THE HEART OF THE CITY
CONTINUITY AND COMPLEXITY OF AN URBAN DESIGN CONCEPT

leonardo zuccaro marchi

The Heart of the City. Continuity and Complexity of an urban design concept.

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10 PROPOSITIONS

01 The 'Heart of the City' refers to a historical discourse and to different theoretical issues concerning the contemporary city too.

02 The Heart of the City deals with the balance between the private and the public spheres and with the ideal overlapping between the social and physical structure of the city, which are still important contemporary issues of "absent urbanism" (Marshall).

03 A general frame of interpretation of the Heart theme is still lacking.

04 There is still a narrow use of the theme of the 'Heart of the City' in some of the contemporary urban theories and projects.

05 The research about the Heart of the City is mostly focused in the 1950s and the 1960s, between Europe and USA.

06 The complexity and the difficulty of interpreting the Heart of the City are mostly caused by its janus-faced semantic load: metaphorical and symbolic.

07 Within the research the three actors (Victor Gruen, CIAM Summer School in Venice and Jaap Bakema) are used in order to dissect the complexity of the Heart of the City theme, similarly to the sections of a complex project or territory. These sections reveal three different relationships: the Heart as a relationship with both the center and centrality, the Heart as a relationship with both the urban and historical context, the Heart as total Relationship.

08 The failures, successes and contradictions of the theories and projects of the three actors are important key studies for contemporary design of the City.

09 The Heart of the City is both a pro-urban Idea and a proto-urban Idea.

10 It's important the study of the constituent elements at the basement of the contemporary urban structure. The 'Heart of the City' is one of them.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors:

Prof. P. Viganò
Prof. M. Riedijk

leonardo zuccaro marchi

Het Hart Van de Stad. Continuïteit en complexiteit van een Urban Design concept.

10 STELLINGEN

01 Het 'Hart van de Stad' refereert aan een historisch discours en ook aan verschillende theoretische kwesties met betrekking tot de hedendaagse stad.

02 Het Hart van de Stad gaat over de balans tussen de private en publieke sferen en over het ideaal dat overlapt tussen de sociale en fysieke structuur van de stad, welke nog steeds belangrijke kwesties van 'afwezig urbanisme' mogen heten (Marshall).

03 Een algemeen interpretatiekader van het hart-thema ontbreekt nog steeds.

04 Er is nog steeds een beperkt gebruik van het thema van het 'Hart van de Stad' in sommige hedendaagse stedelijke theorieën en projecten.

05 Het onderzoek naar het hart van de stad richt zich vooral op de jaren tussen 1950 en 1960, op Europa en de Verenigde Staten.

06 De complexiteit en moeilijkheid om het Hart van de Stad te interpreteren, worden vooral veroorzaakt door zijn tweeledige semantische betekenis: metaforisch en symbolisch.

07 Binnen het onderzoek zijn de drie actoren (Victor Gruen, de CIAM Summer School in Venetië en Jaap Bakema) gebruikt om de complexiteit van het hart van de stad thema te ontleden, op eenzelfde manier als de delen van een complex project of gebied. Deze secties onthullen drie verschillende relaties: het Hart als een verhouding met zowel het centrum als met centraliteit, het Hart als een verhouding met zowel de stedelijke als de historische context en het Hart als een totaalverhouding.

08 De tekortkomingen, successen en tegenstrijdigheden van de theorieën en projecten van de drie actoren zijn belangrijke onderzoeksvelden voor eigentijds Stadsontwerp.

09 Het Hart van de Stad is zowel een pro-stad Idee als een proto-stad Idee.

10 Het is belangrijk de samenstellende elementen aan de basis van de hedendaagse stedelijke structuur te bestuderen. Het 'Hart van de Stad' is daar een van.

Deze stellingen worden opponeerbaar en verdedigbaar geacht en zijn als zodanig goedgekeurd door de promotoren:

Prof. P. Viganò
Prof. M. Riedijk

to Aldo Gastone Marchi

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The heart, even in the age of its transplantability, is still viewed as the central organ of internalized humanity in the dominant language games of our civilization.

- Sloterdijk P., *Sphären I*. 1998

The Heart of the City.
Continuity and Complexity of an Urban Design concept.

The "Heart of the City" theme is proposed by the MARS group as title of the 8th *Congrès Internationaux d'Architecture Moderne* (CIAM), held in Hoddesdon, England, from the 7th to the 14th of July 1951. Two opposite urban conditions are considered by Sert, President of CIAM, as main issues which the Heart discourse should face: from the disappearance of city centres because of the destruction of the War to the negation of the urban centrality because of urban sprawl and the infinite constant enlargement of city boundaries. But the Heart itself also represents two different figures of speeches, the symbol and the metaphor: from one side it becomes a humanist symbol *"which springs directly to the senses without explanation"*[1], in opposition to the *"mechanized killing"*[2] , to the *"tyranny of mechanical tools"*[3] as stressed by Giedion during CIAM 8, similarly to the almost contemporaneous Congress of Darmstadt where Heidegger makes his famous speech *"Building, Dwelling, Thinking"*[4]; from the other side the Heart still keeps its metaphorical organic meaning translated into a presumed right physical form and dimension of the city. These oppositions - from annulled bombed centers to infinite urban structures, from metaphor to symbol, *"from function to passion"*[5] – are the main causes of the complexity and of the stratification of several different layers of significances of the Heart of the City, since CIAM 8 until the present.
If CIAM8`s theoretical roots are already traceable within previous debates and architectural experiences[6], then the thesis stresses the continuity and the

1 *"It seems that a new stage of civilisation is in formation in which the human being as such – the bare and naked man – will find a direct means of expression."* in Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 and Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 127-128

2 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 35

3 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

4 Darmstadt, for the *"Mensch + Raum"* exhibition. An important link is created with Hoddesdon, since *"the formulation of questions and issues are similar: the rediscovery of urban space, respectively the highlighting of the city and its duties against the reconstruction policy in one way of the government, and so the answers."* Oechslin W. (1992), I darmstadter gesprache. *Rassegna,* n.52/4, p. 80

5 *"The understanding of the core as a human heart emerged from an architectural debate in which function seemed to have yielded to passion."* De Sola-Morales I. , *Differences. Topographies of Contemporary* Architecture. MIT Press, 1997, p. 49

6 For instance Domhardt has identified the origins of the CIAM 8 theme since the `30s, in the American

complexity of the Heart of the City, since 1951 until the 1970s[7], as well as its influence in the physical and theoretical transformation of the City in the USA and in Europe. The thesis is therefore both a historical and theoretical study of the Heart theme, through the analysis of both projects and theories related to CIAM 8. Moreover attention has been paid by both master architects` proposals and young students` architects` projects. This is very important since the crucial role of the young generations and of education is vehemently stressed during CIAM 8 itself.

As far as the complexity of the Heart theme is concerned, we might consider the different layers of significance, or arteries of the Heart if we want to keep alive the metaphor, as branches of a *"cultural phylogeny tree"*[8], which can melt together and which come from the same trunk: CIAM 8 . Since it is not possible to describe each singular branch of a tree, also of a natural tree, then three main 'actors' have been individualized in order to dissect horizontally the symbolical branches, similarly to the sections of a complex project or territory. These sections intersect the most important ideas and issues regarding the Heart of the City. Furthermore, these actors have been chosen also because they are characterized by both theoretical and project activity.

The first 'actor' is Victor Gruen and the First Urban Design Conference held at Harvard in 1956, whose *"precursor"*[9] is considered CIAM 8 itself. While Team 10 dissolves "old professors" CIAM, and the Core`s concept is beginning to be

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neighborhood theory and in a constant transatlantic exchange of ideas between USA and Europe. See Domhardt K.S., *From the "Functional City" to the "Heart of the City". Green Space and Public Space in the CIAM Debates of 1942-1952.* in Brantz D., Dumpelmann S., *Greening the City: Urban Landscapes in the Twentieth Century*.University of Virginia Press, 2011, p. 133-156. Then Jos Bosman and Volker M. Welter consider the Core as *"the most symbolical element of Geddes`s theory"* . Bosman J. (1985), *My association with CIAM gave me new perspective.* Ekistics, Vol 52, n. 314/315 ; Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* In in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.258.

7 This is the period during which there are the examples of the Heart`s influences.It is interesting what Henry Russel Hitchcock affirms about this historical period and its urban projets, in Architecture: XIX et XX siècle: *"Les deux décennies avant 1970, les années 50 et 60 virent la production d`une grande partie de cadres urbains et suburbains dan lesquelles nous continuerons probablement a vivre pendant le reste de ce siècle [...]"* quoted in Lefebvre V., *Paris-Ville Moderne. Maine Montparnasse et la Défense, 1950-1970.* ed. Norma, p. 19 Most of the architectural and urban projects which are studied with the heart of the City, are still influencing our contemporary life too.

8 The tree of the '*cultural phylogeny' (*Kroeber A.L.), symbolizes the complexity of *'the mechanism of the human creation"* See Martí Arís C., *Le variazioni dell'identità. Il tipo in Architettura.* Clup, Torino, 1990, p.49 See also Steadman P., *The evolution of design.* Cambridge university Press, 1979; Kroeber A.L., *Anthropology. Race, language, culture, psychology, prehistory.* Hacourt Brace Jovanovich, New York, 1948

9 *"Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52"* in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* University Press, New Haven and London, 2009, p.80

questioned by Team 10 criticizing the basis of CIAM itself, as Eric Mumford reminds us[10], overseas the continuity of the CIAM discussion is assured inside the prestigious American University. The main issues that remain, as Sert explains, are the recentralization of the cities for the preservation of civic values and the three-dimensional design as basis for Urban Design.

Among the participants there is also the "mall maker" Victor Gruen who publishes *"The Heart of Our Cities: The Urban Crisis: Diagnosis and treatment"*[11] (1964), a decade after the release of proceedings of the 8th CIAM *"The Heart of the City: Towards the Humanization of Urban Life."* [12](1952). Gruen invents a new commercial type whose architectural devices would be adopted for the design of urban proposals such as in Fort Worth and Louvain la Neuve. Some of these devices are similar to those used by CIAM members in order to raise the humanist values, as stressed during CIAM 8, within their urban master plans. However, for Gruen the centralization of the city is no longer aimed only at the survival of civic values, similarly to Sert, but it is also focused on environmental protection. Indeed, in the early `70s, the Athens Charter and the Heart of the City will become for Gruen the starting points for an updated manifesto centered on environmental planning: the Charter of Vienna. Finally, the case study of Montreal is discussed. Its planner Vincent Ponte, in the late `60s, transforms the right of the pedestrian, *'la royauté du piéton'* (Le Corbusier) as vehemently stressed by CIAM members in Hoddesdon, into the first germ of social segregation inside the *"analogous city"*[13]. If CIAM 8 (and later also the UD Conferences and Gruen too) stresses the necessary separation between pedestrians and vehicles, as a translation of a radical antagonism between the symbols of the Heart and the Machine, then Montreal becomes the first example where this split is adopted on an urban scale, concentrating the main pedestrian flow into a huge underground protected and controlled shopping centre.

The second 'actor' is the CIAM Summer School held in Venice, from 1952 until 1957. This case study, inside Venice as "*City of the new modernity"*[14], considers

10 See Mumford E., The emergence of Urban Design in the Breakup of CIAM in Harvard Design Magazine (2006), *The origins and evolution of "urban design", 1956-2006*, p. 15 This is not totally true since, as we will see Bakema will continue to think about the heart of the city also later, for instance in *'human core of St. Louis'*.

11 Gruen V., *The Heart of our cities: the urban crisis : diagnosis and cure*. Thames and Huston, 1964

12 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952; tr. It. *Il cuore della città.* Hoepli, Milano, 1954

13 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, 123-15

14 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998. The title derives

the Core as the arising interest on the relationship between the new project and its surrounding urban context. This theme has been well described since 1950s by Ernesto Nathan Rogers in Casabella-Continuità, and it is related to CIAM 8 too, as asserted by Vittorio Gregotti in 1992: *"Moreover at the CIAM in Hoddesdon, also through the 'Heart of the City' theme, the question that starts to emerge - and one which will prove central for the next forty years - is that of listening to the context and of the project seen as a dialogue with the context as a deposited form of the history of a specific place."* [15]

In parallel, the link between the spirit of the city – Norberg Schultz` *genius loci* and the Heart of the City, as already stressed by Volker Welter[16], is analyzed. The main project, which has been discussed, is the *Oslo suburb* proposal, presented at Hoddesdon by the PAGON Group with Christian Norberg Schultz as a student of Giedion.

The third and last actor is Jaap Bakema who, unlike other CIAM members, considers the *'relationship'* as the main characteristic of the Heart: "*There are moments in life when the separation between man and things disappears; at that moment we discover the miracle of the relationship between man and things. And this is the moment of the Heart."*[17]

Instead of proposing a central square or a civic center as a main example of the Heart, Bakema exposes the Asplund cemetery in Stockholm: the Dutch architect conceptually shifts the Heart theme from a conception of life to the overlap of life on death, from the inside to the outside, from the urban centrality to the landscape. The main case study is his project for the *"human core"*[18] of St. Louis in 1960. Almost ten years after CIAM 8, Bakema reconsiders the Heart theme stressing the importance of its historical background[19], its three-dimension and the relationship between the social and physical urban structure of the City. Finally, if we can consider the first actor as mainly characterized by an overlap between the organic metaphor and the humanist symbol of the Heart, then Bakema`s projects reject any organic functionalist metaphor of the city. The projects are intriguing proposals where the Heart attempts to be the symbolic of harmonious

from a lecture exposed by Tafuri in 1993 and called: *"The forms of the time: Venice and the modernity"*

15 Gregotti V. (1992), Editoriale – Gli Ultimi CIAM in Rassegna. *Rassegna* n. 52/4, p. 5

16 Also *locus* and *fatti urbani* of Aldo Rossi, Architettura della Città . See Volker M.Welter, *From locus genii to heart of the city: embracing the spirit of the city* in I. Boyd Whyte (ed.), *Modernism and the Spirit of the City.* Routledge, London and New York, 2003

17 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952; tr. It. *Il cuore della città.* Hoepli, Milano, 1954, p.67

18 Bakema J., *The Humane Core, A Civic Center for St. Louis, MO.*Washington University Press., 1960

19 Similarly to Giedion at CIAM 8

relationships between *"You and Me"*[20], between "*a centripetal diastolic movement, but, at the same time, a systolic centrifugal one"*[21] (Paci, 1954).

All three actors represent a particular and precise facet of the heart theme. Indeed the Urban Design Conference and Victor Gruen, represent the invention and the renewal of the city in America through the concept of the Heart; the CIAM Summer school in Venice represents the increasing importance of the tradition, of the Ernesto Nathan Rogers` continuity, of the recognized role of history and context within the modern project; finally Bakema represents the physical interpretation of the philosophical current of the Relationalism (see Enzo Paci), putting the relationships between the urban factors as the main issue for the sociological and physical structure of the city.

However, the three actors might be all compared through their grades of relationships.

We note indeed that the first is addressed to the centrality of the city, the second to relationship between one building and its surrounding, while the third as a total relationship between different scales of urban structures.

Moreover in all three actors, especially in the first and in the last one, there is a similar intention to consider the design of the city with a vertical integration of functions, into a three-dimensional space: in this sense the heart of the city becomes a counterforce of the zoning method of planning, of the four functions` divisions (*dwelling*, work, recreation, and transport), rather than its mere fifth element as criticized for instance by Team 10[22].

In the contemporary urban discourse and practice, the Heart of the City still remains a reference for contemporary urban projects, such as *"The Simple Heart"* by Dogma or the proposal for the *Grand Paris* by Richard Rogers in 2009. However this latter interprets the heart theme mainly as an organic functionalist metaphor, omitting the deep humanist values stressed at CIAM 8. Indeed the heart and the body become merely images for the restoration of connections to external urban severed limbs, in order to reconstruct the governance of the *Ile-de-France* with balanced districts.

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20 *"If we look at the city as a place in which private life and community life find a meeting place, then the mark of a true city is the balance between YOU and ME.[...] The endeavor to reestablish an equipoise between the individual and the collective sphere is proceeding today throughout the world. This may have been underlying reason for the selection of the 'Core of the City' as the theme for CIAM 8."* Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 124,126-127

21 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii The attention is therefore focused on the relationship between the two movements, with many resonances to Bakema`s theory.

22 See Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* In in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.259

Another interesting project is the new centre for Almere in The Netherlands, designed by OMA in the early 1990s, whose aim remains *"donner un coeur à ses cinq centres et se rendre attractive."*[23] However, this project is in contradiction with the *Generic City* described by Rem Koolhaas almost in the same period , where all Heart identities seem to be totally abhorred. The heart of the city becomes in this case a dichotomy between theory and project attitude, before which one of the most radical Manifestos of the last Century finds its limits and incongruity.

Moreover, in a contemporary emergence of public space design, of *"absent urbanism"*[24], of unclear distinction between individual and collective sphere, the Heart (as humanist symbol rather than mere organic metaphor) still seems an important, valid, contemporary abstract idea[25] of the City. It is indeed an eternally present idea, as interpreted already by Giedion[26] , aimed at an ideal overlap between the social and the physical urban structure. It can be interpreted also as a better future condition or idea of the society, towards which we should tend and which should be interpreted in a present tangible form of public space. "*This is our task today.*" [27], Giedion affirms at CIAM 8 in 1951, and sixty years later this purpose seems still effective. A similar task has been stressed for instance by Christopher Alexander who, in 2006, publishes the essay *"The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City."*[28] Alexander stresses the failure of the First Urban Design Conference

23 *"to give an heart to his five centers and to become attractive",*Oosterman A.(2002) Réinventer Almere. *L'architecture d'Aujourd'hui,* n.339, p 68-75

24 Marshall R., *Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim.* London: Spon Press, 2003

25 As described by the Opbouw Group in Hoddesdon, *"the abstract core is not one point, or one space, or an expression of only one activity, but an idea , expressed now, by one, then by another activity, fluctuating from one place to another, reaching his extreme expression perhaps within a certain, but not distinctly bordered, region"* Opbouw group, CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing. Bakema Archive, NAI, Rottedam, g. 18

26 The interpretation in Giedion of the core as an eternal element is underlined by Francis Strauven. He affirms that Giedion`s discourse about the Heart *"ties in closely with the research into "the eternal present" he was engaged in at the time, a search for the original archetypes of art and architecture, for the primal, prehistoric forms that he saw simultaneously re-emerging in the art of the contemporary avant-garde. He regards the core as an urban archetype, as the place where the individual can participate in public life."* in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238
See Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964).* Bollingen Foundation, Pantheon Books, New York.

27 Giedion makes the example of Michelangelo`s Capitol which is an expression of democracy even when there was no democracy at all in Rome. Similarly the Agora is an expression of freedom even when the Greeks have lost it. See Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

28 *"This essay invites a journey of non-traditional thought about architecture and urban design, and proposes a science of context-sensitive, harmony-seeking, shape-forming process focused on generating and shaping positive space in all public places, so that the overall urban process will be able, in the hands of thousands of professionals and users – to generate inspiring, useful space throughout the city and throughout the region".*

in 1956 (first actor), because of its unawareness or incapacity to focus the attention on the public space as the generator of the city. This remains instead *"what we 21th - Century architects, now must deliver."*[29] - Alexander claims, underlying the importance of contemporary discourse about the Heart of the City, as generator of *"positive space"*[30]. In this context, the study of the three actors, between 1950s and 1960s, aims to reveal the complexity of the Heart theme and its influence on urban design until nowadays, *"as a reference point for the new forms of public space"*.[31] This influence has been already partly unearthed by several authors, historians or designers especially in the last ten years, but without a complete overview[32]. The projects and the theoretical discourses of the three actors represent the attempt to translate the abstract idea of the Heart into a physical urban project. Their failures and successes have become outstanding lessons for present-day Urban Design too. Indeed they allow to specify the context of the Heart theme, delineating some of the theoretical issues and project devices which still concern our contemporary urban planning[33].

Alexander C., Alexander M.M.(ed., *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

29 **Ibid. p. 25**

30 **Ibid. p. 25**

31 **For instance: Ciam 8** *"was perhaps the first expression of what would become major preoccupations with architect-designed public gathering places in the work of Victor Gruen, Kevin Lynch and many others in the following decades. CIAM 8 can be seen as a reference point for the new forms of public space, including Shopping malls [...]"* in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960,* The MIT Press, 2000, p.215

32 **See for instance edited by** Avermaete T., Havik K., Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, 2009, Amsterdam; Mumford E., *Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52* in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* University Press, New Haven and London, 2009; ed. by Mumford E., Sarkis H. , *Josep Lluis Sert:the architect of urban design, 1953/1969,* Yale Press,2008, New Heaven; Domhardt K., ETH PhD Thesis *The CIAM Discourse on the Heart of the City and the American Neighborhood Unit Theory*; Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006; Avermaete T., *Another Modern.* NAI, Rotterdam; Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005; E.Mumford, *The CIAM Discourse on Urbanism.* MIT Press, 2000; Curtis B., *The Heart of the City* in Hughes J., Sadler S. ed by, *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism.* Architectural Press, 2000; de Solà-Morales I., *Architecture and Existentialism*, chapter three in de Solà-Morales I., *Differences. Topographies of Contemporary architecture.* MIT Press, 1997; Gregotti V. (1992), Editoriale. *Rassegna*, n.52/4; Bosman J. (1985), My association with CIAM gave me new perspective. *Ekistics*, Vol 52, no 314/315

33 As Paola Coppola D'Anna Pignatelli highlights: *"The design of a Heart is also nowadays one of the most complex problems of urban planning, because of the lack of a definition specifying its contents."* Paola Coppola D'Anna Pignatelli in a cura di Portoghesi P., *Dictionary of Architecture and Urban planning,* I edition 1968, II edition 2006

Het Hart Van de Stad.
Continuïteit en complexiteit van een Urban Design concept.

De MARS-groep stelde het 'Hart van de Stad' voor als titel van het achtste Congrès Internationaux d'Architecture Moderne (CIAM), dat plaatsvond in Hoddesdon, Engeland, van 7 tot 14 juli 1951. Twee tegenovergestelde stedelijke condities werden door Sert, voorzitter van het CIAM, beschouwd als de voornaamste kwesties die het hartdiscours het hoofd zou moeten bieden: enerzijds het verdwijnen van stadscentra vanwege de vernietiging door de Tweede Wereldoorlog, anderzijds de opheffing van de stedelijke kernen als gevolg van verstedelijking en de oneindige, constante uitbreiding van de stadsgrenzen. Maar het hart zelf vertegenwoordigt ook twee verschillende zegswijzen, namelijk het symbool en de metafoor. Aan de ene kant wordt het een humanistisch symbool 'dat zich direct aan het gevoel opdringt zonder verklaring'[34], in tegenstelling tot het 'gemechaniseerde doden'[35], tot de 'tirannie van mechanische gereedschappen'[36] zoals benadrukt door Giedion tijdens CIAM 8, vergelijkbaar met het bijna gelijktijdige Congres van Darmstadt, waar Heidegger zijn beroemde toespraak 'Bouwen, Wonen, Denken'[37] hield. Aan de andere kant houdt het hart nog steeds zijn metaforische, organische betekenis, vertaald naar een veronderstelde juiste fysieke vorm en de afmetingen van de stad. Deze tegenstellingen - van vernietigde gebombardeerde centra naar oneindige stedelijke structuren, van metafoor naar symbool, 'van functie naar passie'[38] - zijn de belangrijkste oorzaken van de complexiteit en de stratificatie van de verschillende 'betekenislagen' van het hart van de stad, van CIAM 8 tot nu. Hoewel de theoretische wortels van CIAM 8 reeds voorkomen in vorige debatten

34 *"Het lijkt dat er een nieuwe fase van beschaving ontstaat waarin de mens als zodanig – de naakte mens – een direct middel van expressie zal vinden."* in Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 en Giedion S., *Architecture You and Me.* Harvard University Press, USA, 1958, p. 127-128

35 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 35

36 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini en Cudahy, 1952, p.17

37 Darmstadt, voor de tentoonstelling *"Mensch + Raum"*. Er wordt een belangrijk verband gelegd met Hoddesdon, want *"de formulering van vragen en kwesties zijn gelijksoortig: de herontdekking van stedelijke ruimte, respectievelijk het in het licht stellen van de stad en haar taken tegenover het reconstructiebeleid als eenrichtingsverkeer van de overheid, en daarmee de antwoorden."* Oechslin W. (1992), I darmstadter gesprache. *Rassegna,* n.52/4, p. 80

38 *"Het begrip van de kern als een menselijk hart kwam naar voren uit een architectonisch debat waarin functie leek te hebben plaatsgemaakt voor passie."* De Sola-Morales I., *Differences. Topographies of Contemporary* Architecture. MIT Press, 1997, p. 49

en architectonische ervaringen[39], benadrukt het proefschrift de continuïteit en de complexiteit van het hart van de stad sinds 1951 tot de jaren 1970[40], evenals zijn invloed op de fysieke en theoretische transformatie van de stad in de VS en in Europa. Het proefschrift is dus zowel een historische als theoretische studie van het hartthema, door de analyse van projecten en theorieën met betrekking tot CIAM 8. Bovendien wordt aandacht besteed aan zowel de voorstellen van meester-architecten als de architectuurprojecten van jonge studenten. Dit is zeer belangrijk, omdat de cruciale rol van de jonge generaties en van het onderwijs met klem werd benadrukt tijdens CIAM 8 zelf.

Wat betreft de complexiteit van het hartthema, kunnen we de verschillende betekenissen van het hart, of de slagaders als we de metafoor levend willen houden, opvatten als takken van een 'culturele fylogenie-boom'[41], die samen kunnen smelten en die afkomstig zijn uit dezelfde stam: CIAM 8.

Net als bij een natuurlijke boom, kunnen we niet elke afzonderlijke tak van de boom beschrijven. Daarom zijn de drie belangrijkste 'actoren' gespecificeerd om de symbolische takken horizontaal te ontleden, zodat de belangrijkste ideeën en kwesties ten aanzien van het hart van de stad aan het licht komen. Deze actoren zijn ook gekozen omdat ze zich kenmerken door zowel theoretische als projectmatige activiteit.

De eerste actor is de eerste Urban Designconferentie te Harvard in 1956, waarvan CIAM 8 als 'voorloper'[42] wordt beschouwd. Terwijl Team 10 het 'oude professoren'-

39 Domhardt plaatst bijvoorbeeld de oorsprong van het CIAM 8-thema in de jaren dertig, in de Amerikaanse buurttheorie en in een constante transatlantische gedachtenwisseling tussen de VS en Europa. Zie Domhardt K.S., *From the "Functional City" to the "Heart of the City". Green Space and Public Space in the CIAM Debates of 1942-1952. in Brantz D., Dumpelmann S., Greening the City: Urban Landscapes in the Twentieth Century. University of Virginia Press, 2011, p. 133-156.* Vervolgens beschouwt Volker M. Welter de Kern als *"the most symbolical element of Geddes`s theory"*, Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* In ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.258; Bosman J. (1985), *My association with CIAM gave me new perspective.* Ekistics, Vol 52, n. 314/315

40 Dit is de periode waarin de invloeden van het hart zich manifesteren. Het is interessant wat Henry Russel Hitchcock bevestigt over deze historische periode en haar stedelijke projecten in de architectuur: *"Les deux décennies avant 1970, les années 50 et 60 virent la production d`une grande partie de cadres urbains et suburbains dan lesquelles nous continuerons probablement a vivre pendant le reste de ce siècle [...]"* geciteerd in Lefebvre V., *Paris-Ville Moderne. Maine Montparnasse et la Défense, 1950-1970.* ed. Norma, p. 19 De meeste architectonische en stedelijke projecten die worden bestudeerd met het Hart van de Stad, beïnvloeden ons leven ook nog steeds.

41 De boom van de 'culturele fylogenie' (Kroeber A.L.) symboliseert de complexiteit van 'het mechanisme van de menselijke schepping' Zie Martí Arís C., *Le variazioni dell'identità. Il tipo in Architettura.* Clup, Torino, 1990, p.49 Zie ook Steadman P., *The evolution of design.* Cambridge university Press, 1979; Kroeber A.L., *Anthropology. Race, language, culture, psychology, prehistory.* Hacourt Brace Jovanovich, New York, 1948

42 *"Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52"* in Mumford E., *Defining*

CIAM oplost en het kernconcept begint te ondervragen, met kritiek op de basis van CIAM zelf zoals Eric Mumford stelt[43], wordt over zee de continuïteit van de CIAM-discussie verzekerd in de prestigieuze Amerikaanse universiteit.

Zoals Sert uitlegt, zijn de belangrijkste resterende punten de recentralisatie van de steden voor het behoud van maatschappelijke waarden en het driedimensionale ontwerp als basis voor Urban Design. Onder de deelnemers bevindt zich ook 'Mall Maker' Victor Gruen die '*The Heart of our cities: the urban crisis: diagnosis and cure* (1964)'[44] publiceerde – minder dan tien jaar na het vrijgeven van de procedure van CIAM 8 *'The Heart of the City: Towards the Humanization of Urban Life.'*[45] Gruen bedacht een nieuw type winkelcentrum waarvan de architectonische middelen zouden worden opgenomen in het ontwerp van stedelijke voorstellen, zoals in Fort Worth en Louvain-la-Neuve. Sommige van deze middelen zijn vergelijkbaar met die van CIAM-leden, die ze gebruiken om de door CIAM 8 onderstreepte humanistische waarden een belangrijke plaats te geven binnen hun stedelijke masterplannen. Evenwel is voor Gruen de centralisatie van de stad niet langer alleen gericht op het overleven van stedelijke waarden, vergelijkbaar met Sert, maar ook op de bescherming van het milieu. In het begin van de jaren `70, werden het Charter van Athene en het hart van de stad voor Gruen de uitgangspunten voor een bijgewerkt manifest gericht op de ruimtelijke ordening: het Charter van Wenen. Ten slotte wordt het voorbeeld van Montreal besproken. De planoloog van Montréal, Vincent Ponte, verandert in de late jaren `60 het recht van de voetgangers, 'la royauté du Piéton' (Le Corbusier) – dat CIAM-leden in Hoddesdon zo krachtig benadrukten – in de eerste kiem van sociale segregatie in de 'analoge stad'[46]. Waar CIAM 8 (en later ook de UD Conferenties en Gruen) wijst op de noodzakelijke scheiding tussen voetgangers en voertuigen, als een vertaling van een radicale tegenstelling tussen de symbolen van het hart en de machine, is Montréal de eerste *case study* waar deze splitsing is toegepast op stedelijke schaal, met zijn concentratie van

Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69, University Press, New Haven en London, 2009, p.80

43 Zie Mumford E., The emergence of Urban Design in the Breakup of CIAM in Harvard Design Magazine (2006), *The origins and evolution of "urban design", 1956-2006*, p. 15 Dit is niet geheel waar, want zoals we zullen zien, zal Bakema ook later blijven nadenken over het hart van de stad, bijvoorbeeld in *'human core of St. Louis'*.

44 Gruen V., *The Heart of our cities: the urban crisis: diagnosis and cure*. Thames en Huston, 1964

45 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952; tr. It. *Il cuore della città.* Hoepli, Milano, 1954

46 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, 123-15

de belangrijkste stroom voetgangers in een enorm ondergronds, beschermd en gecontroleerd winkelcentrum.

De tweede 'actor' is de CIAM Summer School in Venetië, van 1952 tot 1957. Deze *case study* in Venetië, de 'stad van de nieuwe moderniteit'[47], stelt dat de kern het grootste belang heeft in de relatie tussen het nieuwe project en zijn omringende stedelijke context. Dit thema van de relatie met de context werd in de jaren '50 goed beschreven door Ernesto Nathan Rogers in Casabella-Continuità en is ook gerelateerd aan CIAM 8, zoals Vittorio Gregotti in 1992 beweerde: 'Vanuit het CIAM van Hoddesdon, zelfs bij het thema van het hart van de stad, rijst een vraag die de komende veertig jaar centraal zal staan: het probleem van het luisteren naar de context van het ontwerp als een dialoog met de stedelijke context als een vorm opgeborgen in de geschiedenis van de specifieke plek.'[48] Parallel hieraan wordt het verband tussen de geest van de stad – Norberg Schultz' *genius loci* – en het hart van de stad geanalyseerd, zoals reeds uiteengezet is door Volker Welter.[49] Het belangrijkste project, dat is besproken, is het *Oslo suburb*-voorstel, gepresenteerd op Hoddesdon door de PAGON Groep met Christian Norberg Schultz als student van Giedion.

De derde en laatste actor is Jaap Bakema die, anders dan andere CIAM-leden, de 'relatie' als het belangrijkste kenmerk van het hart beschouwt: "Er zijn momenten in het leven waarop de scheiding tussen mens en dingen verdwijnt; op dat moment ontdekken we het wonder van de relatie tussen mens en dingen. En dit is het moment van het hart."[50]

In plaats van een centraal plein of een openbaar centrum als het belangrijkste voorbeeld van het hart voor te dragen, kiest Bakema de Asplund-begraafplaats in Stockholm: de Nederlandse architect verschuift het hartthema vanuit een conceptie van het leven naar de overlap van leven en dood, van binnenuit naar buiten, van de stedelijke centraliteit naar het landschap. De belangrijkste *case study* is zijn project voor de 'menselijke kern' van St. Louis in 1960.[51] Bijna tien jaar na CIAM 8 heroverweegt Bakema het hartthema, waarbij

47 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998. De titel is afgeleid van een lezing van Tafuri uit 1993 genaamd: *"The forms of the time: Venice and the modernity"*

48 Gregotti V. (1992), Editoriale – Gli Ultimi CIAM in Rassegna. *Rassegna* n. 52/4, p. 5

49 Ook *locus* en *fatti urbani* van Aldo Rossi, Architettura della Città. Zie Volker M.Welter, *From locus genii to heart of the city: embracing the spirit of the city* in I. Boyd Whyte (ed.), *Modernism and the Spirit of the City.* Routledge, London en New York, 2003

50 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952; tr. It. *Il cuore della città.* Hoepli, Milano, 1954, p.67

51 Bakema J., *The Humane Core, A Civic Center for St. Louis, MO.*Washington University Press., 1960

hij het belang benadrukt van de historische achtergrond[52], de drie dimensies en de relatie tussen de sociale en fysieke stedelijke structuur van de stad. Ten slotte, waar we kunnen stellen dat de eerste actor hoofdzakelijk wordt gekenmerkt door een overlap tussen de organische metafoor en het humanistische symbool van het hart, verwerpen Bakema`s projecten elke organische, functionalistische metafoor van de stad. De projecten zijn intrigerende voorstellen waarbij het hart de symboliek van harmonieuze relaties tussen 'Jou and Mij'[53] probeert te zijn, tussen 'een centripetale diastolische beweging en tegelijkertijd een systolische centrifugale'[54] (Paci, 1954).

Alle drie de actoren vertegenwoordigen een specifiek en nauwgezet facet van het hartthema. De Urban Design Conference en Victor Gruen vertegenwoordigen de uitvinding en de vernieuwing van de stad in Amerika via het concept van het hart, de CIAM Summer School in Venetië vertegenwoordigt het toenemende belang van de traditie, van Ernesto Nathan Rogers' 'continuïteit' en van de erkende rol van de geschiedenis en de context in het moderne project; ten slotte vertegenwoordigt Bakema de fysieke interpretatie van de filosofische stroming van het Relationalisme (zie Enzo Paci), waardoor de relaties tussen de stedelijke factoren fungeren als de belangrijkste kwestie voor de sociologische en fysieke structuur van de stad.

De drie actoren zouden echter alle kunnen worden vergeleken door de mate waarin ze aan elkaar gerelateerd zijn. We merken dat de eerste is gericht op de centrale plaats van de stad, de tweede op de relatie tussen een gebouw en zijn omgeving en de derde op de gehele verhouding tussen de verschillende schalen van stedelijke structuren.

Bovendien is er in alle drie actoren, vooral in de eerste en de laatste, een vergelijkbare bedoeling om het ontwerp van de stad te zien in een verticale integratie van functies in een driedimensionale ruimte: in dit opzicht wordt het hart van de stad een tegenkracht van de bestemmingsplanmethode en van de vier functies (wonen, werken, recreatie en vervoer), in plaats van gewoon haar vijfde element zoals Team 10 bijvoorbeeld bekritiseerde.[55]

52 Vergelijkbaar met Giedion op CIAM 8

53 Als we kijken naar de stad als een plaats waarin het private en publieke leven een trefpunt vinden, dan is het stempel van een ware stad de balans tussen JOU en MIJ. […] De onderneming om een evenwicht te herstellen tussen de individuele en collectieve sfeer is vandaag in de hele wereld aan de gang. Dit kan een onderliggende reden zijn geweest voor de selectie van de 'Core of the City' als het thema voor CIAM 8.' Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 124,126-127

54 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii De aandacht wordt daarom gericht op de relatie tussen de twee bewegingen, met veel verwijzingen naar Bakema's theorie.

55 Zie Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the*

In het hedendaagse stedelijke discours en in de praktijk, is het hart van de stad nog steeds een bron voor eigentijdse stedelijke projecten, zoals *'The Simple Heart'* door Dogma of het voorstel voor *Grand Paris* door Richard Rogers in 2009. Maar de laatstgenoemde interpreteert het hartthema vooral als een organische, functionalistische metafoor, waarbij de diepe humanistische waarden worden weggelaten die op CIAM 8 juist een belangrijke rol speelden. Het hart en het lichaam worden zo slechts beelden voor het herstel van de verbindingen met de externe stedelijke ledematen die zijn afgesneden, om het bestuur van het *Ile-de-France* met evenwichtige wijken te reconstrueren.

Een ander interessant project is het nieuwe centrum voor Almere in Nederland, ontworpen door OMA in de vroege jaren '90, waarvan het doel blijft *"donner un coeur à ses cinq centra et se rendre attractive."*[56] Echter, dit project is in tegenstrijd met de *Generic City* beschreven door Rem Koolhaas in vrijwel dezelfde periode, waarbij alle hartidentiteiten volledig lijken te worden verafschuwd. Het hart van de stad wordt in dit geval een tweedeling tussen een theoretische en een projectattitude, ten overstaan waarvan een van de meest radicale manifesten van de vorige eeuw op zijn grenzen en gebrek aan samenhang stuit.

Bovendien lijkt het hart (veeleer als humanistisch symbool dan als organische metafoor) in de hedendaagse opkomst van *public space design,* van 'afwezig urbanisme'[57] en van een onduidelijk onderscheid tussen de individuele en collectieve sfeer, nog altijd een belangrijke, geldige, eigentijdse abstractie van de stad.[58] Het is inderdaad een eeuwig aanwezig idee, zoals Giedion[59] al begreep, gericht op een ideale overlap tussen de sociale en de fysieke stedelijke structuur.

1950`s. In ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.259

56 "een hart geven aan zijn vijf centra en aantrekkelijk worden", Oosterman A.(2002) Réinventer Almere. *L'architecture d'Aujourd'hui,* n.339, p 68-75

57 Marshall R., *Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim.* London: Spon Press, 2003

58 Zoals beschreven door de Opbouw Groep in Hoddesdon, "de abstracte kern is niet één punt, of één plaats of een uitdrukking van slechts één activiteit, maar een idee, nu eens door de ene, dan weer door de andere activiteit geuit, golvend van de ene plaats naar de ander, dat zijn uiterste expressie misschien bereikt binnen een bepaalde, maar niet apart begrensde, regio" *Opbouw group, CIAM 8 in een beschrijving van de kern van Pendrecht, verantwoordelijke rapporteur: W. Wissing. Bakema Archive, NAI, Rottedam, g. 18*

59 De interpretatie in Giedion van de kern als een eeuwig element wordt ondersteund door Francis Strauven. Hij bevestigt dat Giedions discourse over het hart "nauw aansluit bij het onderzoek naar 'het eeuwige heden' waarmee hij toentertijd bezig was, een zoektocht naar de oorspronkelijke archetypen van kunst en architectuur, naar de eerste, prehistorische vormen die hij op hetzelfde moment opnieuw zag opkomen in de kunst van de toenmalige avant-garde. Hij ziet de kern als een stedelijk archetype, als de plaats waar het individu kan deelnemen aan het openbare leven." in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238 Zie Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964).* Bollingen Foundation, Pantheon Books, New York.

Het hart kan ook worden uitgelegd als een betere toekomstige toestand of een idee van de maatschappij waartoe we moeten bijdragen en welke gestalte zou moeten krijgen in een aanwezige, tastbare vorm van de openbare ruimte. 'Dit is vandaag de dag onze taak'[60], bevestigt Giedion op CIAM 8 in 1951, en zestig jaar later lijkt dit doel nog steeds werkzaam. Christopher Alexander stelt bijvoorbeeld een soortgelijke taak in zijn essay uit 2006 getiteld *'The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City'*[61]. Alexander benadrukt het mislukken van de eerste Urban Design Conference in 1956 (eerste actor), vanwege het afwezige bewustzijn of het onvermogen om de aandacht te richten op de openbare ruimte als de generator van de stad. Dit blijft echter 'wat wij 21ste eeuwse architecten moeten leveren' [62], wat ten grondslag ligt aan het belang van het hedendaagse discours over het hart van de stad als generator van 'positieve ruimte'.[63]

In dit verband beoogt het onderzoek naar de drie actoren tussen de jaren '50 en '70 de complexiteit van het hartthema te onthullen, en de invloed ervan op stedenbouwkundig ontwerp tot op heden, 'als een referentiepunt voor de nieuwe vormen van openbare ruimte'.[64] Deze invloed is al gedeeltelijk geopenbaard door verschillende auteurs, historici en ontwerpers in vooral de laatste tien jaar, maar zonder een compleet overzicht.[65] De projecten en het theoretische discours van

60 Giedion stelt Michelangelo's Capitool tot voorbeeld van een uiting van democratie, ook al was er helemaal geen democratie in Rome. Zo ook is de Agora een expressie van vrijheid zelfs al zijn de Grieken haar kwijtgeraakt. Zie Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

61 Dit essay nodigt uit tot een reis van onconventionele gedachten over architectuur en stadsontwerp en stelt een wetenschap voor van contextgevoelige, harmoniezoekende en gestaltevormende voortgang, gericht op het voortbrengen en vormgeven van positieve ruimte op alle openbare plaatsen, zodat de algehele stedelijke voortgang in staat zal zijn – in de handen van duizenden professionals en gebruikers –door de hele stad en de regio inspirerende, nuttige ruimte te ontwikkelen." Alexander C., Alexander M.M.(ed., *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

62 Ibid. p. 25

63 Ibid. p. 25

64 Bijvoorbeeld: Ciam 8 was misschien de eerste uitdrukking van wat grote aandachtsgebieden zouden worden voor door architecten ontworpen openbare verzamelplaatsen in het werk van Victor Gruen, Kevin Lynch en vele anderen in de volgende decennia. CIAM 8 kan worden gezien als een referentiepunt voor de nieuwe vormen van openbare ruimte, inclusief winkelcentra - in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960,* The MIT Press, 2000, p.215

65 65 See for instance edited by Avermaete T., Havik K., Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, 2009, Amsterdam; Mumford E., *Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52* in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* University Press, New Haven and London, 2009; ed. by Mumford E., Sarkis H. , *Josep Lluis Sert:the architect of urban design, 1953/1969,* Yale Press,2008, New Heaven; Domhardt K., ETH PhD Thesis *The CIAM Discourse on the Heart of the City and the American Neighborhood*

de drie actoren representeren de poging om het abstracte idee van het hart te vertalen naar een fysiek, stedelijk project. Hun mislukkingen en successen kunnen ook nu uitstekende lessen bieden voor Urban Design. Ze maken het mogelijk de context van het hartthema te specificeren en bakenen daarbij sommige theoretische kwesties en projectmiddelen af die nog steeds van toepassing zijn op de hedendaagse stedenbouw.[66]

Unit Theory; Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006; Avermaete T., *Another Modern.* NAI, Rotterdam; Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005; E.Mumford, *The CIAM Discourse on Urbanism.* MIT Press, 2000; Curtis B., *The Heart of the City* in Hughes J., Sadler S. ed by, *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism.* Architectural Press, 2000; de Solà-Morales I., *Architecture and Existentialism*, chapter three in de Solà-Morales I., *Differences. Topographies of Contemporary architecture.* MIT Press, 1997; Gregotti V. (1992), Editoriale. *Rassegna*, n.52/4; Bosman J. (1985), My association with CIAM gave me new perspective. *Ekistics*, Vol 52, no 314/315

66 Zoals Paola Coppola D'Anna Pignatelli belicht: "Het ontwerp van een hart is ook tegenwoordig een van de meest ingewikkelde problemen van stadsplanning, vanwege het gebrek aan een definitie die zijn inhoud uiteenzet." Coppola D'Anna Pignatelli P. in a cura di Portoghesi P., *Dictionary of Architecture and Urban planning*, I editie 1968, II editie 2006

01 INTRODUCTION

CONTINUITY AND COMPLEXITY

> *" [...] it is of the very essence of our growing sociological re-interpretation of the past to see its essential life as continuous into the present, and even beyond, and so to maintain the perennity of culture, the immortality of the social soul. "* [1] Geddes P., 1915

"The Heart of the City" is the title of the book published in 1952 and edited by Ernesto Nathan Rogers, Josep Lluís Sert and Jaqueline Tyrwhitt, reporting the debate held in Hoddesdon from the 7th to the 14th of July 1951, at CIAM 8. Since research must be based on an objective necessity (sometimes a hidden and unclear necessity), and it is conducted in a precise epoch of human history, it is important to answer immediately a fair question: Why conduct a research about the Heart of the City nowadays?

A first general answer may concern the importance to reconsider all the CIAM, in particular the last period of its life, as the base for worldwide theoretical and urban design activity of the last sixty years. Studying the last CIAM movement, in a certain sense, means studying our nearest origins and their current influence on our profession. This thesis is supported also by Gregotti who, in Rassegna (1992), affirms that the post-war CIAM has transmitted the essence of the Modern, offering the basic material of work for the younger generations, which are still working and sharing their values and criticisms[2]. Indeed the post-war critical

1 Geddes P., *Cities in Evolution.* London, Williams and Norgate, London, 1949, p.143; original Geddes P., *Cities in Evolution: An Introduction to the Town Planning Movement and the Studies of Civics*. London, Williams and Norgate, 1915

2 *"Qualcuno infine (io tra questi) pensa che la presenza dei CIAM dopo il conflitto abbia avuto il ruolo fondamentale di trasmettere principi e dibattiti dell'essenza del moderno, un loro costume di discussione e persino il loro importante sistema simbolico di rappresentazione sino a una generazione come la mia, offrendo cioè` alla nostra critica il materiale fondamentale su cui si e` costruita la consistenza storica dei progetti della generazione successiva."* Gregotti V*., Editoriale – Gli Ultimi CIAM* in Rassegna(1992), n. 52/4, p. 5 Then, there are few aspects of the CIAM which seem very important to study in comparison with our contemporary condition. Indeed the after-war issues are considered and discussed through a global participation, the CIAM. The "*Congrès Internationaux d'Architecture Moderne"* doesn't represent the unique voice of the worldwide architecture but it might be considered at least as the most powerful concentration of ideas and debates about the architecture and the city at that time. In a contemporary sprawl of researches` themes, which legitimately characterizes the contemporary condition of the architecture, this condensation of ideas and discussions among the most important contemporary architects, regarding the most outstanding contemporary issues, seems lost. There is moreover a contemporary lack of architects who might concentrate in themselves the figures of both designer, thinker and teacher (or at least popularizer of ideas). On the contrary most of the CIAM members from one side are active participants of a physical transformation of the urban environment and from the other side they are more or less conscious investigators of the social, urban changes. This comparison might be interesting to be analyzed in order to put in question the role itself of the architect nowadays.

urban condition, of both bombed centers and infinite sprawl, has become an impressive work-ground to re-build another society, to analyze theoretically the central issues of the city and to propose experimental projects which are now at the basis of our architectural knowledge[3] . Moreover some of the positive proposals discussed in the 1950s and directly linked to the heart theme, have totally failed during the last 60 years, as Alexander states, because of a lack of *"a significant invention of new structure in the realm of urban space."*[4]

Our aim might be therefore to unearth the different levels of significance, re-analyzing historically and theoretically the CIAM issues in order to detect the links with our contemporary condition or, as Michel Foucault states describing his idea of the *"history of the present"*: "*The game is to try to detect those things which have not yet been talked about, those things that, at the present time, introduce, show, give some more or less vague indications of the fragility of our system of thought, in our way of reflecting, in our practices."*[5]

In this sense the Heart of the City – as we will discuss - has many links and resonances with our contemporary debate about the centrality, the identity and with the right public space design. It is a theoretical discourse which has been often exposed as a specific post-war debate: on the contrary, its complex interpretations have many layers of significance which have many reflections on the contemporary social, physical structure of the city. This has been already highlighted by several historians in the last decades, but without a complete frame of interpretations of the theme.

For this reason, the research is focused on both historical and theoretical characters, if we are allowed to split them for clarity of exposition.

In particular we can talk about the continuity of the influences of CIAM 8 from a historical point of view and about the complexity of the Heart of the City idea, through different projects and theories. Indeed, sometimes the Heart of the City is a concept which is translated and transformed by architects without necessarily referring to CIAM8. Thus, we can talk about a historical continuity of CIAM 8

3 Kenneth Frampton affirms that the radical transformation of the city happens in the Fifties.*"What were still essentially nineteenth-century cities in the early Fifties have since become surrounded and partially penetrated be megalopolitan development.[...] In this way, traditional city form, capable of combining many different uses within its continuous, densely woven urban fabric, has found itself superceded by an economically optimizing 'motopia'." Frampton K. Labour, Work and Architecture. Collected Essays on Architecture and design.* Phaidon Press, 2002, London p.11

4 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006 *, p.3*

See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

5 Lotringere S. ed. by, *Foucault Live: Collected Interviews, 1961-1984.* Semiotext(e), USA, 1996, p. 411

which is detectable between the 1950s and 1970s and a theoretical presence of the heart theme which has no definable boundaries since, as a *fil rouge,* it passes through different social, political and historical conditions. This distinction has to be considered as a useful preliminary tool in order to present the historical and theoretical characteristics of the research, which will be later discussed as melt together.

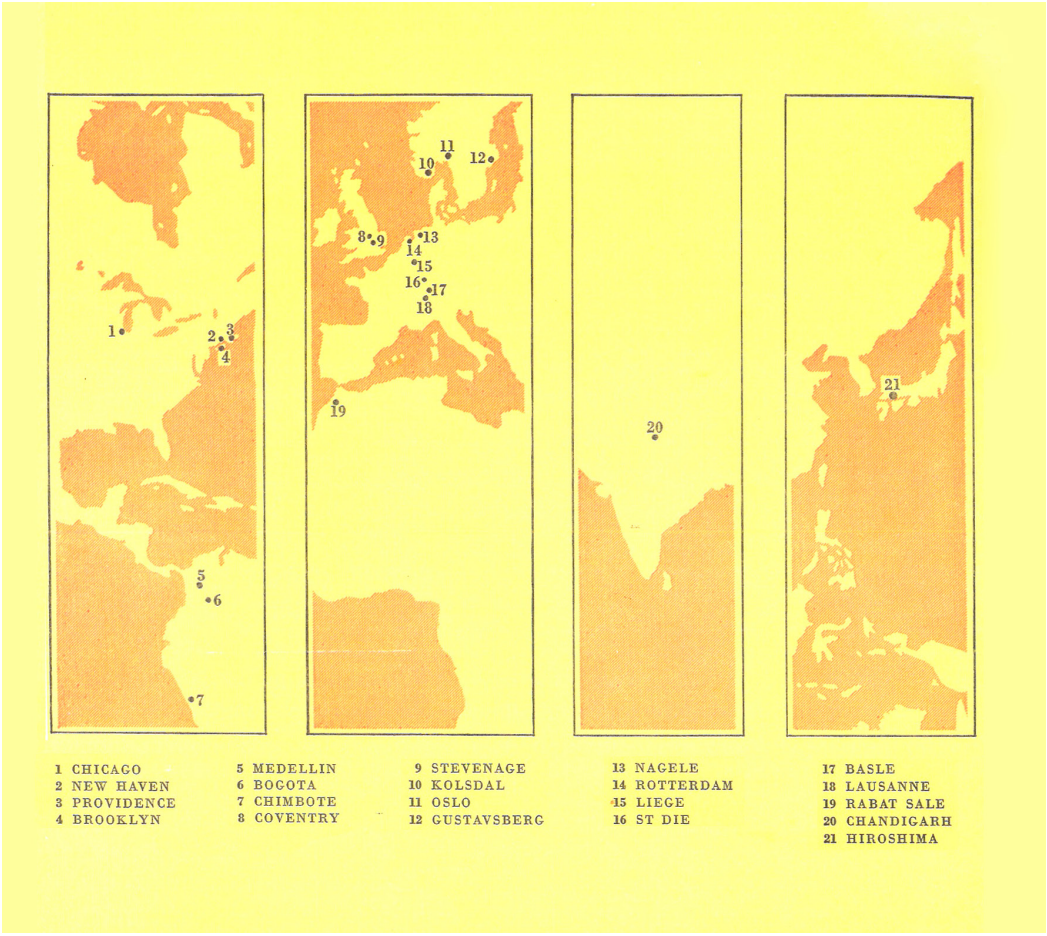
HISTORICAL FRAME: Continuity of CIAM 8

Historically, CIAM 8 discourse has direct and indirect influences in different urban contexts of the world. The flow of ideas starting from the meeting at Hoddesdon, which have not been fully described yet, finds a particular intensity in Europe and in USA. The case studies which will be studied will regard mostly these two continents, even if others might enter into the discourse too. For instance the Japanese Metabolist Movement, born in 1960, has many links and resonances with CIAM 8 too: in particular for the participation of Kenzo Tange[6] in the Congress in Hoddesdon and for the recurrent use of the organic metaphor as leitmotiv[7]. However, we can assume that the most important links and influences are the transatlantic ones. This is evident also by the sites of the projects presented in Hoddesdon in 1951. As we can see from the yellow map published in 1952[8], seven projects are situated in America, twelve in Europe and only one in India and Japan. Of course this geography of the Cores is due to the preponderant participation of the European and American architects at CIAM8.

6 Tange talks in the `60s about "core spaces" directly referring to the Core of the city, even if a structuralist point of view. *"In our proposals"-he says- "for the international competitions for the World Health Organization and in our design for the Kurashiki town hall we gave structure to the whole by means of visual communications spaces – core spaces, in other words. The dwelling unit […] in our Tokyo Plan, 1960 are examples of the same sort of things."* Kenzo Tange, *Function, Structure, Symbol.* 1966, in von Udo Kultermann H., *Kenzo Tange 1946-1969*, ed. Verlag für Architecktur Artemis Zürich, p. 242

7 See Zhongjie Lin, *Kenzo Tannge and the Metabolist Movement, Urban Utopias of Modern Japan.* Routledge, London and New York, 2010 The *tabula rasa* of Tokyo as of Hiroshima led the Metabolists to pose the basis for a new spirit of thinking according to which the existing city is considered as a rigid, constrain, diseased despot, as sustained by Kitakute, in opposition to the autonomy, flexibility and power of the individual. It's the city which has to adapt to the new power of the individual not the contrary. The shell, the capsule, the unit are the new architecture features of a single organism whose parts are both the individual, the house and the city, in any material and at nay scale.The capsule become the image also of the survival architecture and "of the reduction of architecture to the support of the basic metabolic functions of the human body", whose main architectural example still remain the Nigakin Capsule Hotel in Tokyo, designed by Kisho Kurokawa in 1972. See Wendelken C., *Putting Metabolism back in Place. In* AA.VV. *Anxious Modernity.* CCA Montreal, MIT press, Cambridge, London England, p. 295

8 Rogers E.N., Sert J.L., Tyrwhitt J., ed., *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.101



Heart of the City_ CIAM 8, 1951

Moreover this trans-Atlantic discourse about the Heart of City is even precedent to CIAM 8, as Konstanze Domhardt has highlighted in her previous PhD research, analyzing the CIAM discourses on the city center and the American neighborhood unit theory, from 1937 until 1951[9].
Finally the investigated flows of ideas starting from CIAM 8 will be mostly concentrated within the 20 years after the Hoddesdon Congress. Russell Hitchcock has considered these two decades, the 1950`s and the 1960`s, as the main outstanding ones for the production of urban and suburban structure within which we are destined to continue to live[10]. We can then consider the heart theme as part of this urban production within which we are still interacting. The clear references to CIAM 8 will be less evident or even interrupted at the beginning of the `70s, due to different new urban conditions which will focus the attention of critics and architects on different issues[11].

Three actors: historical continuity

The research is therefore mostly focused within this geographical and historical frame, with particular attention to three main actors linked to CIAM 8: the Urban Design Conference at Harvard in 1956 with a specific study of Victor Gruen`s work, the CIAM`s Summer School In Venice (1952-1957) and Jaap Bakema.
Within the first one, the First Urban design Conference held in 1956 at Harvard, shares many links with CIAM 8 as already highlighted by the historian Eric Mumford. While Team 10 is dissolving the *"old professors"* of CIAM, and the Core concept is beginning to be questioned by Team 10, criticizing the basis of CIAM itself, as Eric Mumford reminds us[12], overseas the continuity of the CIAM

9 Domhardt K., *The CIAM discourse on the City center and the American neighborhood unit theory. A transatlantic dialogue, 1937-1951.* PhD thesis, Eth Zurich Hbq 866, 2008
Domhardt, K.. *The Heart of the City: CIAM-Debatten zwischen Europa und Nordamerika, 1933-1951*. Zürich: gta Verlag, 2011.

10 Henry Russel Hitchcock affirms about thi historical period and its urban projets, in Architecture: XIX et XX siècle: *"Les deux décennies avant 1970, les années 50 et 60 virent la production d`une grande partie de cadres urbains et suburbains dan lesquelles nous continuerons probablement a vivre pendant le reste de ce siècle [...]"* quoted in Lefebvre V., *Paris-Ville Moderne. Maine Montparnasse et la Défense, 1950-1970.* ed. Norma, p. 19 Most of the architectural and urban projects which are studied with the heart of the City, are still influencing our contemporary life too.

11 Bernardo Secchi, in 1984, describes three different styles of planning with particular attention to the Italian condition: the first, which dominates the `50s, is concerned with the theory of the urban form and the urban growth, repetitively using the organic metaphor; the second, in the `60s, is more focused on the democratic decision, on the political mediation for the transformation of the territory; the third, in the `70s, is centered on the social practices operating for the use of the territory. Secchi B., *Il Racconto Urbanistico. La politica della casa e del territorio in Italia.* Einaudi, 1984, Torino, p. 60-61

12 See Mumford E., The emergence of Urban Design in the Breakup of CIAM in Harvard Design Magazine

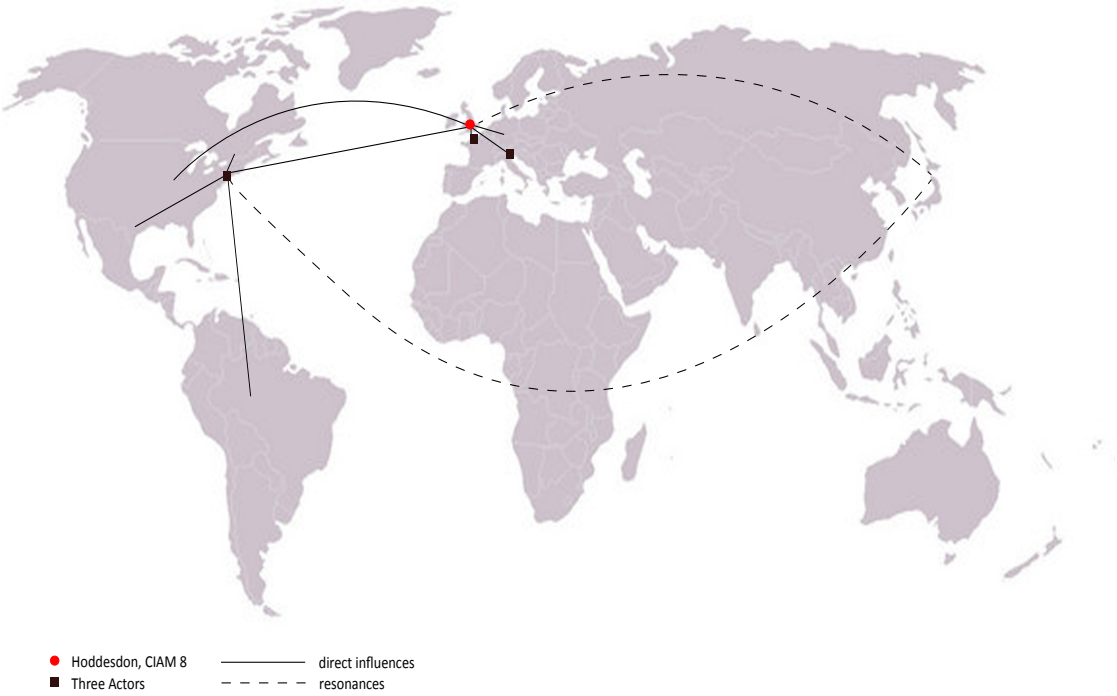
discussion is assured within the prestigious American University where many of the old members are engaged, with their research developing many issues already presented at Hoddesdon, about the Core. Indeed the Heart of the City affects all the issues discussed at the First Urban Design conference with several important consequences to the city structure, such as that of Montreal, as we will see. The American discourse of Urban Design intersects also with the commercial design of Victor Gruen, who participates at the First Urban Design Conference in 1956 and, not by coincidence, in 1964 writes "*The Heart of Our Cities - The Urban Crisis Diagnosis and Cure".*

The second actor is focused on the relationship between CIAM 8 and the CIAM Summer Schools in Venice. Indeed during CIAM 8 the education committee decides to move the Summer School from London to Venice, where it will be held five times. Among the young participants there are some of today's most important architects, such as Denise Scott Brown and Gregotti, while many of the architects who are present in Venice are members of both CIAM and Team X. Moreover the Summer School is an important meeting where the concept of 'continuity' is stressed and analyzed, as later discussed. The CIAM Summer School of Venice is therefore an important case study, also as far as the evolution of the last CIAM is concerned. However it has been almost totally ignored by most historians studying the CIAM.

Finally the research centers the attention on Jaap Bakema, who is an outstanding presence in both CIAM and Team X. This double condition of the Dutch architect is evident in particular in his project for St.Louis in 1959, where the continuity the CIAM 8 debates is recognizable even during CIAM`s demise.

The map below is an attempt to synthesize the relations, which will be later analyzed, between the discourse held in Hoddesdon (red square) and the other three main contexts of debate (black squares). Finally we can summarize that one of the aims of the research is to highlight, for the first time, the continuity of the Heart of the City discourses: linking several architectural and urban movements, discourses, meetings, and projects, and making clear their connections and interdependence with CIAM 8. Another interesting theoretical continuity, which is not always directly linked with CIAM 8, is then analyzed within the research. It is a continuity which finds its origins also nowadays, in our new urban condition, going beyond the necessity of the historical and geographical frame traced before. It is the continuity of a complex discourse about the Heart of the City, which has several layers of meanings.

(2006), *The origins and evolution of "urban design", 1956-2006*, p. 15 This is not totally true since, as we will see Bakema will continue to think about the heart of the city also later, for instance in *'human core of St. Louis'*.



Heart of the City_Flows of Ideas, 1951-1970`s (l.z.m.)

THEORETICAL FRAME: Complexity of the Heart of the City Idea

Metaphor and Symbol

The Heart of the City is first of all a metaphor and as Adrian Forty reminds us *"metaphors are never more than partial descriptions of the phenomena they seek to describe, they are always incomplete"*[13]. The incompleteness of the metaphor allows us to assign many significant aspects which overlay one another, raising the theoretical complexity of the term. As we will see, the significance of the urban issue of the Heart of the City is not unique even during CIAM 8. Many members even do not refer directly to the organic image of the heart, amplifying the stratification of interpretations of the Heart of the City. Others, such as Giedion, underline the symbolical interpretation of the heart rather than its metaphorical translation. Indeed, as we will discuss, Giedion does not make almost any considerations about the physical form of the heart[14] . It is a new social symbol of *"bare naked man"*, of an appropriate relationship between the private and public realm, between collective and individual activities, between "You and Me". We can consider therefore the Heart of the City as a double entity, which is probably one of the main reasons for both its complexity and misunderstanding.

As symbol (from *'syballein'*, meaning *'to throw together'*, from Greek *'symbolon'* and Latin *'symbolum'*, which meant *'token, sign'*[15]), the heart has a social and humanist aim and it is focused on the relationship between the physical space and the society, implying always "*an emotional investment"*[16]. The philosopher

13 *"Indeed, were they to succeed in total reproduction, they would cease to be metaphors, which subsist through likeness drawn between inherently unlike things." in* Forty A.*, Words and Buildings. A Vocabulary of Modern Architecture.* Thames and Hudson. UK, 2000, p.84

14 Giedion refers to a right dimension of the city only in the finale of the book: *"If a reestablishment of the human scale is desired, if a spontaneous relationship between inhabitants is again to come about, the dense masses of urban development must be smashed Instead of one large solid body of masonry with an inextricable chaos of functions, there must be a number of smaller units whose size is foreseen and planned in relation to the human scale."* Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 204

15 Webster M., Collegiate Dictionary. U.S.A: Merriam Webster Inc., 2003, p. 1190 in Fadaee E.,(2011) Symbols, metaphors and similes in literature: A case study of Animal Farm, *Journal of English and Literature Vol. 2(2)*, p.20 *"Symbol is defined in the online 'Encyclopedia Britannica' as "a communication element intended to simply represent or stand for a complex of person, object, group, or idea."* Ibid. As examples of symbols Fadaee proposes the tree as the symbol of growth and the sign of immortality (Gostaniong, 1377: 10). The tree might be therefore another example of both metaphor and symbol in urbanism. As metaphor is indeed criticized for his structure which has been simply used for the design of the city. See later about the tree structure in the chapter about Victor Gruen

16 *"Symbols, on this view, always imply an emotional investment, an effective charge (fear, attraction, etc.) which is so to speak deposited at a particular place and thereafter 'represented' for the benefit of everyone elsewhere."* Lefebvre H., *La production de l'espace.* Ed. Anthropos, 1974, p. 75-76

Sloterdijk finds its roots in Christian models of bodily-spiritual communion and in its *concordia*[17]. As metaphor (from Greek *'Metaphoria'*, which meant *'to carry'*[18]), the heart might be considered as an organ with a limited size and growth, with a precise position and relationship with other organs, and whose function is pumping blood[19].

These two entities[20] can be contradictory since one of CIAM 8`s aims is to overpass the straight functionalism which has been claimed in the previous years by CIAM`s members.

However they can overlap, as in Sert and in Gruen, or they can be differently expressed as in Bakema who is interested in the relationships between things and men rather than in the right dimensions of the city.

Finally Giedion refers specifically to the simplicity of the symbol. *"What began as necessary structural abbreviations now emerge as symbols. The work of Arp, Miro`, Leger, and many others is moving in this direction"*[21] . Indeed the heart is chosen also in order to answer the necessity, stressed for instance by Sartre, to *"spring directly to the senses without explanation."*[22] It is an image whose values

17 *"In the domain of Christianity, however, the personal religion par excellence, the search for the focus of animation has unwaveringly directed itself at the "organ" of the Heart.[...]; among Christianized Europeans, especially in the Middle Ages and early Modern Age, heartiness is the epitome of affective core subjectivity. […] Heartiness as such automatically creates complicity and community, and is consequently interested in concordia, the condition of heart rhythms.[...] Heart-historical motifs cannot deny their roots in Christian models of bodily-spiritual communion."* Sloterdijk P., *Bubbles: Spheres Volume I: Microspherology.* Semiotext(e), 2011, p. 101, originally published as Sphären I – Blasen, Mikrosphärologie, Suhrkamp, Frankfurt am Main 1998

18 *"The first definition of metaphor is expressed by Aristotle as "a shift carrying over a word from its normal use to a new one (Richards, 1965: 89)."* Fadaee E.,(2011) Symbols, metaphors and similes in literature: A case study of Animal Farm ,*Journal of English and Literature Vol. 2(2)*, p.21

19 See Problems of organic theory in Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 95
In particular the comparison between the heart which pumps blood and the Core with its arteries is expressed by Gruen, as later discussed.

20 Rockni affirms that the symbol might be also metaphoric. For instance the "Significant symbols used for natural phenomena, like lion which is a symbol of courage." Rokni M (2009). Retrieved November 2, 2010 from http://harfhaye-man.blogfa.com/8903.aspx. Moreover according to Perrine *"Symbol differs from metaphor and simile in that it does not contain a comparison, but by virtue of association represents something more than itself. For example, if the cross symbolizes Christianity, its symbolic meaning does not arise from a comparison."* Perrine L., Literature 1.New York: Harcourt Brace Jovanovich, Inc., 1974, p.214. Both quoted in Fadaee E.,(2011) Symbols, metaphors and similes in literature: A case study of Animal Farm, *Journal of English and Literature Vol. 2(2)*, p.20-21

21 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 35

22 *"It seems that a new stage of civilisation is in formation in which the human being as such – the bare and naked man – will find a direct means of expression."* in Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 and Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 127-128

should be recognized immediately by everyone in the world, with many references to the philosophy of the School of *Würzburg*, to the Gestalt psychology, etc.
However its simplicity is opposed to the enormous complexity of both its theoretical and physical interpretations, as exposed during CIAM 8 and in the case studies which will be analyzed. In addition this complexity is due also to the use of the heart also as organic metaphor, as already mentioned.
Finally, this stratification and complexity still exists nowadays, with an interesting presence in contemporary urban discussion as well. Indeed, as Paola Coppola D'Anna Pignatelli highlights: *"The design of a Heart is also nowadays one of the most complex problems of urban planning, because of the lack of a definition specifying its contents."*[23]
As far as the contemporary references to the Heart of the City are considered, it is important to note from one side the brand new theoretical attention to the heart theme given by several authors, especially in the last ten-twenty years and from the other side a revision of the organic metaphor in some of the contemporary urban projects.
However, if the former are more interested in unearthing the humanistic and symbolical values of the theme of CIAM 8, suggesting indirectly the necessity to reconsider these values in our contemporary urban condition, then in the urban projects a conservative and traditionalist approach instead arises most of the time.

Contemporary references

Several historians and critics have already highlighted the importance of CIAM 8 and of the Heart of the City theme. This brand new interest, matured in the last ten years, might be interpreted as an awareness of the relevance of the CIAM 8 principles and of its influences. The necessity of a discipline for the appropriate design of the public space seems valid in the 1950s as much as nowadays. *"The elements of social life, the associative life, are in decay. Where can the masses gather?"*[24] Giedion asks in the 1950s while a similar question can be posed also in the contemporary debate about the design of public space. Indeed the heart seems to be recognized as a valid humanistic idea and urban design concept which should be studied nowadays. Among the others, Eric Mumford (2009) has stressed for instance the relevance of the heart of the city as "precursor" of the

23 Paola Coppola D'Anna Pignatelli in a cura di Paolo Portoghesi, *Dictionary of Architecture and Urban planning,* I edition 1968, II edition 2006

24 *"Gli elementi della vita sociale, della vita associativa, sono in disfacimento.Dove si riuniscono le masse?"* Giedion S., *Breviario di Architettura*, Garzanti, 1961, first ed. Bollati Boringhieri, 2008, p. 68

Brief summary of relevant theoretical and historical contributions:

2012 Konstanze Domhardt
_ Heart of the CIty/CIAM 8: roots, 1933-1951
The Heart of the City: Die Stadt in den transatlantischen Debatten der CIAM 1933-1951. gta Verlag, 2011. Publication of PhD Thesis, as later mentioned

2009 Tom Avermaete, Hans Teerds
"The description of the core (VIII CIAM) resembles the definitions of the public sphere by Hannah Arendt, Jürgen Habermas and Richard Sennett" in edited by Avermaete T., Havik K., Teerds H., Architectural Positions. Architecture, Modernity and the Public Sphere. SUN Publisher, 2009, Amsterdam

2009 Eric Mumford
"The clear documentation suggests that there is a direct and linear development from the postwar CIAM focused on the urban core to the most recent thinking about pedestrian-based urban design." in Sert and the CIAM *`Heart of the City`: Precursor to Urban Design*, 1947-52 in Mumford E., Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69, University Press, New Haven and London, 2009, p.80

2008 Eric Mumford, Hashim Sarkis
- Eduard F.Sekler_Chapter 1_Sert, *CIAM and the GSD*
- Jordana Mendelson_Chapter 3_*Creating a Public for Modern Architecture. Sert`s Use of image from GATCPAC to The Heart of the City* -
- Eric Mumford_Chapter 8_ *From the Heart of the City to Holyoke Center. CIAM Ideas in Sert`s Definition of Urban Design*
in ed. by Eric Mumford, Hashim Sarkis, Josep *Lluis Sert: the architect of urban design, 1953/1969.* Yale Press,2008, New Heaven

2004-2008 Konstanze Domhardt_ ETH PhD
Statements from abstract:
_ little has been known about the origins of VIII CIAM.
_VIII CIAM is not a product of the post-war era.
_VIII CIAM comes from transatlantic exchange of ideas
_link with American neighborhood theory
Areas of interest: USA, Europe-Great Britain.
in *The CIAM Discourse on the Heart of the City and the American Neighborhood Unit Theory A transatlantic dialogue, 1937–1951*. ETH

2006 Christopher Alexander
The heart as a new force in order to design the contemporary public space, the so called "positive space". Failure of the First Urban design conference in Harvard.
Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

1968-2006 Paola Coppola D'Anna Pignatelli
"The heart does not mean the physical center of a city or the economic center or the largest traffic point;[...] In the past the heart has often been characterized by a dominant feature: a square as the Agora of Priene or the Piazza San Marco in Venice, the cathedral as a monument in Jerusalem. (Le Corbusier) The design of a heart is today one of the most complex issues of urban planning, because of the lack of a definition specifying its content."
in a cura di Paolo Portoghesi, *Dizionario di Architettura e Pianificazione Urbana*. I edition 1968, II edition 2006

2005 Tom Avermaete
"The term CORE was not referring to a purely physical matter, even to a social issue [...] Briefly, it referred to an element of urban culture." in Avermaete T., *Another Modern.* NAI, Rotterdam, 2005

2005 Alex Wall

"[...] the link between Gruen`s own thinking and the CIAM debates on the city, was probably CIAM 8`s 1952 book The Heart of the City." Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005

2003 Volker M.Welter

_ Heart of City already present in spirit of city of Geddes, Taut,....

_ Heart of city not just a post-war issue:

A: many designs for urban cores of new cities

B: interest in the potentially symbolic function

_ Norberg Schulz-genius loci / VIII CIAM

From locus genii to heart of the city: embracing the spirit of the city. in I. Boyd Whyte (ed.), *Modernism and the Spirit of the City.* Routledge, London and New York, 2003

2000 Eric Mumford

_description of CIAM 8

_influence of the Heart Theme on Gruen : Ciam 8 "was perhaps the first expression of what would become major preoccupations with architect-designed public gathering places in the work of Victor Gruen, Kevin Lynch and many others in the following decades. CIAM 8 can be seen as a reference point for the new forms of public space, includding Shopping malls [...]" From *The Heart of the City to the End of CIAM.* in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960.* The MIT Press, 2000

2000 Barry Curtis:

_Heart of the City and Post-War Humanism *The Heart of the City* in Hughes J., Sadler S. ed by, *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism.* Architectural Press, 2000

1999 Paola Vigano`

_ Heart od the City and Elementarism

Viganò P., *La città elementare.* Skira, Milano, 1999

1998 Francis Strauven

_Heart of the City and eternal present element

_Dutch CIAM members: Bakema, Van Eyck

Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998

1997 Ignasi de Solà-Morales

_ Heart of City as new humanism

_ Heart of City from function to passion

_pre-war: progress, rationality / post war: subjective reality. In *Architecture and Existentialism*. chapter three in I. de Solà-Morales, *Differences. Topographies of Contemporary architecture.*MIT Press, 1997

1992 Vittorio Gregotti

"Moreover at the CIAM in Hoddesdon, also through the 'Heart of the City' theme, the question that starts to emerge - and one which will prove central for the next forty years - is that of listening to the context and of the project seen as a dialogue with the context as a deposited form of the history of a specific place." Editoriale. *Rassegna,* n.52/4

1992 Jos Bosman

_ CIAM, HEART, human element: roots

_ Heart and students/TEAM

Bosman J.(1992), I CIAM del dopoguerra: un bilancio del Movimento Moderno. *Rassegna,* n.52

1992 Francis Strauven

_Dutch CIAM members: Bakema, Van Eyck

Strauve F. (1992), Il Contributo olandese: Bakema e Van Eyck. *Rassegna,* n.52

1992 Werner Oechslin

_1951: CIAM 8/Darmstädter Gespräche

Oechslin W. (1992), I Darmstädter Gespräche. *Rassegna,* n.52

1985 Jos Bosman

_ Heart of the City and Patrick Geddes

Bosman J. (1985), My association with CIAM gave me new perspective. *Ekistics*, n. 314/315

Urban Design, whose contest is still vehemently discussed[25]. Alex Wall (2005)[26] has briefly detached the link between the urban projects and thought of Victor Gruen and CIAM 8, while Tom Avermete (2009) has posed the issue of the heart on a cultural level: he highlights the flux of resonances with other disciplines, comparing the Heart of the City with other "*definitions of the public sphere by Hannah Arendt, Jürgen Habermas and Richard Sennett"*[27]. Other critics have deeply analyzed the roots of CIAM 8, for instance unearthing a constant dialogue between Europe and America since the 1930s (Domhardt,2008)[28] or highlighting the relationships with the theories of Geddes (Bosman[29], 1985 - Welter, 2003) and possible links between the *genius loci* `s theory (Welter[30], 2003). Finally other authors such as Barry Curtis[31] (2000) and Ignasi de Solà-Morales[32] (1997) have depicted the heart of the city as a new humanism and existentialism. These are just some of the main important contributions to the discussion about the heart of the city in the last decade, which will be deeply discussed in the research. However, each one of these critics describes a particular aspect or link of the theme, without a true complete theoretical overview of the complexity of the Heart of the City. The main purpose of both this theoretical and historical research is therefore also to give a more unitarian and complete frame of the discourse, which might become a useful theoretical base for later urban design activity.
As far as the present-day projects are concerned, many of them face the issues of the centrality, the relationship between centre and periphery, the identity, the public space design. All this issues seem to be present inside the Heart of the City theme, already recognized as *"the theoretical code for the definition of public*

25 See Mumford E. *Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52* in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* University Press, New Haven and London, 2009; ed. by Eric Mumford, Hashim Sarkis, Josep Lluis Sert:the architect of urban design, 1953/1969, Yale Press,2008, New Heaven; Mumford E., *The CIAM Discourse on Urbanism.* MIT Press, 2000

26 See Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005

27 See Avermaete T., Havik K., Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, 2009, Amsterdam

28 See Domhardt K., *The Heart of the City: Die Stadt in den transatlantischen Debatten der CIAM 1933-1951.* gta Verlag, 2011.

29 Bosman J. (1985), My association with CIAM gave me new perspective. *Ekistics*, n. 314/315

30 Welter V., *From locus genii to heart of the city: embracing the spirit of the city.* in I. Boyd Whyte (ed.), *Modernism and the Spirit of the City.* Routledge, London and New York, 2003

31 See Curtis B., *The Heart of the City* in Hughes J., Sadler S. ed by, *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism.* Architectural Press, 2000

32 See de Solà-Morales I., *Architecture and Existentialism*, chapter three in I. de Solà-Morales, *Differences. Topographies of Contemporary architecture.*MIT Press, 1997

space"[33]. Moreover some of these contemporary projects directly refer to the Heart as metaphor and symbol of the city, becoming intriguing case studies.

Contemporary Project references

Heart of City vs Generic City

In '90s Rem Koolhaas conducts his cultural battle or provocation concerning the centrality of the city. The Dutch architect indeed eulogies the 'Generic City', as "*the city liberated from the captivity of center, from the straitjackets of identity".* It is a city "*without history […] equally exciting – or unexciting -everywhere [...], it can produce a new Identity every Monday morning."*

It is a city that abhors also its identity character. Without any kind of centers there would not be any periphery, any division between inners and outsiders typical of "*the present concentric obsession"* which has also social consequences making "*us all bridge-and-tunnel people, second-class citizens in our own civilization."* [34]

However, almost in the same year the Generic City is published in *S, M, L, XL*, the Dutch architect presents his project for the new centre for Almere in The Netherlands. Almere is one of the new-cities built since the 1970s in Netherlands. It is composed of a conglomeration of five main centres, expanding within the polder, as a polynuclear city within the nature, freed by any "*concentric obsessions".* The lack of a main centrality combined with the image of the city, considered as a dormitory appendage of Amsterdam, makes the authorities convinced of the necessity of a *"geographic and programmatic heart of the city"*[35] . The project for a sixth representative main centre is then given to the Dutch studio OMA. Arjen Oosterman, in an article which appeared in *L'architecture d'Aujourd'hui*, defines the aim of the entire new project of OMA as to give *"un coeur à ses cinq centres et se rendre attractive"*[36], to design a heart among the other centers, as an aggregating centripetal focus, a compact dense centre able to develop an urban identity which is missing within the existing amorphous settlement of housing. Even if in the mid `90s the identity and the centralization of the city

33 Domhardt K.S., *From the "Functional City" to the "Heart of the City". Green Space and Public Space in the CIAM Debates of 1942-1952*. in Brantz D., Dumpelmann S., *Greening the City: Urban Landscapes in the Twentieth Century*. University of Virginia Press, 2011, p. 151

34 Koolhaas R., *S,M,L,XL.* Monacelli Press, New York, 1995, p. 1249

35 Provoost M., Colenbrander B., Alkemade F., *Dutchtown. A City Centre Design by OMA/Rem Koolhaas.* NAI Publishers, p.31

36 *"to give an heart to his five centers and to become attractive",* Arjen Oosterman.(2002) *Réinventer Almere.* L'architecture d'Aujourd'hui, n.339, p 68-75



OMA, Almere, 1990`s

are theoretically abhorred in the Generic City of Koolhaas, their necessity arises in the physical transformation of Almere.[37] The Generic City and the heart of the city of Almere, considered in this case as a centripetal identity of the Dutch city, become at the end of the century an intriguing dichotomy between theory and project attitude. The heart of the city, or some of its interpretations, in this case is not only a theoretical issue but it is an arising request for a socio-political commitment, in front of which one of the most radical manifestos of the century finds its limits and incongruity.

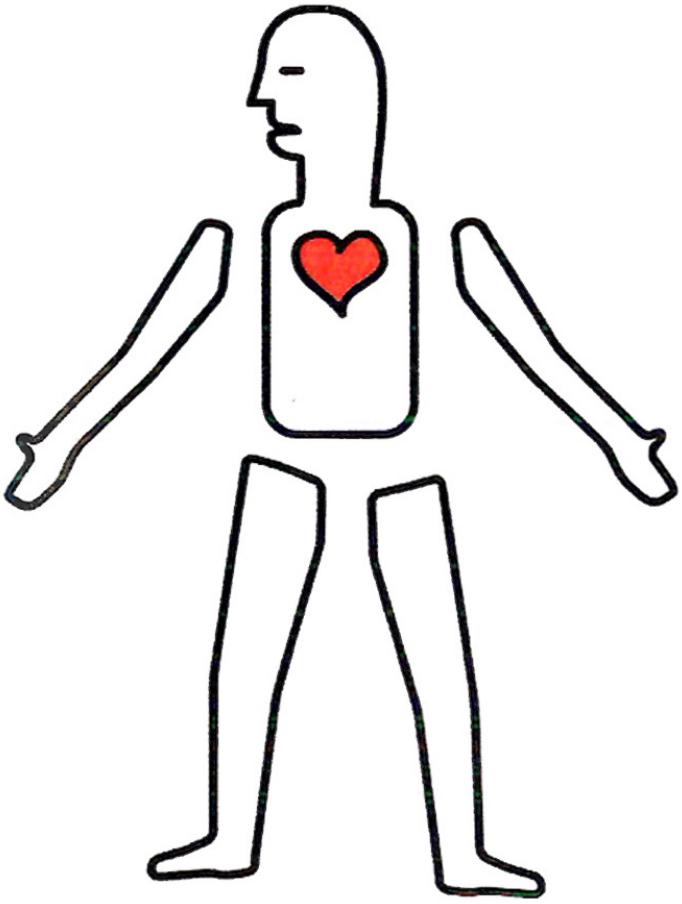
The Traditionalist Grand Paris

Recently the well-known architect Richard Rogers, cousin of Ernesto Nathan Rogers – one of the CIAM editors of "The Heart of the City"- has re-proposed the organic metaphor in order to justify his proposal for the *"Grand Paris"*, in 2009.
Indeed in Rogers` project the heart becomes a metaphor of restoration of connections to external urban severed limbs, reconstructing the governance of the *Ile-de-France* with balanced districts. Even if we do not comment on the entire project presented by Rogers, it is important for our discourse to underline anyway that the heart metaphor is in this case used only as a unique layer of significance, as the radial connectivity and the right dimension of Paris. From Ernesto Nathan Rogers to Richard Rogers, from Hoddesdon to La Grand Paris, since 1951 until 2009, the heart metaphor is still considered and deeply used as a powerful metaphor, but with a more superficial conscience. The arising of a superficial layer of significance of the heart metaphor is a demonstration of the necessity of a brand new serious discourse about the heart idea and about its complexity in reference to the urban condition.
Then we can note that Rogers already designs a similar urban project in 1992 for the Lujiazui International Consultation, organized by the Government of the city.[38]
Both projects remind us indeed of the traditional Ebenezer Howard's Garden City, since also the Asian project is designed with a circular layout centered in this case upon a large public park. However, both of them do not mirror at all the complexity and the positive aim hidden within the humanist values of the Heart of the City, as discussed by some of the CIAM members in the 1950s.
From these two projects, we can hypothesize that a new general and also interest in the organic metaphor rises in parallel with a renovated traditionalist movement.

37 "A greater contrast with the core-less, anonymous generic city, is difficult to imagine." Provoost M., Colenbrander B., Alkemade F., *Dutchtown. A City Centre Design by OMA/Rem Koolhaas.* NAI Publishers, p.75
38 The other architects invited are Massimiliano Fuksas of Italy, Toyo Ito of Japan, Dominique Perrault of France

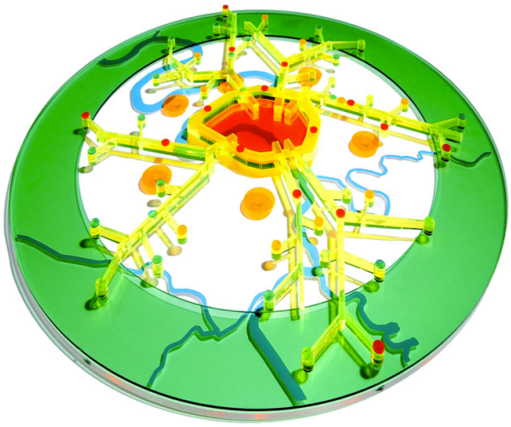


"Comme le dit Richard, on n`a jamais vu une ville dont le corps est déconnecté des bras..." , Mike Davis and Richard Rogers, 2009



«Je ne connais aucune grande ville où le cœur est à ce point détaché de ses membres.»

Richard Rogers



Grand Paris, Richard Rogers, 2009

The critic Hans Ibelings states that the contemporary traditionalism is a phenomenon that has arisen with the turn of the century. He defines its conception as the reaction to the *"globalization of nothing"*, as described by the sociologist George Ritzer: the arising of *"nothingness"*, is due to *"the influence of globalization and market liberalism."*[39] We can suppose that this *"nothingness"* might have organicism as a superficial counterforce. Indeed already in the 1970s the philosopher Lefebvre affirms that only *"when an institution loses its birthplace, its original space, and feels threatened, it tends to describe itself as "organic."*[40] Then we can ask ourselves if the contemporary condition of social, political and economical crisis and contemporary traditionalism, can have some resonances with the 1950s post-war condition too, when CIAM 8 takes place. To answer, Ibelings considers this possible link identifying a traditionalist presence also in the 1950s society, which is *"idealized in the conservative debate on norms and values."*[41] Thus, most of the time we can consider the most superficial layer of the heart as its conservative and traditionalist interpretation: it is a point of view which looks for well detected boundaries of the city - similar to a medieval town-

39 Ibelings H., *Unmodern Architecture. Contemporary Traditionalism in the Netherlands.* NAI Publishers, 2004, p. 14-15

40 *"It 'naturalizes' itself, looking upon itself and presenting itself as a body. When the city, the state, nature or society itself is no longer clear about what image to present, its representatives resort to the easy solution of evoking the body, head, limbs, blood or nerves. This physical analogy, the idea of an organic space, is thus called upon only by systems of knowledge or an organic space, is thus called upon only by system of knowledge or power that are in decline"* Lefebvre H., *The production of Space.* Blackwell Publishing, 2010, p. 274

41 Ibid. p. 46



Heart of the City, Global advertising

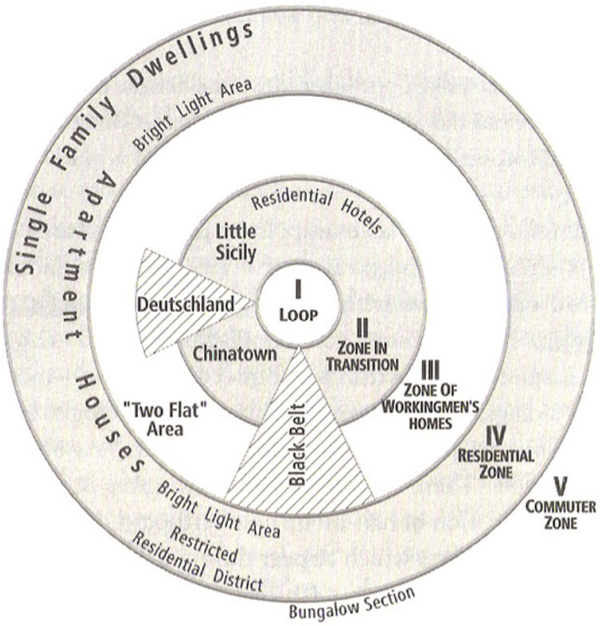
and where each part finds its right place, similarly to each organ within the body. Traditionalism finds indeed its resonance in the urban discussion, in particular within the New Urbanism movement, where the social and physical cohesion, easily describable with the heart image, is considered as a necessity. Krier and Kohl are the main supporters, using what Ibeling calls "*an innovative and non- traditional core*"[42] which anyway does not directly recall a pure nostalgia.

The traditionalist use of the heart metaphor is then surpassed even by a kitsch-nostalgic-populistic abuse of the term, as seen in current worldwide marketing or tourism advertising[43]: the traditionalist counterforce of the global marketing is finally adsorbed by the marketing itself.

But how come many modern architects have considered this metaphor, as we will see, even without referring to an appropriate dimension of the city and of its parts? The dichotomy which arises by analyzing the several projects which directly refer to the Heart of the City, is a clear proof that this urban issue is more complex than it is usually supposed to be. Even if the organic metaphor is generally easy to criticize, the stratification of layers of significance of the heart organic metaphor which is mixed with its symbolic values, is still an unclear issue which is necessary to discuss.

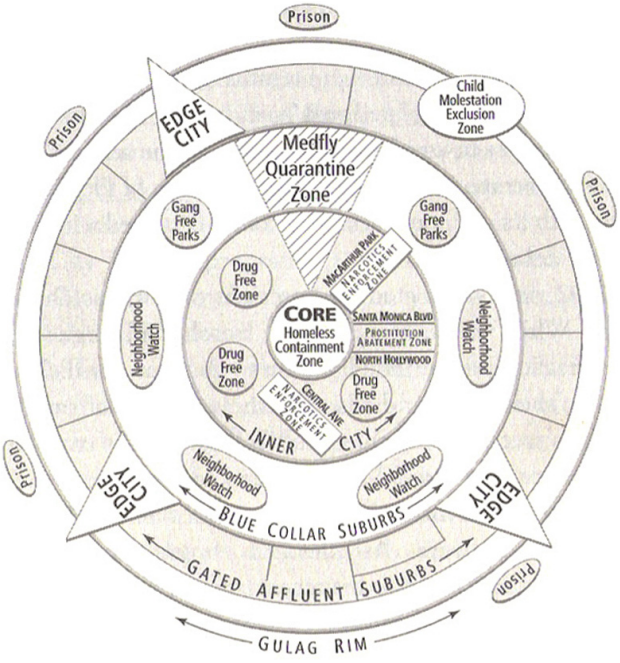
42 **Ibelings H.,** *Anti-Modernist Megastructures, in.* Rob Krier, *Town Spaces,* Birkhäuser, 2006, Basel

43 **Example. As Dubai has no heart, its Department of Tourism and Commerce Marketing (DTCM) has** launched in 2005 a mega marketing campaign titles *"Dubai heart […] Even when the whole body is fast asleep, the heart is at work diligently and that is an expressive comment about Dubai".* Mr. Bin Hareb notes *"It also represents the positive sentiment that visitors feel – of being welcome in a warm, hospitable city that is simply bustling with life."*



"The most famous diagram in social science"

Burgess, City model, 1920's



The ecology of fear

Davis, L.A. Ecology of Fear, 1998

Social Centrality (the ecology of fear)

Ten years before the project for Grand Paris, Mike Davis[44] proposes a reinterpretation of the 1920s model of Ernest W. Burgess (1886-1966), with some resonances with the scheme of Paris.

Almost eighty years after Burgess`s model, Mike Davis attempts to redraw, in a contemporary Los Angeles' scenario, "*Centrality as a Landscape of Power"* [45], citing Sharon Zukin. At a first view of its brand new and still concentric "*Ecology of Fear diagram""*[46], it is interesting to note that Davis substitutes the central 'Loop I' or 'CBD' of the Burgess' scheme, with the 'Core', which has for us a deeper meaning. Indeed the 'Core' is usually used as a synonym for the Heart of the City also during CIAM 8; sometimes it is preferred by CIAM members in order to stress the physical character of the heart, in contrast with a more 'abstract Core' Idea (Opbouw group). Nevertheless Davis immediately specifies that the Core is not a magnificent square or meeting place: it is nothing more than an '*Homeless Containment Zone'* surrounded by the no more reassuring *'Drug Free Zone'*, *'Narcotics Enforcement Zone'* and *'Prostitution Abatement Zone'*, which constitutes the rest of the inner city. Then the outer rings seem to follow this 'fear' escalation passing from the *'Gang Free Parks'* to the *'Child Molestation Exclusion Zone'*, which are present within the suburbs of the *'Blue Collar'* workers, distinguished by the white-collar ones who perform non-manual labor in offices, and the *'Gated Affluent Suburbs'*. In Burgess's scheme these last two rings are instead filled by a low-medium class of workingmen 's houses and by an outer high class-residential zone.

From an "*Ecology of Power"* (Zukin) to this last "*Ecology of Fear"* (Davis), the control gains importance and centrality. Indeed, if the last ring is described by Burgess as the 'Commuter Zone', in Davis' diagram it turns even into a 'gulag rim', a forced work camp of Russian origin in L.A. (!). Indeed the word 'prison' surrounds the last thin gray ring, keeping Howard's traditional green belt.

Fianlly we can note that Roger`s proposal for Paris and Davis` model, share many similarities such as the refererfernce to the Core and the concentric structure. The traditional peaceful garden city model proposed by Rogers, finds its nearest similarities in a *"Dystopia"* of urban fear.

44 Mike Davis who collaborates with Rogers for La Grand Paris is not the same Mike Davis we are talking about now.

45 Zukin S., *Landscape of Power, from Detroit to Disney World.* Univerity of California Press, 1991, p. 1

46 *"My remapping takes Burgess back to the future. It preserves such 'ecological' determinants as income, land value, class, and race but adds a decisive new factor: fear".* Davis M., *Ecology of Fear, Los Angeles and the Imagination of Disaster.* Vintage Books, New York, 1998, p. 363

The literature

The young Italian studio DOGMA has recently published (January 2011 in *Architectural Design* magazine) its proposal for *"an archetype for the contemporary European City."*[47] The project consists of an enclosed square hosting 22 inhabitable units under a glass roof; many similar fortresses are thought to be located along the railway near each center of the European North Western Metropolitan Area (NWMA).

The final system becomes a network of places of knowledge exchange, an *"Edufactory"*, which becomes the true contemporary *"core of production",* born on the ruins of the Fordist machines. The new "cores" have as their main reference, a novel written by Gustave Flaubert, "Un Coeur Simple" (1877). It is interesting to note the symbolical translation of the heart metaphor from literature, where the metaphor finds its origins in urbanism[48]. A similar translation has also already been done in 1944 by one of the most important Italian painters, Alberto Savinio, brother of the more famous metaphysical painter Giorgio de Chirico. Savinio dedicates his book to the destroyed city of Milan, bombarded during the War, using the heart and the body as an urban identity betrayed by humanity: *"[...] I dedicate to you, Milan, all the 'carnal' love that man can give to a city. […] And how prophetic it sounds now the title of this book: I listen to your heart, city .[49]"* And Savinio`s book is truly prophetic as far as CIAM 8 is considered, since in Hoddesdon the heart too becomes an issue for the reconstruction of all cities whose structure has been annulled by the War.

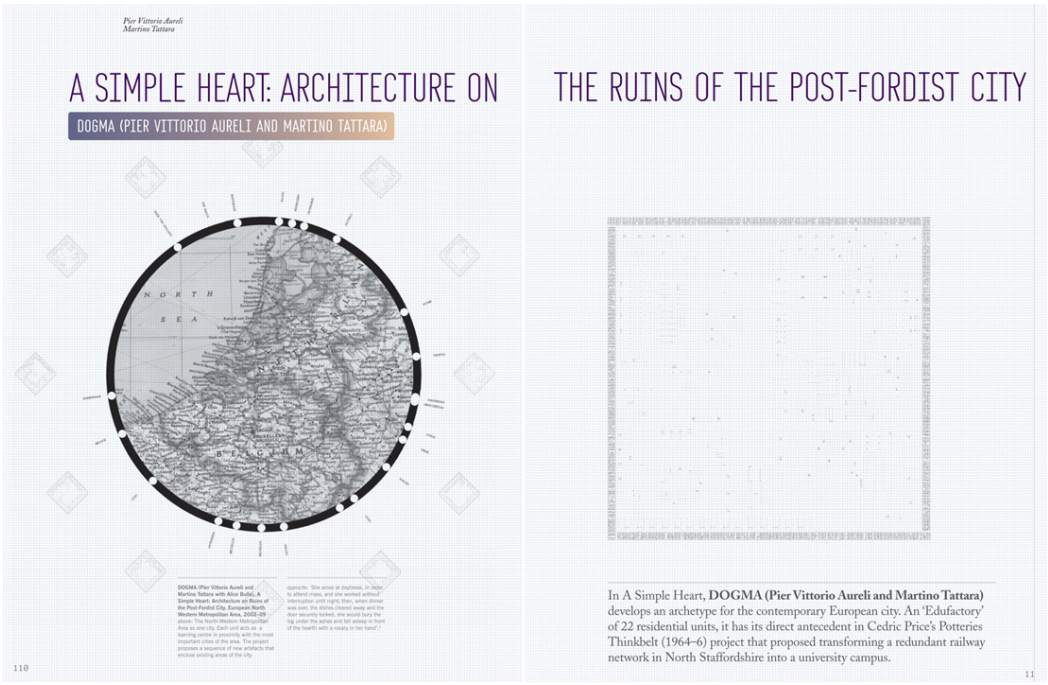
However the interpretation of the *simple coeur* seems to be less poetic and rhetorical than Savinio`s *cuore.* Indeed from the text to the structure of the city, Flaubert uses the heart-symbol in order to denounce the negativity of the XIX Century bourgeoisie society while DOGMA re-uses it for celebrating *"the power of form in framing and defining the space of existence against the fragmentation perpetrated by contemporary urbanization."*[50] It might be interesting to argue how the same heart image can interpret the denunciation of both the XIX bourgeois and the contemporary urban fragmentation and if there are any resonances and links between these two. However what is most important to highlight, both two

47 Aureli P.V., Tattara M.,(2011) A simple Heart: Architecture on the ruins of the Post-Fordist City. *Architectural Design,* vol. 81, n.1, p. 110

48 See Secchi B., *Between literature and urbanism.* Giavedoni ed.,Pordenone, 2011

49 *"[...] Io dedico a te, Milano, tutto l`amore 'carnale' che uomo può avere a una città;[...] E quanto profetico mi suona ora il titolo di questo libro: Ascolto il tuo cuore città."* Savinio A., *Ascolto il tuo cuore, città.* Adelphi, 1984, p. 388

50 Aureli P.V., Tattara M., (2011) A simple Heart: Architecture on the ruins of the Post-Fordist City. *Architectural Design,* vol. 81, n.1, p. 115





DOGMA, A Simple Heart, 2011



Savinio, *Ascolto il tuo Cuore Citta`*, I ed. 1944

centuries ago as nowadays, is again the complexity of the term which is elaborated, deformed and symbolically translated in different social, urban and historical conditions. The second important aspect to highlight is again, similarly to Rogers` project, the use of the metaphor as unity control, as concentration, as precise form too (circle for Rogers, square for DOGMA). But the cores in this specific case are not part of a unique body: they are inserted within a cultural network arising from the importance of the contemporary production of knowledge rather than a traditional image of a Garden City.

The Heart as archetype and Idea

Another important assertion presented by the last studio of architects is that the *Coeur* is an archetype (from Greek *arkhetupon* 'something moulded first as a model', from *arkhe-* 'primitive' + *tupos* 'a model'[51]), a preconscious *a priori,* universally recognized.[52]

This universal character of the heart is presented by some of the CIAM members too in Hoddesdon in 1951. In particular Sigfried Giedion, quoting Sartre, highlights the necessity of *"signs and symbols which spring directly to the senses without explanation*[53]*" ,* in order to justify the arising of the issue of the Heart of the

51 From Oxford dictionary.

52 See Jung C. G. , *Collected Works*, ii, and Knapp B. L. , *Archetype, Architecture and the Writer.* Indian University Press Bloomington, Bloomington, 1986

53 *"It seems that a new stage of civilisation is in formation in which the human being as such – the bare and naked man – will find a direct means of expression."* in Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952,

City. This interest in what he calls at CIAM 8 - "*certain continuous things running through history"*[54] - will lead the historian in the 1960s to write "*The eternal present: A contribution on Constancy and Change"* where we can read on the first page: *"...we shall start out from the one point accessible to us, the one eternal center of all things – man, suffering, striving, doing, as he is and was and ever shall be...We shall study the recurrent, constant, and typical as echoing in us and intelligible through us."* Jacob Burckhardt, *Lecture on History* (1868)[55]

The Heart of the City theme seems perfectly to fit into the necessity, described by Burckhardt, to study "*the one eternal center of all things"* which has an echo in society nowadays too, as shown for instance by DOGMA. We may assume it in particular as an "eternal element", as already underlined by Strauven[56] or an "eternal idea" of the public sphere. This interpretation might be supported also by the speech at CIAM 8 about the Heart of the City of Sert, who considers from one side the issue of the reconstruction of the bombed cities and from the other, the necessity to stop the infinite sprawl of American cities. The Heart of the City is therefore presented in the middle, as ideal idea of the public space, between the tabula rasa and the sprawl, between the zero and the infinity status of the city. Finally, its abstract essence and relationship with other discourses about the public sphere has been recently recognized also by Tom Avermaete[57] who highlights the resemblance of the description of the Core of CIAM 8 with the definition of public sphere given for instance by Hannah Arendt, Jürgen Habermas and Richard Sennett in different years, respectively in 1958 (Arendt, The Human Condition), in 1964 (Habermas, The Structural transformation of the public sphere) and in 1977 (Sennett, The Fall of Public Man).

It is therefore a concept that finds an echo in different periods, in different social-

p. 17 and Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 127-128

54 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

55 Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964).* Bollingen Foundation, Pantheon Books, New York. These book are part of the volumes of the A.W. Mellon Lectures in the Fine Arts, annually delivered at the National Gallery of Art, Washington.

56 The interpretation in Giedion of the core as an eternal element is underlined by Francis Strauven. Francis Strauven. He affirms that Giedion`s discourse about the Heart *"ties in closely with the research into "the eternal present" he was engaged in at the time, a search for the original archetypes of art and architecture, for the primal, prehistoric forms that he saw simultaneously re-emerging in the art of the contemporary avant-garde. He regards the core as an urban archetype, as the place where the individual can participate in public life."* in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238 See Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964).* Bollingen Foundation, Pantheon Books, New York.

57 in edited by Avermaete T., Havik K., Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, 2009, Amsterdam, p. 38

political contexts: CIAM 8 might be considered as the critical point of discussion, but the heart has from one side deep roots in the past and from the other it still expresses contemporary values. Finally we can assume the Heart of the City as an abstract Idea of the city, as already asserted by the Opbouw Group in 1951[58] and later deeply analyzed[59] . The best examples supporting the heart as Idea, are again exhibited during CIAM 8 by the Swiss historian during his speech *"Historical Background to the Core".*[60] Indeed Giedion focuses his attention on Michelangelo`s Capitol, which is a perfect urban heart, "*symbol of the vanished liberties of the medieval city-republic that he held in his heart*"[61] ; however the *piazza* is built in a society which does not yet know what freedom is. If the Agora expresses freedom even after the Greeks lose it, the Capitol is thus the expression of a better future social democratic development which is not present yet. The Capitol as Heart is therefore an idea of future democracy expressed in a present physical form. Then the "*great artist",* Giedion continues, is the designer who interprets in a present tangible form a future better condition or idea of the society, towards which we should tend. "*This is our task today."* [62] he concludes. Sixty years after CIAM 8, this task seems still contemporary valid and effective. In a contemporary crisis of the capacity to design the public space, highlighted by many critics such as Richard Marshall who talks even about *"absent urbanisim"*[63], the heart as a symbolic Idea still affirms its contemporary necessity .

Three actors: theoretical complexity

We have already seen the historical continuity and the flow of ideas among the three main actors which will be analyzed. As far as a theoretical level is considered, we can consider the different layers of significance of the heart theme, or arteries of the heart if we want to keep alive the metaphor, as branches of a cultural phylogeny tree.

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58 As described by the Opbouw Group in Hoddesdon, "*the abstract core is not one point, or one space, or an expression of only one activity, but an idea , expressed now, by one, then by another activity, fluctuating from one place to another, reaching his extreme expression perhaps within a certain, but not distinctly bordered, region" Opbouw group, CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing. Bakema Archive, NAI, Rottedam, g. 18*

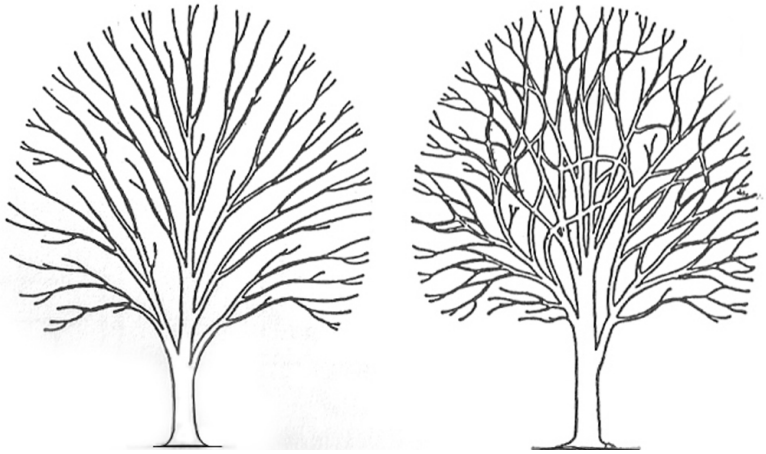
59 See chapter about Bakema, III Actor

60 See Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 . The same discourse is present in *Space, Time and Architecture*, 1941 and in *Architecture You and Me,* 1958

61 Ibid. p.25

62 Ibid. p.25

63 See Marshall R., *Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim.* London: Spon Press, 2003



'biological phylogeny' tree *'cultural phylogeny' tree*

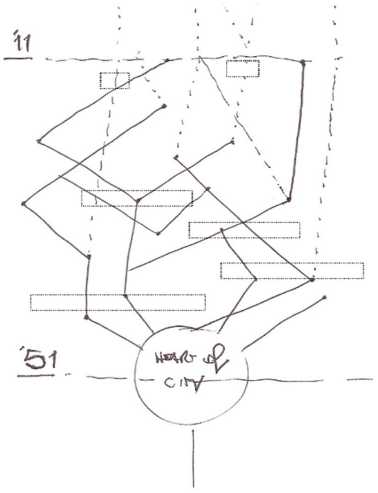
Defined by the anthropologist Kroeber, the phylogeny tree differs from a classical tree structure for its overlapping branches which melt, hybridize with the others, similarly to the semi-lattice structure defined by Christopher Alexander[64]. The difference is well described by Carlos Martí Arís in his book "*Le variazioni dell'identità. Il tipo in Architettura"*, where the author describes the natural tree as the '*biological phylogeny'* while the second represents the '*cultural phylogeny'*[65], symbolizing the complexity of *"the mechanism of the human creation"*[66].
The former represents for Aris, the classification of elements while the latter the transformation of the typology forms. Indeed the overlapping of the semi-lattice structure, which represents the complexity of the structure of the society and of the old natural-cities, has a correspondence with the hybridization of the types in architecture.[67] The semi-lattice is therefore a valid model simultaneously for the structure of the society, for the structure of the city and for the architectural type as well. As a cultural and typological transformation image, the cultural tree

64 *"The tree axiom states: A collection of sets forms a tree if and only if , for any two sets that belong to the collection, either one is wholly contained in the other, or else are wholly disjoint.[...] The semi-lattice axiom is: A collection of sets forms a semi-lattice if and only if, when two overlapping sets belong to the collection, then the set of elements common to both also belongs to the collection."* in Alexander C., *A city is not a tree.* in ed. By Bell G., Tyrwhitt J., *Human Identity in the Urban Environment.* Penguin Books, 1972, 405-406

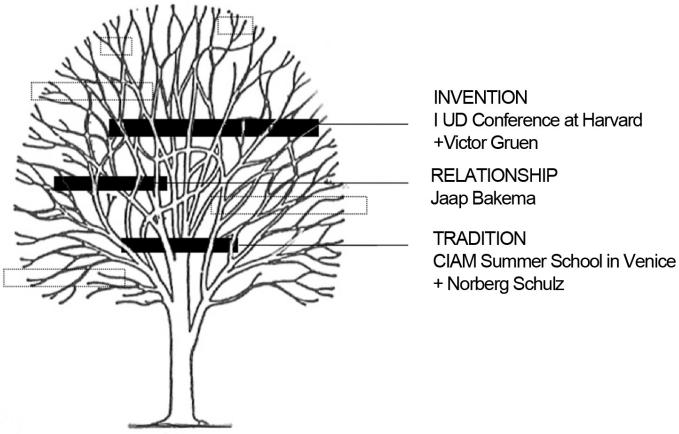
65 Ibid.

66 Martí Arís C., *Le variazioni dell'identità. Il tipo in Architettura.* Clup, Torino, 1990, p.49 See also Steadman P., *The evolution of design.* Cambridge university Press, 1979; Kroeber A.L., *Anthropology. Race, language, culture, psychology, prehistory.* Hacourt Brace Jovanovich, New York, 1948

67 Similarities may then be found with the '*threshold*' and '*in-between*' idea of Team X members, in the *'and-and'* phenomenon in Complexity and Contradiction by Venturi, and so on.



Arteries of the Heart (l.z.m.)
- interpretations (horizontal)
- influences (vertical)



Three main actors and cultural phylogeny tree (A.L.Kroeber) (l.z.m.)

seems therefore a perfect representation of the stratification and interaction of the different arteries of meaning of the heart Idea, coming symbolically from a main trunk, the CIAM 8, and melting together and evolving vertically through the history. Since it is not possible to describe each singular branch of a tree, also of a natural tree, the three main actors have been individualized in order to dissect horizontally the symbolical branches, intersecting the most important ideas and issues regarding the Heart of the City. This theretical approach is similar to the sections used for a complex project or territory in our profession.

We have already mentioned these actors in order to underline their continuity with CIAM 8 discourse and its flow of ideas around the world. We might now summarize that each of these actors represent a main theme or process of the city in the last 60 years. The Urban Design Conference and Victor Gruen, represents the invention and the renewal of the city in America through the heart idea; the CIAM Summer School in Venice represents the arising importance of the tradition, of the Rogers` continuity, of the recognized role of history and the context within the modern project; finally Bakema represents the physical interpretation of the philosophical current of Relationalism (see Enzo Paci), putting the relationships between the urban factors as a main issue for the sociological and physical structure of the city. The invention of the City, the Tradition (but not the traditionalism) of the City and the Relationships within the City, might therefore be considered the three main themes which grow from the heart Idea, and which connect the other main arteries of interpretations as we will later discuss. Then each actor finds a contemporary resonance which confirms the necessity nowadays for a deeper theoretical discussion.

THREE ACTORS: contemporary interest

I ACTOR

The First Urban Design Conference at Harvard, 1956

The First Urban Design conference, organized by Sert at Harvard in 1956, has reinterpreted many issues discussed in Hoddesdon, such as the necessity of a three dimensional design of the city; the necessity of a synergy between different professional figures acting on the city structure; the right of the pedestrian; and the necessity of centralization of the city. These issues become references for discussion nowadays as well.

In 2006, on the occasion of the 50th anniversary of the First Urban Design Conference, some critics and historians discuss the role of Urban Design and its consequences nowadays. For instance Fumihiko Maki affirms that nowadays the issues of the meaning of the central district and of community as discussed in 1956, are still important. Describing the complexity of Tokyo he then affirms that Urban Design *"in reality remains a skill that demands their interpretation into three-dimensional space within a fixed time, budget and program."*[68] Eric Mumford highlights too that the issues formulated during the 1950s and 1960s are still current, even the "Heart of the City" theme[69]. Then Richard Marshall states that the struggle of Sert and his contemporaries, to define the terms of the problem of urbanism, *"has never really ended"*. Moreover, since cities are nowadays more complicated than fifty years ago, the new challenges are bigger than Sert`s ones. Urban design as a discipline, which finds its roots in CIAM 8, is therefore still affirmed with its outstanding validity.

In the same year, 2006, Christopher Alexander publishes an essay entitled *"The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City."*[70] The essay, which is focused on the theoretical description of the heart

68 Maki F., *Fragmentation an Friction as Urban Threats: The post -1956* City. In ed. by Krieger A., Saunders W.S., *Urban Design.*University of Minnesota Press, Minneapolis, London, p. 97

69 *"It is in fact at this time that many ideas about urbanism were formulated in ways that are still current. These ideas include the recognition of the importance the "heart of the city" as a place of urban pedestrian life and cultural institutions, the need to better organize traffic circulation patterns, and the value of the natural environment as part of urbanism, as well as the absence of an overtly partisan political justification for strenthening the central city. Although the aesthetic and functional significance of Sert`s own work remains controversial, his effort to synthesize the historic and the new, the technological and the artistic, in a contect of strengthening urban pedestrian activity during a time of rapid urban decentralization remains of considerable contemporary importance."* Mumford E., *The Emergence of Urban Design in the Breakup of CIAM.* Ibid., p. 31-32

70 *"This essay invites a journey of non-traditional thought about architecture and urban design, and proposes a science of context-sensitive, harmony-seeking, shape-forming process focused on generating and shaping*

The Heart of The City

A Necessary Binding Force that Creates the Core of Every City

Christopher Alexander

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Alexander(ed.), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City*, 2006

theme, begins, not by coincidence, by describing and criticizing the 1956 First Urban Design Conference, which we have already described as part of the first actor of the research.

The contemporary heart discourse of Alexander starts in some way with the criticism of the Heart of the City itself, since the First Urban Design Conference is a continuation of the Heart of the City debate of CIAM 8 in 1951. This apparent contradiction is very important for our research, since it highlights the failure during the last 60 years, in Alexander`s opinion, of most of the positive proposals exhibited in 1956 at Harvard and in 1951 in Hoddesdon: *"one might say the brutal landscape of modern urban design and modern city-building, was largely caused by the kind of thinking which was articulated at the 1956 conference."*[71]

The main mistake of the 1956 conference is, for Alexander, the unawareness, the incapacity to focus the attention on the public space as the generator of the city, or more specifically, on what he calls *"the positive space"* : *"it is coherent space which has the attribute that people want to be there, choose to be there. It has the quality that people feel well in themselves when they are there, and they are capable of experiencing their own life when they are there".* As opposed to this *"positive space"*, the building masses have instead characterized the architecture project since 1956, leading to the crisis of the contemporary public space.

Finally, the re-organization of the structure of the city, toward the positive Heart of the City, as *"a genuinely new concept requiring the remaking of space"*, is an aim proposed by 20th Century CIAM members who, however, were not able to accomplish it. This remains, therefore, *"what we 21th - Century architects, now must deliver."*[72] - Alexander claims, underlying the importance of contemporary discourse about the Heart of the City.

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positive space in all public places, so that the overall urban process will be able, in the hands of thousands of professionals and users – to generate inspiring, useful space throughout the city and throughout the region". Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

71 **Ibid. p. 3 He then lists all the problems or failures which he recognizes in the last 50 years urban design:**

- _ lack of positive urban space-space
- _ failure to resolve the car
- _ lack of variation
- _ gigantism
- _ a view of the city as a machine, not as an organism
- _ lack of attention on the suburbs
- _ lack of attention on the 90% of the Earth which is in a state of poverty
- _ failure in the economy of cities
- _ failure in class and social divisions

72 **Ibid. p. 25**

Then other authors have highlighted the relevance of the urban design discourse nowadays. For instance, as far as the pedestrian is concerned, Eric Mumford affirms that *"the documentary evidence suggests that there is a direct linear development from this postwar CIAM focus on the urban core to more recent thinking about pedestrian-based urban design."*[73]
Moreover the necessary separation between pedestrian and vehicular traffic, stressed both in Hoddesdon and at Harvard, has been radically translated in some parts of USA into negative phenomena. Indeed the Canadian architect Trevor Boddy has studied the split of pedestrian from car-traffic, which is the cause of the change of the nature of the North American City, transformed into the *"analogous city"*[74]*. "[...] Downtown streets are now subject to attack, a slow, quiet, but nonetheless effective onslaught underground and overhead, by glittering glass walkways above the street, or tunnels beneath them."*[75]
From the *"Royauté du piéton"* claimed by Le Corbusier at CIAM 8, to these *"Skywalk cities"*[76], or underground cities such as Montreal which will be discussed, the right of the human scale is transformed, in some contemporary examples, into its social segregation.

Victor Gruen

There is no doubt about the influence of Victor Gruen`s activity on the structure of the cities in the entire world. If in the early 1990s Margaret Crawford claims that *"the world of the shopping mall […] has become the world"*[77] , then the *"mall maker"*[78] Victor Gruen, considered as the pioneer of the regional shopping centers, is certainly one of the main actors of this transformation.
However our contemporary dependence on the commercial and consumer activity faces, most of the time, banal and bastardized examples of the original shopping-urban idea of Gruen. It becomes therefore an inescapable duty to analyse Gruen`s architectural and urban devices, especially the study of his project for Fort Worth,

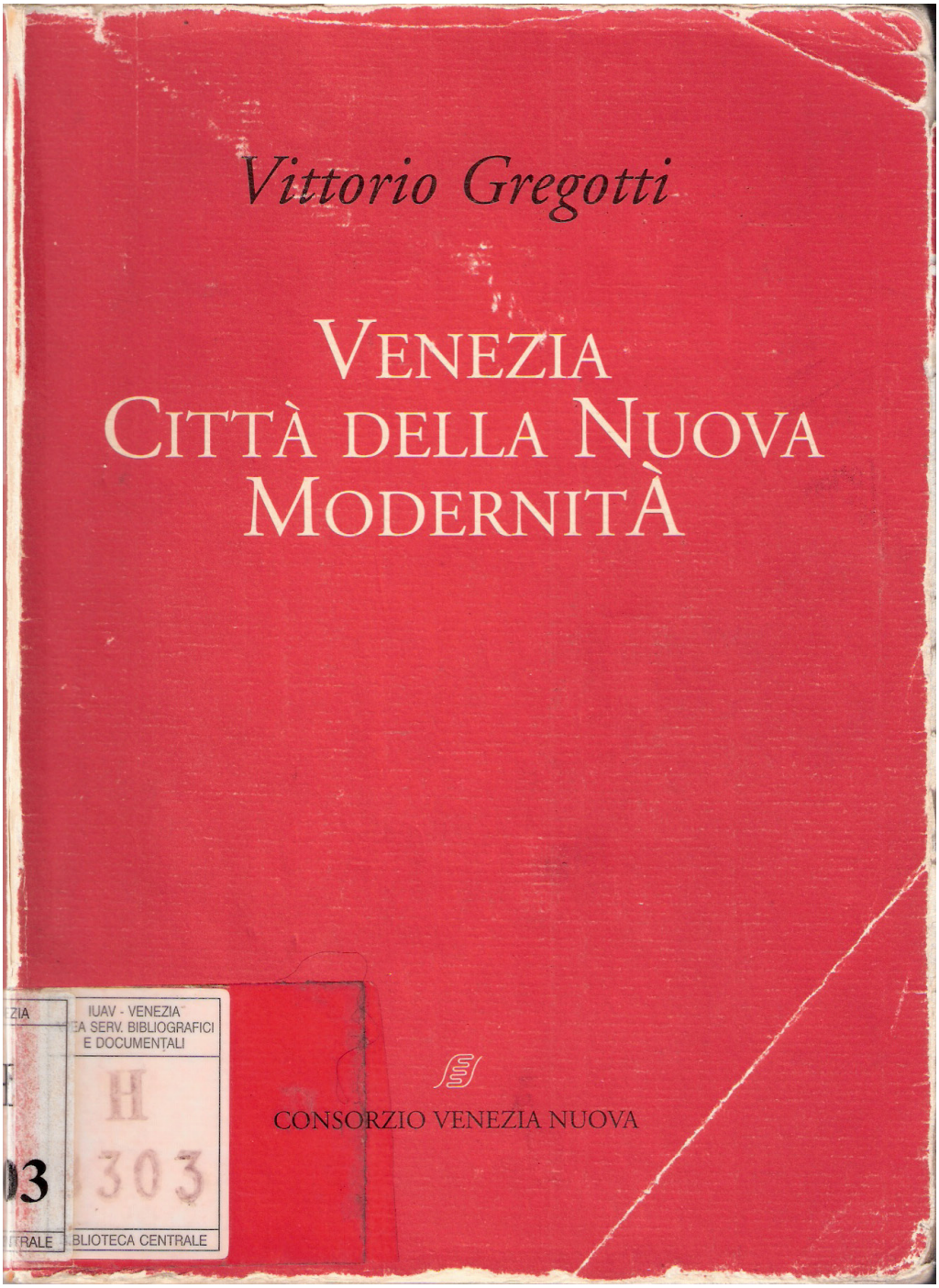
73 Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* Yale University Press, New Haven and London, 2009, p. 80
74 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, 123-15
75 Ibid. p. 123
76 Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, p. 256
77 Crawford M., *The World in a Shopping Mall.* In Sorkin M. ed. by, *Variations on a theme park.The American city and the end of the public space. Hill and Wang, New Yor, 1992, p. 30*
78 Hardwick M.J., *Mall Maker – Victor Gruen, Architect of an American Dream.* University of Pennsylvania Press, Philadelphia, 2004

and his link to the urban theory through the Heart of the City.
Indeed, from the shopping mall to the Heart of the City, Victor Gruen represents of course one of the most important actors of the last 60 years, regarding the commercial evolution of the public sphere and its contradictory relationship. For instance Louvain-la-Neuve, built on a proposal by Gruen at the end of the 1960s, will be an outstanding case study of in-congruency between the commercial and the public sphere: totally conceived on the commercial studies of Gruen`s team, the city still rejects an inner commercial centre, when Gruen`s proposals instead re-emerge.

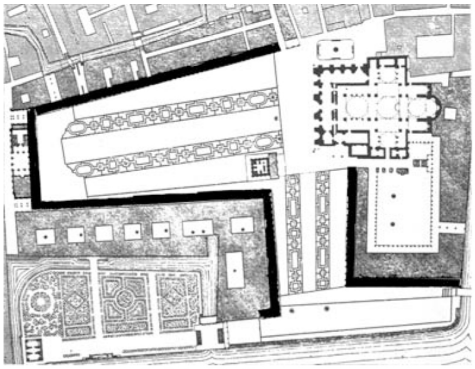
II ACTOR

Venice CIAM Summer School
In 1993 the historian Manfredo Tafuri gives his lecture for the opening academic year: *"The forms of the time: Venice and the Modernity"*. The architect Vittorio Gregotti refers to Tafuri`s lecture in a later publication entitled *"Venice, City of the new Modernity"*[79]: *"The hypothesis that Venice might be thought as city of a new modernity may appear as a paradox"* - Gregotti immediately affirms in the book - *"[…] but Venice is the right representation"* of a *"modernity model of coherence between the geography and its settlement"*[80] , an exemplary model for a modernity which has deeply changed. It is the *"heart of a dispersed and complex city"*, immersed in *"amniotic liquid"*, the lagoon, where the city lives between the old obsession to build everything, even the ground and the water, and its fragility in front of nature itself and its physical decadence.
Avoiding a vision of Venice as *"a fossil, as a satisfactory city of the present"*[81], the *Serenissima* is described, at the end of the 1990s, as the city where the new modern project can capture the sense of history; it is the city which can show its best *"architectonic quality",* expressed as *"the quality of that non coincidence with the natural and the preexistence"[...]*": *in one word, the quality of its modification."*[82]
Moreover Venice, and in particular Piazza San Marco becomes more recently also

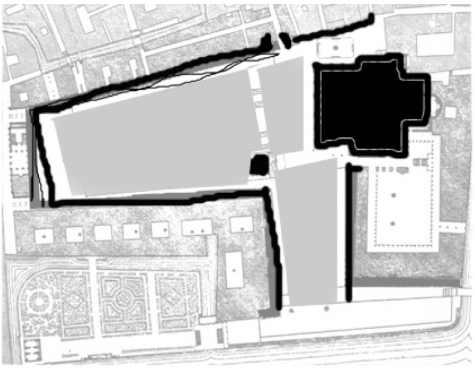
79 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998
80 Ibid. p. 9
81 *"It should certainly be mentioned that some areas exist in which conditions appear satisfactory. But we have to remember that these belong to cities of the past (we cannot include Venice, which is a fossil, as a satisfactory city of the present) [...]"* Doxiadis C.A., *Ekistics: an introduction to the science of Human Settlements.* Hutchinson of London, London, 1968, p.5
82 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998, p. 21



Gregotti V., *Venezia Citta` della Nuova Modernita`*, 1998



St Mark's Square



Three positive spaces(gray shaded areas), formed by the building edges and the campanile

Piazza San Marco Venice: C. Alexander draws the edges of the buildings forming the positive space.

for Christopher Alexander, in *The Heart of the City*[83], a contemporary model of a *"positive structure"*, of a positive container space which might be schematized as the third scheme underneath.

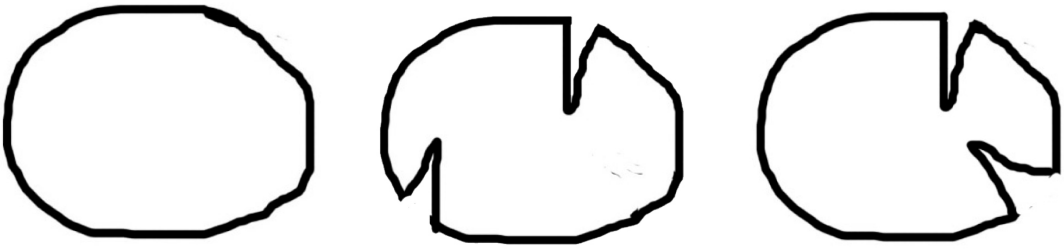
As a first example, Alexander shows Piazza San Marco in Venice which is, not by coincidence, one of the main case studies shown at CIAM 8 during the discussion about Italian Piazzas and then considered as the *"most generous of the hearts"* (Rogers). Even if not a convex space, Alexander explains, the piazza is composed of three "containers", with the campanile as a "visual center" which generates the independence of the three spaces. Piazza San Marco thus still generates interest within the contemporary public space design discourse concerning the Heart of the City.

Furthermore, the study of Venice introduces another interesting issue posed by Alexander, in his contemporary heart discourse: the time of the project. *"The good space can only be built gradually"*[84], the architect affirms, similarly to what Giedion already states during CIAM 8, reminding us of the necessity of five hundred years for the final construction of the Piazza San Marco. In contrast with the contemporary brand new Asian cities , erected in a few years with an objective lack of physical and social quality, Piazza San Marco remains an important example for the good design process of the public space.

Therefore the study of the CIAM Summer School in Venice becomes an outstanding opportunity in order to capture the identity of this *"new modernity"* as described by

83 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006

84 *Ibid.*



egg shape | no-positive space | positive space

Gregotti and of Alexander`s *"positive space"*[85], through the study and the design of Venice itself. Sixty years later, the Summer School in Venice becomes an important lesson for contemporary urban design, which needs Venice, more than the contrary, as an excellent contemporary *"place of history* [86][...], *as idea of the project as dialogue."*[87] Finally the CIAM Summer School of Venice is also the proof of a renovated interest of all CIAM on history and context, which will become main issues during the following decades, until nowadays.

III ACTOR

Bakema

Finally, Bakema represents the link between CIAM old members and the "youngsters" of the TEAM 10. This un-common theoretical position allows Bakema to be probably

85 But what is the form of this *"positive structure"* , Alexander talks about? The space as *"container"* may be considered in his archetype as and egg-shape convex form, Alexander affirms. However the "positive space" is not always convex but it can have some "indents". As we can see from the images, in the second the cuts are not symmetrical and the inner space is divided into imprecise areas which have not the character to coherent contain. The last image shows the right division of the inner space into two definable areas which have the ability to contain, as a vase we can add. Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006, p. 34 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf

86 *"But I think that the slogan "Venice city of the new modernity" has today another significance as well, since I believe that the modern architecture itself needs Venice, place of the history par excellence, since in the last thirty years both the nature and the significance of the notion "modern" are deeply changed."* Gregotti V., *Venezia Citta` della Nuova Modernita`,* Consorzio Venezia Nuova., 1998, p. 19

87 Ibid. p. 34

the most fertile 'actor', among the previous ones, for our *"new modernity"*. Even if his projects related to the heart theme have not a global influence similar to Gruen`s shopping centers, they certainly can be considered important case studies for development of the contemporary project of urban design. Indeed they represent intriguing examples of a correct and sophisticated translation of the abstract idea of the heart into an urban physical and social form. The theoretical and symbolic values described for instance by Giedion and Paci find in Bakema`s projects the most effective reproduction, without falling into banal organic analogies, unlike most of the contemporary projects as previously discussed.

METHODOLOGY

The thesis is both a historical and theoretical study of the Heart theme, through both projects and theories of three main actors, between the 1950s and 1960s. Since the recent studies about the Heart of the City consider only single parts of the heart issue, the main aim of the thesis is to unearth the theoretical frame which constitutes the complexity of the Heart of the City.
This complexity of the theme has many consonances, reflections and links with our contemporary complex urban condition. In particular the theme of the public space, which seems central in the heart`s discourse, finds a particular interest in the contemporary debate since it is evident its particular weakness in both the design process and in the theoretical approach. Therefore the research is aimed to reveal projects and theories which are directly connected with contemporary issues, deepening the meanings of the Heart of the City theme. The historical research is focused on the evolution of the CIAM 8 debate in the following decades, in a transatlantic discourse which has influenced both the design and the theoretical debate about the city. The historical discourse about the spreading and the development of the heart theme becomes therefore a strong base on which to deepen the theoretical complexity of the theme. Finally both this historical and theoretical research critically analyzes both the positive and negative theories and projects about the Heart of the City, in order to produce useful critical material for future urban design. Indeed the thesis is considered as a *"wood centering"* aimed to sustain the *"stone arch"* [88] (the urban project): it is considered as a useful abstract

88 See Martí Arís C., *La centina e l'arco.* Marinotti, 2007. Martí Arís considers the theory as a wood arch which has to sustain the project. This is a quite radical position since it implies that the theory is useful only if it is adopted by the physical project. However the spanish author specifies that even if the centering is

elaboration which might sustain the future practice of architecture.
As previously mentioned, the research is mainly developed through the analysis of three main "actors": the Urban Design Conference at Harvard in 1956 with a specific study of Victor Gruen`s work, the CIAM`s Summer School In Venice (1952-1957) and Jaap Bakema. These actors have been chosen because they are characterized by both theoretical and project activity, and they have been considered the most important ones in order to reveal the complexity and the influences of the heart theme in relationship also with our contemporary debate: some issues such as centrality, tradition, identity, commercial design, the relationship between the public and private sphere and three dimensional design... are clearly highlighted within their works and they are crucial for our time too. Finally if these three actors are probably the most important representatives of the heart`s complexity, then the recurrent themes which will be found in all of them will be discussed in the conclusion as the most outstanding theoretical characteristics which compose the Heart of the City.
As far as the projects are concerned, the research has paid attention to both master architects` proposals and students`/young architects` projects. This is very important since the crucial role of the young generation and of the education is vehemently stressed during CIAM 8 itself. Indeed the CIAM in Hoddesdon is the first congress attended by the Smithsons, the Howells and the Voelckers who meet the other young Dutch and French counterparts: if the CIAM 9 is always considered the starting point of a new generation in opposition to the founders of CIAM, *"the issues that were to divide CIAM were already evident at CIAM 8."*[89]
Moreover the young generation seems the first to detect the necessity of a discourse about the heart of the City: as Giedion affirms, it is the *"generation now about twenty-five years of age [that] leads me to believe that this trend exists today in all countries of the western civilization. Our present interest in the Core is part of this humanizing process[...]"*[90]
Finally, the debate about education and the presentation of their project represent *"a decisive moment of change"*[91] within the CIAM itself, as later described.

auxiliary and it disappears after the construction, it is evident its essential and binding role. I personally don`t agree with this straight relationship between project and theory, but I hope to have the opportunity to physically design what now I am writing in a more abstract way.

89 Bullock N., *Building the Post-War World, Modern architecture and recustruction in Britain.* Routledge, London, 2002, p. 137

90 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17

91 *"A decisive moment of change had been represented by the students projects in Hoddesdon."* Jos Bosman highlights *"These ones raised the questions of the project study inspired by CIAM.[...] they directly exemplified*

As far as the archives are concerned, the most important ones are the NAI in Rotterdam, the GSD at Harvard, the ETH in Zurich and the IUAV in Venice. In particular the materials concerning the first actor and CIAM 8 can be found mostly at GSD and ETH. A complete report of the CIAM Summer School in Venice is hosted in some folders at IUAV, at NAI and at ETH. Finally the materials concerning Bakema are mostly concentrated at the NAI.

the theoretic research in the seminars and studies of Tyrwhitt, Sert, Gropius, Giedion, Rogers and others; through the idea of "center" these could be understood as a new and global coherent approach." Bosman J., I CIAM del dopoguerra: un bilancio del Movimento Moderno. in AA.VV. (1992) *Rassegna*, n.52/4, p.13

02 THE HEART OF THE CITY discourse at CIAM 8

CIAM 8 discourse: roots

Dealing with the topic *"The heart of the city"*, the 8th CIAM meeting takes place in Hoddesdon, twenty miles from London, from 7th to 14th of July 1951.
The necessity to discuss the theme of the Core and its references find several deeper roots than expected, as many historians have recently argued. For instance Volker M. Welter considers the Core as *"the most symbolical element of Geddes`s theory"*[1]. That sounds very interesting if we consider that Patrick Geddes (1854-1932), and in particular his Valley Section, is one of the main references of the young TEAM 10 members, who will mostly abhor the CIAM 8 meeting in the mid `50s. Moreover the reference to the Scottish biologist-urbanist is already considered in 1985 by Jos Bosman, who highlights his influence in particular on Jaqueline Thyrwitt, who considers herself even as *"an ardent disciple of Patrick Geddes"*[2]. The town planner Jacqueline Tyrwhitt (1905-1983), director of the British MARS group after 1949, is one of the main organizers of the Congress and later one of the editors of the book reporting the CIAM meeting. Therefore for Bosman it is not a coincidence that the Core of the City is already mentioned in the reprint edition of "Cities in Evolution" by Geddes (edited by Tyrwhitt herself in 1949), where the author affirms that *"the true town plan […] develops onward to the supreme organs of the city`s life- its acropolis and forum, its cloister and cathedral."*[3]
Then the choice of the Core theme is also coherent with the refusal of Lewis Mumford in 1940 to write an introduction to Josep Lluis Sert' s "*Can Our Cities Survive?"* Mumford indeed argues that *"the four functions of the city do not seem to me to adequately to cover the ground of the city planning"*; he then highlights

1 *"This idea was strongly influenced by Geddes`s claim that a highly visible physical concentration in the urban fabric of cultural and civic institutions was indispensable for any city that wished to be a community of citizens."* Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* In in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.258

2 Homage à Giedion. Basel and Stutgart, 1971, p. 121-122; quoted in Bosman J. (1985), My association with CIAM gave me new perspective. Ekistics, Vol 52, n. 314/315, p. 478; this number of Ekistics is totally dedicated to Tyrwhitt after her death.

3 *"[...] the true town plan, the only one worth having, is the outcome and flower of the whole civilisation of a community and of an age. While starting from its fundamentals, of port and road, of market and depot, and from its essentials, too, of family dwellings worth to be permanent and hereditary homes, it develops onwards to the supreme organs of the city`s life – its acropolis and forum, its cloister and cathedral. Now on pur day we have again to develop the equivalents of all these. It is, in fact, for the lack of these that our cities reek with evils."* Geddes P., Cities in Evolution. London, Williams and Norgate, 1949 (original ed. 1915), p. 71; quoted in Bosman J. (1985), My association with CIAM gave me new perspective. *Ekistics,* Vol 52, n. 314/315, p. 483

the omission of *"the organs of political and cultural association (which) are, from my standpoint, the distinguishing marks of the city: without them, there is only an urban mass..."*[4] The Heart idea might be considered therefore as an afterthought of the previous CIAM statements as suggested by the American critic ten years before CIAM 8. The American contributions seem then very important since some historians have identified the origins of the CIAM 8 theme even in the `30s, in the American neighborhood theory and in a constant transatlantic exchange of ideas between the USA and Europe (Domhardt, 2011).[5]

These recent studies have definitely confuted the general idea that CIAM 8 is just a result of the Post-War era, exploring its deeper and more complex roots.

Moreover, the general main conviction that CIAM 8 regards only the reconstruction of the cities, bombed during the Second World War, is not valid. Indeed from one side the Heart theme concerns a cultural debate which has direct references and links with the Pre-War discourse, as seen before; from the other, not all projects presented in Hoddesdon are concerned with the reconstruction of cities: some, such as Le Corbusier`s Chandigar projects, deal with the design of brand new Cores for the community. Finally CIAM 8, as it will be argued through all the research, embodies a deep complexity of values and significance which can be hardly compressed within the mere issue of reconstruction[6].

Un-definition of the Heart

It is decided that the MARS[7] group, *"the best and most active group in the Congress*

4 Lewis Mumford to Sert, December 28, 1940 (folder E1, JLS). Quoted in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960*. MIT Press, Cambridge, Massachusetts, London, 2000, p. 133. As far as the relation between the refusal of Mumford and the decision of the Heart theme is concerned, see also Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.259.

5 Domhardt K.S., *From the "Functional City" to the "Heart of the City". Green Space and Public Space in the CIAM Debates of 1942-1952. in Brantz D., Dumpelmann S., Greening the City: Urban Landscapes in the Twentieth Century.University of Virginia Press, 2011, p. 133-156.* See also Mumford E. (1992) , CIAM Urbansim after the Athens Charter, *Planning Perspectives 7,* , p. 413 and Bosman J. (1992) CIAM after the War: A Balance of the Modern Mobement. Rassegna, n.52, p. 8

6 See also Welter V.M., *From locus genii to heart of the city: embracing the spirit of the city.* In ed. by Iain Boyd Whyte, *Modernism and the Spirit of the City.* Routledge, London and New York, 2003, p. 36

7 The english MARS group is founded by Wells Coats before teh Fourth Congress. Other members: Edwin Maxwell Fry, F.R.S. Yorke, Godfrey Samuel, Serge Chermayeff, John Gloag, Berthold Lubetkin, Erno Goldfinger, Raymond McGrath, Amyas Connell, Basil Ward, Colin Lucas and the architectural journalists Shand, J.M.Richards, Hubert de Cronin Hastings and John Betjeman. See Mumford E., *The CIAM Discourse on Urbanism, 1928-1960,* The MIT Press, 2000, p. 91

today"[8], should organize the CIAM 8 meeting. This Congress is centered on the Core, a theme which seems to be already proposed by the Dutch group in the previous meeting in Bergamo, in 1949[9]. This decision is taken against a previous desire of Le Corbusier who is instead expressively interested in discussing the *Charte of the Habitat,*[10] during the CIAM in Hoddesdon.

Also Gropius agrees to consider the heart as the main theme of the following meeting. In a letter to Wells Coates, a member of MARS, sent in December 1949, he indeed affirms *that " in my opinion the problem of the centers of settlements, you call it the hearts, is more urgent and organically basic than housing as such and that I would recommend strongly to start with these centers of the organism first. [...] To think through all the factors involved within the whole cycle of human life is as necessary as it is attractive for all of us because it reaches really the basic substance of all our doings".*[11]

At the end of 1949, the English group sends to the other CIAM members a *"Plan Propose` par MARS pour CIAM 8"*[12]. In this preliminary text it is affirmed that in the previous meeting the four elements (Dwelling, Work, Cultivation of Mind and Body, Circulation) were deeply considered. However another element has to be analyzed, *"the element which makes the community a community and not merely an aggregate of individuals. [...] This is the physical heart of the community, the nucleus, THE CORE."*[13]

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8 Sert in a letter to Giedion, December 21, 1949 (CIAM 42-SG-34-52; C6, JLS/CIAM) quoted in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960,* The MIT Press, 2000, p. 201

9 *"I was interested on the Civic Center and I approved it when the dutch architects have presented it at our last reunion in Begamo".*letter of Sert to Godfrey Samuel, 5th march 1950. Quoted in Italian in Bosman J., (1992) I CIAM del dopoguerra: un bilancio del Movimento Moderno. *Rassegna*, n. 52, p. 11

10 In the same letter of the 5th march 1950, Sert writes to Godfrey Samuel that he has spoken a lot with le Corbusier, about the topic of the 8th CIAM. He said the the civic center is a more interesting theme than the *"Charte de l'Habitat". "Now he is sure about it and he agrees with us and with the majority of the Meeting. He also thinks that the 8th CIAM should take place in London, and that the MARS group should organize it".* Quoted in italian in Bosman J., *I CIAM del dopoguerra: un bilancio del Movimento Moderno.* in Rassegna (1992), n. 52, p. 11

11 Walter Gropius, December 22, 1949 Letter to Mr. Wells Coates, cc. Giedion and Sert. Eth/gta 42/SG/34/54

12 ETH/gta SG-34-32. It is presented, with some differences, also in the Report of CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583

13 MARS, Text of Mars Group Invitation. The Core. Report of CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583. In the French letter of the November 1949 we read a more poetical and passional explanation of the Core as expression of the collective emotion: *"Elle est l`expression tantôt a demi consciente, tantôt passionnément voulus, de la vie collective même.[...] Les paroles volent de bouche en bouche, elles soulèvent les émotions, on abandonne la tache individuelle ou les intérêts sectionnels et on sort dans la rue; des groupes plains d`animation se forment, ils s`unissent a `d`autres, et bientôt une vaste foule est en marche vers quoi? La Place Marche`? La Place de La Cathédrale? Les monceaux de scories derrière l`Usine a` Gaz? Il-y-a toujours quelque part un cadre physique approprie` a` l`expression de l` émotion collective, c`est le cœur*

The Heart of the City is therefore explined in the first presentation by the MARS group as an added 5th element which completes the previous ones. Later on this association will be strongly criticized by young members of TEAM 10 who will consider it as a too late attempt to reconsider the analytical approach of the four functions[14]. We can certainly agree that this definition of the Core as the 5th element, as shown by the MARS group, is quite misunderstanding. As we will see in discussing Urban Design in the USA and the third space dimension, the heart of the city will influence the design practice against the zoning method of planning, of the four functions` divisions, born inside the functionalism of the first CIAMs. The heart of the city, without doubts, will become a counterforce of the four functions, rather than a mere fifth zone[15]. However, the problematic issue of a correct definition or of a single theoretical frame of the heart theme, seems continuously present during the CIAM 8. Indeed many of the architects present in Hoddesdon show and express several personal - and sometimes contrasting - significant features of the discussed theme: an *"aggregation of individuals"* (Giedion), an *"element which makes a community a community"* (MARS), a *"natural expression of contemplation...of Italian dolce far niente"* (Rogers), a *"background of spontaneity"* (Johnson), a *"meeting place of the arts"* (Le Corbusier), an *"abstract Core"* (Opbpuw group),... and so on (Welter[16]).
Moreover, as Eric Mumford already highlights, this productive vagueness about the heart theme is apparently in contrast with the "*self-evident need for a core in the published proceeding."*[17] This contradiction seems even stronger when, at the end

de l`Organisme." ETH/gta SG-34-32.

14 See Welter V.W., *In-between space and society. On Some British roots of Team 10`s urban thought in the 1950`s.* In in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.259. However, for instance Bakema will recondider "the human Core of St. Louis" at the end of the `50s, as we will discuss later and Woods will consider the Core in relation with the cluster: "*First the core is determined, then the cluster is formed. […] The idea of clustering the cells proceeds from the core. The core is usually expressed in the master plan as a fixed point in the general scheme, out of contact with the greater part of homes."* Woods S. in Team 10, *The role of the Architect in Community Building. In* Bell G., Tyrwhitt J. (edited by), *Human Identity in the Urban Environment.* Penguin Books, Great Britain, 1972, p. 386

15 The Core as 5th element is probably one of the first misleading definitions of the Core, which has allowed an immediate superficial criticism of the theme, without considering its deeper levels of significances.

16 This variety of definitions is already listed by Welter in order to highlight the continuity of the CIAM 8 with Mumford`s social core, Reclus` communal city centre, Gedde`s cultural Acropolis and Taut`s city crown. In Welter V.M., *From locus genii to heart of the city: embracing the spirit of the city.* In ed. by Iain Boyd Whyte, *Modernism and the Spirit of the City.* Routledge, London and New York, 2003, p. 52

17 *"Though the definition of the Core remained vague, and numerous divergent comments were made in the open sessions and written reports submitted to the Congress, Tyrwhitt, Sert, Giedion, and Rogers continued to emphasize the "self-evident" need for a core in the published proceeding."* Quoted in Mumford E., *Defining Urban Design. CIAM Architects and the Formation of a Discipline*, 1937-69. Yale University. New Heaven and London. 2009, p. 215

of the book, an attempt by Giedion is presented, to enclose with force the theme in a *"Summary of needs at the Core"*. Indeed the seven points composing the summary are evidently not enough to consider all the facets of the theme shown in Hoddesdon, and its later influences in the urban worldwide discussion[18]: the Core is indeed summarized as a single element in the city, a man-made artifact only for pedestrians, with only controlled commercial advertising and some possible varying mobile elements, which finally should be designed by architects, in co-operation with painters and sculptors.[19]

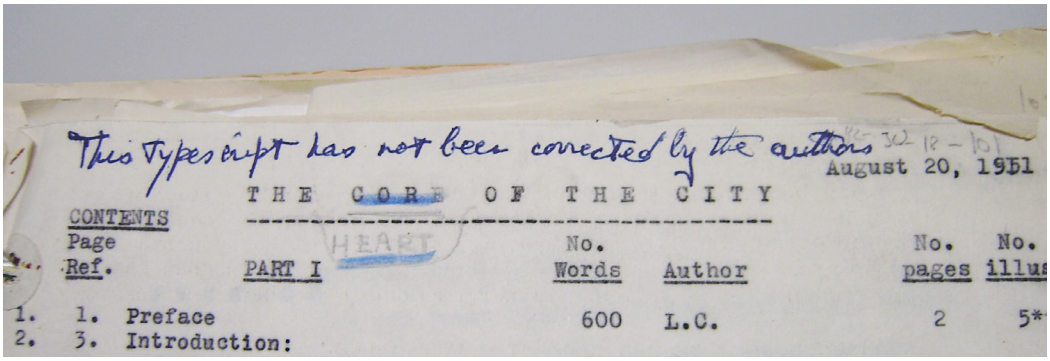
HEART: synonims, metaphors and symbols

We have already discussed, in the introduction, the double entity of both metaphor and symbol concerning the Heart of the City, and the possibility of a huge group of interpretations starting from these two rhetorical figures. At CIAM8 the discussion sometimes concerns the right size of the city, the human scale, the humanist values, the social issues, the emotional feelings of the individual, the central square of the city, the traffic roads as veins....and so on.
As later Lefebvre states in "*La production de l'espace"*[20]*,* while commenting on Nietzsche, the metaphors and metonymies are the attempt to substitute and to go beyond "*a chaos of impressions and excitements"* which are substituted by an image or something else. Even if the organic metaphor is not always considered and accepted by CIAM members, a chaos of interpretations, as described by Lefebvre, underneath the image of the Core or Heart, is mostly always evident at CIAM 8. This lack of clarity of the organic metaphor/symbol is already expressed by Gropius in December 1949, when answering the MARS proposal, he admits to come across "*a great confusion and*

18 Of course we can be critical with this summary because our historical distance allow us to consider the Heart theme in a more complex and complete way, than it has been considered by our more illustrious predecessors.

19 *Summary of needs at the Core:*
1 – That there should be only one main Core in each City. 2 – That the Core is an artifact – a man-made thing. 3 – That the Core should be a place secure from traffic – where the pedestrian can move about freely.4 – that cars should arrive and park on the periphery of the Core, but not cross it. 5 – That uncontrolled commercial advertising – such as appears in the Cores of many cities today – should be organized and controlled. 6 – That varying (mobile) elements can make an important contribution to animation at the Core, and that the architectural setting should be planned to allow for the inclusion of such elements. 7 – That in planning the Core the architect should employ contemporary means of expression and – whenever possible – should work in co-operation with painters and sculptors. In ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 164

20 Lefebvre H., *La production de l'espace*. Ed. Anthropos, 1974


This Typescript has not been corrected by the authors

August 20, 1951

THE CORE OF THE CITY

CONTENTS

Page Ref.	PART I	No. Words	Author	No. pages	No. illus
1. 1.	Preface	600	L.C.	2	5*
2. 3.	Introduction:				

"Core" deleted for the "Heart" , Eth/gta 42/Jt/18/101

misunderstanding of what the organic elements or heart organs should be."[21]
Then we can count another important factor for the lack of clarity of the heart theme, as denounced before. It is the use of several synonyms and different translations in English, French, Italian or other languages which make it difficult to understand the sense of the term of discussion. *Civic Center, Core, Nucleus, Heart, Hearth* in English become *Centre, Cœur, Accueil, rendez-vous* or *Noyau* in French or Centro, Cuore, Focolare in Italian, but they can also have similarities to the Japanese terms *Kinjo and Kaiwai.*[22] The internationality of the CIAM is thus potentially another element of both variety and at the same time misunderstanding of the meaning of the Heart of the City. Finally, in order to clarify these issues as much as possible, it is particularly important for our discussion to understand the different meanings of heart and core, heart and hearth, heart and centre and heart as a functional or humanist element, as used during CIAM 8.

CORE-HEART

The use of the term Core rather than heart is almost undefined. Already in 1950 the CIAM members discuss the pertinence of the term Core. Indeed in a meeting held in June 1950, *"it was agreed that the "CORE" was not the happiest term for the theme. "Centres of Community Life" gave a clearer expression to the ideas, but it was suggested that the MARS Group should try to think of a new word. It was agreed that*

21 Walter Gropius, December 22, 1949 Letter to Mr. Wells Coates, cc. Giedion and Sert. Eth/gta 42/SG/34/54
22 "Kinjo and Kaiwai" are not used at CIAM8, but recently in Kitayama K., Tsukamoto Y., Nishikawa R., *Tokyo Metabolizing.* ed. TOTO LTD., Japan, 2010, p.105

"center", "nucleus", "focus" were all inappropriate."[23] Nevertheless the MARS Group seems not to consider this, entitling directly 'CORE' both in its invitation to CIAM 8 and the cover page of the official congress material.

During the Congress only a few attempts are made in order to distinguish the terms Core and Heart of the City. Moreover the given definitions are almost contradictory, highlighting again the general vagueness of ideas present within CIAM 8, as already criticised before. For instance in the published proceeding of 1952, the Italian architect Ernesto Nathan Rogers rejects the term Core (*nocciolo* in Italian), interpreting it as *"that part of the fruit that contains the seed, the potential energy of an organism".* He admits to prefer instead the direct human organic metaphor, the heart, because it *"has more beats, and also implies the physiological and biological values of sentiment",* since it is the *"symbolic centre of love."*[24]

However other CIAM members contradict the choice expressed by Rogers. Indeed, at the end of the book, the historian Giedion affirms that the term *"civic centre"* is an *"over-employed term"*; for this reason *"the old English word CORE"*, defined in the Oxford English Dictionary as the "*central innermost part, the heart of all"*[25] is preferred. The Core is therefore considered with a more universal and general meaning than the heart; it represents the heart metaphor in all its aspects and in all its scales, from the human body to the city itself.

The difference of meaning between Core and Heart is then considered also by the CIAM President himself, Sert, who inverts the scale of representation given by the Swiss historian. Indeed, answering Battista`s question about the difference between the *'Core'* and the *'Neighbourhood Unit',* he affirms that *"there should be no Neighbourhood Unit without its own small Core, but this only a local reflection of the main Core – the Heart of the City"*.[26] If we admit the presence of different cores in the city, the heart is in this case considered as the main one, whose characteristics and values should be mirrored in different dimensions, inside the smallest cores. Nevertheless, in the unpublished report of the Hoddesdon Conference, the word heart does not appear in the answer of Sert, but is substituted by *"the whole subject of Cores"*[27].

23 Notes on CIAM Meeting held in June 5, 1950 at 9 East 59th St. New York. Present: S.Giedion, L.Holm, A.Iriarte, J.L. Sert, J.Tyrwhitt, P.L. Wiener, Eth/gta ETH/gta 42 JLS-25-1

24 Rogers E.N., *The heart: Human Problem of Cities.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.69

25 Giedion S., *The Heart of the City:a summing-up.* In ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 159

26 *Conversation at CIAM 8*. in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.38

27 *"Batista: Is the Core different from the Neighbourhood Unit? Sert: It is quite different. There could be no*

We can conclude therefore that no substantial differences intervene between the two terms, which often fall inside pure rhetorical discourses, without deep theoretical impacts and consequences. In general we can note that 'Core' appears more times (in 106 pages) than 'Heart' (in 22 pages), in the published book edited by Sert, Rogers and Tyrwhitt in 1952[28]. However, even if the MARS group entitles the theme of the Congress "The Core", which is also mainly used during the Congress, "The Heart" is preferred as the title of the official English final book of CIAM 8.
Following the considerations about the inappropriateness of the term "Core" already expressed in 1950, Josep Lluís Sert writes a letter in September 1951 to Jacqueline Tyrwhitt where he re-affirms his doubts about the title adopted by the MARS group. *"Haven`t we finally agreed that the title of the book should be THE HEART OF THE CITY? I really believe that the "CORE" is an unpopular and meaningless word and I definitely believe that it is a mistake to use it in the title."*[29] The insistence of Sert regarding the title *"The heart of the City"* and its *"more popular appeal"*[30], is manifested in several letters to Jacqueline Tyrwhitt, sent during the last months of 1951. The answer of the English planner is simply to choose *"the title that will sell best"*[31], without changing the word *'core'* throughout the book. Therefore, at the end of 1951, the discussion about Core and heart almost falls into a banal commercial sales' issue. The final book, reporting the CIAM 8 discourses, is published in 1952 in English[32] and a few years later in Italian and Spanish as well. All the three languages correspond to the nationality of the three editors Tyrwhitt, Rogers and Sert. All three

neighbourhood unit, without its own small core, but this is only a small reflection of the Core of the City, and the whole subject of "Cores". The Theme of the Congress. Resume of the open session of 8th July. Chairman J.L.Sert. In CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583,p. 44

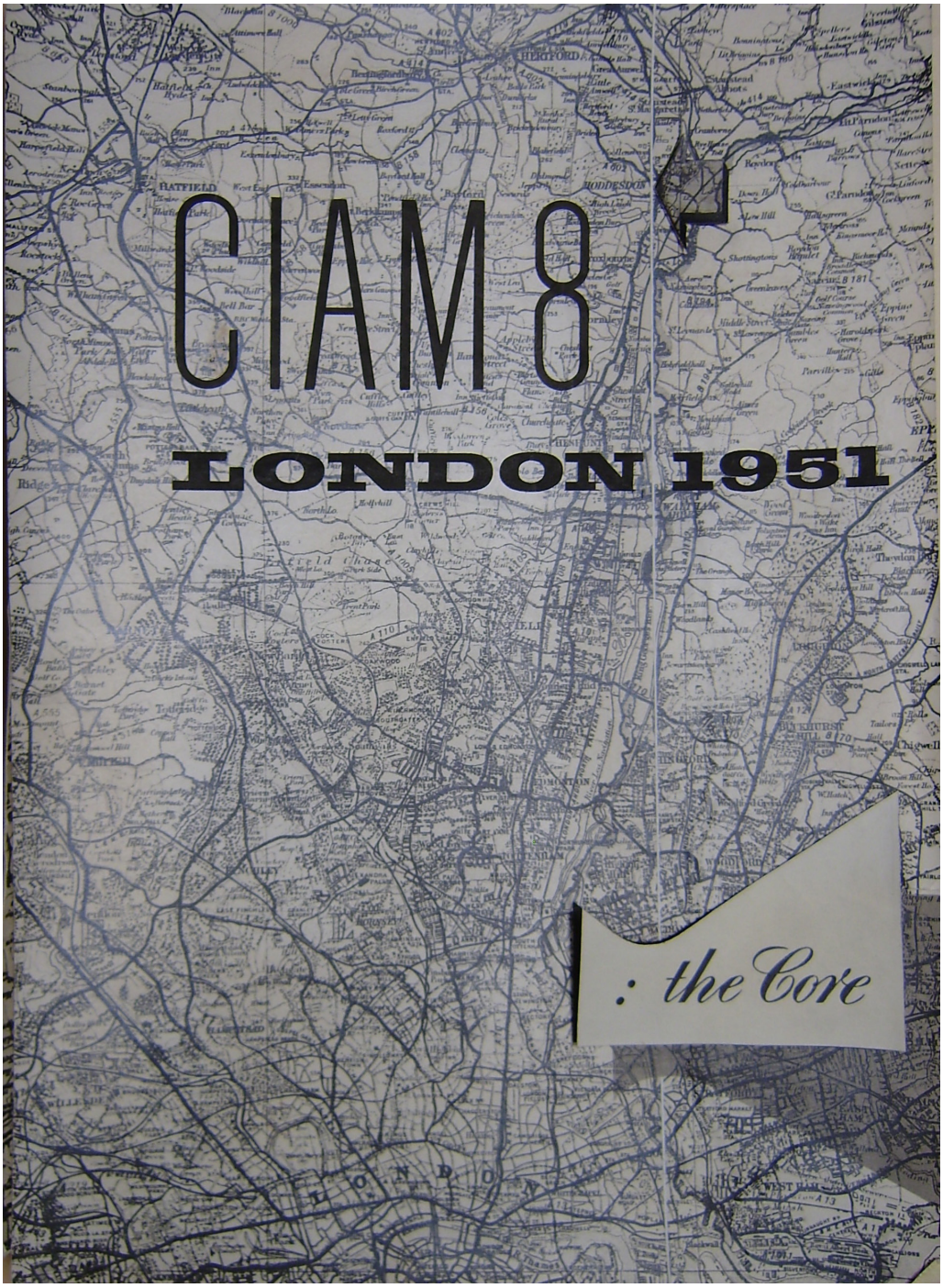
28 'Core/Civic Core' appears in 106 pages, 'Heart' appears in 22 pages, 'Hearth' appears in 3 pages, 'Centre' appears in 58 pages. In Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Lund Humphries and Co Ltd, 1952. In the Italian edition 'Cuore/Cuore della Citta`' appears in 106 pages, 'Centro/Centro della Citta'' in 67pages. In a cura di Rogers E.N., Sert J.L., Tyrwhitt J., *Il Cuore della Città: per una vita più umana delle comunità*. Milano, Hoepli editore, 1954 trad. Julia Banfi Bertolotti

29 Letter of Sert to Tyrwhitt, September 7, 1951. From CIAM Collection _ Correspondence 1951 July-Sept. , Harvard Special Archive, C9. The insistence of Sert regarding the title "The heart of the City", is manifested in several letters to Jacqueline Tyrwhitt .

30 *"Dear jacky,[…] In reference to the title of the book, I do not think it matters if it is called THE HEART OF THE CITY and would refer to the `CORE` in the different articles. This is defined in my introduction and there is no doubt that the term HEART will have more popular appeal regardless of Peter Gregory may say about it."* Letter of Sert to Jacqueline Tyrwhitt, October 1, 1951. From CIAM Collection, Harvard Special Archive, C10

31 *"I have no feelings on the matter and suggest that the decision is made on the title that will sell best. I don`t think we should change the word `core`throughout the book in any case."* Letter of Tyrwhitt to Sert and Rogers, September 22nd, 1951, From CIAM Collection, Harvard Special Archive, C9

32 A second edition is in 1979, Nendeln [Liechtenstein] : Kraus Reprint. See CCA Library, NA682.I52 H4 1979



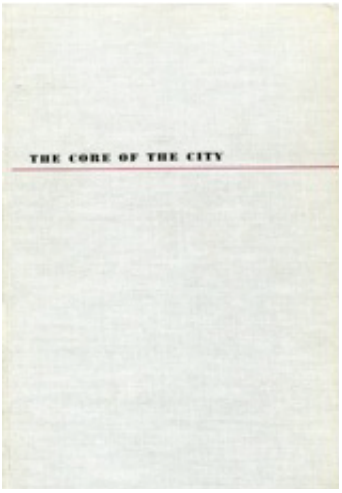
the CORE, Eth/gta 42/JT/7/8



_ a cura di E.N. Rogers, J.L. Sert, J. Tyrwhitt, Il cuore della città : per una vita più umana della comunità. Milano : Hoepli editore,Milano, 1954. CCA Library NA682.I52 H4 1954
_ edited by J. Tyrwhitt, J.L. Sert, E.N. Rogers, The heart of the city : towards the humanisation of urban life. London : Lund, Humphries, 1952. CCA Library NA682.I52 H4 1952
_ a cargo de E.N. Rogers, J.L. Sert y J. Tyrwhitt, El corazón de la ciudad : por una vida más humana de la comunidad. Barcelona : Hoepli, c1955.CCA Library NA682.T52 H4 1955

editions refer to the heart (*'cuore'* in Italian, *'corazón'* in Spanish), the human organ, reporting on the main cover the image of the human heart drawn upon a master-plan drawing: the heart becomes the main urban metaphor representing CIAM 8 to the rest of the world, even if it does not always find a so direct and clear significance within the theoretical content of the Congress of Hoddesdon.
Finally, few years later in 1956, the year of the demise of the CIAM`s and of the First Urban Design Conference at Harvard organized by Sert himself, *"The Core of the City"* is published. It is a book written by John Rannells, regarding *"a pilot study of changing land uses in central business districts."*[33] Sert`s fears about the unpopularity and the misunderstanding of the use of the Core, find their confirmation in Runnells's book. Here the Core has almost nothing to deal with the cultural, symbolical, humanizing process argued and exhibited through projects by the CIAM members only five years before. The "Core" of Rannells is indeed merely associated with the CBD, the Central Business District, a term coined in 1920`s[34] in order to describe the American downtown, the inner economical centre, the business centre of the North American cities. The human values expressed within the public sphere of CIAM 8, are indirectly

33 Rannells J., *The core of the city: a pilot study of changing land uses in central business districts.* Columbia University Press, New York, 1956
34 See Topalov C., Coudroy de Lille L., Depaule J.C., Marin B., *L'aventure des mots de la ville à travers le temps, les langues, les sociétés*. Robert Laffont, coll. Bouquins, Paris, 2010, p. 437



Rannells J., The Core of the City, 1956

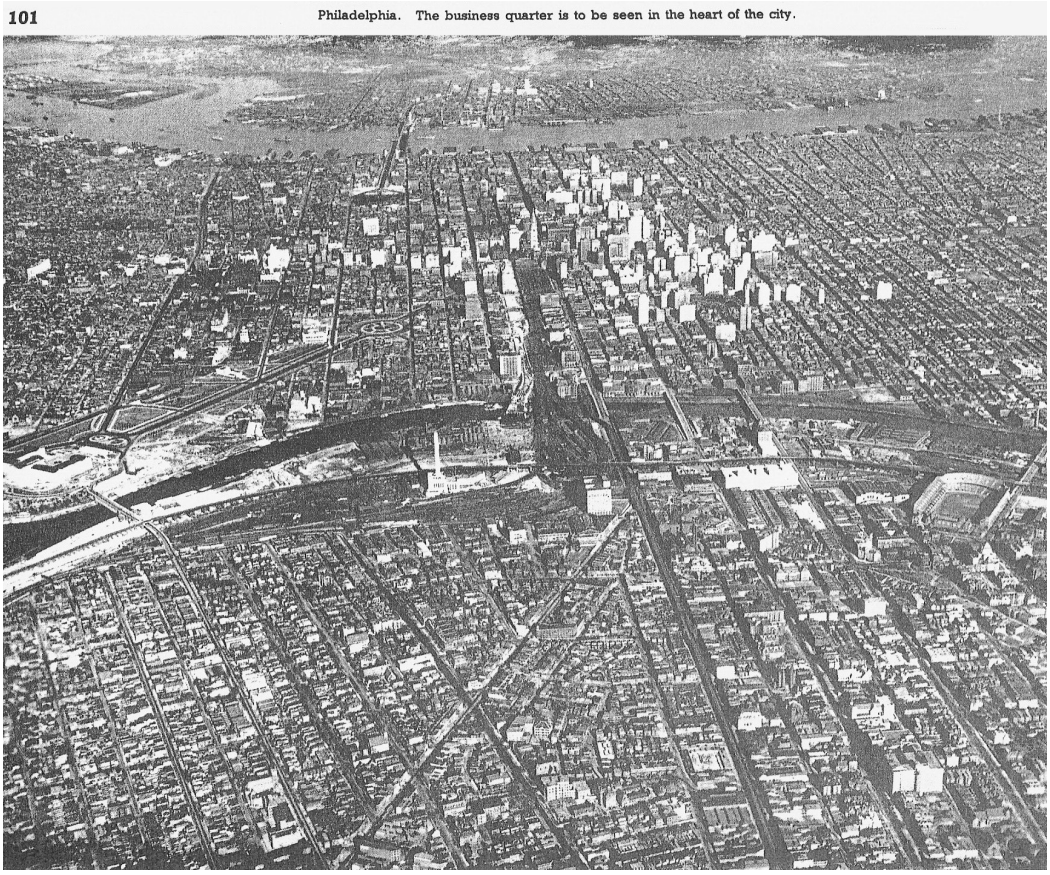
re-conducted to an urban technical, functional discourse by Rannells.
Finally, as far as this research is concerned, we will mainly refer to the 'Heart' rather than to the 'Core', following the desire expressed by Sert. The second term is considered indeed too ambiguous, referring too directly to the centre of the city, to its downtown, cutting any interpretations about the public sphere and the humanistic values which are evidently present within the previous organic image. The term "Core" will be expressly used only in the chapter concerning the CIAM Summer School in Venice: in this case it will be considered from one side as the physical historical centre of the City and from the other it will be interpreted symbolically as the relationship of the project with its surrounding context and history.

HEART-CENTRE

A misleading concept is the relationship between the 'heart' and the 'centre' of the City, as we have already mentioned with the 'Core' and the CBD of Rannells. Indeed the 'heart' is commonly used in our language also in order to indicate the spatial centre or centre of gravity: in heraldry, the image at the centre of the shield is called 'heart' or in vegetable anatomy, the central part of the tree is named 'heart' of the wood[35]. From the other side, if we read some definitions of 'centre' in the dictionary, we can find direct references to the 'heart' as well: *"Centre, milieu, coeur"* in French[36]. This simple relationship between the 'Centre of the City' and 'Heart

35 At least in italian 'cuore'. See 'cuore' in Vocabolario della lingua Italiana Treccani

36 Roquette 1921. See Topalov C., Coudroy de Lille L., Depaule J.C., Marin B., *L'aventure des mots de la ville à travers le temps, les langues, les sociétés*. Robert Laffont, coll. Bouquins, Paris, 2010, p. 265



Le Corbusier, Aircrafts (1935)

of the City' is stressed, twenty years before the CIAM 8, also by Le Corbusier who publishes in *Aircrafts* (1935) an image of the business quarter of Philadelphia, seen from one of the first flying airplanes, and called *"the Heart of the City"*[37]. During CIAM 8, this relationship persists and the published book of the CIAM 8 report is full of images of the Piazza Duomo in Milan, Piazza San Marco, Rockefeller Plaza in New York, etc... Finally also the projects about the reconstruction of the bombed cities deal directly with the urban centre: for instance the hearts` projects for Coventry, Basle, Providence, Lausanne and so on.

However, the heart of the city discourse of CIAM 8 is not a mere discourse about the centre of the city. As we can read indeed from "A short Outline of the Core": *"The word 'Core', in the sense we are using it, does not mean merely the centre of the urban agglomeration, nor the busy heart of the city traffic or economic activity; sometimes it may be united with these areas, but the Core includes other elements, often of an imponderable nature."*[38] The *"imponderable nature"* of the heart is stressed for instance by the Dutch architect Bakema who, as it will be later discussed, will consider the quite peripheral Asplund`s Cemetery in Stockholm as a beautiful heart. The main example of heart is not a central square but a landscape field where the relationship between man and things, life and death, becomes the main issue. Bakema`s example is very important and it allows us to open our mind to several significant aspects of the heart theme. Thus the physical centre of the city, its downtown or historical centre and the centralization process are only part of the main issue. We may affirm instead that it is more appropriate to consider the link between the heart of the city and the "centrality" of the social public life: this is not specifically framed inside the historical walls of the city, and there are many centralities in the urban structure. But what is really "centrality" in our contemporary society? Twenty years after the CIAM 8, in 1974, the French philosopher Lefebvre answers this question, affirming that *"centrality now aspires to be total"* connecting the *"punctual to the global"* and it pretends (implicitly or not) to define a more rational, political state or *"urban rationality"*, which, then, the specialists, the planners, will have the task of justifying[39]. Therefore we can consider the relationship between the "heart" and "centrality", as a complex connection, which goes beyond the simple image of the

37 Here the Heart of Philadephia might have the same meaning of the Core of Rannells. The difference is that Le Corbusier mentions the heart, twenty years before the CIAM8, where the term gains more complex meanings.

38 A short Outline of the Core, in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.165

39 Lefebvre H., The production of Space. Trad. by Nicholson-SMith D., Blackwell,2010, p. 332 ,Trad. by Nicholson-SMith D. original edition *La Production de l'espace*, 1974, Anthropos

central square of the medieval city. This connection will emerge in several meanings and forms, through projects and theories, investing it with social, urban, cultural, biological, anthropological significance. As Tom Avermaete has defined it, the heart theme does not refer purely to the physical matter, nor only to the social issue, *"but rather denote[s] a perceptual and conceptual entity that inextricably link[s] both. In short, it refer[s] to an element of urban culture."*[40] Therefore the real centrality we can talk about is the central cultural role of the heart theme in the 1950s, through CIAM, within a new growing humanism, which is reforming the role itself of the architect.

HEART-HEARTH, public and private realms

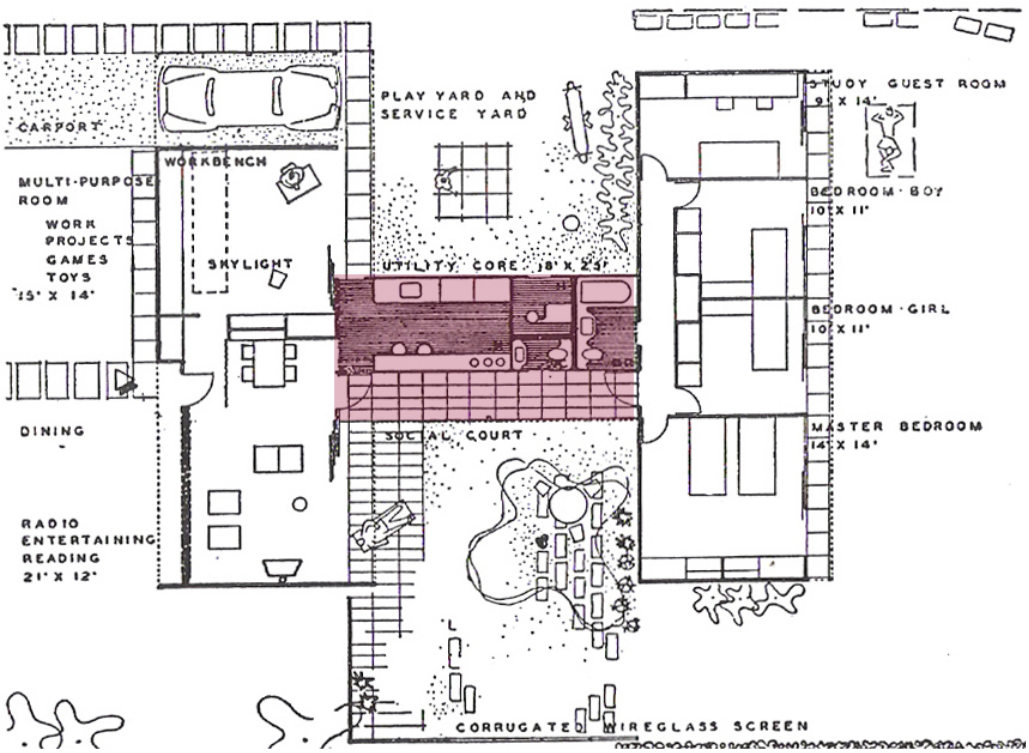
The "Core" is a word already used in architectural vocabulary, as Jos Bosman reminds us[41], especially during the 1940's and 1950s; the expression *Utility Core* indeed refers to the mechanical part of the house that makes it more functional, due to the new technologies. An example of a Utility Core is the "H House" *(*image n. 441 in *Mechanization takes Command of* Siegried Giedion) of J. e N. Fletcher, who in 1945 wins a competition for a small medium size family apartment. The house they projected has a plan with a central mechanical core which works as a link between living and sleeping areas. However if on the one hand there is a link to the mechanical testing of the architectural Core, on the other hand, referring the Core to the city and not to the house, the CIAM goes in the direction of a complete opposition to the idea of the machine's supremacy over man.

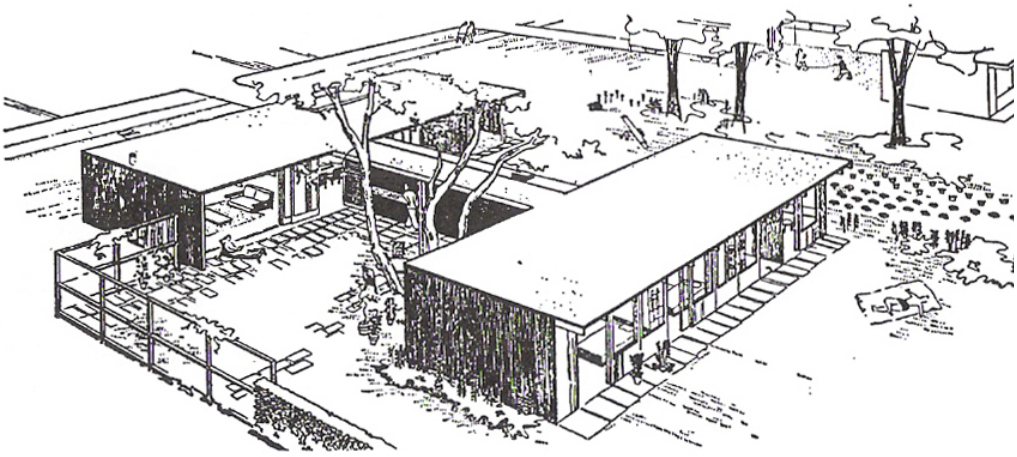
The private realm of the house, of its hearth, remains a main important term of comparison with the public realm of the heart. During the CIAM 8, the relationship between the heart of the house and the city can be traced in many speeches. For instance the Swedish CIAM member Gregor Paulsson (1890-1977) talks about the house which is considered as the first centrality for the community, as a point of reference even in a lack of identity and centrality[42]. He talks then about the study of the relationship between animals and plants and their natural sites; more precisely he reminds us that *ecology* is derived from the Greek word "oikos" (house), in relation to the town-planner's task *"to make a good habitat for man as an individual*

40 Avermaete T., *Another Modern. The Post-War Architecture and urbanism of Candilis-Josic-Woods*. Nai Publisher, Rotterdam, 2005, p. 71

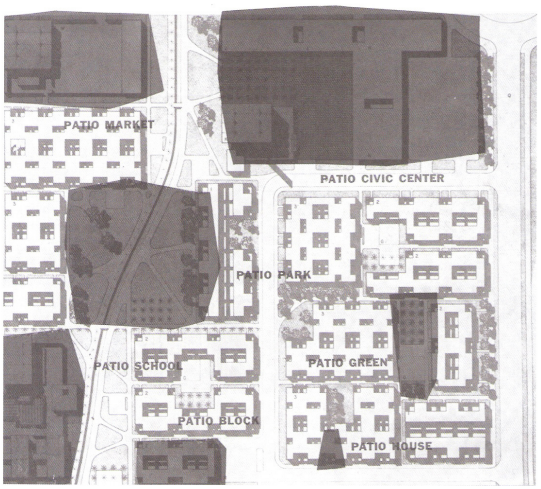
41 Bosman J., *I CIAM del dopoguerra: un bilancio del Movimento Moderno.* in Rassegna (1992), n. 52, p. 14

42 *"In a Coreless community […] the orbits of men are from their house to the places where they work and back again, the orbits of the house-wives will consist of the homes, a few shops, and the doorsteps where they chat with their neighbours."* Paulsson G., *The Past and the Present.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.29





J. e N. Fletcher, H House, 1945



Sert J.L., Can patios make cities?,
Architectural Forum (August 1953)

as well as for man as a social animal."[43] In this sense Paulsson`s point of view is not so dissimilar from the Team X`s member Voelcker who will later consider the house in *"its ecological significance*", as *"the centre from which living extends and to which it returns"*, as *"embryo all organs of village, town and city*"[44]. In both quotes, indeed the private house is the organic navel of the entire urban system.

Very significant is then the pioneering experiment of Dr. G Scott Williamson of the Health Centre in Peckham (1935-1951) presented at CIAM 8 and which will be later deeply discussed. It consists of a community composed of 800-900 households, all compressed in a single megastructure building-house. In this new community, the family and symbolically the hearth, or *"heart of the house"*, become *"the smallest living human whole"*[45], the fundamental entity which guarantees the right process of healing. As Ling affirms the "*Individual is the root, the Family the flower and Peckham Health Centre the fruit."*[46] The family is always considered as central in the

43 Ibid. p. 28 The ecological issue referred to the heart theme will be later discussed talking about the 'mall maker' Victor Gruen.

44 *"The formal significance of housing is matched by its ecological significance. The house is the centre from which living extends and to which it returns; it contains in embryo all organs of village, town and city; the kitchen, for example, becomes the workshop, factory, warehouse and multiple store of the great city, the living room becomes the cinema, library and dance hall. If village, town and city are to be comprehensible extensions of living and not unknowable forces within which the house is nothing but a refuge, the connections between the embryo and its development need to be apparent. The design of the house must imply what lies outside."* Voelcker J., in Smithson A. (ed.), Team 10 Primer, London 1965, p.38

45 Scott Williamson G., *The individual and the Community.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.30-31

46 *CONVERSATION ABOUT THE CORE, The human aspect of the Core, Resume of open session, tuesday, July 10th* CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583 p. 68

discourse about the heart of the City. Even in the invitation text of the MARS group, the family is already described as the lowest scale in the sense of community which constitutes the heart of the City[47] . Sert quotes the part the MARS group concerning the family and the different scale levels of the heart in his introduction to *"Centres of Community Life"*[48]. It is interesting to note that the CIAM President himself will later interpret, in a formal project, this relationship between the private smallest scale of the family and the urban public realm of the heart. Indeed, in 1953 Sert publishes in *Architectural Forum* the article *"Can patios make cities?"* from the patio house, to the patio neighborhood, to the patio park, to the patio city, an architectural element is re-measured at different scales and it is used as a tool for planning. The main difference is that the patio at the scale of the house serves as the "exclusion" from the road, from the rest of the city, while the patio at the scale of the heart becomes a place of "inclusion" of urban life, as described by Hyde[49]. Finally, we can consider Sert`s project as a typological translation of different scales of community, such as expressed at CIAM 8, where the patio is the physical reinterpretation of the relationship between the private hearth and the public heart.

Another CIAM member, Serge Chermayeff, will highlight, together with Christopher Alexander, the necessity of a distinction between the two private and public realms, between the hearth and the heart, in order *"to re-establish an equipoise between the individual and the collective."*[50]Almost ten years later the CIAM 8, the two architects will publish the book *"Community and Privacy. Toward a new Architecture of Humanism",* where the two realms are respectively synthesized in the schemes of *'Anatomy of Dwelling'* and of *'Urban Realms'*.

At the center of these schemes, we find respectively the *family hearth* and the *civic core.* The first is formed by the intersection of the 'adult privacy', the 'children privacy', the 'family community', while the latter is due to the intersection of the 'private', the 'semi-private', the 'semi-public' and the 'public'.

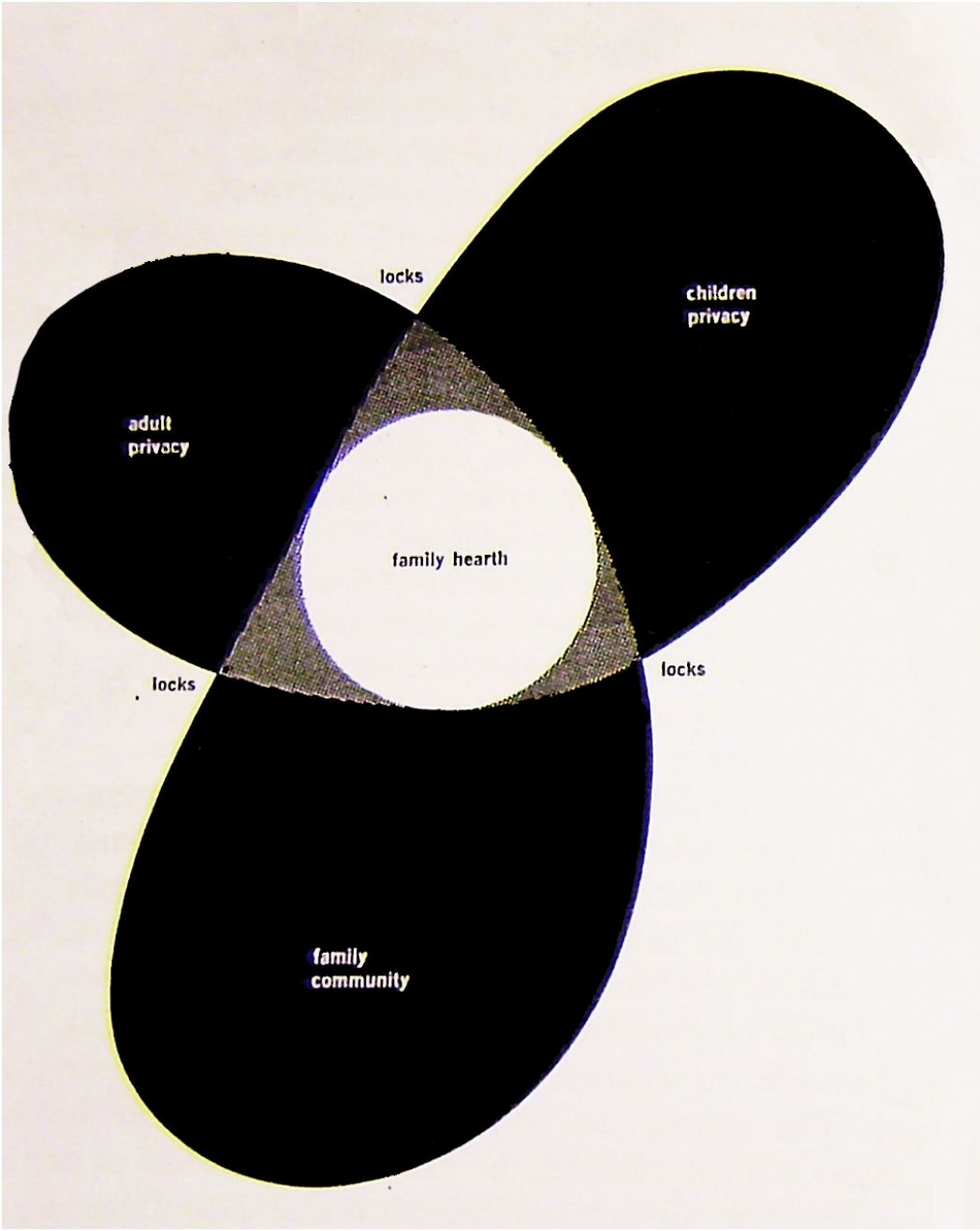
47 CIAM 8, Text of MARS Group Invitation, The Core. in Report of Hoddesdon Conference, CCA Library, BIB 200583, p.5

48 Sert J.L., *Centres of Community Life.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.6

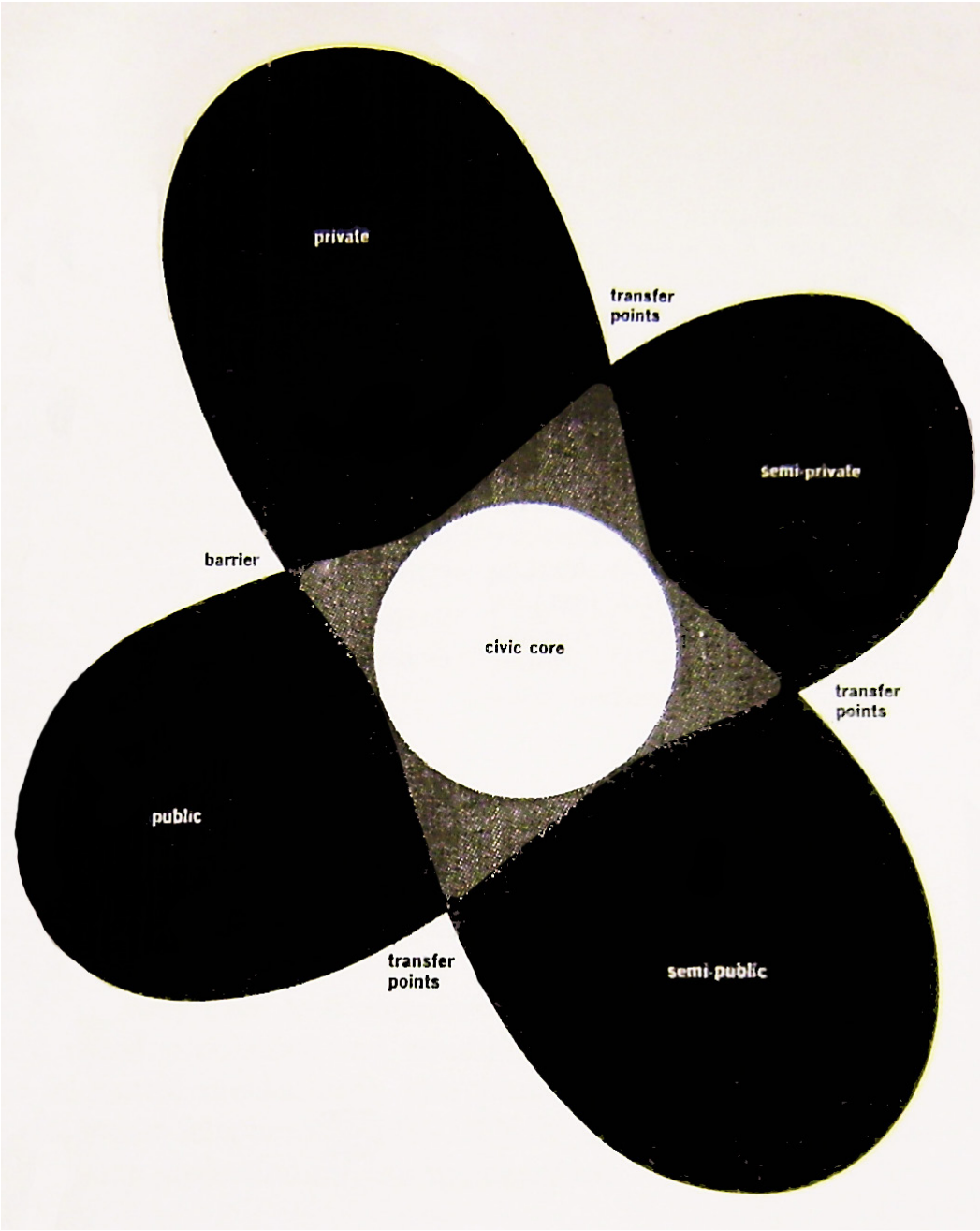
The hearth of the house as symbol of the private heart is used also by Le Corbusier and later reconsidered by the dutch architect Bakema. See Bakema J.B., Relationship between Men and Things.in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.67

49 Hyde T., *Planos, Planes y Planificacion. Josep Lluis Sert and the Idea of Planning.* in Mumford E., Sarkis H., *Josep Lluis Sert: the Architect of Urban Design, 1953-1969.* Yale University Press, 2008, p. 69-70

50 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 126



'Anatomy of Dwelling'
Serge Chermayeff, Christopher Alexander,"Community and Privacy. Toward a new Architecture of Humanism", 1962



'Urban Realms'.
Serge Chermayeff, Christopher Alexander,"Community and Privacy. Toward a new Architecture of Humanism", 1962

Then each of these entities, which creates the hearth and the heart, presents different kinds of thresholds which regulate the interaction with the others. In the first scheme only 'locks' are present as nodes between the two forms of privacy and the family community. We can imagine a closed threshold, which might be open when permitted, similar to a door. In the second scheme the 'transfer points' allows open interactions between 'public'/ 'semi-public', 'semi-public'/'semi-private' and 'semi-private'/'private'. Only between the 'private' and the 'public' realms, the threshold is totally closed, it is a 'barrier' which theoretically does not permit the introduction of the private sphere into the public one and vice versa. Nevertheless, fifty years later the scheme of Chermayeff and Alexander, the *'barrier'* is not anymore an unshakable wall and the relationship between private and public, between the 'hearth' and the 'heart' becomes a contemporary issue. Kenneth Frampton has indeed recently highlighted that the Latin verb *"aedificare, from aedes, a "building" or, even more originally, a "hearth", and ficare, "to make" - has latent within it the public connotation of the hearth as the aboriginal 'public' space of appearance."*[51] The *'hearth'* is considered as an archetypical form of public space situated inside the private realm since, even nowadays, *"no place is more of a forum in the contemporary home than the hearth or its surrogate, the television set."*[52]

Therefore the 'heart' and the 'hearth' are no longer symbols of two different scales of dimension of the sense of community nor positive metaphors of the family and of the social community. In contemporary society the 'heart' and the 'hearth' overlay each other, making unclear the distinction between a privatized public realm and a publicly opened private realm[53]. That allows us to consider again the heart theme, in relationship with its hearth, as a contemporary issue.

51 Frampton K., *Labour, Work and Architecture.* Phaidon Press Inc., New York, 2002, p. 26

52 Ibid. The issue of the role of the television is already mentioned by Bakema in 1951 at the CIAM8 :*"Le Corbusier explains how in every private house there is a core. In early days around the hearth; in our days, or in the coming days perhaps round the television screen? Or around the mechanized kitchen?"* Bakema asks during the VIII CIAM .See Bakema J.B., Relationship between Men and Things.in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.67

53 See for instance the role of internet and of the television in the private realm, and of the control systems and privatization of the public space. See for instance AA. VV., *Variations on a theme park. The new American city and the end of public space.* Hill and Wang, New York, 1992; ed. by Avermaete T., Havik K. ,Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, Amsterdam, 2009

HEART AS A SYMBOL OF NEW HUMANISM

Giedion and the Symbol

In the published proceedings of the CIAM 8, *"the Heart of the City",* the subtitle *"Towards the humanisation of urban life"* highlights the real aim of the CIAM 8 debate. In particular it presents the symbolic value of the heart rather than its metaphoric translation: it represents a new rising humanism after the tragedy of the Second World War, instead of a mere comparison of the city with an organic structure. This symbolic aspect of the Heart of the City is clearly explained by Siegfried Giedion in Hoddesdon in 1951 and then deepened in his book *"Architecture You and Me"*[54] (1959). Giedion does not overlap the metaphorical interpretation with the symbolic one. Since he is a theorist and historian, he does not exhibit a proper proposal of a city or square; thus, unlike some of his CIAM friends, he does not confuse a direct translation of abstract social and humanist values with the physical characteristics of the human organ: if the organic metaphor might presume a predetermined scale, dimension, function, growth and relationship with other organs, then the symbol of the heart is linked to an abstract idea of social public wellbeing without a prearranged physical form or dimension.[55] If sometimes the metaphorical and symbolic entities of the heart are unified, as in the projects of Sert or Gruen which will be later discussed, in Giedion the abstract Idea[56] of the heart is deepened and unearthed without confusing the metaphor-functionalist and symbol-humanist characteristics which

54 Giedion S., Architecture You and Me. Harvard University Press, Cambridge, 1958 As far as *Architecure You and Me* is considered, Carlo Olmo states in the preface of the last italian edition of Breviario di Architettura (2008) that the first original edition is in German, published in May 1956 and called *"Architektur und Gemeinschaft"*. It is interesting to note that it is published inside the "Rowohlts Deutsche Enzyklopädie", whose director is the italian Ernesto Grassi, professor of Humanism and President of International Centre of Humanist Studies in Monaco. Olmo asserts that there is an important exchange of thoughts between Giedion and Grassi, indeed the humanism becomes a principle part of the text.

The American edition is entitled *Architecture You and Me* and published in 1958. It is a further developed of the first german one. The Italian version is translation of the original german one, published in march 1961, without considering the american edition.Therefore it has been important to consider both editions in order to complete consideration about the symbol and the Heart.

See Preface by Carlo Olmo in the italian edition of 2008, of Architecture You and Me. Giedion S., *Breviario di architettura.* I edition Garzanti Milano 1961, I edition Bollati Boringhieri 2008, Torino, p.5-30

55 A criticism to the organic metaphor is later discussed in the chapter about Gruen and the New urban patterns.

56 Also the dutch Group Opbouw considers the Heart as an abstract Idea. Bakema`s proposals will be probably the most interesting translations of the symbolic image of the Heart of the City into a physical urban project without trip over a conservative image of medieval city. See chapter about Bakema.

are both potentially amenable to the Heart of the City. In particular, as far as the symbol in Giedion`s theory is concerned, Christopher Hight[57] has recently compared Giedion`s and Cassirer`s writings affirming that both of them consider *"the symbolic and its associated matters of scale and proportion"*[58] as the starting point for the distinction between "Man" and the rest of Nature[59]. The heart as an eternally present idea, as already noticed by Strauven[60] and previously mentioned, is therefore coherent with its symbolic interpretation: the symbol of the heart becomes even the first reason for the civic existence of the city and of its social community. The city itself becomes thus *"an arch-symbol of a diversified human society"* which appeared at the beginning of civilization and which *"has continued throughout all periods."*[61]

Symbol of the Heart

The Swiss historian mentions, among the examples of hearts, Michelangelo`s Capitol as a symbol of democracy and the Agora as a symbol of freedom[62]. These piazzas represent a social future or past better condition, translated symbolically into a physical present form of public space, as previously discussed in the introduction. Both squares are not merely central attractive meeting places of the City. For Giedion, they are representatives or symbols of a collective social idea; they are major examples of the rising *"emotional life"*[63] of *"the human being as such – the bare naked man "*, in contrast to the symbol of the *"tyranny of mechanical tools"*[64] which led to *"the blood and horror"* of the Second World War. Indeed, the Heart of the City becomes the most powerful symbol in order to regain a social, emotional and human scale of the city, dismissing the dangerous primacy of the machine which has been already described by Giedion in "*Mechanization Takes Command" (*1948). The heart becomes the counterforce idea of that "Man Machine"[65] proposed for instance by Fritz Kahn in the 1930`s,

57 Hight C., *Architectural Principles in the age of Cybernetics.* Routledge, New York, 2007

58 Ibid. p. 131

59 *"The most important reflection Giedion saw in Cassirer was in the latter`s proposal that a "symbolic dimension" distinguished humanity from the rest of Nature."* Ibid. p.121

60 See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998

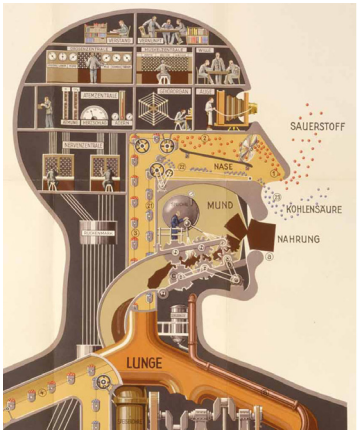
61 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 124

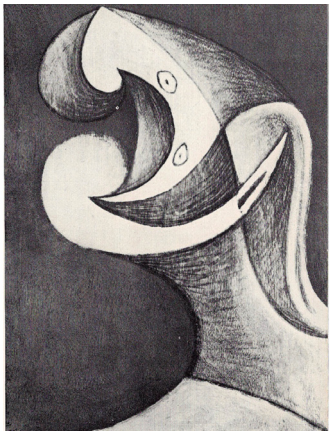
62 As previously discussed in the introduction. See Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 . The same discourse is present in *Space, Time and Architecture*, 1941 and in *Architecture You and Me,* 1958

63 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 37

64 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

65 See also chapter about Heart of Power (III Actor) for a contraddictory relationship betwen Heart and Machine.





The transformation of the 'Man Machine' (Fritz Kahn, 1930`s) into the 'Man of the war' (Picasso, 1930`s, published by Giedion in Architecture You and Me -1956).

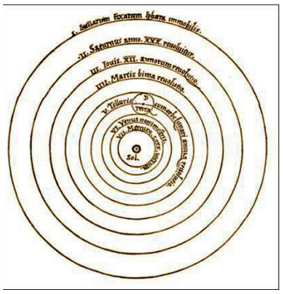
which has been degenerated and corrupted and become the terrifying face of the man sketched coevally by Picasso and described by Giedion as the symbol of *"our attitude toward war"*[66]. Indeed a deep shift happens, after the Second World War, from an unconditioned trust in progress and machines, towards the rise of the subjectivity of the individual which will fecundate the rest of the century[67]. The same CIAM moves from the austerity of functionalism, which is the major theme of the first meetings, to the symbolic translation of a human organ inside the city. From function to passion, as summarized by De Sola-Morales[68], CIAM 8 becomes the highest point reached by the 'pendulum'[69] which, between 1940s and 1950s, rapidly swings from the interest in the functionalist "existenzminimum", towards

66 *"This sickle-shaped head-like form, with its cavities and spikes, is both monstrous and human, and symbolizes our attitude toward war. It does not glorify war, like the Napoleonic Arc de Triumph on Place de l`Etoile. This sketch in oils is a projection of the horrors of our period and its tragic conflict: to know that committing mechanized murder can solve no human problems, and vet be obliged to do it."* Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, picture n. 14

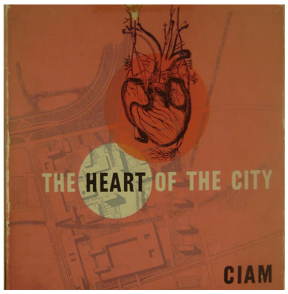
67 Bernardo Secchi stresses the rise of the democratization, of the attention to the everyday life, of the autonomy of the individual, in particular in second part of the XXth Century. See Secchi B., *La citta` del ventesimo secolo.* ed. Laterza, Bari, 2005

68 *"The understanding of the core as a human heart emerged from an architectural debate in which function seemed to have yielded to passion."* De Sola-Morales I., *Differences. Topographies of Contemporary* Architecture. MIT Press, 1997, p. 49

69 The image of the pendulum is used by Denise Scott Brown in order to explain the arise of young movements against old ones. *"A young movement, while its future is insecure, will often, because it must to survive and grow, try to destroy its past. This is easy to do when the pendulum has swung too far in one direction."* Scott Brown, D. (1967) Team 10, Perspecta 10, and the present state of the architectural theory. *Journal of the American Institute of Planners*, n.1, p.49.



City of the Sun: Utopia



City of Man: Heart of City



City of God: Transcendence

a humanizing process where Man seeks his proper scale within the city. It is a radical shift towards the "City of Man"[70], as described by Ernesto Nathan Rogers at CIAM 8, avoiding any Universal supremacy: it is indeed a city described in equilibrium between the "*Utopian and totalitarian city of the Sun"* (the perfect city of the solar civilization narrated by Tommaso Campanella, in 1602) and the "*transcendent City of God"*[71] (described by St. Augustine, in the early 5th Century AD, in contrast to the *City of Man*, the Pagans' City, immersed in the cares and pleasure of the present).

However, it is a pendulum which has probably swung too fast and too far in a single direction, falling often in too rhetorical impressions and misleading discourses about the city and the human body, also during CIAM 8. Nevertheless it is a strong counterforce, whose radicalism is necessary to represent a post-war humanism which responds *"to recent experiences of totalitarianism and scientifically planned mass destruction."*[72] This aspect is another possible contradiction between the

70 *"The Heart of the City could be brought into being for the City of Man, which concretely stands midway between the transcendent City of God and the totalitarian City of the Sun."* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

71 Ibid.

72 *"Humanism was an organizing principle in architectural thinking in the post-war period, both in terms of reconfiguring traditions and seeking lost or exotic alternatives. But humanism also implied a new mode of sensitivity to values which responded to recent experiences of tatalitarism and scientifically planned mass destruction". Curtis B., The Heart of the City. in* Hughes J., Sadler S. ed by, *Non-Plan: Essays on Freedom, Participation and Change in Modern Architecture and Urbanism.* Architectural Press, 2000, p. 52

Barry Curtis reminds also that "Man" was is part of the discourse inside the statements of UNESCO on race and difference, in 1950-`51. Ibid.

humanist symbol and the organic metaphor: as Kevin Lynch explains, the hierarchy expressed inside the organic metaphor presents a *"common pattern of social organization"*[73], used by imperators, generals or kings in order to impose their authority. While the organic metaphor might be interpreted with a totalitarian organization, the symbol of the heart abhors any totalitarianism.
Moreover this counterforce is necessary because it reconsiders the entire previous CIAM`s axioms presented through the Athens Charter[74]. In particular, as we will discuss through all the research, the heart discourse will develop a three-dimensional design attitude which contrasts the zoning method of planning, of the four functions` divisions , influencing the urban design of the last decades. This aspect is critically presented also by Giancarlo De Carlo who, writing about CIAM 8 in the `60s, will ask himself how it has been possible that the same persons who wrote the Athens Charter, have later talked about the Heart of the City[75]. Furthermore the symbolic heart is for Giedion the place of emotions. If in the `70s Lefebvre affirms that *"Symbols, on this view, always imply an emotional investment, an effective charge"*[76], then in the 1950s, Giedion already stresses the necessity to reconsider the emotions as the basic element for the existence itself of the city.[77] Indeed Giedion describes the major purpose of the century as the overcoming of the differences between the methods of the thought and the methods of the sentiments: their synergy is considered even as the universal conception of the world[78]. Then the culture itself is also considered

73 Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 281

74 For instance we will see that the Heart of the City re-interpret the previous division of the city into four functions, preparing the ground for the theories of the young Team 10.

75 *"[…] Leaping from one subject to another, at Hoddesdon in 1951 a discussion was held on `The Core of the City`and around this such a large quantity of inaccurate and wordly nonsense was collected which, on re-reading the Report to-day after a lapse of time, makes one wonder how it was possible for the many serious-minded persons who were present – some of whom had assisted in drawing up the Athens Charter – to agree with or even stand it."* De Carlo G., (Architectural Design , October 1964,or AJ the architects`journal, vol 132, jly, 1960?)p. 205 , Harvard Archive, Smithson Collection, E-017

76 *"Symbols, on this view, always imply an emotional investment, an effective charge (fear, attraction, etc.) which is so to speak deposited at a particular place and thereafter 'represented' for the benefit of everyone elsewhere."* Lefebvre H., *La production de l'espace.* Ed. Anthropos, 1974, trad. Eng. *The Production of Space*. Blackwell, 2010, p.141

77 *"Today the immediate impact of aesthetic or emotional values has become of the utmost importance.[...] This is the revolt of the humiliated human instincts."* Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 69

78 *"Compito nostro e` quello di superare le differenze, comparse nel XIX secolo, tra i metodi del pensiero e quelli del sentimento. Il parallelismo fra pensiero e sentimento e` l`inizio di una concezione universale del mondo. Il Rinascimento e il Barocco ne ebbe una loro propria, e noi dobbiamo riconquistare un`altra con i nostri mezzi"* Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958 trad. it. *Breviario di Architettura*,Garzanti, 1961, ed. Bollati, 2008, p. 109

by Giedion as a consequence of the relationship between the objects of the knowledge and the emotional structure[79]. If the sentiments and emotions have a central role in our life, then it is clear there is an outstanding necessity for a discourse about the symbol of the heart, which has been already depicted by Ernesto Nathan Rogers in Hoddesdon as the *"symbolic centre of love"* implying *"the physiological and biological values of sentiment"*[80]. Furthermore, since the symbol is the *"eco of the interior sentiment of Man"*[81], then also the heart is characterized by simplicity and immediacy, which allow its instant recognizability. *"We need today signs and symbols which spring directly to the senses without explanation."*[82] Giedion affirms quoting the French philosopher Jean Paul Sartre and referring to psychologists' experience of the school of *Würzburg*[83].

This reference to the French philosopher is interesting because Sartre represents one of the main exponents of existentialist-humanism of the mid 20th century. In *« L`existentialisme est un humanisme »,* Sartre compares two different kinds of humanism: the first one considers man as a superior value; but "*this humanism is absurd"* since we could not evaluate ourselves from an objective point of view from outside and only the *"dog or horse might judge all about man"* [84].

In contrast the philosopher proposes a humanism which considers man constantly outside of himself, beyond himself, central in the center of the transcendent

79 *"La cultura nasce quando l`uomo, consapevolmente o inconsapevolmente, pone gli oggetti della conoscenza in rapporto con a struttura emotiva."* Ibid. p. 109
"Solo quando il nostro sentimento viene destato da un atto creativo possiamo annetterci anche emotivamente i nuovi campi del visibile." Ibid. p. 111

80 Rogers E.N., *The heart: Human Problem of Cities.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.69

81 *"Uomo in quanto tale, il nudo, scoperto uomo, non definito dalla classe sociale, dalla religione o dalla razza, si esprime direttamente in forme o simboliche sono eco del suo sentimento interiore."* Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958 trad. it. *Breviario di Architettura*,Garzanti, 1961, ed. Bollati, 2008, p.137

82 Giedion S., *Architecture You and Me*. Harvard University Press, Cambridge, 1958, p. 128 and Giedion S., *Historical background to the Core.* In ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 17

83 The school of Würzburg is mentioned in the italian edition (Breviario di Architettura), not in the american one (Architecture You and Me).

84 *"En réalité, le mot humanisme a deux sens très différents: Par humanisme on peut entendre une théorie qui prend l'homme comme fin et comme valeur supérieure. […] Cet humanisme est absurde, car seule le chien ou le cheval pourraient porter un jugement d` ensemble sur l' homme […] Mais il y a un autre sens de l` humanisme, qui signifie au fond ceci: l` homme est constamment hors de lui-même, c`est en se projetant et en se perdant hors de lui qu`il fait exister l` homme et, d` autre part, c` est en poursuivant des buts trascendants qu`il peut exister; l` homme étant ce dépassement et ne saisissant les objets que par rapport à ce dépassement, est au coeur, au centre de ce dépassement."* in Sartre J.P., *L` existentialisme est un humanisme.* Les Editions Nagel, 1946, Paris, p.90-93

overrun . The final result is a universe which cannot be something other than a human universe, the universe of the subjectivity. In this sense the human heart is not just the centre square of the city, but mankind itself, the individual subjectivity which becomes the heart of the urban issue.
It is a humanism which does not refer to the Renascence Man, the centre of the universe, the measure of everything[85]. The major focus is the subjective human person[86] who lives in an always more complex collectivity, immersed in a lack of urban structure. Finally this arising of the attention to everyday life, the autonomy of the individual and the subjectivity, which we can see germinating also within CIAM 8, will influence the second part of the century[87]. The pendulum of CIAM 8 traces one of the main debates of the 1950s, which will directly or indirectly influence the urban design profession and debate of next 60 years.

Moreover the symbolic interpretation of the heart also finds many resonances within coeval discourses proposed by other theorists: for instance Kevin Lynch in *"The image of the City"* (1959) affirms that the Core is *"the focus and symbol of an important region"*[88] and makes many references to Giedion`s discourse. The symbol of the heart loses its post-war humanist value in opposition to the tyranny of the machines which has caused the death of millions of persons during the War. It becomes, for Lynch the *node*, which is one of the elements which form the public image of the city as a result of a *"constant interacting process"* between the observer and the environment. It is important to underline that, even if very different from Giedion`s heart, the node of Lynch keeps its symbolical value omitting any organic references; indeed *"these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as symbol. They may be called cores"*[89].

85 In contrast with this statement, Sert ad Wiener still presents in the `40s and `50s schemes similar to Alberti`s, or Leonardo`s Man. The main meaning is focused in the centralization of the city rather than the humanistic value.

86 Rather than the Vitruvian man, the Man of the CIAM 8 is more similar to the pedestrian "flaneur", as later described by Michel De Certeau (1925-1986), in contrast with the panopticon *"solar eye looking down like a God",* contemplating the city from the 110th floor of the World Trade Center. See de Certeau M., *The practice of everyday life.* University of California, 1984

87 See Secchi B., *La citta` del ventesimo secolo.* ed. Laterza, Bari, 2005

88 Lynch K., The image of the City. MIT Press, Cambridge, First Edition 1959, p. 76 It is interesting to note that Lynch teaches at MIT and Giedion at Harvard in the same period.

89 Ibid. p. 48

Monument and Symbol

Giedion affirms, in "*Architecture, You and Me*", that *"monumentality springs from the eternal need of people to create symbols for their activities and for their fate or destiny"*[90]. The CIAM member then denounces the loss of the capacity to build monuments for his contemporary society, in parallel with the *"dethroned symbolism"* as already mentioned by Lewis Mumford in *"Monumentalism, Symbolism and Style"*[91]. Nevertheless Giedion adds in a footnote that his words are written in 1943, a few years before Le Corbusier`s project for St. Die`. This last master-plan, shown also at CIAM 8 in Hoddesdon, is considered by Giedion as the first attempt of his period of a new form of representation of *"a crystallization of community life"* with the same potentialities of *"the Greek meeting place"*[92].

Le Corbusier`s St. Die` project is considered by the Swiss historian as the first modern example where monumentality and symbolism gain for the first time a modern connotation, which is an expression of the spirit of the time. St. Die` becomes the physical translation of the symbol of the heart in the mid XXth Century, similarly to the Agora in the Vth Century B.C.

It symbolizes moreover the right of the pedestrian, and therefore also of humanity, over the tyranny of the machines which invade urban centres. This is achieved through the separation of the pedestrian and car traffic, which is forbidden in the central part.

St. Die` will become a major reference for many later urban projects as we will discuss in the next chapters. It will influence the urban structure of entire parts of cities but often without keeping the symbolical heart which is specifically detached by Giedion inside the French project. For instance the preservation of the human scale, of *"la royauté du piéton"* (Le Corbusier), will degenerate into forms of social segregation in some projects of 'la dalle' in France, or in the underground city of Montreal[93],as later discussed. Some other projects, such as Sert`s Latin American master plans, will be instead intriguing evolutions of the St. Die` scheme, thanks to the mix between modern and local traditional entities[94].

Another project presented by Le Corbusier at CIAM 8 is the plan for Chandigarh[95].

90 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 28

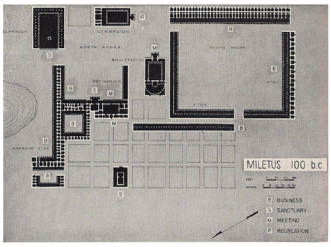
91 Mumford L., Monumentalism, Symbolism and Style, Architecure Review (April 1949), p. 179 quoted in Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 23

92 Ibid. p. 162

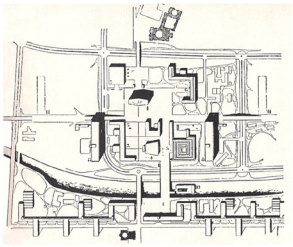
93 See Chapter about the the Urban Design.

94 See project of Chimbote and Motor City in the chapter about the Urban Design and Sert.

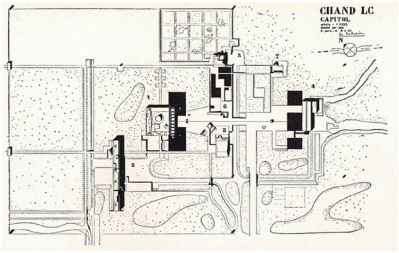
95 The master-plan of Chandigarh is designed by Le Corbusier with Jeannert, Drew and Frey who is part of the MARS Group, organizer of the CIAM 8. Curtis affirms that *"Thapar and Varma set out to find a new chief architect. They continued to feel that there was no one in India remotely capable of handling such a thing […]*



The Agora of Miletus, 100b.C.



Le Corbusier, St.Die`, 1945



Le Corbusier, Chandigarh, 1951-`55

Here the symbolic presence is fully expressed as underlined by William Curtis in *"The symbolism of Chandigarh"*[96]. In particular the monument of the "Open hand" becomes the *"very symbol […] of international peace, transcending politics, caste, religion, race."*[97] Moreover this dominant symbolic hand, which should be seen from everywhere turning *"on ball bearing like a weathercock"*[98], has many resonances also with Indian tradition and identity. E.L.Varma, who chose the site of Chandigarh, considers indeed the *"Open hand [...] appealing [to] India in its entirety"*. He describes Le Corbusier`s monument as a contemporary translation of *Ram Bharosa*, an Indian expression which indicates the *"deep faith in the Ultimate […] Source of Knowledge. [...]"* . The entire master-plan of Chandigarh is therefore already part of a symbolical Indian tradition, which might even evolve through the architectural and urban space design of the brand new city. "*Ours is a philosophy of open hand.* - Varma concludes – *Maybe Chandigarh becomes the center of new thought."*[99]

Another intriguing project presented at CIAM 8, which better resumes the synergy between symbol, monument and heart, is Kenzo Tange`s Hiroshima Peace

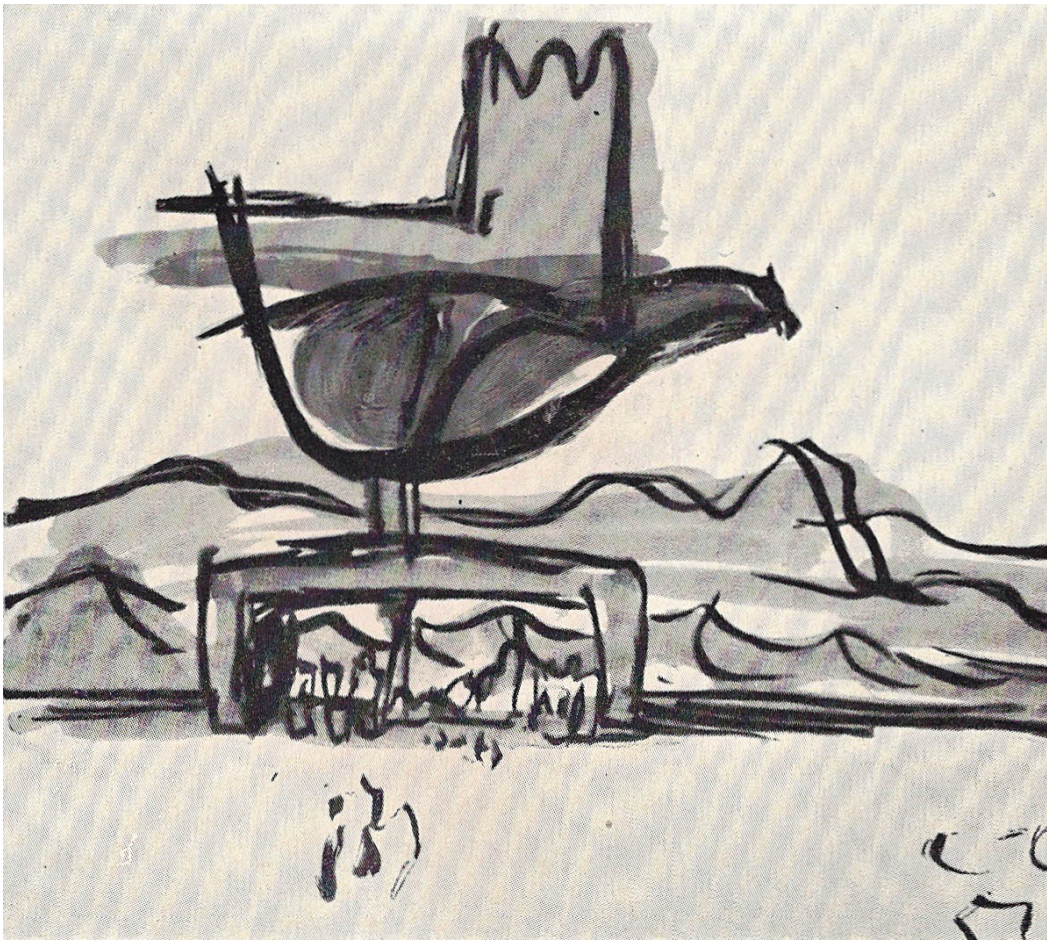
They went to London and spoke to Jane Drew and Maxwell Fry, who had experience designing in the tropics but who hesitated to take the whole job on and recommended Le Corbusier." See Curtis W.J.R. *The Symbolism of Chandigarh* in Curtis W.J.R., *Le Corbusier: Ideas and Forms.* Rizzoli, New York, 1986, p. 188

96 **Ibid. p. 188-201**

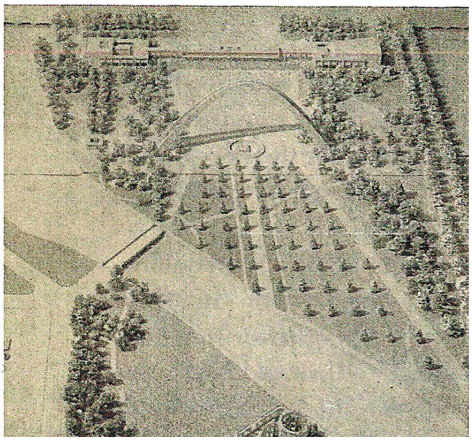
97 **Ibid. p. 194**

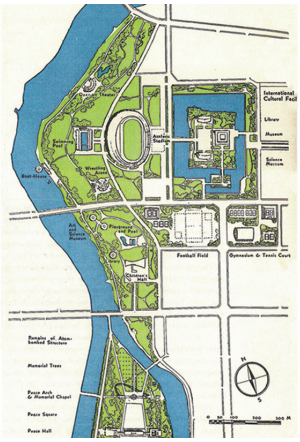
98 Le Corbusier, *Oeuvre complete,* 1946-1952 (Zurich, 1953), p. 150-151 quoted in Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 176

99 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 176-177



Le Corbusier, The Open Hand, Chandigarh, 1951-`55





Tange, Hiroshima Peace memorial park and master-plan, 1951

memorial park. If in Europe the War has left visible ruins of the old destroyed city, then in Japan most of the wooden buildings have been substituted just by ash. *"How many bodies had been burnt to a cinder by the intense heat?"* Tange asks himself "*Losing the war meant the re-thinking of fundamental attitudes towards existence...It was almost as if one of nature's basic laws had been shown to be false."* [100]

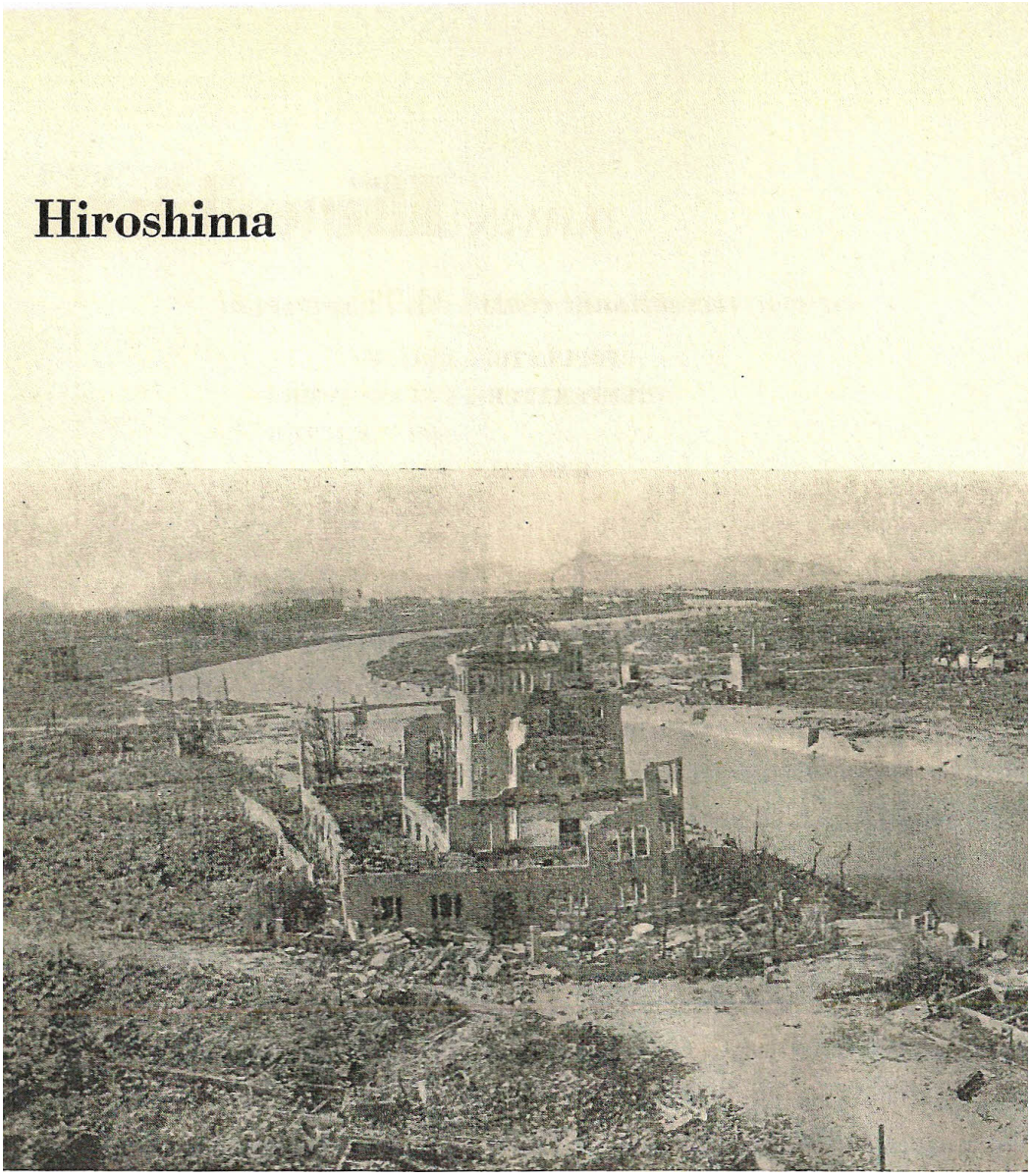
Hiroshima, one of the two cities destroyed by the atomic bomb, is one of the major symbols of the horrible destruction of the War. Tange presents a fifteen-year program of reconstruction which mirrors the decision of the people of Hiroshima *"to stand for peace and […] to demonstrate it to the world by moulding their ruined community into a monument of permanent peace"*[101].

The master-plan thus provides a Peace Hall, a Peace Park, a Peace Boulevard and international hotels and dormitories, which are disposed with an axial composition centered on the memorial cenotaph, in order *"to create a unique ethos that would inspire the city`s reconstruction"*[102]. The entire city, rather than a single monument, becomes a symbol of peace: in a footnote of an image, the new

100 **Raini, P.,** *Twentieth Century Masters: Kenzo Tange*. New York, London, Sydney, 1969, p.8

101 **Kenzo Tange in Rogers E.N., Sert J.L., Tyrwhitt J., Editors,** *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p. 137 *"This Hiroshima peace project is not that ideal city Core that we cherish in our minds; but it is a rare and happy case in Japan […] to have been willing to organize into a single body so that a civic scheme can in fact be realized."*

102 **Lin Z.,** *Kenzo Tange and the Metabolist movement. Urban Utopias of Modern Japan. Urban Utopias of Modern Japan.* Routledge, London and New York, 2010, p. 178 Lin affirms that *"Tange raised the isue of symbolism at the eight CIAM conference in 1951."* Ibid. p. 177



Hiroshima, after war

plan for Hiroshima is indeed called the "Peace City"[103]. The symbol will remain, for Tange, an outstanding theme during the later decades too. Indeed a few years later, in 1966 the Japanese architect will note in his essay *"Function, Structure and Symbol"* that since the symbol is *"an important subject in architecture or in the arts"*, then the architect has to think *"what is the symbol of the day, where the symbol reveals itself, and how the symbol is created."*[104]

Moreover the symbol has a specific purpose for the Japanese architect. Differently from Giedion, Tange considers the symbol as the melting element of technology and humanity. *"Can modern technology restore humanity?"* - Kanze wonders - *"[...] 'yes' only when modern technology has succeeded in creating in a space a symbol of the spirit of the time. And I am convinced of its possibility."*[105]

The dichotomy expressed by Giedion between machines and humans[106], which has been translated in many projects into the split between car and pedestrian flows, is overpassed by Tange who, on the contrary, ponders the right synergy between humanity and technology, through the symbolic expression in space of the spirit of the time, of the zeitgeist[107]. Similarly to Lynch, Tange undresses the heart symbol of its post-war humanist values in contrast with the machine, keeping its role as a symbol for the design of the city, based on the mutant spirit of time.

103 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p. 136

104 Kenzo Tange, *Function, Structure, Symbol.* 1966, in von Udo Kultermann H., *Kenzo Tange 1946-1969,* ed. Verlag für Architecktur Artemis Zürich, p. 243

As far as the Hiroshima project is concerned, Kenzo Tange affirms : *"I had already begun to think of an antagonistic relationship between inner (private) and outer (social) functions in the Hiroshima peace park and hall project ad to consider ways of making exterior spaces and social spaces correspond to outer function."* ibid. p. 243

105 ibid. p. 243

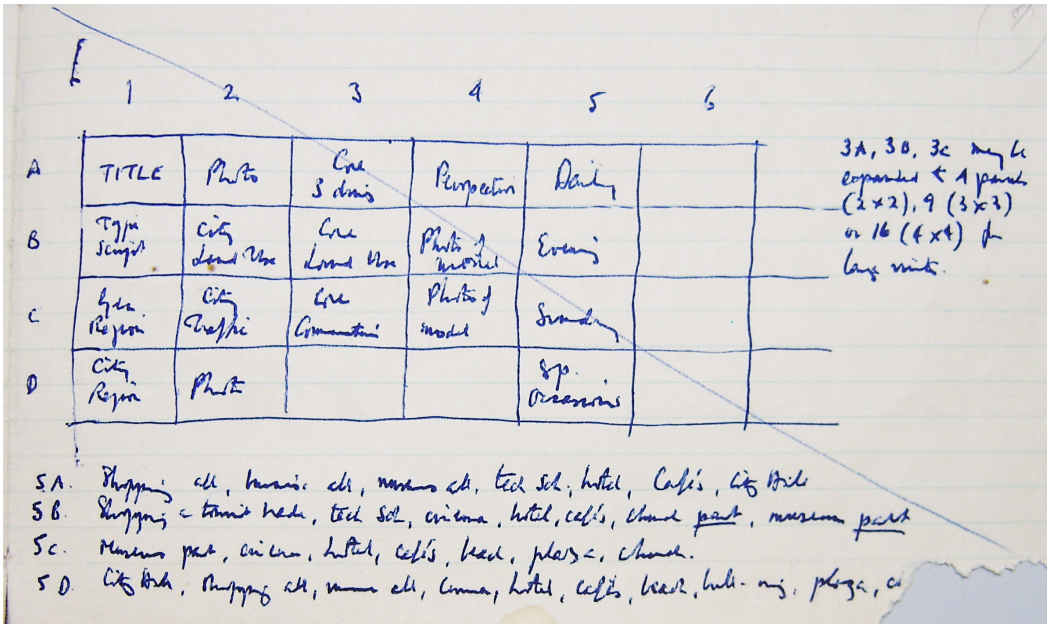
106 This dichotomy between machines and humans will be inverted in the chapter about the Heart of Power, (See III Actor)

107 We will later talk about the relationship between the spirit of the place, the genius loci and the Heart of the City, discussing about Norberg Schulz. Also Gruen considers the synergy of technology and humans in his Cellular Metropolis. See chapters about Gruen`s New Urban Patterns.

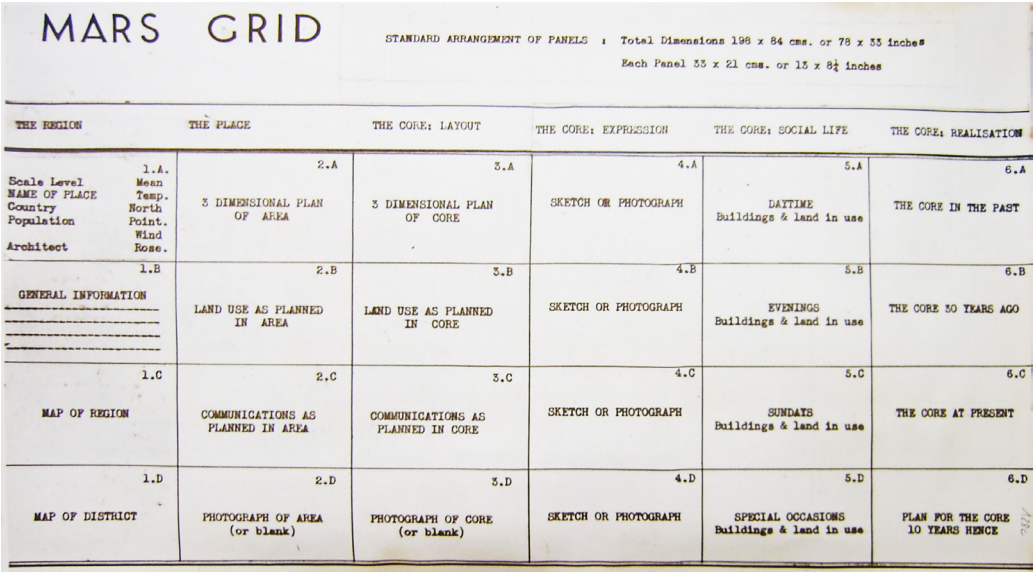
CLASSIFICATION of projects, CIAM8

The MARS group individualizes five different scale levels for the analysis of the projects which should be presented by CIAM members. The first four scale levels are considered by Jacqueline Tyrwhitt, as the essential ones for the urban constellation, *"that area within which a full life can be lived with freedom of opportunity for the development of the potentialities of each individual."*[108]
1st scale: The Village (rural) or Primary Housing Group (urban) - 500 people
2nd scale: The Small Market Centre (rural) or Residential Neighbourhood (urban) -1500-3000 people
3rd scale: The Town (rural) or City Sector (urban) - 25.000-100.000 people
4th scale: The City or Large Town - 250.000-1.000.000 people
5th scale: The Metropolis with millions of people
Each project is then presented using a grid suggested by the MARS Group itself. This grid is a reduction of that one used by the ACORAL group during the 7th CIAM in Bergamo in 1949. The information about the heart are divided in six columns: the first three are different scales in progression from the starting point (village, city or neighbourhood) toward the Heart; in the fourth column there are the images of the heart and the last two columns describe the time linked to the heart, both the daily one and the historical one. Each scale has a specific environment described with a strong emphasis on the sense of community.
However the grid and the scale level division seem to be not totally followed in the official publication of CIAM 8, edited by Tyrwhitt, Sert and Rogers and published one year later. Indeed the projects are exposed in a more complex index, which tries to express the several issues proposed by the CIAM 8 projects: they concern the Core from the Village to the Small Town, the Urban Neighbourhood, the Urban Sector, the City; moreover it is listed as the Core of a New Town, the Search for the Core of a City and the Core of a Government Centre[109].
Jacqueline Tyrwhitt then also proposes a more interesting formal-typological schematization of the projects, as a result of the similarities of the design process of the studied projects. It is a schematization which goes beyond the dimension scales, and the functions surrounding the single projects.
A - Enclosed formal: The buildings are visually tied together and the open public

108 ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 105
109 ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 102



MARS` sketch of the Grid for CIAM 8. ETH/gta Archive 42-JT-7-62/63.



MARS GRID

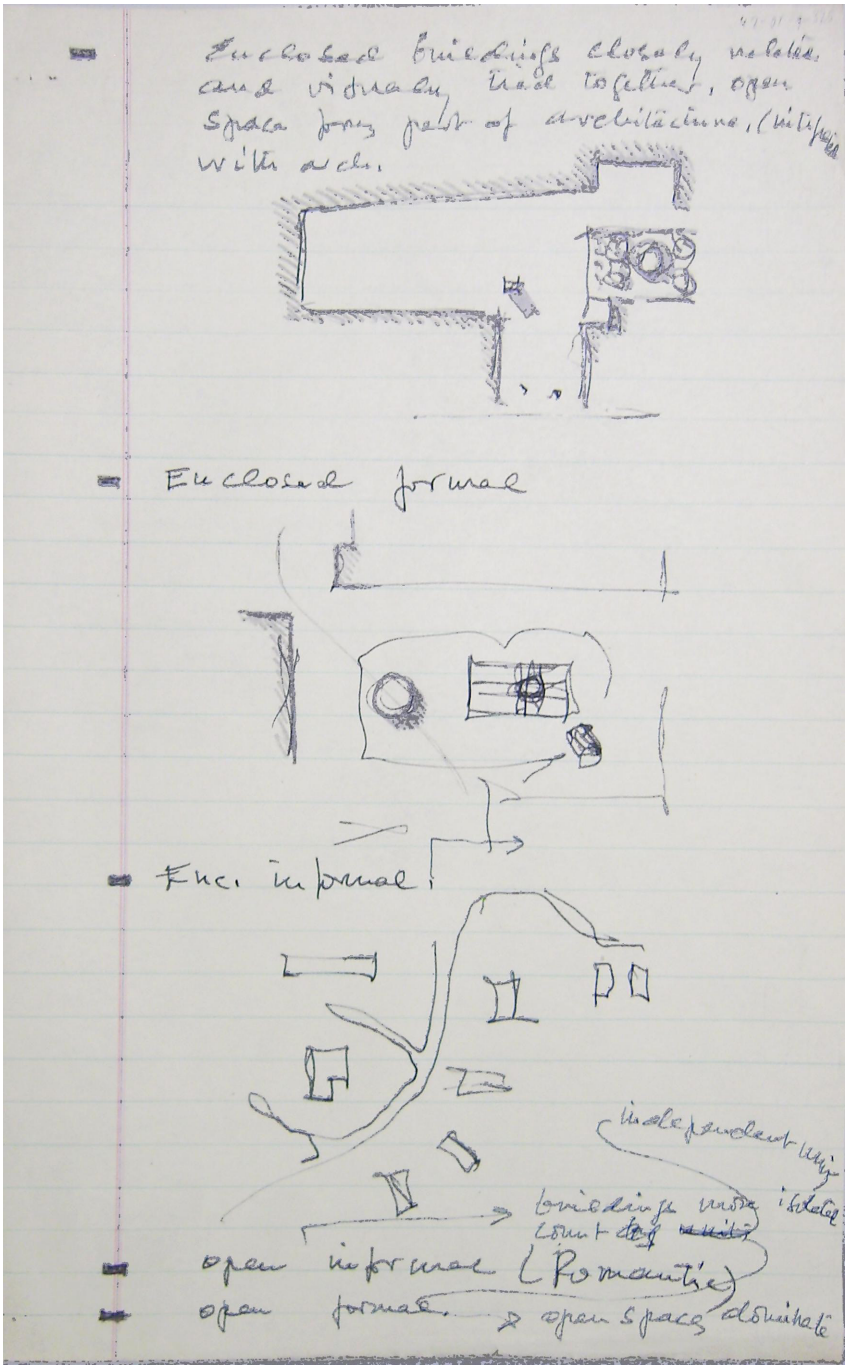
STANDARD ARRANGEMENT OF PANELS : Total Dimensions 198 x 84 cms. or 78 x 33 inches
Each Panel 33 x 21 cms. or 13 x 8¼ inches

THE REGION	THE PLACE	THE CORE: LAYOUT	THE CORE: EXPRESSION	THE CORE: SOCIAL LIFE	THE CORE: REALISATION
1.A. Scale Level, Mean Temp., NAME OF PLACE, North Point., Country, Wind Rose., Population, Architect	2.A 3 DIMENSIONAL PLAN OF AREA	3.A 3 DIMENSIONAL PLAN OF CORE	4.A SKETCH OR PHOTOGRAPH	5.A DAYTIME Buildings & land in use	6.A THE CORE IN THE PAST
1.B GENERAL INFORMATION	2.B LAND USE AS PLANNED IN AREA	3.B LAND USE AS PLANNED IN CORE	4.B SKETCH OR PHOTOGRAPH	5.B EVENINGS Buildings & land in use	6.B THE CORE 30 YEARS AGO
1.C MAP OF REGION	2.C COMMUNICATIONS AS PLANNED IN AREA	3.C COMMUNICATIONS AS PLANNED IN CORE	4.C SKETCH OR PHOTOGRAPH	5.C SUNDAYS Buildings & land in use	6.C THE CORE AT PRESENT
1.D MAP OF DISTRICT	2.D PHOTOGRAPH OF AREA (or blank)	3.D PHOTOGRAPH OF CORE (or blank)	4.D SKETCH OR PHOTOGRAPH	5.D SPECIAL OCCASIONS Buildings & land in use	6.D PLAN FOR THE CORE 10 YEARS HENCE

MARS Grid, J.L.Sert, P.L. Wiener, Chimbote Project presented in the MARS Grid

space is considered as an extension of the internal, private one. The main examples are the projects for Lausanne, Chimbote, Oslo and Bogota.
B - Enclosed informal: the architectural buildings are still tied but the design of the public space is more informal, as in the medieval cities of Coventry and Kolsdal
C- Open Informal: the relation among buildings is not so direct and the public space is usually not limited by them. The open space dominates the plan, melting sometimes with landscaping elements. Examples are Hiroshima and Gustvsberg
D- Open Formal: still the open space dominates the plan, but the buildings are distributed in a more formal pattern. Examples are Meddelin and Chandigar.
This classification is a very important and more intriguing in respect of the concentric one presented by the MARS group, from village to metropolis. Indeed it is more related to the urban design process of the city rather than its dimension. Moreover, it has many resonances with the projects and urban devices which will be discussed through the entire PhD research.
If we analyze a personal sketch, probably drawn by Tyrwhitt, we can notice that this classification is exemplified with drawings of Piazza San Marco in Venice (enclosed informal) and Pisa`s Campo dei Miracoli (Enclosed formal).
These two piazzas are the main references respectively for the CIAM Summer School in Venice (second actor) and for St. Die` and Fort Worth which are deeply analyzed in the chapter concerning Victor Gruen (first actor). The third sketch represents a cluster of buildings unified by an informal public space (Enclosed Informal). This last part might have some resonances with Bakema`s interest in the urban relationships rather than the architectural object itself (third actor). Furthermore it might represent a first attempt to delineate, inside the Heart of the City, the theme of the "Cluster"[110], which will later become one of the major issues of the Team X.
Finally we can conclude that the formal space division with regard to the Heart of the City considered by Tyrwhitt, drawing these three sketches, overlaps coherently with the 'actors' which have been chosen in order to expose the complexity of the Heart theme. Indeed, the three sketches might perfectly symbolize the project`s references to the three actors, even with many differences in comparison with Tyrwhitt`s proposal of classification of the heart theme.

110 See also chapter about Victor Gruen and Fort Worth, where the theme of the cluster is deeply analyzed.



_Enclosed buildings tied toghether_Enclosed Formal _Enclosed informal_Open informal _Open formal
gta/ETH Archive 42-JT-9-325

MENSCH + RAUM (Darmstadt, 1951)

During 1951 other important Congresses and Exhibitions take place as well. On 3 May, the Festival of Britain opens on the South Bank of London. The main aim is to celebrate "*the British contribution to civilization, past, present and future"*, using a festival as a "*tonic to the Nation"*[1], after the disasters of the wars. The central theme celebrated is the *"innate curiosity"* thanks to which British people made important discoveries in all fields. This spirit is transmitted by the pavilions such as the Dome of Discovery by Ralph Tubbs, which is considered by critics in the 1950s as *"the largest dome in the world"*. Another interesting building is the Sea and Ships pavilion, designed by the Scottish architect Basil Spence, which is later described by Reyner Banham as "*a megastructure of sorts before the time had come"*[2].

In July 1951 the delegates of Hoddeson CIAM organize a bus trip to the South Bank Festival, in order to deepen their discussion about the Heart of City theme in a British Festival context. Even if the Festival is characterized by interesting architectural proposals[3], Nicholas Bullock supposes that the South Bank exhibition should appear as an "*easily overshadowed lesson*"[4] in comparison with the range of proposals shown by various national CIAM delegates.

Then in the same period, in Italy the ninth Milano Triennale takes place[5]. As Strauven[6] relates, the CIAM member Van Eyck is invited together with Jan Rietveld

1 Banham and Forty, *Tonic to the Nation*, p.27 Quoted in Bullock N., *Building the Post-War World, Modern Architecture and reconstruction in Britain.* Routledge, 2002, London, p. 69

2 Banham R., *Megastructure. Urban Futures of the recent Past.*Thames and Hudson, London, 1976, p. 34

3 The master plan of the Festival contains also one of the first important public buildings built after the War, the Royal Festival Hall, designed by Leslie Martin as leader of the team of architects proposed for the construction. After different configurations imposed by the restricted size of the site, it is decided that the major concert hall would be an *"hard core"* elevated above the foyer area giving access to the auditoria and enveloped with outsider circulation and ancillary spaces. A "*solid egg in the transparent box"* is the final main idea of the Royal Hall, becoming an outstanding first example of Concert projects even of nowadays Contemporary architecture. The Festival has moreover many similarities with other post-war exhibitions as that one held in Rotterdam one year before and designed by van Broek and Bakema as a celebration of the after War reconstruction of Rotterdam: in both exhibitions the cultural and urban rebirth idea after the War is indeed present, the pavilions are designed as permanent structures and there is a same attention to a section, three dimension design of the buildings as wellSee Bullock N., *Building the Post-War World, Modern Architecture and reconstruction in Britain.* Routledge, 2002, London.

4 Ibid. p. 75

5 12 maggio-settembre 1951. See Pica Agnoldomenico (a cura di), Nona Triennale di Milano catalogo, Milano, S.A.M.E., 1951, catalogo della mostra, Milano, Palazzo dell'Arte, 12 maggio-settembre 1951

6 See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.190

(son of the better known Gerrit Rietveld) by Ben Merkelbach[7] (1901-1961), to design the layout of the Dutch entry. Their exhibition results are very clear, in a very sparing style, consisting mainly of a series of small Dutch architecture project photos[8]. As far as the Italian architects are concerned, they participate in the ninth Triennale too but their exhibition seems not to be very well appreciated, because it is much too exuberant especially in comparison with the winner's one. Moreover in Hoddesdon,[9] there are no Italian projects exhibited even if the theoretical presence of Rogers and the discussion about the Italian Piazzas have a determinant role within the debate[10]. Nevertheless, all Italian efforts seem concentrated on the organization of a contemporary architecture exhibition in Sweden and of the Italian Architecture Exhibition which will be held the following year at the Royal Institute of British Architects (RIBA) in London[11].
Finally, in addition to these exhibitions, another important architectural Congress is organized in 1951, in parallel with the CIAM8: the Congress held in Darmstadt (Germany) in August 1951.

Darmstädter Gespräch, 1951

> *"Building is a fundamental activity of man - Man is at the essence of his era while He builds - Our era is the era of `technical`- The poverty of our age is the lack of State".* Preamble at Darmstädter Gespräch, 1951

At CIAM 8, J.L. Sert starts his presentation about the "*Centres of Community Life"* with a long quote from *The Revolt of the Masses* written by the Spanish Philosopher Jose Ortega Y Gasset (1883-1955):

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7 Ben Merkelbach is a Dutch architect. He has a determinant role for the inclusion of young generation architects within CIAM. He introduces Bakema and van Eyck at the Bridgwater CIAM meeting in 1947.

8 These ones are exhibited in different sections: the first one is filled by the `forerunners`(Berlage, De Stijl and pre-war projects); the second is reserved the post-1940 projects. A Theo van Doesburg painting (*Counter-composition 5*-1924) and two chairs (`Zigzag` and `Red and Blue`) of Rietveld, are exhibited as well. At the end of the Triennale exhibition, the Dutch entry wins the gold medal. See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.190

9 The present Italians at CIAM 8 are Ernesto Nathan Rogers with a young Vittorio Gregotti (as referred by a personal interview), Peressutti, Albini, Bottoni, Romano, Daneri. During Sigtuna meeting in 1952 Rogers admits the lack of participants within the Italian Group and for the first time he speaks for himself, not on behalf of the group. See Protasoni S., *Il gruppo Italiano e la tradizione del moderno.* In Rassegna (1992), n.52/54, p. 36

10 See chapter about the CIAM Summer School in Venice, second actor.

11 This last exhibition consists of 50 panels showing projects from the 1930 and the 1951, from Sant´Elia, Terragni, Pagano, Lingeri to BBPR, Albini, Bottoni, Gardella, Mucchi and to more young Zanuso, Menghi and next Team 10 member, Giancarlo De Carlo. See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998

"For in truth the most accurate definition of the urbis and the polis is very like the comic definition of a cannon. You take a hole, wrap some steel wire tightly round it, and that`s your cannon. So, the urbis or the polis starts by being an empty space, the forum, the agora, and all the rest are just a means of fixing that empty space, of limiting its outlines.[...]"[12]

In the opinion of the Spanish philosopher, the city` s aim, different from that ones of the private, is to allow people to communicate: the invention of this new kind of space is *"much more new than the space of Einstein"*, Ortega affirms.

Moreover if the City is a *"canon"*, separated from *"the Geo-Botanic cosmos"*, then the new world of the technique is, in Ortega`s opinion, nothing more than "*un dispositivo ortopédico gigante"* (a giant orthopedic device)[13]. Indeed, even if man is within nature, He comes out from Nature and therefore he does not belong to it: he is an intruder, without a proper Habitat (unlike other animals), unsuited to any *milieu;* thus he needs to build, to use the technique in order to assimilate and humanize the space.

These last concepts are personally exhibited by the Spanish Philosopher only one month later the Hoddesdon meeting, more precisely during the Darmstadt Congress[14], in Germany, during the Exhibition *`Mensch und Raum` (Man and Space, from 4 to 6 August 1951)* where many infrastructure and urban projects are exhibited by German architects. [15] *"It seems that the ruins have been for them like an injection of hormones in their body which caused a frantic desire to build. [..] The ruin as an aphrodisiac."*[16] - Ortega y Gasset explains the spirit of the meeting, as a new propulsion towards a new era, a new Germany to be reconstructed after the War. (A totally different spirit in comparison with the behavior of Japanese Metabolists in front of Tokyo's ruins!!!) During these *Colloquia* another outstanding philosopher, the German Martin Heidegger (1889-

12 Josè Ortegay Gasset, *The Revolt of Masses.* W.W. Norton and Company Inc.1932, New York, p. 164-165 quoted in Sert J.L., *Centres on Community Life* in Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p.3

This quote will be deeply discussed later discussing about Sert and the urban Design.

13 Josè Ortegay Gasset, *Meditación de la técnica.* Alianza Editoriale, Madrid, 2002, p. 108 quoted in AA.VV., *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p. 58

14 Darmstadt Colluquium, 4th -6th August 1951. VIII CIAM in Hooddesdon was held between the 7th and the 14th of July 1951.

15 Among the others: Bartning, Gerhard Weber, Franz Schuster, P.F. Schneider, Peter Grund, Ernst Neufert, Aloys Giefer and Hermann Mäckler, Rudolf Scwarz and Sep Ruf, Scharoun. The only no-German architect presenting a project is Willem Marius Dudok. The main reference of the exhibition is the `Artistic Colony of Darmstadt`held in 1901 and mostly all 11 exhibited projects are kindergartens and schools.

16 Josè Ortegay Gasset, *Meditación de la técnica.* Alianza Editoriale, Madrid, 2002, p. 109 quoted in AA.VV., *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p. 62

1976), delivers his lecture proposing one of his most famous theories in "*Bauen, Wohnen, Denken" (Build, Dwell, Think).* Heidegger`s lecture is addressed to all architects who, after the War, have the task of rebuilding the destroyed cities. In opposition to a vision based on progress as the basis for meaningful present actions, the philosopher proposes a return to roots, to origins. Indeed he affirms that only thanks to a reconsideration of the past, can we transform the act of the residential into real dwelling. Originally the German word *bauen* - building – forms part of the act of dwelling and from this word "*we learn three things:*

1. *Building is really dwelling.*
2. *Dwelling is the manner in which mortals are on the earth.*
3. *Building as dwelling unfolds into the building that cultivates growing things and the building that erects buildings. [...]The fundamental feature of living is that of taking care."*[17]

This strong synergy, according to which "*only if we are capable of dwelling, only then can we build"*[18], is however in opposition to the point of view of Ortega y Gasset who delivers his speech just a few hours later: *"The myth of man over the technique"*.[19]

During this lecture, the arguments are in contrast with Heidegger`s. Indeed if for the German philosopher`s point of view man already dwells – *bauen* – on the earth[20], then in the other Philosopher`s opinion, as already shown, man originally is not able to dwell - *wohnt*- on the Earth: he needs *"a giant orthopedic device"* to transform his original illness into a wellness while the dwelling is a privileged condition, "*the fullest form of being."* [21]

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17 Heideger M., *Bauen – Wohnen – Danken.* Neve Darmstädter Verlaganstalt, 1952 [trad. eng. *Building, Dwelling, Thinking.* from Poetry, Language, Thought, translated by Albert Hofstadter, Harper Colophon Books, New York, 1971. trad. it. *"Costruire Abitare Pensare"* in Saggi e discorsi, Mursia, Milano 1954 p.98-99]

18 Ibid. p.107d

19 During the Darmstadt Conference the Spanish Philosopher is sat behind Heidegger while the German speaks and he doesn´t ear everything He says: "Heidegger has not managed to speak with the neck yet !´ Therefore he cannot interact with the German doctrine few hours later during his lecture, half improvised because of lack of time, which has the title of "The myth of man over the technique". Josè Ortegay Gasset, *Meditación de la técnica.* Alianza Editoriale, Madrid, 2002, quoted in Josè Ortegay Gasset, *Intorno al Colloquio di Darmstadt, 1951* in AA.VV., *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p.67

20 In the universe between the Mortals and towards the Divinities and he builds in order to make the dwelling a contemplation – *schönen* – and thinking, meditating – *dichten*.

21 Moreover, in a etymological later battle, Ortega notes that if Heidegger considers *Bauen-buan-wohnen* with the meaning of `to be`, `to live`, then these terms are not isolated: the same root unifies the words *gewinnen* (to make efforts for something), wunsch (to aspire to something which is missing) and *wahn* (both something which is not sure and hope and effort, similarly to *gewinnen*.). Finally this would mean for Ortega that -*wohnen*- dwelling and -*Sein*- being, can mean only something that is not quite, not already finished,



Mensch + Raum Exhibition, Matildenhohe in Darmstadt, 4 August-15 September 1951

If Heidegger considers that we can build only if we are able to dwell, only if *"poetically, Man dwells"*[22], then Ortega Y Gasset states on the contrary that we need to build in order to seek to dwell. If for Heidegger the technique is described as the Greek -*techne*- as a creative revealing (*entbergen*) of the truth belonging to – *poiesis* - making, then in the philosophy of Ortega Y Gasset the technique is a giant orthopedic device thanks to which we are able to survive on the Earth.

Finally these contradictory and complex point of views mirror the similarities between the architectural and urban debates both in Hoddesdon and in Darmstadt[23], centred on the new urban condition after the tragedy of the War. As Werener Oechslin indeed affirms *"the formulation of questions and issues are similar: the rediscovery of urban space, respectively the highlighting of the city and its duties against the reconstruction policy in one way of the government, and so the answers."* [24]

Furthermore, both philosophers' considerations have resonances with the Heart of the City discourse, even if they contradict each other. On the one hand, the separation between nature and *urbis*, as claimed by Ortega Y Gasset, becomes one of the major references for Sert`s idea of urban centralization which will influence all the urban design debate in the USA, from the mid 1950`s. On the other hand, Heidegger's research of the roots of the human dwelling mirrors the symbolical interpretation given by Giedion to the Heart of the City and in particular his research for an eternal present element, as previously discussed. Moreover the investigation of the term *Dwelling* in Darmstadt is coeval with the first criticisms of the significance of

not closed. Ibid. "*The Human Being is stress and dissatisfaction […] the Earth is inhabitable for Man"* - Ortega concludes. Thus the authentic dwelling is an illusion, for the Spanish Philosopher, or a necessity, *Bedürfnis;* it is something that Man has always looked for but He never got it totally; however He cannot fully Be without it and therefore "*he strives towards that goal and he produces buildings, roads, bridges and tools."*Ibid. p. 79

22 Lecture at Bühler Hohe spa in the mountains above Baden Baden, 6 October 1951. See Sharr A., *Heidegger for architects.* Routledge, London and New York, 2007, p.75

23 While CIAM obtains an outstanding consideration within the architectural history, Darmstadt remains an important point of meeting after the War; it remains anyway an isolate episode. Moreover he CIAM and the Darmstädter Gespräch have no many occasions for installing a relationship or for a direct exchange of ideas. Many criticisms are moreover spent from the Germans to possible common interests: the Philosopher Alfred Weber considers the continual discussion on the dwelling as the transformation of Architecture discipline in "*applied hygiene"* and he criticizes the new ONU building as a "*pocket of cigarettes put in vertical"*; Hugo Häring affirms that CIAM is interested only to a "*renewal of Architecture"*, while the `*German tradition*` is faithful to the construction and to compositional items. However some attempts of reconciliation are made, for example, through BAU magazine where André Sive writes about the Bridgwater CIAM meeting saying that "*the wheel is turned"* and that CIAM projects do not represent anymore the individuals opinion but a more official point of view with a consequent more useful aim. *"That means: the research of the best social, technical and esthetic condition for the contemporary Man life; a generous and tireless work which, now, produces concrete solutions."* André Sive, *Bericht über den VI. Kingress der CIAM.* In BAU, n.1, 1947, p.77 quoted in Oechslin W. (1992), I darmstadter gesprache. *Rassegna*, n.52/4, p.78

24 Oechslin W. (1992), I darmstadter gesprache. *Rassegna*, n.52/4, p. 80

Dwelling, as one of the four functions defined by the Athens Charter in the 1930s. The Heart of the City itself is an attempt to correct this zoning division rather than being merely its fifth element, as already argued[25].

Finally both congresses clearly refer to the human being as the central issue of the debate: from one side the Heart is a symbol of a brand new social interest within the public realm, and from the other side "Man and Space" become the frame for one of the most outstanding philosophical expositions of the last Century, on the human existence.

As far as the architects in Darmstadt are concerned, among the German architects participating in the conference, under the direction of Otto Barting, two of the most representative exponents of the German Architecture: Gropius and Mies van del Rohe[26]. are not there. However another outstanding German architect, Hans Scharoun (1893-1972), seems to welcome the opportunity to share his architecture proposals with the philosophers` theories. In particular, Heidegger, the *Zerdenker, "the bad thinker"*[27], establishes a good intellectual relationship with the architect. In a letter written on the 18th October 1957 by Heidegger to Scharoun, the Zerdenker admits that he continually thinks of their meeting in Darmstadt, because on that occasion "*You said to me something of an unspoken unanimity between Your creating and my attempting.*"[28] This intellectual synergy is very clear in Scharoun`s

25 This debate will continue within the CIAM and the Team X, with the research of a new Chart of the Habitat.

26 Gropius, who is one of main exponent of CIAM and he is instead present in Hoddesdon one month before of Darmstadt, has already booked his ticket for the steamer to America; Mies can`t find the way to come from USA in time.`*Mies van der Rohe, der vorgestern noch an den Oberburgermeister geschrieben hat, daß er bis zum letzten Augenblick gehofft hat, herüberkommen zu können, dann aber doch den Weg von Amerika im letzten nicht gefunden hat.*` – Otto Barting Says. (AA.VV. *Mensch un Raum.* Dam Darmstädter Gespräch 1951 mit den wegweisenden Vorträgen von Schwarz, Schweizer, Heidegger, Ortega y Gasset, herausgegeben von U. Conrads und P. Neitzke, Braunschweig, 1951, p.64

27 as Ortega calls him in Darmstadt in order to defend him from the other `*sleeping animals* `. After the famous speech `*Bauen – Wohnen – Danken*` someone starts to criticize Heidegger, saying that the conference didn't clarify (*gelöst)* but it only corrupted and misrepresented (*zerdacht*) the essential items, through the Thought (*Denken*). In the mean time Ortega y Gasset takes the microphone saying: *`The good Lord needs Zerdenker – bad thinkers- to not make sleep the remaining animals.`* (*Der liebe Gott braucht die Zerdenker, damit die übrigen Tiere nicht schlafen.)* and the present young generation starts to laugh. This anecdote is told by both Heidegger while he commemorates the death of Ortega in 1955 (*Begegnungen mit Ortega y Gasset*, trad. in Spanish in Revista de la Asociacion International de Hispanismo, VII, N.39, May 1956) and by Ortega himself (Josè Ortegay Gasset, *Meditación de la técnica.* Alianza Editoriale, Madrid, 2002, quoted in Josè Ortegay Gasset, *Intorno al Colloquio di Darmstadt, 1951* in AA.VV. *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p.66). Marcello Barison sustains that this anecdote happens to Scharoun instead that Heidegger, underlying the deep link between the two. (Ibid. p. 124). The same interpretation has Werner Oechslin, *I Darmstädter Gespräche.* In Rassegna(1992), n.52/54, p. 78

28 *"denn Sie Sagte mir etwas von einer unausgesprochenen Einstimmigkeit zwischen Ihrem Schaffen und meinem Versuchen"* Heidegger in Scharoun-Archiv (23 Juni 1952, 13) quoted in de Bruyn G., *Fisch und*



Heidegger and Scharoun, 1959



Jose Ortega y Gasset

project for the School of Darmstadt, which shares many similarities with the Pioneer Health Centre presented in Hoddesdon, as we are going to compare.

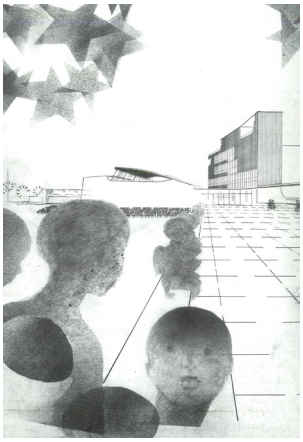
Scharoun`s school/ Peckham Building: Two Community Projects

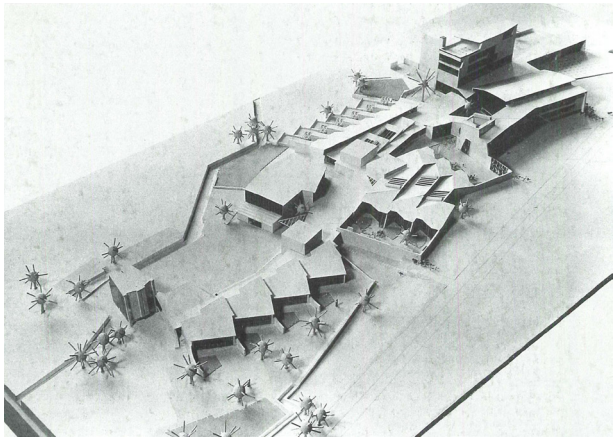
I_ Community Project: Darmstadt School

The School of Darmstadt is presented by Scharoun during the Darmstadt Congress. The school is, in the architect`s thought, a reflection of the city in an architectural microcosm; it is a social community, a new school community, divided in small `secret communities`[29]. The `core` of the whole system is a central artery, *"a path for meeting",* like a street of a town**.** It connects all classrooms with the assembly hall, the gymnasium, the staff rooms, the work rooms. It is an irregular path; it expands and contracts itself hiding the view of the following buildings and of the end of the school as well. It regulates the composition of the volume on the ground floor, guaranteeing an unexpected amazing passage through them as shown by

Frosch oder die Selbstkritik der Moderne, Basel, 2001, p. 100 and quoted in Barison M., *Eterotopie-Gropius-Heidegger-Scharoun.* in AA.VV., *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p.126-127 Indeed there is such a deep respect between them that when Scharoun becomes President of Berliner Akademie der Künste in 1955, he wants the German Philosopher as member.

29 **The youngest pupils (1-3 years old) are hosted in classes orientated towards south in order to still** feel the *"warmth of the nest"*; the second small community (4-6 years old) is in east and west orientated classes because of their necessity to have different experiences and "interests in lessons and independent activities"; the last community is constituted by children between 7 and 9 years old, hosted in North orientated classrooms, where they must to define their personality, their inwards studies even thanks to a good indirect natural light.





Scharoun , Darmstadt School, 1951

the child's face sketched by the architect himself. The importance of the street in Scharoun`s project, designed as a community place not as a mere distribution connection, anticipates many of the projects presented by some members of Team X, who rethink the street as the first level of public association (instead of the public square). In this sense the street becomes a structural level within the *"non-arbitrary groupings"* (after the private house and before the district and the city) for the Smithson's, who rediscover the urban `identity` within the traditional nineteenth-century street model, where people can identify themselves as a group. Their famous project for the competition `Berlin, Capital City`[30] (1957), is indeed an example of superimposed pedestrian areas, some 10 meters above the ground, which link a network of new building towers over the existing structure of the city. The project is presented as a universally valid scheme, applicable to *"all mechanism-served communities"*, whose basis should be *"movement patterns"*[31]. Allison and Peter Smithson`s project wins the third prize, just behind the totally different urban project proposed by Hans Scharoun himself. The German tenant

30 "*The concrete task of the competition is the reconstruction of the central part of Berlin, which has been largely destroyed in the war; the objective is to shape this central area in such a way as to form a visible expression of the German capital and modern-day metropolis."* The jury members are A.Aalto, O. Bartning, C. va Eesteren, H. Jensen, W. Hebebrand, R. Hillebrecht, J. Rossig, M. Steinbiss, H. Stephan, P. Vago, E. Wedepohl. The deadline of the competition is 1 February 1958 and 151 schemes are submitted by 149 firms. Also Le Corbusier partecipates with a a projet which is short-listed by the juryand which rfemembers his first *ville radieuse* projects for Paris. See Schäche W., *The 1957/58 Competition for Berlin, Capital City: Projects Negating the Past.* In Scheer T., Kleihues J.P., Kahlfeldt P., (ed.by) City of Architecture of the City, Berlin 1900-2000. Nicolai, Berlin, 2000, p. 251-257

31 See Smithson A. and P., *The charged Void: Urbanism.* The Monacelli Press, 2005, USA, p. 44-55

presents indeed an *"extensive landscape of green area"* with buildings of different style, function and size, floating within it.

The French firm of architects Candilis, Josic and Woods also present the street as the main structural part of their project, for instance, in Toulouse. Woods considers indeed the street in the project as a "*stem" "considered not only as a link between additive cells, but as the generator of habitat. It provides the environment in which the cells may function."*[32]: one side of the residential houses is in contact with the *stem* road while the other border is in touch with the environmental service line. This division allows, as the Japanese Kurokawa stresses, a humanization of the road which becomes "*the main shaft of the city structure."*[33]

Going back to the analysis of the Darmstadt School, the assembly hall, connected to the street, is a "mediating room", a community space open to the school children and to those coming from outside as well. On the east side there is the "cosmic room", whose dome represents heaven while the floor has concentric circles and squares in a symbolical reference to the relationship between earth and the cosmos. This `cosmic space`, as described by de Bruyn, with the `dome` and the `foundations` as extremes, symbolically represents the *"architectural incarnation of the* – Heidegger- *Quadrature Philosophy"*[34], whose symbolical architectural link is the `bridge`, connecting the earth, the sky, the divinities and the mortals.[35] The project is therefore recognized as a physical translation

32 Woods S. in Team 10, *The role of the Architect in Community Building. In* Bell G., Tyrwhitt J. (edited by), *Human Identity in the Urban Environment.* Penguin Books, Great Britain, 1972, p. 387

33 Kurokawa N., *Architecture of the Road.* In Ibid. p. 400. Kurokawa, before underlying his interest on the French firm project, he firstly exalts the Acropolis Road project (1951-1957) of Pikionis, which can be called "*an architecture for human movement"*; then he stresses the cultural importance of the street in the East. In India, for instance, the temples are not concentrated "*in a square or in a core"* but along a road. In Kyoto (Japan) the *Bojo* street system distinguishes *Ji*, a traffic artery, from *Michi,* a street. Moreover he distinguishes *Fukoro-Koji* (cul-de-sac), Machiya (old streets with stores and residential houses) and *Koji* (small passages) which penetrate through the districts or even through the houses blocks. While the main arteries, which connect different districts or towns, are the place of the power and of the ceremonies, the *Koji* are the place where the inhabitants life and the individual activities are linked together. Finally, "*Have passages like the Koji existed in the western world?"* Kurokawa, member of the Metabolism movement, polemically asks. See Ibid. p. 394-399

34 De Bruyn, *Fisch un*, cit. p.98 Even Adam Sharr finds similarities between Heidegger and Scharoun: "*Scharoun Darmstadt school, […] displays a particular Heideggerianism in its attention to atmospheres and moods, to site, and change qualities of light."* (Sharr A., *Heidegger for Architects.* New York, 2009, p. 109)

35 "*The buildings form the Quadrature […]. Taking care of the Quadrature, save the earth, accommodate the sky, waiting for the divine, leading the mortals, this fourfold caring is the simple essence of living"* - explains the German *Zerdenker* Heideger M., *Bauen – Wohnen – Danken.* Neve Darmstädter Verlaganstalt, 1952 [trad. eng. *Building, Dwelling, Thinking.* from Poetry, Language, Thought, translated by Albert Hofstadter, Harper Colophon Books, New York, 1971.]



Innes Pearse and George Scott Williamson

of a theoretical thought of Heidegger[36]: the origins of living, of dwelling, are translated into a street-core, as an archetype of the community within an architectural building[37].

II_ Community Project: Peckham Building (CIAM)

One month before that Scharoun exhibits his school community project, another interesting attempt to create a community within a single building is presented in Hoddesdon. It is the Pioneer Health Centre, in Peckham (UK), commissioned by the two English married medical doctors Innes Pearse (1889-1978) and George Scott Williamson (1884-1953). Williamson is personally invited to CIAM 8 in order to show the importance of the "heart theme" within their activities.

The architectural-scientific approach of the doctor to the Heart of the City is positively claimed by all CIAM members. For instance Giedion will report, in his *"Architecture you and Me"*, that "*no one at the eighth congress of CIAM was listened to with greater attention than Dr. G. Scott Williamson, founder of the Peckham Health Centre in London, which was indeed a "core" based on the spontaneous activities of people of all ages."*[38]

As far as the Health Centre is concerned, it is important to mention first of all the context in which it is conceived, as already described by Elizabeth Darling[39]. During

36 It is interesting to note that the Darmstadt School and "Bauen Wohnen Danken" are presented in the same days in Darmstadt. There are not direct influences between the speech and the architectural project.

37 Moreover the project is an *"expression of a universal democratic principle"*, as described by Scharoun himself, and of the *"responsibility of the individual"* as emphasized by the artery structure.

38 Giedion S., *Architecture You and Me*. Harvard University Press, 1958, Cambridge, p. 128

39 See Darling E., *Re-forming Britain, narratives of modernity before reconstruction.* Routledge ed., London-

the World Wars in Great Britain many debates started about the so called `health of the race`, especially after the loss of 700,000 productive young men during the last War. Since the beginning of the century some welfare legislation is introduced, such as the National Insurance Act (1911) and the Maternity and Child Welfare Act (1918). Nevertheless the healthy status of society still remains an important problem because of the limited number of people with access to the public health insurance. The evolution of the welfare debate also involves modern architecture; the aim is to reconstitute a healthy existence mixing a spatial, social and medical welfare project. This is possible thanks to a general optimism towards the use of modern architecture for a healthy modernization of the urban environment and of the health care.[40] Doctor Scott Williamson has experienced the cruelty of war, spending nine months as a prisoner in Germany. Back in England he becomes the Director of Pathological Studies at the Royal Free Hospital in London, having as an assistant the doctor Innes Pearse. The two start to concentrate their strengths together with a small committee of philanthropists, in order to seek and develop new techniques of care for the health of the community. Indeed, in 1926, they launch an experiment, founding a club, the Pioneer Health Centre, in Peckham, a small locality whose working-class inhabitants are introduced as part of the Centre activity. The investigation of citizens` health condition is organized in different phases, from 1926 until 1950. At the basis of the doctors` ideas, which should be reflected in the architectural design of the new centre, there is the Family, considered as "*the basic unity of the society, the lowest common denominator into which all society can be resolved as well as the natural biological unit"*[41]. Indeed the family is the working smallest unit within the health centre as far as "*the human organism is the Family-in-its-Home"*[42] which is "*the smallest living human `whole [...], the Core for human development."*[43] This principle is described by the doctor with a biological metaphor, as a sort of cell whose nucleoplasm is constituted by the "*home"* while the nucleus consists of "*powerful genes"*: the family members. Thus the individual is only part of a human organism, it is "*blossom of the fruit*" rather than the organism itself: that means a very difficult "*jump"* from the point of view of the patients who move from an old individualistic

New York

40 *The most important step towards revitalization of the masses of the people is improvement of their environment.`Richards J.M. The Idea Behind the Idea.* In Architectural review (1935),p.209

41 Richards J.M. *The Idea Behind the Idea.* In Architectural review (1935),p.209

42 Scott Williamson G., *The Individual and the Community.* In Tyrwhitt J., Sert J.L., Rogers E.N.(ed.), *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 30

43 Ibid. p.30-31

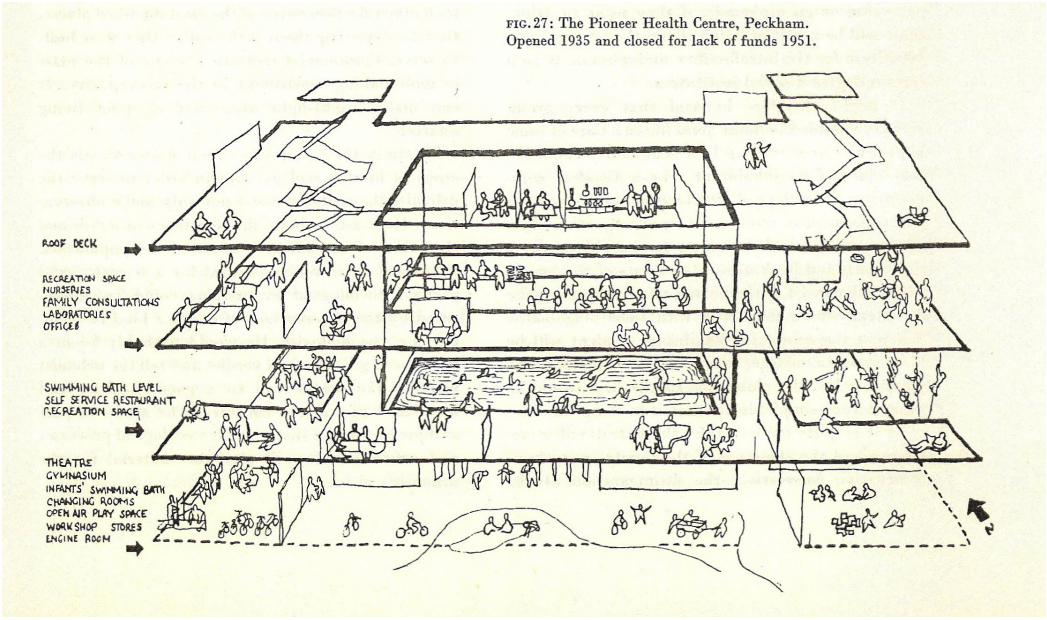
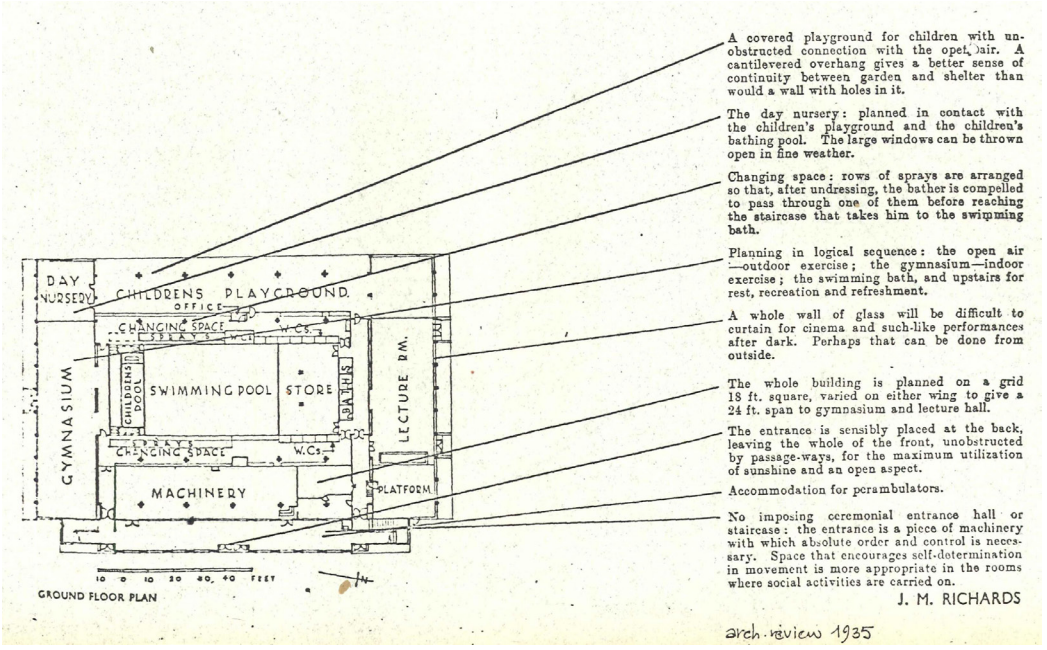


FIG. 27: The Pioneer Health Centre, Peckham.
Opened 1935 and closed for lack of funds 1951.

Scott Williamson, Health Centre of Peckham (1935-1951), sketch published in The Heart of Our City



Health Centre of Peckham (1935-1951), Ground floor plan, in Architectural Review, 1935

attitude toward a community sharing.[44] It is also a shift from the centrality of the individual toward the social collective sphere, similar to the humanism described by Sartre and mentioned before.

Moreover, Williamson`s real interest about the "*home"* is its functional "*hearth"*, or "*heart of the house."* The main characteristic is its social relationship between the private and the public sphere, as "*a lively and directive energy."*[45] The architectural design of the pioneer centre should be, in the doctors` minds, perfectly correspondent to this *family-in-its-home* ideal: it should represent the physical and environmental space for the good growth of family-communities, enclosed within an open building. The private hearth and the public heart should thus coincide in order to obtain the best medical therapeutic results, with many resonances and similarities with the discourse about the hearth as described by CIAM`s members in Hoddesdon and already mentioned in the previous chapter.

After a preliminary review of different architects` projects, the engineer Owen Williams` proposal is chosen.[46] The project exalts all the doctors` expectations; it immediately seems the right architectural answer to all proposals for a *family-in-its-home,* for a "*biological cultivation"*: The individuality is abhorred, the circulation is not channeled and there is an internal flexibility on all levels, guaranteed by a structural skeleton[47] which enables a free plan, whose internal spaces are divided by glass panels.

"*Freedom, in fact, is the salient characteristic of the plan. The building, from inside, appears to merge into the open air; it is extrovert in character."*[48] Owen Williams' project is even described by critics as a building "*without precedent"*, "*architecturally alive"*: since there are no plans for health centres before this project and there is the necessity to propose new techniques for health improvement, "*so the building is required to be of a character previously unknown".*[49] Doctor Pears defines it as *"a modern building designed as a laboratory for the study*

44 *"Each family brought its home with it into the Centre – or such parts of its home as it was prepared to exhibited to public gaze ."* Ibid. p.31 This openness is of course requested from one side as a sort of healing method and from the other in order to allow doctors to make all analyzes in the best and easy way.

45 *"a lively and directive energy" attempting to creep out and bring within its assimilative influences experience from the broader avenues of society."* Ibid.

46 Other architects include Wells Coats (member of MARS Group, organizer of the CIAM 8 where doctor Williamson is invited), H.S. Goodhart-Rendel.

47 The whole building is planned on a grid 18ft square, varied at either wing to give a 24ft span for gymnasium and theatre. Cruciform pillars carrying the concrete floor spaces, and affording conduits for power, water, etc, allow flexibility of internal planning.

48 Richards J.M., *The Idea Behind the Idea.* In Architectural review (1935),p.209

49 Annual Report of the PHC, 1936,9, SA/PHC quoted in Darling E., *Re-forming Britain, narratives of modernity before reconstruction.* Routledge ed., London-New York, 2007, p. 61

of human biology", and an "*enabling environment"*.[50] Also the health centre`s inhabitants (800-900 households are hosted!) feel the success of the experience and of the building as well: "*You use the word 'community';* - an ex-patient says *"but the Centre needs a much warmer word than that; we did feel mutually responsible for each other. The Centre became an extension or our home - not a clinic or a leisure centre, nor was it political, racial or class motivated etc, but a place where the family could expand as a whole, and all in one building*[51]"; all in a huge single social hearth which is perfectly mirrored in the architectural plan. If in Scharoun`s Darmstadt School the physical heart is the internal street which becomes the connecting *stem* (using a Woods` term) of the whole project, then in the Peckham Centre the Core is constituted by a central swimming pool, a 23x10 meters rectangle of water around which all the plan is orientated, becoming the central place of social congregation. It is a central empty space, a three floor high enclosed chamber, regulating the temperature and humidity of the building with roof and walls covered with glass. These transparent walls allow also both the vertical patients` view from upper levels towards the water and, in the same time, the flood of reflected light within the building's rooms obtaining "*an appropriate salubrious spirit".* All functions are organized around this internal water rectangle, whose perimeters are covered by glass, similarly to the external walls: both an internal and external open view is always guaranteed, towards the water surface and to the external nature respectively .[52]
Nevertheless this whole-enabling-family`s plan soon shows a limit. Doctor Pears

50 PearsI.H., Crocker L.H., *The Peckham Experiment. A study of the living structure of society.* Scottish Academic Press Ltd, 1985 and Darling E., *Re-forming Britain, narratives of modernity before reconstruction.* Routledge ed., London-New York, 2007, p. 65. Essential features and insights of the Peckham Experiment are summarised: 1. Study of health rather than disease, 2. Holistic approach: to cultivate all the factors- physical, psychological, social and spiritual - which combine holistically in health, 3. Social Club, 4. Family membership, 5. Health checks and family consultations, 6. Limited membership and easy access, 7. Non-directional help, 8. Non-competitiveness, 9. The building: freedom of movement and visibility in an open-plan structure,10. Nutrition, 11.Open discussion. See Dr Alex Scott-Samuel, *Total Participation, Total Health. Reinventing the Peckham Health Centre for the 1990s*. See http://www.thephf.org/familiesetc.html

51 from Scott Williamson G., Pearse I.H., *The passing of Peckham.*

52 As far as the other functions within the Centre are concerned, the ground floor is used for physical culture activities, hosting the gymnasium with easy access to the nursery, playground, and garden, the swimming pool (the big Core and even a small one for infants and learners), lavatories and spray-chambers; in order to give the maximum advantage of south-west sunshine and fresh air to most of these activities, the main entrance is placed at the back, leaving the front unobstructed. The first floor hosts instead the social culture activities: there is the cafeteria area, the kitchen, the lounge and the lecture room which starts from ground floor. It is important to underline the visibility of the different spaces in order to permit the social cohesion: the use of sliding internal windows and of double height spaces, allows the vertical view into the lecture hall, the lower level gymnasium and pool, and into the outside garden. The second floor is destined to private medical rooms and mental cure, isolated by doors painted red to indicate "*no thoroughfare"*. Finally the flat roof is available for any recreations or out-door exercises.

indeed notes that "*if individuals after their `cure` remain in the environment in which they have been living [...] disorders are prone to recur.*"[53] The problem finds its natural solution with the attempt to expand the pioneer health centre outside the centre itself: the town should become a civic place to reproduce the positive architectural and medical solutions which have been firstly experienced in the health centre. Thus emerges the necessity of a reforming urbanity, towards a "*new landscape of health*", as described by Elizabeth Darling who considers this proposal even as a counterforce to the dispersion of the city, "*serving as prophylactic against suburban sprawl.*"[54] In 1933, the centre committee agrees to give a part of its terrain for the building of housing with the clear aim to start a sort of transformation of the unhealthy urban life. Nevertheless, when the war breaks out the new housing centre has to close as well.

As a conclusion, Peckham`s experiment is very intriguing since it involves the transformation of the urban structure, starting from the architectural scale of a private hearth. Considering the family as the first element of aggregation instead of the individual, it testifies that the health of the community is obtainable only if the wellness of the private sphere is scaled up to the urban public realm.

Through medical and scientific studies rather than architectural ones, the two doctors conclude their experiments considering the city as a unique and most important frame and scale of reflection for the welfare of the human being. Thus from medical studies, the two doctors get similar results to those discussed by later CIAMs and Team 10[55].

Moreover the similarities with the CIAM debates and the compatibility of results have helped to open architectural practice to cooperation with different professional figures for the study of urban complexity and the transformation of the city itself. For instance Gropius, after the presentation of Scott Williamson, affirms that *"[a]rchitects should learn more from biologists, sociologists and scientists."*[56] Then Giedion states that

53 Pears I., *The Peckham Experiment.* Eugenics Review (1945), n.37, p.48-55

54 *"The resulting theory emphasized that working-class lives could only be improved by housing which was both well designed and incorporated extensive social amenities such as those which could be supplied by the Centre. It was also a firmly pro-urbanist theory, based on the premise that cities should be re-formed: a modern urban realm serving as a prophylactic against suburban sprawl. Her emphasis on re-forming both the social and physical environment thus echoed the doctors` concern to transform their members as both corporeal and social beings."* Darling E., *Re-forming Britain, narratives of modernity before reconstruction.* Routledge ed., London-New York, 2007, p. 66

55 For instance the importance of the family as stressed during the CIAM 8 and the centrality of the city as maximum scale of aggregation as in the Geddes` valley, re-drawn by Team X`s members.

56 *"Gropius: Architects should learn more from biologist, sociologists and scientists. Reason for inviting Dr.G. Scott Williamson, founder of peckham Health Centre. /Ling: Individual is the root, the Family the flower and Peckham Health Centre the fruit. /Percy Marshall: Applauded Williamson and the work of Peckham Health Centre and deplored its colsing./Hovens Greve: Peckham Health Centre had everything under the same roof. Is this essential?/Williamson: Essential that there should be a great mixture in the same place."*

since the heart is a human problem, then the *"architects and planners know that [...] they need the cooperation of sociologists, doctors, historians."*[57] This synergy between several specialists operating in both social and physical realms of the city, will become evident within the discourse about three-dimensional design, which is deeply argued within both the CIAM 8 and the urban design debate, as later discussed.

Finally we can affirm that both projects, presented in Hoddesdon and in Darmstadt, highlight the importance of the role of the public community within private architectural projects, avoiding a split between the private sphere and the public one. Thus both projects perfectly reflect Giedion`s consideration about the "Heart" as a *"place that serves as a bridge between private life and community life", [...a] place where human contacts between man and man can again be built."*[58] Lastly, both proposals are the witness of a common discourse about the human being and the community in 1951, held in both congresses of Darmstadt and Hoddesdon, as already discussed before.

The human aspect of the Core, Resume of open session, tuesday, July 10 th, p.68-69 in CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583.

57 Giedion S., *Architecture You and Me*. Harvard University Press, 1958, Cambridge, p. 128

58 Giedion S., *Architecture You and Me*. Harvard University Press, 1958, Cambridge, p. 123

03 ANATOMY OF THE HEART OF CITY

I ACTOR:

GRUEN, the Heart as Urban Design

HEART OF THE CITY AND URBAN DESIGN

The need for centralization

CIAM`s President, J.L. Sert, in his initial presentation at CIAM VIII regarding the *"Centres of Community Life"*, focuses attention on both the reconstruction of bombed city centers and the necessity to contrast the *"process of constant and unchecked decentralization and land speculation[...]"*, which are *"[…] a real menace to all our cities and to the stability of civic values"*[1]. Therefore, the heart of the city becomes principally, in Sert`s opinion, an important ethical issue of recentralization. The main aim is the rescue of the *"civic values"* inside a urban structure which, for the first time in history, is going to be profoundly deformed. This becomes evident in the '50s especially when the city arrives at its extreme limits - either of zero or infinite structure. Namely, the disappearance of city centers owing to the destruction during the War or the blurring of centers (negation of centrality) due to urban sprawl, or rather the infinite and inconstant enlargement of the city`s boundaries.

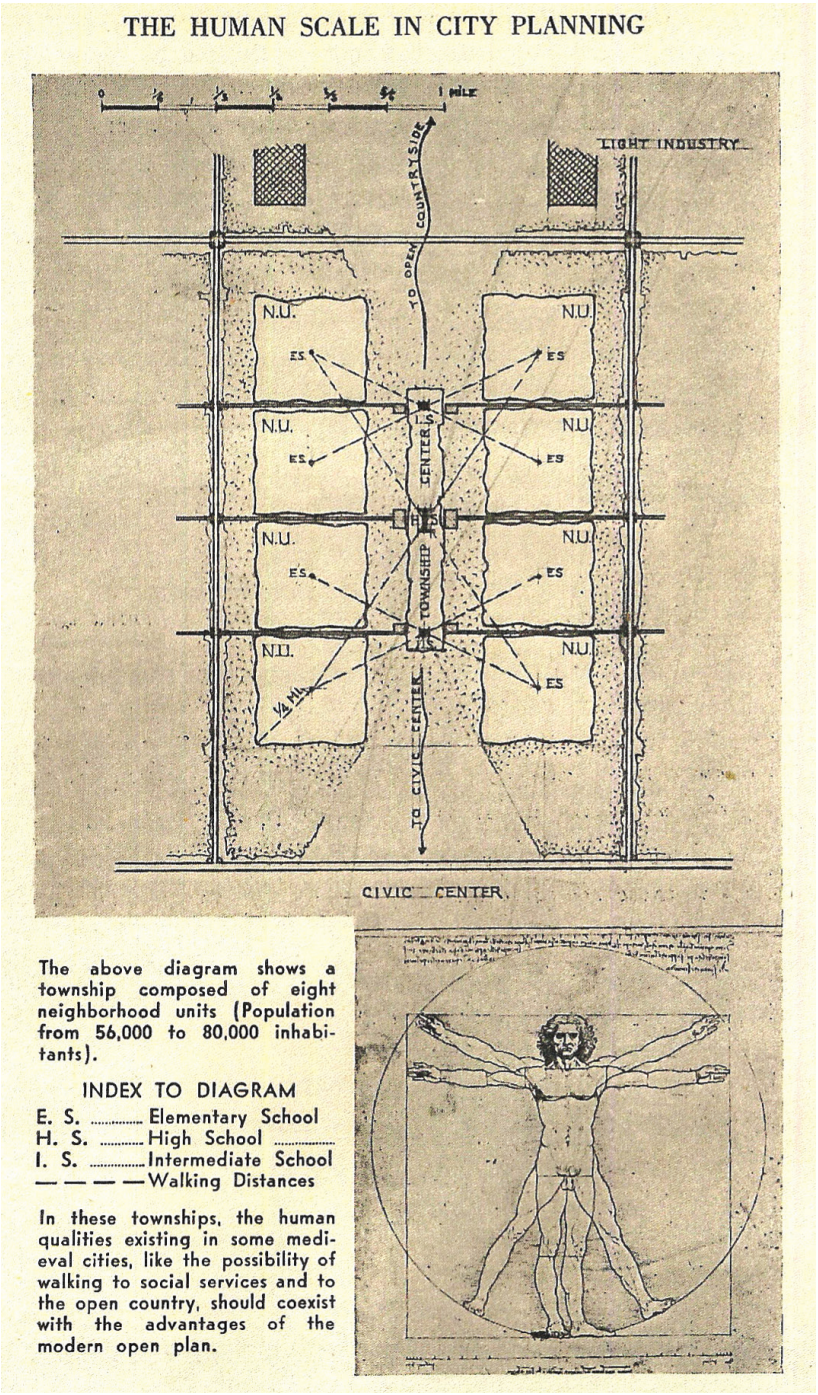
However this necessity to recentralize the city has already been stressed in previous congresses. For instance, Le Corbusier`s Ville Radieuse is an example of increasing densities within the city in the `30s, since *"extreme manifestations of vitality are to be found in places of great concentration"*[2]. The centralized metropolises in South America, where Sert himself, along with Wiener, designes urban master-plans also become key references; while both the disurbanists[3] from the Soviet Union and the Frank Lloyd Wright`s Broadacre City represent the most interesting counterforce in the `30s to this moral necessity for urban centralization. Moreover, in Ville Radieuse the metaphor of the city-as-a-body is already apparent, though it is a functional metaphor which is very far from the humanistic values described in CIAM VIII. The head is indeed the business center, the heart is merely the cultural center and the entire plan is under biological development[4]. From Sert`s point of view, there is still the idea of the heart with its organic characteristics of limitation, specific size and dimension which has to be translated into a correct, human-scale urban form.

1 Sert J.L., Centres on Community Life in Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p.4

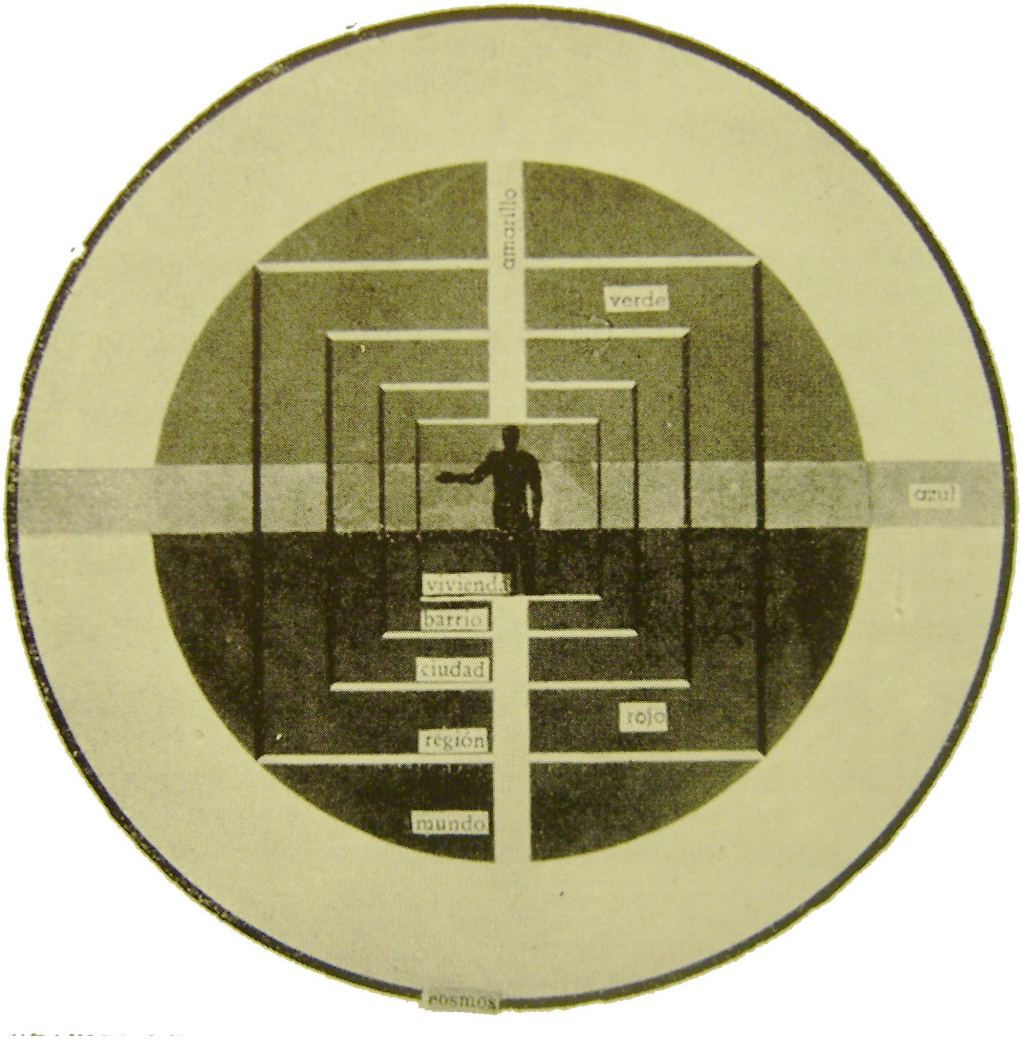
2 Le Corbusier, Response to Moscow, translated and quoted in Cohen, Le Corbusier, 139. Quoted in Mumford E., The CIAM Discourse on Urbanism, 1928-1960, The MIT Press, 2000, p. 46.

3 The biggest cities will be "swept from the face of the earth" (Sabsovich) while the existing cities are "a knot of communication, a knot of roads and rivers". (Okhitovich) Quoted in McLeod, *Urbanism and Utopia.* 217 and in Mumford E., The CIAM Discourse on Urbanism, 1928-1960, The MIT Press, 2000, p. 45

4 See Ibid. p.48-49



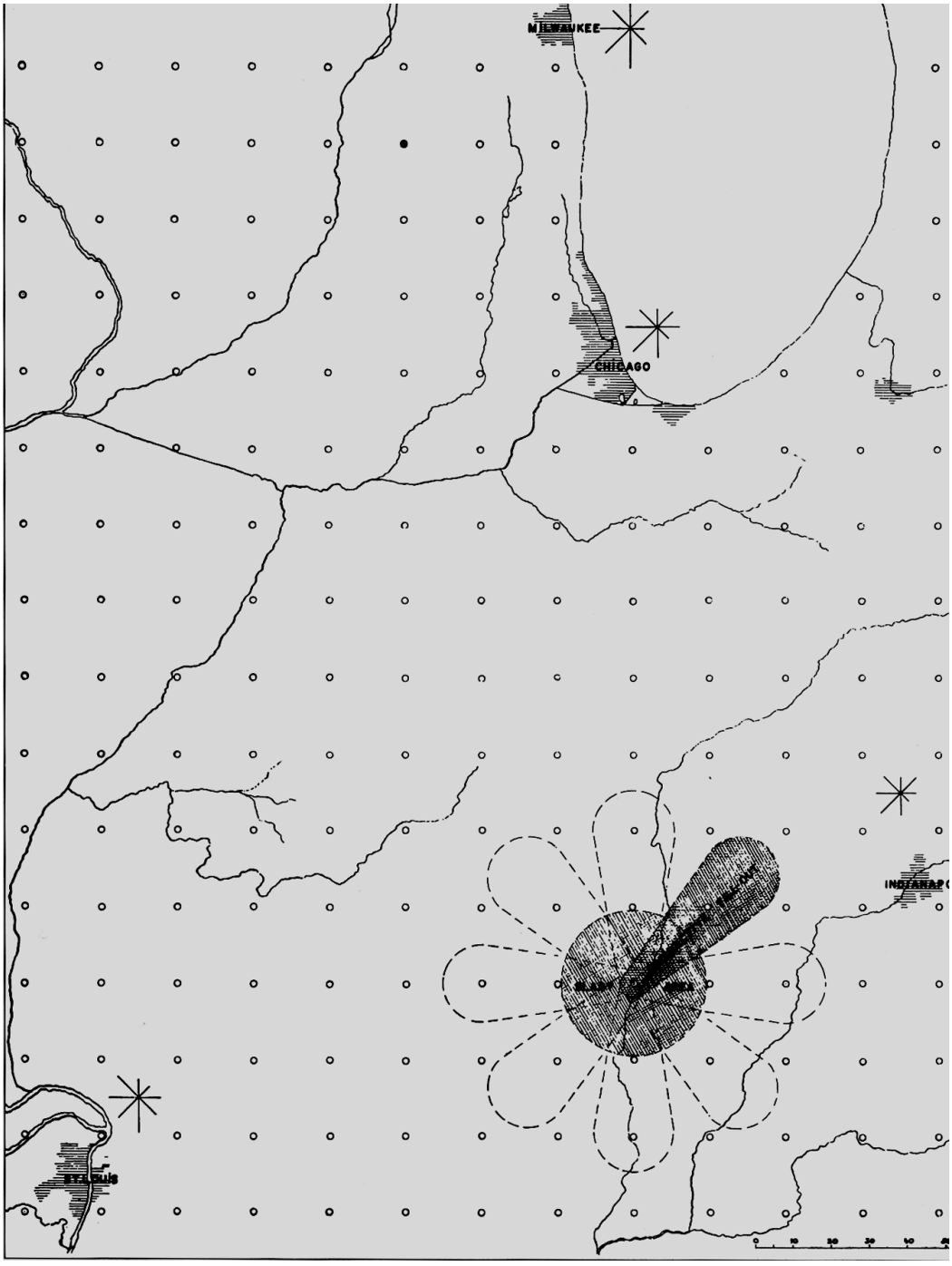
Sert J.L., “The human scale in City Planning”, 1944



P.L.. Wiener, “Diagram of the human environment” , 1953

From Sert`s point of view, there is still the idea of the heart with its organic characteristics of limitation, specific size and dimension which has to be translated into a correct, human-scale urban form. For instance, already in 1944, in his essay entitled *"The Human Scale in City Planning"*[5], he compares one of his plans to the Vitruvian Man by Leonardo da Vinci, in order to highlight the human dimension of the city itself. Similarly, in 1953 his collaborator Paul Lester Wiener publishes, in Nuestra Architectura, the *"Diagram of the Human Environment"*[6] where Man is inscribed inside a system of squares symbolizing the home, the neighbourhood, the city, the region and a final circle representing the world and the cosmos[7].
Thus, in the `40s and `50s, probably a functional interpretation of the organic metaphor still persists in both Sert`s and Wiener`s view. However, it is inserted inside an ethical and moral issue where the civic values of society become the main social interest for the two architects. The same Paul Lester Wiener, during the Congress at Hoddesdon, emphasizes the theme of the heart as an inevitable social process, where the world no longer lives in a money-based economy, after the advent of the atomic age. The new intellectual problem, he says, *"born with the coming of the atomic power, is the biological, spiritual, political problem of the power of men over men themselves."*[8] Thanks to this new atomic era, the new energy sources will satisfy the physical needs of men, freeing their own time from the hard work of feeding themselves; men will finally discover their *"better selves"*, of which the Heart is the physical expression. Thus in Wiener`s discourse the atom becomes the smallest important part of our life, rather than the cell as in the other organic interpretations. Indeed the atom is not merely the smallest part of an organic agglomeration, but it is the energy source for all humanity`s freedom. Therefore, in this case the final aim of the organic metaphor becomes the social, *"biological, spiritual, political"* health, rather than a functional interpretation of the human organ`s limited size .
It is interesting therefore to note the position, in the same period, of the TVA planner Tracy Augur who is as conscious as Wiener of the advent of the new atomic era. However, contrary to the architect, who upholds a centripetal vision of the

5 See Sert J.L., *The human scale in City Planning.* In Zucker P. (ed. by), *New Architecture and City Planning.* Philosophical Library, New York, 1944, p. 392- 412
6 The re-use of the Vitruvian Man seems in opposition to that Humanism described by Sartre, as discussed before. However it is important to stress again the civic aim which underlies the image of the central man in Sert and Wiener.
7 See Hyde T., *Planos, Planes y planificacion.* in Mumford E., Sarkis H., Josep Lluis Sert: the Architect of Urban Design, 1953-1969. Yale University Press, 2008, p. 56-57
8 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.83



Ludwig Hilberseimer, 1955

city directed towards the Heart, Augur stresses urban safety as the principal factor for urban design, proposing a dispersal vision of small efficient towns: *"Urban Centers Make Inviting Targets"*[9] he states. Similarly, during the same period, the German architect Ludwig Hilberseimer (1885-1967) proposes a project outlining a network of urban centers following the lesser involvement of the atomic mushroom-cloud, abhorring the urban centralization as well: the result is a grid of equidistant small centers covering all the territory near Chicago[10]. The same reference to atomic energy is therefore used for opposing urban proposals: from Man`s centrality to the infinite urban network.

As far as the centralization issue is concerned, the Italian philosopher Enzo Paci (1911-1976), in a later article in Casabella-Continuità (n° 202 1954), focuses his attention on the contradictions of the exaggeration of Man`s centralization[11] as discussed by some of the architects present at CIAM VIII, and also deeply criticizes Sert. Indeed, he underlines how the "Heart of the city" theme, as conceived by Sert, is influenced both by the philosopher Gianbattista Vico (1668-1744) and Max Weber (1864-1920) , who consider the founding of a city as the configuration of human space carved into the ingens sylva of savagery, with its own time of societas, *"as opposed to that of [the] farmer"*[12]. Indeed Sert uses a similar definition quoting, in his introduction discourse at CIAM 8, the philosopher Ortega y Gasset who considers the urbs *"like the comic definition of a cannon"*[13].Its exter-

9 *"[…] the same space standards that serve the civilian planner`s goal of greater livability [...]We should direct the new building into channels that will produce a dispersed pattern of small efficient cities much more attuned to the needs of modern living"* Augur T., (1948), The Dispersal of Cities as a Defense Measure, Bulletin of the Atomic Scientists, p. 131-134 quoted in ed. by Krieger A., Saunders W.S., Urban Design.University of Minnesota Press, Minneapolis, London, 2009, p. 18,19. Sert`s answer is *"You cannot disturb the historical pattern of towns."* Ibid. p. 19

10 My thanks to Cino Zucchi for the Hilbeseimer image.

We have seen the interpretations of atomic energy by Wiener and Augur-Hilberseimer and the opposite urban results. It might be interesting to see a third interpretation by the Metabolist movement (Metabolism 1960: Proposal for a New Urbanism) , where the atomic disaster has deeply influenced urban-architectural thought as well. Interest is focused on the power and the individuality of the individual, who should live in capsules or units. Avoiding the idea of a city conceived as a diseased depot, the early Metabolist movement demanded the city itself adapt, not the individual. See Wendelken C., Putting Metabolism back in Place. In AA.VV. *Anxious Modernity.* CCA Montreal, MIT press, Cambridge, London England, p. 288-289 and Metabolism 1960: Proposal for a New Urbanism which contains projects and essays by the architects Kiyonori Kikutake, Masato Ohtaka, Fumihiko Maki, Noriaki-Kisho Kurokawa and the critic Noboru Kawazoe.

11 This excess of Man`s centralization recalls also the "absurd Humanism" as described by Sartre and mentioned above. See Sartre J.P., *L` existentialisme est un humanisme.* Les Editions Nagel, 1946, Paris

12 Paci, E. (1954) *Il cuore della città*. Casabella Continuità, n.202, p. vii , quoted also from Weber M., La citta`. Bompiani, Milano, 1950, p.34

13 Josè Ortegay Gasset, *The Revolt of Masses*. W.W. Norton and Company Inc.1932, New York, p. 164-165 quoted in Sert J.L., Centres on Community Life in Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City –

nal limits separate the inner city decisively from nature, from the cosmos; the loss or deformation of this boundary would mean the nonexistence or inefficiency of the *"cannon"*, of the city itself.
This interest in a defined boundary between an internal civic space and an external *"geo-botanic cosmos"* is only partially acceptable for the Italian philosopher.
With regard to decentralization and recentralization, Paci indeed affirmes that the city should be considered instead as a point of junction between the closed and the open, *"with a centripetal diastolic movement, but, at the same time, a systolic centrifugal one"*[14].
This specific reference to the Heart, to both its diastolic and systolic movement, as first used by Paci, is very intriguing. Indeed the philosopher doesn't merely consider the heart's function as that of pumping blood[15]. The heart`s movement instead concerns the relationship, the interaction between urbia and geo-botanic cosmos, between civic-space and landscape, between culture and nature … It is a sophisticated interpretation of the organic metaphor which invests both the physical and cultural issues of the city. On the contrary the radical insistence on the human measure, on Man`s centrality, causes only the isolation of the city itself , *"even if perfect, as the stellar city of the Filarete"*[16].
The 'cannon' becomes therefore too fixed an image of the city which no longer corresponds to the social, cultural and even philosophical contemporary context. For Paci, the heart becomes the right symbol to destroy this traditional image of the city, rather than being its perfect representation as is usually considered.
Sert exports the discussion on the necessity for urban centralizations - of new *"perfect stellar cities"* as Paci would have critically called them - to the American discussion as well. A few years after the meeting at Hoddesdon, Sert employes similar words about centralization, considering the younger generations as its main urban-minded supporters: *"The younger generation in this country (perhaps resembling their grandparents rather than their parents) is less suburban minded than its elders, as it has become aware that the uncontrolled sprawl of our com-*

towards the humanisation of urban life. London 1952, p.3
14 Paci, E. (1954) Il cuore della città. Casabella Continuità, n.202, p. vii Attention is therefore focused on the relationship between the two movements, with many resonances to Bakema`s theory, which will be discussed later.
15 This interpretation is usually used in order to compare the movement of blood in the arteries with the movement of the traffic, in the streets of the city.
16 Ibid. Paci`s negative consideration about Man`s Centrality is interesting when compared with Satre's negative opinion of 'l`homme comme fin et comme valeur supérieure', quoted before about Giedion. There are indeed few connections between Paci's 'Relazionismo' and Satre's 'Existentialisme'. See, for instance, Sartre's L`existentialisme est un humanisme. 1945 and Paci's L'esistenzialismo. CEDAM, Padova, 1943

munities only aggravates their problems, and that the solution lies in the re-shaping the city as a whole. The necessary process is not one of decentralization, but one of re-centralization.[...] We must be urban minded"[17]. This is 9th April 1956 and Sert is talking at the First Urban Design Conference[18] held at Harvard University in USA, where he has been Dean since 1953. While Team 10 dissolves *"old CIAM professors"* and begin to question the concept of Core, criticizing the basis of CIAM itself, as Eric Mumford reminds us[19], overseas the continuity of CIAM's discussion is assured inside the prestigious US University. Here many of the 'old members' are involved: during the UD Conference there are even, among the participants, six members of CIAM, namely Sert, Tyrwhitt, Chermayeff, Neutra, Muschenheim, and Coats (member of the British MARS group and organizer of the CIAM VIII). These continue their research by developing many issues about the Core that has already been presented at Hoddesdon[20]. Also it is decided that the Charte de l`Habitat, formally discussed in Aix-en-Provence in 1953, needs to be analyzed in more depth and even completed at Harvard[21].Even though 1956 sanctiones the death of CIAM, all the work done until that date continues to be studied in more depth on American soil.

17 J.L.Sert, Opening remarks to the Urban Design Conference, April 9, 1956, Loeb Library, GSD Archive, Harvard, Rare NAC 46 Harv 1956.

18 Thirteen editions of the Urban Design Conference until 1970.

19 See Mumford E., The emergence of Urban Design in the Breakup of CIAM in Harvard Design Magazine (2006), The origins and evolution of "urban design", 1956-2006, p. 15 This is not totally true since, as we will see, Bakema continues to think about the heart of the city even later, for instance in 'human core of St. Louis'.

20 The Core is the main theme also during the Eighth Urban Design Conference but, as Richard Marshall affirms, "by 1964, in a reflection of much of what was happening in the United States, social, political, and economic concerns outweighed any emphasis on form or aesthetics." Marshall R., The Elusiveness of Urban Design. in ed. by Krieger A., Saunders W.S., Urban Design. University of Minnesota Press, Minneapolis, London, 2009, p. 50

21 During the Seminar "The shaping of Urban space", held by Giedion in 1960-61 at Harvard, Karl Otto Schmid presented a discussion about CIAM. At a certain point the participants agreed to complete the Charte de l'Habitat at Harvard. Sert: "The matter of a Charte de l`Habitat was started years ago. Though formally put forward at Aix-en-Provence in 1953, the subject has, I feel sure, been in minds of almost everyone present here for a long time; and many other congresses have been working on the same subject without giving it this particular title or content... There is need in the world for such a statement and CIAM has itself made no such statement since the Charte d` Athens. Are you agreed that the work of completing the chart should be done at Harvard Univeristy. (Agreed by Voting)", The Shaping of Urban Space. Seminar conducted by Professor Sigfried Giedion, Meeting II, March 8 1961, GSD Harvard University, Cambridge, Collection Loeb Design NA 2300 H261 1960/61

Moreover, E. Mumford reminds us that Isaac and Sasaki teach studios about "human habitat in the totally of environmental design environmental" in 1953. See Mumford E., Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69, Yale University Press, New Haven and London, 2009, p.114 and Mc Atee, From the Ground Up, 177-182

The necessity for three-dimensional design

Another issue that appeares during the First Urban Design Conference, and which is already present at Hoddeson, is the design of the city in three dimensions. As Sert affirmes in his introduction to the Urban Design Conference in 1956 : *"Urban Design is the part of city planning that deals with the physical from of the city. It is by nature three or four dimensional (four if we include the time factor)"*.[22]

It is immediately important to underline that the three-dimensional idea, which is present inside the Urban Design discourse in 1956 at Harvard, also incorporates another outstanding theme: the necessity for both synthesis and synergy among all professional figures working on the city. In particular, planners and architects are described as conflicting professions, even though both are directly interested in the evolution of the city structure. As Sert affirms during the conclusion of the meeting: *"There is certain misgiving among architects, as someone has said here, that city planners do not know anything about the three-dimensional world we want to help shape. And the city planners think the architects know nothing about city planning. […] It is terribly tragic that while people know how to read and write, they have no way of reading things in three dimensions and, as a result, we are talking completely different languages."*[23]

Therefore, the three-dimensional theme are not proposed by Sert just as a mere issue regarding composition, with the aim of giving complexity and interest to a particular project at any scale; on the contrary, it is considered as a common vocabulary that all urban actors should know in order to communicate and to understand an idea, a project or a plan inside the city. Moreover, this dichotomy among different professional actors seems to continue during later decades, and probably still does. For instance, in 1967, Denise Scott Brown attacks planners who did not recognize *"that architecture has its own socially-minded critics"*, whose books should be read by them as well. The social interest is common to both the professions and should be recognized by both sides. *"Such communication might spell hope for a better collaboration between planners and architects one day, and real hope for an urban architecture,"*[24] she considers.

Finally, the issue of cooperation between different urban actors is already emphasized during CIAM VIII. In particular, it is stressed that cooperation between artists is necessary rather than that between planners and architects. Indeed, in

22 J.L.Sert, Introduction to the Urban Design Conference – GSD, Harvard University, April 9, 1956.

23 J.L.Sert as Conclusion of the First Urban Design Conference, Loeb Library, GSD Archive, Harvard, Rare NAC 46 Harv 1956.

24 Scott Brown D., Team 10, Perspecta 10, and the present state of architectural theory. In the Journal of the American Institute of Planners. January 1967, p.49

the final *"Short Outline of the Core"*, the Heart is even called *"a centre of the Arts"* where there should *"most effectively accomplished […] the synthesis of the plastic arts": "architects, painters, and sculptors working in co-operation in the true communion of a single team."*[25] From painters to architects and from architects to planners, in Hoddesdon in 1951 as at Harvard in 1956, the cooperation between professional figures operating in the city is proposed as a main necessity for a correct three-dimensional humanized city.

As far as three-dimensional design is specifically concerned, many architects have already highlighted the importance of this aspect within architectural and urban design, even before the '50s. For example, already in the '30s, Adolf Loos (1870-1933) writes in a footnote about the importance of design inside free space, as shown in his Raumplan: *"[...] Before Kant, humanity couldn't think inside the space yet and the architects were forced to design the bathroom as high as the lounge. [...]"*[26] This comparison of Loos between the philosophy of Immanuel Kant (1724-1804) and the architect`s capacity to design a bathroom is very intriguing, and ironical too.

Without trying to solve a possible equation between the *"Critique of Pure Reason"* and bathroom design, it is again important to stress the theoretical relevance within design practice: similarly to all CIAM discourses, Loos refers to the abstract theory in order to sustain the design process - in this case the three-dimensional design - as a wooden centering would work with its arch of stones[27]. Finally, architectural design is described by Loos as a board game played in multi-dimensional space: *"as one day Man will be able to play chess on a cube, so also the other architects will solve the problem of the floor plan inside the space."*[28]

In the same period CIAM's members have already considered three-dimensional design in the Charte d'Athènes (1933, published in 1942) : *"L'urbanisme est une science à trois dimensions et non pas à deux dimensions."*[29] Within this three-

25 Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life*. London 1952, p. 168

26 From an Italian translation of Loos A. *Nonostante Tutto. in Parole nel Vuoto.* Gli Adelfi, 2003, Milano, p.370 original title Trotzdem. Brenner-Verlag, Innsbruck, 1931

27 See Marti Aris C., *La centina e l`Arco. Teoria, Pensiero, Progetto in Architettura.* Marinotti, 2007
The theory is a tool for the design process and not only an abstract discourse. This is also the main aim of this Phd research. Vice versa, it is important that the design process is conceived as a production of knowledge as well. See Viganò P., Territorio dell'urbanistica. Il progetto come produttore di conoscenza. ed. Officina, 2010

28 From an Italian translation of Loos A. Nonostante Tutto. in Parole nel Vuoto. Gli Adelfi, 2003, Milano, p.370 original title Trotzdem. Brenner-Verlag, Innsbruck, 1931
This playing role will be analyzed in more depth later when discussing Bakema and the homo ludens of Huizinga.

29 *"C'est en faisant intervenir l'élément de hauteur que solution sera donnée aux circulations modernes*

dimensional science, just considering the height in the plan, the complex modern circulation will be expressed and solved. The latter allows the correct exploitation of the space, arranging leisure activities inside the new free areas created. The right urban three-dimensional design is therefore a socially necessary tool in order to guarantee free-time activity to society as whole. It is a key tool, with outstanding social relevance, which allows the arrangement of one of the four functions which constitutes the idea of the Functional City in the '30s. But at the same time three-dimensional design abhors any functional neat planar divisions since all flows and functions are distributed within the free space. This will be particularly clear when we discuss Victor Gruen's projects in the next chapters.

At this point it is important to stress again that three-dimensional design`s insistence in Urban Design and the Heart of the City Idea, allows us to confute any criticism which merely considers the Heart as a fifth element in addition to the previous ones (dwelling, work, recreation and transport)[30].

Moreover, it also allows us to consider more complex scale level diagrams of the Heart of the City. Indeed in the published papers of the CIAM VIII, Jacqueline Tyrwhwitt describes five different scale levels of the Heart, which refers only to horizontal dimensional quantities[31]. It might be schematized as concentric circles representing the different dimensions of urban levels, from the housing group to the metropolis. However, the three-dimensional complexity is not mentioned in this scheme.

Only by considering both a horizontal quantitative dimensional scheme (on the right) and a vertical qualitative three-dimensional scheme (on the left), may the Heart of the City be depicted expressively.[32]

The complex role and the importance of three-dimensional space in contemporary architecture is then subjected to in-depth analysis, almost forty years after the Charte d'Athènes, by one of the main exponents of CIAM. In fact, Siegfried

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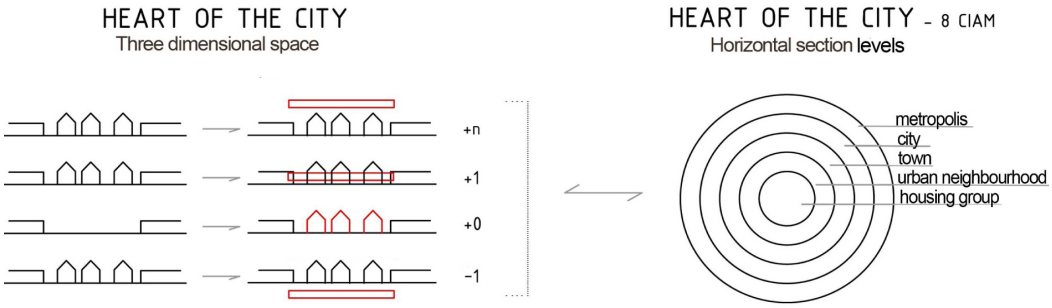
ainsi qu'aux loisirs, par l'exploitation des espaces libres ainsi créés." Le Corbusier, La charte d'Athènes - 1933-1942 - Editions Seuil Paris 1971. At CIAM VIII the importance of three dimensions is still considered: "Three dimensional space at all scale levels is the base of the architectural disciplines."

Commission 3, Architectural Education (Gropius, Rogers, Van Eesteren, Giedion, Chermeyeff, Tyrwitt), CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583,p. 110

30 As, for example, it is presented by the MARS Group in the invitation text of CIAM VIII, discussed above.

31 Tyrwhitt J., Cores within the Urban Constellation. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life. London 1952, p. 104

32Tyrwhitt then subdivides the projects also according to a "few general forms", as already described before: enclosed formal, enclosed informal, open informal, open formal. However it is again an horizontal schematization which doesn`t properly consider the three-dimensional complexity of the projects. See ibid. p. 106. As we shall see later, Gruen will refer to the music score in order to draw a three-dimensional scheme where the functions are linked to the vertical and horizontal design.



Scheme of comparison between vertical and horizontal conception of the Heart of the City (l.z.m.)

Giedion writes an entire book on this subject. In *"Architecture and the Phenomena of Transition, the three space conceptions in Architecture."*[33], published posthumously in 1971, Giedion presents three different conceptions of space, relating them to three different and significant stages of Western architecture. The First space concerns architecture as space-radiating volumes. The first stages of this conception are the first high civilizations in Mesopotamia and Egypt, while the final stage is Greek architecture, embodying the new European democracy with its emphasis upon the individual. The Second space conception is formulated in Roman architecture, based on the evolution of interior space thanks to the use of new construction techniques: the Roman wall, the Roman arch and the Roman vault. We can also find it in the Middle Ages, the Renaissance and the Baroque. The Third Space conception *"has only just begun. Where it will lead no one can tell."* Giedion states. *"[...] its preliminary stage was occupied with reuniting thinking and feeling, which had been reft asunder in the nineteenth century. The next stage was to bring about a necessary distinction between the collective and private spheres within human society, with an acute awareness of the changes occurring in contemporary life."*[34]

33 Giedion S., *Architecture and the Phenomena of Transition, the three space conceptions in Architecture.* Harvard University press, Cambridge, Massachusetts, 1971. In the acknowledgements Giedion thanks Jaqueline Tyrwhitt and Christian Casparis for their translations.
The reasons of transition to the new space conception are to be found first on the progress of the technological development, first interpreted by engineers, not by architects, with the development of anonymous iron construction in the nineteenth century, interpreted by artists such as G.Seurat and R. Delaunay who painted the first structures, including the Eiffel Tower. In the twentieth century are in fact the artists who first introduce the new conception basing it on the plane surface, analyzed and interpreted firstly by Cubists and then by Mondrian and Theo van Doesburg in Holland, by Le Corbusier and Ozenfant in France and by Malevich and Lissitsky in Russia.
34 Ibid., Preface

We have already discussed the importance of the distinction between the *"private hearth"* and the *"public heart"* and the barrier posed by Chermayeff and Alexander between the private and public sphere in their Community and Privacy scheme of 1962. This distinction is stressed by Giedion even at the basis of the third space conception which *"has only just begun"*, as he affirms at the end of the '60s.

However, fifty years later the contemporary crisis of private and public space might make us question the end of this phase as well[35]. Moreover recently, in 1996, Edward Soja has re-used the term *"third space"*, based on Lefebvre`s theory of *"thirding-as-Othering"*[36]. In particular Soja re-considers the fundamental necessity, stressed by the French philosopher, to always consider an alternative, an-Other alternative between two terms, avoiding any *"binary logic in thinking about space and their complexity of the modern world"*[37]. However, it is neither a combination nor an *"inbetween"*[38] of the first terms, since it can produce more *"othernesses, to a continuing expansion of spatial knowledge"*[39]. Based on Lefebvre`s distinction between perceived space of Spatial Practice, conceived space as Representations of Space and Lived Spaces as Representational Space, Soja`s Thirdspace is a flexible term which is coherent with the complexity and uncertainty of the contemporary human condition which is related to its physical, mental as well as social spatiality. In a certain sense it is a concept with many resonances with Urban Design too[40], since it promotes a new way of thinking which is not isolated within a precise field of knowledge: if the professional figures working on the city are sepa-

35 On the one hand, the intrusion of the public space inside the private realm with TV and the internet; on the other, the privatization and control of the public space. Might we then consider cyber space as a contemporary fourth space conception?

36 *"After all, since two terms are not sufficient, it becomes necessary to introduce a third term … The third term is the other, with all that this term implies (alterity, the relation between the present/absent other. Alteration-alienation. […] Reflexive thought and hence philosophy has for a long time accentuated dyads. Those of the dry and the humid, the large and the small, the finite and the infinite, as in Greek antiquity. Then those that constituted the Western philosophical paradigm: subject-object, continuity-discontinuity, open-closed, etc. Finally, in the modern era there are the binary oppositions between signifier and signified, knowledge and non-knowledge, center and periphery.... [But] is there ever a relation only between two terms...? One always has Three. There is always the Other."* Lefebvre H., La Presence et l`absence. 1980, p. 225,143; quoted in Soja, Edward W. Thirdspace. Malden (Mass.), Blackwell, 1996. Print. p. 53

37 Soja, Edward W. Thirdspace. Malden (Mass.): Blackwell, 1996. Print. p. 57

38 The inbetween will be discussed in depth in the Chapter on Bakema. The thirdspace goes beyond this concept. However, it is interesting for its resonances with both Urban Design and Bakema`s discourse. See also Ibid. p. 60

39 Ibid. p. 61

40 There are also many resonances with the Idea of the heart conceived by Bakema at the end of the 1950's as the overlapping between the social structure and physical structure of the City. See later III Actor`s chapter on the St. Louis project

rately concerned with the Firstspace (the Perceived Space) which is related to the materiality of the spatial forms or with the Secondspace (the Conceived Space) which deals with the cognitive and mental forms of human spatiality, then the Thirdspace (similar to Lived Space) concept fuses and transcends both "real" and "imagined" spatial forms in a new synergy for a new perspective on space, and thus on the city as well. Then, since it involves all forms of "real-and-imagined" places, the Thirdspace is an Idea where *"everything comes together"*[41], similarly to "The Aleph" by Borges (1899-1986), *"where all places are": "what eternity is to time, the Aleph is to space."*[42] - as the Argentinean writer affirms.

Thus Soja`s meaning of "thirdspace" is quite different from Giedion's. While the former is concerned with a theoretical concept of space based on the philosophical assertions of Lefebvre[43], the second is focused on the space of Art and Architecture based on their historical evolution. The former is a theoretical concept which is based on contemporary conditions but with no apparent historical boundaries; it is considered as a new way of thinking in opposition to the dualism which has almost totally characterized the discourse on space until the 1960's. The latter is instead a result of an historical evolution of space in Architecture and it is destined to mutate into other forms of space in the future. Finally, if Soja`s study is focused on *"the rebalanced trialectices of spatiality-historicality-sociality"*[44], then the social aspect does not seem so central in Giedion's Three Space conceptions.

In any case, both interpretations consider the fusion of the two previous conditions and the co-existence of several characteristics which are melted together. Indeed, while Soja describes the union of a first phase, *"the perceived space"* and of a second phase, *"the conceived space"*[45], Giedion affirms that the new space conception is a *"fusion of the first two which interrelated the space-emanating*

41 In the Thirdspace *"everything comes together […] subjectivity and objectivity, the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, the repetitive and the differential, structure and agency, mind and body, consciousness and the unconscious, the disciplined and the transdisciplinary, everyday life and unending history."* Soja, Edward W. Thirdspace. Malden (Mass.): Blackwell, 1996. Print. p. 57

42 Borges J.L., *The Aleph and Other Stories: 1933-1969.* New York, Bantam Books, p. 189

43 In particular Lefebvre H., La production de l'espace. Ed. Anthropos, 1974

44 *"I define Thirdspace as an-Other way of understanding and acting to change the spatiality of human life, a distinct mode of critical spatial awareness that is appropriate to the new scope and significance being brought about in the rebalanced trialectices of spatiality-historicality-sociality."* Soja, Edward W. Thirdspace. Malden (Mass.): Blackwell, 1996. Print. p. 57 Soja never refers to Giedion in his book.

45 These three phases are referred to in Lefebvre`s triad: spatial practice, representations of space, representational space. See Lefebvre H., *La production de l'espace.* Ed. Anthropos, 1974

powers of volumes and the sculptural form of interior and exterior space."[46] Moreover, both their interpretations consider the necessity for a new perspective regarding the conception of space, which emerges specifically in the last century and which has to revolutionize both ways of thinking and acting on space, and on urban space in particular.

For Giedion this revolution is expressed for the first time in 1919 by the sculptor Alexander Archipenko who translates the synergy between the interior and exterior space in his artwork *"Seated Figure"*. It represents a seated person whose body is moulded in a continuous *"fluctuation of volume and void, interior and exterior"*[47], convex and concave. This continual interpenetration of space is then translated in Architecture as well.

The first architectural project of third space conception presented by Giedion is the Saint Dié Civic Center, designed by Le Corbusier in 1945 and presented at CIAM VIII. In the plan the new civic centre is referred to as both the "heart of the city" and "its heart and brain"; a tower, dedicated to municipal offices, police station and business, rises above a square along a central axis, which connects the Meurthe river and the old cathedral. On the same square, there is a horizontal slab containing shops and cafés, a community centre and the famous museum with its spiralling design of unlimited growth. As Giedion states, Le Corbusier achieves a freedom of sculptural interrelations between the buildings as occurs in Piazza Duomo in Pisa, which is also entirely organized for the pedestrian. *"Each building is so placed that it radiates its own space, while simultaneously it is subordinated to the unity of the whole center."*[48] For Giedion, this sculptural interrelation presented in Saint Dié is similar to the art work of Alberto Giacometti, Project pour une place (1930-31): free objects are disposed around a free-standing vertical form while a base unifies the entire composition of group forms, similarly to Le Corbusier's proposal[49].

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46 Giedion, S., Architecture and the Phenomena of Transition, the three space conceptions in Architecture. Harvard University press, Cambridge, Massachusetts, 1971, back cover

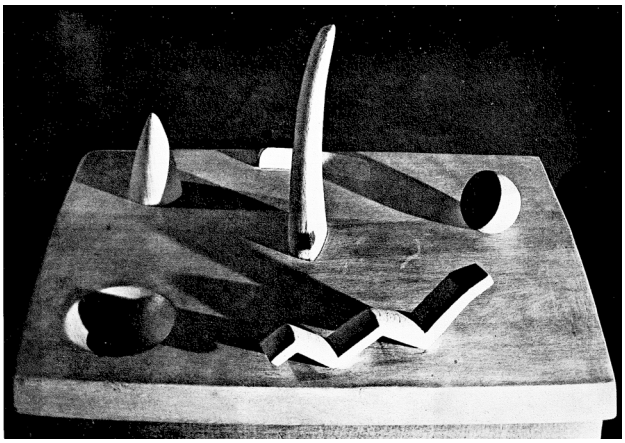
47 *"The sculptor Alexander Archipenko was perhaps the first to develop certain methods that were shortly afterward incorporated into architecture. In hi early bronze figures, 1909-1916, he realized and expressed the dynamic interplay of negative and positive volumes and showed a structural method of accomplishing the dematerialization of solid volumes. In Archipenko`s "Seated Figures", 1916, we can follow the contours of the back without interruption, but the front of the figure is partly solid and partly hollowed out. This fluctuation of volume and void, interior and exterior, was followed up in architecture, where interior and exterior space continually interpenetrated one another, establishing new interrelationships. In an enclosed architectural space one is still made aware of the exterior."* Ibid. p. 268

48 Ibid., p. 270

49 Giedion also mentions two references to this notion of group form: "Group Design in Greek Architecture" (1949) by American archeologist, Robert Scranton; "Investigations in Collective Form" (1964) by Japanese



Archipenko A., Seated Figure (1919)



Giacometti, Project pour une place, 1930-31

Less enthusiasm for the Saint Dié project is shown by Colin Rowe and Fred Koetter who criticize the plan in their book *"Collage City"*[50], a few years after Giedion's book. The Saint Dié plan is compared this time with the ground plan of another Italian city, Parma, underlining the contrast between the prevalence of the "object" in the French master-plan and the richness of "space" in the Italian texture: as a result the traditional city, with *"its solid and continuous matrix or texture giving energy to its reciprocal condition, the specific space"*[51], is lost together with its sociological values and identity. Even though both authors compare the Saint Dié plan with a 'traditional' Italian city, the conclusions should be considered therefore as opposite[52]. Indeed if Saint Dié is conceived by Giedion as a brand new urban model of 'sculptural interrelations' which positively recalls Piazza Duomo in Pisa, on the contrary Rowe and Koetter use it as the modern symbol of the loss of the capacity to design high quality public space, which *"has shrunk to an apologetic ghost"* [53].

This contradiction is the result of the rise of interest in the context and history since the '50s, as the key reference for contemporary urban design, which will be dealt with more

architect, Fumihiko Maki

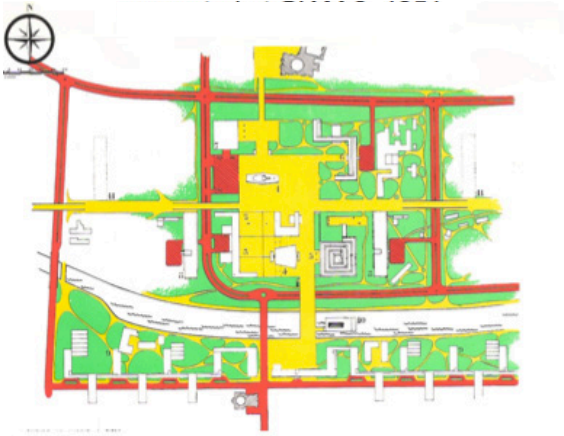
50 Rowe C., Koetter F., Collage City. The MIT Press, Cambridge, Massachusetts and London, England, 1983. As we read in the Acknowledgements the text was completed in December 1973

51 Ibid. p. 65

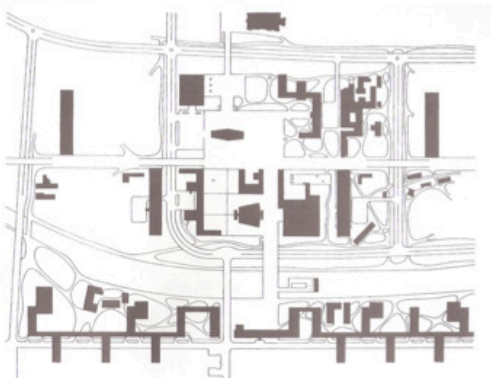
52 We should then ask ourselves what 'traditional' really means. The opposite conclusions referring to both Italian cities allow us to understand that the "traditional city" (as considered by Koetter and Rowe, ibid. p.62) has to be considered with more complexity than it has been done in Collage City.

53 Ibid. p. 65

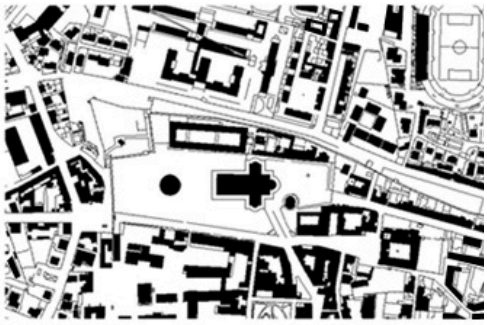
Le Corbusier, St. Die' (1945)
presented at CIAM8



Le Corbusier, St. Die' (1945)



Pisa



Parma



St. Die' and Pisa_ Giedion, Third Space Conception, 1971
St. Die' vs Parma_Rowe, Koetter, Collage City, 1973 (Itext)

in depth later when we talk about the issue of the Italian piazza`s discussed at CIAM VIII. Finally, Saint Dié is a very important project also for Sert who, during the First Urban Design Conference, describes it as *"the first physical expression of the emerging idea of the core."*[54] As Mardges Bacon affirms, the French plan clearly influences Sert`s projects such as Motor City or Chimbote which are also discussed in Hoddesdon. This latter project is a new small industrial seaport city in Peru, composed of ten neighbourhoods, four of which are grouped around the Core. The residences are designed as one and two-story houses, stressing the theme of the patio as the key aspect throughout the entire urban structure. Indeed the patio becomes the same key aspect for the construction of both public and private realms as we see in Sert's article *"Can patios make cities?"*, appeared on Architectural Forum in 1953.

Finally, the Core of Chimbote is proposed as *"an attempt to provide a modern extension of an old tradition"*, as Sert explaines, with a small stream passing through it and with branches in all directions, *"following the Arab tradition and that of the Incas."*[55]

If Chimbote is directly linked to the Saint Dié project, then both of them seem to refer to a certain tradition of urban structure. In particular, Sert`s Latin America master plans appear to be intriguing synergies between contextualized urban local presences and modern space composition[56]. Again we have evidence of the interest in 'tradition' in the modern projects shown at Hoddeson in 1951.

As far as the three- dimensional issue is then considered, Bacon notices this aspect in both master-plans – Saint Dié and the Latin American projects - with their capacity to synthesize the arts, in particular as metaphors of the theatre[57]. However, Le Corbusier refers to the core as *"a meeting place of arts",* the stage of a popular theatre in a similar way as a piazzetta in Venice where The Merchant of Venice could be enacted. *"Le Corbusier's intuition reintegrates the functional requirement of the aesthetic creation in the human community"*[58] as Paci already states in 1954. On the contrary, Sert`s theatre is more socially involved; it is a true *"centre of community*

54 Urban Design Conference, Harvard University, April 9-10 1956 in Progressive Architecture 37 (August 1956), p.100-101; see also Bacon, M. *Josep Lluis Sert's evolving concept of the urban core.* in Mumford E., *Sarkis H., Josep Lluis Sert: the Architect of Urban Design, 1953-1969.* Yale University Press, 2008, p. 94

55 Wiener and Sert, Chimbote. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 130

56 The Cidade dos Motores, later discussed, is another outstanding example.

57 See Bacon, M. *Josep Lluis Sert's evolving concept of the urban core.* in Mumford E., Sarkis H., Josep Lluis Sert: the Architect of Urban Design, 1953-1969. Yale University Press, 2008, p. 105

58 Paci,E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

life"[59] which recalls Mumford`s *"associative life"*[60] and where the three-dimensional aspect is aimed at re-conquering the civic values of a traditionalist image of the organic city. It is *"a platform for drama, rather than a formal stage set."*[61], as Bacon states. The three-dimensional aspect in Sert's work is therefore conditioned by interest in social values, local identities and modern 'space conceptions'. Thus, even though the 'cannon' metaphor results as an overly traditional image of the city, Sert`s projects are deeply influenced by many contemporary outstanding themes, which emerge over the following decades and influence the design of the city as well.

The necessity for the pedestrian's realm

Recently the historian Eric Mumford has detected a theoretical fil rouge which links CIAM VIII to the Urban Design Conferences at Harvard. Mumford even explicitly defines CIAM's *"Heart of the City"* as the precursor of Urban Design[62]. In particular, the importance of the right of the pedestrian, *"la royauté du piéton"* as it is called by Le Corbusier, is an outstanding characteristic of the Core claimed during CIAM VIII as well as at Harvard[63]. In the final *"Summary of needs at The Core"* in the book published on CIAM VIII, we find points 3 and 4:

"3 – That the Core should be a place secure from traffic – where the pedestrian can move about freely.

4 – That cars should arrive and park on the periphery of the Core, but not Cross it."[64]

The physical expression of the heart idea has to be considered as the most explicit expression of the public realm and of its human values. Hannah Arendt later calls it the *"proper place for human excellence"*[65]. Therefore the relevance given

59 *"Core as a meeting place of arts"* and *"Centres of Community life"* are the titles of the works respectively by Le Corbusier and Sert in ed. by Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life. London 1952

60 Mumford L., Culture of Cities, p. 482 quoted in Bacon, M. Josep Lluis Sert's evolving concept of the urban core. in Mumford E., Sarkis H., *Josep Lluis Sert: the Architect of Urban Design, 1953-1969*. Yale University Press, 2008, p.105

61 Bacon, M. Josep Lluis Sert's evolving concept of the urban core, p.92; in Mumford E., Sarkis H., *Josep Lluis Sert: the Architect of Urban Design, 1953-1969*. Yale University Press, 2008, p. 105

62 *"Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52*" in Mumford E., Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69, University Press, New Haven and London, 2009, p.80

63 Mumford affirms that the attention to pedestrian streets is new in CIAM in 1951. But already in 1947 Le Corbusier published Propos d`urbanisme, where after-war Paris was evoked without car traffic. Ibid. 87-88

64 Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life. London 1952, p. 164

65 Arendt H., *The Human Condition.* University of Chicago Press, Chicago, Second edition 1998, p. 49

by CIAM members to the pedestrian is almost obvious when contrasted with that growing mechanization which contracts the new humanistic view of the world.
Giedion, who a few years before writes *"Mechanization takes command"*, traces the roots of the sacrosanct right of *"la royauté du piéton"* in the past[66]. But this right has become oppressed by the spread of private cars which, in few years, radically transformed the structure of the city itself.
This dependence of the city on the car is very evident especially in the US. Victoria de Grazia reminds us that at the end of the '30s, while in France and England 1/20 of the population has a car (in Germany 1/40, in Italy 1/100), in the US the proportion is 1/4.
This is the result of the radical revolution of the Ford standardization which is part of that *"American consumerism empire"* which peacefully invades the whole world from the beginning of the last century[67].
Some of the master-plans presented during CIAM VIII are therefore deeply and radically influenced by this key issue of the separation of pedestrians from cars.
For instance, Le Corbusier presents the new government centre of Chandigarh, construction of which begins the same year in 1951. The urban structure of the new capital of the Punjab is designed by applying the Le Corbusier's so-called "seven roads-V7" classification system. Each of these roads has a proper function: V1 is for express highways, V2 for monumental avenues, V3 for fast traffic roads without pedestrian accessibility, V4 for shopping streets, V5 for distributor streets from shopping areas to neighbourhoods, V6 for service streets to houses and finally V7 is only for footpaths and green ways[68].
Even though the issue of pedestrian rights seems to have been rationally solved, the entire road system becomes a radical functional compromise solution. Indeed the pedestrian road is no longer *"the main shaft of the city structure"*[69], as Kurokawa calls it, since the pedestrian and green ways traverse the whole city without properly structuring the city itself. Moreover, Chandigarh`s system seems unable to physically mirror the complexity of the society which lives inside it. *"At a very crude level*

66 Giedion S., *"Historical Background to the Core"* In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life. London 1952, p. 130

67 Victoria de Grazia affirmed that Henry Ford should be considered as one of the founders of United Europe, since he had been the first to consider the whole of Europe as a single unique selling area. See De Grazia V., Irresistible Empire. America`s Advance through Twentieth-Century Europe. Harvard University Press, 2005

68 In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 153

69 Kurokawa N., Architecture of the Road. In In Bell G., Tyrwhitt J. (edited by), *Human Identity in the Urban Environment.* Penguin Books, Great Britain, 1972, p. 400. See the role of the road in the previous examples: Scharoun's Darmstadt School or in the later "stem" road system by Woods

of thought this is obviously a good idea", Christopher Alexander affirms when discussing the separation of pedestrians from moving vehicles as proposed by Le Corbusier and later by Luis Kahn. *"But it is not always a good idea."* What is missing in general is the overlapping of functions, necessities and desires which characterizes society, which is not an abstract functionalist structure. For instance, as Alexander underlines, we can use *"the urban taxi only because pedestrians and vehicles are not strictly separated.[...] Thank God for taxis."*[70] Alexander`s consideration is only one of the criticisms against the V7 system. The extreme consequences of this *"not always a good idea"* will later be re-argued when we discuss the Montreal case study: we will see how in the `60s Le Corbusier's split of flows will even turn into three-dimensional social segregation.

Finally, the Bogota master plan, also presented in Hoddeson and prepared by the French architect with Sert and Wiener as consultants, follows the "V7" system, as Eric Mumford describes it[71]. However, as in all his South America projects, Sert's interest is focused on the integration of the local urban presences, in *"a modern extension of an old tradition"*. The functional division of streets therefore finds a more sophisticated vernacular relationship with the pre-existing context and with the history of the place as well.

For example, in Chimbote the stream recalls the Inca tradition; in Motor City Sert maintains the local "praça" and "corso"; finally in Bogotá[72] the old Plaza Bolivar becomes a porticoed promenade for pedestrians, recalling the old Latin-American tradition. The importance of the historic urban environment is a key theme shared by the Italian group as well, especially by Ernesto Nathan Rogers.

In particular the CIAM Summer schools in Venice in the '50s , discussed later, are characterized by the same interest and issue of both the relationship with tradition and pedestrian prevalence, as in Sert's projects.

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70 *"Imagine yourself coming out of a Fifth Avenue store; you have been shopping all the afternoon; your arms are full of parcels; you need a drink; your wife is limping. Thank God for taxis."* Ibid. Alexander C., A city is not a tree. in ed. By Bell G., Tyrwhitt J., *Human Identity in the Urban Environment.* Penguin Books, 1972, p.416

71 Mumford affirms that Le Corbusier, Sert and Wiener sketched the Bogotá pilot plan, with the director of the Bogotá planning office, just after CIAM VII in Le Corbusier`s holiday cabanon. See Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* Yale University Press, New Heaven and London, 2009, p.89-91

72 While Sert was working on the Bogotá master-plan, he considers The Heart of the City theme is important to discuss during CIAM VIII. In this master-plan the rights of the pedestrian and the historical importance of the place become the main aspects which would later be part of the discussion in Hoddesdon. Letter, Sert to Giedion, December 21, 1949 (CIAM 42 – SG – 34 – 52) See Ibid. p. 95

Students` projects

The pedestrian issue, as considered during CIAM VIII, is well recognized at the end of the '50s by the participants of the Urban Design Conference. It is so relevant that It even becomes an academic project theme to give to students.

Since the new debate about Urban Design is placed in a important university institution, unlike the previous CIAM, it is interesting to see the influence of the Urban Design discourse on the students' projects.

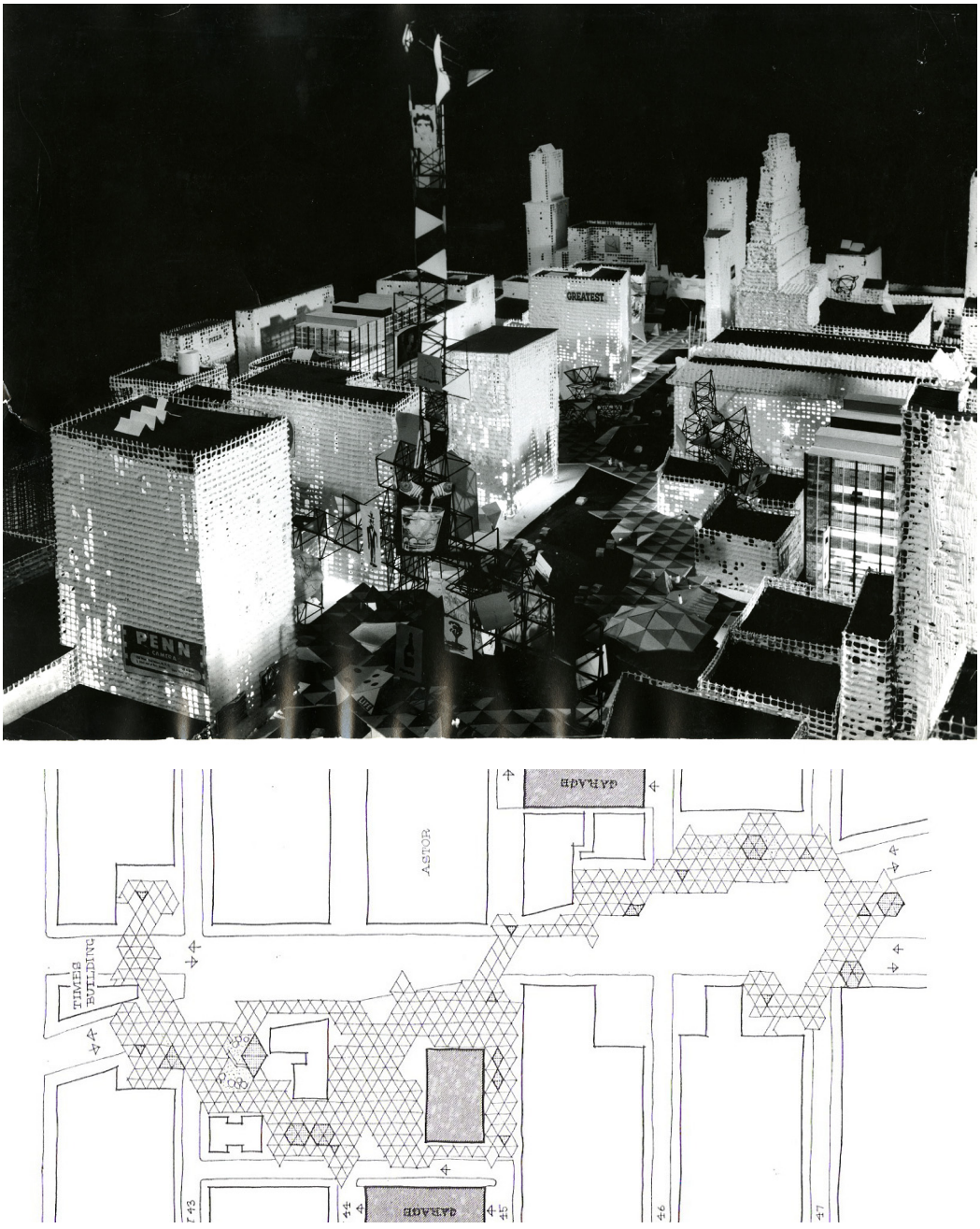
In 1954, Sert leads the Urban Design course at the GSD together with Carlhian and Roland Gourley, assisted by Costantino Nivola, a Sardinian artist and sculptor. The main theme is the re-qualification of Times Square in New York, along Broadway and 7th Avenue between West 42nd and 47th Streets. The aim is to make students think about the transformation of the New York crossroad into a real square. As we can read in the *"preliminary study"* assignment given at the course, all the issues discussed above are presented to the students: for instance *"the continuity between the new Times Square and the existing one"*, the improvement of the pedestrian space and the separation from automobile traffic, the location of the right amount of car parking spaces, the attention to the three-dimensional elements. Personal psychological sensibility is also proposed as an important element for analysis: *"any elements susceptible of creating an impact on the individual`s senses should be considered an essential part of the designer`s palette – odours, noises as well as all the known (or unknown) visual elements. Psychological behaviour of crowds cannot and should not be ignored."*[73]

One of the most interesting projects proposed by students is published in *Architectural Forum* in August 1955 in the article "*Could this be Times Square Tomorrow?"*. The project proposes an elevated system for pedestrian circulation. This latter is based on a three-dimensional structure, partly stretched out across a horizontal plane for the pedestrian route and occasionally vertically articulated in order to lodge billboards and shops. Five buildings that are considered obsolete are eliminated and the spectacular neon signs are scraped from the facades and replaced with new technological ones. Finally, new car parking towers are added in order to relieve the city centre of car-traffic and create new sights to observe the city.

This intriguing double ground level in Times Square is quite an important project since it surprisingly anticipates some of the American pedestrian walkways in the '60s[74]. For example, the ex-Harvard-student Vincent Ponte would design *"sky-*

73 Studio #1 Urban Design, Fall Term, 1954-55, Arch, 2-4a, Dean Sert, Prof Carlhian, Problem VII: Preliminary Study for the redevelopment of Times Square. p.2 In GSD Archive, Harvard University, GSD Students, CC098

74 Eric Mumford already mentions this anticipation in the footnotes to the project, published in *"Defining Urban Design": "Student studio work that anticipated many of the urbanistic ideas of the 1960s."* See



GSD Students, Times Square . Harvard University Archive, GSD Students, CA005. In the footnotes to the project, published also in *"Defining Urban Design"*, Eric Mumford makes the following comment *"Student studio work that anticipated many of the urbanistic ideas of the 1960s.*" See Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* Yale University Press, New Heaven and London, 2009, p. 127

walk" pedestrian paths for Dallas in the '60s, which directly refers to this Times Square experiment.[75]

Also at CIAM VIII, in 1951, students from Harvard exhibit a project: the final thesis by William Conklin, Robert Geddes, M. Sevely and the landscaper Ian L. McHarg, regarding the redevelopment of downtown Providence[76]. It is interesting to note that this *"collaborative thesis",* as it is called by Alofsin[77], embraces the fields of both architecture and landscape, representing an anticipation of that synthesis of professional actors vigorously claimed by Sert few years later. *"Our interest in urban redevelopment stems from our belief that cities are the fruit of civilization. […]"* the students affirm *"Our new city centers must speak of life and its joy. It is in the belief that it is essential for our cities to recapture this spirit that we have operated.[...] we believe that planning, architecture, and landscape architecture are interdependent, and no one of them alone can be successful in the creation of the urban environment."*[78]

Secondly, it is important to note again the choice of the elevated pedestrian access at the second level of the downtown Federal Building while the ground level provides services: as in the Times Square project, a research on the three-dimensional design, of overlapping fluxes in section, determines an architectural complexity which contrasts with the zoning method of planning of the city, and which would become important for all later urban projects, right up until today.

Urban Design: definitions and relations with the Heart theme

Urban Design is still a contemporary issue for many architects and theorists dealing with contemporary global megacities and metropolises, as already depicted in the introduction. The necessity for a contemporary discourse on urban design is also highlighted recently by David Grahame Shane[79] who considers its origins

Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69,* Yale University Press, New Heaven and London, 2009, p. 127

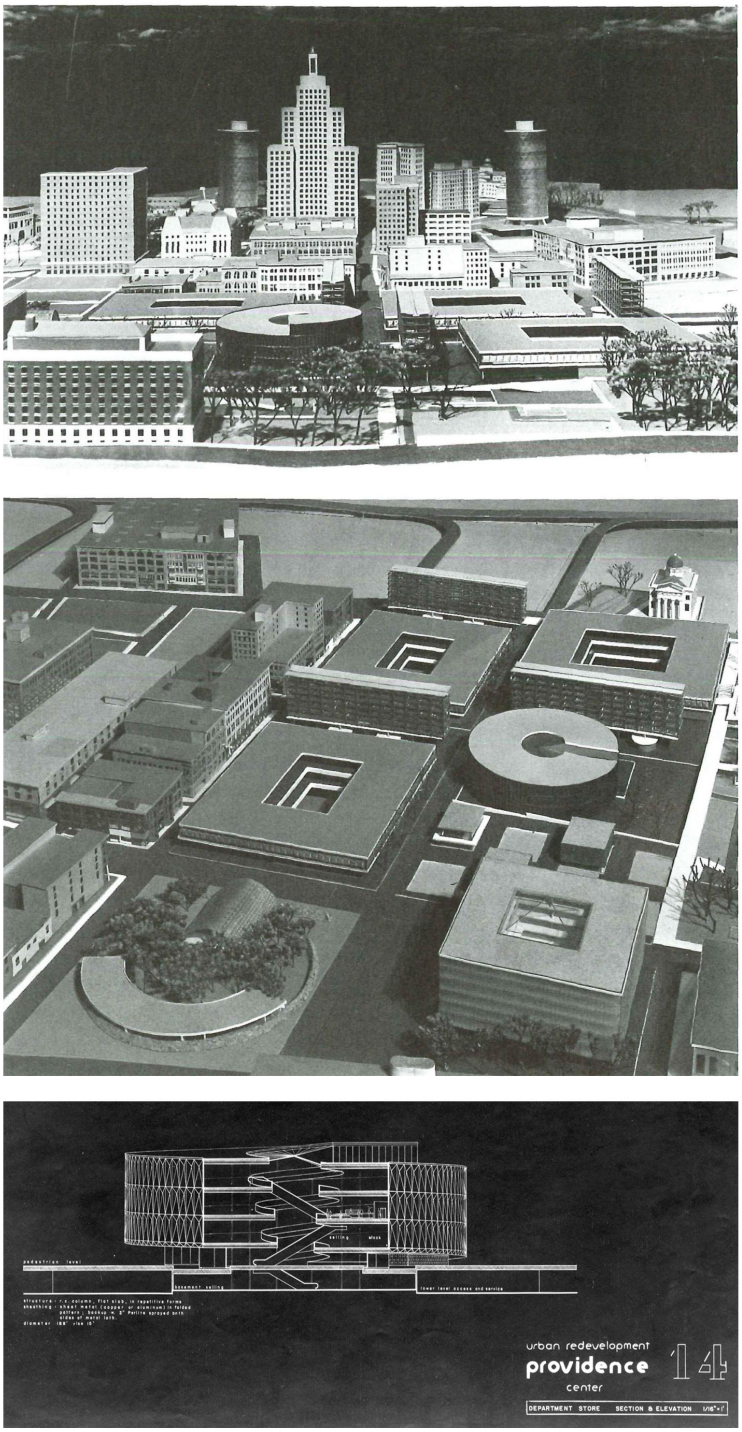
75 See the chapter on Montreal and Vincent Ponte. It is interesting to note here that the planner Ponte had studied at Harvard, though before the UD Conferences.

76 Eric Mumford writes about the presence at CIAM VIII of the GSD students' project in Ibid. p. 96. See also Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 142

77 Alofsin reminds us that the thesis is submitted on 18 November 1949 for the Architecture Bachelor degree, and McHarg for the Master of Landscape Architecture. See Alofsin A., The Struggle for Modernism. Architecture, Landscape Architecture, and City Planning at Harvard. W.W. Norton and Company, New York and London, 2002, note n.36 p. 292 and p. 207-212

78 Collaborative Thesis Program, (June 1950) TS. In personal correspondence, William Conklin to Polly Price, 4 August 1987, quoted in Alofsin A., The Struggle for Modernism. Architecture, Landscape Architecture, and City Planning at Harvard. W.W. Norton and Company, New York and London, 2002, p. 207

79 At the end of the introduction of Grahame Shane`s book about urban design we read: "The next chapters



William Conklin, Robert Geddes, and M. Sevely and Ian L. McHarg, *downtown Providence,* GSD Thesis CB037

can be traced back to 1943 and in the plans by Patrick Abercrombie and John Henry Forshaw for the reconstruction of cities after the war and the increasing number of automobiles.[80] Both issues are central in the debate at CIAM VIII, as already mentioned. Thus we can consider Urban Design and the Heart of the City as coeval and consonant discourses after the war which influence each other (Mumford even considers the heart as a *"precursor"*[81] of Urban Design) or as parts of a unitary debate about the necessity of reconsidering the modern design of the city in the increasing complexity of the new and changeable urban conditions, which affect our epoch still. Indeed, both terms regard the cooperation of different professional figures operating in the city, the transformation of the city through the introduction of new technological devices such as the car, the right design for the public space and its synergy with society: the increasing complexity of these issues from the *"compact metropolis of 1945"* to *"the megacity of 2005"*[82], make us consider both the Heart of the City and Urban Design as still contemporary and valid themes.

However, 60 years ago and nowadays, both terms did not and do not have a sufficiently clear frame of significance in urban theory and practice. This problem is recognized in the 1950's, in particular as far as the meaning of Urban design is concerned.

Indeed, in April 1957, Mr. R.L. Sutnar, one of the editors of *Synthesis*[83], asks Jacqueline Tyrwhitt to write a letter to different professional figures related to city design - such as architects, planners, sociologists, lawyers,.... - in order to ask them for a short definition of Urban Design. The intriguing experiment results in a total of 32 answers[84]. Some of them are negative such as that of Frank Lloyd Wright, who rapidly answers:

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will illustrate how different urban actors in different periods during the last 60 years worked to create different urban models, using the basic urban elements of enclave, armature and heterotopia. Urban design played a complex and shifting role in this process from metropolis to megacity, and these three urban elements form the basis of all the following sections and paired chapters." Grahame Shane D., Urban design since 1945 – a global perspective. Wiley publication, UK, 2011, p. 11

80 See Abercrombie P., Forshaw J.H., County of London Plan. Macmillan and Co., London, 1943 and Grahame Shane D., Urban design since 1945 – a global perspective. Wiley publication, UK, 2011, p. 9

81 See Mumford E., Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69. Yale University Press, New Haven and London, 2009, p. 80

82 Grahame Shane D., Urban design since 1945 – a global perspective. Wiley publication, UK, 2011, p. 10

83 Synthesis is an architectural journal published by the GSD students at Harvard University. First number appears in April 1957.

84 "Replies were received from 12 architects, 1 landscape architect, 8 planners and 11 others who encompassed the field of art, history, law, geography, government, administration, economics and promotion." ed. By Tyrwhitt J., Definitions of Urban Design. In Synthesis, April 1957, GSD Harvard, p. 27

"My Dear Radoslav L. Sutnar:
Sorry – I am not interested.
Sincerely Yours.
Frank Lloyd Wright".[85]

Twenty answers are however positive and explain different points of view regarding the profession, education, the three dimensional aspect (Le Corbusier), the social issue of *"giving space to a community"* (R. Neutra), the efforts to create *"the living spaces of our urban surrounding"* (W. Gropius), the resolution of chaos in the City (Breger and Tunnard), the modulation of the environment and of our attitude towards it (Gaus, Haar,...),...and so on.

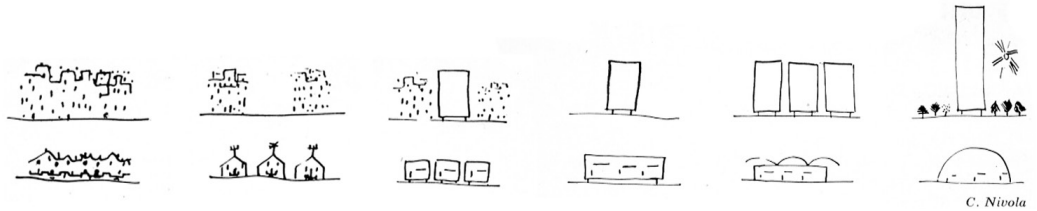
Similarly to the discussion about the Heart of City, held a few years before in Hoddeson, the interpretations of the theme are therefore multiple and not always consistent.

Among the CIAM members who answer to Tyrwhitt's proposal, Giedion replies with a very significant definition: *"Urban design has to give visual form to the relationship between You and Me."*[86] Almost in the same period, the Austrian historian publishes the book *"Architecture, You and Me"*, with the original title *"Architektur und Gemeinschaft".* Both the English title of the book and his Urban Design definition, directly recall another Austrian thinker, the philosopher Martin Buber (1878-1965). Indeed Buber writes in 1923 the book "*Ich und Du"* (later translated into English as *"I and Thou"*)[87]. This last book is also the main reference for Van Eyck and Bakema's *in-between* theory. Moreover, the same discourse by Bakema at CIAM VIII on *"Relations between Man and Things",* has direct similarities with Giedion's Urban Design interpretation. Indeed if we analyze Giedion's answer in Synthesis again, we can easily recognize "visual form", "relationship" and "you and me" as clear references to the Dutch group`s discourse, which will be analyzed in the following chapters. It is important to note again the continuity of theoretical fluxes from the Heart of the City towards Urban Design in the US. Also the book *"Architecture You and Me"*, reference to which by Giedion's definition of Urban Design seems very clear, deals directly with the Heart of the City theme. If Urban Design is described in Synthesis as the correct physical and

85 Ibid. p. 28

86 ed. by Tyrwhitt J., Definitions of Urban Design. In Synthesis, April 1957, GSD Harvard, p. 29

87 See Buber M., Ich un Du. 1923, trad.eng. I and Thou a new translation. Scribner, New York, 1970; Lefaivre L., Tzonis A., Aldo Van Eyck. Humanist rebel. Inbetweening in a Postwar World. 010 Publisher, 1999, Rotterdam; Mantia G., Devices, lo spazio poroso figure e dispositivi in Vigano P., Pellegrini P. eds., Comment Vivre Ensemble. Officina Edizioni, 2006, p. 194-196 The relationship between Buber and Bakema is discussed later.



C. Nivola, Sketches on Urban Design (GSD Archive)

visual translation of the social collective relationship "*between You and Me"*[88], then the Heart of the City is depicted in the book as the symbolic representation of this relationship[89].Therefore the Heart might even be considered as the final aim of Urban Design itself.

In Tyrwhitt's article, it is interesting to highlight the presence of the expressive sketches of the Italian artist Costantino Nivola (1911-1988), which are published at the same time as the architects` written answers. We may imagine, though we cannot be sure, that Nivola is also asked to write a definition of Urban Design. We might consider these drawings as the artist`s way of explaining his thought, taking the role of interpretation to the spectator. All the drawings appear as a comparison between old and new, multiple and singular, vernacular and modern, low and high: many themes of what has been described in words by other architects seem to be summarized in these sketches, which may also be considered a visual Synthesis of all positions described.

Another interesting sketch is proposed by Sidney L. Katz who explains:

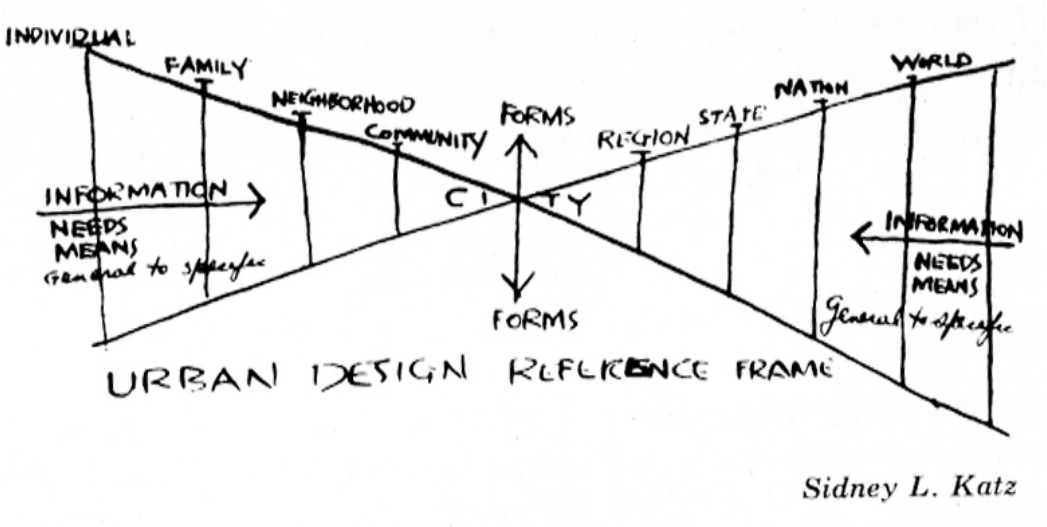
"The field of urban design deals with integrated concrete solutions to the specialized social needs and inter-relationships of individuals, family, neighbourhoods, communities, cities, regions, states, nations and the world,..."[90]

The related scheme, called *"Urban Design reference frame",* presents two diagonal lines, where different scales of agglomerations are listed, from the individual on the left to the world on the right, passing through the intersection centre, which defines the City. The four areas, formed by the intersection, are symmetrically

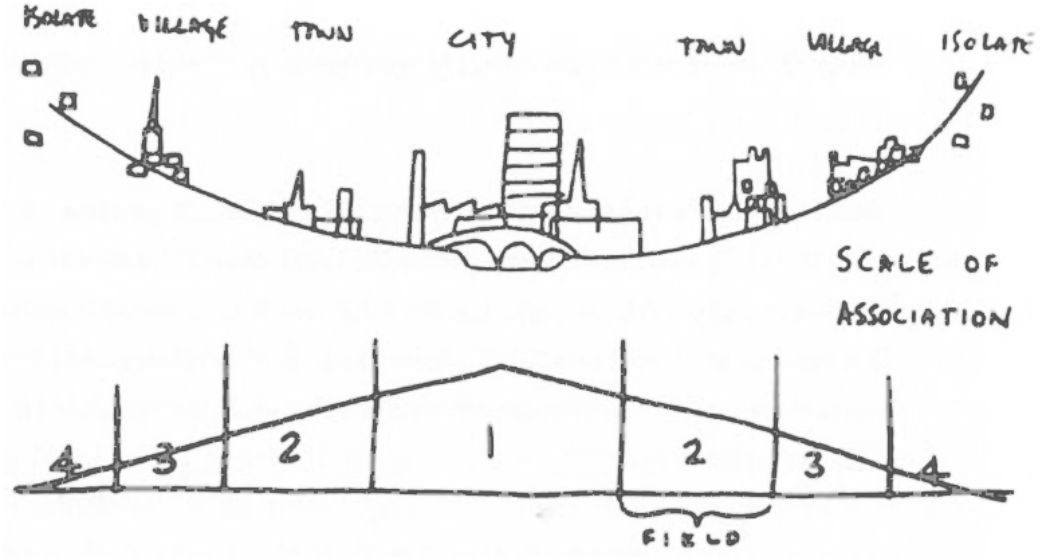
88 ed. by Tyrwhitt J., Definitions of Urban Design. In Synthesis, April 1957, GSD Harvard, p. 29
We can think about "Between You and Me" as "between private and public" or "between individuals in the same collectivity"

89 *"If we look at the city as a place in which private life and community life find a meeting place, then the mark of a true city is the balance between YOU and ME.[...] The endeavor to reestablish an equipoise between the individual and the collective sphere is proceeding today throughout the world. This may have been underlying reason for the selection of the 'Core of the City' as the theme for CIAM 8."* Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 124,126-127

90 Ibid. p. 29



Katz: Urban Design (1957)



Team X: Scale of Association (first in 1953)

divided into *"forms"* and *"information, needs, means"*. We can note that the scale level diagram, starting from individual to the world, is very similar to others we have already discussed[91].

However, in Katz`s *Urban Design frame*, the centrality of Man is undermined by the importance of the City, where the urban form meets the architectural one. Urban Design therefore seems to be the discipline which controls the design of these two kinds of forms or structures, with many resonances in later discussions and books, such as the *Architecture of the City* (1966) by Aldo Rossi.

Finally, it would be interesting if we could compare this scheme with another one which is presented almost contemporaneously in Europe. Indeed in 1953 Team 10 shows, in the Doorn Manifesto, a re-interpretation of Patrick Geddes' Valley Section[92], where CIAM's four functions are substituted by the concept of the *"human association"*. The new scale levels are depicted in a valley section, starting from the isolated buildings, villages and towns until it reaches the city which is drawn on the lowest part of the diagram; the curve then rises again in mirrored order.

Similarly to Katz`s scheme, the city is positioned in the central part: although there is still a dimensional distinction as in the five levels of the Heart, attention is now focused on the importance of the city instead of the individual. It is no longer the Vitruvian Man at the centre of the world, but the relations inside the community, the social complex structure which should be physically interpreted by the urban designers[93]. Indeed the City is the main level of complexity; it is the place where human relations are higher than in the other levels, where the design`s strengths will be higher than in other places, in order to produce the most *"convenient communities […].*[94] Under the "valley", Team 10 later redraws the scheme adding a triangle underneath, the so- called *"scale of complexity of*

91 For instance at CIAM VIII the MARS group divided the heart topic into 5 levels, from the small aggregation of the village (500 inhabitants) to the metropolis; in the *"Diagram of the human environment"* (1953) Paul Wiener draws Man inside a scalar series of squares which represent the home, the neighbourhood, the city and the region and lie inside a main circle representing the world, the cosmos.

92 Geddes' valley image is used in order to show how human communities can develop in specific natural conditions. Welter defines it as the "ecological approach to human societies" regarding both social and ecological structure. See Welter V.M., In-between space and society. On some British roots of Team 10`s urban thought in the 1950s. in ed. by Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81*.NAI Publisher, Rotterdam, p. 135, 258-263. See Strauven F., *Aldo van Eyck. The shape of relativity*. Architectura e Natura, Amsterdam, 1998, p. 260. See Architects' Year Book 12, London, 1968, p. 65-71.

93 We have already discussed Satre's humanist values which abhor Man as a superior value in the Chapter on CIAM VIII. This interest in the social community rather than the singular individual is already evident at CIAM VIII.

94 (Holland 1954) in Team 10 Primer, MIT Press second edition 1974 (first edition 1968)

association", relating the level of association to each community: the highest point, the vertex, coincides with the City. This *"comparative and synchronic scale that establishes a conceptual relation that binds the smaller communities into a hierarchically structured, larger whole"*[95] - as Volker M. Welter defines it – should definitely substitute the functional hierarchy described in the Charte d` Athens as dwelling, work, recreation and transport.

Therefore the similarity with the Urban design scheme is important in order to underline the discontinuity with the zoning method of planning, of the four functions` divisions of the city, within the Urban design discourse and thus in the Heart of the City too.

Moreover, the links between CIAM VIII and Urban Design, and between Urban Design and Team 10, make us think about a continuity (or at least a resonance) of the CIAM principles inside Team 10, rather than a radical rupture. This becomes evident for instance if we analyze the continual references to Geddes` theory. If Geddes` valley is re-interpreted by Team 10, then Volker Welter affirms that the urban Core, as discussed at CIAM VIII, is a direct reference to the Scottish architect too: it is even the *"most symbolic element of Geddes' theory"*[96]. The Core defined by Jaqueline Tyrwhitt as *"the gathering space of the people"*[97] is indeed considered similar to the symbol of human community, such as the city crown, claimed by Geddes[98]. Team 10's scale of association, Katz`s interpretation of Urban Design and CIAM`s Heart of the City therefore find the same roots, in a continual flux of ideas between Europe and America.

95 **Welter V.M.,** *In-between space and society. On some British roots of Team 10`s urban thought in the 1950s.* in ed. by Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81*.NAI Publisher, Rotterdam, p. 135, 260

96 **Welter V.M., In-between space and society. On some British roots of Team 10`s urban thought in the** 1950s. in ed. by Risselada M., van den Heuvel D., Team 10 In search of a Utopia of the past, 1953-`81.NAI Publisher, Rotterdam, p. 135, 258

97 **Tyrwhitt J., Cores within the Urban Costellation. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City** – towards the humanisation of urban life. London 1952, p. 103

98 **See the relationship between the Genius Loci and City Crown and the Heart of the City, in the Norberg-**Schulz chapter.

HEART OF THE CITY AND VICTOR GRUEN

VICTOR GRUEN

Among the speakers at the First Urban Design Conference at Harvard in 1956, Sert also invites one of the most important commercial and urban designers of the last Century, in the US and Europe: Victor Gruen (Vienna, 1903 – 1980).

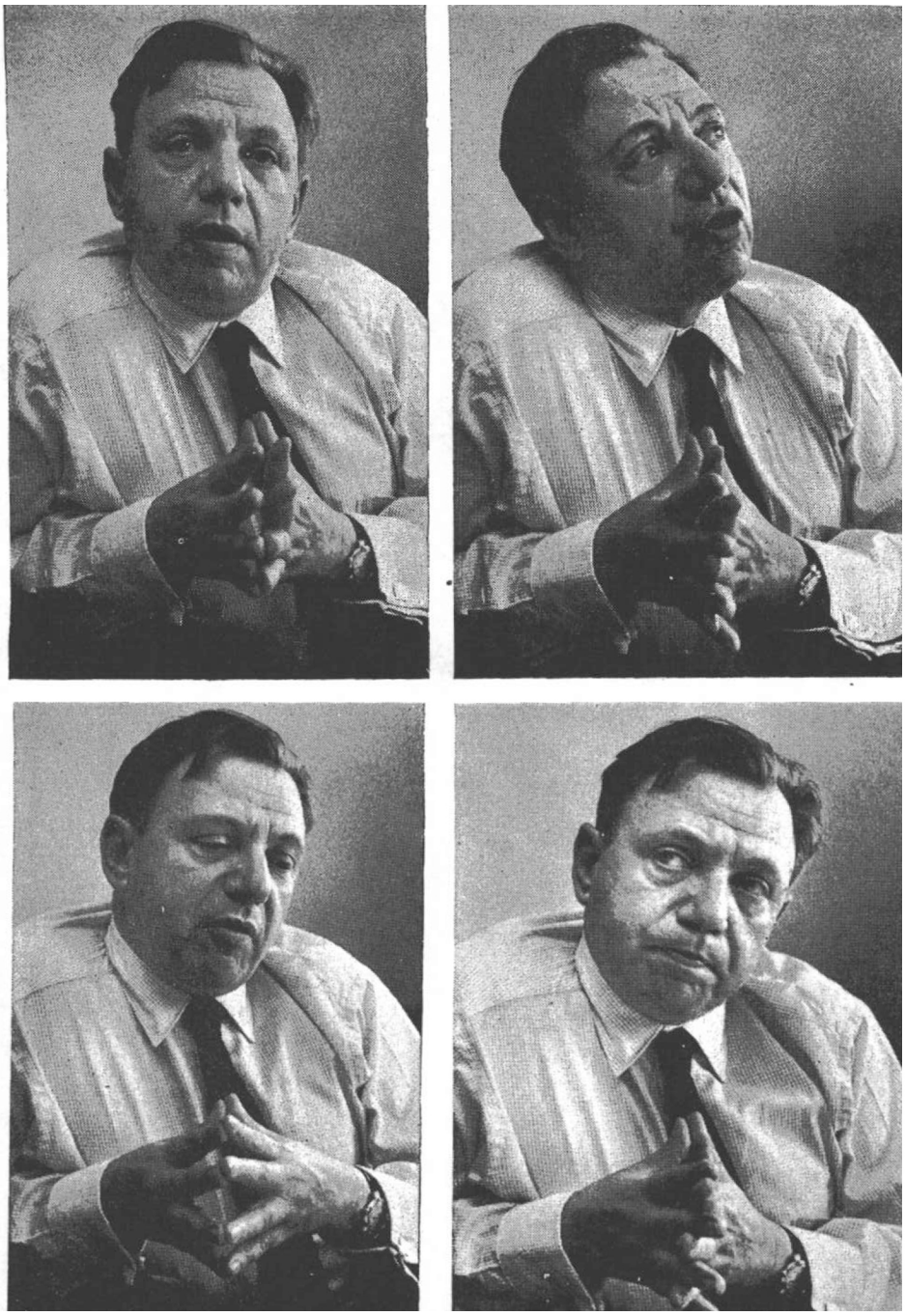
Victor Grünbaum - this is his real name - studies at the Akademie der Bildenden Künste of Vienna where some years before Adolf Hitler also studied and where Peter Behrens, master of Le Corbusier, is one of the teaching staff. After his graduation, Gruen works in an architecture studio and in cabaret shows until 1938, when he has to emigrate with his wife to the US because of Nazism. Once in the States, he doesn't go to work immediately as an architect; instead he forms the Refugee Artists Group playing in 1939 on Broadway. As Hartwick writes in Gruen's biography, the *"Mall maker"*[1], one day the Austrian-born architect meets an old friend from Vienna, Ludwig Lederer, who suggests that he design a shop window on Fifth Avenue. The shop window, designed with his college Morris Ketchum, shows a new conception of commerce on the street: in contrast with other shops that opened directly onto the footpath, Gruen decides to recess the front window in order to attract the consumer inside. This first experiment is an outstanding example of successful interaction between commercial and public space, which will characterize all Gruen's projects, even at the urban scale. This interaction will be exploited by the Austrian architect since the early `50s, when J. L. Hudson[2] entrusts him with the task to design his first regional shopping center, the Northland, outside Detroit. Gruen's professional activity continues to keep both theoretical and design interest on the shopping center, culminating with the draft of "Shopping Town U.S.A.", written together with the English economist Patten Smith in 1958-59. As Gruen highlights, *"with this title, we wanted to indicate that the role of the new planning concept could expand beyond the goal of creating merely machines for selling, and could satisfy the demand for urban crystallization points and thus offer to the suburban population significant life experiences."*[3] All Gruen's commercial design activity becomes therefore a first experimental attempt for the constitution of new "*urban crystallization points*" inside the sprawled city, with many references to the Heart of the City theme[4].

1 Hardwick M.J., *Mall Maker. Victor Gruen, Architect of an American Dream.* University of Pennsylvenia Press, Philadelphia, 2004

2 The J.L. Hudson Company is one of the most important retail department store chains of the US, based in Detroit – Michigan.

3 Gruen V., *Centres for the Urban Environment. Survival of the Cities*. V.N.R. Company, 1973, New York, p. IX

4 The influence of the CIAM VIII and of the Heart of the City theme in Gruen is already stressed for instance by Eric Mumford. CIAM VIII *"was perhaps the first expression of what would become major preoccupations*



Victor Gruen in Business Week, Oct. 1955

GRUEN AND THE HEART OF OUR CITIES

This reference becomes very explicit in the `Megayear 1964`, as Banham calls it[5], when Gruen publishes "*The Heart of Our Cities - The Urban Crisis Diagnosis and Cure"*[6]. Banham himself describes the book as a *`fairly irresistible […] apparent combination of commercial success and sound cultural preferences`*[7], underlying the mix of commercial and cultural characteristics which are always present in Gruen's theoretical and professional activity.

As far as the significance of the Heart metaphor is concerned, in the book there are several interpretations and meanings. Sometimes the heart is even exchanged with different organ metaphors – such as *`the seat of the urban brain and of the urban spirit, or of the city `s soul as well`*[8] - losing its specificity and character.

However its meaning is always linked or influenced by Gruen's commercial design experience, as we shall notice later.

Moreover, if on the one hand the metaphor acquires different shades, on the other it is clear that its field or frame of interpretation is totally centered on the 'core'[9], on the physical inner city, on the *`spot of origin`* of European cities or on the CBD (Central Business District) in the US[10]. This is indeed the unique place

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with architect-designed public gathering places in the work of Victor Gruen, Kevin Lynch and many others in the following decades. CIAM VIII can be seen as a reference point for the new forms of public space, including Shopping malls […]" in Mumford E., *The CIAM Discourse on Urbanism, 1928-1960*, The MIT Press, 2000, p.215 or by Alex Wall :*"[...] the link between Gruen`s own thinking and the CIAM debates on the city, was probably CIAM 8`s 1952 book The Heart of the City."* Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005, p. 227

5 `Megayear 1964` is the title of the fourth chapter of Banham book Megastructure.The author defines the 1964 as the `annus mirabilis for ideas and projects` for Megastructure. See Banham R., Megastructure. Urban Futures of the recent Past.Thames and Hudson, London, 1976, p. 70

6 Gruen V., The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964 Gruen doesn`t mention CIAM VIII directly in order to explain the aim and the title of his book. However he lists the CIAM 8 published proceeding in the bibliography. See "Some Books of Special Interest" in Gruen V., The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p.351

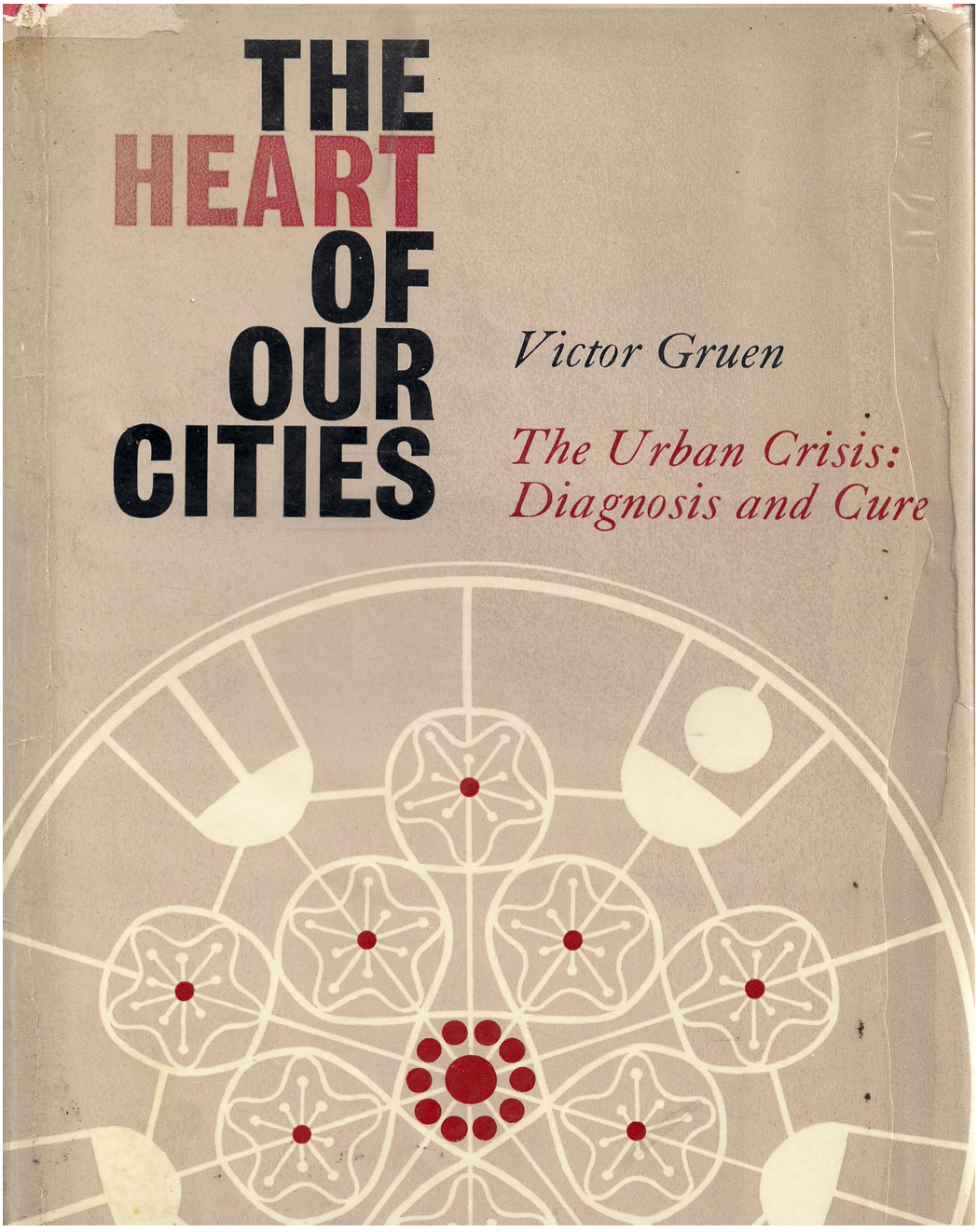
Also Bakema will refer to the "Heart of city" with the Human Core for St. Louis publication, the result of the University course project held in St.Louis by Bakema in 1961. See the last chapter on Bakema.

7 Banham R., *Megastructure. Urban Futures of the recent Past.*Thames and Hudson, London, 1976, p. 76

8 Ibid. p.8

9 We might also simplify the discourse saying that Gruen considers the inner physical Core of the city as the Heart of the City. Nevertheless the Heart metaphor is used in order to mention many issues which concern the centers of the Cities, rather than merely the CBD. It would be reductive to not consider these issues as part of the interpretation concerting the metaphor of the Heart. Therefore the physical Core is the main physical frame or field of discussion, while the Heart concerns several urban themes inside it.

10 *"Motorists in the United States arriving within a metropolitan area from the outside will generally be guided by signs reading TO THE CENTRAL BUSINESS DISTRICT, or TO MAIN STREET. The motorist entering a metropolitan area in Europe, on the other hand, will find signs that read TO THE CENTER, TO THE INNER CITY, or simply TO THE CITY. In this variation in language is expressed some of the trouble that besets the heart*



Victor Gruen, The Heart of our Cities, 1964

where "*the essence of urbia"*[11] persists, where public life can express its maximum quality inside the historical boundaries. Moreover, if we consider the Core as the generating spot of origin of all urbanity, then it is automatic that we also deal with the interdependence with its generated urban regional parts[12]. Therefore Gruen's discussion in the Core's frame has vaster interests and consequences than expected. However this interdependence or equilibrium between the inside and outside, always favours the Core itself, its necessary centralization. Indeed, Gruen explains the Core, distinguishing *'Cityscape'*, as *"a setting where man-made structures are predominant"*, and '*Landscape'*, as *"an environment in which nature is predominant[...]; the successful marriage of nature and human endeavor"*. The *'Cityscape'* can be *`technoscape`* (with a majority of technological apparatus), *`transportscape`* (including vast transport environment), *`suburbscape`* (classical suburbia) and finally *`sub-cityscape`* which is *"a collection of the worst elements of cityscape, technoscape and transportationscape"* filling all the space between cities, spreading in all directions. The actual disease of cities which transforms them into `anti-cities`, is then caused by "*Cityscape* [which] *has spilled over the walls, has spread out in the form of sub-cityscape"*[13] - as Gruenaffirms. The necessity of recentralization is therefore, similarly to Sert, a key purpose in order not to destroy the identity of *Urbia* itself and to preserve its civic values. Gruen`s urban point of view is very similar also to Ortega y Gasset's 'canon', where a strong boundary of steel is the unique way to conceive a inner urban space, the already mentioned 'Cityscape', separated from an outer *'ingens sylva'*[14], the 'Landscape'. In this conservative[15] vision of the city, it would be interesting to mention some of the facets of the Heart theme, which emerge in the book *"The Heart of our Cities"*.

of our cities." Gruen V., The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p.84 It is interesting to note that his first shopping centers are built outside the inner city.

11 Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p.12

12 *"[…] We cannot talk about the fate of our city cores without discussing their interdependence with the entire urban and regional pattern."* Gruen V., F.A.I.A, The downfall and rebirth of the City Cores on both side of the atlantic. A lecture developed for the symposium program of the Victor Gruen Foundation for Environmental Planning, February 1.972. Edited by Mrs. Allen E. Susman, Director. Published in Los Angeles, California

13 Gruen V., *Cityscape and Landscape.* Experts from a speech recently given at the International Conference of Design in Aspen, Colorado. 1955

14 See Paci E., Ingens sylva. Bombiani, 1994

15 Already criticized by Enzo Paci, as mentioned previously.

HEART AND ENVIRONMENT

As a first interpretation, the Heart is used in order to denunciate the bad health of city centers, focusing the attention on the environmental issue. The main aim therefore becomes *"to create environmental qualities that will help fulfil the human heart's desire in the city's heart"*[16] as the author affirms. Indeed, only by improving the environmental qualities of the center is it possible to allow citizens to increase their own health, enjoying the urban qualities which are present only in the physical Core of the City. It is still a vague interpretation of environment which might concern both social, ecological or psychological elements. However, this interest of Gruen's in the environmental issue as early as the `50s is very intriguing, anticipating many discourses which will become main themes of discussion up until today.

At this point it is interesting to highlight a specific aspect of the environment theme which is clearly delineated in *"The heart of our cities"*. Gruen focuses attention not only on the pollution and on the environmental qualities of the Core, but also on the effect of un-controlled enlargement of the city's boundaries. Indeed, as we can observe from the sketch[17] published in the book, Gruen shows the destruction of nature, of the "Landscape", by the City sprawl, by the continual building of individual houses. In this sense the environmental issue is used by Gruen also as a instrumental tool in order to highlight yet again the necessity for centralization.

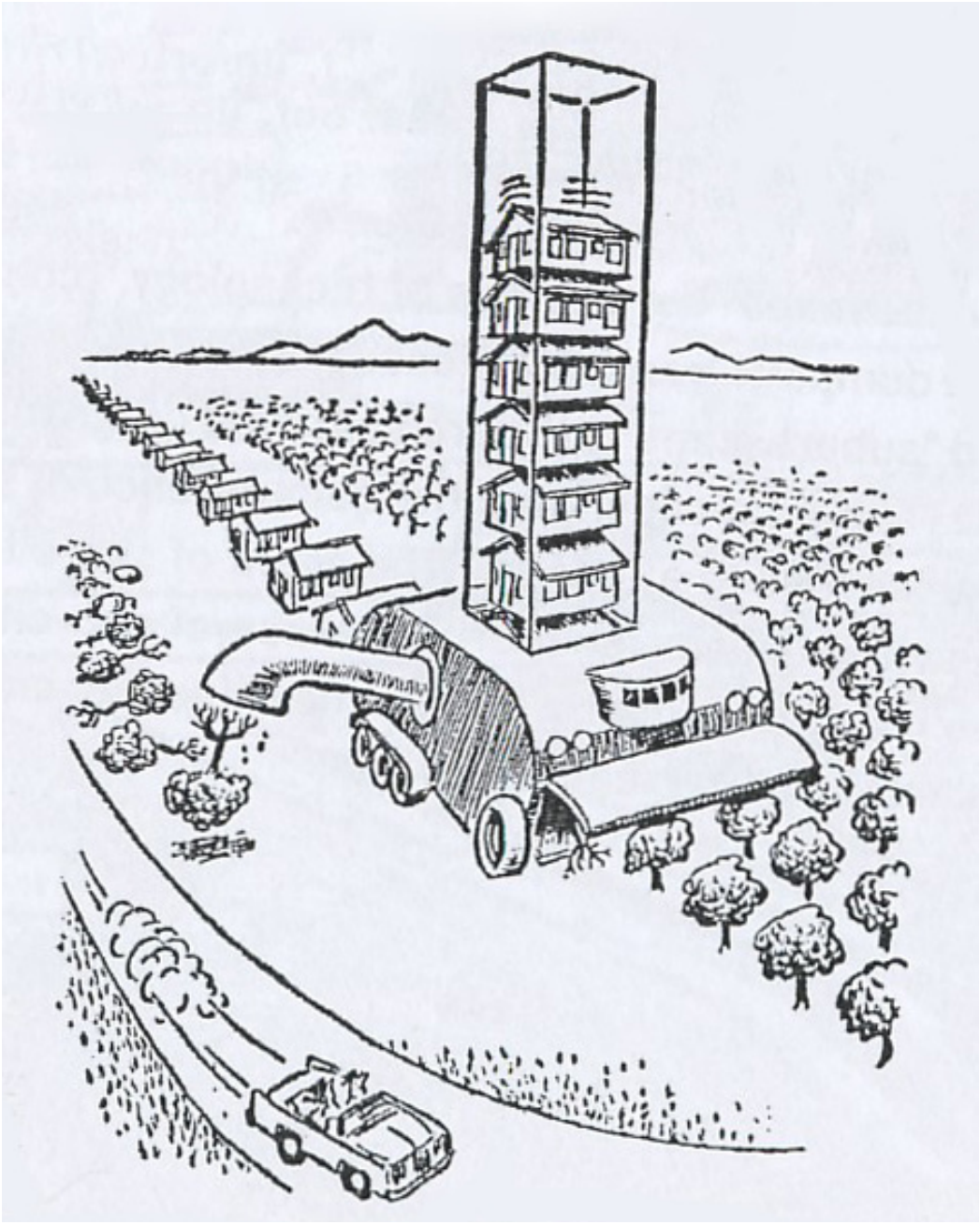
Consequently, the centripetal interest in the central Core is aimed not only at preserving civic values, as supposed by Sert, but especially at conserving the entire natural system. This clear and significant message will be investigated later by Gruen with books and even a sort of manifesto centered on it, as discussed later.[18]

16 Ibid. p. 299 It is interesting to remember that Gruen designed the first shopping center with air conditioning, the Southdale. In this sense the artificiality of the environment, of the climate also becomes a commercial issue.

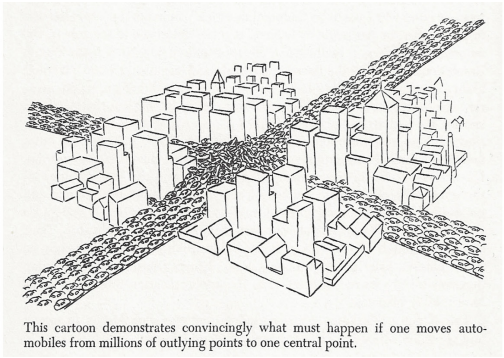
17 The sketch is entitled *"The masked Builder Strikes Again"*. See Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure*. Thames and Hudson, London, 1964, p.106

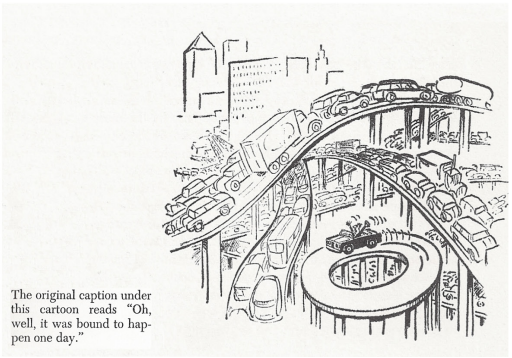
It is very interesting to note the use of ironical sketches as didactic and explicative tools in Gruen's writings. The irony of these sketches might be linked to his experience in the cabaret in Vienna and during his first years in the US.

18 See later the Charte of Vienna.



"The Masked Builder Strikes Again" In Gruen V., The Heart of Our Cities


This cartoon demonstrates convincingly what must happen if one moves automobiles from millions of outlying points to one central point.


The original caption under this cartoon reads "Oh, well, it was bound to happen one day."

Gruen: traffic sketches in the chapter about "The false friends of the City"

HEART, TRAFFIC AND MECHANICAL TOOLS

Gruen then continues to affirm that the main cause of the *"disease of the urban heart"*[19] is the lack of accessibility to the Core. In this condition, the arteries of the Heart are functionally interpreted as the main streets which allow access to the CBD.

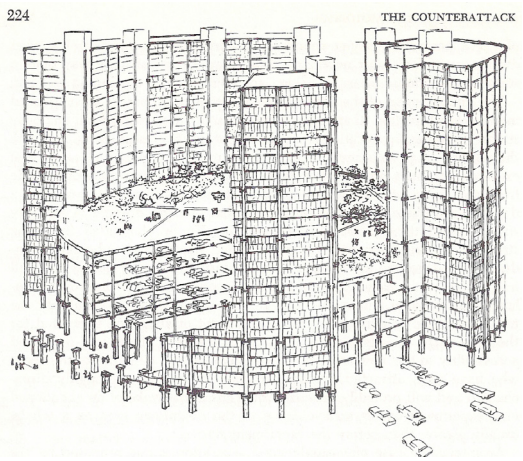
In a rather banal similarity between the traffic flow and the blood stream, the unique way to maintain the Core's environmental health is to clean these arteries making them more fluent, with less obstacles. It is indeed necessary on the one hand to allow people to reach central locations of the city quickly and conveniently, and on the other to consider the environmental impact.

The excess of traffic is therefore the main disease for a correct blood circulation system towards the pumping heart. This disease evolved thanks to the ever increasing individualized transportation request: "*the automobile population has higher birthrate than the human one"*(!) - Gruen affirms - "*It appears that the internal combustion engines, in their mass assault, have led to the external combustion of the city."*[20] It should be clarified that the `mall maker` Gruen has deep admiration for the invention of the automobile, whose parking areas become probably the most both interesting and problematic parts of his Shopping buildings[21]. However he is

19 **Gruen V.,** *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p.84

20 **Ibid. p.210 It is again interesting to highlight the reference to the environmental issue of the city, its** combustion and its pollution. Thus the issue of the mechanization of vehicles contrasting with the right of the pedestrian, as discussed during CIAM VIII, is strongly present in Gruen`s Heart as well.

21 **For example, in Southdale Shopping Center where the different parking areas are positioned on upper and** lower levels which slope from a circulatory driveway to meet the lower or upper levels of the merchandising facilities. See Gruen V., Smith L., Shopping Town USA. Reinhold Publishing Corporation, New York, 1960,



"Circular garages resembling medieval fortification towers, ...by Kahn." V.Gruen

deeply worried about an excessive attitude towards it, in both existing cities and some outstanding architects` projects too. For instance he vehemently criticizes the Philadelphia Center City of Louis Kahn (1952)[22] which reminds us of a fortified medieval-mechanized city. The project consists in a cluster of massive cylindrical towers, perforated cubes and truncated pyramids forming a `place of maximum intensity` of the city. In a more detailed sketch, Kahn shows in perspective the section of one of these circular huge cylindrical towers surrounding the city core, revealing the garage inside and all the apparatus of technology outside (water towers, ventilating ducts, air-conditioning machinery, plumbing). In Gruen's opinion this romantic vision of modern technology expresses a *`lack of appreciation for the hierarchy of values […]. Mr Kahn gets swept off his feet by romanticism [… in] a dramatic architectural expression of modern technology.* - he asserts - *[…] Mr Kahn believes, generally, that utilitarian functions should be*

p.127

22 It is interesting to note that Kahn's Philadelphia project is also published in `Team 10 Primer` edited by Alison Smithson, although Kahn is not a member of Team 10. However, his project seems to have been considered interesting by the British architect, and therefore Kahn's sketches are published in the chapter `Urban infra-structure` near Smithson's `pattern of association` schemes, the Woods-Candilis-Josic Berlin University project, and even near Bakema's considerations on the St. Louis city project, whose mound parking garages look similar in their monumentality. See Smithson A. (ed.by), *Team 10 Primer*. Studio Vista, London, 1968, p. 53-55- 60- 65-67

Also Reiner Banham shows Kahn's towers in Megatructure, as `a ring of vast, solidly monumental structures clustering around the city`s heart, none strictly a megastructure, but together conjuring an urban imagery that inspired many megastructure projects.` See Banham R., Megastructure. Urban Futures of the recent Past.Thames and Hudson, London, 1976, p. 39

Finally also Maki in his book of 1964 (the `Megayear`!) mentions it in the basic linking act as a wall which defines the inside core as the wall around medieval towns. See Maki F., *Investigations in collective form. Washington Univerity*, St. Louis , 1964, p.39-44

*clearly and openly expressed, in order to reflect the spirit of our times.[...] He believes that he can thus create a style for the century of technology. […] I would rather romanticize human thought, human emotions, man`s soul and man`s heart than garages or air-conditioning equipment.`*[23] Gruen`s criticism to the explicit show of technology reminds us of Giedion's fight against the *"tyranny of mechanical tools"*[24] , as described during his speech at CIAM VIII in 1951. Indeed, both of them believe in the increasing necessity of highlighting the humanizing process inside the city, rather than exhibiting the sublime power of mechanical progress.

Moreover Gruen, coherently with his theoretical criticisms of Kahn, always designs introspected closed-box buildings where all the technological tools are hidden: the external facade doesn't reveal the internal program, stressing *"the neutrality, the `undefined`, the implicit qualities that are not only confined to the architectural substance but are also a powerful expression in a new spatial sensitivity."*[25] His introverted buildings are intriguing experiments where the external public space is literally sucked inside the shopping center, similarly to his first shop windows on Fifth Avenue. All the external neutrality and minimalism contrast with the interior, where all the vitality of the Commercial or even *'Hyper-consumerism'*[26] reach their maximum.

Therefore, the disagreement with Kahn`s technological romanticism is supported principally by commercial reasons, rather than humanistic sensibility[27].

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23 Gruen V.,*The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p.223-224

24 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, The Heart of the City: Towards the humanization of Urban life. New York, Pellegrini and Cudahy, 1952, p.17

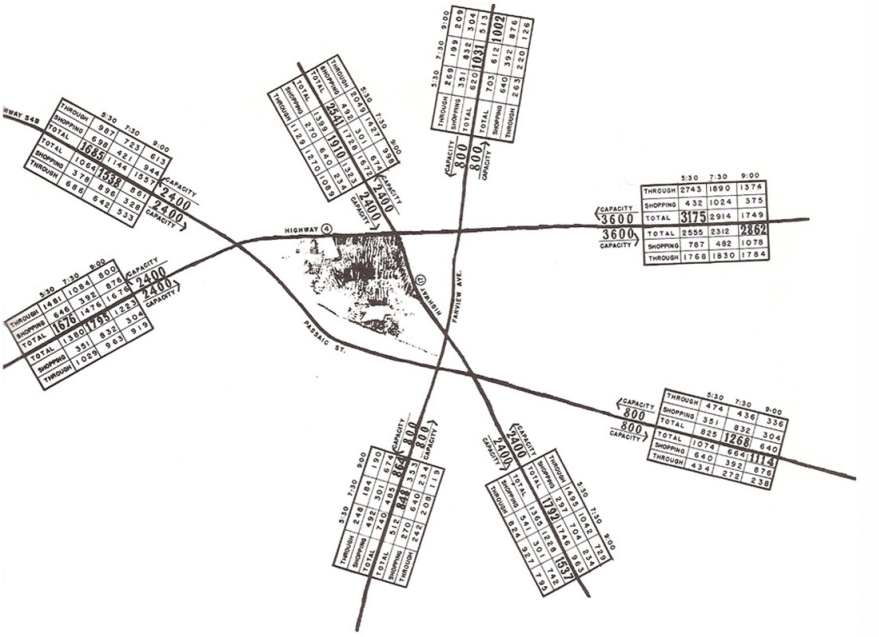
In particular Gruen doesn`t accept an exaggerated attitude of romantic fascination towards technical devices, which will instead be a main theme in some architects' projects from `60s-`70s.

25 This is a definition of Supermodernism given by Ibelings. Hans Ibelings. He considers Gruen`s buildings as one of the main reference for `90s Supermodernism Architecture, characterized by introversion and neutrality. H., Supermodernism. NAI, Uitgevers, 1998, p.62

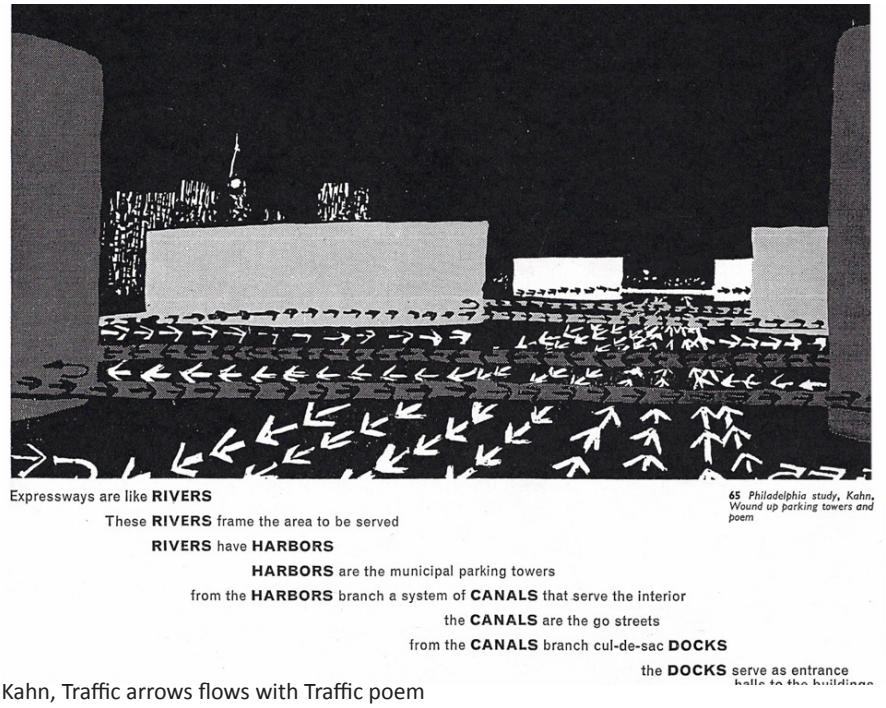
It is interesting to note that Supermodernism comes from the Surmodernitè described by the sociologist Marc Augè as a combination of historical acceleration - shrinkage of the space and in relation with the negative proliferation of non-places. Shopping malls, invented by Victor Gruen, are listed by Augè in these non-places as creators of `a solitary contracts`, in contrast with the `anthropological places which make the social organism`. Nevertheless, it is important to highlight that the design of the first shopping centers is for Gruen, on the contrary, the architectural way to reach useful design considerations for the health of the city, for the health of its Heart, as already seen, and not at all for a Surmodernitè for future decades of society.

26 See Ritzer, G. *The McDonaldization of Society.* Pine Forge Press, Thousand Oaks, 1993 or Baufrillard J. The Consumer Society: Myths and Structures. 1970

27 However, if Gruen`s regional shopping centers are the first laboratories of these functional commercial strategies, then his urban proposals seem to re-propose similar tools and functional configurations but with a more social and ethical attention to society. In this sense Gruen`s Heart of the City is a intriguing mix of



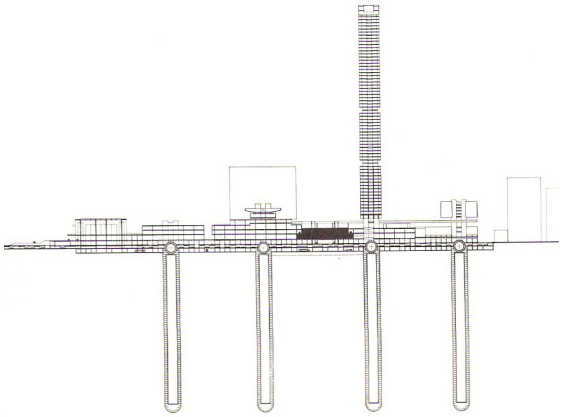
Gruen_Smith, analytical Traffic approach
"Tabulation of existing shopping traffic and combined traffic at critical traffic periods as well as exixting road capacities." in Gruen V., Smith, L., Shopping town U.S.A. New York, 1967, p. 119



Kahn, Traffic arrows flows with Traffic poem
From Smithson A. (ed.), Team 10 Primer, London, 1965, 60



G.A.Jellicoe, Motopia, 1961



Dallas underground parking garage project

Finally, also the fascination with the romantic vision of car flows is criticized by Gruen. This becomes very clear, for instance, when we compare Kahn's well-known poem under his arrow-flows sketch with Gruen's analytical, scientific approach as seen in his shopping traffic schemes, made together with the economist Larry Smith.

It is evident, especially as far as the mobility issue is concerned, how much Gruen`s practice activity deeply influences his theoretical approach. Indeed he cannot avoid criticizing other examples of traffic infrastructure projects, because he considers them too unrealistic or too radical for the built environment.

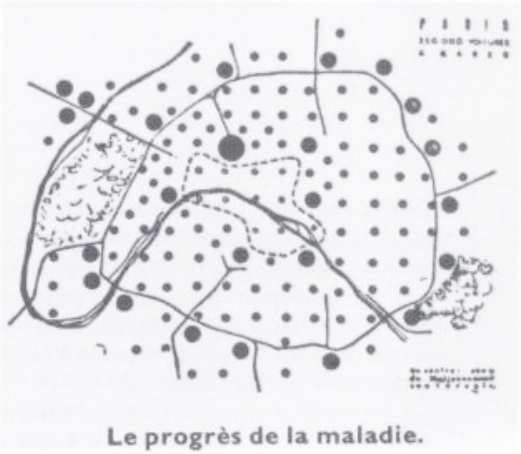
For example, Gruen doesn't spare the fascinating utopian city of `Motopia` (1961) by G.A. Jellicoe[28]: the plan is designed as a grid of roof-road buildings crossing small rotunda centers. Here the issue of the separation between car traffic and pedestrian flows is solved simply by eliminating the latter. Indeed even the pedestrian routes seem to have disappeared.

Then, Gruen also mentions the Core`s revitalization for Dallas, proposed by members and students of the School of Architecture at Columbia University. Here the main purpose is to store the largest number of cars without occupying land:

both commercial and social issues, whose resonances with CIAM VIII debate is transferred to a growing capitalist context.

28 *"Motopia is such an idea, and arises not so much from normal discontent as from the realization that our present physical conditions are being thrown into chaos by the advent of one car per family and even one per person."* Jellicoe G.A., A study in the evolution of Urban landscape. Studio Books, London, 1961, p. 7

`Autopia` is also the IV Ecology described by by Reyner Banham in Los Angeles.The architecture of four ecologies. 1971



Januz Deryng, "The progress of the sickness: CORE – GARAGE", 1964

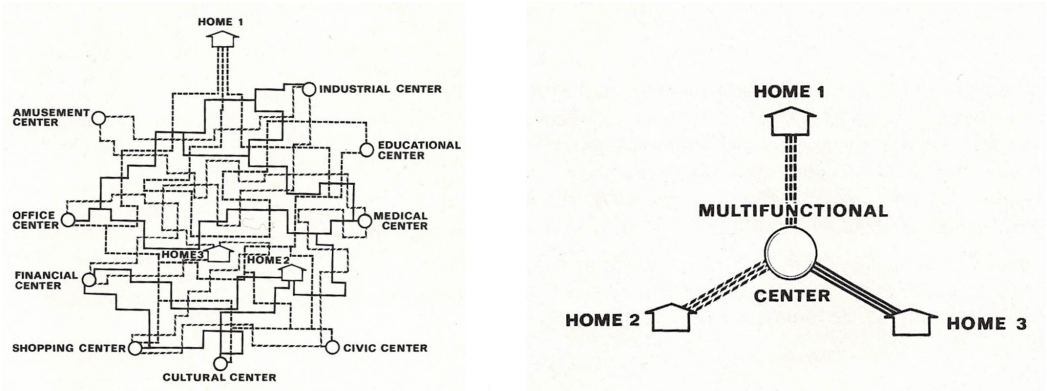
some car storages are sunk in deep wells (equal to 50 storeys), under buildings of different heights; the arriving cars would be conducted onto a platform and then moved down and up again. In these "*mental acrobatics"* in aid of resolving traffic issues, people would have to wait 30 minutes before seeing their car reappear on the surface. *"It would seem that a short waiting time for a subway train would be preferable."*[29] Gruen suggests ironically.

Finally, the denouncements of the Austrian born architect against the exponential augmentation of private cars, and against traffic-planning's submission to them, also find echoes in Europe in the same period. For instance, among the Situationists, Guy Debord talks about *"the breaking up of the dialectic of the human milieu in favour of automobiles"*[30] ,with many resonances with CIAM VIIII as well. In order to highlight this criticism, the *Internationale situationniste* n° 9 (1964, the `Megayear`!) publishes *`The progress of the sickness: CORE – GARAGE`* project by Januz Deryng: this explicit provocative plan consists in massive underground automobile garages (as in the `real` proposal of Columbia University for Dallas), arranged at regular intervals beneath the city of Paris. Each garage becomes a sub-center of the French capital so that *"each of the one hundred million Frenchmen that De Gaulle anticipates by the end of the century will find his car at its designated spot."*[31]

29 Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p.221-222

30 Debord G.E., *Positions situationnistes sur la circulation.* Internationale situationniste, n.3, December 1959, pp.36-37 quoted in Sadler S., *The Situationist City. MIT Press*, Cambridge, 1998, p. 25

31 Anon., Urbanisme comme volonté et représentation. Internationale situationniste, n.9 (paris, August



"The suburban labyrinth" (left) and "The introduction of one multifunctional center would dissolve the labyrinth" (right)

The core-garage therefore becomes a provocative and ironical interpretation of the Core of the city. It represents precisely the opposite of that *"royauté du piéton"* as described by Le Corbusier, since it identifies the role of the car as the central part of the structure of the city. The final aim remains, however, the same for the Situationists and for Gruen or for the CIAM VIII members - that of preserving the human scale inside the city which is transforming itself, since the late `40s, thanks to space's growing need for infrastructures, garages, commercial activities, etc. These are indeed the causes for a necessary radical redrawing of the city, as defined in 1963 by the Buchanan Report[32], which remains a milestone for the urban traffic issue, by studying the political tools used to heal the congestion of central areas. In this sense, Gruen`s urban proposals seem an attempt to answer contemporary urban compulsory transformations, starting with his commercial models. This aspect is in any case apparently contradictory, since his urban projects will be an evolution of a brand new architectural model, the regional shopping center, which is itself one part of the causes of urban mutation, as discussed later.

MONOFUNCTIONAL - MULTIFUNCTIONAL

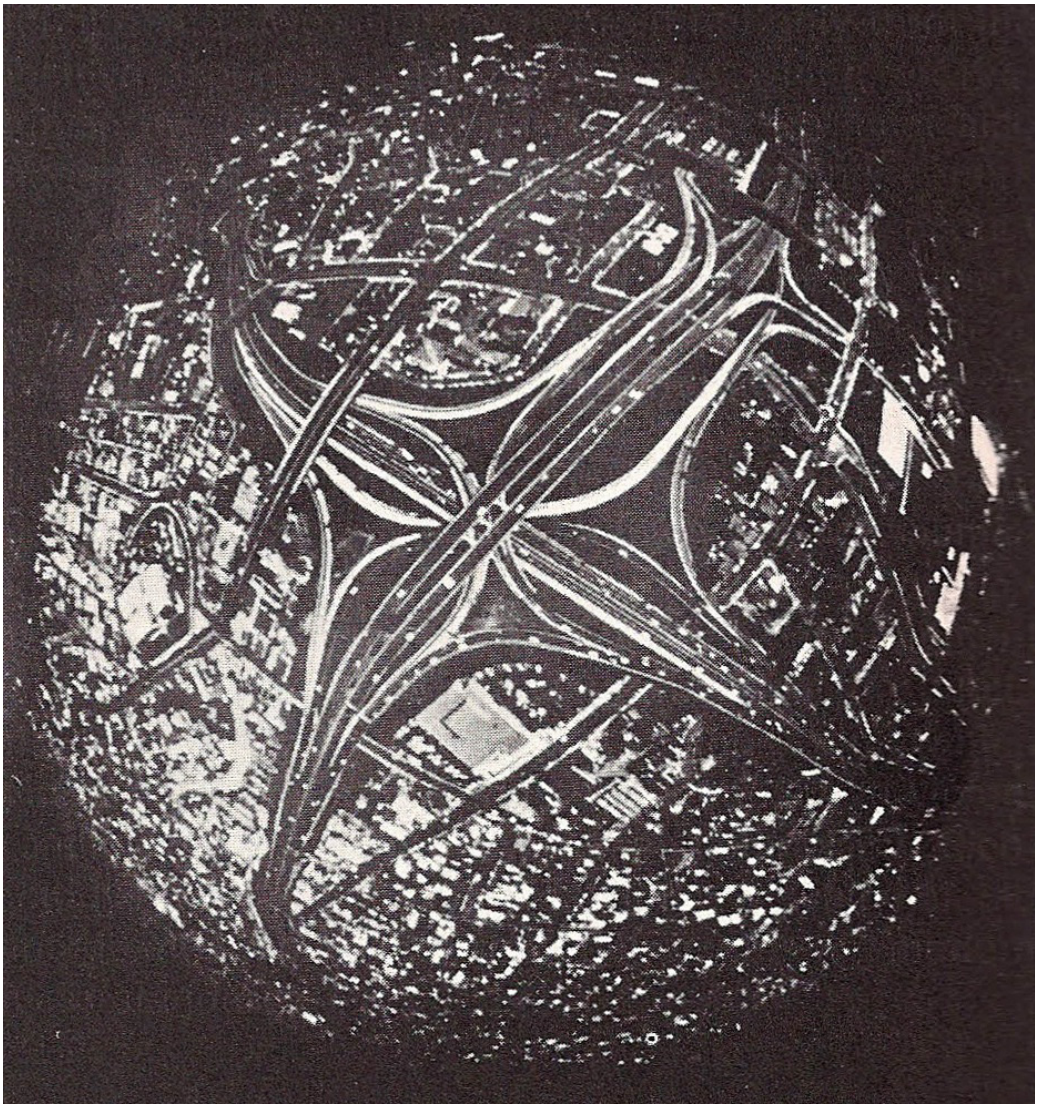
We have already mentioned the use of the environmental issue in order to stress the necessity for urban centralization. Likewise the mobility theme follows a similar purpose in Gruen`s later writings[33].

Indeed Gruen stresses the danger of *`enforced mobility`*: inside a system of

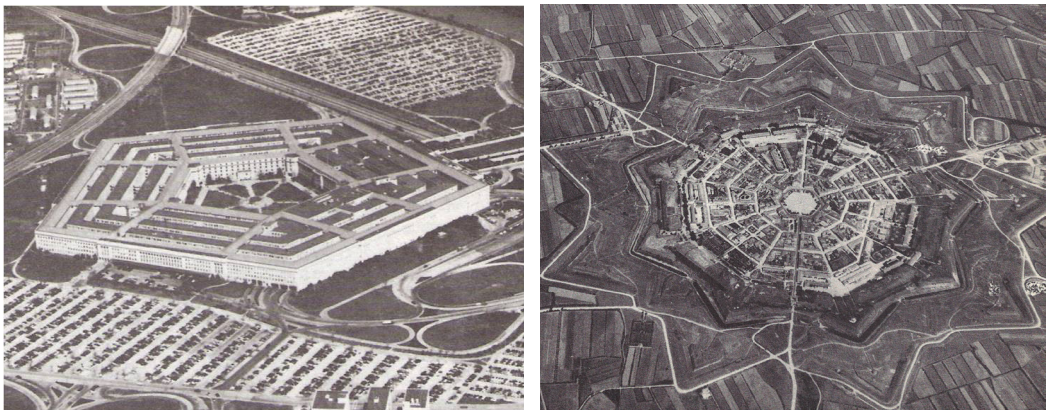
1964), pp. 12-13 quoted in Sadler S., The Situationist City. MIT Press, Cambridge, 1998, p. 25

32 Constant criticizes the Buchanan report, in New Babylon Bulletin n.1 (1963), saying that it only aimed to `advocate the development of machines for joyriding`

33 Ibid.



Gruen , “Freeways conquer the world!”



Gruen`s comparison: Pentagon and Palmanova

`urban agglomerations`, also called *`Mono-functional centers`*, people are obliged to spend their lives moving with cars from center to center in order to satisfy their needs. These mono-functional centers comprise the Industrial, Civic, Finance, Cultural, Religious, Amusement, Eros, etc centers. Being part of the bi-dimensional functional zoning of the territory, each function is separated from the others and is not integrated vertically.
Moreover, these centers might even be the same size as a European town center but without the same social and urban complexity. As an example Gruen compares the `monofunctional` Pentagon in Washington and the `multifunctional` city of Palmanova in Italy, designed by Vincenzo Scamozzi: although similar in the geometrical compactness of their design, the former has nothing in common with the city, since "*it is an office building for 25,000 workers. It is not surrounded by the country side but by a huge parking area and highways as well.*"[34]
The dispersion of these centers is the cause of a huge (and growing) labyrinth of suburban roads and parking areas. The waste of ground (environmental issue) is the first negative consequence of this planning and of the lack of a three-dimensional design, as already described by Sert and CIAM VIII. Therefore, only the centralization of all functions in one single place, such as the Core, would allow us to avoid any problems concerning enforced mobility.
In this sense the regional shopping center is described by Gruen as a first attempt to transform the mono-functional shop into a `Multifunctional` center, where

34 Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p 214-217

people can go and find whatever they need just in one place. Firstly, it represents an intriguing architectural experiment where the three-dimensional design is aimed at coordinating and centralizing the several urban functions in one unique architectural megastructure[35].
Instead of mere spots inside the suburb, these new architectural-urban shopping models become the utopian experiment by the Austrian-born architect to generate brand new attractive centers inside the negative *"sub-cityscape".*
However, the urban and social failure of this attempt[36] and finally the banalizations of these shopping models spread around the world are recognized by Gruen himself. Nevertheless, Gruen re-uses many of the most successful devices experimented for the design of the shopping center at the urban scale. This seems very clear for instance in his proposal for the renewal of the city core of Fort Worth, where each of these devices will be analyzed.

FORT WORTH

On 9th and 10th April 1956, during the I Urban Design Conference, among the other presented projects[37], Victor Gruen is asked to show and discuss his suggestion for downtown Fort Worth, located in North Central Texas. The project is commissioned by Mr. J.B. Thomas, president of the General Electric Company of Texas, who considers it very important to revitalize the center of the city since the company has made heavy investments serving its population. The investor is impressed by Gruen, after having read an article in the Harvard Business Review in 1954, where the architect underlines that the shopping center`s experience may and should be positively adopted for the revitalization of city cores[38].

35 Though not complete with all the functions and services as a city, the regional shopping center is home to bars, cafés, restaurants, cinemas, conference halls, nurseries, art spaces, promenades, etc.

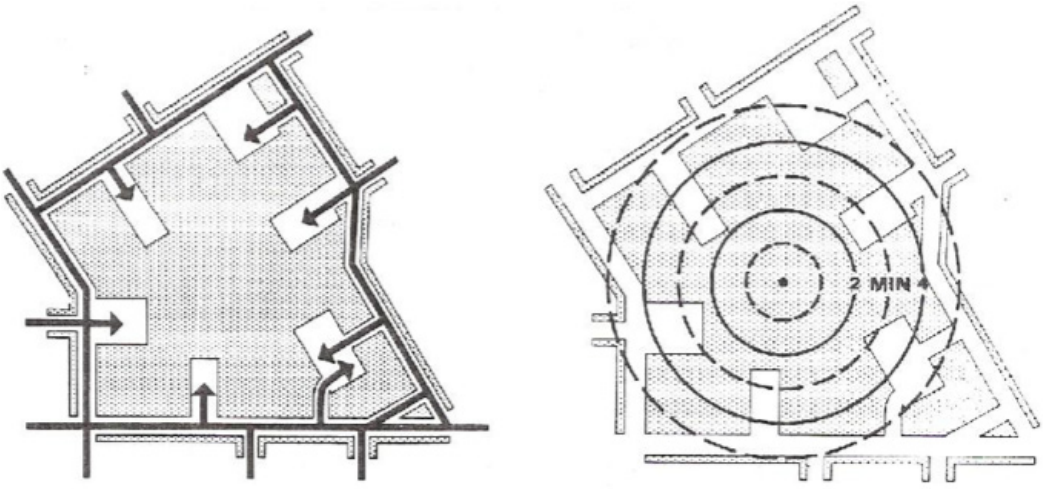
36 The main architectural problem is highlighted by Gruen himself: the necessary huge external parking area is a negative cut, a deep separation between the center and the surrounding suburbia. The parking area becomes a sea of asphalt where the shopping center is a central island, isolated from the rest of world (like the Pentagon); there are no possibilities to become part of the city.
Many criticisms have been leveled at Gruen`s shopping center model and his social consequences such as the "Gruen transfer". See for instance Crawford M., The World in a Shopping Mall. In Sorkin M. ed. by, Variations on a theme park. The American city and the end of the public space. Hill and Wang, New York, 1992. However, since we look at Gruen`s project above all as architects - like scientists in front of the invention of the atomic bomb – we cannot escape being fascinated by his architectural proposals, rather than immediately criticizing them.

37 Such as the Golden triangle of Pittsburgh, the plans for Philadelphia by Bacon and Willo von Moltke, the one by Kahn and Mill Creek

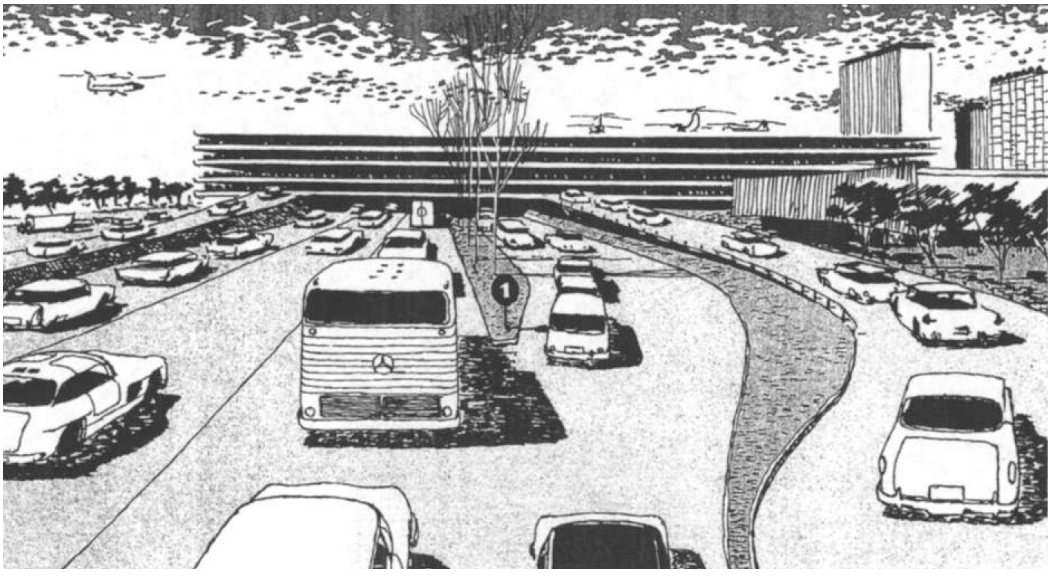
38 See Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 192



Gruen , plan of Fort Worth



Gruen, Finger garage system, Fort Worth



Gruen , Entrance to the Fort Worth by car. View of the Garages.

Gruen explains the project in the "*Heart of our Cities"* with many historical and rhetorical references to his city of origin, Vienna[39]. The traditionalist reference to the limited size and enclosed medieval city is used by the Austrian-born architect as a metaphor for contemporary inner cities, under attack by automobiles. Indeed Gruen affirms that a similar defensive system used in Vienna against the attacks by the Turks, is reused again for the first time by his firm, in Fort Worth, in order *"to repel the invasion of mechanical hordes"* [40].

So the historical reference is not only aimed at highlighting the lost 'civic values', as in Sert`s discourses. It becomes a real source of inspiration for the functional separation between car and pedestrian flows: in Fort Worth the historical defensive walls of Vienna becomes a system of concentric rings of highways - outer, intermediate and inner ones - preserving the central pedestrian nucleus.

Indeed, the inner ring is the impenetrable wall, inside which only pedestrian or public vehicles are allowed to enter. Motorists, coming from the metropolitan region, have to leave their automobiles inside the parking-garages, as seen in the sketch. These multilevel parking terminals are thought to have space for 60,000 cars in total; they are organized on various levels and they extend from the ring-road towards the inside, *"penetrating like fingers"* the central zones. Gruen`s team estimates that it would take 2-4 minutes on foot, to reach the pedestrian areas from the garages, as shown in his diagrams.

The functionality of this radical proposal is based on the results of many analytical investigations into traffic in Fort Worth, following the same analysis procedure prepared for traffic planning in shopping malls: analysis of the flow of goods, people, traffic and studies on merchandising and feasibility.[41] Indeed Gruen's continual reference to his previous work as shopping mall designer is stressed and evident in all his urban design activities[42].

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39 Cities have historically refined different defence systems, mainly based on a series of concentric rings of fortified walls. In order to defend itself from hordes of human enemies, Gruen`s city of birth, Vienna, is a perfect example of fortification which saved entire Europe from sieges by the Turks who invaded the whole of East Europe in the 17th Century. Outside the inner wall there was a deep water-filled ditch and beyond that an open area called Glacis with no houses inside it in order to have an uninterrupted view of the enemy. The second ring was called Linienwall, surrounded by outer communities and it was built in a similar way as the first. Finally an outer ring had the function of slowing down enemy attacks.

40 Gruen V.,*The Heart of Our Cities - The Urban Crisis Diagnosis and Cure*. Thames and Hudson, London, 1964, p.214

41 These analyses are extended to 14 years later, in 1970. The results are considered alarming: *"By 1970 approximately 152 000 cars will visit the central section each day. At least 30 000 of these will move during the peak hour.[...] If cars were permitted on the streets in 1970, the existing street system would have to be enlarged by over 300%."* Gruen V.,*A Greater Fort Worth Tomorrow.* Fort Worth Public Library, LH 976.45315 G

42 Jane Jacobs considers the suburban shopping centers and the parks as the two main themes on which the

In the magazine *Business Week*, October 22, 1955, an article appears about Gruen; the title clearly summarizes the intention of the `mall maker` architect: "*Downtown Needs a Lesson From the Suburbs".* The diseased heart of downtown has to return to its original "*highly compact entity'" of " tightly-knit cores [...], no matter how a city grows outwardly."'*[43]

The best solution for Gruen seems to look at the best available model he invented: the shopping center as new modern urban archetype for the return of the city toward its original concept of market place[44].Some planning devices which are first invented for shopping centers and then applied to the City are indeed listed in the article: (1) the most productive use of land, (2) the free flow of traffic throughout the feeder area, (3) the separation of service traffic, pedestrian traffic, and auto traffic within the center, (4) integration of commercial and non commercial activities.[45]

Now, it might be interesting to focus our attention on some of these urban rules such as the vertical differentiation of different kinds of flows or the integration of different activities inside the Core through the cluster. We will then progressively become aware of the similarities and resonances between Gruen's principles and Sert's Urban Design and Heart of the City discourse discussed previously; these similarities concern, for instance, the radical centralization thought as we have already seen, the three dimensional design and the separation of pedestrians from vehicles. These are proposed by Gruen always with a commercial origin and significance rather than as a pure humanistic value recalling the existentialism of Sartre.

The three dimensional design

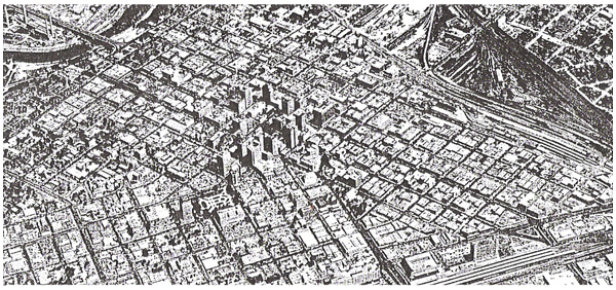
Gruen continuously stresses in his books the necessity for the three-dimensional design of the city, as opposed to the zoning method of planning. We have already discussed this distinction in both the Heart of the City and Urban Design. In particular, we have proved the inconsistency of the definition of the Heart as the fifth element in addition to dwelling, work, transportation and recreation. This aspect is very clear in both Gruen's practice and theory, where three-dimensional

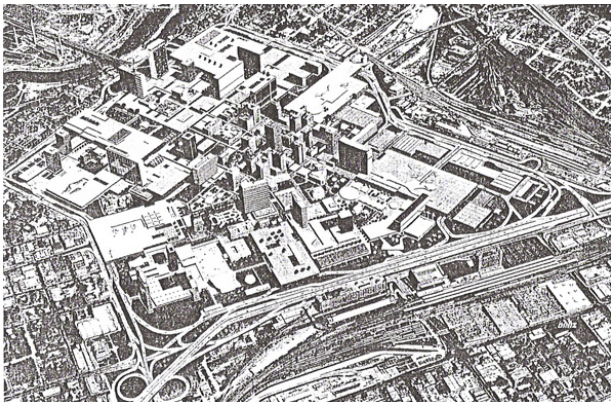
entire urban schemes depend. In Jacobs, J., Do not segregate pedestrians and automobiles. In ed. by Lewis D., *The Pedestrian in the City.* D.Van Nostrand Company, INC., Princeton, N.J., 1965, p. 110

43 Gruen V., A Greater Fort Worth Tomorrow. Fort Worth Public Library, LH 976.45315 G

44 *"A commercial center must be a place that builds not just trade, but good will, too. And unless I`m wrong, that spirit is being blown downtown right now."*

45 Business Week, October 22, 1955, "Downtown Needs a Lesson From the Suburbs`. Business Week, October 22, 1955, `Downtown Needs a Lesson From the Suburbs".







Evolution of Fort Worth: the situation in 1955, the Gruen Plan in 1956 and Fort Worth nowadays.

design even attains an ethical and ecological[46] value in comparison with the previous definitions that we have considered. Indeed, Gruen`s interest in three-dimensional is centered on a conscious exploitation of the ground and territory, avoiding any waste of natural resources, rather than on a synthesis of professions as stated by Sert, or on a new historical space conception as described by Giedion. This is clear especially when he explains the section evolution of his shopping centers, where parking is transformed from a open single floor asphalt 'ocean' into a multilevel storey building, enveloping and connecting several commercial floors[47].

The Three dimensional chart

We have previously argued that the five levels proposed at CIAM VIII are inappropriate when considering the vertical, three-dimensional development. Gruen tries to overcome the limit of the five levels by proposing a musical model[48]. Far from a romantic interpretation of architecture as `solidified music` (Goethe), Gruen deciphers musical composition as the introduction to three-dimensional planning: if the simple succession of sounds and their quantity (duration) are expressed in a unique melodic line, a third dimension is indicated thanks to a secondary linear system, the bass register.

The interactions of various instruments (metaphorically the urban functions) will thus be expressed on all the levels of the scale as far as their position, exact time, quantity of performance and strength (urban quality) are concerned. Therefore the musical score becomes a perfect planning technique for the integration of different three-dimensional functions on a bi-dimensional sheet. However, how can the architect work on the planning of the city in the same way as the composer does with music? Gruen`s ludicrous answer, apparently more playful than functional, is a *"Three-dimensional chart"*: divided horizontally into urban functions (human functions, human communications, service functions and their communications) and vertically in the different project levels (underground, basement floor, upper levels). At the intersection of functions and levels, musical symbols (pianissimo (pp), piano (p), forte(f), fortissimo (ff)) are used in order to express the degree of interaction or its absence in case of a pause symbol (-). This playful chart is not just a mere planning exercise. Indeed Gruen even

46 See more about ecology and Victor Gruen in the later chapter about the Charte of Vienna.

47 This is clear when he explained the section evolution of his shopping centers. See Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 105 and p. 61

48 Probably thanks to his previous experience in the cabaret and as a musician.

Composition of a Center

Tabulation of Functions

Introduction to a Three Dimensional Approach

		Gross Built-up Area	Underground Level 3	Underground Level 2	Underground Level 1	Lower Level	Upper Level	Total Base Structure	Terrace Level	1st Level	2nd Level	3rd Level	4th Level	5th Level	6th Level	7th Level	Subtotal Terrace Level and Superstructures	Total
PRIMARY (HUMAN) FUNCTIONS																		
1. Residences																		
2. Education	Pre-School Education Primary Schools Secondary Schools Specialized Schools Universities																	
3. Culture	Theaters and Concert Halls Museums and Art Galeries																	
4. Entertainment																		
5. Leisure Time Activities																		
6. Sports	Outdoor Sports Indoor Sports																	
7. Health Services																		
8. Employment	Public Administration Private Administration Non-disturbing Industries																	
9. Retail Trade and Personal Services																		
10. Professional Activities	Medical, Legal, Architectural, etc.																	
11. Eating and Drinking Facilities																		
12. Artists Studios																		
Subtotal: PRIMARY FUNCTIONS																		
PRIMARY (HUMAN) COMMUNICATIONS																		
13. Pedestrian Areas	Enclosed and Climatized Open or Protected																	
14. Vertical Communications	Escalators, Elevators, Stairways, Ramps																	
Subtotal: PRIMARY COMMUNICATIONS																		
SECONDARY SUPPORTING FUNCTIONS (MECHANICAL SERVICES)																		
15. Public Transportation	Terminals and Stations Reserved Rights of Way																	
16. Goods Transportation	Delivery Roads and Docks, Conveyor Belts, Service Corridors																	
17. Individualized Transportation	Roads, Storage Space (Parking)																	
18. Utilities	Mechanical Rooms, Space for Utility Lines																	
19. Waste Products	Storage, Maintenance Rooms, Incinerators, etc.																	
Subtotal: SECONDARY SUPPORTING FUNCTIONS (MECHANICAL SERVICES)																		
TOTAL: GROSS BUILT/UP AREAS																		

Gruen , Three dimensional chart

uses this model for the draft of the *"Three dimensional chart"*[49] for the entire University Town of Louvain la Neuve in Belgium, in 1968 as discussed later. In this last tabulation, square meters (mq) substitute the musical symbols, providing a feedback on the quantity of different functions per each vertical level.

The differentiation of flows

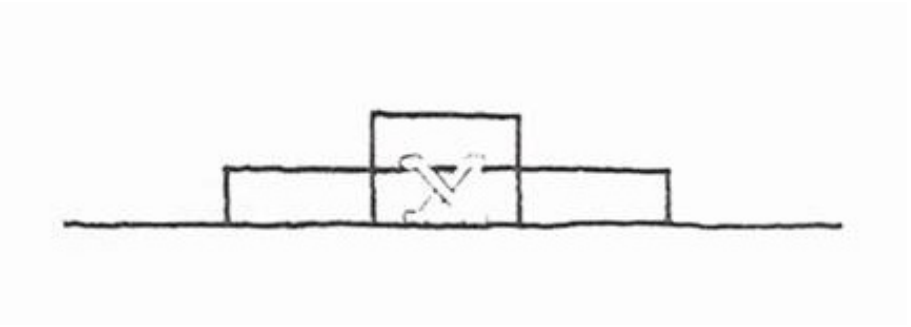
Victor Gruen reminds us that five centuries ago Leonardo da Vinci had already proposed the separation between human functions and utilitarian ones in his ideal city: the basement levels were to be used for carriages and boat traffic, while people on foot would move through colonnades at ground level. With the same purpose the Austrian architect illustrated sections of the different possibilities for a commercial center. The first one shows a center without underground levels, shops on one floor and department stores on two floors.

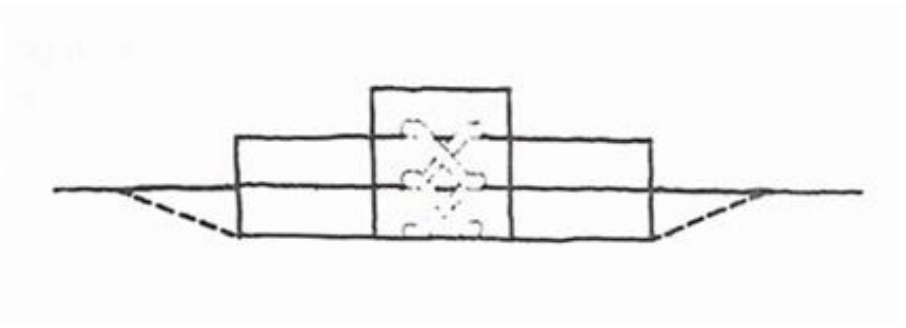
The second illustrates the shopping center with basement, shops on one floor and department stores on two floors. The dotted line indicates the sloping delivery roads connecting the underground level.

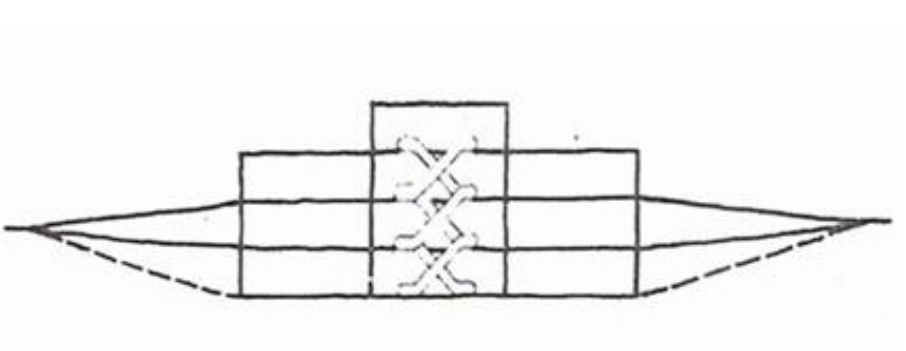
The last one shows a center with basement and another three floors for department stores and shops. The parking area is in the middle between the first and second floors; it consists of huge slopes in order to equally distribute the pedestrian flows on the two first shopping levels (probably the third is considered an inner floor for the bigger anchor store and therefore not directly accessible.)

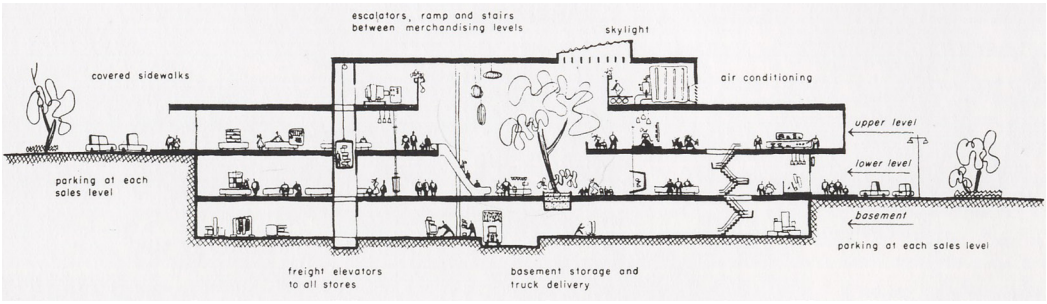
The Southdale Shopping Center, opened near Minneapolis in 1956, is one of the first examples where Gruen positions the parking areas alternately towards the center (to the first floor, then the second, then again to the first and again the second, etc), with access to the two shop levels, which are built upon the storage basement. As we can see in section, in the middle of the basement a truck stops to deliver the goods. It comes from an outside road, connected to the highway and to the parking loop, access to which is permitted only to delivery vehicles. This service road goes underground and only necessitates digging one meter under the basement level, guaranteeing both an economic savings on construction costs and even an increased facility of loading and unloading goods. Moreover, the section shows clearly the differentiation between delivery goods (basement level), private cars (parking sloping areas outside the center) and pedestrian consumers (inside the cluster of volumes). We can consider this schematic division as a commercial translation of the humanistic split between cars and humans as expressed by CIAM VIII. Despite this,

49 The two chartes are published in Gruen V., *Centres for the Urban Environment. Survival of the Cities*. V.N.R. Company, 1973, New York, p. 105 and p. 226-227

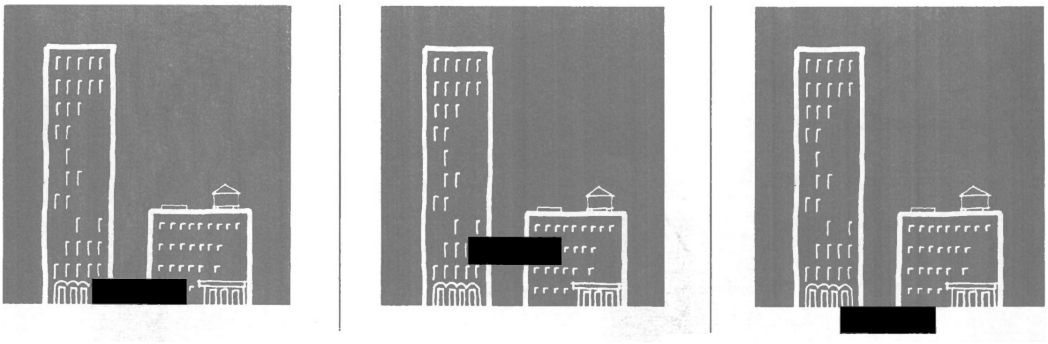






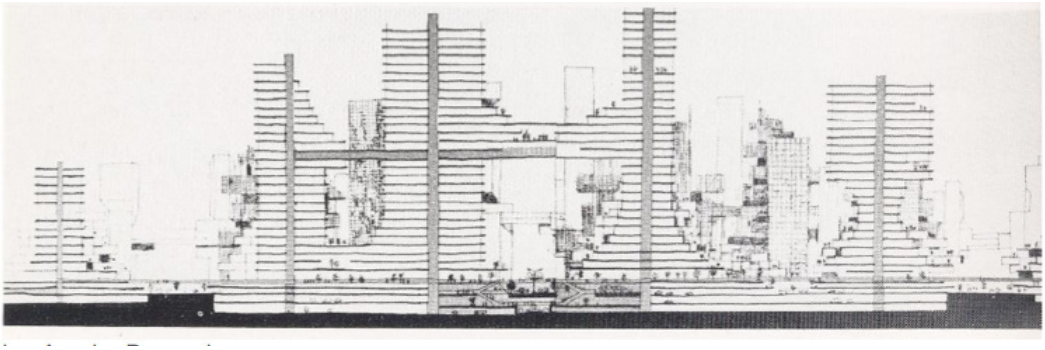


Gruen, Section solutions for shopping center and section of Southdale Shopping Center, 1956



Gruen, Three alternatives for serving facilities in Fort Worth, 1956

Gruen`s design proposals seem similar or even more interesting in section form than some of the projects presented by his contemporary modern masters.
This schematic division is mostly the same as that presented in the Fort Worth project as in other urban projects. Indeed in the `Greater Fort Worth Tomorrow` Report, Gruen shows a scheme of three different systems of services for the inner city. These schemes seem to be deeply related to the previous regional shopping center and they represent three basic alternatives for the problem of the growing delivery system.
The first picture represents the necessity to widen and improve the surface delivery system at ground level. Nevertheless this might not be considered as a final solution because it contrasts with the unique opportunity to have a central entirely pedestrian area. Moreover, improving the facilities on the surface would require considerable expense in order to have new free service space.
The second possibility is to build new elevated delivery facilities. There would be more space at ground level while the space under the roads might be used for productive purposes. However a considerable amount of expensive demolitions and reconstruction would be necessary. This second scheme is developed, for instance, in his project for Los Angeles. The concept, presented in January 1970, is based on the design of 48 highly developed multifunctional centers within the metropolitan area. As we can see from the section diagram, the new towers would have been connected at upper levels, with bridges or terraces containing a rapid transit system. We may also recognize many similarities with the project for Times Square made by Harvard students and with the *`skywalk cities`* designed in the



Gruen, Los Angeles proposal, 1970

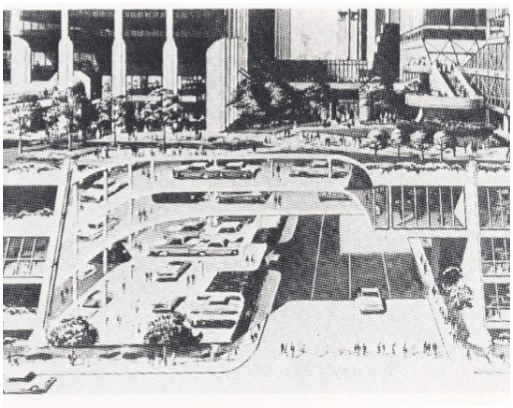
same period in the US[50].
Finally, the third and last proposal concerns the construction of new underground delivery facilities. This seems to be the best alternative in Gruen`s opinion since it was already positively experimented in his existing shopping centers, such as the Southdale Center. It would be practical and economical as well, because the existing basements would be anyway remodelled with the relocation of the underground utilities; moreover, any firm would ask for fast sub-surface trucking facilities which might also be adapted to the existing street system. This proposal has been adapted for the Fort Worth project, where the whole circulatory system is covered by a new basement or platform.

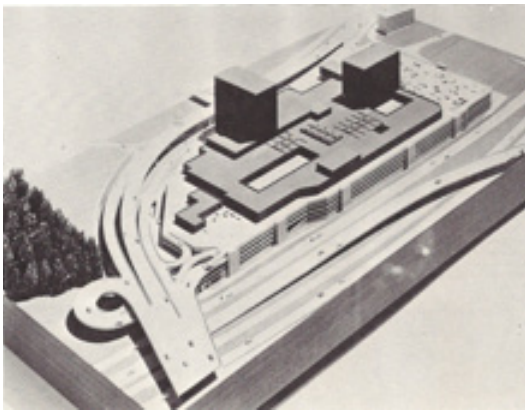
The Platform principle[51] and the Superstructures
Reyner Banham, in Megastructure, describes the Fort Worth project as the *`first of the business-district-on-a-podium projects that inspired megastructuralists`*[52]. He refers to a podium, to a new artificial pedestrian ground level, between the underground parking- garages and the cluster of new buildings. Gruen defines this

50 Urban pedestrian routes which connect the main buildings of the inner city in totally controlled safety. See chapter on Montreal and Vincent Ponte and Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, 2001 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992

51 Gruen V., Centres for the Urban Environment. Survival of the Cities. V.N.R. Company, 1973, New York, p. 105 and p. 107

52 Banham R., *Megastructure. Urban Futures of the recent Past.* Thames and Hudson, London, 1976, p. 42

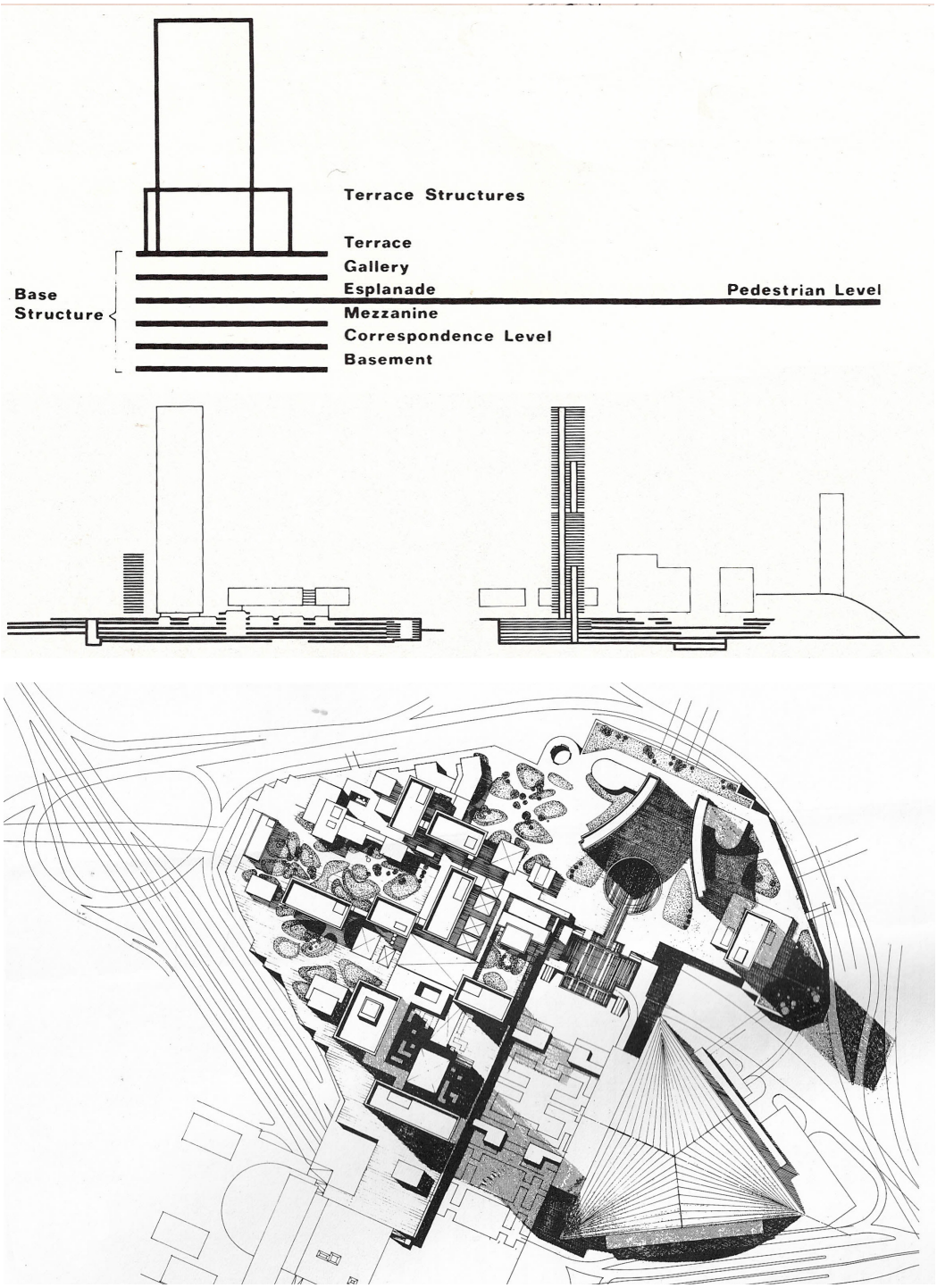




The Houston Center designed by William L.Pereira Associates and the Center Glatt designed by Gruen

`podium`, this `platform` as *"the superior limit of a base structure"* constituted by several functions and services. This platform may generally have different characteristics. It can be organized into various high terraces, it can be a desirable pedestrian area, it can solve the function of green basement in direct contact with hotels, offices, houses,... hosting sports fields, botanical gardens, zoos, and so on. Among the possible examples Gruen uses the Houston Center designed by William L. Pereira Associates. The project is constituted as a pedestrian platform with communication and parking services underneath (40,000 car stalls), while upstairs main squares and promenades surround the main structures. Another interesting project shown as an example is the Center Glatt, near Zurich, designed by Gruen Planning and Architecture Ag. In this example the platform is a pedestrian terrace with restaurants, exposition halls, sport facilities, house units and a medical center as well.
Even more surprising is Gruen`s proposal for the *Tête de la Défense* at the end of the `60s[53]. The project plan developed by Gruen is structured on different levels: a base structure is composed of the lowest underground basement and then the upper levels of correspondence, mezzanine, pedestrian esplanade (at ground floor) and a gallery above the main pedestrian level; the upper level is a terrace-platform, used for cultural meetings, and which houses sports centers, both botanical and zoology gardens, green areas and restaurants. Finally the main high density poli-functional buildings, which are defined by Gruen as `Superstructures` (a few years before Banham`s `*Megastructure*`), rise from the terrace, containing both offices and hotels. A *'Three-dimensional chart'*

53 Gruen mentions only that the plan is in principle accepted in January 1970. See Gruen V., *Centres for the Urban Environment*. Survival of the Cities. V.N.R. Company, 1973, New York, p.139



Gruen, Tête de la Defence: Schematic section of the esplanade and masterplan, 1970

of this *"integrated megastructure"*[54] shows the areas allocated for each function, for a total built area of approximately 9,700,000 square feet[55].

The final composition of 'platform' and 'superstructure' seems coherent for instance with the sculpture by Giacometti described by Giedion in order to highlight the sculptural interrelations inside Le Corbusier`s St. Die` project. Both Gruen`s projects for Fort Worth and for la Defense, may be other important examples of that *'Three space conception'*, as described at the end of the `60s by the Bohemian-born Swiss historian. In particular their new artificial ground level are representative of the relevance of the horizontal plane, as the true *"Constituent Element"*[56] of modern architecture.

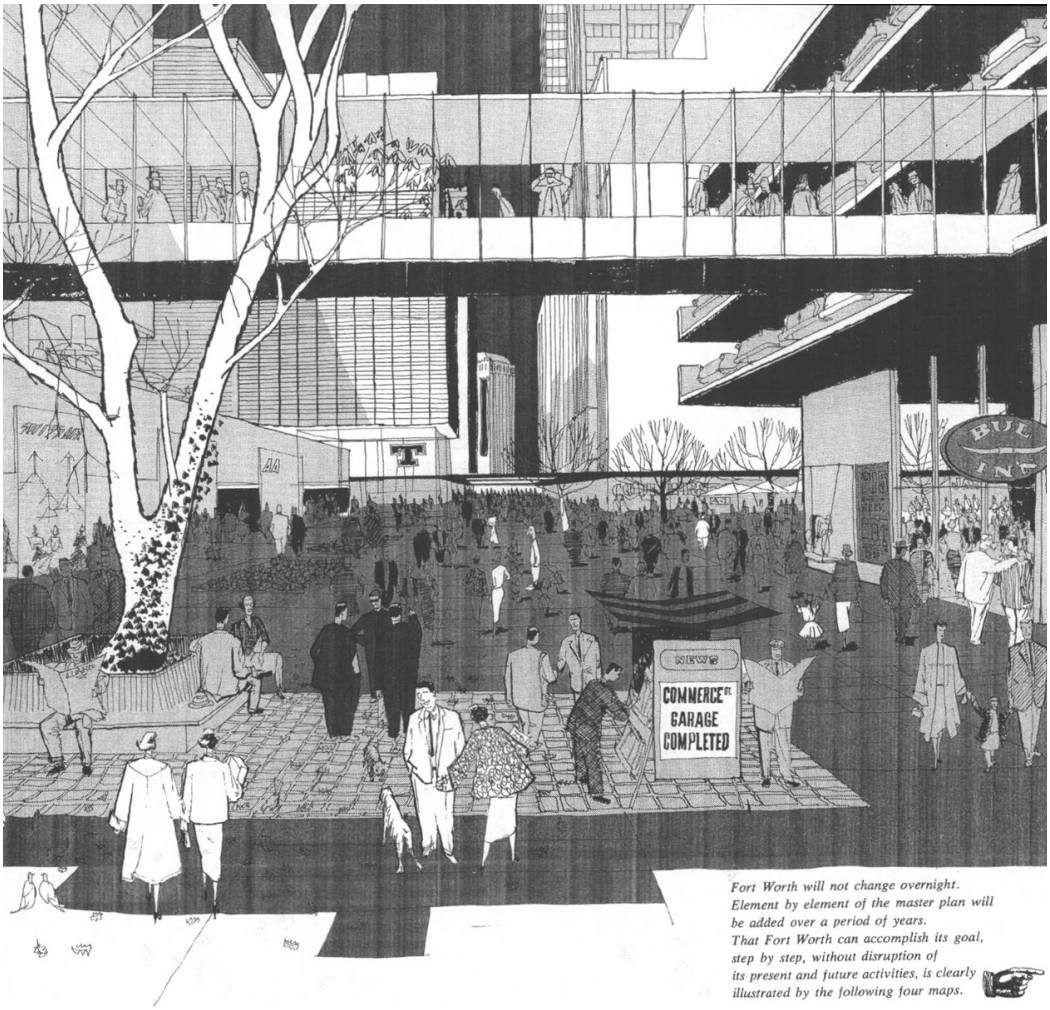
However, in France after the `50s the horizontal platform gains a significant meaning within the urban texture. On the one hand the platform defines the separation between cars and pedestrians, as suggested by CIAM members in order to re-gain the human scale of the city. On the other the platform, called in France "la dalle", becomes an over-scaled element representing the total artificiality of both the natural level and the *"milieu humain"*[57] itself.

54 Ibid. p. 139

55 Developer: EPAD (Establissement Public pour l`Amenagement de la Défense); Planning Team: Planners and architects: Victor Gruen Planning and Architecture; technical staff of EPAD; transportation consultants: Freeman, Fox, Wilbur Smith; economic consultant: Larry Smith and Company.
Gruen affirmed that all the master-plan documents were prepared in four months. In January 1970 Mr. Jean Miller, president EPAD, accepted the master-plan in principle. However, one of the largest sub-developers expressed the wish his own architect, I.M.Pei and Partners from New York, to participate in the planning. Unfortunately the cooperation between the studios of Gruen and Pei was not success, as Gruen himself confirms when he describes the project in April 1972. This is caused *"partly by the divergent wishes of the clients for the office functions, and partly by a different architectural philosophy".* See Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 139 Virginie Lefebvre recently retraces the evolution of La Defense. It is interesting to note that Gruen is never mentioned, while Ieoh Ming Pei is just mentioned as sort of consultant for la Tête de la Défense. See Lefèbvre V., *Paris - Ville moderne : Maine-Montparnasse et La Défense 1950-1975.* Norma, 2003, p. 219

56 Giedion S., Space, Time and Architecture. The growth of a new tradition. Harvard University Press, Cambridge Massachusetts, London, England,1941, First Harvard University Press paperback edition, 2008, p. 673. In particular, Giedion refers to the architecture of Jorn Utzon who perceives the horizontal plan or platform as *"the blackbone of the archietctural composition"*. Ibid. p. 676. The relationship between the architectural buildings and the horizontal plane is not recent, and it originates from the architecture itself: from the ziggurats, the pyramids laying on a plain of arable land. It is with Cubism, with the suppression of the unique point of view, that the plane achieves an outstanding value. See Giedion S. Il piano, elemento della nuova concezione dello spazio. In Giedion S., *Breviario di Architettura.* First edition Grazanti, Milano 1961, Bollati, Torino, 2008, p. 112

57 *"De Metropolis de Fritz Lang au Cinquième Élément de Luc Besson, en passant par Blade Runner de Ridley Scott, l`artificialisation du milieu humain conduit a la catastrophe."* Lefèbvre V., *Paris - Ville moderne : Maine-Montparnasse et La Défense 1950-1975.* Norma, 2003, p. 17



Fort Worth will not change overnight. Element by element of the master plan will be added over a period of years. That Fort Worth can accomplish its goal, step by step, without disruption of its present and future activities, is clearly illustrated by the following four maps.

Gruen, The euclid avenue of Fort Worth

This contradiction is very important since it shows how some of the positive purposes highlighted inside the Heart of the City, *"toward the humanization of urban life",* have generated contrary results. Therefore, Giacometti's sculptural table becomes, at the urban scale, a megastructure where the problematic relationships between infrastructure-architecture, natural-artificial ground level generate social issues within this brand new public space model[58].
However, we can note from Gruen`s sketch that the public space of Fort Worth seems more natural than that in Paris: the artificial podium seems to have been transformed into a more socially agreeable space, thanks to the presence of natural elements and the differentiation of flows at different levels[59].

The cluster

The buildings rising from the urban platform designed by Gruen for Forth Worth, show a specific arrangement related to the human activity. Gruen indeed redesigns the center with a new framework for public life, with *"the creation of human activity nuclei or clusters, based on the scale of acceptable walking distance within each unit."*[60]
The cluster is an important urban theme in the '50s. During CIAM X in Dubrovnik, it even becomes one the key issues discussed by the Team 10 members[61]. The 'Cluster' indeed represents a new way to conceive the community in relation to

58 *"Aujourd`hui, les dalles cristallisent les critiques les plus virulentes adressees aux espaces publics contemporains. On stigmatise leur caractere inhumain, dangereux, leur inconfort."* Lefèbvre V., *Paris - Ville moderne : Maine-Montparnasse et La Défense 1950-1975.* Norma, 2003, p. 17
"Espace fluide, d`une grande simplicité` en surface, il devient incompréhensible dans ses profondeurs et résulte de processus laborieux et extrêmement couteaux.[...] Comme décrire, critiquer, représenter des espaces dont les multiples dimensions mettent en crise la représentation en plan et en perspective utilisée` jusque-la pour projeter la ville? Les espaces sur la dalle renvoient aux limites des techniques de représentation traditionnelles, en même temps qu`a l`absence de nouveaux codes visuels, codes qu`ils semblaient appeler et qu` ils ne sont pas parvenus a susciter. Leur échec est aussi lie` a la rupture entre ingénierie et pensée architecturale. […] absence de qualité des espaces situes entre le sol de la dalle et le sol naturel. Selon la terminologie de Marc Auge`, de tels espaces sont assimilables a` des non-lieux." Ibid. p. 186-187 See also Urbanisme N° 266 : Dossier *"Faut-Il En Finir Avec L'urbanisme De Dalle?"* and Charre A., Maitrise d`oevre urbaine. La théorie voilée. Mardaga, 2003, p.96

59 Indeed the attention paid to the public space is important for Gruen, especially for commercial reasons: public space should be as attractive as possible in order to amplify the desire of the consumer to return again and again.

60 Gruen V. in `Modern Architecture` quoted in Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005, p. 190

61 During CIAM X a Commission composed of Team 10 members is divided into sub-commissions which discussed the issues of 'cluster', 'mobility', 'growth and change' and 'habitat'.
See Pedret A., Dubrovnik 1956, CIAM X: scales of association in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p. 52

its existing patterns and structures rather than its sub-divided parts[62]. For the Smithsons the cluster, *"meaning a specific pattern of associations, has been introduced to replace such group concepts as street, town, city, (group entities), which are too loaded with historical overtones."*[63] Since it is described as a sort of *"clearing-house term during the period of creation of new types"*[64], we can define it as a new attempt to consider the relationships and the associations in the urban settlement, which doesn`t envisage the Heart of the city as the constituent element. This is evident for some of the Team 10 members who describes the Heart as a 5th element, as a belated attempt by the old CIAM members to reconsider the Charte of Athens. Nevertheless, the relationship between 'cluster' and 'core' is highlighted for instance by Woods who considers the Core as the origin of the cluster: *"First the core is determined, then the cluster is formed. […] the core brings clarity and organization to the cluster. The idea of clustering the cells proceeds from the core."*[65] Bakema also finds within the Heart theme similar issues and themes which are later discussed by Team 10 with regard to the 'cluster', in particular as far as the *"relationship"* and the *"in-between"* are concerned, as later described in the III Actor. Therefore we are allowed to imagine a continuity between the two theoretical terms rather than a rupture. This is clear in the third sketch by Tyrwhwitt regarding the formal typological classification of CIAM VIII`s projects[66]. The *"open informal"*[67] scheme is indeed represented by the CIAM member as a cluster whose buildings are immersed inside the landscape and connected by a single main road. For Tyrwhitt this scheme, which has many

62 "The problem of cluster is one of developing a distinct total structure for each community and not one of sub-dividing a community into parts", as it is expressed by the Cluster committee in 1956.Report of the Cluster Committee (8 August 1956) in the provisional report CIAM X Dubrovnik 1956 p. 81. Quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity*. Architecture and Natura, Amsterdam, 1998, p. 271
Strauven shows also the differences of meaning of Cluster for Van Eyck and the Smithsons.

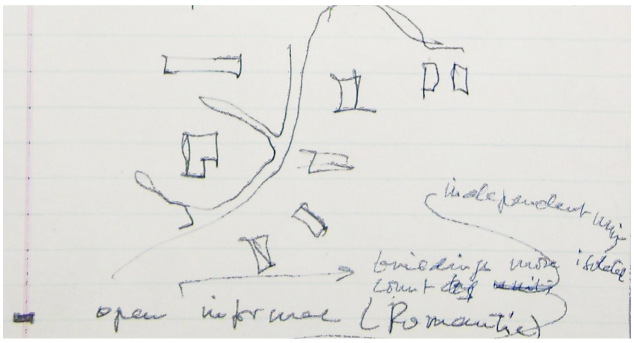
63 Team 10, Arena, June, 1965, p.13 See ed. by Chung J.C., Smithson A. and P., The charged Void: Urbanism. The Monacelli Press, 2005, USA, p.30

64 Ibid.

65 Woods S. in Team 10, The role of the Architect in Community Building. In Bell G., Tyrwhitt J. (edited by), *Human Identity in the Urban Environment*. Penguin Books, Great Britain, 1972, p. 386 However, rather than expressing the core in the masterplan "as a fixed point in the general scheme, out of contact with the greater part of homes", Woods uses the 'stem' as the basic viable structure for the 'cluster'. He stated that one proceeds *"from stem to cluster (rather than from cell to symbol)"*. Ibid. p. 387

66 See chapter on CIAM VIII, CLASSIFICATION OF PROJECTS, CIAM VIII

67 *"C: Open Informal: Here, buildings laid out in an informal way count as independent units and the relationship between the different buildings is not so close. Landscaping elements have greater importance than in the enclosed layout. Open spaces dominate the plan and are less classified than in the formal layouts, generally counting as one large space, sometimes visually unlimited. (Examples: Hiroshima [by Tange], Gustavsberg [by Thunstrom]"*. See ed. by Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City: towards the humanization of urban life. Pellegrini and Cudahy, New York, 1952, p. 106





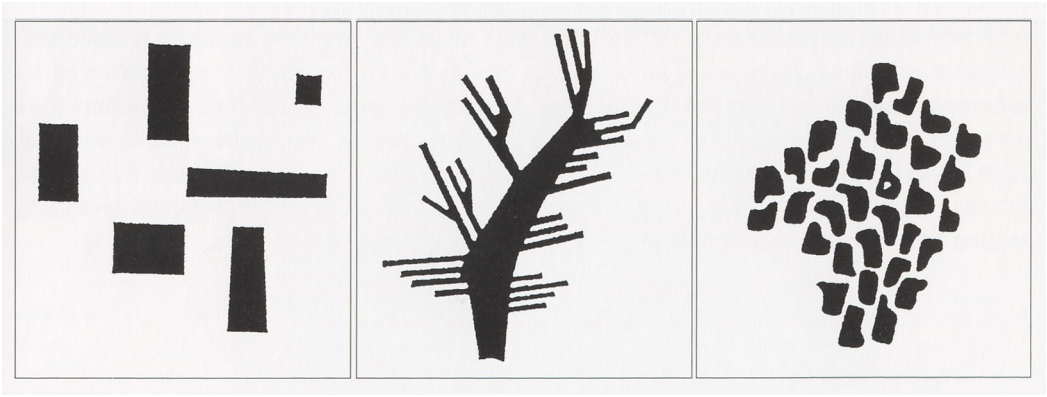
Tyrwhitt J. “Open Informal” and Thunstrom O. and Swedish Co-op, A new Centre for Gustavsberg, Sweden

formal resonances with the later clusters proposed by Team 10, has already been used in the Projects presented at CIAM VIII. For instance she mentions Tange`s Hiroshima, which has been described previously, and Thunstrom`s master-plan for Gustavsberg, in Sweden.

This last project is composed of *“scattered ‘Core-making’ buildings”*[68], which have been caused by both the topography of the valley and its industrially fragmented development since the 1920s. The final result is a dispersion of main buildings in the valley with a linear center made by aligned rectangular buildings (n° 4,5,6,7,8 on the map). This is in contrast with the definitions of the Core as urban centrality or the central square, as represented by some CIAM members and already criticized in the previous chapters, highlighting the complexity of both the theoretical and design issue of the Heart theme. Indeed *“scattered Core-making”* implies an open organization of the buildings which links all the parts of its social community, rather than being an enclosed defined centrality inside the city. Moreover, it is not a defined-Core but it is *“Core-making”*: we might interpret this as a generator of social structure of the community which has the potentialities to improve the quality of the Heart of the City in future development, thanks to its open and flexible urban structure.

Finally, we can state that the ‘cluster’ has already recognized as an important organization of urban space at CIAM VIII, since it is considered as one of the formal

68 *“This valley is now drained and the new plan gathers most of the scattered 'Core-making' buildings within it.”* ed. by Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City: towards the humanization of urban life. Pellegrini and Cudahy, New York, 1952, p. 106



Maki F.: 'Compositional form', the 'Megastructure' and the 'Group Form'

solutions of the Heart of the City. However, there was probably not a clear awareness about its theoretical and physical potentialities, and it is not so fundamental in the CIAM VIII debate as it will become in 1956 in Dubrovnik.

In the '60s the 'cluster' will be part of one of the most intriguing studies made by one of the participants at Team 10 meetings, the Japanese architect Fumihiko Maki[69], who writes about it in his *"Investigations in collective form"*, published in 1964, at the same time as Gruen's "*The heart of our the cities".* Maki describes three different and opposing patterns: the 'Compositional form', the 'Megastructure' and the 'Group Form'. Although he doesn`t directly mention the term 'cluster', we can find many similarities with the last pattern, the 'Group Form', considered as the *"form which evolves from a system of generative elements in space."* [70]

It is a basilar idea which can be found in historical examples such as in the Greek islands or in medieval cities in Europe and which depends on the different characteristics of each place. The study of "Group Form" also leads therefore to an *"attention to regionalism in collective scale"*[71] and to the study of the social relationships between generative elements. Indeed the single element of the Group-form is described by Maki as a possible *"essence of collectivity"*[72].

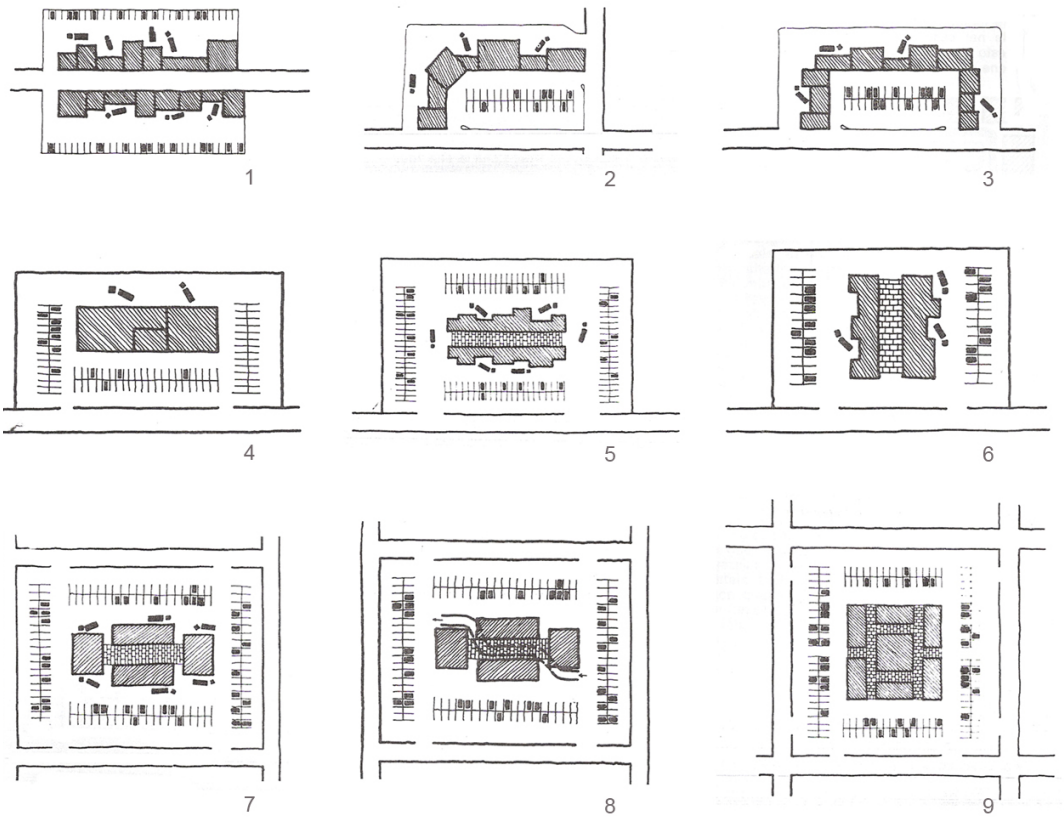
However, if the Smithsons` cluster has resonances with Maki`s Group-form, it is interesting to note the dissonances with Gruen`s Cluster. Indeed, Fort Worth itself,

69 **Maki is also a member of the Metabolism movement in Japan and he was student at GSD in Harvard** attending the courses on Urban Design organized by Sert.

70 **Maki F.,** *Investigations in the collective Form*. Washington University, St.Louis, 1964, p. 14

71 **Ibid. p. 22**

72 **Ibid. p. 19**



Gruen: Evolution of the 'cluster' in shopping models

(1) Firstly, there is an old string typology with a double `personality`: the main representative shop façades are on the street, while consumers enter from the parking areas which are behind the shops. (2-3) Secondly the car park moves in front of the shops and the division between goods and people flow begins. (4) Then the center is still dependent on public viability for accessibility; however the car park surrounds the shops on three sides leaving the fourth behind free for the delivery of goods. This model is present especially in Europe. (5-6) The center is finally `open`: an inner pedestrian area is introduced, while the parking areas cover two or all the outer sides. The disadvantage is still the double accessibility of customers from both parking and pedestrian areas. (7) The center then changes with the introduction of two poles of attraction, with inner viability inside the car park, without as yet any distinction between the delivery of goods and customers. It might be `open` with both inner and outer shop windows, or it can be `introverted` with all the main entrances and signs oriented towards the center, animating positively the inner pedestrian flow. (8) The previous model might have a variation with the introduction of a basement for the delivery of goods; access is guaranteed by an underground road. Finally the right separation between private cars, pedestrians and delivery goods flows is achieved. (9) The last solution consists of a variation of the previous one, with the introduction of a unique big central pole of attraction. See Gruen V., Centres for the Urban Environment. Survival of the Cities. V.N.R. Company, 1973, New York, p. 43-47 Moreover these schemes are very similar to those of Gibberd. See Gibberd F., Town Design. The Architectural Press, London, 1953

which is described by Gruen as having a cluster arrangement of the buildings, is a megastructure. It is part of that second pattern described by Maki as in opposition to the *'Group-form',* since it is a good representation of that *"large frame in which all the functions of a city or part of a city are housed"*[73]. Furthermore, Gruen's cluster, as presented for example in some of his shopping centers, is more similar formally to Maki`s ' Compositional Form', rather than to the 'Group Form', as we can observe from Maki`s sketch. This interesting contradiction can be partly explained if we consider the origins of Gruen's 'cluster planning'. If Team 10`s cluster and Maki`s Group-form are directly linked with the structure of the city in both its historical and social development, then Gruen delineates the 'cluster' from the evolution of the shopping center, from its merchant origins to present day solutions. Therefore, Gruen`s 'cluster' is first of all a commercial design instrument, which might be perfectly expanded upon a platform or in a megastructure[74].

This evolution is clearly described by Gruen in the diagram below; the final solution (n° 9) is wholly similar to the floor plan of the Northland Shopping Center, near Detroit, designed in 1954: the first modern pedestrian commercial center with a `merchant city` form, is formed by a *cluster* plan, where the pedestrian space is the introverted void formed inside the composition of the full shopping volumes.

Gruen's commercial cluster, which is firstly experimented in the architectural scale of the shopping center, plays an important role in the urban project as well. Indeed, it is used by Gruen as a functional and programmatic structure for both the revitalization of downtown districts – such as Forth Worth – and the recentralization of the sprawling areas as well.

Gruen uses the cluster as a basilar organizational tool for his master-plans for brand new cities, which will be analyzed later, in order to achieve, at urban scale, that *"essence of Urbia"* which is present only in the physical Core of the City[75].

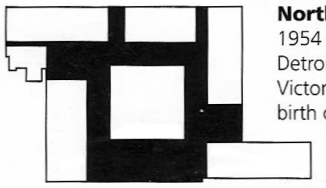
Finally, recent studies[76] have considered the evolution of the `*cluster*` shopping

73 Ibid. p.8

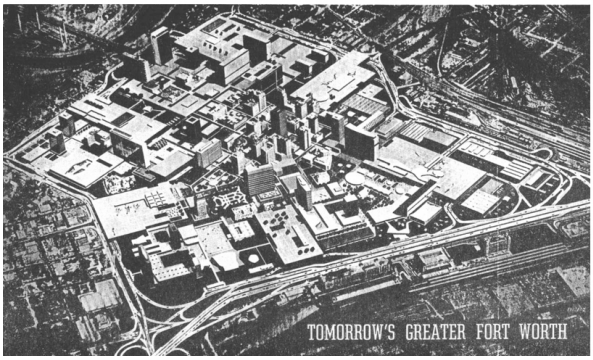
74 Moreover in the '50s Gruen recognizes good cluster examples which are already present in the US, as Alex Wall reminds us: the American College Campus, as the Illinois Institute of Technology designed by Mies, is indeed *"a proof that an ensemble of buildings with limited automobile access is attractive"*. Wall A., *Victor Gruen – From Urban Shop to New City*. Actar, Barcellona, 2005, p. 190

75 *"As a planning concept, it (the regional shopping center) is a formula of the new order to come within our entire urban pattern, and in this term I conclude not what we usually refer to as cities but the entire sprawling fabric of suburbs and metropolitan towns. As a planning concept … it is forerunner of the nuclear or cluster or, as some people call it, the cellular approach for regional planning."* Gruen V., The planned shopping centers in America, Zodiac quoted in Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p. 190 See also the chapter on Gruen and New Patterns

76 See ed. by Koolhaas R., Chung C.J., Inaba J., Leong S.T., The Harvard Design School Guide to Shopping / Harvard Design School Project on the City 2.TASCHEN, Spain, 2001

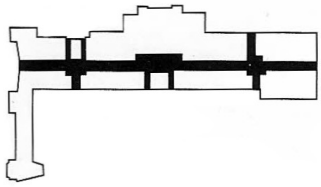


Northland Shopping Center
1954
Detroit, MI
Victor Gruen
birth of the cluster

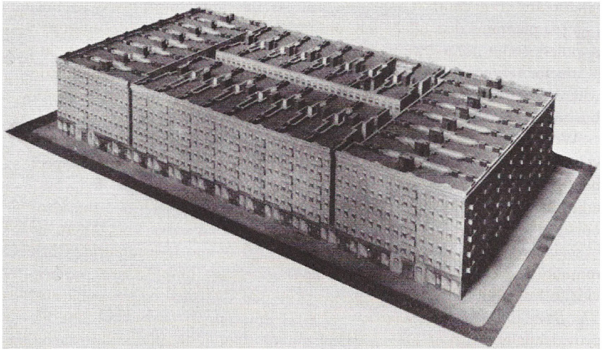


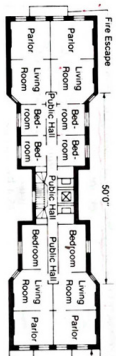


CLUSTER: Northland Shopping Center, 1954, 'birth of cluster' / Fort Worth Center, 1956
The Northland and the Northgate are considered the first examples of cluster and dumbbell by Hermann These schematic drawings are from Hermann D., Mall. In ed. by Koolhaas R., Chung C.J., Inaba J., Leong S.T., The Harvard Design School Guide to Shopping / Harvard Design School Project on the City 2. TASCHEN, Spain, 2001, p. 462



Northgate Center
1950
Seattle, WA
John Graham
birth of the dumbbell





DUMBBELL: Northgate Center, 1950, 'birth of dumbbell' / Tenants in New York, XIXth century
"As in Berlin, so in New York, another "improved" housing design perversely brings no light, no air, but instead monumental overcrowding" See Hall P., Cities of Tomorrow. Blackwell Publishing, Third edition 2002, p.40-41

model in parallel with another scheme: the `*dumbbell*`[77]. All shopping centers, since the `50s , seem to follow one of these two models or they are a mix of both. The dumbbell, contrary to the cluster, consists in digging an irregular canal inside a big solid articulated volume. Before becoming a commercial scheme, the dumbbell is known as a kind of tenement which is present for instance in New York and which is characterized by overcrowding and by very sharp apertures, patios where neither air nor light could enter inside[78].

Both commercial schemes have therefore urban correspondences. However, if the 'dumbbell' is symbol of poverty and inhuman planning related to the market speculation of the 19th Century, then in the '50s with Gruen the 'cluster' becomes an optimistic model which even has the potentialities to save both civic values and environmental health symbolized in the Heart of the City.

77 *"The dumbbell plan separates the building masses, with circulation directed along linear pathways. The cluster plan bundles the building masses into groups, with circulation occurring in the interstices of the masses as a network of intersections. Most plans share characteristics of both types."* Hermann D., Mall. In ed. by Koolhaas R., Chung C.J., Inaba J., Leong S.T., The Harvard Design School Guide to Shopping / Harvard Design School Project on the City 2.TASCHEN, Spain, 2001, p. 462

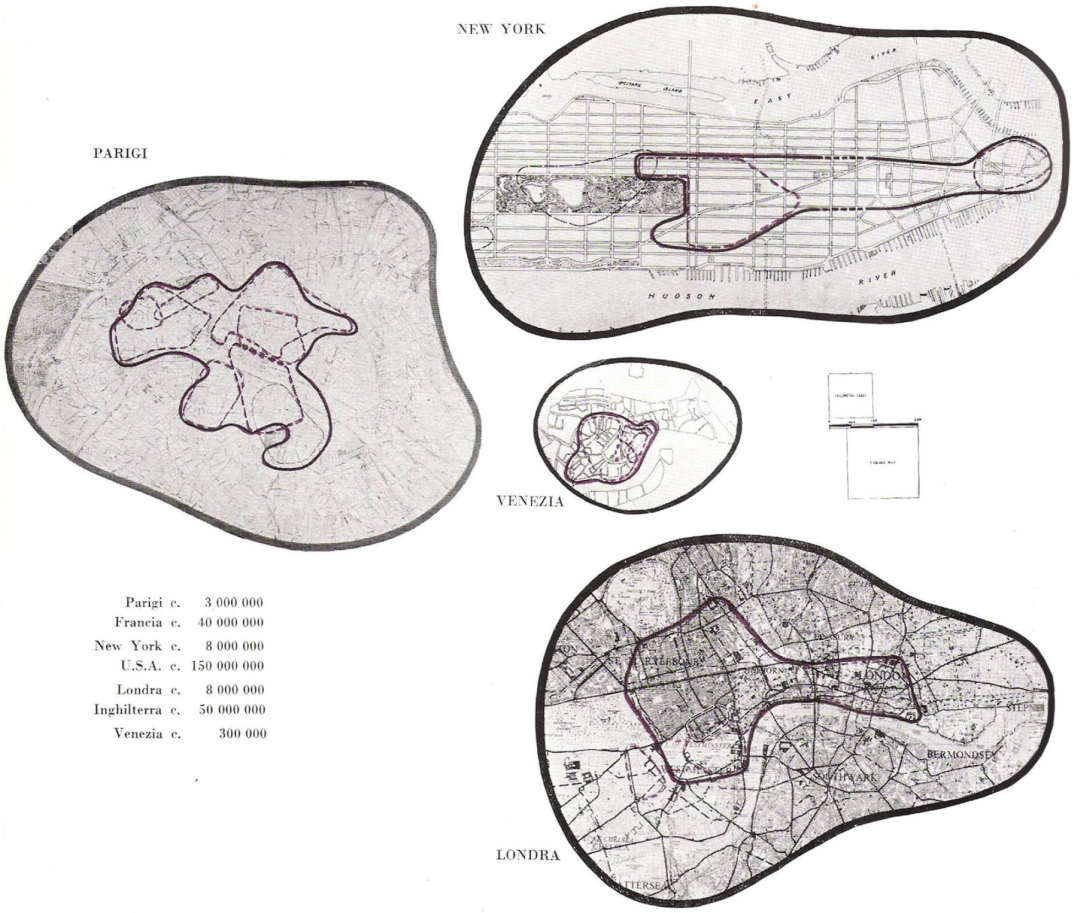
78 *"[...] developed in a competition in 1879, the notorious dumbbell tenement allowed 24 families to be crowded on to a lot 25 feet wide and 100 feet deep, with 10 out and 14 rooms on each floor having access only to an almost lightless (and airless) lightwell. Not infrequently, two families crowded into each of these wretched apartments.[...] Thus an ordinary street block could house 4,000 people and in 1900 some 42,700 Manhattan tenements housed more than 1.5 million peoples, at an average of nearly 34 to each building."* See Hall P., Cities of Tomorrow. Blackwell Publishing, Third edition 2002, p.38 The problem of the overcrowding slums in New York is described also by Sert. See Sert J.L., *Can our cities survive? an ABC of urban problems, their analysis, their solutions.* Harvard University Press, Cambridge. Humphrey Milford, Oxford University Press, London, 1944, p. 19

HEART AND COMMERCE

In the `50s Commerce and the first shopping design experiences are positively considered by some of the modern masters, in order to reorganize the structure of the contemporary city. As far as the Heart theme is concerned, during CIAM VIII[1] some studies are aimed at demonstrating the perfect overlap of the Core`s limits and the commercial area of the City. From the comparison between New York, Paris, Venice and London the J. Alaurant group admits, in a footnote, astonishment on discovering that in the 18th century these cities have inner commercial centers that were proportionately roughly the same size.
But, how far is the heart of the city connected to its commercial entity?
Giedion reconstructs, during the meeting in Hoddesdon, some historical references to commerce and public space. He affirms that only in the Fifth century B.C. did the *agora* start to host commercial functions and only after the 'decay' of the Roman Empire did the public space turn definitely into a market, which became accessible to both pedestrians and vehicles.[2]
The commercial aspect of the Core is also taken into consideration by W.J. Holford in his lecture "*The Commercial Core of London"*[3]*.* If before the War, 60% of the total inner land area was commercial, and one third of the City has been totally destroyed by bombs, then the development of the new reconstruction of the core of London will of course have dealt with the commercial issue, as Holford claims. Therefore, since the `40s, the commercial and shopping design is not only an American theme for a new and increasingly consumerist society. It is strictly connected to the reconstruction of the historical structure of European cities, that has been totally destroyed by the Second World War. Thus the shopping type seems to concern the renewal of both American downtowns, such as in Fort Worth, and historical European centers, such as in London.

From the Shopping center to the City
J.L.Sert, one of main exponents of CIAM and then Dean of GSD, also recognizes in his writings and projects, the importance of the first shopping center experiments as attempts to design new centers of community. For instance, Mardges Bacon highlights both the importance, recognized by Sert in *Can our cities survive?*, of

1 See Alaurent J., *France: Paris, search for the Core of a city.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life*. London 1952, p. 131
2 See Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 20
3 Ibid. p. 97



J. Alaurent, at CIAM VIII. Parallel with the study of Paris, London, New York and Venice

the shopping center in the neighborhood community[4] and the relevance of the new North American shopping center models on his Latin American projects[5] .
If on the one hand Eric Mumford affirms that the direct influence of "*Sert and CIAM's promotion of the Heart of the city concept"* on the development of the postwar shopping center is not clear[6], on the other, in some cases, the fascination caused by these new project experiments is evident in some modern architects, such as José Luis Sert.
For instance, during the Urban design Seminar on the human scale in 1957, the Spanish architect states that shopping centers are the first *"notable attempt in the United States to give the pedestrian a meeting place"*[7]; later in 1961 Sert and Tyrwhitt consider these shopping centers as "*an idea of what these new urban cores might be like. Many of these shopping centers, though built purely for private profit, have found it worthwhile to provide a wide mall or plaza, well separated from car parking areas [...]."* Finally they even consider them as *"our open expression of the new humanizing trend in the urban scene".*[8] Therefore, between the `50s and `60s, both Sert and Tyrwhitt recognizes the same humanizing purpose of the heart of the city in the shopping center. Rather than a pure consumerist machine, the shopping center is assumed to be a heap of intriguing devices, as already described in Gruen, which perfectly mirror and respond to the need for a split between machines and humans.
Moreover Sert seems to agree with Gruen who defines the shopping center, in "Shopping Towns USA" (1960), as a new contemporary archetype, "*one of the few*

4 Bacon affirms that Sert agreed with Stein and Bauer who states that *"the economic success of a neighborhood community and the well-being of its inhabitants depend to a great extent on the planning of the neighborhood shopping center."* See Sert J.L., *Can our cities survive? an ABC of urban problems, their analysis, their solutions.* Harvard University Press, Cambridge. Humphrey Milford, Oxford University Press, London, 1944, p. 71 - 233. quoted in Bacon M., Josep Lluis Sert`s evolving concept of the Urban Core, Between Corbusian Form and Mumfordian Social Practice in ed. by Mumford E., Sarkis H., *Josep Lluis Sert, the architect of Urban Design, 1953-1969.*Yale University Press New Heaven and London, Harvard GSD Cambridge, 2008,p. 97

5 Such as (listed by Eric Mumford) Pietro Belluschi`s McLoughlin Heights in Vancouver, Washington (1942) , Linda Vista, near San Diego. See Bacon M., Ibid. p.97; and Mumford E., *Sert and Hofmann at Chimbote in Hans Hofmann: The Chimbote Project.* Museu d'art Contemporani, 2004, 58,75 n. 23

6 Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69.* Yale University Press, New Haven and London, 2009, p. 109 .

7 Sert J.L., *Urban Design Seminar:the Human Scale,* GSD Harvard, Cambridge, 1957, Twelfth Meeting, 1-3, and Thirteenth Meeting, 1-2 (HU sc Loeb) quoted in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69.* Yale University Press, New Haven and London, 2009, p. 135

8 Sert J.L., Tyrwhitt J., *The Shape of the American City.* In Contemporary Architecture of the World 1961, Tokyo, Shokokusha, 1961, p. 106 quoted in Mumford E., *Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69*. Yale University Press, New Haven and London, 2009, p. 144

new building types created in our time"; its aim is to satisfy new contemporary human needs and activities, becoming a new *"urban organism",* a *"shopping town"*[9].

It is not surprising therefore that the 'shopping center' becomes an urban project theme proposed to students at GSD Harvard, before and during Sert`s tenure as Dean. Indeed already in 1945-46, students are asked to design a commercial center for Hingham, Massachusetts in order to *"remedy present difficulties"*. The development requires the allocation of the site and of the building areas needed for commercial purposes, recommendation on traffic, architectural plans and finally the establishment of a procedure for the growth of the Commercial Center for the next 10 years.[10]

The final proposals still seem a little primordial, more similar to small theatres with some annexed shops and facilities than a shopping center; furthermore there are just a few required functions: stores, automative repair and service, cinema, offices and other facilities (note that there is no car parking!).

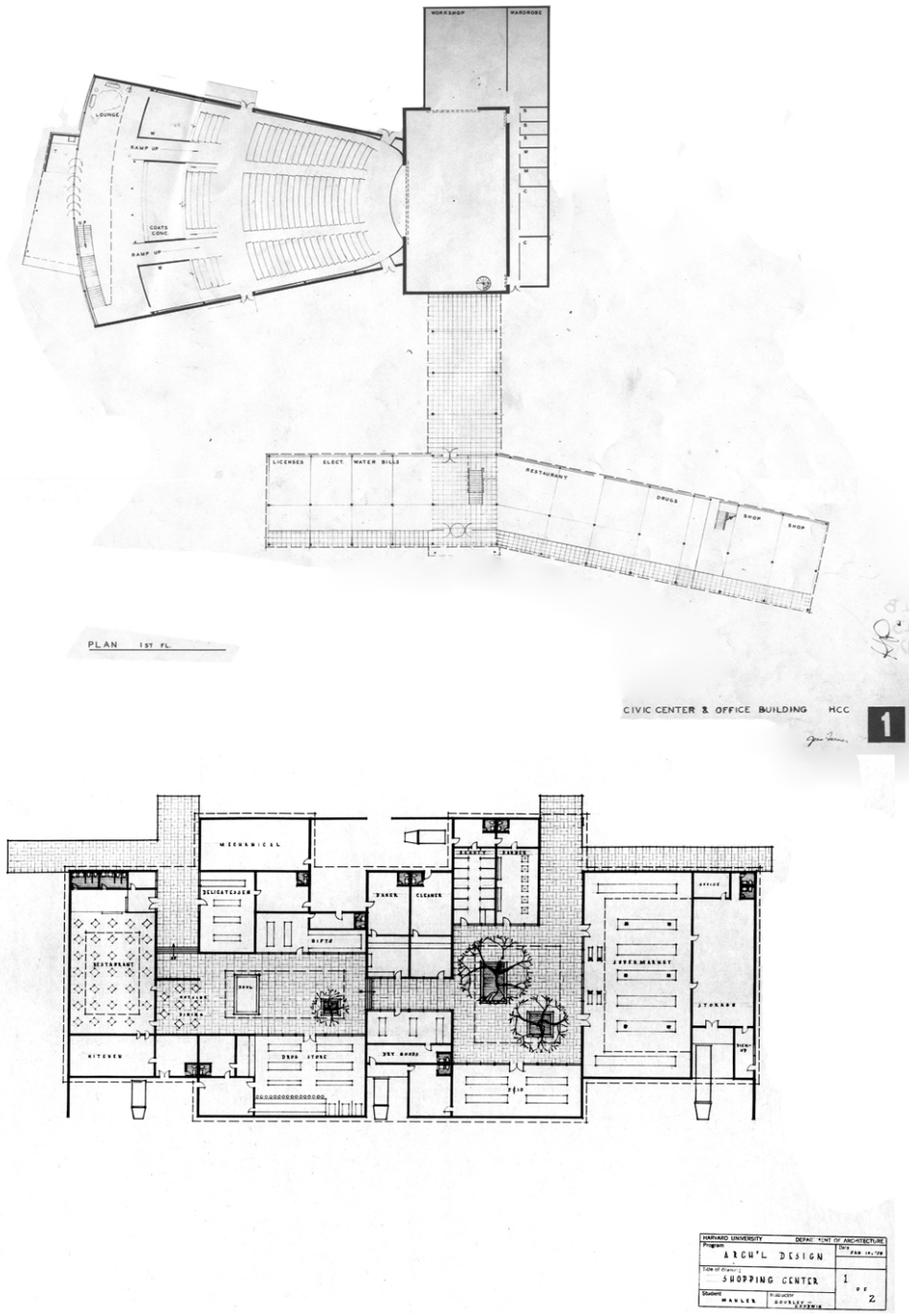
More interesting still are the proposals, for instance, during the autumn term 1957-58, when the course theme of 'shopping centers' introduces the study of pedestrian and vehicular movement, which will become an important aspect also in the design of urban civic centers. Moreover, more complexity of functions is required: supermarket, drug store, restaurant, five and ten, delicatessen, gift shop, beauty shop, barber, dry goods, laundry, bakery, facilities and parking for at least 300 cars.[11]

Finally this integration of different urban functions within the shopping center will later become the main theme of the Seventh Urban Design Conference, held in 1963: "*The Shopping Center as Nucleus of Inner-City Activity",* underlying the overlap of the shopping center and the Core. However, the interest in this synergy is already present at the first two Urban Design Conferences (1956-1957), since the Dean (Sert) invites the 'mall maker' Victor Gruen to explain his Fort Worth`s project, as discussed previously.

9 Gruen V., Smith L., *Shopping Town USA. The Planning of Shopping Centers*. Reinhold Publishing Corporation, USA, 1960, p. 11 Among the examples of existing commercial projects, he mentions the Lijnbaan Center *"in the reconstructed Core of Rotterdam"* designed by CIAM member Jaap Bakema with van den Broek in late `50s, which will be discussed later. Ibid. p. 12

10 Harvard GSD Special Collection, GSD Student CA 182

11 Harvard GSD Special Collection, GSD Student CA 184-185



Shopping Center students` projects at Harvard: academic years 1945-46 and 1957-58 (GSD CA182-184)

From the City to the Shopping center

Gruen`s urban projects are an important example of the biunique[12] influences between shopping and urban projects. In fact modern urban projects also influence the design of the new shopping centers and this is verifiable.

For instance Morris Ketchum, Victor Gruen`s first partner, writes about Sert in the final chapter "*neighborhood and regional shopping centers"* in his book *'Shops and Stores'* (1948). He specifically comments on the project *Cidade dos Motores* (Motor City - 1944-47) near Rio de Janeiro, designed by Sert and Wiener. It is one of the most important of Sert`s projects together with his proposal for Chimbote in Peru (1946-48) which has been presented and discussed during CIAM VIII.

Ketchum states that if the right conditions exist, "*regional shopping facilities should be planned as a part of a larger group of civic and institutional buildings also serving the same geographical area. The tremendous possibilities of this approach to regional planning are proved by the layout of the proposed Cidade dos Motores."'*[13] The layout of the Latin American project is therefore considered a model for the right integration of shopping facilities in other urban functions. It becomes a specific and remarkable case study for all shopping center designers, and represents, with its social and political character, *"the central theme of the VIII CIAM in 1951, the heart of the city."* [14]

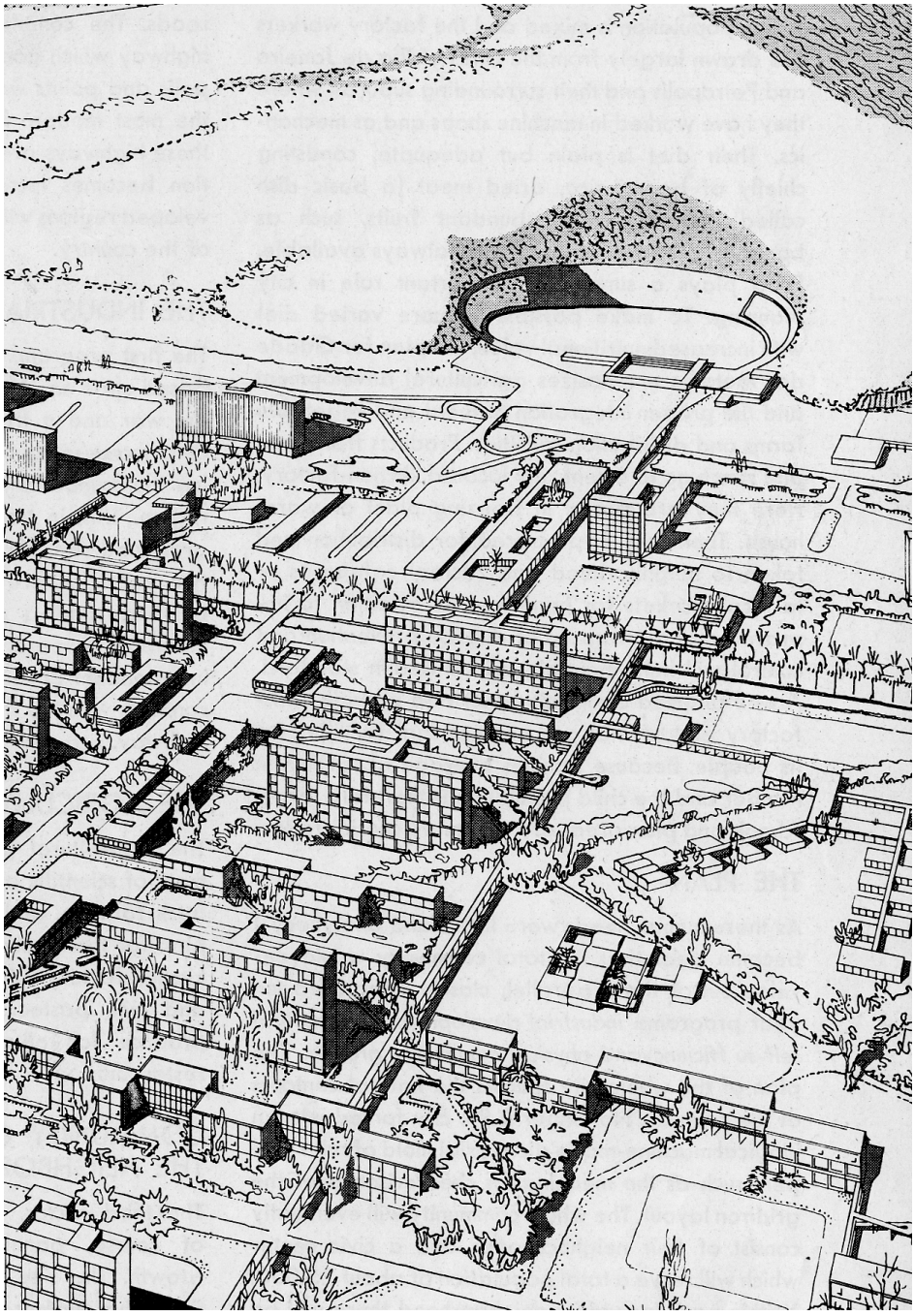
Ketchum continues describing the new Latin American city as a regional center divided into three sections: one for trade, recreational activities and administration, one for culture and the third for sport. He highlights that each section is organized and planned as a *"single co-ordinated unit"* which serves the surrounding residential areas. In particular administration, amusement and commercial buildings are grouped around the town square, the civic center, the *"civic nucleus"*. Here there are: a shopping center, a hotel, a central restaurant, cafes and *"a moving picture theatre"* (so-called by Ketchum for a movie theatre/ cinema). The latter embraces the northern side of the public space, called in his drawing with the Portuguese word *Praça* (public square). The use of this local word is coherent with Sert`s proposal to maintain a relationship with local vernacular traditions and demonstrates a "*careful fusion between modernism and local identity"*[15]*,* as underlined also by Bacon. The new commercial *Praça* is

12 It is not true that only urban projects are influenced by shopping centers. Also the shopping design refers to modern urban project. There is a biunique influence.

13 Ketchum M. Jr., Shops and Stores. Progressive Architecture Library, Reinhold Publishing Corporation, Knickerbocker Printing Corp., New York, 1948, p. 281

14 Ibid. 92

15 Bacon M., Josep Lluis Sert`s evolving concept of the Urban Core, Between Corbusian Form and Mumfordian



Paul Lester Weiner, Josep Lluis Sert, Paul Schulz, Cidade dos Motores, 1944-`47

then connected through a promenade (the typical *corso*) to the western stadium and a swimming pool, adjacent to the mountain.
The whole system, coherently with the later discourses in Hoddesdon about the human scale, is then designed with a neat separation between the pedestrian paths and the network of highways: the former pass through all the three sections of the regional center, while the latter allow the connection with the external neighbourhoods. This system will be developed in many future architectural example of shopping centers.
Finally, Sert`s project also seems to influence Ketchum`s considerations about urbanization. Indeed, at the end of the description, he affirms that Sert`s proposal is a proof of the necessity for *"organized recentralization"* over *"planless decentralization".*
Sert`s belief in the necessary centralisation of the city for the preservation of civic values, as expressed later in Hoddesdon and at Harvard, directly influences the shopping design activity. This latter becomes an attempt to generate new centralities of social and commercial mixture, rather than isolated islands inside the suburb. Victor Gruen, as already discussed, will vehemently carry on the belief stressed already in the '40s by his colleague Morris Ketchum. *"The heart of our cities"* (1964), will become a intriguing overlap between Sert`s urban design and Ketchum`s commercial teachings.

Commerce in *Town Design*
A few years before the U.D. Conferences, in 1953, Frederick Gibberd (1908-1984) already introduces the shopping center as a urban element in his book *"Town Design"* : *"town design embraces architecture, landscape and road design, and these arts being so embraced lose their individual identity to become a new things, 'The Urban Scene' "*[16], as Gibberd explains.
We have to note that this definition of *Town Design* is not so far from *Urban Design* as depicted by Sert and his colleagues a few years later: indeed the necessity for a synthesis of different professions and different scales of design is present in both terms.
Also David Grahame Shane mentions Gibberd's book as an *"excellent early manual"*[17] linked with the coeval attempts of Abercrombie to define Urban Design

Social Practice in ed. by Mumford E., Sarkis H., *Josep Lluis Sert, the architect of Urban Design, 1953-1969.*Yale University Press New Heaven and London, Harvard GSD Cambridge, 2008,p. 91
16 Gibberd F., *Town Design.* The Architectural Press, London, 1953, p. 5
17 *"A series of international conferences helped to define the field [urban design] and the British architect and town designer Fredrick Gibber provided an excellent early manual in his Town Design (first published*

as a new field between architecture and planning. In particular, *"Town Design"* shows *"early American examples of shopping malls as urban designs"*[18]. It is therefore an important theoretical work which anticipates many of both Gruen`s considerations on commercial design and Sert`s thoughts on Urban Design.
"Town Design" is divided into four main parts: design of the complete town, central areas, industry and housing. In the second part Gibberd introduces the Shopping Center which may be conceived as part of the town center or as a mix with other building types. He classifies five main categories of *"shopping groups"*[19]. The last is the "*shopping precinct"* where the pedestrian commercial street is separated from car traffic, with external parking areas or at different levels. This last type is the *"regional or decentralized centre"*, which *"is now beginning to appear in America"*, as Gibberd affirms. It is described as the *"result of congestion and the high costs of land in central areas, coupled with the use of the private car"*[20], and therefore arranged at the intersection of a motorway system. Therefore Gibberd considers congestion, the high cost of central land and the use of the car as the causes behind the development of the shopping center, rather than its enemies and counterforces, as deeply stressed by Gruen ten years later[21]. However, Gibberd is not interested[22] in a deeper discussion on this shopping group, since it is a "regional form" of the existing types of shopping buildings.
He considers it more interesting to study in more detail the relationship between the design of the five shopping types and the design of the *"various forms of centre"* which are related to them. Gibberd`s succession of diagrams, from the

in 1953, revised 1959). Abercombie was a prominent British town planner who was used to working with architects like Gibberd, but also saw the need for a new field between the two disciplines." Grahame Shane D., Urban design since 1945 – a global perspective. Wiley publication, UK, 2011, p. 9

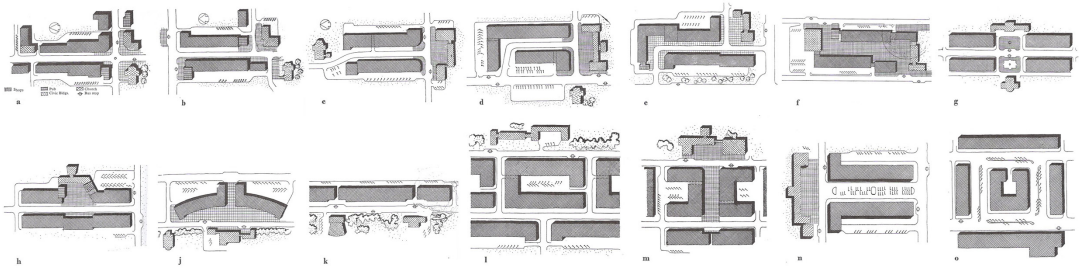
18 *"In particular he included early American examples of shopping malls as urban design. He compared these simple armature-and-enclave designs directly to his own practices at Lansbury and Harlow."* Grahame Shane D., *Urban design since 1945 – a global perspective*. Wiley publication, UK, 2011, p. 100

19 Here the first four groups are described. The first is the market, a series of flat rows of stalls or booths selling usually cheap goods; but the market is not a spatial type, Gibberd affirms, since the market needs only a flat surface and an urban wall as a boundary; therefore its presence is important for the life of the city but not for the specific design of the public space. The second is the shopping street which is "now the most popular form of shopping street"; its essential requirements are the continuous window, a balance of interest between the two sides of the street, easy access for the pedestrian to enter shops and cross the street, the facilities for private car parking and for service vehicles usually behind the shop. The third is the department store, which embraces characteristics of both the market and shopping street under a single roof. It is thought of as an island which can be accessed from different points. See Gibberd F., *Town Design*. The Architectural Press, London, 1953, p. 97-103

20 Ibid. p.98

21 Probably the effective consequences of the shopping center are generally similar to what Gibberd states, even though Gruen`s first proposals are the inverse.

22 At least in the first edition of 1953.



Gibberd`s shopping arrangements` scheme : from the shopping street (a), to the addition of a civic space on a T-junction (b-c-d), to the design of two squares at both ends (e), to the junction of two public spaces in a bigger central one with external parking (f), to different formal designs of the central public space on an axis with the civic buildings (g-h), to the one-sided concave commercial building opposite the civic building (j), to the visual enclosure with heavy planting between the civic buildings (k), to the rectangular pattern where "the heart of the block" is designed for car parking instead of a pedestrian shopping space (l), to a "H-shaped shopping space" (m), to the solution of car parking on the shopping street (n), to the central island block with external car parking (o). Many of these diagrams represent already existing shopping patterns in cities such as the new town of Hemel Hempstead, designed by G.A. Jellicoe, which forms the (k) scheme, with commercial strip looking towards the river. Gibberd F., Town Design. The Architectural Press, London, 1953, p.114-122

shopping street to the central island, is impressively similar to Gruen`s schemes[23] discussed previously in order to explain his 'cluster' idea, through the historical and urban legitimacy of his Regional Shopping Center.

Finally, among the projects presented by Gibberd in order to explain his diagrams, there is also the Willow Run center[24]. The entire plan of the town outside Detroit is composed of five neighbourhoods; each of them designed by one of the five architecture firms such as Stonorov, Louis Kahn and S.O.M.. The community and shopping center, which is not built, is then designed by Saarinen and Swason who propose a clear separation between pedestrian fluxes, demonstrating clear influences from Sert`s projects.[25]

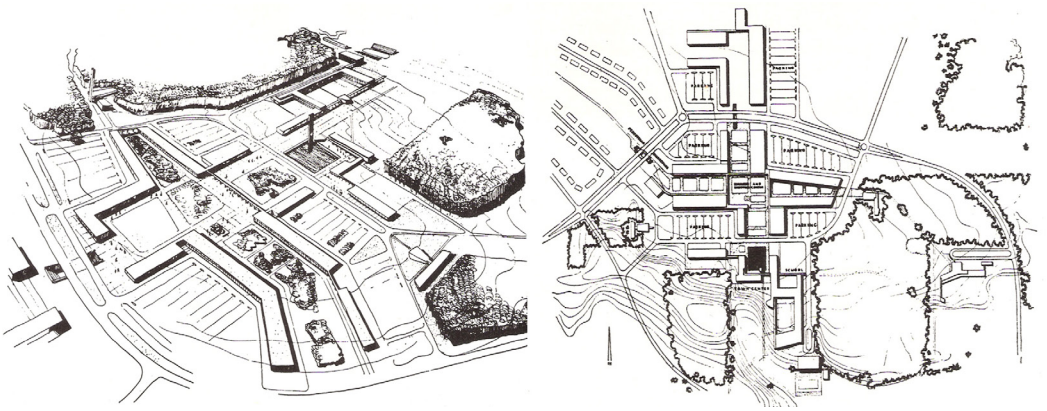
The project is published also by Ketchum himself, in *"Shops and Stores"*, a few pages before Sert`s *Cidade dos Motores* and just before the description of the Regional Shopping Center typology. Gruen`s colleague highlights the importance of this project, as *"a model for post-war planning […] in a well planned over-all pattern"*[26], and with *"well spaced"* commercial buildings which would have served

23 Gruen`s schemes are published 20 years after "Town Design" of Gibberd. We can assume with certainty that Gruen studies Gibberd`s research and he is influenced by it as well, since he redrwas or copies some schemes from "Town Design" in the draft report of the Commercial Study of the new city of Louvain la Neuve, in 1969. See Victor Gruen, Urbanisme et Architecture s.a., 'Commercial Study', Draft report, Octorber 1969, in Louvain la Neuve Archive, Dossier 15, p.14-16

24 Ibid. p.116

25 as Mardges Bacon affirms. See Bacon M., Josep Lluis Sert`s evolving concept of the Urban Core, Between Corbusian Form and Mumfordian Social Practice. in ed. by Mumford E., Sarkis H., *Josep Lluis Sert, the architect of Urban Design, 1953-1969.*Yale University Press New Heaven and London, Harvard GSD Cambridge, 2008,p. 96

26 Ketchum M. Jr., Shops and Stores. Progressive Architecture Library, Reinhold Publishing Corporation,



Saarinen and Swason, Willow Run centre, Detroit, 1942-`43

all the external neighbourhoods. Similarity to Sert`s Latin American project, Willow Run also arouses interest for both town and shopping designers: it represents a modern example of integration of urban functions and services, where human and functional devices are well accorded following modern precepts and increasing contemporary needs.

Synergy between commerce and public space

As far as the Heart of the City theme is concerned, the similarity between Gibberd`s and Gruen`s schemes, Ketchum`s interest in both Cidade dos Motores and Willow Run Centre and Sert`s fascination for the new shopping centers, are therefore proof of the important synergy between commercial and public space design in the `50s. This is a very important aspect even nowadays. If the "heart of the city" is often culturally sold out merely as the main shopping center of the city[27], as mentioned in the introduction, then the shopping design experience itself has transformed the urban devices present in the city, influencing our contemporary public space[28]. Moreover, if *"the world of the shopping mall [...] has become the world"*[29] itself, as Margaret Crawford criticizes, then the serious interest of the '50s in

Knickerbocker Printing Corp., New York, 1948, p. 271

27 For instance Rialto bridge is called the Heart of Venice, Auckland`s shopping center is called its heart, the same is true in Tokyo,...

28 See for instance Strøget, the car-free zone in Copenhagen designed by Jan Gehl. See Gehl, J., *Life Between Buildings: Using Public Space,* translated by Jo Koch, Van Nostrand Reinhold, New York, 1987.

29 Crawford M., T*he World in a Shopping Mall.* In Sorkin M. ed. by, *Variations on a theme park. The American city and the end of the public space.* Hill and Wang, New York, 1992, p. 30

shopping design and urban design might help us to reconsider our commercial urban devices in the city and their social duties too.
Indeed, rather than banal and populistic places of consumerism, such as the contemporary proposals of John Jerde[30], the first shopping types are recognized by Sert and other architects as outstanding urban experiments which might have improved their capacity to design an even more complex urban structure.
This is true even if we have to admit the failure, for example, of Gruen's utopian commercial experiments, resembling consumerist versions of Fourier`s Phalanstery.[31]
This is evident in both a social and urban point of view: on the one hand the excessive commercial fascination and disease, the so-called "Gruen Transfer"[32], has substituted that human *rendezvous* experience which was stressed during CIAM VIII; on the other the overly enclosed centralization of the multifunctional shopping centers has cut any relationship with the externally dispersed urban context, transforming the center into a brand new artificial Filarete`s Stellar City[33]. Nevertheless we can deconstruct the shopping type and observe that Gruen`s proposals, among those of some of the `50s shopping designers, still conceal intriguing devices[34] and themes for our contemporary urban design and for our Heart of the City`s discourse. A particular hidden issue in Gruen`s commercial theory is for example the environmental theme, as briefly outlined previously, in relation to the Heart of the city theme and the previous CIAM`s Chart of Vienna.

30 See http://www.jerde.com and Anderton F., You Are Here. Phaidon Press, 1999

31 *"[…] the fragmented forms and functions of modern living are being brought together under the mall`s skylighted dome. This suggests the possibility that the unified world of premodern times might be reconstituted through the medium of consumption, an ironic reversal of the redemptive design projects imagined by nineteenth-century utopians such as Fourier and Owen, who sought unity through collective productive activity and social reorganization. Although Fourier`s Phalanstery merged the arcade and the palace into a prefigurative mall form, its glass-roofed corridors were intended to encourage social intercourse and foster communal emotions, rather than stimulate consumption."* Crawford M., *The World in a Shopping Mall*. p. 6

32 *"The Gruen Transfer (named after Victor Gruen) designates the moment when a 'destination buyer', with a specific purchase in mind, is transformed into an impulse shopper, a crucial point immediately visible in the shift from a determined stride to an erratic and meandering gait."* Ibid. p. 14

33 As Enzo Paci warned as early as 1954, when writing about the danger of a too enclosed and Man centralized urban interest of the city. It is interesting to note that Gruen designs his later urban proposals mostly admitting the failure of the shopping model. Anyway the most interesting urban experiences which we are going to analyze are always not entirely completed or not built at all. Therefore it is hard to state if the translation from the architectural shopping model to the urban scale is successful or not. To read about Gruen`s shopping flaws, see Hardwick M.J., *Mall Maker – Victor Gruen, Architect of an American Dream.* University of Pennsylvania Press, Philadelphia, 2004, p.216 and Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p.39

34 Such as the cluster, the three-dimensional design, the differentiation of flows, the platform, the multifunctional center, the Superstructure, ... as already described in the previous chapter.

THE CHARTER OF VIENNA AND THE ECOLOGICAL HEART

Die Charta von Wien

The influences between Modern architecture and shopping design is clear in Victor Gruen. In particular his city of origin, Vienna, Europe`s "*center of intellectual and cultural life*"[1], represents his professional and personal link with both the European historical city and European modern architecture, such as the buildings of Adolf Loos[2]. It represents for Gruen a sentimental mix of architecture schooling and traditionalist urban origins. This becomes evident for instance when Gruen uses Vienna as the main reference for his American project for Fort Worth, shown at the First Urban Design Conference at Harvard in 1956, as already described.

Although still an anti-Semitic city, Gruen is still nostalgic of his life in Vienna, during his permanence in the US[3]. Thus, in the late `60s, he decides to retire from his firm in Los Angeles, Victor Gruen Associates, and he moves back to his old central district of the Austrian capital. Here he opens another architectural firm, Victor Gruen International, characterized by different project attitudes compared to the US one, based and founded on shopping center design.

In the same period Gruen recognizes the general American perversion and bastardization - still present nowadays - of his original shopping center idea, represented by thousands of new banal types spread around the US. *"I refuse to pay alimony for those bastard developments"*[4], Gruen affirms in 1978. His original and idealistic idea of a mix between commercial and humanistic values, between functional and urban themes has been adsorbed only in its purely economic character. The failure of Gruen`s shopping center purpose is evident when, as described by Hardwick, the 'mall maker' himself starts to fight against the construction of a shopping center outside Vienna, which would have sucked

1 Gruen V. , *Centers for the urban Environment: Survival of the Cities.* Van Nostrand Reinhold, 1973, p. 173. A complete biography of Gruen is described in Hardwick M. J., Mall Maker. Victor Gruen, Architect of an American Dream. University of Pennsylvania Press, Philadelphia, 2004

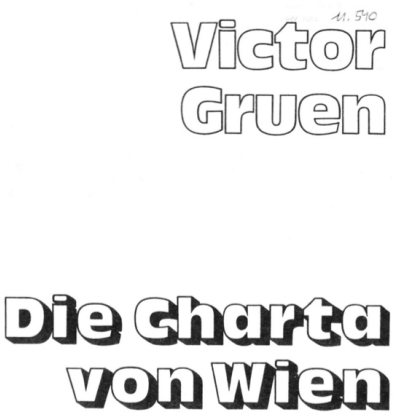
2 M.J.Hardwick states that Gruen is influenced by the buildings of Loos. Hardwick M. J., Mall Maker. *Victor Gruen, Architect of an American Dream*. University of Pennsylvania Press, Philadelphia, 2004, p.10 Moreover he attends the Vienna Academy of Fine Arts, where also Peter Behrens (teacher of many modern masters: Le Corbusier, Mies, Gropius,..) teaches.

3 See Ibid. p. 210

4 *"In a speech given in London that year (1978), he criticized Americans for perverting his ideas. The very popularity of the shopping mall gave him easy target. He looked at what he had built and despised what he saw. "I refuse to pay alimony for those bastard developments", he proclaimed. Gruen said that American in their blind pursuit of profit had corrupted his vision."* Hardwick M. J., *Mall Maker. Victor Gruen, Architect of an American Dream*. University of Pennsylvania Press, Philadelphia, 2004, p. 216



CIAM, The Athens Charter, 1933



Gruen, Die Charta von Wien, 1973

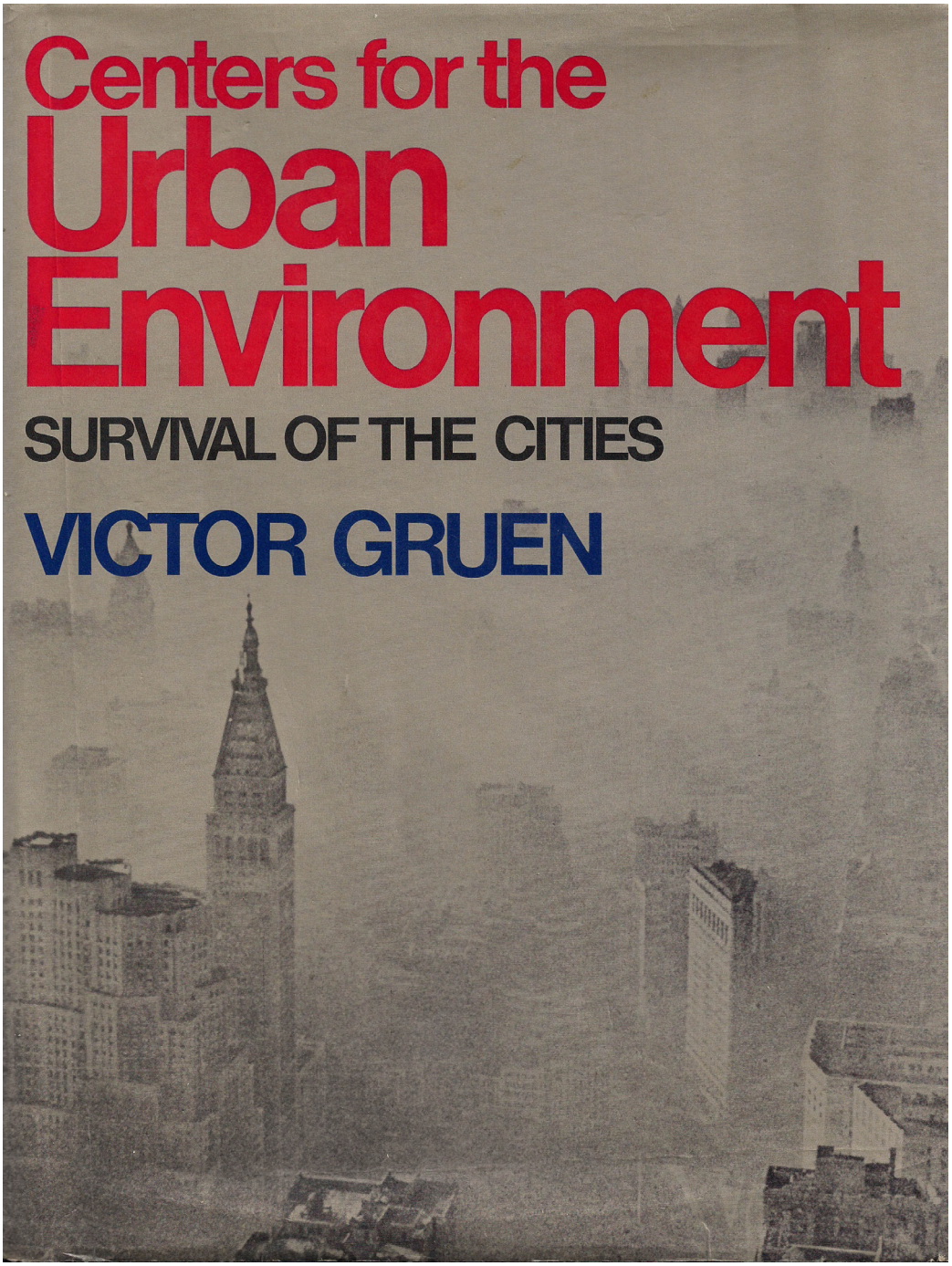
all the commercial attractions out of the city[5]. The '*Impero Irresistibile*'[6] of consumerism is infiltrating more and more his old Europe. In a certain sense, it is his own invention which turns against him, destroying the life of his beloved native city.

In front of this failure, Gruen concentrates his theoretical and design activity on a determinant theme which has already been mentioned, as discussed above, in "The heart of our cities": the environmental issue. In 1970 he even founds the Victor Gruen Foundation for Environment Planning, while his beloved Vienna becomes the main reference for his new manifesto for architecture, centered on the ecological theme: "*Die Charta von Wien"* (The Vienna Charter). Another reference is clearly CIAM itself, in particular the Athens Charter, written by the CIAM founders in 1933[7]. The latter was conceived not only as a reference, but as an integrated part of the new charter, because of the importance of some of its

5 This anecdote is described by Hardwick in Hardwick M. J., *Mall Maker. Victor Gruen, Architect of an American Dream.* University of Pennsylvania Press, Philadelphia, 2004, p. 217-219: *"American cities, with their comparatively short histories and small traditions [...] offered people little beyond traffic jams.[...] for Europe the thoughtless copying of the American shopping centre has been truly catastrophic."*

6 Title of the book by Victoria de Grazia who describes how US consumerism has conquered the world. De Grazia V., *L`impero irresistibile. La società dei consumi americana alla conquista del mondo.* Einaudi, 2005

7 Published for the first time in 1941 anonymously due to political reasons and a second time in 1957 with a preface by Le Corbusier and an introduction by Jean Girandoux, the Charte d` Athenes is divided into three parts. The first concerning 'The City and its religion' wais still valid in Gruen's opinion. The second part, *"The present condition of the City - Critical and Remedy"* is subdivided in five chapters where the results of the research and the requirements for improvement are exposed. The third part deals with the final conclusions, formulating the architectural and urban principles.



Gruen, *Survival of the Cities*, 1972

outstanding, always valid principles[8]. Indeed Gruen affirms that CIAM`s Charter is very powerful for its foresight. In particular his interest in the 76th paragraph, concerning the right shape of the human environment: *"Le dimensionnement de toutes choses dans le dispositif urbain ne peut être régi que par l`* échelle humaine*"*[9]**.** The humanizing process, as deeply stressed with the Heart of the City at CIAM VIII, therefore becomes the main theme which should be highlighted again for a new manifesto of environmental planning.

However, at the same time, Gruen affirms the necessity to rethink and update the Athens Charter to contemporary conditions and requirements, which have changed profoundly over the last forty years. Indeed the Charter hasbeen a powerful means of both urban transformation and professional training for many architects. This has led to the diminution of construction density and to the separation of urban functions. But these principles have been vehemently asserted and highlighted during the `30s when their validity was still intact. Unfortunately, their myopic application, without considering the new urban conditions, hascaused urban decay and the division of the city into *"mono-functional ghettos"*. Gruen`s denunciation in the `70s, is thus similar to what CIAM`s and Team 10`s members has been saying since the `50s. Indeed the Heart of the City itself is a first attempt, in 1951, to spoil the rigidity of the four functions within the urban structure, rather than being merely its 5th element, as already argued[10]. Moreover, the Athens Charter was proposed on the analysis of thirty-three cities (twenty-eight in Europe, three in the USA and two in Asia), while Gruen reminds us that in the `70s there are 131 megacities in the world (38 in Europe, 35 in Central-North America, 10 in South America, 42 in Asia, 4 in Africa and 2 in Australia) and it is no longer possible not to consider the diversity and complexity of all of them[11]. Furthermore, he stresses that 16-18% of the total world population lives in urbanized districts: it means that cities, even in a crisis, are still attractive destinations[12].

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8 This is further proof of CIAM's influence on Gruen`s activity, as already highlighted in the similarity between the theme of the CIAM VIII and Gruen`s book "The Heart of our City".

9 *"The size of all things in the urban system can be governed only by the human scale."* in *La Charte d` Athénes*, avec un discours liminaire de Jean Girandoux. Editions de Minuit, 1957, chap. 76

10 See chapter about "Origins of the CIAM 8 discourse" and about three-dimensional design.

11 *"In den 131 Millionenstädten der Welt leben zur Zeit 320 Millionen Menschen. [...] Von den131 Millionenstädten der Erde liegen 38 in Europa, 35 in Nord- und Zentralamerika, 10 in Sùdamerika, 42 in Asien, 4 in Afrika und 2 in Australien."* Victor Gruen Foundation for Environmental Planning, *Die Charta von Wien*. Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I

See also in Library of Congress, Washington. Victor Gruen Papers: Box 48, Folder 5

12 Gruen is writing in 1972; a few decades later, in 2006, half of the world population will become urbanized! Shall we need a third Charter?



Gruen, “Conservation of nature or pollution through technology?”

These new conditions and issues are also described inside his book *“Centers for the Urban Environment. Survival of the City”,* published in the same period as the Charter, in 1973. As we can read from the Foreword, the book *“represents an expression of the effort of the Foundation to bring about a greater public understanding of the decisive role which “Environmental Planning” should and must play if the ecological and biological balance of our planet, which is essential for the continuous existence of the human species, is to be assured.”*[13]
Similarly to the Charter, the “Center of urban Environment” is centered on both the human and environmental issue of the city. This character exactly mirrors the honours gained by the founder of the Foundation. Indeed Gruen proudly reminds us in the introduction that he has been officially recognized as both *“Architect of the People”,* during his presentation at Rice University,and *“Architect of the*

13 Foreword by the Foundation, written by Tracy Susman, the Director. She also mentions Dr. Claudia Moholy-Nagy, who died at 35 years old in 1971 and who worked intensively for the book. *“Her idealism, dynamism, devotion and wide knowledge remain an inspiration to us all.”* in Gruen V., Centers for the Urban environments, survival of the cities. Van Nostrand Reinhold Company, Los Angeles, 1973 p. v. Claudia Moholy-Nagy is the daughter of László Moholy-Nagy (1895-1946), well known painter and teacher at Bauhaus, and Sibyl Moholy-Nagy (1903-1971), architectural critic and professor of architectural history.
Gruen writes in “The heart of our cities” (1964), to have asked Sibyl Moholy-Nagy for an opinion on Lucio Costa`s Horizon City. The answer is: *“a town conceived in the sign of the football”*. Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure*. Thames and Hudson, London, 1964,p. 112. The connection between Gruen and Moholy-Nagy`s family is yet another proof of the link between the modern movement and the 'mall maker'.

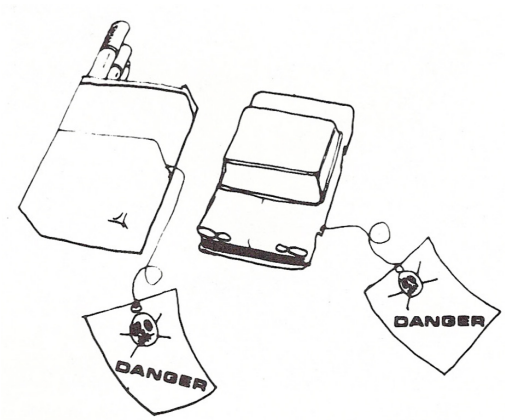


Figure 1-9 Why danger-labels only on cigarettes? Why not on cars?



Figure 1-10 Who should get the Oscar? Individual heating? Industry? Oil refineries? Dumping? The automobile?

Gruen`s sketches

Environment"[14] in an article in Fortune Magazine. Both the book and the charter represent a continuity with CIAM's statements, in particular with the Heart of the City. In fact the efforts towards the humanizing process inside the city, are the same at CIAM VIII as in Gruen`s writings. The brand new element introduced by Gruen is the emphasis on the ecological environment, as a rising necessary theme, in the early `70s, in addition to preservation of human values.

We can consider therefore Gruen`s environmental interest as an updating, or translation to his contemporary context, of those humanistic purposes expressed for instance by Giedion, quoting the humanism and existentialism of Sartre. Indeed the mechanical tools "which take commands" and the excess of trust on progress are considered by Gruen as the same enemies for both environmental and human entities.

Moreover, the environmental aspect is already subtly present in some of the discourses at CIAM VIII too. For instance, Gregor Paulsson draws the connections between Habitat, Ecology and Heart of the City during his speech *"The past and the Present"*, in Hoddesdon[15]. But the '50s are too soon for CIAM members to recognize environmental sustainability as a key theme for planning. It is difficult also for Gruen himself to introduce it as the basis of planning 20 years later, as Alex

14 Gruen V., Centers for the Urban environments, survival of the cities. Van Nostrand Reinhold Company, Los Angeles, 1973 p. x

15 *"The task of the town planner is to make a good habitat for man as an individual as well as for man as a social animal."* Paulsson G., The Past and the Present in Rogers E.N., Sert J.L., Tyrwhitt J., ed., *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p. 28



Figure 1-3 The first men.

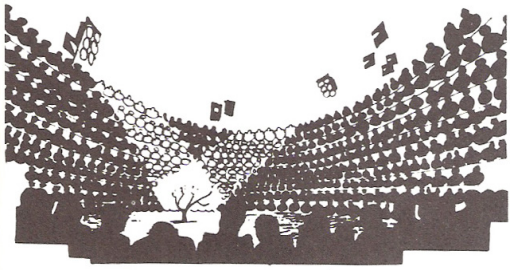


Figure 1-4 The last tree.

Gruen`s sketches

Wall affirms, *"when the threat to the environment was neither widely accepted nor understood.*[16]*"* Indeed the UN's first major conference on international environmental issues (United Nations Conference on the Human Environment), held in Stockholm in 1972, is coeval with the Vienna Charter.
As far as this latter is specifically concerned, the principle theses are listed and summarized in four points in the first part:
A. Man stays at the medium point of each urban planning and architecture.
B. The first aim of both urban planning and architecture must be therefore the satisfaction of both human needs and human hopes.
C. The conquests of Science and Technology must be used in order to satisfy the main aim: the greater satisfaction of Human life.
D. It is necessary not to allow Science and Technology to become mere purposes. Indeed they can neither tyrannize nor liquidate the Humanity. [17]
The Charter then continues with another short six chapters, where the principles are explained.
The second concerns immediately the ecological theme and is indeed entitled '*The global environmental crisis':* Gruen focuses his attention on the problem of the battle between Man and Nature, hoping that the first will never win. *"Homo sapiens is winning the millennium-old war against nature"*, Gruen affirms. Our final victory would mean our death too, since we are an organic part of Nature

16 See Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005, p. 231
17 Victor Gruen Foundation for Environmental Planning, *Die Charta von Wien.* Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I

itself. *"Nature will die, and man, realizing too late that he is himself part of nature, will suffocate in the stench of the corpse.*[18]*"* A way to survive would therefore be to transport the hierarchy of values from "*increase and quantity"* to "*humanism and quality"*[19], in a new organic approach to planning.
The urban proposal for a foundation of a new Cellular Metropolis, which will be analyzed in the next chapters, will be Gruen`s attempt to consider the city as an organic structure in continuity with the living organism, keeping humanity as first qualitative element for planning.
The third and fourth chapters regard *'The needs and hopes of Man'* and *'The essence of urbanity',* defining urbanity as the place of total 'personal freedom', where everyone is free to choose where to work, where to live, where to exchange ideas etc.
As fundamental conditions he lists:
1- compactness
2- maximum integration of human functions
3- maximum separation between mechanical-service functions and human functions.
The essence of urbanity, sometimes called the essence of *urbia*, is nothing more than "*the Core of the city, which I shall call its `heart`"*[20]*,* as he mentions some years before in his book *'The heart of our cities'*. Therefore, the Heart of the City is an integrated part of the new rising human-environmental theme. Indeed, the three conditions are also the same as the CIAM VIII discourses or the First Urban Design Conference. In particular, the aim of centralization, compactness of the urban structure passes from the survey of civic values (Sert) to the rescue of the environment (Gruen).
The fifth and sixth chapters deal with *'Bureaucracy of the Project'* and *'The essence of the Architecture'.* Gruen denounced the fact that cultural urban principles which were dictated by the master architects of the `30s for their present conditions, have been translated anachronistically into laws, rules and urban regulations in a totally transformed contemporary society. For instance, *zoning*, which is originally thought of in order to control the dispersion of industrial zone development,

18 Gruen V., *Centers for the Urban environments, survival of the cities.* Van Nostrand Reinhold Company, Los Angeles, 1973 p. 4
19 Victor Gruen Foundation for Environmental Planning, Die Charta von Wien. Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I
20 Gruen V.,*The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p. 12

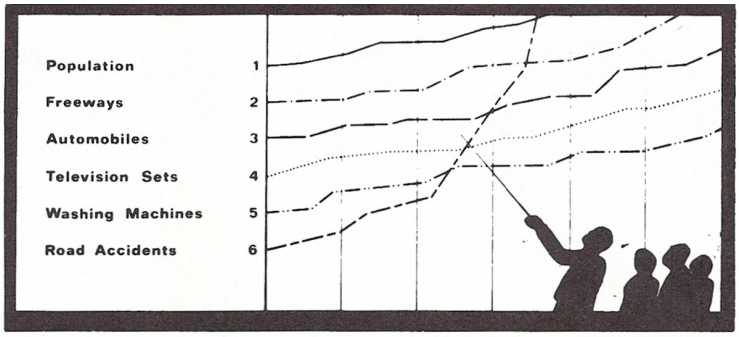


Figure 1-15 Chart of urban growth rates: We point with pride!

Gruen`s sketches

has transformed the city, *"the urban organism into ghetto-like enclaves"*[21]. The latter are the opposite expression of the "multifunctional" Heart, as previously analyzed, which is sustained by the integration of different urban services and functions in a three-dimensional design. With zoning the essence of the city is therefore destroyed, traffic increased and nature scarified. In this scenario the architect has passively assisted, as a passive witness, to the metamorphosis from the original Greek profession of *Architekton*, as master of construction, to a mere *décorateur de façades.* However, if on the one hand the architectural profession is degraded, on the other the architect has to resolve the biggest tasks and problems ever faced before: the urban and environmental crisis. In order to perform these tasks, the architect needs to recognize that "all human society" is the main client, as Gruen affirms.

Finally, in the last chapter '*New oportunities, ways and paths',* Gruen attacks traffic specialists, whose work is causing the augmentation of traffic volume and velocity and the consequent laceration of the city structure. The Athens Charter, Gruen states, has already defined that traffic would have caused the total chaos in cities, even where the cars were very few in comparison with his contemporary situation.

Traffic is another theme already explained and criticized before in "The heart of our cities". We may conclude therefore that most of all Gruen`s environmental discussion in planning is thus overlapped with his previous discourse on the heart of the city.

21 Victor Gruen Foundation for Environmental Planning, Die Charta von Wien. Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I

Moreover, on the one hand, in the `60s Gruen re-interprets the CIAM VIII theme, through the book *"The Heart of our Cites",* referring it to his shopping design experience in the North American context; on the other, in the early `70s he uses the Heart issues to re-vision CIAM itself. Indeed the environmental interpretation of the Heart of the City allows Gruen to reinterpret all CIAM`s principles many years after its decline. In particular, the first theoretical expression of CIAM, the Athens Charter, becomes for Gruen a still valid and contemporary tool in the `70s, rather than an obsolete and dangerous vision of the city as considered for instance by Team 10. Fifteen years later at the end of the CIAM in Dubrovnik by young Team X members, Gruen detects a possible continuity of the Modern Movement: its basilar principles are recognized by Gruen as still useful tools for contemporary and future environmental discourse, which needs only to be updated coherently with mutable urban-social conditions in order to reaffirm their validity.

Vienna

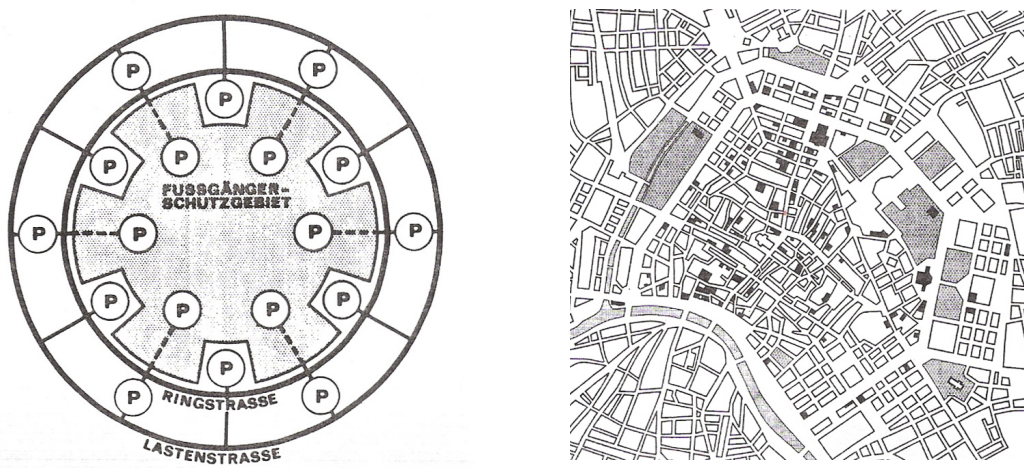
As far as traffic in Vienna is concerned, between November 1969 and December 1971 Gruen conducts a study in order to "*delineate measures to increase the dynamism of the city Core with respect to all urban functions"*[22]*.*The final scheme is very similar to the Fort Worth one, with an external ring of viability and fingers of parking garages, hosting approximately 20,000 cars, inserted in the pedestrian Core[23]. The scheme is proposed as the only way to save his beloved city from the traffic problem.

But what about other solutions? To deal with this question, Gruen proposes a dystopian view of the Core of Vienna, with high sarcasm, probably typical of his past profession as an entertainer at cabaret theatres and Socialist idealist.[24] Indeed, on "*Centers for the Urban Environment: Survival of the Cities",* he draws a vignette with a highway passing through St Stephan Cathedral, the city's main monument, and a huge car park which substitutes the entire City: "*If the automobile were*

22 Gruen V., *Centers for the Urban environments, survival of the cities.* Van Nostrand Reinhold Company, Los Angeles, 1973, p.172

23 It is interesting to note that exactly the same solution is applied to an America downtown, Fort Worth, and the European historical center, Vienna. This is explained by the fact that Gruen uses the Austrian capital as project reference. He translates the urban European models into the American context. He is effectively taking Europe to the USA. The main problems occur when America arrives in Europe, with that "bastard developments" of shopping centers which are not conceived to interact with the pre-existing European urban context. "Ironically, he reversed his own equation and began an Americanization of Europe." Hardwick M. J., Mall Maker. Victor Gruen, Architect of an American Dream. University of Pennsylvania Press, Philadelphia, 2004, p. 221

24 Gruen spends his first years as architect also as a showman and entertainer performing in Vienna`s coffeehouses and theaters.



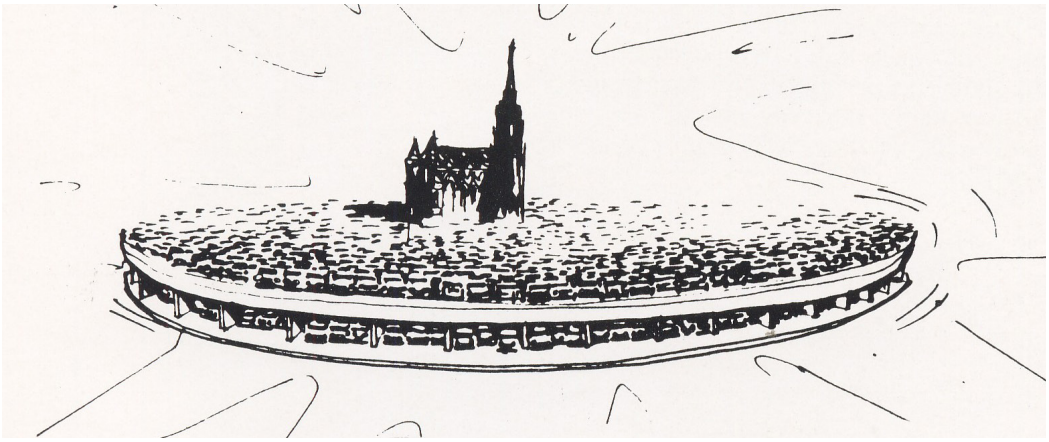
Gruen, new plan for Vienna, 1971, similar to the previous plan for Fort Worth in the USA

to be given freedom of the city of Vienna, a freeway through Saint Stephan` s Cathedral might be required.[...]"* Then he continues with his sarcastic joke - *"To Provide sufficient parking space in the city of Vienna, demolition of all structures might be required (For sentimental reasons, Saint Stephan` s Cathedral might be spared)".[25]

Similar sarcasm is reserved for traffic, in the same period, by another European architect. In 1970 Van Eyck is invited to participate in a competition for the *Nieuwmarkt* district in Amsterdam, where the Town Planning Department provides a plan for rehabilitation, comprehensive renovation with a new traffic highway passing through it. That means evacuating and demolishing properties which are located on the new metro and route line. Other invited Architects are Apon and Herzberger; but Van Eyck seems to have the most consensus over the other projects. "*Aldo`s must be [...].,"* Piet Blom argues, "*Only under the leadership of Aldo I believe it is possible to obtain a poetical approach to all the known acceptable demands: […] the creation of a heart, the processing of the magic center that exists there, [...]"*[26]. Aldo van Eyck got the commission, also thanks to the a petition made by the Architectura et Amicitia society, BNA and the Amsterdam-1975 Committee founded by Amsterdam residents contrary to demolition. The Dutch architect agrees with the committee's reasons and

25 Gruen V., *Centers for the Urban Environment, survival of the cities.* Van Nostrand reihold Company, 1973, p. 179

26 Blom P., *Aldo moet het worden*, in De Tijd, 9 Oct. 1970, p.13, and in TABK, 22 Oct. 1970, p.520; quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.556



Gruen , Dystopian view of Vienna car park model. The car park substitutes the entire city.
Only St Stephan`s Cathedral is saved for “sentimental reasons”.

specifically he defends their belief in the neighbourhood’s right to survive as a social-cultural entity; the neighbourhood has to be regarded and respected as a monument.[27] Ironically, he presents as part of his competition entry the suggestion of an alternative route, building a road through a church going towards a heart drawn in the sky and indicating the City center. The aim is to ridicule the unequal treatment that city neighbourhoods and architectural monuments usually receive.

“*If you have embarked on a breakthrough, you might as well do it properly,*” asserts Van Eyck ironically. “*We made a sketch of the Zuiderkerk and I thought, you know what? Let` s make a big hole in it so we drive straight through the church. After all, that` s the shortest way to the Dam.”*[28]

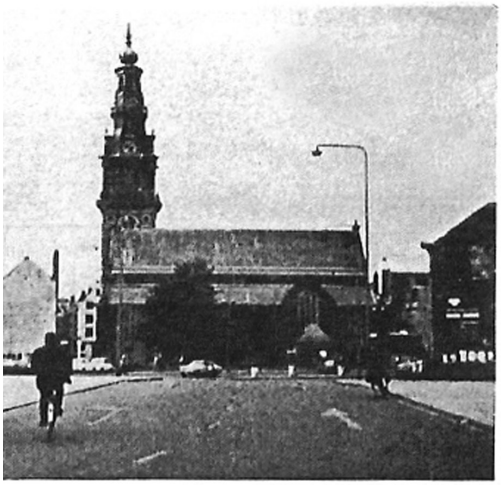
Similarly to Jane Jacobs, who in the 60`s fights against Robert Moses whose plan is to run two highways through lower Manhattan destroying the existing neighbourhoods, Van Eyck fights alongside the inhabitants, even financing and designing their footbridges for a supply line in case of a siege.[29] But contrary to the US example, the Dutch neighbourhood is eventually demolished.

Finally, Van Eyck`s and Gruen`s provocations are very similar and they both refer,

27 In the same period Aldo van Eyck even refuses the commission for hundreds of houses in Almere, since the new city was considered as a new dormitory town, principally intended for re-housing displaced inhabitants from Amsterdam. Ibid., p. 559 Almere, as seen in the introduction, becomes an interesting contemporary case study for the Heart of the City theme.

28 A. van Eyck in an interview with William Rothuizen in Haagse Post, 14 Dec. 1974, P. 54-58; quoted in Strauven F., Aldo van Eyck, The Shape of Relativity. Architecture and Natura, Amsterdam, 1998, p.557

29 Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.560









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Aldo Van Eyck, Amsterdam, 1970

Victor Gruen, Vienna, 1971

whether directly or indirectly, to the Heart of the City theme. Indeed, on the one hand the dystopian proposal of the Austrian architect is aimed at stressing the necessity for a car-free zone inside the inner center of Vienna, which should be enjoyed only by pedestrians. It refers to the necessary split between cars and humans, vehemently stressed during CIAM VIII.
On the other hand, Van Eyck`s proposal is linked to the increased cultural attention to the historical and physical continuity of the urban context. This crucial aspect will be discussed in depth and described in the later case study by the CIAM Summer School in Venice, whose roots can be identified in CIAM VIII itself as well as in the Heart of the City theme.

THE CELLULAR METROPOLIS

> *"The great difference between human settlements and natural organism is that settlements are the product of both natural and conscious forces and thus their evolution can be guided, while the natural organisms are the result of natural forces only and their evolution cannot be guided except within vary narrow limits."*[1] Doxiadis C.A., *Ekistics,* 1968

The Regional Shopping Center is Gruen's first attempt to generate urban crystallizations in the suburb. It represents a new architectural archetype, germinating outside the traditional core with the idealistic intention to polarize the dispersed community. On one hand it is an architectural experiment of new urban centers using traditional European merchant cores as the main urban references; on the other it represents the new commercial cathedral, a contemporary expression of a rising consumerist society in the US. This mix of consumerism and urban structure, passes from an architectural expression to a real urban proposal firstly with the renewal of existing city centers, such as Fort Worth, as already described. "*Downtown Needs a Lesson From the Suburbs"*[2] is the general expression of the redesign of the US downtown through the shopping center experience.

However, at the same time Gruen also considers the possibility for a complete transformation of his architectural experiment into a newly founded urban center.

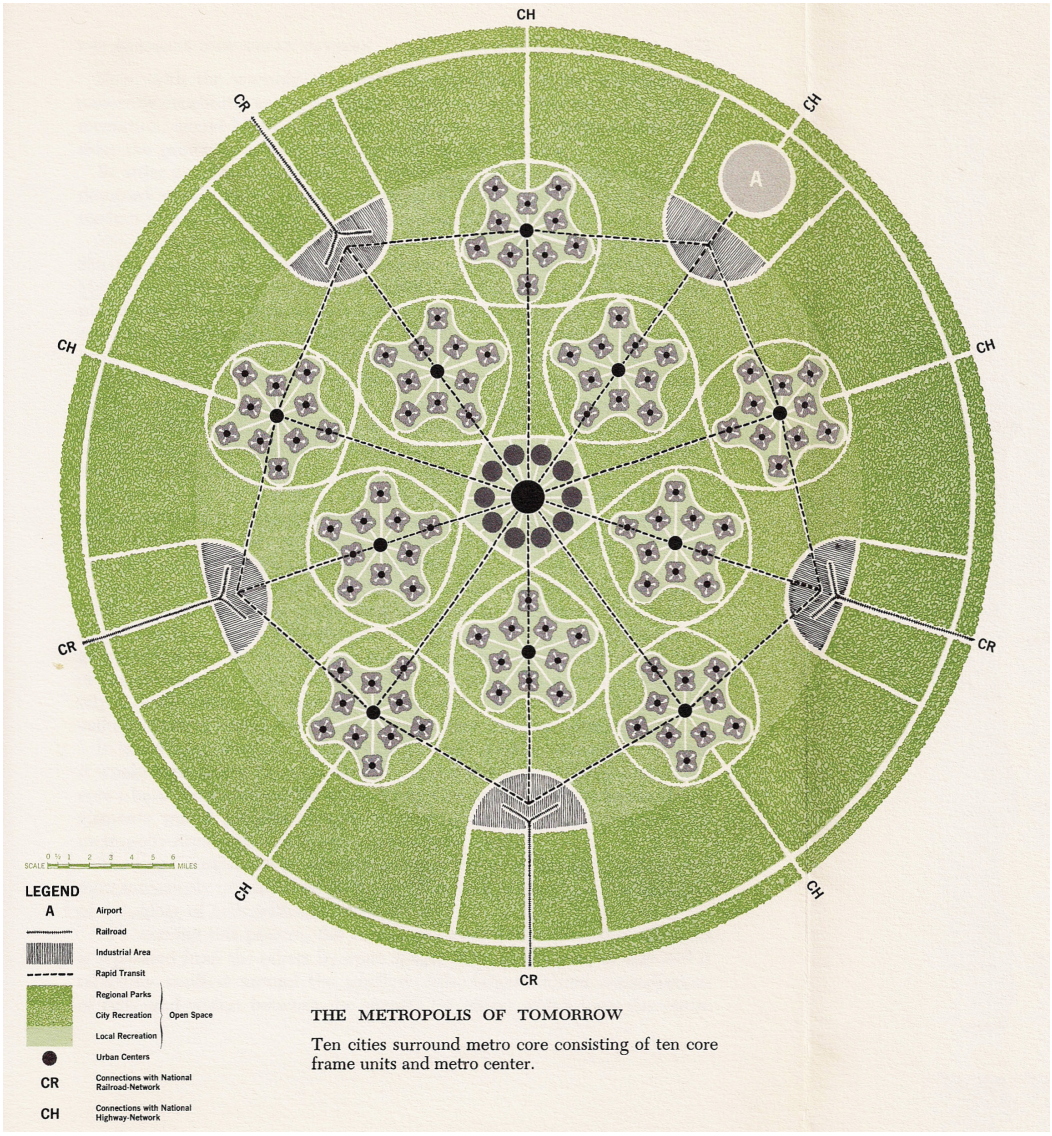
If the failure of his architectural invention is partially caused by the lack of social and physical connections with the surrounding context, then these new urban proposals might encompass the context itself with its residential units as part of the new urban model. The Regional Shopping Center becomes an integrated part of the model where both the commercial design devices and the environmental-humanistic values are re-interpreted.

THE ORGANIC METAPHOR OF THE CELL IN THE NEW URBAN PATTERN

The new Urban Pattern presented by Gruen is first and foremost a scheme, rather than a real project for a new city. Moreover, it is drawn considering the expression of contemporary needs and transformations: as is stated by the coeval Buchanan Report in 1963, the mid twentieth century city has to be redrawn because of the rise of the influence of the automobile and the consequent infrastructures. Differently from the

1 Doxiadis C.A., *Ekistics: an introduction to the science of Human Settlements.* Hutchinson of London, London, 1968, p. 42

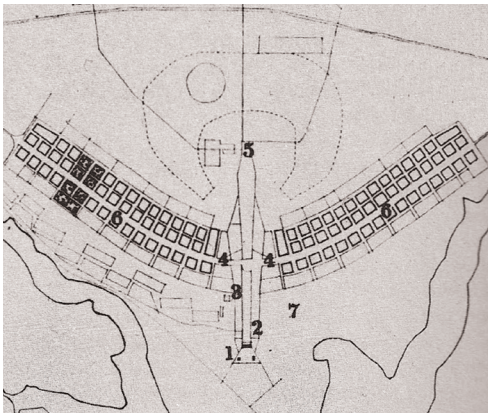
2 In the magazine Business Week, October 22, 1955

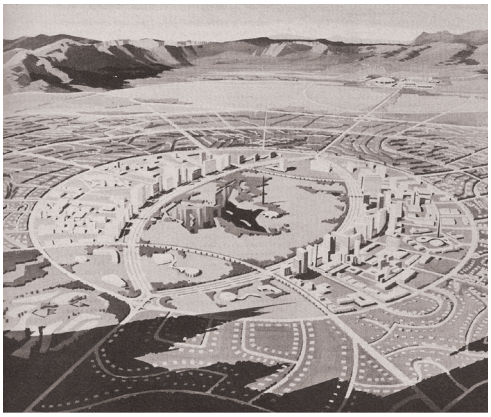


THE METROPOLIS OF TOMORROW

Ten cities surround metro core consisting of ten core frame units and metro center.

Gruen V., The Cellular Metropolis, in The Heart of Our Cities, 1964





Lucio Costa, Brasilia and Horizon City

old nineteenth-century pattern, the main aim of the brand new pattern is thus to melt together *"the new technological apparatus"* with *"human and urban needs"*[3]. Therefore, the main intent is no longer to highlight the humanist symbol of the heart in contrast with the *"mechanized killing"*[4], the *"tyranny of mechanical tools"*[5] as stressed by Giedion during CIAM VIII. Instead, Gruen considers the synergy between human needs and mechanical devices as the expression of a contemporary urban condition. The lack of this acknowledgement, would mean the umpteenth shrinking of the heart of the city. Moreover, the brand new Urban Pattern has to be disconnected from coeval examples designed by other famous architects, some of which are even described as "*false friends of the city"*[6]. For instance Gruen vehemently attacks the Brazilian architect Lucio Costa (1902-1998) and specifically his plan for Brasilia, described as a formalistic plan probably derived from the image of a "*bird or an airplane, rather than by a deep and intense study of human needs and requirements or by topographic and natural conditions"*[7]*.*

Similarly to Kahn in his Philadelphia Plan, Lucio Costa is therefore accused of not having properly transposed human needs into physical urban form. Brasilia is considered as

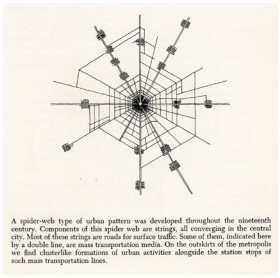
3 Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p. 271

4 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 35

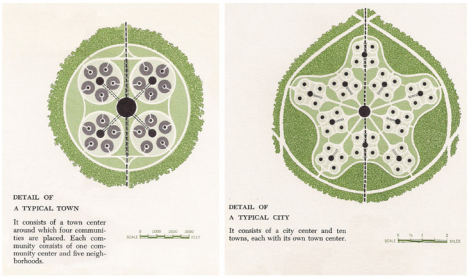
5 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, The Heart of the City: Towards the humanization of Urban life. New York, Pellegrini and Cudahy, 1952, p.17

6 Chapter 8 'The false friend of the City' in Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p. 98

7 Ibid. p. 110



19th and 20th Century spider-web type of urban pattern



Gruen`s proposal for a town and city based on the "cell"

the most autocratic city of the Western world, a homage to the 'traffickist'; it is a city where even tourists want to escape from its sterility, preferring to visit the more populous shantytown. Then the Austrian architect lashes out again against Costa, and this time the subject is his Horizon City in Texas. Gruen quotes a letter from Sibyl Moholy-Nagy (1903 – 1971), wife of the well known Bauhaus` professor László Moholy-Nagy, who describes Costa`s attempts as a switch from a *'town conceived in the sign of the cross to a town conceived in the sign of the football'*.[8]

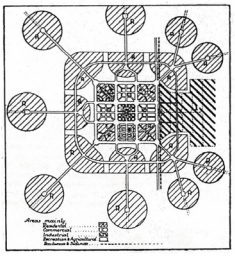
In both examples Gruen negatively highlights the analogy between the new urban structure and an apparently superficial reference: the bird for Brasilia and the football for Horizon City. On the contrary, his own urban model would be the attempt to use the human reference, the most important and noble one, as the expression of the organic life inside an organic structure. This will appear evident from his plan which uses the cell as its main reference. Since the cell is *"the basic unit of life"*[9] and of all natural forms and the city is part of a total environment where humanity is part of nature, then the cellular system can be applied to the "*urban organism"*[10] as well.

The final urban model should then be a cluster of cells, consisting of a nucleus and protoplasm, which are combined in a specialized organ which forms a town.

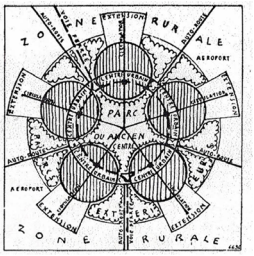
8 Ibid. p. 112

9 He quotes the magazine Guideposts to Knowledge: *"The basic unit of life, whether plant or animal, is the same. Millions of cells enter into the structure of higher plants and animals but the simplest forms of life are one-celled organisms. Cells show great variety of shape, being spherical, disk-shaped, elliptical, oblong, etc. A typical cell consists of a mass of protoplasm, in the center of which is a denser mass called nucleus.... (add by G.: Most cells are surrounded by cell walls...) In the more highly organized plants and animals the vital processes are carried on by groups of cells that form specialized organs."* in Gruen V., The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p. 271

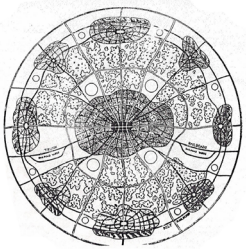
10 "I submit that this cellular system is applicable to the urban organism as well." Ibid. 271



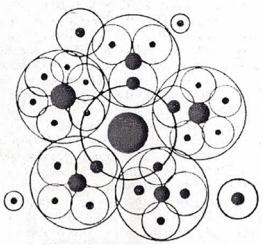
Unwin (1922)



de Groer (1936)



Whitten (1923)



Bardet (1940)

If this system grows, then it constitutes a bigger organism, a city; if it evolves into a highly developed organism, then its metamorphosis will give birth to a new organic metropolis: the "*Metropolis of tomorrow"*, as Gruen calls it.

Other organic urban references

Many other urban projects have similar organic references. Some similarities can be traced for instance in the scheme of a industrial City by Unwin (1922), the Central City of suburb - satellites by Robert Whitten (Cleveland, 1923), the scheme of a poly-centric city by de Groer (1936), the cellular reference of Gustav Bardet (1940) which are all published in *"Le nouvel urbanisme"* by Bardet himself[11].

The organic metaphor becomes the main reference also for the construction of the Japanese City, in the same period as Gruen`s urban proposals.

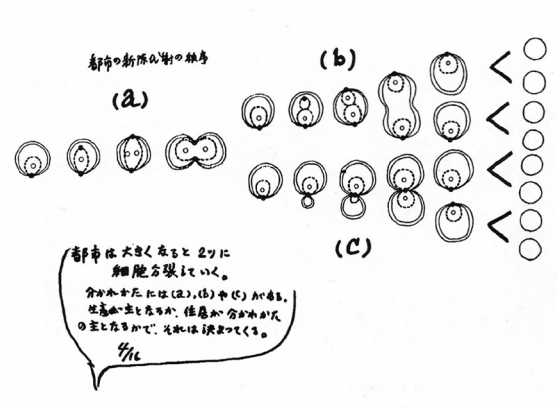
Indeed, after World War II a young group of architects in Japan forms a new movement called 'Metabolism.' Their manifesto is exhibited for first time in 1960 during the World Design Conference in Tokyo[12], then published in a small book: *"Metabolism 1960:*

11 See Bardet G., Le Nouvel urbanisme. Editions Vincent. Freal et Cie, Paris, 1948 Also Alex Wall mentions the similarities between Gruen`s Cellular Metropolis and some of these projects.

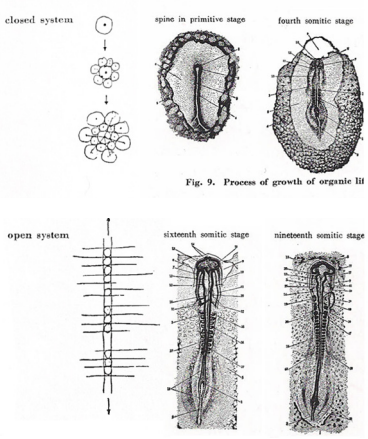
He also mentions Erich Gloeden`s Polynuclear Metropolis (1923) while the transportation networks and the use of green belts echoes, in Wall`s opinion, more recent urban proposals by Saarinen, Ungers, Duany and Plater-Zyberk. Moreover, *"given his base in New York, and his familiarity with the ideas of Lewis Mumford, he would have been aware of the planning precedents of Radburn and the Greenbelt Town."* Wall A., *Victor Gruen – From Urban Shop to New City. Actar*, Barcellona, 2005, p. 202-205

Other important and clear references are Cristaller`s Central Place Theory (1930) and Howard`s garden City (1908), which will be mentioned and discussed later.

12 The Conference is also attended by Team 10 members Alison and Peter Smithson and by Louis Kahn, Paul Rudolph, Minoru Yamasaki and Jean Prouvé.



Kikutake K., sketch inside the Metabolist Manifesto, 1960



Tange, from closed to open system, organic references for the Plan of Tokyo, 1960

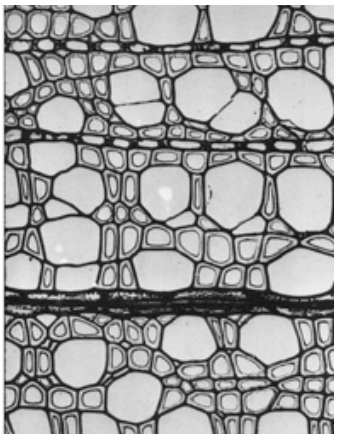
Proposal for a New urbanism"[13] Metabolism, as a response to the wartime destruction and the consequent cancellation of nationalist and even militarist pre-war values, polemically rejects any efforts to improve or even analyze the existing city[14]. The *tabula rasa* of Tokyo or of Hiroshima leads the Metabolists to pose the basis for a new spirit of thinking according to which the existing city is considered as a rigid, constraining, diseased despot, as sustained by Kitakute, in opposition to the autonomy, flexibility and power of the individual. The shell, the capsule, the unit, the cell therefore becomes the new architectural features of a single organism whose parts are both the individual, the house and the city, made in any material and any scale. Thus all the Metabolism movement`s projects are directly inspired by biology in order to conceive the main concept for the urban structure. For instance, the plan for Tokyo, designed by CIAM member Kenzo Tange and his students at MIT in 1960, is conceived from the study of the growth of an organism, similarly to Gruen`s Cellular Metropolis. However, although both architects conceive the plan through the organic analogy, their final results are formally opposites. Tange considers the radial evolution of the cellular forms, which is the main reference for Gruen`s urban model, as a negative *"closed system"* which is too similar to the old traditional, medieval structure of the

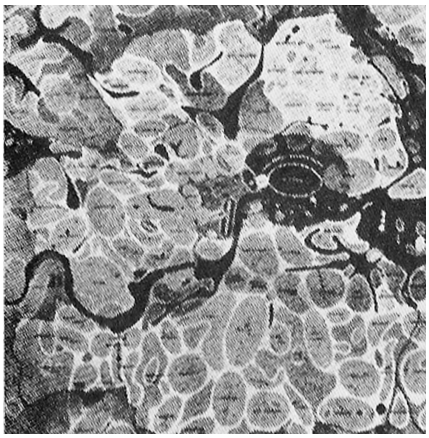
13 The authors are Kiyonori Kikutake, Masato Ohtaka, Fumihiko Maki, Noriaki-Kisho Kurokawa and the critic Noboru Kawazoe.

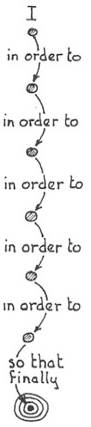
14 If, for example, in Berlin the War has left visible stone, concrete, brick ruins of the old destroyed city, in Japan most of the wooden buildings have been substituted by wood and human ash.*"How many bodies had been burnt to a cider by the intense heat?"* Tange asks himself *"Losing the war meant the re-thinking of fundamental attitudes towards existence....It was almost as if one of nature's basic laws had been shown to be false."* in Raini, P., *Twentieth Century Masters: Kenzo Tange*, New York, London, Sydney, 1969, p.8

city. Instead he considers the organisms of evolved vertebrates as the right organic metaphor for both the contemporary structure of city and society and the linear system of mass transportation. From cells to vertebrates, from civic centers to civic axis, similar biological analogies are therefore interpreted in opposite ways, keeping mobility always as a main issue for the reorganization of the urban structure.
Another common theme for both Tange and Gruen is the Heart of the City itself. If Gruen is deeply influenced by urban issues regarding the Heart theme, then Kenzo Tange too is a CIAM member who is present in Hoddesdon in 1951, showing his project for Hiroshima previously described in the chapter regarding the Heart as symbol.[15]
In Tokyo Bay, the linear development seems in contrast with the urban principles described at CIAM VIII. For instance the vertebrate urban growth itself encourages the rising mobility system rather than the right of the pedestrian.
However the 'core' is interpreted as part of the Japanese City's structure itself: it becomes a system containing all vertical services giving *"structure to the whole by means of visual communications spaces – core spaces, in other words"*[16].
Thus the Core is no longer an urban centrality as in Sert or in Gruen, but an architectural device for an organic development of the City into *"three-dimensional lattices"*[17]. In this sense the Heart of the city loses any urban form references, stressing only its three-dimensional character, as previously discussed with regard to Urban Design.
Another interesting interpretation is given by Doxiadis in his book Ekistics[18] (1968). The Greek architect states that the human settlement is part of an organic world but it *"can be neither cells nor bodies nor organism"*[19]. The main reasons are that the natural organisms are not conscious of their evolution since they are the result of natural forces while settlements are the product of both natural and conscious forces; moreover in the dynamic urban settlement there are always additionals places or nodal points while in the natural organism there is never a "repetition of a central

15 See the chapter about CIAM VIII, in particular "The Heart as symbol of Humanism"
16 Kenzo Tange, *Function, Structure, Symbol*. 1966, in von Udo Kultermann H., *Kenzo Tange 1946-1969*, ed. Verlag für Architecktur Artemis Zürich, p. 242
17 Ibid. the lattice model is later described along with criticisms of the tree structure
18 Doxiadis C.A., *Ekistics: an introduction to the science of Human Settlements.* Hutchinson of London, London, 1968. Ekistics is derived from the Greek adjective οἰκιστικός more particularly from the neuter plural οἰκιστικά (as physics is derived from φυσικά, Aristotle). The ancient Greek adjective οἰκιστικός meant: "concerning the foundation of a house, a habitation, a city or colony; contributing to the settling." It was derived from οἰκιστής, an ancient Greek noun meaning "the person who installs settlers in place". This may be regarded as deriving indirectly from another ancient Greek noun, οἴκισις, meaning "building", "housing", "habitation", and especially "establishment of a colony, a settlement , or a town" (already in Plato), or "filling with new settlers", settling", "being settled". All these words grew from the verb οἰκίζω, to settle and were ultimately derived from the noun οἶκος, "house", "home" or "habitat.
19 Ibid. p. 41







False friends:
Alexander C.(2006): Positive Space in the cellular structure of wood tissue

Abercrombie L. (1943), London Masterplan

Lynch K.,
'in order to'

function at a different point"[20]. Nevertheless the biological metaphor is not refused at all since the human settlements are described as complex biological individuals, of two order higher than cells[21], and in a primitive phase of development.
Finally it is interesting to mention the link between the cell metaphor and the Heart of the City theme which has been traced recently by Christopher Alexander.
Indeed, in the already quoted *"The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City"*[22], in 2006 the author refers to a specific type of cell: the wood one. This structure is different from Gruen`s cell since it has neither a nucleus nor cytoplasm and its position and form do not follow any hierarchy. Alexander then presents the image of wood tissue as a possible image of the city, as a production *"of an endless system of positive space at many scales"*[23]. If we consider a small part of empty space, he explains, this should be constituted at least by some weak latent central regions, even if a strong centrality is omitted. But a total lack of centrality is not possible. So these empty spaces are inside different-adjacent blobs and they should

20 Ibid. p.208
21 The direct analogy with cells is then proposed by Doxiadis for the static settlement of the past: even if they have many differences , they share the settlement as a whole and its nucleus. The necessary of the static cell, removing the main circulation networks which allows the growth of the organism, is then considered as necessary for higher relationships with the growth of natural and social phenomena as it is present in the old cities.
22 Alexander C., Alexander M.M.(editor), The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City. Center for Environmental Structure, 2006 See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf
23 Ibid. p. 33

be considered as underdeveloped center-like. Later the necessity to transform this "empty" space into a more coherent structure, makes the latent centers becoming more positive shape center-like. The same mutation happens in wood where the *"structure-preserving transformations"* permits the cell to arrive at its final cell shape: the action of all forces of all pressed bubbles allow the latent center-like to be transformed into a strong positive shape center.[24]
Then we can compare Alexander`s image of wood cells and the plan of London (1944) by Patrick Abercrombie: though apparently similar, the first has no historical centre of dependence, and it doesn't refer directly to the urban structure.
Indeed the wood structure is not used for the drawing of the urban plan, but as an image of the right growth of the public realm: this is not guaranteed by an external imposing hand, but thanks to the internal and natural (and even democratic and meritocratic if translated to a social level) pressure, which should be fully understood by the architect. It is therefore a metaphor for the *"positive space"* related to the Heart as *"the necessary binding force"* of the city[25], rather than a conceptual reference for the organization of the urban plan.
Finally we might affirm that Gruen`s cell, Tange`s vertebrate and Alexander`s wood cell are different and intriguing organic metaphors related to the Heart of the city: the first is focused on the centralization of the city, similarly to Sert`s proposals, and to its environmental planning, the second is part of the three-dimensional and evolving structure of the city while the last is a metaphor for the design of a positive public realm. Their different meanings and interpretations are proof of the complexity of the Heart theme and of the influence of the CIAM VIII debate, as continuously highlighted.

Criticisms to the organic metaphor by Lynch

The organic metaphor is generally vehemently criticized by many theorists and historians. These criticisms are very important and well founded even though Gruen`s, Tange`s and Alexander`s discussed proposals, seem to confute some of their doubts about the conceptual validity of organicism in the urban discourse.
We have already mentioned for instance the philosopher Lefebvre who, in the `70s, affirms that only *"when an institution loses its birthplace, its original space,*

24 *"Look at the packing of kernels in a bit of wood tissue. While the tissue is growing, the wood cells press against one another, deforming their shapes, much as bubbles in a mass of bubbles keep their coherence under their own internal pressure, balanced against the pressure of nearby bubbles. Just so with the cells in the wood tissue, until each bit of space is made positive"*. Ibid. p. 33, quoted from TNNO, Book 2, The process of Creating Life, p.69
25 Ibid.

and feels threatened, [does] *it tends to describe itself as "organic"*[26]. Then, as far as the physical structure of the city is concerned, Kevin Lynch studies the *Organic city* in his *"The good city form"*, comparing it with the *City of Faith* and the *City as Machine*. The idea of the city as an organism comes from a notion developed with the rise of biology in the eighteenth and nineteenth century, as stated by Lynch. It is therefore almost a new notion of the city, born as extreme opposition to the spreading industrialization. Characteristics of the organism are their "*homeostatic dynamism"*[27], autonomy, defined boundary and size inside which different parts are in close contact with each other.

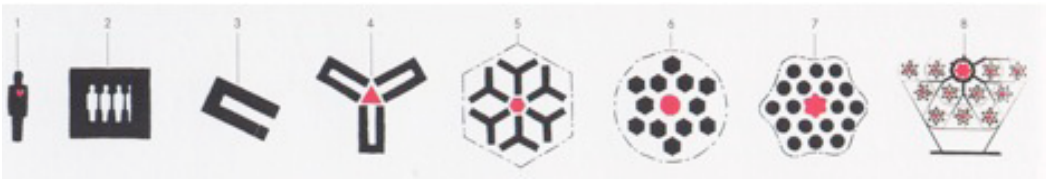
Although it is easy to reject many organic metaphors of the city (the traffic as blood, the arteries as streets, etc) which have already been denounced as banal metaphors discussing Gruen`s interpretation of the Heart), the author affirms that some concepts still remain to be considered more seriously. For instance, the idea of hierarchy is "*not a grand rule of nature"* Lynch states. It is a "*common pattern of social organization"*, used by emperors, generals or kings in order to impose their authority. It is a dangerous and overbearing characteristic of the organicism in the city. Therefore, the autonomy which is typical of the organism is in total antithesis with the hierarchical structure which instead controls all the organic city development.

Secondly the optimum size of the city is also considered by Lynch as "*an elusive concept".* Indeed cities and societies are continuously changing, thus it is not appropriate to give a fixed boundary or a defensive ring as designed for instance by Gruen in Fort Worth. On the contrary, Lynch claims that it would be wiser to look for a "*rate of growth"* of the city, rather than a optimum size as in the traditional urban research. Few pages later the American author is even more radical: *"You cannot design a city. And should not,"* he scolds the reader, "C*ities are vast natural phenomena, beyond our ability to change and beyond our knowing how we ought to change them".'*[28]

26 *"It 'naturalizes' itself, looking upon itself and presenting itself as a body. When the city, the state, nature or society itself is no longer clear about what image to present, its representatives resort to the easy solution of evoking the body, head, limbs, blood or nerves. This physical analogy, the idea of an organic space, is thus called upon only by systems of knowledge or an organic space, is thus called upon only by system of knowledge or power that are in decline"* Lefebvre H., The production of Space. Blackwell Publishing, 2010, p. 274

27 *"homeostatica dynamism: internal adjustments tend to return the organism to some balanced state whenever it has been disturbed by any outside force. So it is self-regulating. It is also self-organizing. It repairs itself, produces new individuals, and goes through a cycle of birth, growth, maturity and death."* in Lynch K., A theory of Good City Form. MIT Press, 1981, p. 98

28 Ibid., p. 281



Gruen V., "How to Handle This Chaos of Congestion, This Scatteration of Anarchy", 1956

Then he ironically represents a scheme from 'I', the individual, to the concentric rings forming the city; in the middle a myriad of *'in order to'*s hierarchically link the different actions of the inhabitants of the city. *"So that finally?"* Lynch ironically asks. This is *"a very unreal picture of human scale"*, since we do not live in one single chain but in a continual interaction of different confusing chains. The final result should be a "*thicket more than chain"*[29], mocking the hierarchical system called the *"tree model"* where all parts are direct consequences of a previous one.

The tree structure of the Cell Metropolis

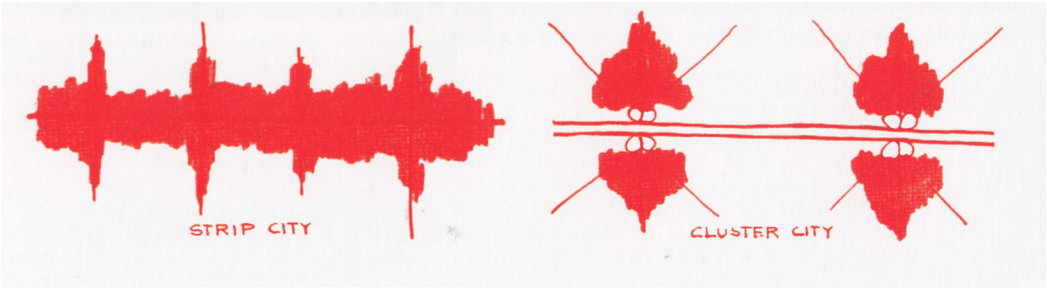
This organic evolution of the city, critically exposed by Lynch, is instead used as the main tool for the urban organization by Gruen who well explains it in his article *"How to Handle This Chaos of Congestion, This Anarchy of Scatteration"*[30], published in 1956. The associated schemes represent a concentric development of the city, centered on the individual[31]: this is organized from the individual (1) to the family (2), to the group (3), to the neighbourhood (4), to the community center (5), to the town center (6) and finally to the multi-center city organized around a single major center (7-8). Thus Gruen`s scheme shares many similarities with Wiener's *"Diagram of the human environment"* (1953) or Sert's *"The human scale in City Planning"* (1944), since the entire urban structure is built *"around a new model – the human being"*[32]. However the plan is not expression of a

29 *"...or more exactly a thicket whose roots and branches interlace and are grafted onto each other."* Ibid. p.106 However, Lynch states that there is, perhaps, an important contribution of the organic models: the way of consider the city as a *"whole of many functions, whose diverse elements […] are in constant and supportive interchange, and where process and form are indivisible."*

30 Gruen, Victor, *"How to Handle This Chaos of Congestion, This Anarchy of Scatteration."* Architectural Forum , Vol. CIV, September 1956 and republished in Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005, p. 195-196

31 This is drawn with small heart inside similarly to the man drawn by Richard Rogers for La Grand Paris in 2009, as described in the introduction.

32 Gruen V., (1956) How to Handle This Chaos of Congestion, This Anarchy of Scatteration, Architectural Forum , Vol. CIV, p. 130 On the contrary in Team 10's Scale of Association or Katz's Urban Design scheme, the



The Architectural Review, 1956: Strip City and Cluster City

metaphorical translation of the human body into the general urban plan; the final cluster scheme is not a city-as-body where for instance the head is the business center or the heart is merely the cultural center – similarly to Le Corbusier`s Ville Radieuse: on the contrary the centrality of the human being in the plan is interpreted by Gruen as the basilar *"walking distance acceptable for [the] specific conditions and purposes"*[33] which characterizes each function in the clusters. Gruen is thus more interested in the definition of a human scale inside the city instead of the human anatomy of the urban structure.

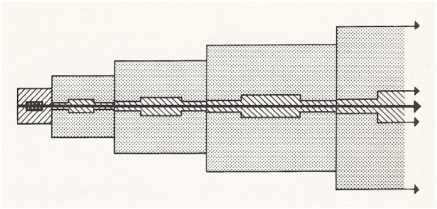
Anyway the hierarchical organization of the urban structure, its defined dimensions and its attention on Man`s centrality, make us still consider the final metropolis, *"even if perfect, as the stellar city of the Filarete"*[34], as Enzo Paci criticizes some of CIAM VIII`s master plans in 1954.

Inside this hierarchical organization the 'cluster', which has already been described in the discussion on Gruen`s devices in Fort Worth, remains the most intriguing and fundamental urban device regulating urban development: at the urban scale its function is to structure the city and regulate its growth, once the city center reaches a certain prearranged dimension and a new one needs to be built. Therefore, also in this case the cluster is used differently by Gruen in comparison with the Smithsons` one, since it becomes a regulative organization of the urban structure inside the limited sized organic city, rather than a new

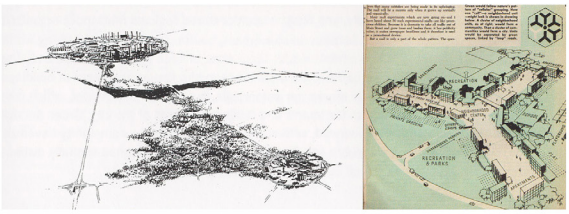
City and its relational social complexity are the central part.

33 Ibid. p.132

34 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii See chapter Heart of the City and Urban Design and Sartre's criticism l`homme comme fin et comme valeur supérieure', quoted in L`existentialisme est un humanisme. 1945



Linear - Doxiadis` Dynapolis



Centripetal - Gruen`s 1976 City

"*specific pattern of associations*"[35] related to the urban social complexity. Gruen describes the cluster as one concrete *"counterattack against the forces of Anti-city"*[36], in particular against the strip development of US Cities. This last pattern failed because it serves as both a *"track for automobiles"* and *"guiding element for structure"*, while these two uses are contradictory and opposed[37]. This thesis is supported by the magazine itself, The Architectural Forum, which publishes a few pages before two sketches about the *"Strip City"* and the *"Cluster City"*, considering the latter as *"the nuclei of really organizable new cities"*[38].

In *"The Heart of Our Cities"* Gruen underlines his contrary opinion on any linear development of cities which are structured on the road pattern (such as Roadtown, Corridortown, Motopia). Among these non positive examples he also mentions "Dynapolis" by the Greek planner C.A. Doxiadis. The proposal envisages the development of the town adding incremental parts of the core and of residential areas along a central artery. This linear development, which is one of the proposals which *"are destroying the physical confines of the urban organism and thereby all chances for organized community life"*[39], is the opposite, for instance, of Gruen`s first attempt to translate his schemes into a project of a newly found

35 Team 10, Arena, June, 1965, p.13 See ed. by Chung J.C., Smithson A. and P., The charged Void: Urbanism. The Monacelli Press, 2005, USA, p.30

36 Gruen V., *The Heart of our cities: the urban crisis: diagnosis and cure*, Thames and Huston, 1964, p. 183

37 "The diabolic thing is that the two uses are diametrically opposed that each nullifies the other`s value." Gruen V., (1956) How to Handle This Chaos of Congestion, This Anarchy of Scatteration, Architectural Forum , Vol. CIV, p. 130

38 *"In these lumps or cluster, forming at access points miles apart, may be found the nuclei of really organizable new cities. Planned or not, these will be really big. The Road Cities of 1976 promise to out-spread Los Angeles as Los Angeles has outspread New York."* Ibid. p.129

39 Gruen V., *The Heart of our cities: the urban crisis: diagnosis and cure* , Thames and Huston, 1964, p. 182

city in 1955[40], when the NBC asks Gruen to design, for a documentary, the future city of 1976[41]. Although Dioxiadis[42`] scheme shows a linear development while Gruen`s is *"centripetal"*[43], both proposals are characterized, on a morphological level, by an organization in hierarchical levels, represented by human settlements, similarly to the structure of a tree. Therefore opposite projects are in this case the result of similar structure organization[44].

As far as the tree structure is specifically concerned in Gruen`s master-plans, the two diagrams above represent the organization of the "Cellular Metropolis" as described in 1964 in "The Heart of Our Cities" and in 1972 in "Centres for Urban Environment".

As we can see from the diagrams, all the urban units are hierarchically connected and arranged, similarly to the structure of a tree: each unit of the metropolis is composed of a center and a cluster of smaller units, and each of them are themselves composed of a center and other smaller agglomerations. The smallest entity, the "cell", is the individual while the largest is the metropolis, which has a well defined maximum dimension: 3.3 million inhabitants in 444,485 acres in

40 As Alex Wall affirms in Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p. 194-195

41 1976 was the year of the bicentennial of the Declaration of Independence. The sketches he proposes, show a regional metropolis with a main nucleus supported by several smaller cities around it, spaced apart by green belts. "1976" - Victor Gruen Associates, July 30, 1955 – July 23, 1956, AHCVGC box 15, Published in Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p.195

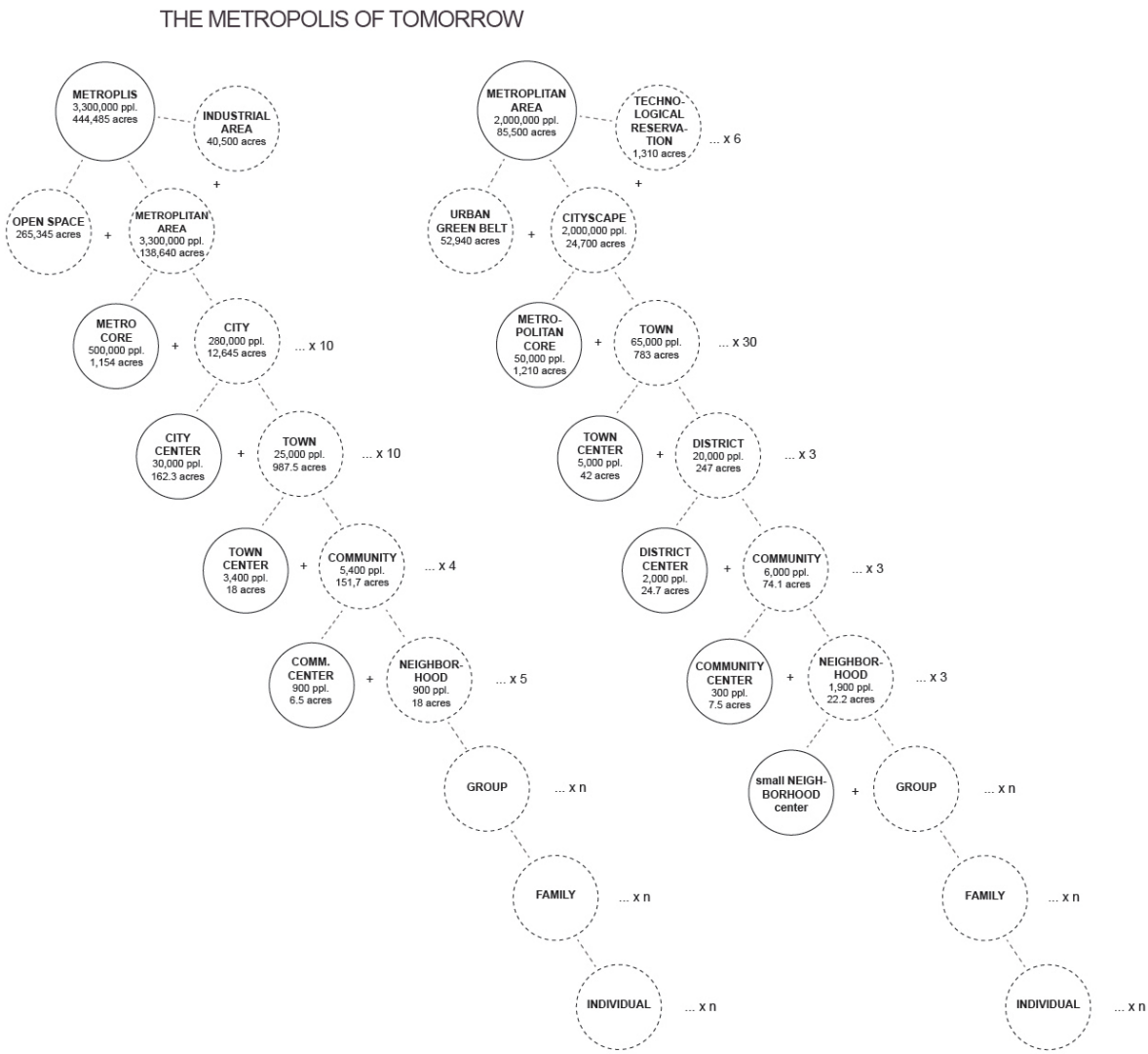
42 It is interesting to note that Dioxiade`s Ekistics, the science of human settlement, shares many consonances with the Gruen`s environmental-urban planning, as Alex Wall already affirms: "Doxiades` "Ekistics", the science of human settlement, was not so very far from Gruen`s ideas about environmental planning. Both shared the view that the architect-planner should seek to balance all forms of the development within its region" Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p.186. See Dioxiadis C.A., Ekistics, an introduction to the science of human settlement. Hutchinson of London, 1968, Great Britain *"The term Ekistics is derived from the ancient Greek οἰκιστικό, which meant contributing to settling down in a dwelling or a city. Ekistics denotes both a specific settlement orientation and at the same time a wide field of interest, encompassing all those processes which have served to form settlements throughout history."* in Introduction in Bell G., Tyrwhitt J.(ed.), *Human Identity in the Urban Environment*. Penguin Books, 1972, p. 28. It is important to note that the journal Ekistics was founded in 1955 by Dioxiadis together with Jacqueline Tyrwhitt, a CIAM member, editor of the "Heart of the City".

43 *"Each unit is held to a definite shape by its own centripetal force."* Gruen V., (1956) How to Handle This Chaos of Congestion, This Anarchy of Scatteration, Architectural Forum , Vol. CIV, p. 132

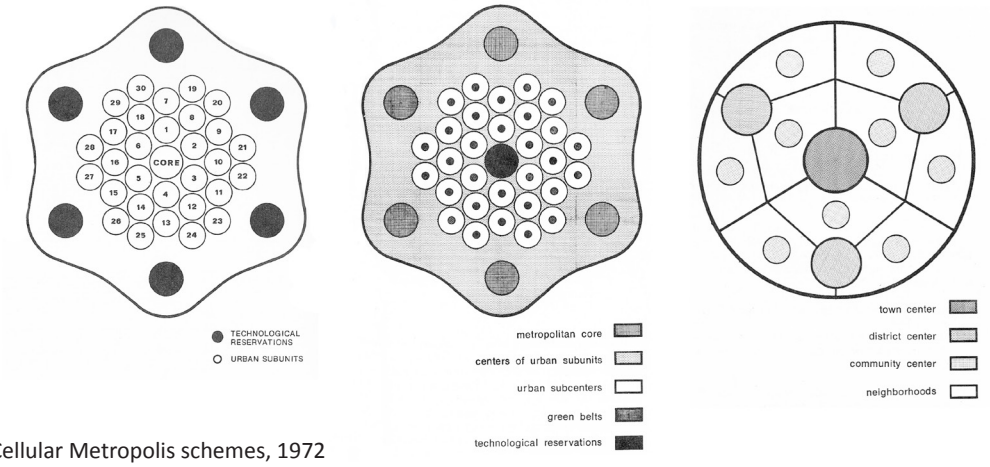
This reference to the "centripetal force" of the city is interesting when compared with Enzo Paci's proposal to consider the Heart of the City "with a centripetal diastolic movement, but, at the same time, a systolic centrifugal one". Paci, E. (1954) Il cuore della città. Casabella Continuità, n.202, p. vii

While Paci`s Heart has a biunique relationship, Gruen`s pattern is only univocal. This will be discussed in more depth in the conclusions of this research.

44 See also the interpretation of Bakema of the Linear Core (III Actor) in comparison with Man`s centralization of Sert (I Actor)



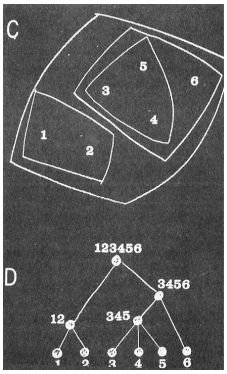
Interpretation of the tree structure of the Cellular Metropolis as described by Gruen in 1964, in “The Heart of Our Cities” (left scheme), and in 1972, in “Centres for Urban Environment” (right scheme). (l.z.m.)

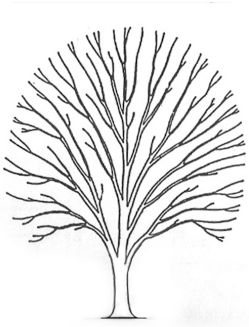


Cellular Metropolis schemes, 1972
"Each town consists of three districts of 247 acres each and one town center of 42 acres – together 783 acres. Each district is composed of three communities of 74.1 acres each, together, 222.3 acres; and one district center of 24.7 acres. Each community is composed of three neighborhood of 22.2 acres each and one community center of 7.5 acres. Each of the neighborhoods is provided with small center. Demographically, the total urban population is assumed to be 2,000,000 and the population of the core 50,000, of each town 65,000, of each district 20,000, of each community 6,000, and of each neighborhood 1,900. The population of the multifunctional centers is, for each ton center, 5,000 for each district center, 2,000, and for each community center, 300." Gruen V., Centres for the Urban Environment. Survival of the Cities. V.N.R. Company, 1973, New York, p. 105 and p. 205

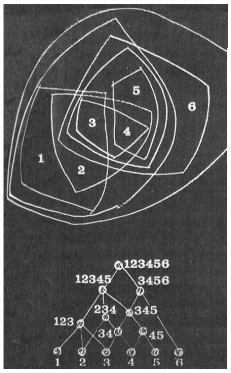
the first diagram and 2 million people in 85,000 acres in the second. The two tree models differ mostly for the different multiplication of the urban units, which seem more linear in the latest version: if the 1964 scheme has ten towns, four communities and five neighbourhoods, then in the 1972 one there is a continual reference to 3 as the multiplication factor.
Then it is interesting to note in the latest version the attention given to the separation between 'Landscape', `Technoscape` and 'Cityscape' which constitute the whole Metropolitan Area[45]. In particular the Cityscape is bound inside the others in order to avoid any spilling *"over the walls"* in the *"form of sub-cityscape"*, as warned a few years earlier in a Design Conference in Colorado, in 1955[46], as previously discussed.
Finally, it is important to highlight in both schemes, and especially in the description of the second one, the explicit indication regarding the dimension of each unit, its consumption of ground. This is explainable on the one hand as a clear indication

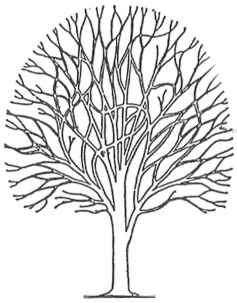
45 Also in 1964 Gruen draws these elements, but he doesn't remark on their importance as he will do in 1972.
46 Gruen V., *Cityscape and Landscape.* Experts from a speech recently given at the International Conference of Design in Aspen, Colorado. 1955





C. Alexander: tree model
C.Martí Arís / A.L. Kroeber 'biological phylogeny' tree





C. Alexander: semi-lattice model
C.Martí Arís / A.L. Kroeber 'cultural phylogeny' tree

of the correct use of the urban pattern into a real urban project; on the other it mirrors Gruen's rising interest in environmental planning and consequently the right exploitation of territory. In this sense the organic metaphor of the "cell" and of the "heart', as limited sized parts of the city, are used in agreement with the principles of *"environmental planning"* as described in the Charter of Vienna.

Criticisms to the tree structure

The most famous criticisms to the tree model are shown by another Austrian-born architect, Christopher Alexander. Indeed in the mid 1960`s, in his well known "*A City is not a Tree"*[47], Alexander highlights the failure of modern attempts to create *artificial cities* (such as Chandigar, Levittown, British New Towns) with the same urban quality as the *natural old ones* (such as Siena, Liverpool, Kyoto). The "*missing ingredient"*, the lack of *"patina of life"* is caused by the incapacity of architects and urbanists to see and propose a design of the city in all its essential complexity. He therefore confronts the "*tree model",* where each unity of elements, "*set"*, is linearly connected to another without overlapping, with the "*semi-lattice model"* where the sets overlap and the common elements belong to collection and both sets as well.[48]

47 See Alexander C., A city is not a tree. in ed. By Bell G., Tyrwhitt J., *Human Identity in the Urban Environment.* Penguin Books, 1972, 405-406. See Alexander C.(1965), A city is not a tree, Architectural Forum 122 , No. 1, pages 58-61

48 *"The tree axiom states: a collection of sets forms a tree if and only if , for any two sets that belong to the collection, either one is wholly contained in the other, or else are wholly disjoint.[...] The semi-lattice axiom is: A collection of sets forms a semi-lattice if and only if, when two overlapping sets belong to the collection,*

The diagrams he shows are very clear. In general we can assume that the tree model is a simplification of the second one since it is a semi-lattice model without any overlap. Secondly the semi-lattice is more complex than the tree model: indeed if we take for instance twenty elements, the tree model may contain nineteen subsets without overlapping, while the semi-lattice may have more than 1,000,000 different subsets, considering all different possibilities of overlaying and connections.

A similar distinction between tree and semi-lattice models, reported almost thirty years after Alexander`s article, in the 1990s, by Carlos Martí Arís comparing the '*biological Tree'* and the '*phylogeny Tree'* of the anthropologist Alfred L. Kroeber. We have already mentioned the '*phylogeny Tree'* model in the introduction in order to stress the necessity of studying three main actors in the several "arteries" of the Heart theme. Now, It is intriguing to note how the un-natural *phylogeny* tree seems to perfectly represent the semi-lattice structure, as depicted by Alexander, since they both symbolize the complexity of *"the mechanism of the human creation"*[49]. Moreover, if Alexander`s structure referred to the urban scale and to its social complexity, then Martí Arís`s is used in order to mirror both the cultural and typological development. Therefore together they represent a valid synergy between the cultural-theoretical and urban-physical approach, as sought by Gruen himself[50].

As far as the 'mall maker' is concerned, he rigorously adopts the tree structure for the abstract model of the Cellular Metropolis, as already analyzed. Nevertheless, both his urban and architectural projects are always designed with different integrations of functions avoiding any monofunctional ghettos which are hierarchically arranged in the plan[51]. For instance, the platform itself, as used in

then the set of elements common to both also belongs to the collection". As for example the number 567 may be composed of 56 and 7 (there is no overlapping between the two numbers, it is a tree), but if I take 56 and 67 the two sets are both present in the same collection (567), and their overlapping element (6) is inside the collection as well. In Alexander C., A city is not a tree. in ed. By Bell G., Tyrwhitt J., Human Identity in the Urban Environment. Penguin Books, 1972, 405-406

49 Martí Arís C., Le variazioni dell'identità. Il tipo in Architettura. Clup, Torino, 1990, p.49 See also Steadman P., The evolution of design. Cambridge university Press, 1979; Kroeber A.L., Anthropology. Race, language, culture, psychology, prehistory. Hacourt Brace Jovanovich, New York, 1948

50 *"I have been led into the position of being a "thinker" and a "doer" at the same time. This is not a comfortable position. It is like standing on a bridge, with a view toward reality on one side and idealism on the other, hoping that the bridge might act as connecting link between "thinkers" and "doers.[...] A bridge opens up fascinating views in all directions but it is also an unsheltered place, exposed to the stormy weather which characteristically prevails where a "high" of lofty thinking adjoins a "low" of materialistic aims."* Gruen V., Centres for the Urban Environment. Survival of the Cities. V.N.R. Company, 1973, New York, p. 105 and p. ix

51 Also Alexander uses the differentiation between tree and semi-lattice models in order to criticize the

Fort Worth, represents an urban device which overlaps with all or some of the others. Then also the cluster avoids any fixed centrality or hierarchy. We might therefore consider the 'three-dimensional chart', previously described, as the attempt to transcribe the complexity of his three-dimensional project into a sort of semi-lattice diagram. Finally, even if the organic metaphor is always mentioned and used by Gruen, we cannot consequently consider his proposals as *"a very unreal picture of human scale"*[52], as Lynch affirms when describing the organic structure. Indeed his proposals are still not banal "grey areas", which should be investigated in depth, between the simple organic image of the cell and the three-dimensional interaction of urban functions inside multifunctional centers[53].
In this sense, the Heart of the City might well represent this apparent contradiction in Gruen, since its complexity controverts a strict negative interpretation of the organic metaphor, as already stated.

Density
As far as the density of the Cellular Metropolis is concerned, the first version assumed 7.42 persons per gross acre and 23.8 if we exclude the open space. In the second diagram the cityscape`s density becomes 81 persons per acre, while the entire metropolitan area is 23.4 person per acre. Therefore, the density calculated without considering the open space and industrial areas in the diagram of the 1964, is almost the same as that in 1972 considering the entire master-plan[54].
This increasing density in the Cellular metropolis mirrors the highlighted necessity, since the first experiences of Regional Shopping Centers, for a centralization of the city, for high-density-multifunctional centers which might avoid both the waste of territory and "enforced mobility", as already previously discussed.
Moreover, the theme of recentralization and compactness of the Core is already

'extreme compartmentalization' of the elements of the city: for instance he points out the inadequacy of the separation of work from housing stated first by Tony Garnier in his Industrial City and the exclusion of the modern University Campus from the city.

52 Lynch K., *A theory of Good City Form*. MIT Press, 1981, p. 106

53 Also Wall agrees that his two-dimensional model cannot represent Gruen`s three-dimensional concept. See Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p. 204

54 1964= metropolis acres (also with green area) 444,485, population 3,300,000, density 7.42 per gross acre (4.75 person per sq.mile); metropolis acres (excluded open space and industrial area) 136,640, population 3,300,00, density 23.8 person per acre. See Gruen V.,The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p. 277-278;
1972= cityscape acres 24,700, population 2,000,000, density 81 person per acre; entire incorporated metropolitan area acres 85,500, people 2,000,000, density 23.4 person per acre
See Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 105 and p. 205-206

stressed by CIAM`s president Sert in Hoddesdon: indeed while he demonizes *"decentralization and land speculation"* as the causes for the loss of *"civic values"*[55], he consequently also condemns the pattern of low density or urban sprawl.

In this sense, *"the optimal high density and land coverage"*, which for Gruen are comparable to a compact utilitarian kitchen[56], are a prerogative for the preservation of the *"spirit of the city"*[57], of the Heart of the City. It is moreover a prerogative for a correct three-dimensional design of the city which has to preserve the environmental qualities of the Core, as already stressed in the Charter of Vienna. Indeed in his new manifesto, Gruen delineates high density as a good characteristic of a city, even though it is often misunderstood and translated with "*overcrowding"*[58]: the former is the right rapport between space and built volume while the latter is the consequence of many people living together in a limited and narrow space. Their different urban patterns might be respectively symbolized for instance by the cluster and the dumbbell, which have been previously described with regard to the commercial issue.

Nevertheless, density, as Gruen notes, can be considered also as the relation between the ground surface and the number of persons, as we have seen in the different density data above. We can consider therefore overcrowding as badly controlled, inefficient high density. And who has the duty to design the right, respectful, compact urban space, without degenerating high density into overcrowding? "*This depends on the ability of architects"* [59], Gruen answers in the Charter.

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55 See Sert J.L., *Centres of Community Life.* In Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p. 4

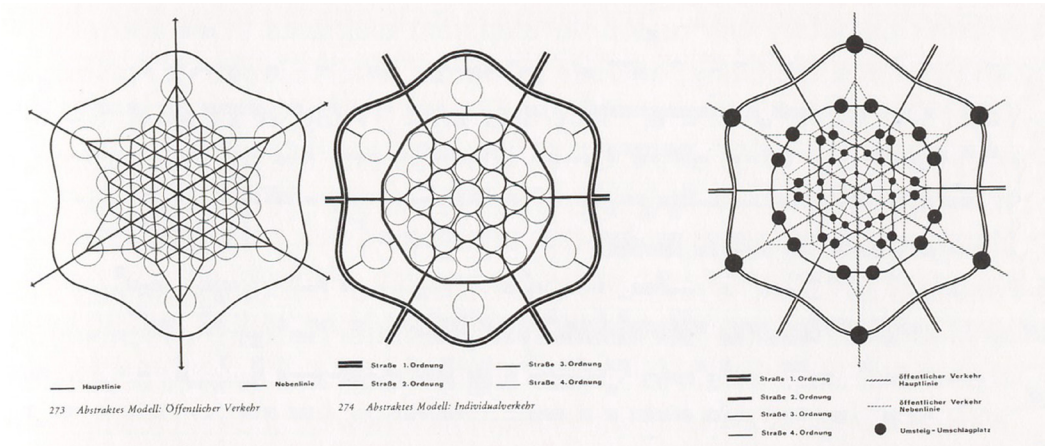
56 Gruen uses the example of the kitchen in order to explain the differences between 'overcrowding', 'disorderliness', 'low density', and 'high density'. See Gruen V.,The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p. 143-144

57 *"Those who attempt to introduce low densities and low land coverage patterns into the hearts of our cities, who try to transplant suburban concepts into urbia, sin against the spirit of the city."* See Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p. 145

58 This distinction is described in 1961 by Jane Jacobs as well, in the chapter 'The need for concentration', where she defines high density as a 'large number of dwelling per acre of land' while overcrowding means 'too many people in a dwelling for the number of rooms it contains'. In Jacob J., *The death and life of great American Cities.* Vintage Books, New York, p.205

59 In the VII Chapter: New opportunities, in Victor Gruen Foundation for Environmental Planning, Die Charta von Wien. Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I

Finally, in order to keep the characteristics of urbanity valid, he proposes that the inferior limit to density should be 200-300 persons per hectare. (81- 121 persons per acre): this inferior limit he indicates in the `70s is however very high in comparison with proposed density in his Cellular metropolis model. But it is right if we consider the density of the Metrocenter as 216 persons per acre.



Gruen, Cellular Metropolis, Public and Private transports and overlapping system

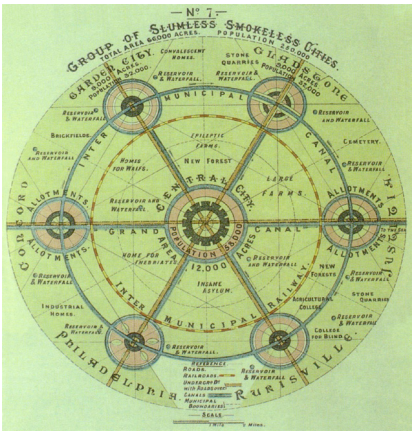
Abstract transportational model[60]

As far as mobility is concerned, Gruen split public transport from private transport, as already experimented since his first Regional Shopping Center in the early `50s. Indeed he proposes two different schemes: the first shows the public transport network which is more thick toward the center, passing through all the cells' nuclei; the private one is instead formed, as in Fort Worth, by strong concentric 'defensive' rings which enclose the different parts of the urban organism, becoming weaker and thinner as we drive into the central part. Finally the overlap of these two transport systems shows the possible transfer points between private and public, which are bigger and more intense in the outer rings.

Although the main aim remains the separation between humans and machines, between pedestrians and cars, as stressed at CIAM VIII, the solution adopted by Gruen seems to implicate a reasonable match: instead of a total pedestrian core as in Fort Worth or in other modern architects` proposals, such as Saint Dié, in the Cellular Metropolis car traffic is only reduced in the center, passing tangentially to each nucleus, rather than cancelled. Therefore the unique final aim is no longer the preservation of the pedestrian's right, but the valid integration between *"the new technological apparatus"* and *"human and urban needs"*[61].

60 See Gruen V., *Centres for the Urban Environment. Survival of the Cities*. V.N.R. Company, 1973, New York, p. 105 and p. 207

61 Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure.* Thames and Hudson, London, 1964, p. 271



Ebenezer Howard, Garden Cities of To-Morrow, 1902



From Howard`s 'Ward and Center of Garden City' to Gruen`s 'Core and Core Frame'

A similar urban model: the Garden City

At the end of the description of the Cellular Metropolis in *The Heart of Our Cities*, Victor Gruen confesses, with a feeling of both interest and frustration, that Ebenezer Howard had already described his metropolitan organism many years before[62]. Though quite unbelievable, he almost swears that he had never seen Howard`s project before publishing his own urban model. This seems impossible since Howard`s model is already well known in the `60s and radically important for the development of many cities around the world as well[63]. Lewis Mumford even considers it as outstanding for the 20th Century as the invention of the airplane[64]. In particular, Gruen is concerned by the description of a large metropolitan organism for a semi-rural garden town, illustrated in diagram n° 5

62 *"I had arrived at the idea of the cellular organization after a period of many years, and I wrote about it for the first time in an article published by Architectural Forum in September, 1956. When, quite recently, in the process of doing research for this book, I read Ebenezer Howard`s garden Cities of Tomorrow, I experienced that double-edge feeling which comes from learning that somebody else had your idea before you did; on the one hand, a certain sense of disappointment that I had not been as original as I thought and, on the other hand, satisfaction that there must be some logic to my thoughts if they had been enunciated sixty years earlier by a man who undoubtedly was a profound thinker."* in Gruen V., *The Heart of Our Cities - The Urban Crisis Diagnosis and Cure*. Thames and Hudson, London, 1964, p. 283

63 Such as Hellerau, Tapiola, Milton keynes, Telford, Marino, St. Helier, Reston.

64 *"At the beginning of the twentieth century two great new inventions took form before our eyes: the aeroplane and the Garden City, both harbingers of a new age: the first gave man wings and the second promised him a better dwelling-place when he came down to earth."* Mumford L., *The Garden City Idea and Modern Planning*. In Howard E. (ed. by Osborn F.J.), Garden Cities of To-Morrow. Faber and Faber Ltd., First MIT Press, Feb 1965, Great Britain, p.29

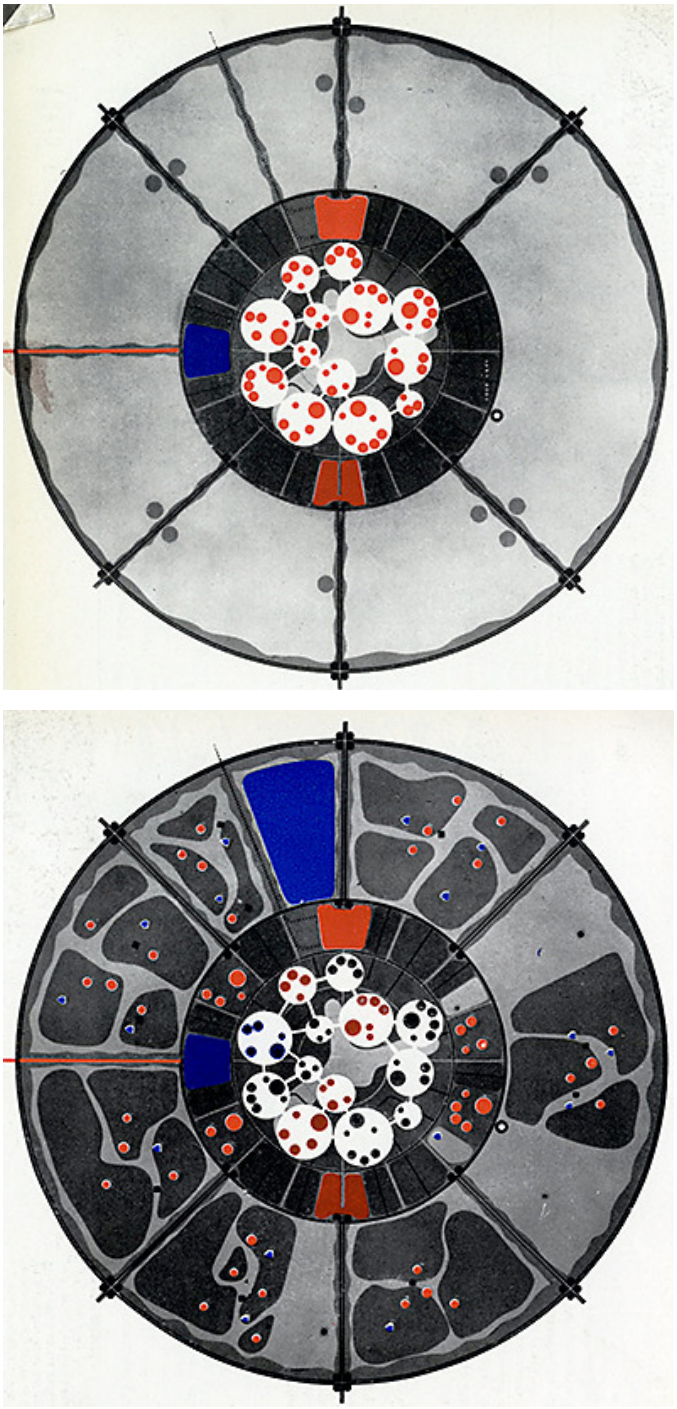
of Howard`s book. It is a satellite town for 30,000 citizens, designed as concentric rings whose center is dedicated to park and cultural institution; the inner ring contains a 'crystal palace' while the industries are designed in the periphery along the rail line and the houses; then six radial boulevards extend from the center to external areas, passing through an outer agricultural green belt which contains farms and space for children, convalescents, etc. The final result is the hybridization of the best aspects of both country- and town-scape.
Finally the Garden City is thought to be limited in size, in order to avoid the eventuality of a crowded city, which in Howard`s mind is an unhealthy city: when it reaches full population inside, another garden city would be built nearby. This principle of *"good urban growth"* seems to be applicable even nowadays in Gruen`s opinion.
Indeed, "*we should have a cluster of cities"* as Howard states, "*not of course arranged in the precise geometrical form of my diagram, but so grouped around a Central City"*[65].
The use of the cluster, the need for a concentric diagram to be then developed in a real project in relation to different needs and site specifications, the size limit, the organic metaphor, all are clear similarities or copies between Howard and Gruen.
Under Howard`s diagram of one sector of the Garden City, re-published in *'The heart of our cities'*, Gruen underlines yet again the relationships with his contemporary model affirming that the original caption "*Ward and center of Garden City"* would nowadays be preferably called the "*Core and Core Frame"*[66].
However, Gruen still finds radical differences between the two schemes. For instance, he underlines that Howard`s model cannot answer "*the stormy development of technology and sociology"* which has developed over the last decades.
Therefore Howard`s principles, which still seems to be valid in Gruen`s mind, need to be updated to the new urban condition.
These updates should concern the density of population (Howard is talking about 30,000 inhabitants while Gruen considers about one hundred times more people[67]), the size of the cell (Howard`s model corresponds to a City of 404 hectares, while the Cellular metropolis has a size of 10,000 hectares) and transportation (Gruen`s complex interactions between public and private

65 Howard's description of diagram number five and quoted by Gruen in The Heart of Our Cities - The Urban Crisis Diagnosis and Cure. Thames and Hudson, London, 1964, p. 283-284
66 Ibid. p. 284
67 Gruen`s model: 2,000,000/10,000 (ab/ha) = 200 ab/ha, Howard`s model 32.000/404 (ab/ha) =79,2 ab/ha

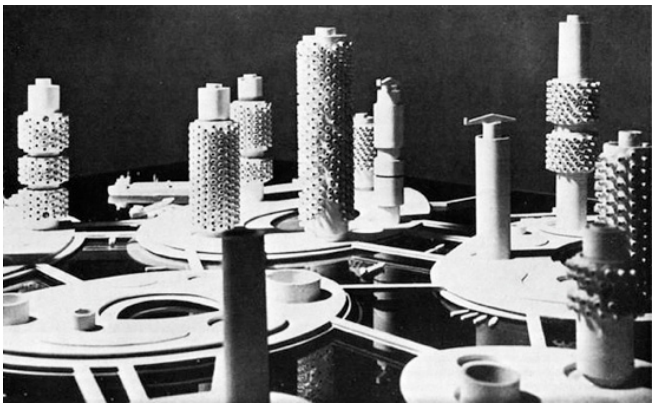
transportation networks developed on ground level and underground as well in a three-dimensional way, are simply resolved by Howard with an external ring of inter-municipal railways and small radial internal electric tramways).
Gruen`s Cellular metropolis might be considered a new Garden City model in the `60s, updated via commercial and transportation devices.

From Urban Model to Urban Project
Among Gruen`s urban proposals which translate the Cellular metropolis into a real urban structure, we present two projects, one in America and one in Europe. These examples are intriguing since they show the adaptability, flexibility and evolution of Gruen`s urban model. Moreover, we can recognize in both the commercial devices experimented since the `40s by Gruen and his theoretical thought concerning the heart of the City.
World Fair 1964
The conceptual and diagrammatic models for the Cellular Metropolis are tested in 1959, with a project for the *World Fair 1964*[68], commissioned by the Department of Commerce in Washington. The proposal envisages that the fair, which is designed in order to accommodate 50 million visitors, can be converted into a new satellite town for 100,000 inhabitants, once the initiative closes. This functional conversion represents the most intriguing character of the project. All the design principles used by Gruen firstly in his Regional Shopping Centers - such as the use of the platform, three-dimensional design, differentiation of flows, multifunctional center - are perfectly coherent and helpful in order to satisfy this main purpose[69]. As far as the project is concerned, the diagrammatic plan shows a series of concentric zones, adaptable in form and program for the various local conditions: in the central part, the exhibition halls and other attractions are organized on two different levels, using the already discussed three-dimensional concept; the ground floor is used for traffic, stores and services while the upper level hosts buildings for the fair, exhibition areas and public spaces; the final configuration is a cluster of platforms, of connected islands which are arranged around a central park with a lake. This cluster for the Fairs would become later the basis for the new urban structure: its upper exhibition building would be converted into offices, apartments, hotels, etc, keeping their pedestrian basements (the

68 Alex Wall affirms that the World Fair is designed in 1959 and it is the first opportunity for Gruen to translate his "1976" into a real urban project. See Wall A., *Victor Gruen – From Urban Shop to New City.* Actar, Barcellona, 2005, p. 198
69 Gruen`s theory is important even today when dealing with similar tasks. For instance, today there is a debate on how to reconvert the next EXPO which will be held in Milan in 2015.



Gruen, World Fair 1964, during the Fair and the later conversion into a satellite town Frame’



Kiyonori Kikutake, Marine City, 1963, Model view

platform) as public spaces. Moreover, the space underneath the platforms willd be filled with terminals for public transportation, storages, heating and air conditioning plants, keeping its functions unchanged for both the Fair and the Satellite city.
Then a system of concentric rings, similar to Fort Worth, contain all the parking areas and terminals. The inner one, surrounding the core, is used only for parking lots and terminal facilities for regional transportation, some of which will be converted later into industrial centers, since the transportation load will be smaller after the Fair. An outer ring is used for multi-purpose functions and facilities for the Fair, becoming an area for future development of small neighbourhoods or towns immersed in green areas.
Finally, if on the one hand, similarly to Fort Worth, Gruen designs a city with well-defined boundaries like a traditional medieval city, on the other his proposal seems very progressive thanks to its "reusable" destinations: its architectural devices and the cluster, experimented in his shopping centers, allow the project to evolve from a Fair to a satellite town for 100,000 inhabitants; but it could also allow other transformations of the city itself according to future necessities. Gruen`s project represents an intriguing flexible model where the urban structure and its devices are preliminary designed for a future continual transformation, which might also answer to an increasing complexity of society and of its necessities. Moreover, the same organic reference and transformability of the plan, which are present in Gruen`s proposal, can be found with many resonances in coeval Metabolist projects, as already discussed. Indeed the same term Metabolism refers to a mutable organism, which transforms itself rejecting any fixed idea of a zoning plan or eternal valid master-plan. It relates to *"a system which*

can be followed consistently from the present into the distant future"[70], similarly to Gruen`s proposal. In particular the Marine City designed by Kiyonori Kikutake in 1963, resembles the World Fair 1964, because of both its formal cluster of circle islands and its internal regeneration: the islands can grow horizontally expanding the limits of the cluster or vertically adding more units to the tower, or they can even die by sinking into the ocean. In this sense the organic metaphor, in both the Fair`s plan and Marine City, doesn't crystallize into a fixed image of the city as criticized for instance by Lynch. On the contrary, it becomes, in Japan as in the US, the counterforce of static urban entities, considering the *"human society as a vital process, a continuous development"*[71].
Unfortunately, the '*World Fair 1964*' shares the same destiny as the renewal of Fort Worth: it is not realized. The final decision is to organize the Fair in New York rather than in Washington: *"an opportunity to demonstrate new approaches and new ideas in the field of city planning"* fails. *"The operation was a success but the patient died!"*[72]

LOUVAIN LA NEUVE

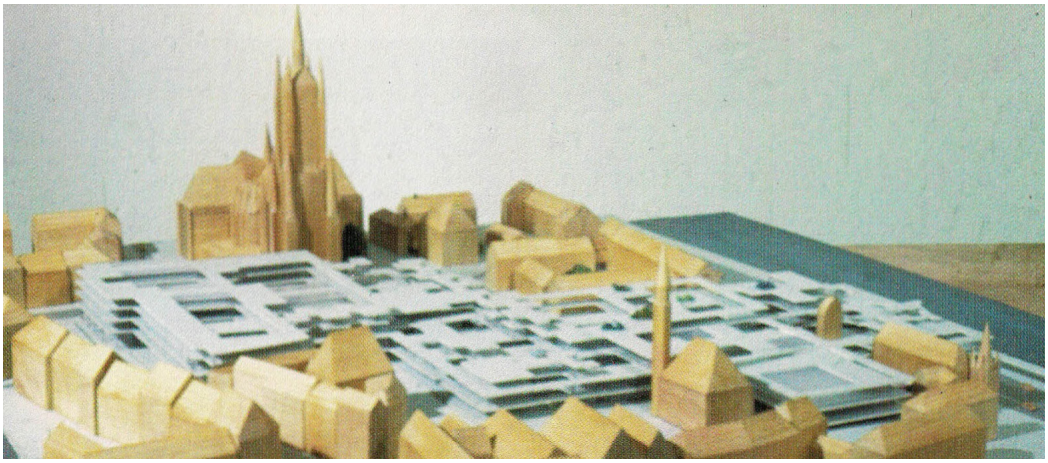
Another intriguing urban proposal is the University Town for the Catholic University of Louvain, in Belgium or, as Gruen himself sarcastically calls it, the project of "*The University Town which could have been"*[73], since yet again the original project willnot be completely executed.
The necessity for a new university town is due to a governmental decision to separate the French speaking side from the Flemish one, both concentrated in the University of Louvain, which is one of the oldest in Europe, founded in 1425.
The main purpose of the new project should therefore be the spirit of urbanity, compactness and the close integration of the Institutions with the new urban structure, which is a specific characteristic also of the old University in Louvain.

70 Noboru Kawazoe, The City of the Future, Zodiac 9 (1961):100 quoted in Lin Z., Kenzo Tange and the Metabolist movement. Urban Utopias of Modern Japan. Urban Utopias of Modern Japan. Routledge, London and New York, 2010, p. 96

71 Kiyonori Kikutake et al., *Metabolism: The Proposals for New Urbanism* (Tokyo:Bjiutsu Shupansha, 1960) quoted by Lin Z., Kenzo Tange and the Metabolist movement. Urban Utopias of Modern Japan. Urban Utopias of Modern Japan. Routledge, London and New York, 2010, p. 24

72 Fredrick Gutheim, Washington planning problems: from L'Enfant to Gruen, 1959, p. 86 quoted in Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p. 200

73 Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 105 and p. 222



Candilis-Josic-Woods, Free University competition in Berlin, 1963

The University Town issue

In 1967 the Chief Administrator of the University goes to Los Angeles to ask Gruen for a first study of already existing examples of new Universities integrated inside the city[74].

After a brief research Gruen`s team is unable to present any interesting references of urban integration, since there is always a compartmentalization between new campuses and urban centers. The new project would be, therefore, an outstanding opportunity to propose a brand new model of a University Town, whose basis can fit into both the abstract Cellular metropolis organization and the Shopping Town`s principles.

Nevertheless, the conclusions of the study report made by Gruen about the contemporary references seems incomplete and therefore wrong. Indeed a few years before, in Europe, other architects have already developed a project with an interesting merging between the University campus and the Urban structure: the French firm Candilis-Josic-Woods[75]. The project for the Free University competition in Berlin (1963) is indeed an attempt to use the '*web'* and the '*mat'*[76] metaphor as a criticism against the separation of functions as stated by modernism[77]. Moreover, it is a clear example of a post-war project the

74 Mentioned by Gruen in Ibid. p. 222

75 Gruen doesn`t mention them but as we will see there are many similarities.

76 See Tom Avermaete, *Mat-building. Team 10's reinvention of the critical capacity of the urban tissue.* in ed. by Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81.*NAI Publisher, Rotterdam, p. 135, 307-312

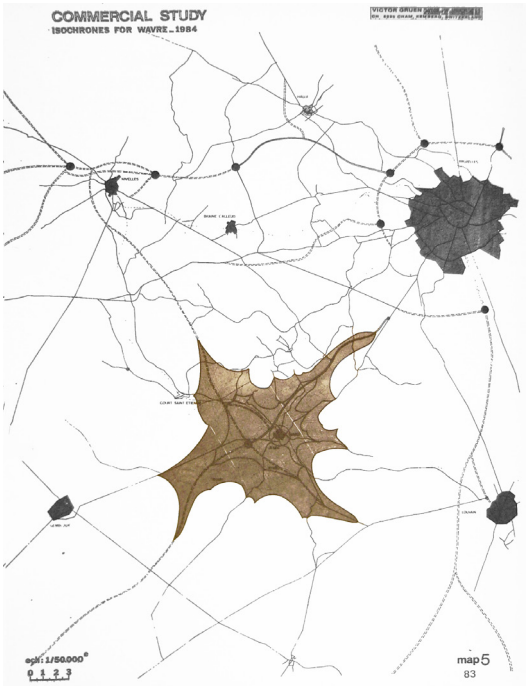
77 Ibid.

aim of which is to "*recapture the spatial and functional density of the traditional European City'"*[78]. The new university is thus considered a true "*tissu urbain",* a dense "*two-dimensional tissue"*[79] , with a "*groundscraper organization"* (Woods): its structure is in contrast with the idea of the city as a collection of volumes, becoming the first example of the end of the monumentality period for university buildings, as stated by Giedion[80].
Therefore the French firm`s project featured Gruen`s analogue principles such as high density and the complexity of the functional integrations. For instance, the *'groundscraper'* university shares many similarities in section with the *'platform principle'* used by Gruen, even though the former compresses all the three-dimensional complexity inside a stratification of planes while the latter has a clear distinction between the different functions, the pedestrian platform and the vertical *superstructures*.

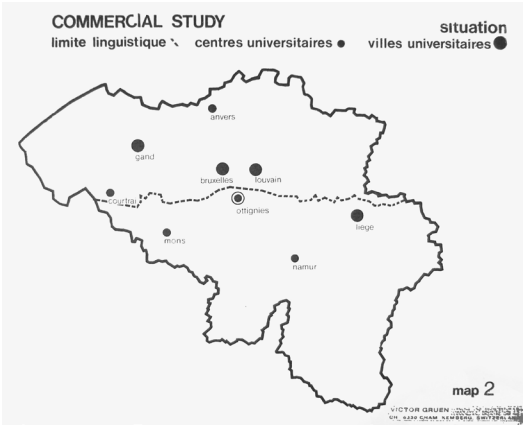
Shopping Town Belgium[81]: Gruen`s commercial analysis
Gruen`s first analyses aimed at focusing on the influence area and the specific site where the new city should be built up[82]. He divides these studies into five main steps where the major considerations regard driving time and the size of the commercial facilities.
The first step considers the determination of the time/distance ranges from the site of the new potential center in 1984. The result, obtained with the help of Henry Zoller (CREAT), is a map of isochrones of different driving times from the center[83].

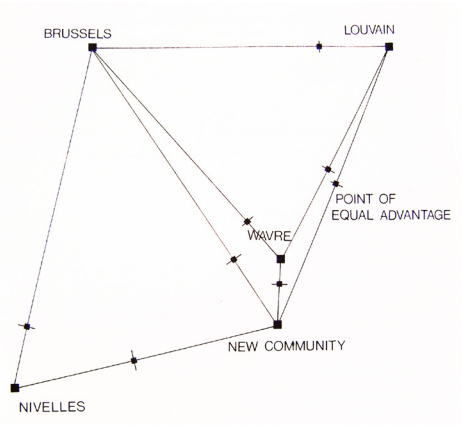
78 Ibid.
79 Ibid.
80 *"No trace of civic grandeur remains [...] the plan is a web of low one-to three story buildings interwoven by four parallel pedestrian streets, 66 meters apart, and numerous narrow cross streets. Transportation routes and servicing are at a lower level."* Giedion, S., *Architecture and the Phenomena of Transition, the three space conceptions in Architecture.* Harvard University press, Cambridge, Massachusetts, 1971, *p.286*
Contrary to other large-scale developments, the plan permits a high grade of intimacy to be reached and, in the same time, it allows later expansions or re-modellings. Intimacy is guaranteed by the modest sized interior courts while flexibility is attained thanks to the use of interior wall panels which can be freely added or removed.
81 A personal interpretation with reference to Gruen`s book "Shopping Town USA".
82 All the material is in Victor Gruen, Urbanisme et Architecture s.a., 'Commercial Study', Draft report, Octorber 1969, in Louvain la Neuve Archive, Dossier 15
83 5 minutes (maximum driving time inside a neighbourhood of 10,000 mq) 10 and 15 minutes (center dimensions between 10,000 and 35000 mq), 20 and 25 minutes (considered as `optimum` average of time in order to reach a regional center which can contain at least one major Department Store). The Isochrone has been then compared to the isochrones of the nearby city of Wavre, which is characterized by a larger area of influence thanks to an highly developed road network. The study finally develops public transport as well.





Gruen: Isochrones for New Community and Wavre in 1984; the second Map shows only the 5-minute area which is bigger than in the first one.





Gruen: linguistic boundaries in Belgium (third step) and travel time between communities (fourth step), 1969

The second and third steps include the determination of the future population in the entire region and the investigation of all the *"weighting factors"* of all urban agglomerations which could enter potentially in competition with those of the new community[84].

The most important factor is the "*uniqueness of service or activity"* in already existing agglomerations, since *"the town must project an image"*, as Gruen states, with a *"strong identifiable activity idea"*. In Louvain la Neuve this activity idea is perfectly represented by the University itself, as "*one of the most dynamic, creative social institutions to-day"*[85] and its particular potential integration with the newly founded urban structure. Also the difference of language and culture is another important factor since it is the reason itself for the rise of the new community. This factor is shown synthetically by Gruen indicating on a map of Belgium the present linguistic boundaries and universities.

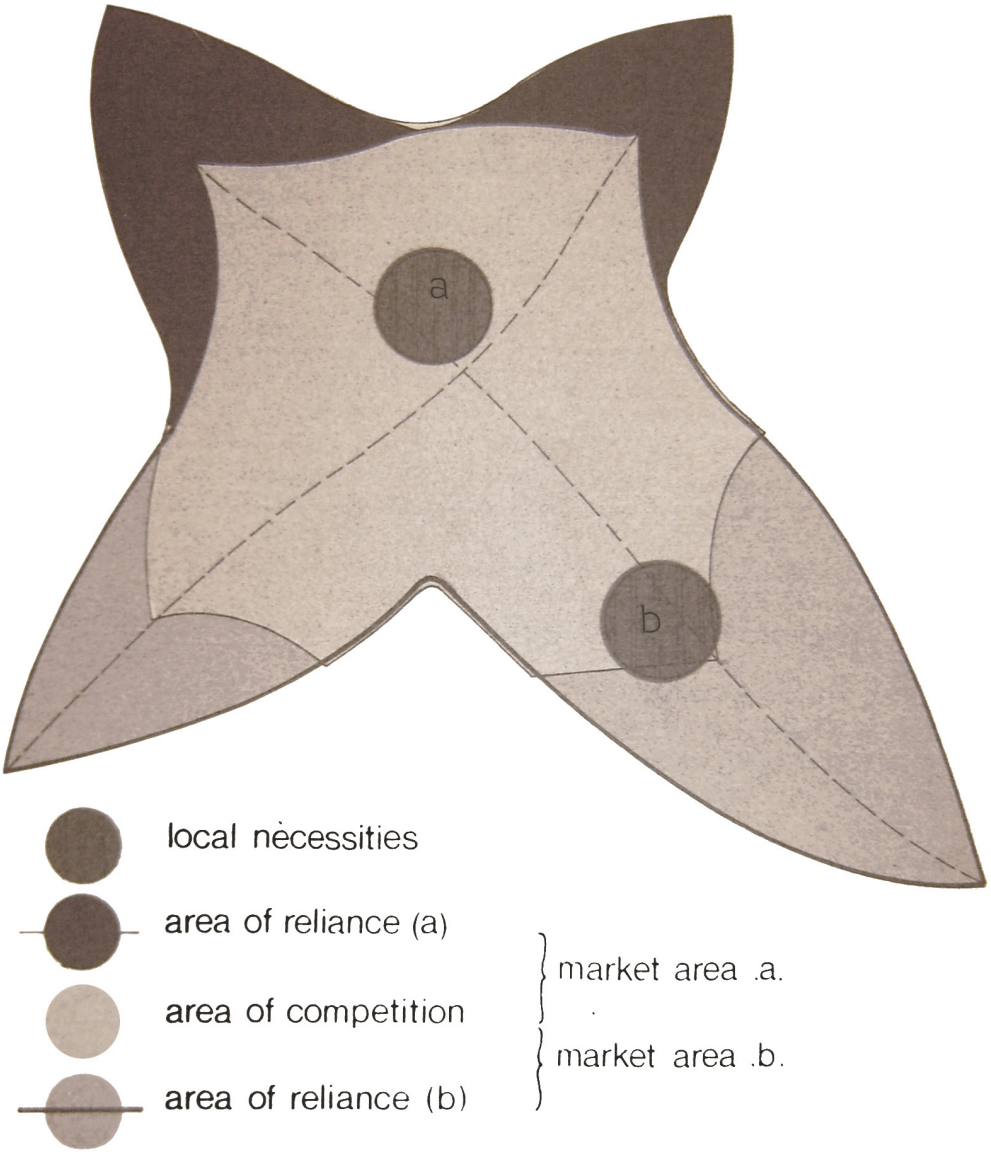
The last factor considered is *"the availability of auto-oriented commercial-service or cultural opportunity"*[86]*.* It is interesting to note that this factor regards both commercial and cultural aspects together, without distinctions. The related tables then shows only the availability for existing and new services, parking, commercial density and proximity to major transport routes: the cultural activities are even omitted or maybe only considered as part of services.[87]

84 These factors are related to the population of each city and the time/distance of each agglomeration to the new community, which have been discussed before.

85 Ibid. p. 64

86 Ibid. p.57-67

87 Finally, all these factors are evaluated with a number (10 is the maximum), obtaining the final factor by



Gruen, Market area relationships: general centers 'A' - 'B' and Louvain la Neuve - Wavre
Both centers, 'A' and 'B', generate areas of reliance, of dependence which are on the extreme sides respectively. The hatch lines represent the priority necessities of each center while the main central part is entirely the "area of competition" where also the two centers are merged because of their proximity. This condition is similar to the market interaction between the new community and the nearest city of Wavre. Indeed from the second map we can see the proximity of two centers and the strong interaction between the two market areas.



Gruen, Market area relationships: general centers 'A' - 'B' and Louvain la Neuve - Wavre
Louvain la Neuve is indeed destined to be built near Wavre. The report does not clarify whether the reason for this decision is political or as a result of Gruen`s study. It is interesting to note that even if Louvain la Neuve is almost inside the primacy market area of Wavre on the east side, it has highly developed regional market areas which envelope both centers and external ones as well, such as Gembloux on the south west side.

Finally the fourth step considers the travel times between the various agglomerations while the last step combines all the previous information into a synthesis.
This is literally calculated using an equation[88] which permits us to theoretically know the limit between two adjacent areas of market, inside which people will decide to reach one of the two centers. This limit is called *"point of equal advantage"* and it is determined for all main agglomerations including the new community as well.
The two areas may overlap as well. In this case there will be an area of competition between the two centers.
We can finally conclude that this interesting and long analysis is entirely based on the potential commercial attraction of the new settlement, deriving directly from the schemes and methods used by Gruen and the economist Larry Smith for the regional Shopping Centers in the US as described in "*Shopping Town USA"*[89]. Moreover all the attention is focused on the commercial facilities and services, omitting all institutional, municipal, and cultural reasons[90]. This seems contradictory if on the one hand the new city should seek its uniqueness in a new image of University-Town, in a new model of a City based on the integration of cultural institutions and urban structure (as in the Free University of Berlin) and on the other all the attention is spent on its function of Commercial-Town, of a brand new *Shopping Town Belgium*[91]. Nevertheless, we probably cannot radically criticize this approach since Gruen`s experience is rooted in shopping center design and therefore we may interpret this study as a specific personal approach underlying all his urban proposals; moreover the market schemes are always considered in parallel with the social and environmental issues as well.

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adding all the single ones. A + B + 1/2C + D + E= FINAL FACTOR or OPTIMUM ATTRACTIVENESS FACTOR FOR 1984, Ibid. p.67

88 As example it is assumed an imaginary City 'A' with final factor of 25 (calculated in Step 3), and a second city 'B' with final factor of 10. In Step 4 the time/distance between 'A' and 'B' has been calculated, for instance 24.5. The final equation, whose origin has been not explained, is therefore:
25 (x)= 10 (24.5 -x) ---> x= 7 minutes. 'X' is the time/distance from 'A' to 'B' and its market area. If we exchange the cities in the equation, we will obtain 17.5 minutes as the limit of the market area from 'B' to 'A'. Ibid. p.72

89 See Gruen V., Smith L., Shopping Town USA. Reinhold Publishing Corporation, New York, 1960

90 "We realize of course that this is a very simplistic way of determining this market area. We have employed the following reasoning: if a town has a certain number of m2 of facilities and services (not including cultural, municipal, etc...), it will have a market area which should be able to be quantified similar to that which is done for modern Shopping Centers" in Victor Gruen, Urbanisme et Architecture s.a., 'Commercial Study', Draft report, Octorber 1969, in Louvain la Neuve Archive, Dossier 15, p.73

91 Nowadays Consumerism and Culture are almost mixed together in many institutions. Margaret Crawford highlights "an exchange of attributes between the museum and the shopping mall, between commerce and culture [...] The world of the shopping mall […] has become the world." Crawford M., The World in a Shopping Mall. In ed. By Sorkin M., Variations on a Theme Park. The new American City and the end of public space. Hill and Wang, New York, 1992, New York, p. 30

Criticisms to the commercial centrality in New Towns

After this analysis we might ask ourselves whether the commercial part is effectively the most important issue for the design of the city and public space in order to guarantee both the affluence of people and growth of the economy. Aldo Rossi has also wondered this in *"Architettura della Citta`"*, considering the commercial function as the *"most convincing in order to explain the multiplicity of 'fatti urbani' "*[92]. We have already argued the necessity of rehabilitating the positive architectural shopping devices as already considered for instance in the `50s by Sert and Tyrwhitt in the Urban Design discourse. In a world transformed into a shopping mall[93], there are still positive features and devices which can be rescued from the first commercial experiments (before becoming *"bastards"*[94]) in order preserve the social role of commerce of "*contact and stimulation"*, as highlighted for instance by Jan Gehl[95].

Nevertheless, Louvain la Neuve seems apparently totally catalyzed only around the commercial activity with a dangerous *"inversion of values"* of its center in comparison with the old ones of the European city, as highlighted for instance by Bernardo Secchi[96] describing Milton Keynes. This is another New Town, founded near London at the end of the `60s, almost contemporary with the Belgian new University town. In 1979 the biggest shopping center in the UK is built in the center of Milton Keynes while all the civic and cultural institutions are located outside on

92 *"[…] e` opportuno precisare che già all'interno di questo sistema sorge una difficoltà nello stabilire il ruolo della funzione commerciale.[...] Una funzione preminente ed emergente e` infatti quella commerciale. Questa funzione del commercio e dei traffici commerciali e` infatti il fondamento, in termini di produzione, di una spiegazione 'economica' della città che, partendo dalla formulazione classica di Max Weber, ha avuto uno sviluppo particolare e su cui ci fermeremo più avanti. E` logico immaginare come, accettata una classificazione della città per funzioni, la funzione commerciale, nel suo costituirsi e nella sua continuità, si presenti come quella più convincente a spiegare la molteplicità dei fatti urbani; ed a legarsi con le teorie di carattere economico della città. Ma proprio l`attribuire un valore diverso alle singole funzioni ci porta a non riconoscere validità al funzionalismo ingenuo [...]"* Rossi A., *L`architettura della città.* Città Studi edizioni, Torino, 2006, p. 37-38 ; 1st ed. Città Studi ed., Milano, 1978

93 *"the world of the shopping mall […] has become the world"* Crawford M., *The World in a Shopping Mall.* In Sorkin M. ed. by, *Variations on a theme park. The American city and the end of the public space.* Hill and Wang, New York, 1992, p. 30

94 *"I refuse to pay alimony for those bastard developments".* in Hardwick M. J., Mall Maker. Victor Gruen, Architect of an American Dream. University of Pennsylvania Press, Philadelphia, 2004, p. 2

95 *"[…] the shopping excursion is both a shopping trip and a pretext, or occasion, for contact and stimulation."* Gehl J., Life between buildings. Using Public Space. Island Press, 2003, p. 117, original Van Nostrand Reinhold, New York, 1987

96 *"Come se il 90% dei negozi di una città` come Brescia o come Rennes fossero riuniti in un solo luogo; come se, in mezzo ad una città` nuova di zecca, si costruisse un centro che aspira a svolgere, in un`area più` ristretta, le identiche funzioni e l` identico ruolo dei centri antichi di Brescia o di Rennes, privi pero` delle popolazioni che pur vi risiedono, degli uffici e dei luoghi di lavoro che pure li occupano."* Secchi B., *La città del ventesimo secolo.* ed. Laterza, 2005, Roma-Bari, p. 144

the external boundaries of the city. *"Maybe realistically the contemporary society represents better itself in a shopping mall than in the civic magnificence,"*[97] Secchi argues ironically. Milton Keynes is therefore a case study where the centrality of the shopping mall contradicts the multifunctional principles stated by the 'mall maker' himself, Victor Gruen. It is probably also proof of the failure of the shopping center in Europe and especially of its new banal versions, as already recognized and denounced by Gruen. On the contrary the proposal for the Belgian city, albeit totally based on the commercial analysis, doesn't betray the three-dimensional integration of both cultural, civic and commercial functions inside its center, as stressed by Gruen in the Heart theme and in the Urban Design discourse. This is proven for instance by the semi-lattice structure panel, the *"three-dimensional chart"* traced by Gruen for the design of Louvain la Neuve. As we can note, the activities are indeed mainly divided into university and urban activities, while the commercial functions are quoted only inside the second ones without a central role in the chart.

Louvain la Neuve, the project

In "*Centres for the Urban Environment"* Gruen presents two projects proposed by his firm for Louvain la Neuve.

Gruen`s first plan shows a center surrounded by four communities, with a total land area of 865 acres and a population of 70,000 people and with a high density of 80.9 persons per acre. This is the inferior limit of density as considered in the Charter of Vienna (between 81-121 persons per acre)[98], in order to achieve the correct compactness of the city. The abstract model then has a diameter of approximately 1,950 meters with a core of 200 meters. This model has then been developed with four quarters around a central one , as shown in the diagram, using the cluster and the platform as the main devices for urban organization.

The second project is designed through the hexagonal model which directly recalls Christaller`s diagram for the "*local centralities theory":* here the market area is a hierarchical structure based on economies, transport costs, number of household units.

Although the reference seems evident, Gruen doesn`t mention the Nazi[99] commercial scheme by Christaller, motivating the hexagon as producer of "*the tightest and most*

97 Ibid. 144

98 In the VII Chapter: New opportunities, in Victor Gruen Foundation for Environmental Planning, Die Charta von Wien. Zentren als Urbane Brennpunke, 1973 from Tu Wien Library, 2601G, 441.540 I

99 It is very interesting to note that a model invented with the aim to impose Nazi order in Germany in the '30s was re-interpreted, or rather copied, forty years later by the "Mall Maker", by the architect of the American Consumerism Dome, in a State which has been occupied by Nazis during the II World War.

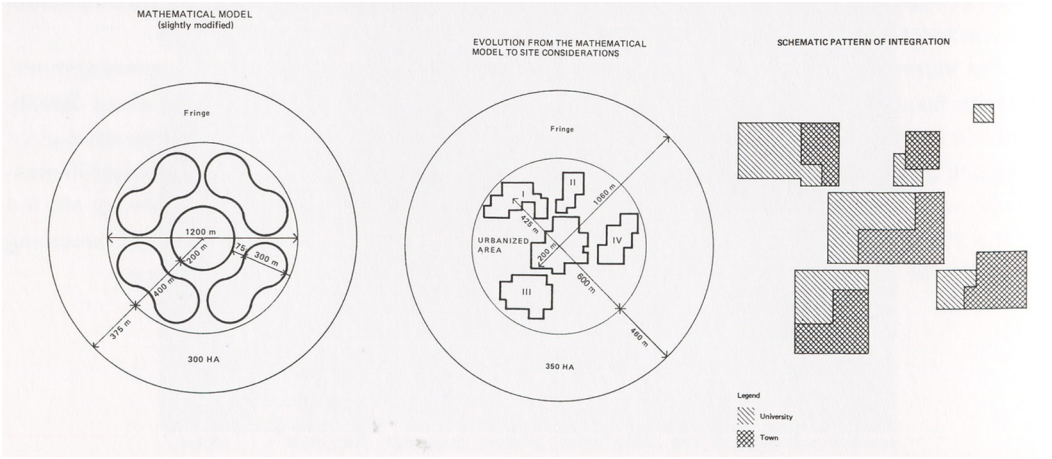
REPARTITION HORIZONTAL ET VERTICALE DES SURFACES DE PLANCHER BRUTES PAR FONCTION

ALLOCATION OF GROSS BUILDING FLOOR AREAS BY FONCTION TO LEVELS AND LOCATION

A L'EXCLUSION DU PARKING ET DES ACTIVITES SITUEES DANS LA ZONE PERIPHERIQUE
EXCLUDING PARKING AND ACTIVITIES WITHIN FRINGE AREA

FONCTIONS / ACTIVITIES			SURFACE DE PLANCHER BRUTE TOTALE EN m^2 TOTAL m^2 GROSS FLOOR AREA	SURFACES DE PLANCHER SOUS PLATEFORMES / FLOOR AREAS WITHIN THE BASE STRUCTURES								SURFACE TOTALE SOUS PLATEFORME EN m^2 TOTAL m^2 WITHIN BASE STRUCTURE
				CENTRE DE LA VILLE / TOWN CORE				CENTRE DES QUARTIERS / QUARTIER CORES				
				NIVEAU DES SERVICES / SERVICE LEVEL	NIVEAU D'ACTIVITE I / ACTIVITY LEVEL I	NIVEAU D'ACTIVITE II / ACTIVITY LEVEL II	SOUS-TOTAL / SUB-TOTAL	NIVEAU DES SERVICES / SERVICE LEVEL	NIVEAU D'ACTIVITE / ACTIVITY LEVEL	SOUS-TOTAL / SUB-TOTAL	
FONCTIONS UNIVERSITAIRES / UNIVERSITY ACTIVITIES	FONCTIONS ACADEMIQUES / ACADEMIC ACTIVITIES	AUDITOIRES ET SALLES DE SEMINAIRE / CLASS AND SEMINAR ROOMS	43,100	2,500	20,300	20,300	43,100	–	–	–	43,100
		LABORATOIRES D'ENSEIGNEMENT / TEACHING LABORATORIES	60,100	–	–	–	–	12,000	22,000	34,000	34,000
		LABORATORIES DE RECHERCHE / RESEARCH LABORATORIES	184,500	–	–	–	–	84,500	100,000	184,000	184,500
		BUREAUX DE FACULTES / DEPARTMENTAL OFFICES	123,600	600	7,500	7,500	15,600	22,000	47,000	69,000	84,600
		SALLES DE REUNION / MEETING ROOMS	18,000	1,000	3,500	3,500	8,000	–	8,000	8,000	16,000
		BIBLIOTHEQUE SPECIALISEES / SPECIAL LIBRARIES	44,000	–	–	–	–	3,000	28,000	31,000	31,000
		BIBLIOTHEQUE CENTRALE / CENTRAL LIBRARY	88,000	9,000	20,000	20,000	49,000	–	–	–	49,000
	AUTRES FONCTIONS UNIVERSITAIRES / OTHER UNIVERSITY ACTIVITIES	ADMINISTRATION CENTRALE / CENTRAL ADMINISTRATION	12,800	400	1,800	4,300	6,500	–	–	–	6,500
		INSTALLATIONS SPORTIVES COUVERTES / INDOOR SPORTS	10,200	2,000	1,500	1,500	5,000	1,300	2,400	3,700	8,700
		SERVICES ETUDIANTS / STUDENT SERVICES	17,000	–	–	–	–	2,000	12,000	14,000	–
		LOGEMENTS POUR ETUDIANTS / RESIDENCE HALLS	176,000	–	–	–	–	6,000	10,000	16,000	16,000
		RESTAURANTS	22,000	1,200	1,900	1,900	5,000	2,200	8,800	11,000	16,000
		LOGEMENTS POUR ETUDIANTS MARIES / HOUSING FOR MARRIED STUDENTS	54,000	1,600	800	800	3,200	1,200	1,200	2,400	5,600
		AUTRES LOGEMENTS FOURNIS PAR L'UCL / OTHER HOUSING PROVIDED BY UCL	104,000	3,400	6,600	4,100	14,100	2,100	4,000	6,100	20,200
	TOTAL DES FONCTIONS UNIVERSITAIRES / TOTAL UNIVERSITY ACTIVITIES		957,300	21,700	63,900	63,900	149,500	136,300	243,400	379,700	529,200
	HOSPITAL NON COMPRIS / NOT INCLUDING HOSPITAL 100,000										
FONCTIONS URBAINES / URBAN ACTIVITIES	LOGEMENT / HOUSING		1,872,000	11,000	7,000	7,000	25,000	32,000	33,000	65,000	90,000
	ECOLES / SCHOOLS		118,000	4,000	15,000	15,000	34,000	7,500	48,500	56,000	90,000
	EQUIPEMENTS SANITAIRES / HEALTH		27,000	2,500	5,000	5,000	12,500	2,500	8,000	10,500	23,000
	INSTALLATIONS SPORTIVES COUVERTES		6,000	500	500	500	1,500	800	1,700	2,500	4,000
	EQUIPEMENTS CULTURELS ET RELIGIEUX / CULTURAL AND RELIGIOUS	EGLISES / CHURCHES	28,000	500	2,000	2,000	4,500	1,000	5,000	6,000	10,500
		BIBLIOTHEQUES / LIBRARIES	9,400	1,000	1,500	1,500	4,000	800	2,700	3,500	7,500
		EXPOSITIONS / EXHIBITIONS	2,200	300	600	600	1,500	50	150	200	1,700
		SPECTACLES / ENTERTAINMENT	2,200	200	900	900	2,000	–	–	–	2,000
		CLUBS	2,200	100	700	700	1,500	100	600	700	2,200
	COMMERCE / RETAIL SHOPPING		148,500	20,600	38,700	38,700	98,000	6,000	30,000	36,000	134,000
	BUREAUX / OFFICES		50,000	4,500	3,500	3,500	11,500	–	–	–	11,500
	SERVICES PUBLICS / PUBLIC SERVICES	ADMINISTRATION LOCALE / LOCAL ADMINISTRATION	10,500	900	950	950	2,800	–	–	–	2,800
		POLICE	1,500	100	400	400	900	100	400	500	1,400
		POST AND TELEGRAPH	3,000	600	600	600	1,800	600	400	1,000	2,800
	TOTAL DES FONCTIONS URBAINES / TOTAL URBAN ACTIVITIES		2,280,500	46,800	77,350	77,350	201,500	51,450	130,450	181,900	383,400
	FONCTIONS UNIVERSITAIRES ET URBAINES / ACADEMIC AND URBAN ACTIVITIES		3,237,800	68,500	141,250	141,250	351,000	187,750	373,850	561,600	912,600

Gruen, First part of the Three-dimensional chart of Louvain la Neuve. Allocation of gross floor areas by function to levels and location excluding parking and activities within fringe area



Gruen, First schemes for Louvain la Neuve, very similar to his model of the Cellular Metropolis.

efficient spatial arrangement."[100] The abstract model is then adjusted to the topography of the site, underlying the different scale boundaries, the cores including the Academic one and major connections.

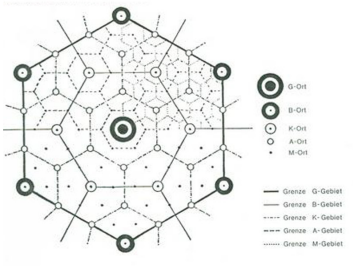
Differently from the first proposal, the new one is less compact, with less population organized in double the space. The density is thus lower: 50,000 inhabitants live in 1,760 acres, with a density of 29.5 person per acre which is very far from the first proposal of 80.9 persons per acre. Then the core is smaller with a diameter of 790 meters, housing a population of 10,000 people, while each small quarter is designed for 6,000 inhabitants.

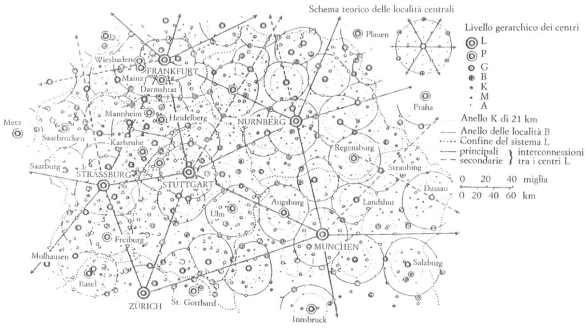
The platform principle is used only for the central Core, avoiding the non-human space of *"la dalle"* for the entire urban settlement. Indeed the rest of neighbourhoods are no longer developed on high density platforms, but as single houses with gardens, in a more *"conservative"*[101] solution.

As we can see from a more detailed section, the cultural and commercial activities are mostly compressed inside the platform above the lowest level of parking and transportation. The complexity of this compressed platform of mixed university and commercial activities, finds some resonances with the mat structure of the University of Berlin, as already stated. Nevertheless, the shopping center foreseen by Gruen in the central core, and drawn also in section, is finally rejected by the academic council since *"the commercial uses didn't belong near a University and would be better located*

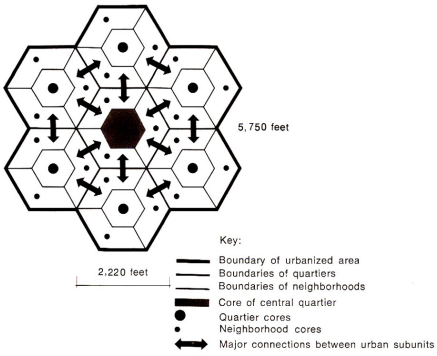
100 Gruen V., *Centres for the Urban Environment. Survival of the Cities*. V.N.R. Company, 1973, New York, p. 105 and p. 232

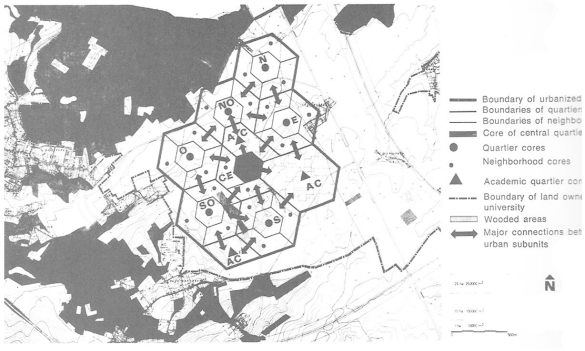
101 Ibid. p. 229



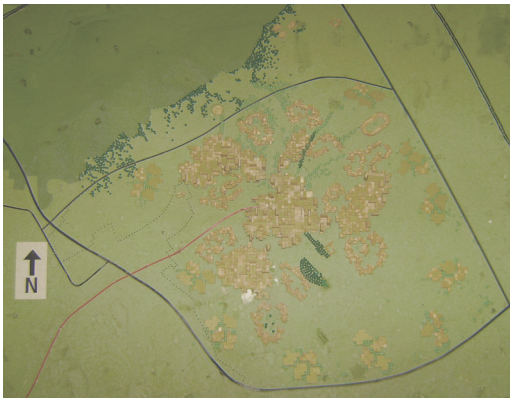


Christaller, Local centralities theory, `30s





Gruen, Second Master-plan of Louvain la Neuve, 1968





Gruen, Model of the Master-plan of Louvain la Neuve

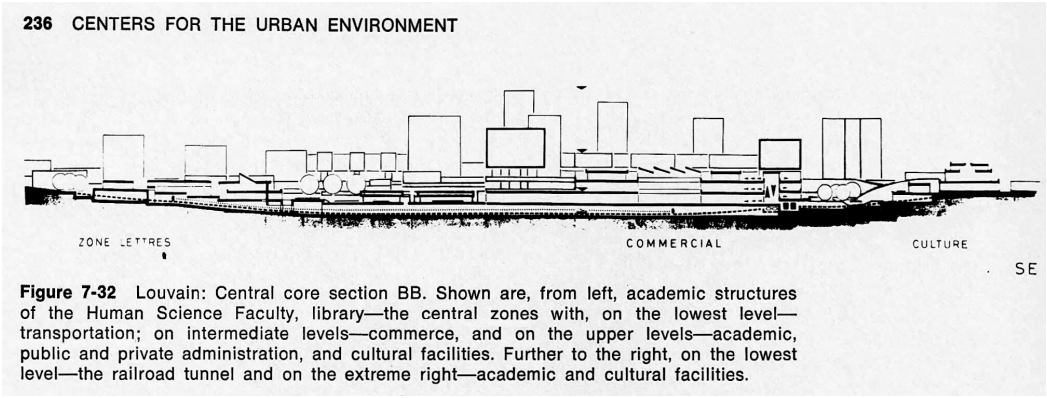


Figure 7-32 Louvain: Central core section BB. Shown are, from left, academic structures of the Human Science Faculty, library—the central zones with, on the lowest level—transportation; on intermediate levels—commerce, and on the upper levels—academic, public and private administration, and cultural facilities. Further to the right, on the lowest level—the railroad tunnel and on the extreme right—academic and cultural facilities.

Gruen, Louvain la Neuve section

outside"[102].

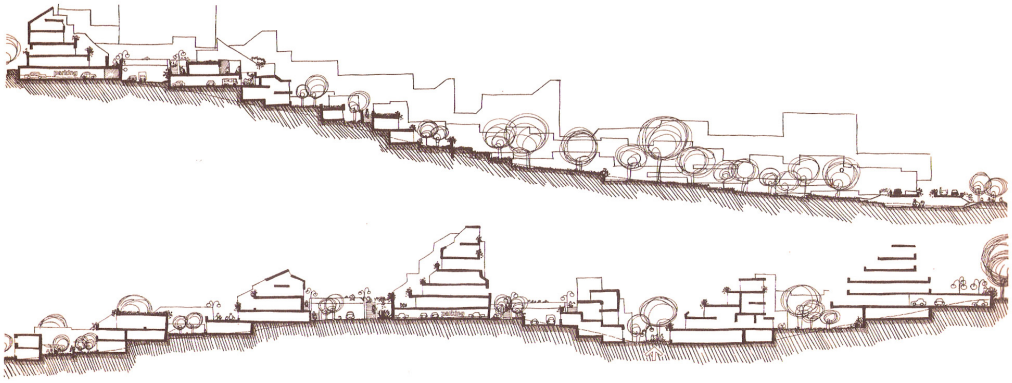
Differently to Milton Keynes, in Louvain la Neuve the internal shopping center is thus abhorred though also designed with an intriguing mix of cultural and consumption functions, which could have been potentially a new experiment for a contemporary post-fordist University Town.

Then in 1968 the responsibility to continue the plan is turned *"for national sensitivity"* to local Belgian architects, who are more interested, in Gruen`s opinion, in a *"romantic planning"*[103] rather than a rational one. These architects indeed propose a more human-postmodern identity to the architecture, described by Gruen as a populistic one, and they also diluted the density previously proposed, reserving the town only for *"nice people with high incomes."*[104] In any case parts of Gruen`s scheme, such as the division into four neighbourhoods (Hocaille, Bruyere, Bierau, Lauzelle) around a

102 This is stated in an interview by Alex Wall with Fritz Waclawek, Architect, and Erik Bramhas, City Planner, Vienna, 23 may, 2002. Also with Prof. David Vandenburgh, UCL, Louvain-la-Neuve, 2001, and Fabenne Lewis-Sowa, Karlsruhe, 2004. in Wall A., Victor Gruen – From Urban Shop to New City. Actar, Barcellona, 2005, p. 218-219

103 *"[…] the Belgian team was emotionally involved in an attitude of urban planning which I termed "romantic planning". In contrast to "technocratic planning" which in blind admiration of the achievements of modern technology is willing to subordinate the expressions of human life to the functioning of machinery, "romantic planning" is based on the admiration of the past. It considers the manifestations of modern society to a large extent vulgar and believes that for the urban environment to become desirable, the examples of the past must be slavishly followed."* in Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 105 and p. 228

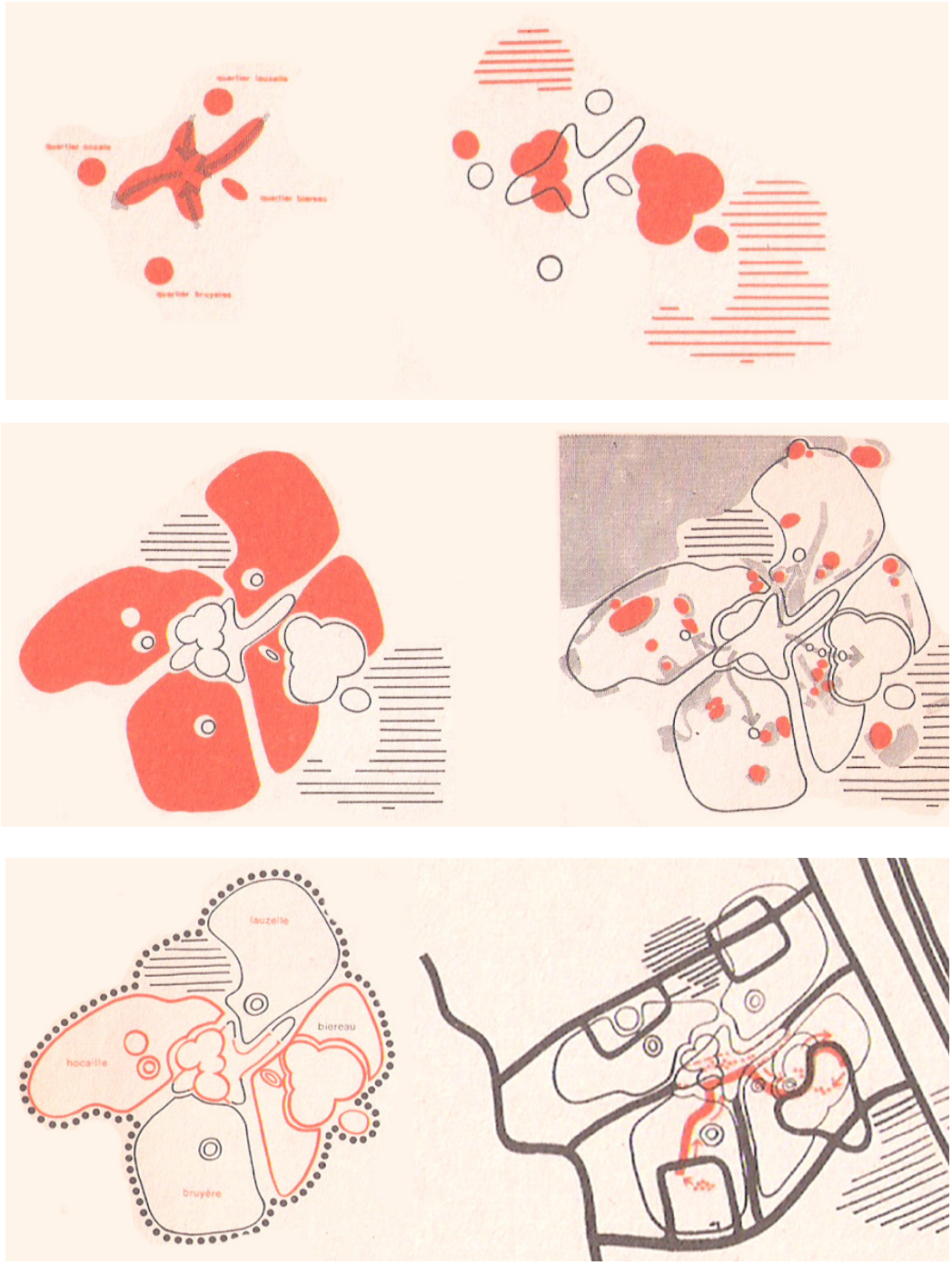
104 Gruen ironically affirms that *"The sociological problem is solved by declaring that the town will be reserved for "nice people with high incomes."* in Gruen V., *Centres for the Urban Environment. Survival of the Cities.* V.N.R. Company, 1973, New York, p. 105 and p. 228



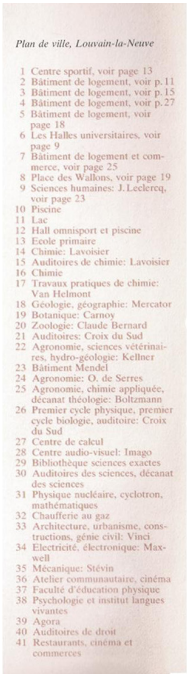
After Gruen, Louvain la Neuve section

central core, are kept as valid. However their sections reveal the loss of the three-dimensional stratification claimed by Gruen, keeping an interesting complexity of typological aggregations following the different levels of the ground, from one-family houses to the highest apartments. As far as transport is concerned, the intent remains to dissuade the use of the car inside the city, as shown in “flower like” schemes.
Finally, in 2005 inside the core of Louvain la Neuve, the fourth biggest commercial center in the whole of Belgium opens its doors near the train station. The project is designed by the well known English commercial studio Chapman and Taylor and is constituted by 42,000 m² divided into two commercial levels and three underground parking levels with a total area of 54,000 m². Peter Wilhelm, the project promoter, affirms that the authorities have finally realized that the area has the strongest purchasing power in the country, but it has not yet been exploited.[105] Forty years after Gruen`s commercial analysis and commercial-cultural center project, Louvain la Neuve thus has to digest the megastructural dimension of the brand new Commercial dome. Although its entrance is well integrated inside the pedestrian paths of the center, it inevitably represents the failed capacity of local authorities to immediately bet on Gruen`s three-dimensional proposal: indeed the belated decision made that structural and functional mix partly impossible which would have been important proof of Gruen`s Heart principles.

105 *“En 25 ans,* dit Peter Wilhelm, *il n'y a eu que quatre centres commerciaux du même type que le nôtre qui ont obtenu un permis dans ce pays. Une des raisons qui l'a justifié, c'est que les autorités locales s'étaient rendu compte qu'il y avait ici une évasion énorme du pouvoir d'achat vers d'autres régions. Or, nous étions une des zones au plus fort pouvoir d'achat du pays.[...]* C'est selon Peter Wilhelm*, le plus grand montage financier jamais réalisé dans une opération privée en Belgique.”* http://archives.lesoir.be/l-esplanade-ouvre-ses-portes_t-20051006-001H2N.html

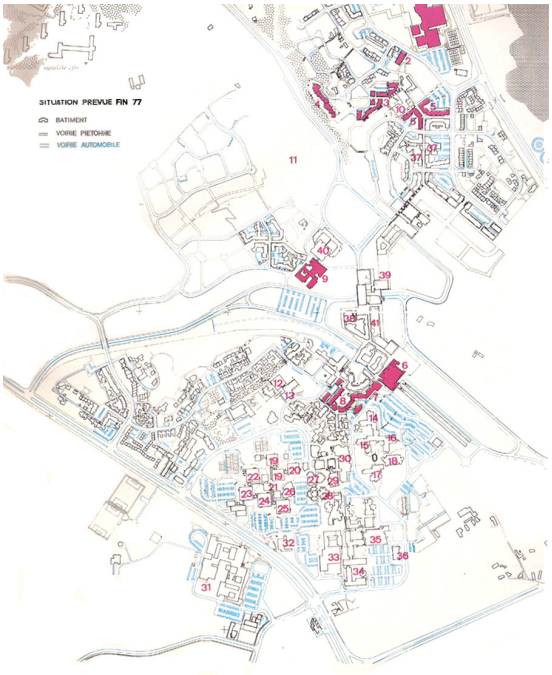


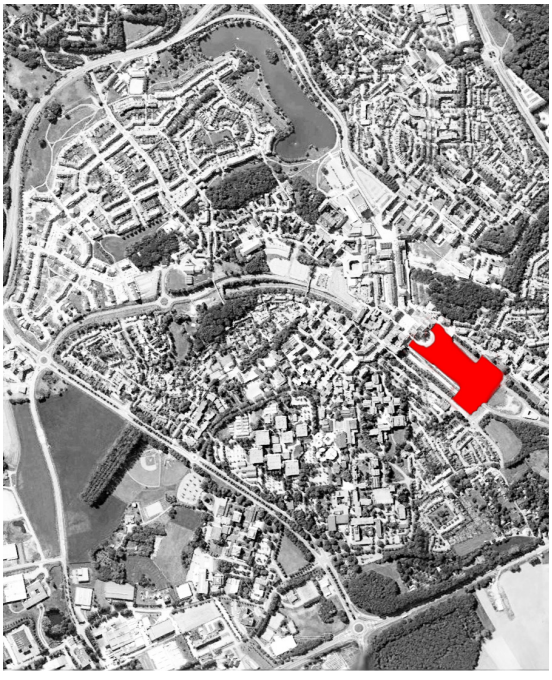
After Gruen, Louvain la Neuve, final schemes



Plan de ville, Louvain-la-Neuve

1 Centre sportif, voir page 13
2 Bâtiment de logement, voir p. 11
3 Bâtiment de logement, voir p. 15
4 Bâtiment de logement, voir p. 27
5 Bâtiment de logement, voir page 18
6 Les Halles universitaires, voir page 9
7 Bâtiment de logement et commerce, voir page 25
8 Place des Wallons, voir page 19
9 Sciences humaines: J. Leclercq, voir page 23
10 Piscine
11 Lac
12 Hall omnisport et piscine
13 Ecole primaire
14 Chimie: Lavoisier
15 Auditoires de chimie: Lavoisier
16 Chimie
17 Travaux pratiques de chimie: Van Helmont
18 Géologie, géographie: Mercator
19 Botanique: Carnoy
20 Zoologie: Claude Bernard
21 Auditoires: Croix du Sud
22 Agronomie, sciences vétérinaires, hydro-géologie: Kellner
23 Bâtiment Mendel
24 Agronomie: O. de Serres
25 Agronomie, chimie appliquée, décanat théologie: Boltzmann
26 Premier cycle physique, premier cycle biologie, auditoire: Croix du Sud
27 Centre de calcul
28 Centre audio-visuel: Imago
29 Bibliothèque sciences exactes
30 Auditoires des sciences, décanat des sciences
31 Physique nucléaire, cyclotron, mathématiques
32 Chaufferie au gaz
33 Architecture, urbanisme, constructions, génie civil: Vinci
34 Electricité, électronique: Maxwell
35 Mécanique: Stévin
36 Atelier communautaire, cinéma
37 Faculté d'éducation physique
38 Psychologie et institut langues vivantes
39 Agora
40 Auditoires de droit
41 Restaurants, cinéma et commerces





Louvain la Neuve in 1977 and today with the shopping center.

THE 3D CORE[1] OF MONTREAL

Place Bonaventure

In "*Centers for the Urban Environment – Survival of the City"*, Victor Gruen lists several case studies of interesting multifunctional centers, in order to illustrate their *"environment and economic opportunities"* in accordance with *"the three-dimensional approach."*[2]

The twelfth case study presented concerns "Place Bonaventure", completed in 1967 in Montreal, Canada and designed by the architect team Affleck, Desbarts, Dimakopolos, Lebensold and Sise. Even though the name suggests an empty public space, Place Bonaventure is one of the biggest buildings ever built before with *"no real plaza at all",*[3] covering almost 6 acres and with a final gross area of 3.1 million square feet.

This interesting dichotomy between the name `Place' (in English Square) and the real identity of project, is the result of the concentration of different urban functions inside one main structure, of the public realm of the street forced inside a private building: from the bottom we find the metro station, garage for 1000 cars, retail shops, cinema, a better living center, exhibition hall, merchandise Mart, office space, showrooms and finally on the top even a 400-room hotel with an inside garden.

As Affleck affirms, the real problem of the building is not the design of each entity which is present inside the architectural volume, *"but rather the linkages and connections between these diverse functions."*[4] The final result is a *"multi-use urban complex"*[5], a *"Omnibuilding"*[6] as André Corboz describes it, *"a megastructure*

1 With reference to the title of the article on Montreal: Blake P. (1966) Downtown 3d, *The Architectural Forum*, Vol. 125, n. 2

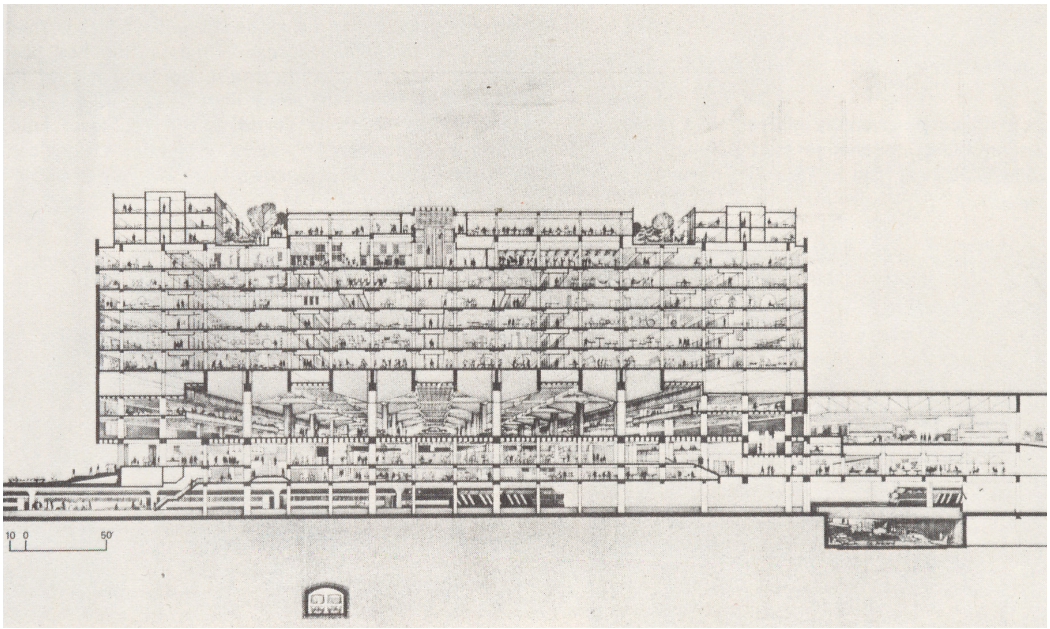
2 Gruen V., *Centers for the Urban Environment. Survival of the Cities.* Van Nostrand Reinhold Company, New York, 1973, p. 111

3 Schmertz M.F. (Dec. 1967), Place Bonaventure: a unique urban complex, *Architectural Record,* p. 139

4 *"This circulation system evolved as the framework for the total design, and eventually became the more permanent element (the continuum) in the unity – diversity – ratio[...] In effect, the city was "turned inside-out" and the familiar urban equation of streets and public spaces related to individual private uses reappeared within a large climate-controlled environment."* Affleck R. T.(1967), Place Bonaventure, *Architecture Canada*, v. 44, p. 36

5 Ibid. p.35

6 Corboz A. (1974), "Place Bonaventure" : Kraak de l'Import-Export, *Archithese,* n. 10, p. 39 *"Ce fragment de ville qui reproduit a' petite échelle le système des communications urbaines, cette sorte de hill-town dont le bâtiment serait colline lui-même, ne constitue pas seulement une métaphore ou une trouvaille, mais un modele, qui reprend sans le savoir l` idée formulée par Platon, Alberti et Palladio d`une correspondance réversible entre édifice et cite. Sinon qu`il ne s`agit plus de philosophie, mais de consommation. »*



Section of Place Bonaventure (1964-1967)

in itself"[7] (R. Banham), with a *"labyrinthine overall effect"*[8] (K. Frampton); the pedestrian circulation design thus becomes the most important effort in order to achieve that *"world as a global village"*, described by the Canadian Marshall McLuhan (1911-1980) and which seems to have inspired Affleck.[9] Indeed the latter affirms that *"future urban environments can be grasped more in terms of interrelations, overlaps, inbetweeness and movement networks than in terms of isolated, discrete functions and forms"*[10]. The stressed interest in the relationships rather than the functions, as expressed theoretically by Affleck and designed in Place Bonaventure, deeply recalls that Heart of the city as defined during CIAM VIII by Bakema, as the "*moments in our life in which the isolation of man from things becomes destroyed",* as the moments when *"we discover the wonder of relationship between man and things.''*[11]

Moreover, other interesting references to the Heart theme are present in the Place Bonaventure project. For example, it is important to highlight the role of the "game" used by Affleck, with reference to McLuhan`s theories, as highlighted by James Viloria[12]: "*the situations contrived to permit simultaneous participations of many people in some significant pattern of their own corporate lives."*[13]

This quote is important for our discourse firstly because it recalls the "play" role of Huizinga`s *homo ludens* in Bakema and Van Eyck, which will be discussed later in detail; and secondly because Affleck translates this simultaneity of different players into a work method.

This finds many resonances to that synergy among different professional figures which is underlined by Sert during his discourse at the First Urban Design Conference (but also with that *"synthesis of the plastic arts"*[14] as stressed during CIAM VIII).

We might suppose that since the architectural project assumes all the characters of the urban realm, then the architectural design process has to mirror the

7 Banham R., *Megastructure. Urban Futures of the recent Past.* Thames and Hudson, London,1976, p. 120

8 Frampton K. (1968), Place Bonaventure, Montreal, *Architectural design*, v. 38, p. 34

9 See Viloria J. A. (1998), Place Bonaventure: architecture and the anxiety of influence, *Journal of the Society for the Study of Architecture in Canada*, v.23, n.2, p.36

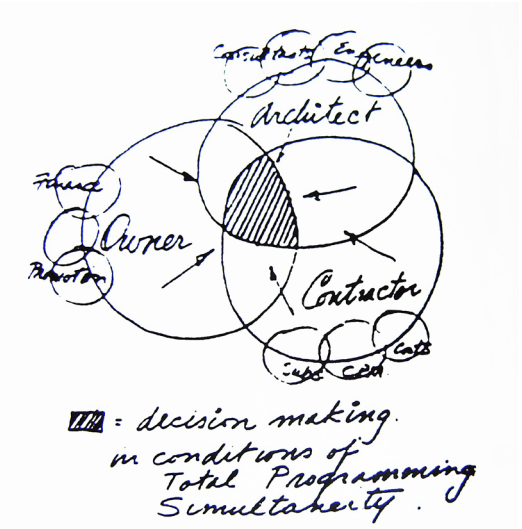
10 Affleck R.T. (1969), Place Bonaventure :celebration of the mixmaster!, *Modulus*, n. 5, p. 68-69

11 Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952. See later chapter about Bakema, III Actor

12 See Viloria J. A. (1998), Place Bonaventure: architecture and the anxiety of influence, *Journal of the Society for the Study of Architecture in Canada*, v.23, n.2,

13 McLuhan M., *Understanding Media*. Mentor, New York, 1964, p. 216

14 Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 168



Affleck, Venn diagram of design decision making

complexity of the urban decision making, thus involving different actors. The result is, as we can see from Affleck`s Venn diagram, a perfect dialogue among different principal players, where the final *"decision making"* is *"in conditions of Total Programming Simultaneity."*[15]

The Underground City

Gruen doesn't only publish the section of Place Bonaventure in his book. He shows also the insertion of its underground floor plan inside the "underground context" of Montreal.

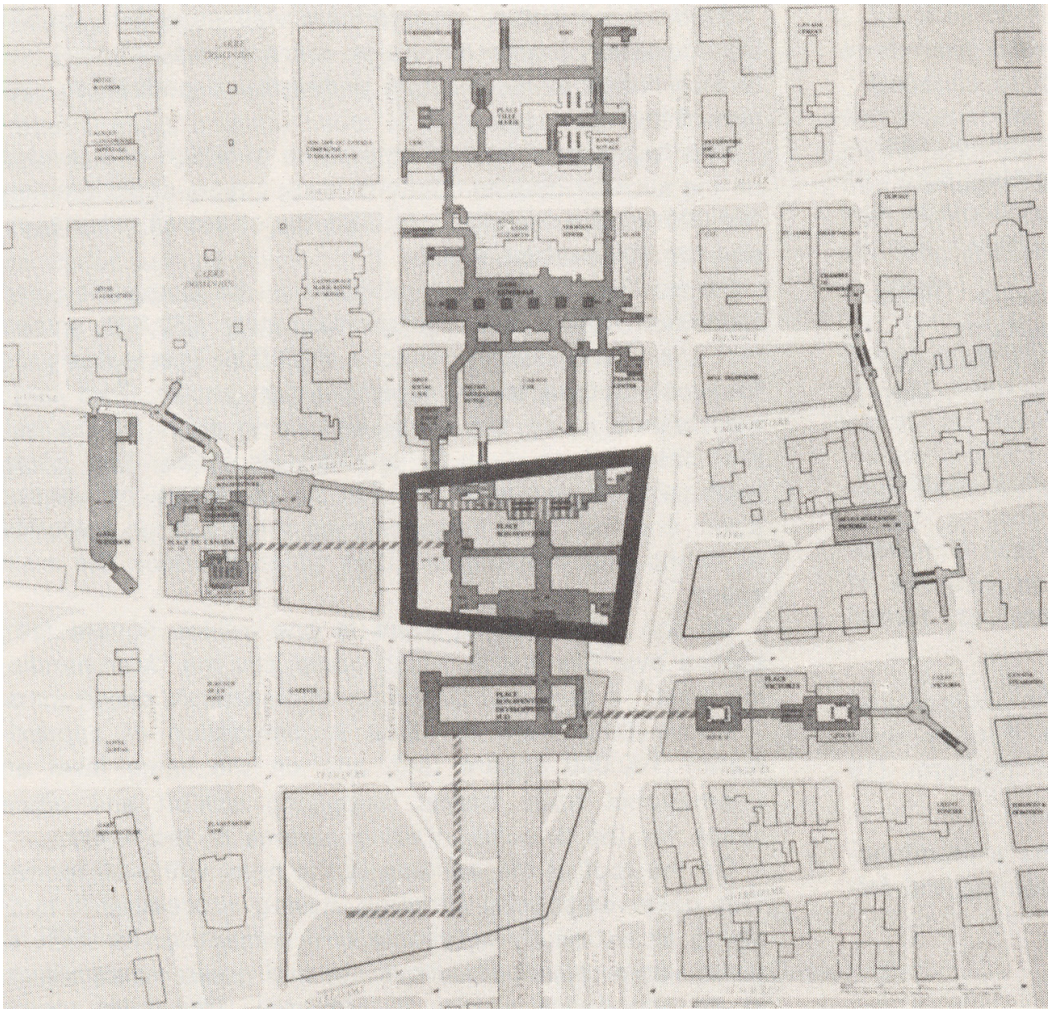
Place Bonaventure is indeed a central node where a thick network of underground pedestrian paths and the metro intersect, as Banham himself highlights[16]. The urban functions pressed into a type of McLuhan`s village form, are thus physically connected through tunnels linking different buildings, transforming the entire downtown into a unique urban building, an "underground-city".

Nevertheless, if Affleck's *"fortress-like"* project is considered by Banham as the central node of the so called *"underground-city",* then the initial *" germ of what would become a germinating idea—a spreading urban system,"*[17] is another

15 Affleck R.T.(1967), Place Bonaventure, The Architect`s View, *Architecture Canada* 44, n.7, p. 32

16 *"the point at which the two perspectives on Montreal actually meet at right-angles, where the pedestrian plumbing and metro intersect and the whole promise of a subterranean city protects from the elements comes closest to realization, is Place Bonaventure.[...] Place Bonaventure is, appropriately if disputably, a megastructure in itself."* Banham R., *Megastructure. Urban Futures of the recent Past.* Thames and Hudson, London,1976, p. 120

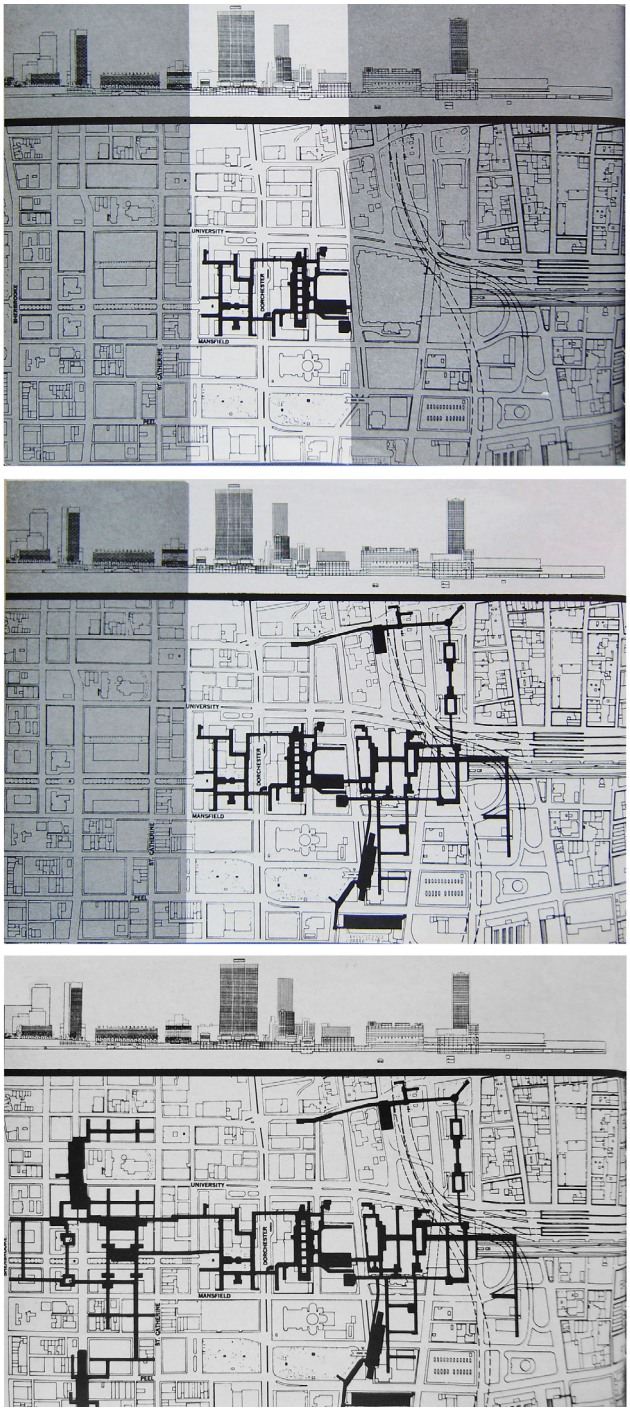
17 Blake P.(1969), Vincent Ponte: A New Kind of Urban Designer, *Art in America*, no. 5, p. 63



From Gruen`s book: “Place Bonaventure: map of downtown Montreal, indicating the underground system of pedestrian pathways connecting major projects. The boundaries of the place Bonaventure project are marked with a heavy line”. Gruen V., Centers for the Urban Environment. Survival of the Cities. Van Nostrand Reinhold Company, New York, 1973, p. 148

"Place": the Place Ville Marie.
The project originated in 1957, and the building is opened to the public in 1962, thanks to the efforts of a team composed of different actors similarly to Affleck`s diagram: the entrepreneur Bill Zeckendorf working together with architects I.M. Pei and Cobb and the planner Vincent Ponte.
Similarly to Affleck`s project the PVM is not a public square, but rather a 48-storey cruciform tower, hosting five times the amount of rentable office space then being built annually in all of Montreal, designed in front of a 4-acre square[18]. Underneath this public space, another four underground levels contain 160,000 square feet of retail space; below another 2 levels are dedicated to parking and another level is for trucks moving underground. This complexity in section, similar to the later Place Bonaventure,
will be mirrored at urban scale radically transforming the entire city.
The planner Vincent Ponte (1919-2006) is considered the main supporter of this transformation. Born in an Italian family that had emigrated to Boston, Ponte is conferred his degree at Harvard a few years before the UD Conferences; however, similarly to Pei, he seems to maintain continual relationships with the University in Cambridge, Massachusetts since he is even engaged, together with the American-Chinese architect, on the site planning for the John Fitzgerald Kennedy Memorial Library at Harvard University in the '60s[19]. As result, many issues discussed during the mid `50s at both Harvard and Hoddesdon reverberate in Ponte`s design for Montreal. A direct link between the CIAM VIII debate and Montreal`s urban design has been highlighted recently by Andre Lortie as well. Indeed, he asserts that the *"multilevel core"* of Montreal - as defined by Peter Blake[20] *"would have fitted neatly into the great debate that had raged within the ranks of CIAM ever since their 1951 meeting in Hoddesdon, England, which was devoted to that very topic"*[21].
The third space conception defined by Giedion, stressed the Heart idea during CIAM VIII and highlighted by Sert as well during the First Urban Design Conference,[22] is going to be concretely expressed by Ponte for the first time at an

18 See Blake P.(1966) Downtown in 3-D, *The Architectural Forum* 125, n.2, p.39
19 See Ponte V. (1969) Montreal gets a new heart, *The Architect and Building News*, Vol.2N.8, p. 43
20 See Blake P.(1966) Downtown in 3-D, *The Architectural Forum* 125, n.2, 31-48
21 See ed.by Lortie A., *The 60s Montreal Thinks Big.* Canadian Centre for Architecture - CCA, Montreal, 2004, p. 111-112
22 Eric Mumford suggests a relation between Pei and the Urban design conference and therefore the 'core' concept as well : "*Although relatively few of Giedion`s CIAM examples of this latter element were ever built, in differing ways aspects of Sert`s concept of the core began to be realized in actual projects at this time. Suburban shopping centers by Pietro Belluschi, Morris Kutchum, and eventually Victor Gruen and I.M. Pei*



Development phases of “underground city”:`50s-`60s



Vincent Ponte (1919-2006)

urban scale level. "*The special interest of Montreal is,"* the planner explains, "*that for the first time in any major city the multi-level principle has been applied on just such scale and with just such conviction*."[23]

In a "multi-level principle" the different flows of pedestrians, cars, goods are distributed independently from the street level, from the ground zero which disappears in such a complexity of urban sections. The term "underground-city" is *"a notion that seems hardly appropriate to a high density center city*", as Affleck explains, since *"[...] the 'ground' itself has become an artefact;[...] the 'ground' is"* as we have seen in the previous section on Place Bonaventure *"in effect where the designer chooses to put it."*[24]

Affleck also refers to the topography, to the different slopes and levels of the ground of the city[25], Montreal`s *"Downtown in 3-D"*[26]. This pre-existing slope enables the planners and architects to develop different connections at different

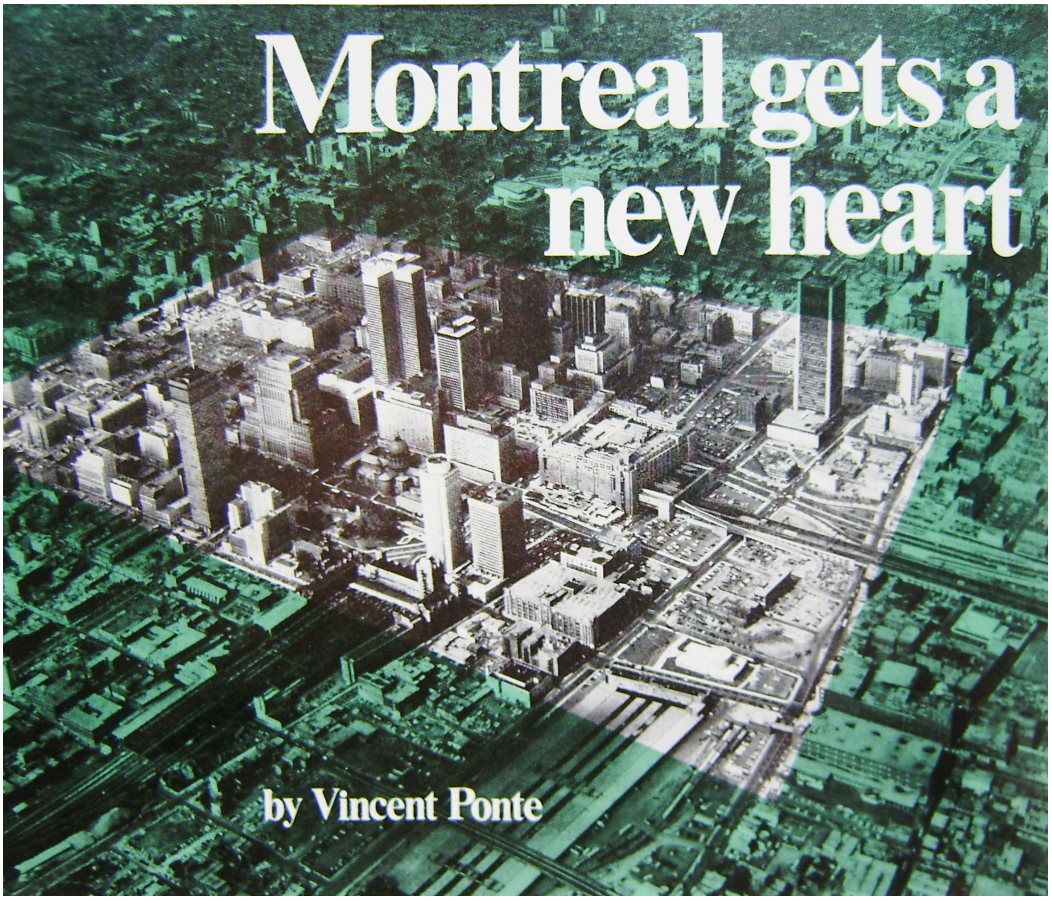
began to apply the core concept to the rapidly decentralizing American metropolitan areas of the 1940s and early 1950s. Soon afterwards Pei began designing Modernist mixed-use pedestrian central-city projects for developer William Zeckendorf in Denver, Washington, D.C., Montreal and other cities. Sert sought to have Pei teach at the GSD at this time, but Pei was too busy with practice to do so." see E. Mumford, *The Emergence of urban Design in the breakup of CIAM.* In ed. By Krieger A., Saunders S.W., Urban Design. University of Minnesota Press. Minneapolis, London, 2009, p. 24

23 Ponte V. (1969) Montreal gets a new heart, *The Architect and Building News*, Vol.2N.8, p. 43

24 Affleck, R.T., (1967) Place Bonaventure. *Architecture Canada*, v. 44, p. 36

25 *"[...] from the McGill campus to the banks of the St. Lawrence, drops of between 150 and 200 feet in elevation.[...] 'All you need is a 15-foot change in elevation to put out of sight one entire system of services', Harry Cobb said recently."*Blake P.(1966) *Downtown in 3-D*. The Architectural Forum 125, n.2, p.37

26 See Blake P.(1966) *Downtown in 3-D*. The Architectural Forum 125, n.2, p.37



Ponte V. (1969), Montreal gets a new heart, The Architect and Building News, Vol.2, n.8

levels, forcing them to think in three-dimensions. *"Planners are beginning to go beyond the 2-D of paper plans,"* as the planner Ponte explains, *"In this city we are concentrating the 'core' functions into a right, totally interrelated unit, doubling and tripling the use of the same cells of precious Downtown land by inserting several levels above and below ground."*[27]

However, there are many differences between Ponte`s core and the Heart idea. In fact, as Vincent Ponte states, *"[…] for us, the 'core', has a specific meaning. It is the area of densest concentration in the city. It is where the tallest buildings are and where the greatest number of people daily concentrate."* The "Core" is not therefore used as an urban metaphor, with different layers of significance related to the public realm or to the humanization process of the city; it is rather referred to the functional CBD of the US city.[28] The 'core' of Montreal even has specific dimensions and form: it is described by Ponte as a rectangle 4000 ft long and 2000 ft wide, for a total area of 185 acres. This dimension is considered the right one insofar as it is similar to the other American Cores, consisting usually of 70-100 blocks or 200-300 acres.[29] Indeed the core should be compact, it should be the place *"where the action and excitement is. It is these things which make city life so wonderful, that apostles of dispersal would thoughtlessly destroy [...]"*[30]

This compact functional core-CBD is presented on the one hand as the antidote against the city's *"decay of dispersal"*; on the other it even becomes a specific manifesto against that *"global village"*, admired and translated into architecturea few blocks away by Affleck, since no telephones, computers or other communication tools will ever substitute the physical confrontation. *"If anyone doubts this*," Ponte warns "*let him ask a businessman."*[31]

Moreover, in order to keep this concentration of functions, activities and flows inside a small central area without any congestion or chaos, Ponte refers to a planning principle which has been already described and which is relevant to both the CIAM discourse and the UD conference: the separation between

27 Peter Blake, See Blake P.(1966) *Downtown in 3-D*. The Architectural Forum 125, n.2, p.31

28 The 'heart' is however used as title of the article and in a few mostly rhetorical expressions: *"[…] unifying downtown so that it can recapture its true role as the vital heart of the city.[...] For when the core fails then the city is stricken at its heart." See Ponte V. (1969) Montreal gets a new heart, The Architect and Building News, Vol.2N.8, p. 48*

29 *"[...] no matter how large or small the city itself may be. The reason, most likely, is that this dimension represents the farthest distance a businessman is willing to go on foot to meet his clients or his banker-and the distance people in general will walk to shop or dine or be entertained."* See Ponte V. (1969) *Montreal gets a new heart,* The Architect and Building News, Vol.2 N.8, p. 42

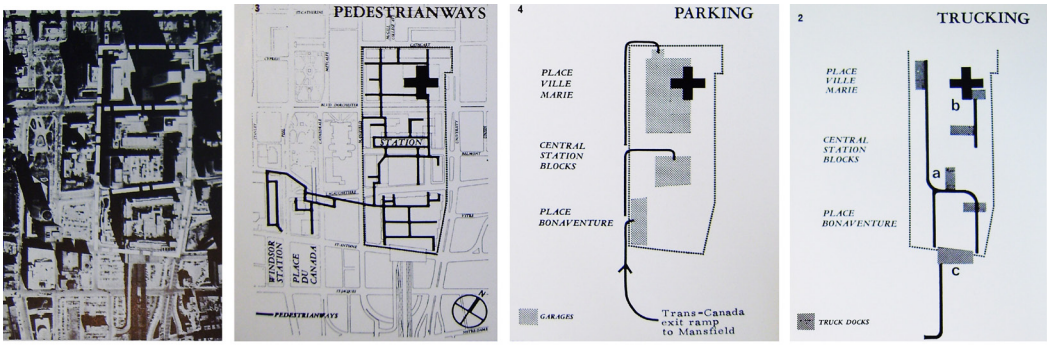
30 Ibid.

31 Ibid.

DOWNTOWN IN 3-D

Through a happy combination of expert foresight, private initiative, and luck, Montreal is about to become the first 20th century city in North America. Its Downtown, compressed between Mount Royal and the St. Lawrence, is seen here outlined in white, erupting skyward. But what sets this core apart is not so much the towers as their spreading roots in a multilevel network of shops, transportation systems, and pedestrian promenades.

Blake P.(1966) *Downtown in 3-D*. The Architectural Forum 125, n.2, p.31



Differentiation of flows: aerial view, pedestrian ways, parking, trucking

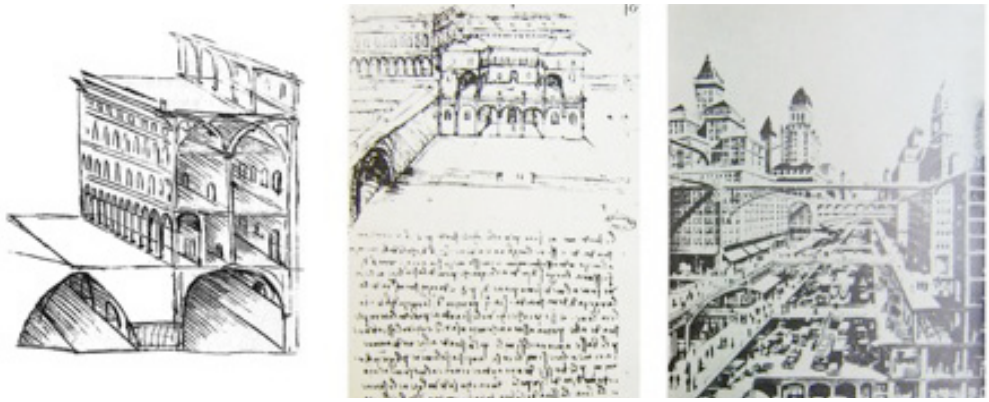
pedestrians and cars. Nevertheless, this split is not caused by the necessity to redefine a new human scale of the modern city, as it is defined by Giedion and other CIAM members. *"La royauté du piéton"* (Le Corbusier) is translated in the Canadian context into a purely functional programmatic project, focused more on commercial values rather than social ones. Then, differently to the Harvard students' project described before where the pedestrian level fluctuates over car traffic in Times Square, Ponte proposes transferring almost all pedestrian circulation underground[32], as already designed for the Place Ville Marie.

Vincent Ponte's main references are directly connected to his Italian origins[33]: Antonio Sant`Elia's "*Futuristic planning project for New York city*" (1913) is a perfect vision of differentiation of flows at different levels in New York, while a sketch of the ideal town for 50,000 inhabitants designed by Leonardo da Vinci 500 hundred years before, is a perfect example of functional separation of traffic under and above the street level.[34]

32 Barles and Jardel affirms that the underground development of cities in the world is not caused primary by the climate, as generally thought. It is not therefore the first reason for the development of Montreal downtowns, even though the tunnels become a useful and comfortable protection during winter as well as summer. *«Le climat ne constitue pas la cause première de l`enterrement, au mieux une cause seconde, et plutot un avantage induit. D`une façon générale, l`argument de la protection (contre le chaud, le froid, l`humide, le sec) ne vaut que pour des conditions climatiques extrêmes (ex. voir par exemple les projets pour la région industrielle de Norilsk en Russie) ou dans des contextes ruraux et des pays en voie de développement ou émergents.»* Barles S., Jardel S., *L`urbanisme souterrain: Etude comparée exploratoire.* Laboratoire Theorie des Mutations Urbaines, *UMR 7136 Architecture, Urbanisme, Societes.* CNRS et Universite` de Paris 8, Avril 2005, p. 23

33 Vincent Ponte spends one year in Rome, as winner of the Fulbright Scholarship, studying the relationship between baroque planning and infinite calculus. "Multilevel Man", Time, 19 October 1970, p.2

34 Both projects are shown in his article *See Ponte V. (1969) Montreal gets a new heart, The Architect and*



Leonardo da Vinci's Sketch shown by Gruen in 1965; Leonardo da Vinci's Sketch and Sant`Elia's project for New York (1913) published by Ponte in 1969

In 1964 Victor Gruen also writes about Leonardo da Vinci`s project in the introduction of *"The Heart of our Cities".* Gruen affirms that he had planned the entire book during a trip onboard an Italian ship called the *Leonardo da Vinci* . *"A big ship is a good place to think about the fate of our cities.[...]".* The ship itself becomes an ideal city: *"The Leonardo da Vinci is an extremely compact city."*[35] Gruen affirms. At the end of the third page of the introduction he publishes a sketch which looks very similar to that published by Ponte four years later in "*The Architect and Building News"*. But interest in the Italian genius is not the single common interest that Gruen and Ponte shares. Both designers are interested in the compactness of the city as the essence of urbia; they both design, in the mid `50s, proposals for functional "multilevel cities". Many similarities can indeed be found if we analyze the Fort Worth project and Montreal's core: the only main difference is that in the latter the pedestrian level is designed underground while in Fort Worth the ground level is totally car free.[36] "Germ" of the former is the regional shopping mall designed as a suburban node; "germ" of the latter is Place Ville Marie, designed together with Pei, as a new architectural symbol of Montreal`s urban structure.

It is no coincidence that Reiner Banham describes both projects in his book *"Megastructure. Urban Futures of the recent Past"*. Downtown Fort Worth is

Building News, Vol.2N.8, p. 44

35 Gruen V. *The heart of our cities. The Urban Crisis: Diagnosis and Cure*.ed. Simon and Schuster, 1964

36 However in the redesign of downtown Dallas proposed by Ponte in the same period, the pedestrian level is placed above the street level, thanks to tunnels passing through the different blocks. Many similarities can be found with the Times Square project proposed by Harvard students during Sert's UD courses.

described as *"the first of the 'business-district-on-a-podium' projects that inspired the megastructuralists"* with its "*artificial ground level"*[37], then an entire chapter of the book is devoted to the *"Megacity Montreal"*[38]*.* After having described and commented on the Expo '67 and Habitat project as one of the main expressions of three-dimensional buildings in the '60s, Banham argues that *"the major claimant to the title of megastructure in downtown was the downtown itself"*[39]. He calls it *"basement urbanism"* similar to the *"business-district-on-a-podium"* of Fort Worth. Finally, the important element for the shaping of Montreal`s downtown for Banham is the Metro system *"as unifying factor in a seemingly disorganized city",* transforming some stations into true attractive commercial nodes of the underground pedestrian system.
The final result is summarized by Peter Blake, who defines the new "core" as *"the product of topography, tradition – and vision"*[40], in particular referring to the vision of the Italo-American planner Vincent Ponte. The innovation of this multi-level city bewitched Blake so much to that he considers Montreal as *"the first 20th century city in North America".*[41]

Worldwide influences

More recently, as already anticipated in the introduction, the Canadian architect Trevor Boddy has described the phenomenon of the split of pedestrian from car traffic as a negative American phenomenon which has transformed the North American City into an *"analogous city"*[42]*.*
These "*Skywalk cities"* [43] are safe places, similar to the controlled street of the commercial centers, keeping intact that characteristics described by the sociologist George Ritzer as part of a McDonald`s society[44]: efficiency, calculability,

37 Banham R., *Megastructure. Urban Futures of the recent Past.* Thames and Hudson, London,1976, p. 42
38 Ibid. Chapter 6, p. 105 *"The tunnels' connection with almost everything of consequence in downtown, their own shops, parking lots and station concourses, gave rise to the claim that "Montreal itself is the megastructure!"* p. 119
39 Ibid. p. 106
40 Ibid. p.37
41 Title of an article written by Peter Blake, see Blake P.(1966) *Downtown in 3-D*. The Architectural Forum 125, n.2, p.31
42 *"[...] Downtown streets are now subject to attack, a slow, quiet, but nonetheless effective onslaught underground and overhead, by glittering glass walkways above the street, or tunnels beneath them.*" Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, 123-15
43 Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, p. 256
44 *"[...]McDonaldization,[...]is the process by which the principles of the fast-food restaurant are coming to dominate more and more sectors of American society as well as of the rest of the world."* Ritzer G., *The*

predictability and control. As we can see from the *"Plan directeur d`aménagement de l`arrondissement Ville-Marie",* among the most important aims we find indeed: *"Assurer le confort et la sécurité des piétons. […] La juridictions divers qui d`appliquent aux nombreux tronçons du ressaut en compliquent la gestion, l`entretien et, surtout, la sécurité."*[45]

The result is that "consumers" in the new analogue city are allowed to *"shop, work, and attend the theatre without risking direct contact with outside world* – Robert Reich affirms – *in particular, the other city"*[46] or *"the fallen city",*[47] as Pope calls it. *"[B]ad consumers"*, the poor people described by Zygmunt Bauman[48], *"the nonwhite, the socially non conformist, or the political dissenting"* are excluded or not *"allowed to install themselves in the quasiprivate domain of the city's elevated and underground shopping concourse"*[49].

Trevor Boddy states that *"Dallas is a case in point, demonstrating these disturbing trends in the evolution of the analogous city"*[50]. Dallas' bridge-multilevel system above the street level is very similar in its aims and urban visions to downtown Montreal: they are two mirrored projects respectively above and under ground level. Indeed both projects are proposed by the same planner, Vincent Ponte, described by Boddy as *"the éminence grise' of the analogous city"*[51]. *"Ponte,"* explains Boddy "*went so far as to propose banning pedestrians from parts of Dallas[...]"* which is described as a "*metaphor of apartheid"* "because *'one of the chief contributing factors to traffic congestion is crowds of pedestrians interrupting the flow of traffic at intersections'."* [52]

The split is the result of a mind of a "*traffic engineer'"*, as Boddy calls Ponte rather than that of a planner: for the author the Italo-American planner is more

McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life. Pine Forge Press, 1995

45 In *Plan directeur d`amenagement de l`arodissement Ville-marie, Montreal: Ville de Montreal.* Oct. 1990, p. 73-74, quoted in Barles S., Jardel S., *L`urbanisme souterrain: Etude comparée exploratoire.* Laboratoire Theorie des Mutations Urbaines, UMR 7136 Architecture, Urbanisme, Societes. CNRS et Universite` de Paris 8, Avril 2005

46 Quoted in Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, 2001, p. 259

47 Ibid.

48 See Bauman Z., *Homo Consumens. Lo sciame inquieto dei consumatori e la miseria degli esclusi.* Erikson ed., 2007

49 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, p. 151

50 Ibid.

51 Ibid.

52 Vincent Ponte quoted in William H. Whyte, *City. New York: Doubleday,* 1988, p. 198 in Ibid.

concerned about congestion problems than about social gathering[53]. This is the main criticism which separates the Montreal experiment from CIAM VIII`s social aims, as already affirmed.

Finally, we must at least hint that the case study of the *"underground-analogous city"* of Montreal has been studied recently (2005) by Barles and Jardel[54], in comparison with other underground projects such as in Tokyo and Paris. Moreover, Ponte`s plan for Montreal has been compared by Graham and Marvin in "*Splintering Urbanism"*[55](2001) to similar developments for instance in Minneapolis, Dallas (of course), Houston, Charlotte and even in Hong Kong (Cuthbert, 1995) and Tokyo (Tschumi). These studies show the influence of the Montreal plan on the design of many cities around the world. Indirectly they show also the flows of ideas generated also from the Heart of the City abstract idea, physically transforming the shape and structure of the City in several parts of the world over the last 60 years.

53 However in Montreal this split is not so extreme and radical since the West-East commercial axis, rue St. Cathrine, remains a lively commercial street in the open air with cars and pedestrians at the same level.

54 Barles S., Jardel S., *L`urbanisme souterrain: Etude comparée exploratoire.* Laboratoire Theorie des Mutations Urbaines, UMR 7136 Architecture, Urbanisme, Societes. CNRS et Universite` de Paris 8, Avril 2005

55 Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, 2001, p. 259

II ACTOR:
VENICE CIAM SUMMER SCHOOL, the Heart as Continuity

'CONTESTO`, 'CONTINUITA`` AND HEART OF THE CITY

"It was at the Hoddesdon CIAM, also via the "Heart of the City" theme, that the issue started to emerge, an issue that will be of central importance for the next forty years: the idea of listening to the context, the project, viewed as a deposited form of the history of a specific place, as a means of dialogue with the context itself" Vittorio Gregotti affirms in 1992 in an editorial in *Rassegna* - *"[...] It initiated the question of the value and the defence of the historical city, the preservation of tissues and not just of isolated monuments, the theme of memory and tradition as important materials for the project."*[1]

The Heart of City idea therefore attains a brand new meaning, as proposed by the Italian architect, in comparison with the several projects and theories discussed before.

The discussion about the Heart of the city at CIAM VIII is indeed considered as the starting point, the germinating moment of the discussion about the history of architecture and the project's relation with 'context'. This discussion will develop and grow over the next decades, investing and influencing a worldwide debate which is still current today, but one which finds its most critical and radical examples in the `60s and `70s, with the rise of postmodernism and in the `80s with "Critical Regionalism" as well, as defined in the '80s by Tzonis-Lefaivre and Frampton[2]. It will influence directly Rossi (*The Architecture of the City* -1966) and Gregotti himself (*Il territorio dell`Architettura* -1966), and it will be present with many resonances in the 'contextualism' debate of Colin Rowe at Cornell University (*Collage City* -1984), and with criticisms of the orthodox modernism of Robert Venturi (*Complexity and Contradiction in Architecture* – 1966), right up until that "*fuck context*" expressed by Rem Koolhaas in 1995.

Similarly to the other layers of significance, the 'historical Heart' artery also has many influences on following decades in both Europe and America (but also in

1 *"Peraltro, proprio al CIAM di Hoddesdon, anche attraverso il tema del 'Heart of the City', comincia a emergere la questione che si dimostrerà centrale per i quarant'anni successivi: il problema dell`ascolto del contesto, del progetto come dialogo con esso in quanto forma depositata della storia del luogo specifico. Si trattava, e` vero, della formulazione della questione nei termini del continuismo rogerisano delle pre-esistenze ambientali o in quelli antropologici dei valori di permanenza di civiltà alternative, con una netta resistenza contro ogni richiamo agli stili storici, ma purtuttavia si era avviata la questione del valore e della difesa della città storica, della conservazione dei tessuti e non solo dei monumenti isolati, del tema della memoria e della tradizione come materiali importanti del progetto."* Vittorio Gregotti (1992), Editoriale, *Rassegna,* n.52/4

2 See Tzonis A., Lefaivre L., The Grid and the Pathway: an Introduction to the Work of Dimitris and Susana Antonakakis, with Prologemena to a History of the Culture of Modern Greek Architecture", in Architecture in Greece, 15, 1981 and Frampton K., Prospects for a Critical Regionalism, in Perspecta, 20,

other parts of the world), amplifying the necessity for and the justification of research on the Heart of the City.

Then it is important to say that Gregotti considers 'the historical Heart' as the unique artery of significance, using Core rather than Heart, not purely as a physical urban center, but as an urban project issue related to the context[3]. For this reason we will use *Core* in order to consider the "historical" significance of the heart metaphor.

As far as the organic metaphor is concerned, *"when an institution loses its birthplace, its original space, and feels threatened, it tends to describe itself as "organic"*[4] affirms Lefebvre. CIAM members do not use the organic metaphor of the Heart with regard to the city in order to describe themselves; however it would be interesting to consider the use of this metaphor, considered as historical continuity, also as an effect of a crisis of some of the CIAM members' values: a certain anti-historical attitude, though sometimes only an apparent attitude[5], used as *"their revenge on the past"*[6]. It is a crisis of values concerning trust with regard to progress and mechanization which led society to two world wars. This lack of trust is also present in September 1951 during the Darmstädter Gespräch, with the discourses of Heidegger's "*memory replaces progress"*[7], and of Ortega y Gasset, technique as *"a giant orthopaedic device"*[8] and in the later Japanese Metabolism (another organic reference) as well. It is moreover a crisis linked with the new interest in a new humanism, as described before. But it is also the crisis of CIAM itself which will become more evident during later meetings.

Then, it is no coincidence that it is Gregotti, rather than some of his foreign

3 From a personal interview with Vittorio Gregotti, Milan- June 2010

4 *"It 'naturalizes' itself, looking upon itself and presenting itself as a body. When the city, the state, nature or society itself is no longer clear about what image to present, its representatives resort to the easy solution of evoking the body, head, limbs, blood or nerves. This physical analogy, the idea of an organic space, is thus called upon only by systems of knowledge or an organic space, is thus called upon only by system of knowledge or power that are in decline"* Lefebvre H., *The production of Space.* Blackwell Publishing, 2010, p. 274

5 *"In founding anti-history and presenting their work not so much as anti-historical, but rather as above the very concept of historicity, the avant-gardes perform the only legitimate act of the Time."* Manfredo Tafuri, 1968, quoted in Forty A., *Words and buildings. A Vocabulary of Modern Architecture*. Thames and Hudson, 2000, p. 198

6 Ibid.

7 Heideger M., *Bauen – Wohnen – Danken.* Neve Darmstädter Verlaganstalt, 1952 [English translation *Building, Dwelling, Thinking.* from Poetry, Language, Thought, translated by Albert Hofstadter, Harper Colophon Books, New York, 1971. Italian translation *"Costruire Abitare Pensare"* in Saggi e discorsi, Mursia, Milano 1954 p.98-99]

8 Josè Ortegay Gasset, *Meditación de la técnica.* Alianza Editoriale, Madrid, 2002, p. 108 quoted in AA.VV., *Costruire, Abitare, Pensare.* Mimesis/ Estetica e Architettura ed., 2010, Milano-Udine, p. 58

colleagues, who highlights the historical value of the Heart, the Core. Indeed historical continuity is a theme which first appears with particular intensity in the Italian discourse itself in the `50s. *"The story begins in Milan in 1950s"*[9], Adrian Forty reminds us when discussing 'context', with Rogers' critiques to some modernist architects which appeared in *Casabella-Continuità*. Even the title of the magazine is significant, underlying the necessity for Continuity (Continuità) with a previous discourse. In the article/manifesto "Continuity", in 1954, Rogers indeed argues: *"No work is truly modern which is not genuinely rooted in tradition, while no ancient work has significance today unless it can resonate through our voice."*[10] Rogers uses *"preesistenze ambientali"* or *"ambiente"* in order to describe the existing 'context', and translated into English with a confusing different meaning in the Anglo-Saxon discourse[11]. *"To consider l'ambiente means to consider history" (1955, 203),* Rogers affirms, linking the two entities in an indissoluble necessity for the design of new projects.

The "continuity" expressed within his theoretical discourse is indeed coherently also translated into physical form by Rogers. For instance, Torre Velasca, built in Milan in 1956-58, is an attempt to give an *'urban identity'* with resonances in the historical context surrounding the tower or, as Tafuri asserts, an *"homage to a historical centre virtually destroyed by real estate speculators"*[12].

Finally, Rogers' point of view is also evident before Casabella-Continuità appears, as we can read for instance in the CIAM VIII Report. Indeed, during the discussion concerning *"The visual expressions of the heart"* at CIAM VIII Rogers expresses his rejection of a distinction between *"eternal and temporary art"*, remarking on the moral necessity to act - as architect - as if each drawn line, each single wall would be eternally present and therefore have consequence in the world.[13] In Hoddesdon the interest in historical continuity is then particularly evident during the "*discussion on Italian Piazzas*[14]", involving several CIAM members.

9 Forty A., *Words and buildings. A Vocabulary of Modern Architecture*. Thames and Hudson, 2000, p. 132

10 Rogers E.N. (1954) Continuità, *Casabella Continuità,* n. 199, p 2

11 For the difference between contesto-context-contextualism-ambiente-preesistenze ambientali, see Forty A., *Words and buildings. A Vocabulary of Modern Architecture*. Thames and Hudson, 2000

12 Tafuri M., Dal Co F., *History of World Architecture.* Electa, Milano, 1976, p. 354

13 *"Every time you draw a line you should do it as if it is thought to stay forever" Krieger, A., Saunders W.S., Urban Design.* University of Minnesota Press, Minneapolis-London, 2009,p.26; *cited in Ernesto Rogers, "Resume of Open Session, Wednesday July 11", in an unpublished CIAM VIII session, CIAM JT-6-16-75*

14 *Discussion on Italian piazzas.* ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanisation of urban life.* Pellegrini and Cudahy, New York, 1952, p. 74

Discussion on Italian Piazzas

Italian piazzas are already considered by Rogers in a previous speech as *"spaces open and welcome as vases, […] wonderful examples of generous Hearts.*[15]*"*

In any case it is very interesting to note that the discussion is, from the very beginning, not focused on all Italian Piazzas; indeed almost all the presentations concerns just one single square - Piazza San Marco in Venice[16]. Gropius talks about one of his best students who visited Piazza San Marco for the first time and he understood that he was wrong when he rejected, together with his colleagues, the design of a square with arcades, because *"too much to former times [??]"*[17]. Rogers defines the Venetian piazza as *"a very high expression of dolce far niente"* (translated in English as *"to think, without effort"*), pointing out the problem of *"how the Core can expand"*. Paulson instead remarks that it is enough to consider Piazza San Marco as an expression of human life since it is part of Venice which is almost a dead city. Sert underlines the identity of the Core as *"the place where people can see people. The Piazza san Marco is perfectly scaled for this.*[18]*"* Then he describes the Core as a "civic landscape", as the maximum expression of the civic entity, in contrast with the *"natural landscape"*. The Venetian square thus becomes for Sert the best example of the split between these two landscapes: *"[...] consider for a moment how horrible a tree would look on the Piazza San Marco!*[19]*"*

It is interesting to note that Sert`s distinction is very similar to Gruen`s later definitions of *Cityscape*, as *"a setting where man-made structures are predominant"*, and *Landscape*, as "*an environment in which nature is predominant[…] the successful marriage of nature and human endeavor*"[20]. Both architects use this distinction, evident in Piazza San Marco, for the design of new cities and the renewal of existing ones, particularly in America, as we have already discussed when talking about Urban Design. San Marco can be considered therefore as a symbol of the distinction between *cityscape* and *landscape*, between the *ingens sylva* of savagery (G.B. Vico) and *societas* (Weber)[21], which will become fundamental for the entire Urban Design in the US.

15 Rogers E.N., *The heart: Human Problem of Cities*. Ibid. p. 73

16 See also *Piazza San Marco, the "core" of Venice.* in Architectural Design, August 1951, p. 226

17 *Discussion on Italian piazzas.* Ibid. ,p.74

18 Ibid. p.76-77

19 Ibid. p.77

20 Gruen V., *City and Landscape.* in Business Week, Oct. 1955

21 The Italian philosopher Enzo Paci underlines how the "Heart of the city" theme, posed by Sert, is influenced both by G.B. Vico, who considers the founding of a city as the configuration of human space carved into the *ingens sylva* of savagery, and by Weber who, in "*The City"*, underlines human space with a time of its own, that of the *societas*, *"associative, characterizing the city and the concept of citizen, as*

Finally Philip Johnson describes three elements which seem the most important part of the Core; all of them are perfectly exemplified again in Piazza San Marco: the monumentality, the *"feeling of being cuddled"* and *"the feeling of processional development within the Core"*[22].

Also Giedion, in a different conversation[23], stresses the importance of the Venetian Piazza. In particular, he highlights the long time needed for the correct growing of the Core. *"The most beautiful Cores have always taken a long time to grow – the Piazza San Marco took 500 years."*[24] Piazza San Marco is therefore also the most successful example to demonstrate, as Alexander also pointed out recently in his "The Heart of the City", as explained before, the need to await the passage of years before transforming and creating the right space for the human scale, a mature space which resists the transformations of society. This appears to be an important lesson even today for the construction not only of squares, but of entire brand new cities in the life span of just few years. Although technological tools allow us to build sooner and faster, the time for the human scale still remains unchanged: 500 years to get Piazza San Marco.

Venice, and in particular Piazza San Marco, therefore seem to be the most outstanding case study, according to some of the main CIAM VIII members, in order to transmit the quality of public space in contemporary urban projects: Piazza San Marco on the one hand becomes representative of the memory, the collective, public life and on the other hand it is considered a progressive example for the future design of the public space as well.

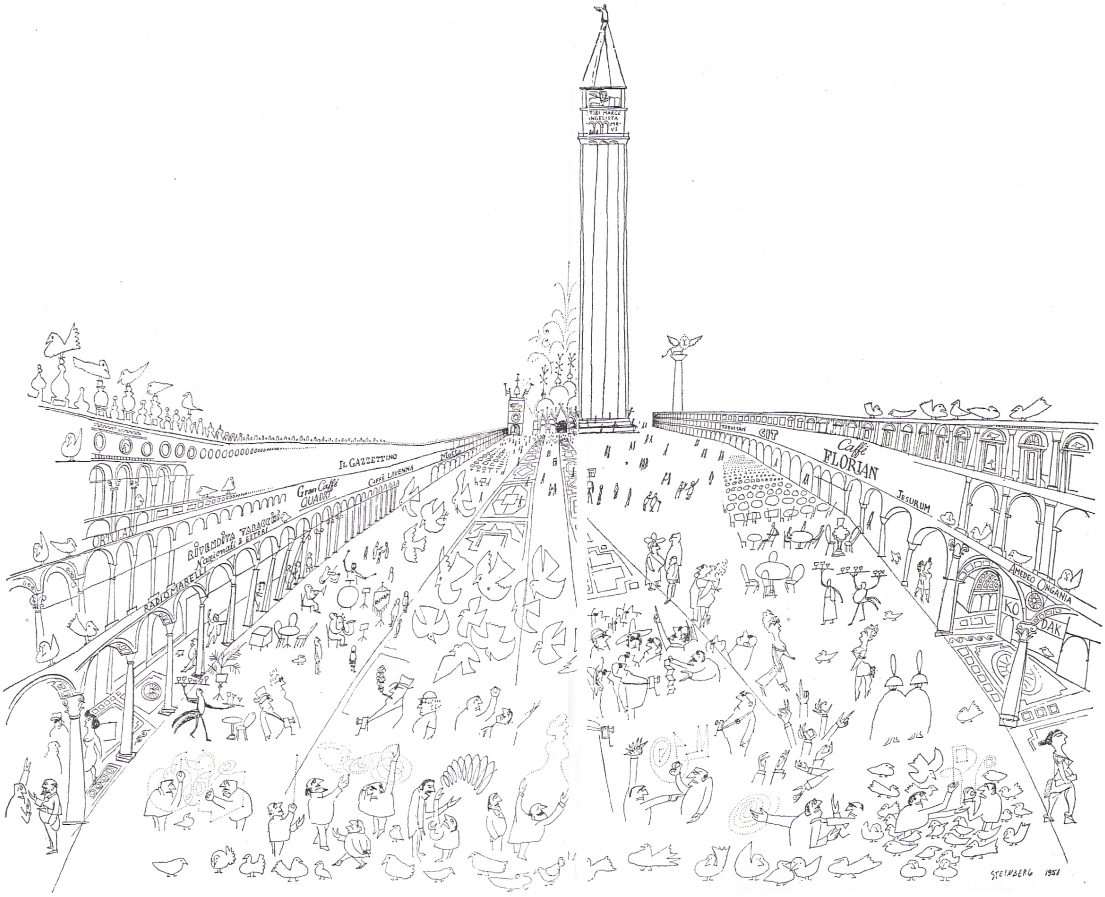
Then, the importance of Piazza San Marco in the discourse of the Heart of the city is deeply stressed also via the editing decisions of the CIAM VIII Report, edited by Tyrwhitt, Sert and Rogers and published in 1952 in English, Italian and Spanish versions: indeed on the inside and the outside of the back cover [front cover and back cover] of the book, we see a sketch, made by Saul Steinberg in 1951, of Piazza San Marco. In a certain sense this sketch opens and closes the book and it is presented as the first and last image which summarizes all the Heart of the City discourses. The sketch shows the Piazza from above, from west to east, as it would have been sketched from a window of Museo Correr. Steinberg draws,

opposed to that of farmer". Paci E.,(1954) Il cuore della Città*. Casabella Continuità,* n. 202

22 Ibid. p. 77-78 Peressutti focuses his attention instead on the Piazza San Pietro in Rome, as did Giedion, while Paulson also talks about Piazza della Signoria in Florence and Piazza Vittorio Emanuele.

23 Listed in the publication of the 1952 in *"Conversation at CIAM 8"*, in ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanisation of urban life.* Pellegrini and Cudahy, New York, 1952, p. 39

24 Ibid.



Saul Steinberg, Piazza San Marco, 1951

sometimes in detail sometimes as a sketch, the architectural buildings and the public space of the square; however the most important subject seems to be the Italian people drawn as funny caricatures of that *"dolce far niente"*, as described by Rogers, playing with pigeons, drinking coffee, selling postcards to tourists, playing music, talking with gestures … and so on. Also the architecture is covered with manmade signs such as Italian billboards (the newspaper *Il Gazzettino*, the company *Motta*, …), the insignia of the restaurants, of the cafes (*Florian, Quadri, Lavenna*,...), of the small shops. Steinberg`s sketch is therefore a representation of the human life in Piazza San Marco rather the physical public space itself. It is also a perfect representation of that new humanistic, social interest which has characterized all the CIAM VIII discourses.

Venice and Piazza Marco have profound influences, not only at theoretical and design level, but also on the structure of CIAM, since the meeting held at Hoddesdon in 1951.

Indeed it is during CIAM VIII that (and it is no coincidence) it is decided to organize the CIAM Summer School in Venice, probably influenced by the continual discussion about Piazza San Marco, as already discussed. In particular, during the *"Resume of open session of Architectural Education"* held in Hoddesdon in 1951, the Italian architect Franco Albini (1905-1977) shows the Plans for a summer school in Venice to be held the following year, for 30 students, divided into 5-6 groups, at the final stage of their architectural education or already graduates. The staff should be composed of four Italian members and others from outside.[25]

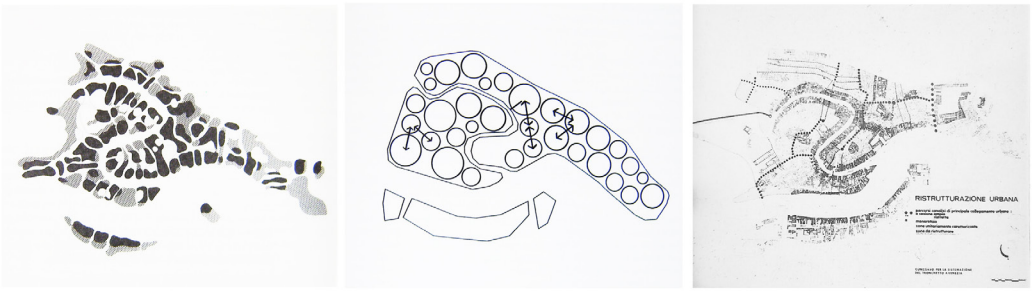
From Hoddesdon to Venice, the Heart of the City discourse will continue through almost all the `50s, evolving through four editions of the CIAM Summer School (1952, 1953, 1954, 1956), plus one called *V Seminario internazionale di Architettura* in 1957.

The summer schools also have a direct and indirect effect on the city itself. As we will see, the study of the structure of Venice will continue in the education program of the IUAV University of Venice as well. In particular Samona` and Trincanato will be involved for their entire lives in the study of Venice, in the research of *"the 'sure body' of the Architecture inside the City"*[26], of the two poles of typology and morphology.

The result of this theoretical research on Venice will be published in books such as *Venise au fil du temps,* written by Egle Renata Trincanato and published in Paris

25 **Report on Architectural Education. In CIAM VIII, 1951, report of Hoddesdon Conference, CCA Library, BIB** 200583,p. 115

26 **Marras G.,** *Studi e ricerche per un libro su Venezia.* In a cura di Marras G., Pogacnik M., *Giuseppe Samona` e la Scuola di Venezia. Archivio progetti*. Il Poligrafo, Padova, 2006, p. 132



Trincanato, nuclear hypothesis of Venice, in Venise au fil du temps, 1971 and Competition for the Tronchetto in Venice, 1965 G.Samona` with C.Dardi, V.Pastor, G. Polesello, A. Samona`, L.Semerani, E. Trincanato

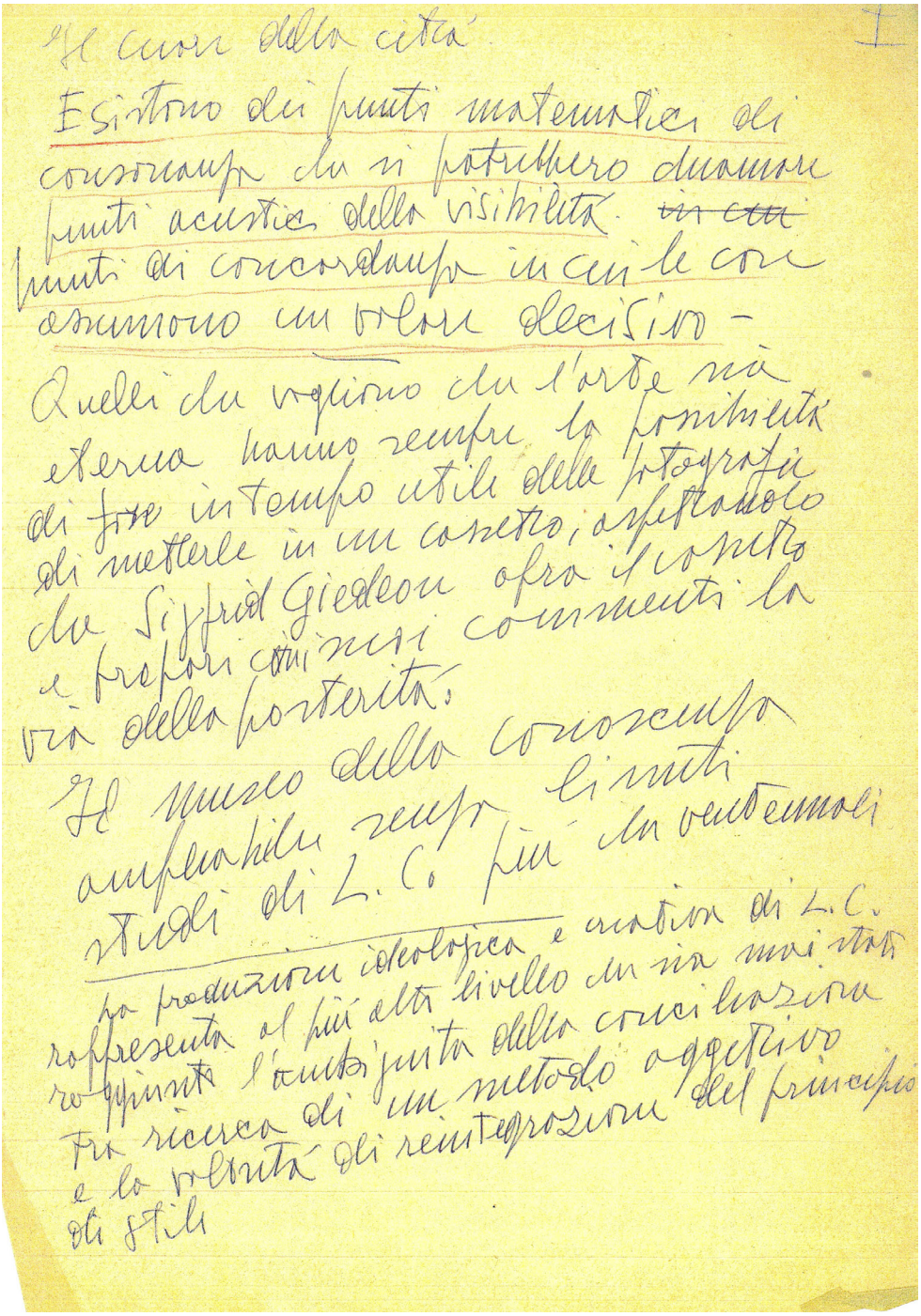
in 1971, where Venice is represented in a "nuclear hypothesis", starting from the old morphology of Venice. But the research will also be translated into a project as Samona's proposal 'Novissime', for a new design of Venice in 1964, touching themes and issues which are discussed ten years before, during the CIAM Summer Schools, with many resonances, as we can see when we compare these drawings with projects that will be shown and described later.

Moreover Samona`, director of the Summer School and Dean of IUAV University in Venice in the `50s, writes some particularly interesting notes entitled *"Il cuore della Città"* (The heart of the City), conserved in his Archive at IUAV University[27]. Collected inside a folder named "Le Corbusier", it is not yet possible to understand when Samona` wrote them since the year is not indicated[28]. They are anyway part of a personal research, which the IUAV Dean calls *"Osservazioni massime – principi di metodologia e storia e voci di vocabolario" (General Observations - the principles of methodology and history and vocabulary items).* The note starts with this sentence underlined in red: *"Esitono dei punti matematici di consonanza che si potrebbero chiamare punti acustici di visibilita`, punti di concordanza in cui le cose assumono un valore decisivo"*[29] The quote is the Italian translation of part of a speech by Le Corbusier, given in Hoddesdon and published later in 1952, about *"visual acoustics"* and directly referred to a *piazzetta* in Venice where *The*

27 IUAV University, Venice, Archive Samona` 2.FAS/070/03/02

28 Since there are also parts of Rossi, we may assume that they might be written after [??] the `60s after the CIAM Summer School.

29 Ibid.


Il cuore della città

Esistono dei punti matematici di concordanza che si potrebbero chiamare punti acustici della visibilità. ~~in cui~~ punti di concordanza in cui le cose assumono un valore decisivo -

Quelli che vogliono che l'arte sia eterna hanno sempre la possibilità di fare in tempo utile della fotografia di metterle in un cassetto, aspettando che Sigfrid Giedeon apra il cassetto e proferisca i suoi commenti la via della posterità.

Il museo della conoscenza ampliabile sempre - limiti visibili di L. C. più che vedremoli

la produzione ideologica e critica di L. C. rappresenta al più alto livello di una mai vista raggiunta l'acutezza della conciliazione fra ricerca di un metodo oggettivo e la volontà di reintegrazione del principio di stile

Samona`s notes about the Heart of the City

Merchant of Venice was staged:
"Why was this performance so good? Because of something to which I want to draw your attention. There are certain exactly proportioned spaces of perfect harmony which one could describe as places of 'visual acoustic' – places of such perfect proportions that the onlooker is made one with the surroundings. Move away a few paces and you no longer experience this: the harmony is broken or you are no longer in the play"[30]
Samona`'s text then continues with another quote, which is still part of the speech of Le Corbusier at Hoddesdon, about the impossibility of considering an eternal art[31], in contrast in some way with Giedion's *"Eternal Present"* and Rogers' *"Continuity"*.
These references of Samona` to the Heart of the City theme and in particular to the *'visual acoustics'* of Venice, are particularly important: on the one hand they demonstrate the continual flow of interest in the Heart of the City theme many years after the meeting in Hoddesdon; on the other, they are proof of the role of the CIAM Summer School in Venice, as the central node of intersection between the research on a particular structure of the city – Venice – and research on a particular Idea of the city – the Heart of the City.

30 *"[...] Reinhardt – put on The Merchant of Venice in 1934 in Venice itself,[...]. This was really very god. He had taken over a piazzetta – a real stage scene: walls on three sides, a canal in front crossed by an alley which slipped across and then slid into the night by the side of a great garden enclosed by high walls.[...] Our amphitheatre of spectators was surrounded by three-storied houses whose windows were filled by the occupants and their friends.[...] We found ourselves in the midst of a stage set that was itself alive. I assure you that it was an extraordinary – an overwhelming – experience to be present at this spectacle. When I came away I was intoxicate, moving in a world of fantasy. I didn`t go to be until nine in the morning after prowling around all over the town, on land and on water, and watching a variety of spectacular sunrises. Visual Acoustics. Why was this performance so good? Because of something to which I want to draw your attention. There are certain exactly proportioned spaces of perfect harmony which one could describe as places of 'visual acoustic' – places of such perfect proportions that the onlooker is made one with the surroundings. Move away a few paces and you no longer experience this: the harmony is broken or you are no longer in the play."* Le Corbusier, *The Core as a Meeting place of the Arts.* In ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 45-46
31 *"Those who stand and wait for the art that is eternal can occupy the present time by taking photographs of such work and putting them away in a drawer to wait for the day when Sigfried Giedion will open the drawer and, by his comments upon them, establish the outlook for posterity!"* Le Corbusier, Ibid. p. 50

ABOUT EDUCATION AND YOUNG GENERATIONS

In CIAM the necessity to invite young participants emerges after the war. As Jos Bosman reminds us, in 1947 Ben Merchelbach proposes that each State should send a member of its younger generation; the Dutch one would be Bakema, who is 33 years old at the time of the Bridgwater CIAM meeting. *"It is our opinion that the produced themes for the next Congress […] lack of the presence of the younger generation, which has not taken a responsibility position yet."*[32] Also Giedion, in the introduction of *"A Decade of New Architecture",* states that after CIAM VI, *"far from dissolving CIAM, it proved necessary to agree to open its doors more widely – especially to youth."*[33] During CIAM VIII, the Swiss historian continues to mention the new young generation - "*twenty-five years of age"*- even in order to justify the necessity of studying and analyzing a contemporary, evolving process of humanization of the environment[34].

The 1951 Congress is the first one where students and younger generation architects meet to share opinions and discuss the same topics and show their projects as well.

Nicholas Bullock affirms that it is the first congress attended by the Smithsons, the Howells and the Voelckers (even though their names are not listed in CIAM VIII documents[35]) who meet other young Dutch and French counterparts: if CIAM IX is always considered the starting point of a new generation in opposition to the founders of CIAM, Bullock reminds us that *"the issues that were to divide CIAM were already evident at the CIAM 8"*[36].

These issues are already present in their project proposals, which represent *"a decisive moment of change"*[37]*, as* Jos Bosman highlights, and which are published

32 **Proposal made by B.Merkelbach as president of the "Architectenvereeniging de 8", the 8**th April 1947, in Bosman J. (1992), I CIAM del dopoguerra: un bilancio del Movimento Moderno.*Rassegna*, n.52/4, p.10-21

33 Giedion, S., *A Decade of new Architecture.* Grinsberger, Zurich, 1951, p. 1

34 *"No one can foretell how things will develop, but my observations of the generation now about twenty-five years of age leads me to believe that this trend exists today in all countries of the western civilization"* Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p. 17

35 Dirk van den Heuvel and Max Risselada also affirm that Alison and Peter Smithson attended the congress in Hoddesdon in 1951 to hear Le Corbusier speak. See ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.11

36 Bullock N., *Building the Post-War World, Modern architecture and reconstruction in Britain.* Routledge, London, 2002, p. 137

37 *"A decisive moment of change had been represented by the students projects in Hoddesdon."These ones raised the questions of the project study inspired by CIAM.[...] they directly exemplified the theoretic research in the seminars and studies of Tyrwhitt, Sert, Gropius, Giedion, Rogers and others; through the*

in the book edited by J.Tyrwhitt, J.L.Sert and E.N. Rogers in 1952: Chicago Housing Project by students of the Institute of Design, New York district by students of the Pratt Institute, Stevenage district by students of the Architectural Association, project in Providence by students of Harvard University and New Heaven project by students from Yale University.

Education is moreover one of the most important themes discussed in Hoddesdon, by the third commission composed of Gropius (President), Rogers (Vice President), Van Eesteren, Giedion, Chermeyeff and Tyrwhitt. The discussion is a continuation of that already held during the VII Congress[38], where the exhaustive and programmatic point of view of President Gropius is presented and later published in "*A Decade of new Architecture"*[39] in 1951, the same year as the Hoddesdon Congress.

Similarly to the previous meeting, yet again the necessity for an international educational system is stressed which will ensure the essential integration between the arts and sciences with courses common to Artists, Architects and Engineers. As a result *"Members of CIAM must take the initiative in bringing all schools, wherever these may be located, in sympathy with these principals into the closest possible contact and to provide opportunities for direct interchanges such as CIAM summer schools."*[40]

This necessity for summer schools is also stressed by the young architects present in the committee. Among them there is also Vittorio Gregotti, who will consider, 40 years later, the Hoddesdon meeting as the starting point of an historical-context discourse. On 12th July 1951, a young Christian Norberg-Schulz (1926-2000), who is there with Giedion, presents a report by the young architects about education to the CIAM commission. The young group is made up of, as the Norwegian architect remind us, fifteen people, *"speaking six or seven different languages, and inexperienced in commission work"*[41]. Despite this diversity

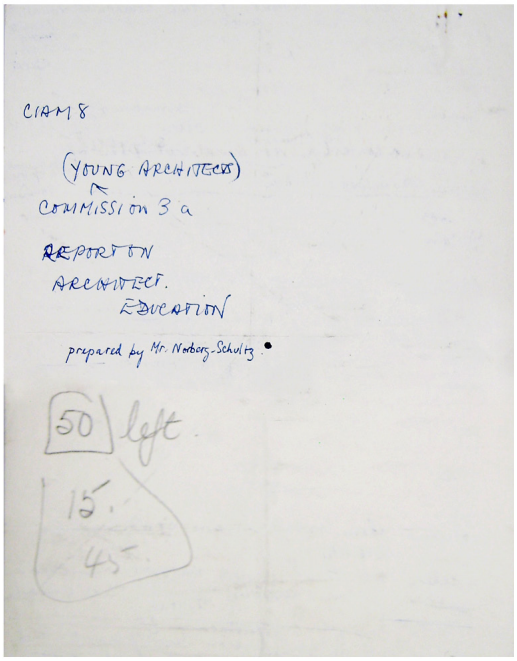
idea of "center" these could be understood as a new and global coherent approach." Bosman J., *I CIAM del dopoguerra: un bilancio del Movimento Moderno.* in AA.VV. (1992) *Rassegna*, n.52/4, p.13

38 IIIrd Commission, CIAM 7.*Reforme de l`enseignement de l` architecture et de l`urbanisme.* President: Ernesto Rogers. Vice-pres: Jane Drew. Membres: Roth, Stynen, Singer, Schutte, Korsmo, Woerkom. Etudiants: Berlanda (I), Derbyshire, Rykwert, Turner (Gr.B.), Levy(S) « […] le écoles ne prennent pas part a la vie de l`architecture ni a celle de l`urbanisme.[…] L` architecte crée et organise les lieux ou se déroule la vie de l`homme[…] enseignement la méthode est plus importante que l`information, elle doit s`appuyer sur l`institution, l`analyse, le sens critique.» gta/ETH Archive 42-x-116 a-b

39 Gropius W., *In search of better architectural education.* In Giedion, S., *A Decade of new Architecture.* Grinsberger, Zurich, 1951, p. 41-46

40 CIAM 8, 1951, report of Hoddesdon Conference, CCA Library, BIB 200583,p. 112 Commission 3, Architectural Education (Gropius, Rogers, Van Eesteren, Giedion, Chermeyeff, Tyrwitt)

41 Norberg-Schulz, Commission 3A (Young Architects), Report on Architectural Education. In CIAM VIII,



CIAM 8

(YOUNG ARCHITECTS)

COMMISSION 3 a

REPORT ON

ARCHITECT.

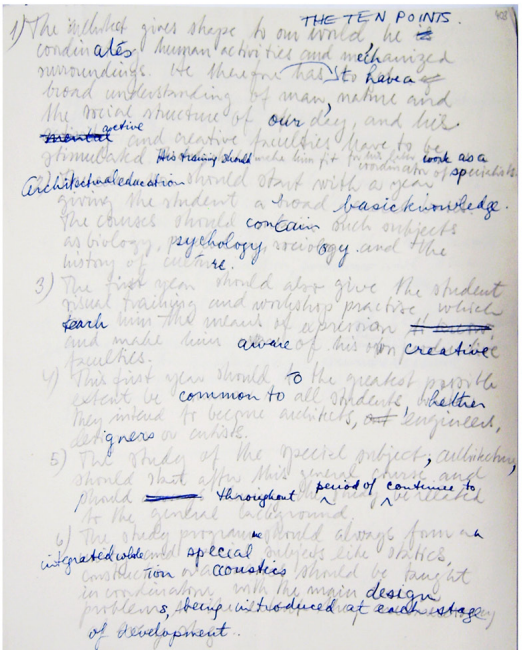
EDUCATION

prepared by Mr. Norberg-Schultz.

50 left.

15.

45.



THE TEN POINTS.

1) The architect gives shape to our world, he coordinates human activities and mechanized surroundings. He therefore has to have a broad understanding of many native and the social structure of our day, and his active inventive and creative faculties have to be stimulated. His training should make him fit to take part as a coordinator of specialists.

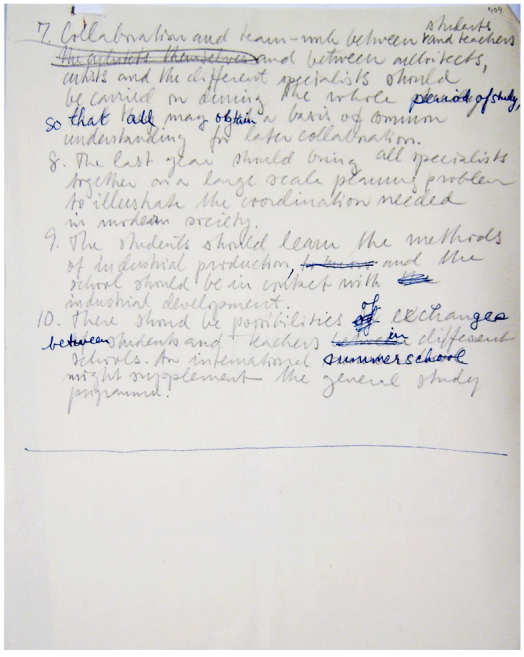
Architectural education should start with a year giving the student a broad basic knowledge. The courses should contain such subjects as biology, psychology, sociology and the history of culture.

3) The first year should also give the student visual training and workshop practice which teach him the means of expression and make him aware of his own creative faculties.

4) This first year should to the greatest possible extent be common to all students, whether they intend to become architects, engineers, designers or artists.

5) The study of the special subject, architecture should start after this general period and should throughout period of continue to the central background.

6) The study programme should always form an integrated whole and special subjects like statics, construction or acoustics should be taught in connection with the main design problems, being introduced at each stage of development.



7. Collaboration and team-work between students and teachers and between architects, artists and the different specialists should be carried on during the whole period of study, so that all may obtain a basis of common understanding for later collaboration.

8. The last year should bring all specialists together on a large scale planning problem to illustrate the coordination needed in modern society.

9. The students should learn the methods of industrial production, and the school should be in contact with industrial development.

10. There should be possibilities of exchanges between students and teachers in different schools. An international summer school might supplement the general study programme.

Norberg-Schulz, The Ten Points, CIAM VIII, gta/ETH Archive NS-42-JT-7-400/404

among the members, most of them agree on the lack of correct education at their respective Universities. *"I can say that most of us have not been satisfied with our education,"* he explains. *"After finishing our studies, we feel a great lack of understanding of human beings and of the society for which we must work."*[42]
What is generally felt as necessary is a total and global reorganization of the architectural schooling. In order to satisfy this proposal, Norberg-Schulz presents the *"Ten Points".* It is an ambitious Manifesto for a new concept of worldwide architectural education written by the CIAM younger generation (among whom we find Gregotti, Tavora, and Candilis). On the one hand these statements should be useful in order to cultivate a global consciousness of the importance of education in architecture among CIAM members; on the other these rules should be used for the development of a new young professional figure who might better satisfy the needs of contemporary society.
The first point states that, since the architect is assumed to be the person who shapes the world, by coordinating different specialists, the architect would *"have a broad understanding of man, nature and the social structure of our day"*.
The second, third and fourth points stress the necessity for a first year of general courses containing different subjects (from biology to psychology, sociology, history). It should make students aware of their creative faculties and it should be open to the broadest possible range of students, whether they consider undertaking a career as architect, engineer, designer or artist.
In the next two points, Norberg-Schulz writes that the more specific subjects should start after this general year; moreover architecture statics or construction subjects should be always integrated with the main design problems. All students should collaborate in teams formed by students along with teachers and architects, artists and other specialists as mentioned in the seventh point. The last year of school should collect all the specialists together in order deal with a large scale planning problem as a group (8th point), while industrial production should be always included in the teaching program (9th point).
Finally, in the tenth and last point, the young group highlights the necessity for exchanges between students and teachers from different Universities. This might also be achieved thanks to an International summer school, which *"might supplement the general study program."*[43]
It is very important to stress that the summer school is posed as the final part

1951, report of Hoddesdon Conference, CCA Library, BIB 200583,p. 113
42 Ibid.
43 Ibid. p. 114

of the Ten-points statement by Norberg-Schulz, as probably the main concrete and easiest proposal contained in the Manifesto, to be realized in the following months.

We must underline that the summer school is not only a course organized and set by CIAM members, but it is something that is felt as extremely necessary by the younger generation as well. The final aim of the CIAM summer school is not only an architectural experience to add to the educational program, but a way to fill the gaps in the Architecture programs found by the students themselves. The summer school is shown as a first step to converting the entire system of architectural education throughout the world, since CIAM itself is global. It might probably be seen as a small experimentation for an ideally internationalized school, a bringing together of the main architects and probably the more motivated students from all parts of the world.

We do not really know what the real effect of the CIAM summer school really has in the end on the University system around the world. For instance, it would be interesting to understand how much the summer schools held in Venice, and directly influenced by the Hoddesdon meeting, have stimulated the construction of the future so-called "school of Venice". As Maddalena Scimemi[44] reminds us, it is during the first CIAM summer school held in London in 1949 that Samonà – the Dean of IUAV University – collaborates with Albini, Gardella and Rogers. In a few months the same architects are called by Samonà to become professors in Venice. The international character of the CIAM summer school will remain as a main feature of IUAV university in the next decades, hosting the most outstanding Italian architects and historians[45] as professors and many visitors from all over the world, making IUAV one of the most important Universities in the world in following decades. We may then assume for sure that five editions of CIAM summer schools in Venice have at least helped IUAV University for that process of internationalization, the necessity of which has already been deeply stressed by young Norberg-Schulz in 1951, in Hoddesdon.

However, after CIAM VIII the collaboration of younger CIAM members and the foundation of CIAM junior-groups do not seem to have been so active. In a letter dated 26th June 1952, Norberg-Schulz criticizes this lack of interest: he receives only four positive answers, Basel-Zagreb-Paris-Karlsruhe, among the 40 Universities which are asked to collaborate.

44 Maddalena Scimemi, *Venezia internazionale. La CIAM Summer School 1952–1957,* In *IUAV journal n. 83, 2010,* http://www.iuav.it/Ateneo1/chi-siamo/pubblicazi1/Catalogo-G/index.htm

45 Some of the professors at IUAV are: Gregotti, Rossi, Tafuri, Secchi, ...

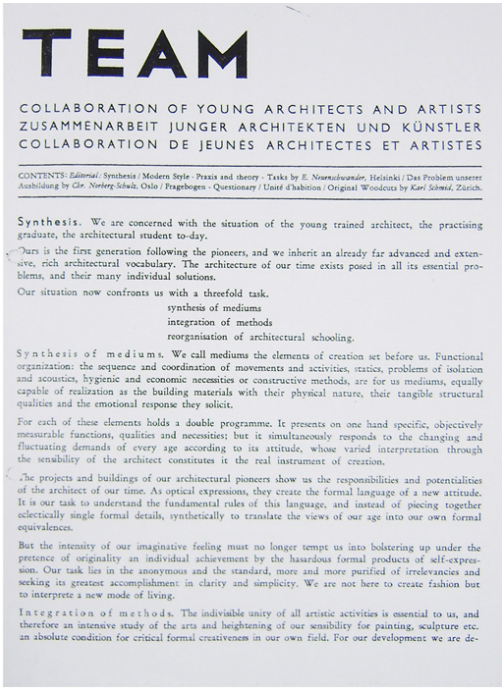
"We may assume that the younger architects and students interested in joining CIAM have rather vague idea about the aims and work of CIAM," affirms Norberg-Schulz. "*We therefore would ask the elder members to make a statement which can give a basis and an answer to the question: "why do we join CIAM?"*[46]
Moreover the creation of young groups and a possible split from the old ones, does not seem to have been considered entirely positively, also during CIAM VIII itself. For instance, Rogers states that *"the adjectives 'young" and "old" cannot be applied to us, modern architects."* He talks about a *"Continuing Revolution"* which should be advanced by all members travelling *"the same road together",* without any opposition between different generations, as it will be in few years. In this sense *"Continuity"* for Rogers is not only the relationship with history and *contesto*, between *"eternal and temporary art",* but it also means the continuity of CIAM's modern strengths via cooperation between generations, also in new schools where *"the old generation, while teaching their juniors, will be willing also to continue to learn from the latter."*[47]
However, Norberg-Schulz carries on the idea of the organization of a Junior-CIAM group, through the publication of *"TEAM, Collaboration of young architects and artists"*, edited by Norberg-Schulz himself and Neuenschwander, and published for the first time on 1st May 1951. Therefore we can affirm that the necessity for a rising young group inside CIAM has already been considered even before the Heart of the City Congress.
Most of the issues presented at both CIAM VII and CIAM VIII are present in the aims of TEAM. Indeed, as we can read from the Synthesis of the first number of TEAM, the authors consider themselves as the *"first generation following the pioneers"*, which is concerned with the situation of young architects and students and which has to deal with *"a threefold task: Synthesis of medium, integration of methods, reorganization of architectural schooling"*[48].

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46 Chr. Norberg-Schulz, Sigunta 26,6 1952, gta/ETH archive 42-JT-10-70

47 *"[…] far from becoming weaker, the sense of opposition existing between one generation and another will acquire a new importance if the younger ones, instead of opposing the work of their elders, will, in the full conscience of their own strength, fall into place, alongside, and travel the same road together."* CIAM 8, Rogers: Architectural education, First session. Gta/ETH archive 42-JT-7-473/475

48 *"We are concerned with the situation of the young trained architect, the practicing graduate, the architectural student to-day. Ours is the first generation following the pioneers, and we inherit an already far advanced and extensive, rich architectural vocabulary. The architecture of our time exists posed in all its essential problems, and their many individual solutions.*
Our situation now confronts us with a threefold task.
Synthesis of medium,
integration of methods,
reorganization of architectural schooling." TEAM, Number 1, 1 May 1951, in gta/ETH Archive 42-x-150



TEAM

COLLABORATION OF YOUNG ARCHITECTS AND ARTISTS
ZUSAMMENARBEIT JUNGER ARCHITEKTEN UND KÜNSTLER
COLLABORATION DE JEUNES ARCHITECTES ET ARTISTES

CONTENTS: *Editorial* / Synthesis / Modern Style - Praxis and theory - Tasks by *E. Neurnschwander*, Helsinki / Das Problem unserer Ausbildung by *Chr. Norberg-Schulz*, Oslo / Fragebogen - Questionary / Unité d'habition / Original Woodcuts by *Karl Schmid*, Zürich.

Synthesis. We are concerned with the situation of the young trained architect, the practising graduate, the architectural student to-day.

Ours is the first generation following the pioneers, and we inherit an already far advanced and extensive, rich architectural vocabulary. The architecture of our time exists posed in all its essential problems, and their many individual solutions.

Our situation now confronts us with a threefold task.

synthesis of mediums
integration of methods
reorganisation of architectural schooling.

Synthesis of mediums. We call mediums the elements of creation set before us. Functional organization: the sequence and coordination of movements and activities, statics, problems of isolation and acoustics, hygienic and economic necessities or constructive methods, are for us mediums, equally capable of realization as the building materials with their physical nature, their tangible structural qualities and the emotional response they solicit.

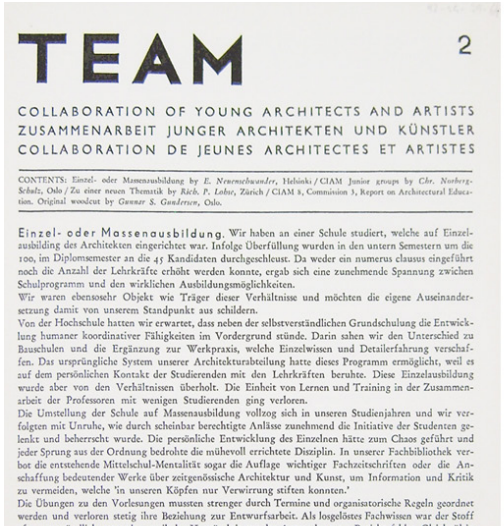
For each of these elements holds a double programme. It presents on one hand specific, objectively measurable functions, qualities and necessities; but it simultaneously responds to the changing and fluctuating demands of every age according to its attitude, whose varied interpretation through the sensibility of the architect constitutes it the real instrument of creation.

The projects and buildings of our architectural pioneers show us the responsibilities and potentialities of the architect of our time. As optical expressions, they create the formal language of a new attitude. It is our task to understand the fundamental rules of this language, and instead of piecing together eclectically single formal details, synthetically to translate the views of our age into our own formal equivalences.

But the intensity of our imaginative feeling must no longer tempt us into bolstering up under the pretence of originality an individual achievement by the hasardous formal products of self-expression. Our task lies in the anonymous and the standard, more and more purified of irrelevancies and seeking its greatest accomplishment in clarity and simplicity. We are not here to create fashion but to interprete a new mode of living.

Integration of methods. The indivisible unity of all artistic activities is essential to us, and therefore an intensive study of the arts and heightening of our sensibility for painting, sculpture etc. an absolute condition for critical formal creativeness in our own field. For our development we are de-

TEAM, May 1951, gta/ETH 42-x-150 .



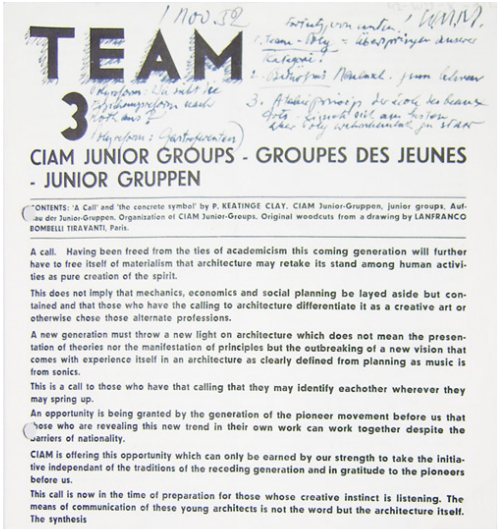
TEAM 2

COLLABORATION OF YOUNG ARCHITECTS AND ARTISTS
ZUSAMMENARBEIT JUNGER ARCHITEKTEN UND KÜNSTLER
COLLABORATION DE JEUNES ARCHITECTES ET ARTISTES

CONTENTS: *Einzel-* oder Massenausbildung by *E. Neurnschwander*, Helsinki / CIAM Junior groups by *Chr. Norberg-Schulz*, Oslo / *Zu einer neuen Thematik* by *Rich. P. Lohse*, Zürich / CIAM 9, Commission 3, Report on Architectural Education. Original woodcut by *Gunnar S. Gundersen*, Oslo.

Einzel- oder Massenausbildung. Wir haben an einer Schule studiert, welche auf Einzelausbildung der Architekten eingerichtet war. Infolge Überfüllung wurden in den untern Semestern um die 100, im Diplomsemester an die 45 Kandidaten durchgeschleust. Da weder ein numerus clausus eingeführt noch die Anzahl der Lehrkräfte erhöht werden konnte, ergab sich eine zunehmende Spannung zwischen Schulprogramm und den wirklichen Ausbildungsmöglichkeiten.
Wir waren ebensosehr Objekt wie Träger dieser Verhältnisse und möchten die eigene Auseinandersetzung damit von unserem Standpunkt aus schildern.
Von der Hochschule hatten wir erwartet, dass neben der selbstverständlichen Grundschulung die Entwicklung humaner koordinativer Fähigkeiten im Vordergrund stünde. Darin sahen wir den Unterschied zu Bauschulen und die Ergänzung zur Werkpraxis, welche Einzelwissen und Detailerfahrung verschaffen. Das ursprüngliche System unserer Architekturabteilung hatte dieses Programm ermöglicht, weil es auf dem persönlichen Kontakt der Studierenden mit den Lehrkräften beruhte. Diese Einzelausbildung wurde aber von den Verhältnissen überholt. Die Einheit von Lernen und Training in der Zusammenarbeit der Professoren mit wenigen Studierenden ging verloren.
Die Umstellung der Schule auf Massenausbildung vollzog sich in unseren Studienjahren und wir verfolgten mit Unruhe, wie durch scheinbar berechtigte Anlässe zunehmend die Initiative der Studenten gelenkt und beherrscht wurde. Die persönliche Entwicklung des Einzelnen hätte zum Chaos geführt und jeder Sprung aus der Ordnung bedrohte die mühevoll errichtete Disziplin. In unserer Fachbibliothek verbot die entstehende Mittelschul-Mentalität sogar die Auflage wichtiger Fachzeitschriften oder die Anschaffung bedeutender Werke über zeitgenössische Architektur und Kunst, um Information und Kritik zu vermeiden, welche 'in unseren Köpfen nur Verwirrung stiften konnten.'
Die Übungen zu den Vorlesungen mussten strenger durch Termine und organisatorische Regeln geordnet werden und verloren stetig ihre Beziehung zur Entwurfsarbeit. Als losgelöstes Fachwissen war der Stoff oft unverständlich geworden, weil das Verständnis aus der Anwendung am Projekt fehlte. Gleichgültig wurde das Fachpensum durchgegangen und gegenüber der Entwurfsarbeit griff dieselbe Haltung um sich. Nicht selten wurde versucht, durch Anpassung oder durch Nachahmung sich die Aufmerksamkeit und Zufriedenheit des Professors zu verschaffen.
Diese würgende Passivität in der Massenausbildung, wo der eine nicht mehr den Namen des andern kannte, weckte in vielen Unzufriedenheit, aber es war schwer, sich einen Masstab zur Kritik an den Verhältnissen zu schaffen. Selbst wer sich Kenntnisse erwerben und eine eigene Einstellung bilden konnte, fand nicht den Boden, sie im Entwurf zu üben und anzuwenden.
Es war ein grosser Zufall, dass sich in dieser gespannten Atmosphäre eine Gruppe von Studenten zusammenfand, die nicht eigene Interessen ausserhalb der Schule suchten, sondern im Gegenteil mit sehr viel Begeisterung und Ausdauer ihre Kritik und ihre Vorschläge in die Schule hineintrugen.
Es war unser erstes Programm, uns für unser Studium und unseren Lehrgang verantwortlich zu machen.

TEAM2, February 1952, gta/ETH 42-SG-39-61/62.



TEAM 3

CIAM JUNIOR GROUPS - GROUPES DES JEUNES - JUNIOR GRUPPEN

CONTENTS: 'A Call' and 'the concrete symbol' by P. KEATINGE CLAY. CIAM Junior-Gruppen, junior groups. Aufbau der Junior-Gruppen. Organization of CIAM Junior-Groups. Original woodcuts from a drawing by LANFRANCO BOMBELLI TIRAVANTI, Paris.

A call. Having been freed from the ties of academicism this coming generation will further have to free itself of materialism that architecture may retake its stand among human activities as pure creation of the spirit.

This does not imply that mechanics, economics and social planning be layed aside but contained and that those who have the calling to architecture differentiate it as a creative art or otherwise chose those alternate professions.

A new generation must throw a new light on architecture which does not mean the presentation of theories nor the manifestation of principles but the outbreaking of a new vision that comes with experience itself in an architecture as clearly defined from planning as music is from sonics.

This is a call to those who have that calling that they may identify eachother wherever they may spring up.

An opportunity is being granted by the generation of the pioneer movement before us that those who are revealing this new trend in their own work can work together despite the barriers of nationality.

CIAM is offering this opportunity which can only be earned by our strength to take the initiative independant of the traditions of the receding generation and in gratitude to the pioneers before us.

This call is now in the time of preparation for those whose creative instinct is listening. The means of communication of these young architects is not the word but the architecture itself. The synthesis

That this form of communication be made possible an exhibition to witness the new spirit will be necessary. In this way the really creative people will be able to identify eachother and through the similarity of this fresh direction in their work will be able to form a working body in CIAM as in their independant practice.

The value of these young people in CIAM will be according to their creative ability. There is no repetition in creation and what is to unfold in CIAM is unknown.

CIAM will in this way not be a systematised organisation but the meeting point of the outstandig creators of the day. It will be free every time to find its own purpose and meaning freshly through its own work.

This call in its very nature will single out those who have the calling within them.

TEAM3, September 1952, gta/ETH 42-WM-X-1

The second number of TEAM[49], published in February 1952, refers directly to CIAM VIII with the report of the CIAM VIII-Commission 3 on Architectural Education[50], published inside. *"CIAM 8 decided to establish Junior Groups in as many countries as possible to get an effective continuity in the work of CIAM"*[51], as the editors state. These groups are formed by students and young architects with less than two years of practical experience.

The first one is organized "*in Oslo in autumn 1949 as a result of Dr. Giedion direct appeal and inspiration"*[52] , as explained in TEAM 2. It is the PAGON Group (progressive arkitekters gruppe Oslo, Norway) and it is formed by Norberg-Schulz himself, with Carl Corwin, Robert C.Esdaile, Sverre Fehn, Geir Grung, Arne Korsmo, P.A.M. Mellbye, Hakon Mjelva, Erik Rolfsen, Odd Ostbye, and Jorn Utzon[53].

Then the editors mention the elections of the CIAM Council members - Howell (London) and Candilis (Rabat) - among the young architects present at CIAM VIII, and of Norberg-Schulz (Oslo) as delegate for the Junior groups. The election of *"the two representatives of the new generation"*[54], is later confirmed also during an *"Extraordinary Council Meeting"* organized in Paris, on May 10th and 11th 1952, in order to discuss *"particularly on the suggestion, made at CIAM 8 (Hoddesdon) that CIAM should be 'handed over' to the younger architects."*[55] In the same meeting the Second CIAM Summer school is confirmed, which will be held from September 10th to October 10th, in Venice, in the Architectural Institute, Palazzo Grassi, Fondamenta Nani.[56]

The nomination of Candilis as one of the representatives of the younger generation, together with Norberg-Schulz, editor of TEAM is therefore quite interesting. Indeed Candilis will later become one of the main exponents of the young group TEAM 10, called with the same name as Norberg-Schulz's previous

49 *"Heute schickte ich TEAM 1 und 2 nach 75 Architekturschulen und CIAM-Delegierten mit Anfragen uber Junior-Gruppen." trad. Today I sent TEAM 1 and 2 in 75 schools of architecture and CIAM delegates with inquiries about Junior-Gruppen.* Chr. Norberg-Schulz, gta/ETH archive 42-SG-39-61

50 See TEAM 2, p. 7-8 gta/ETH Archive 42-SG-39-62

51 Ibid. p.4

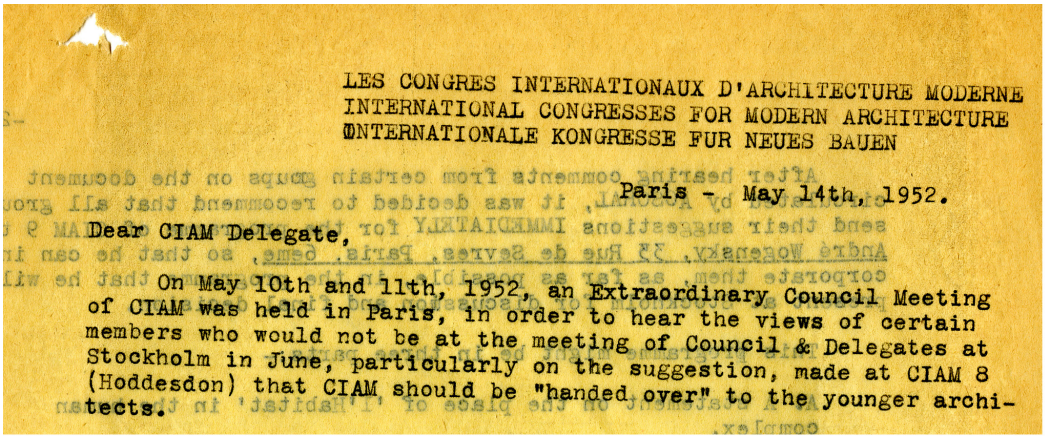
52 "*A junior Group was formed in Oslo in autumn 1949 as a result of Dr. Giedions direct appeal and inspiration. […] In autumn 1950 the group was admitted to the CIAM group in Oslo, which had been reformed after the war by architect Arne Korsmo, with Korsmo and erik Rolfsen, the Town Planning Officer of Olso, as delegates."* TEAM 2,Feb. 1952 gta/ETH Archive 42-SG-39-62

53 BYGGEKUNST nr. 6/7 1952, gta/ETH Archive 42-x-14

54 Letter of CIAM Extraordinary Council Meeting, Paris, May 14th1952, from Harvard Archive, CIAM Collection C11

55 Ibid.

56 Letter of CIAM Extraordinary Council Meeting, Paris, May 14th1952, from Harvard Archive, CIAM Collection C11



LES CONGRES INTERNATIONAUX D'ARCHITECTURE MODERNE
INTERNATIONAL CONGRESSES FOR MODERN ARCHITECTURE
INTERNATIONALE KONGRESSE FUR NEUES BAUEN

Paris - May 14th, 1952.

Dear CIAM Delegate,

On May 10th and 11th, 1952, an Extraordinary Council Meeting of CIAM was held in Paris, in order to hear the views of certain members who would not be at the meeting of Council & Delegates at Stockholm in June, particularly on the suggestion, made at CIAM 8 (Hoddesdon) that CIAM should be "handed over" to the younger architects.

III THE NEW GENERATION OF ARCHITECTS

i. Student Groups of CIAM: Candilis and Howell (the two representatives of the new generation elected to the Council at CIAM 8) were asked to investigate further methods of starting student groups in universities and working groups of young architects, and to report to the Stockholm meeting.

ii. CIAM Summer School: The second CIAM Summer School will be held in Venice this summer, from September 10th to October 10th, in the Architectural Institute, Palazzo Grassi, Fondamenta Nani, under the direction of Albini, Gardella, Rogers and Samona. It will be open to young architects and students in their final year. Applications should be made to the Institute. The cost for the month is likely to be 60,000 lira (inclusive). Further particulars are being sent to all groups from Italy.

Yours sincerely

Le Corbusier
Vice President

S. Giedion
Secretary General

J. Tyrwhitt
Secretary to Council

PRESENT: Candilis, Wells Coates, Le Corbusier, C. van Eesteren, S. Giedion, W. Gropius, J.J.Honegger, W. Howell, S. Markelius, E.Rogers, G. Samuel, R. Steiger, J. Tyrwhitt, A. Wogensky.

Letter of CIAM Extraordinary Council Meeting, Paris, May 14th 1952, Harvard Archive, CIAM Collection C11

publication. It seems that Giedion, who is in direct contact with Norberg-Schulz during his studies at ETH at the end of the `40s and who inspires the formation of the PAGON group, proposes calling the young members preparing the CIAM X *"for instance Team Ten"*[57].

Furthermore, during CIAM IX the editors of TEAM are among the candidates for the election of the young members of CIAM. Bakema and Wogenscky are instead elected, while Howell and Candilis remain on the Council[58]. Bekema`s position as member of both CIAM and TEAM X might then be considered as a continuation of Norberg Schulz's previous attempt to organize a younger generation inside CIAM. Moreover, as we will see, both architects will be directly influenced by the Heart theme even many years after CIAM VIII in Hoddesdon, highlighting the continuity of the Heart Idea in different arterial discourses.

Finally, from TEAM to TEAM 10 the continuity between CIAM and Team X and the central role of Norberg-Schulz[59] and of all the Education committee at CIAM VIII is clear, as already stated for instance by Jos Bosman[60], in order to radically transform both the CIAM structure and the Architecture discipline itself in later decades.

In September 1952, Norberg-Schulz and Neuenschwander publish the third number of TEAM. The magazine is totally focused on the organization and support of CIAM Junior-groups, with an almost revolutionary tone:

"A call. Having been freed from the ties of academism this coming generation will further have to free itself of materialism that architecture may retake its stand among human activities as pure creation of the spirit. […] A new generation must throw a new light on architecture. […] We must realize for ourselves the fundamental new vision of

57 Letter from S. Giedion to C. van Eesteren, 15 January 1956, Giedion CIAM Archive, gta/ETH Zurich in Bosman J., *Team 10 out of CIAM* in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.247

58 See Bosman J., *Team 10 out of CIAM* in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.247

59 At the Lapad Congress, 10 July 1956, Norberg-Schulz and the Pagon group are present, though not mentioned among the Team X members. Their discourse at CIAM X remains focused on the education issue. *"There are already so many CIAM members connected with universities that it should be possible to make a cooperation within the problems to solve which could both serve CIAM group work, be presented for the Congress and be shown in exhibitions and given put in publications. It is also important that well prepared work will give an understanding of the methods and outlines of CIAM among architectural students. Such work is already established in several universities and has the advantage of economical possibilities for both study and research as well as publication.[…] The aim should be to have a worldwide cooperation within the universities to get student work and research directed toward solutions for the habitat."* Note from Group Pagon, Norway, Lapad Congress 10 July 1956, gta/ETH Archive 42-JT-15-339/340

60 See Bosman J., *Team 10 out of CIAM* in ed. by Risselada M., van den Heuvel D., *TEAM 10 1953-81: in search of a Utopia of the present.* NAI Publishers, Rotterdam, p.246-251

man which lies at the base of new architecture."[61] However, the Junior Group is still considered to be based on CIAM principles, whose education has to be carried to the architectural schools.

In the same month as the publication of TEAM 3, the first CIAM Summer School in Venice is held, becoming the main laboratory of exchange of ideas and architectural experience between different generations in a *"Revolutionary continuity"*, as described by Rogers at CIAM VIII. The summer school experience will follow the destiny of CIAM itself, closing simultaneously with the CIAM's last Congress in 1956.

61 *TEAM 3: CIAM Junior Groups -Groupes des jeunes*, September 1952, gta/ETH Archive 42-SG-37-73 and 42-WM-X-1

THE CIAM SUMMER SCHOOLS

The CIAM Summer School in London, 1949

As far as the CIAM Summer Schools are concerned, the first real edition is held in London in 1949. The decision to establish it is made before the 7th CIAM held in Bergamo, July 22-31, 1949. As we can read from a letter written in Paris, in March 9, 1949, the first course is decided to be held in London from August 9 to September 5, 1949[62], with Maxwell Fry, member of the MARS group, as the director and Jaqueline Tyrwhitt as assistant director. The MARS Group itself, which later organizes the Congress in Hoddesdon as well, prepares four main subjects to propose to students: neighbourhood unit, office building, national theater, city traffic problems. These are all related to sites in London, such as the *"Elephant and Castle"* area, considered by the MARS Group as an *"Area of Extensive War Damage"* in need of revitalization.[63] Moreover each theme of study has its own Tutor: C.K. Capon (theatre), A. Korn (traffic junction), H.T. Cadbury (office block), Peter Shepheard (housing scheme).[64]

The participants are only post-graduates and they are "*half drawn from the nominees of the various national groups of CIAM and half from residents in the British isles"*[65]. At the end of the summer school sixteen schemes are finally prepared for the exhibition on September 1st, where the projects are criticized by Professor C. van Eesteren from Amsterdam and Dr. Ernesto Rogers from Milan, members of the Council of CIAM, by Maxwell Fry, the Director of the School, and by Robert Jordan, the Principal of Architectural Association[66]. The later summer schools will instead be more focused on analysis and on the discussion of some issues related to the urban level, becoming a more theoretical-project laboratory, with the aim of going beyond the single architectural design. The influence of the Italian CIAM group will become important in order to enrich the summer school with discussions about history, tradition, continuity and context which

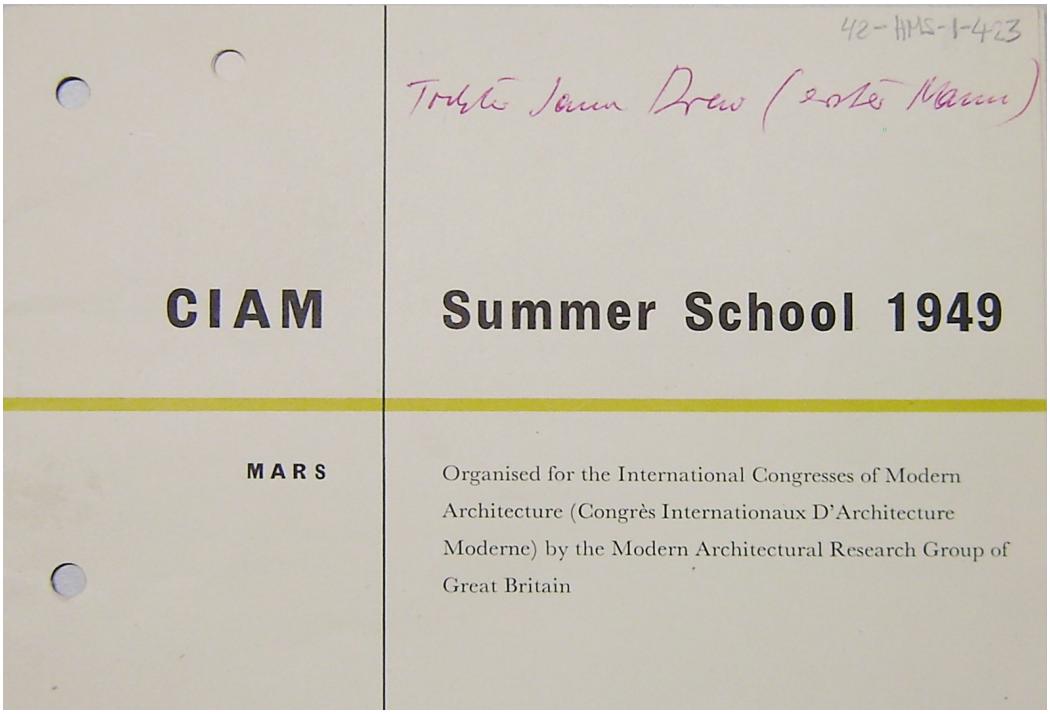
62. Giedion, Le Corbusier, Syrkus, Paris, March 9, 1949. from GSD Harvard Archive, CIAM Collection B5.
In a letter of November 24, 1949 we read that *"The first CIAM Summer School was held in London from August 8th to September 2nd, 1949"* gta/ETh Archive 42-JT-4-215

63 MARS GROUP, CIAM Summer School 1949, Program for a New Elephant and Castle, gta/ETH Archive 42-JT-3-203 The *Elephant and Castle area is related to the traffic issue.* Other Areas are the South side of Hapstead Health, near Parliament Hill (housing), a site between Knightsbridge and Hyde Park (office), South side of Regents Park (national theater). MARS GROUP, CIAM SUMMER SCHOOL, Information Sheet, gta/ETH Archive 42-JT-3-219

64 gta/ETh Archive 42-JT-4-215

65 MARS GROUP, CIAM SUMMER SCHOOL, Information Sheet, gta/ETH Archive 42-JT-3-219

66 letter of November 24, 1949 gta/ETH Archive 42-JT-4-215



Flyer CIAM Summer School 1949, gta/ETH 42-HMS-1-423

-4-

CIAM SUMMER SCHOOL

The first course of this summer school will be held in London from August 9th to September 5, 1949.

The Mars Group has prepared four main examples on the following subjects:

1 - Neighborhood Unit.
11 - Office Building
111 - A National Theater.
1V - A traffic problem in a big city.

The number of participants in this summer school will be limited to forty. They should be architects or students about to finish their architectural studies. They should also be recommended by the CIAM groups in respective countries.

Inscriptions should be forwarded not later than May 31, 1949 to the:

MARS Group - 34 Gordon Square - London WC1 (England)

The participating fees will be 5 pounds per ~~person~~ student.

For further information on this matter you should address yourself to the MARS Group.

- IMPORTANT NOTE-

We request of each delegate that he translate this letter to the language of his country and he immediately distributes copies to the different members of the group.

PARIS, March 9, 1949

For the Council of CIAM

General Secretary	Vice-President	Vice-President
Dr. S. GIEDION	LE CORBUSIER	Helena SYRKUS

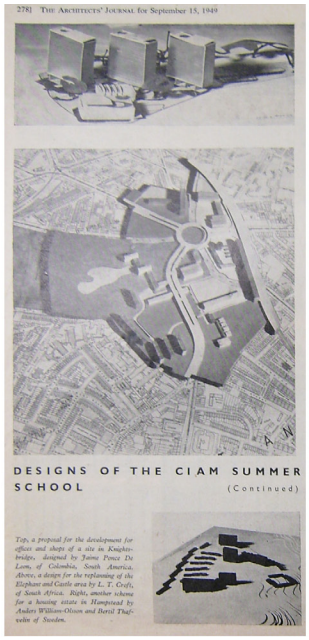
Giedion, Le Corbusier, Syrkus, Paris, March 9, 1949. GSD Harvard Archive, CIAM Collection B5

will become relevant in later decades. Finally, after the first School in London, the MARS group proposes organizing the school each year, in the same country where CIAM will be organized, and *"just before the Congress so that the work of members of the School can be seen and criticized by Congress members."*[67] Nevertheless, the influence of the discussion on Piazza San Marco, in Hoddesdon, will be so relevant that all the future summer schools will be held in Venice, considered as *"a particularly suitable background for an international School, both because of its unique architectural and urban qualities and for the increasing number of cultural events that take place there."* It is a unique city where the young architects can *"obtain a better understanding of contemporary architectural and town planning problems which are presented by particular situation of Venice."*[68]

List of Participants at the International CIAM Summer School in London-1949[69]: (all participants: students and teachers)

Ole Bang
Denmark
Franco Berlanda
Italy
Cristophe Bon
Switzerland
John H.Bramwell
England
Paul Boissevain
Ireland
H.T. Cadbury Brown
England
C.K. Capon
England
Oliver Carey
England
L.F. Croft
South Africa
Richard De`Ath
Scotland
Yves De Vestel
Belgium
Etienne Donnet
Belgium
Othmar Egger
Austria
Maxwell Fry
England
Francesco Gnecchi Ruscone
Italy
A.G. Hamilton
Australia
Oskar Hansen
Poland
Etiane Havenith
Belgium
Bride Kennedy
Sweden
J.W.Kamerling
Holland
A.Korn
England
Jean Mazet
France
Lucas Mellinger
England
F.Moessinger
Switzerland
Giovanna Pericoli
Italy
Jaime Ponce De Leon
South Africa
Godfrey Samuel
England
Peter Shepheard
England
Ricardo Sievers
Argentine
Bertil Thafvelin
Sweden
Jaqueline Tyrwhitt
England
August Verschaeren
Belgium
Jacques Veyssiere
Belgium
Anders William-Olsson
Sweden
C.W.H. Wright
England

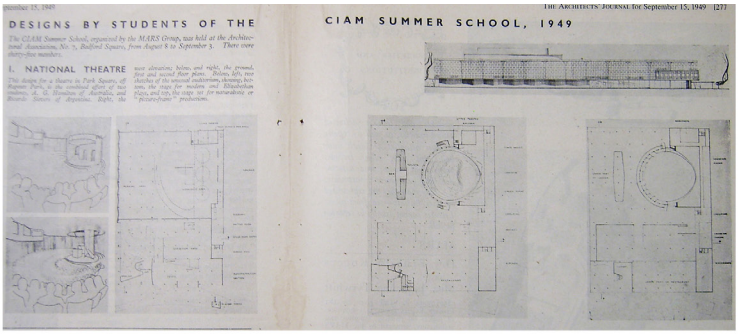
67 Notes of a meeting of the members of this school held at the Architectural Association, 34, Bedford Square, London, W.C.1., on September 2nd, 1949, gta/ETH Archive 42-JLS-11-147
68 In the flyer for the CIAM SUMMER SCHOOL 1952, gta/ETH Archive 42-JLS-27-91
69 CIAM Summer School in London-1949, gta/ETH Archive 42-JT-3-203



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DESIGNS OF THE CIAM SUMMER SCHOOL (Continued)

Top, a proposal for the development for offices and shops of a site in Knightsbridge, designed by Jaime Ponce De Lam, of Colombia, South America. Above, a design for the replanning of the Elephant and Castle area by L. T. Croft, of South Africa. Right, another scheme for a housing estate in Hampstead by Anders Willum-Olson and Bertil Thaf-velin of Sweden.



September 15, 1949

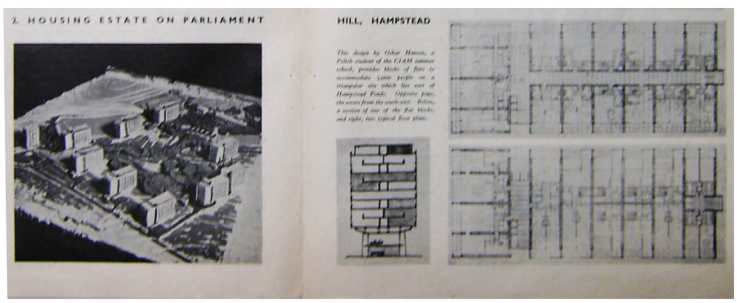
DESIGNS BY STUDENTS OF THE CIAM SUMMER SCHOOL, 1949

The CIAM Summer School, organized by the MARS Group, was held at the Architectural Association, No. 7, Bedford Square, from August 8 to September 3. There were thirty-four members.

1. NATIONAL THEATRE

This design for a theatre in Park Square, off Regents Park, is the combined effort of two students, A. G. Hamilton of Australia, and Ricardo Tosetti of Argentina. Right, the "picture-frame" production.

were elevations; below, and right, the ground, first and second floor plans. Below, left, two sections and a perspective drawing; between them, the stage for modern and Elizabethan plays, and top, the stage set for naturalistic or



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2. HOUSING ESTATE ON PARLIAMENT HILL, HAMPSTEAD

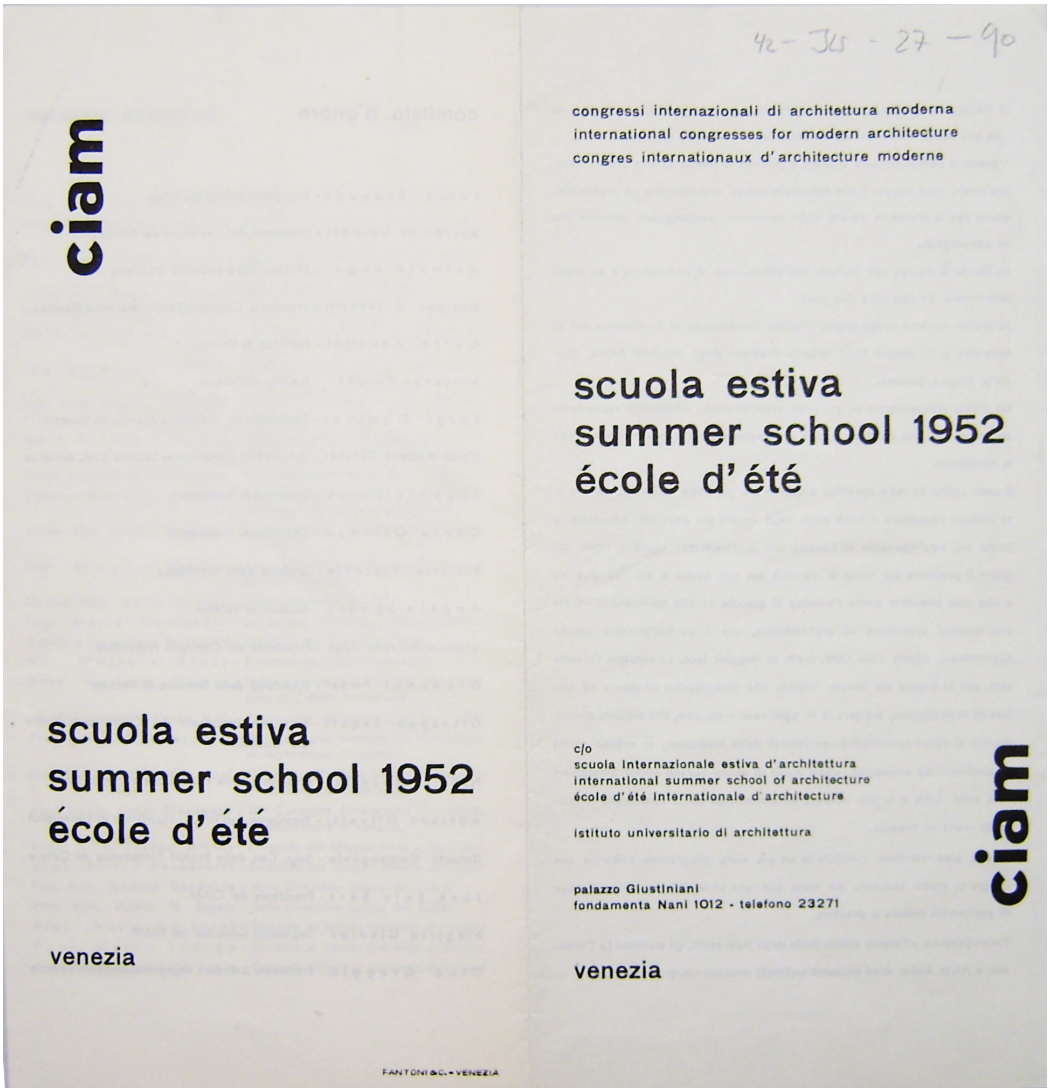
This design by Oskar Hansen, a Polish student of the CIAM summer school, provides blocks of flats to accommodate 3,000 people on a triangular site which lies east of Hampstead Pond. Opposite page, the scene from the south-east. Below, a section of one of the flat blocks, and right, two typical floor plans.

CIAM Summer School , London, 1949, Projects, gta/ETH Archive 42-JT-2-432/435

The First CIAM Summer School in Venice, 1952

"The Council of CIAM which was held in Hoddesdon near London in July 1951, has accepted the proposal of the Italian CIAM groups that the Summer School of CIAM will be in Venice," affirms a letter written in April 1952 by the CIAM Italian Group. *"This town is particularly well set up for this type of school in its architectural and planning value and its ever increasing cultural expression which exist here"*[70].
The directors are Albini, Gardella, Rogers, Samonà, with Ms Trincanato as general secretary.
There are 66 participants (double than the number proposed by Albini at Hoddesdon) and 23 listeners, from 15 different countries[71]. Only 10 of these students or young architects are Italian[72].
Among the assistants then we find Franco Berlanda who is present at both the CIAM VII Education Commission and at the CIAM Summer School in London, Gino Valle and Giancarlo De Carlo, who will later become part of the young group of TEAM X[73].
Many architects and other key personalities are invited to lecture, such as Argan, Astengo, Piccinato, Holford, Bottoni, Ragghianti, Zevi, Bettini, Franco, Van der Broek, Satou and Lucio Costa.
While the Honour committee even include Luigi Einaudi, President of the Italian Republic and Alcide De Gasperi, the President of the Council of Ministers and other senators, the mayor of Venice, ministers, and the Patriarch of Venice as well, highlighting the official character of the event. Also Giedion and Sert are listed on the Honour committee as members of CIAM. However, the main exponent of CIAM in Venice is Le Corbusier, who gives a lecture in "*a classroom packed up to capacity."*[74] The main subject is Venice itself, which is used in order to trace the links with both his own theoretical and project works[75]. In particular

70 Letter April 1952, CIAM Italian Groups, Summer School , Architectural School in Venice, Palazzo Grassi, Fondamenta Nani, gta/ETH Archive 42-JLS-23-51
71 From Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia, *Prospettive*, n.5 in Archivio progetti IUAV, Venice, AP-Originali/TXT/015 Np=043094 x-0012/7
72 *"E' inoltre mancata una forte rappresentanza italiana che avrebbe potuto invece permettere un piu` deciso contributo delle nostre esperienze a successive proposte e al loro sviluppo."* Berlanda F. (1953) La Scuola del C.I.A.M. A Venezia. *Urbanistica,* n.13
73 Other assistants include Vittorio Boracchia, Piero Bruscagnin, Thomas McNulty, Giorgia Scattolin, Andrea Vianello – Vos. From one the flyers of the CIAM Summer School 1952, gta/ETH 42-JLS-27-90
74 From Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia, *Prospettive*, n.5 in Archivio progetti IUAV, Venice, AP-Originali/TXT/015 Np=043094 x-0012/7
75 *"L`argomento della conversazione fu Venezia, ma per le Corbusier si tratto` di legarla a tutta la sua opera, ai suoi libri, alle sue profezie, e alle realizzazioni che sta attuando in India."* Ibid., the conference is published



Flyer CIAM Summer School in Venice 1952, gta/ETH 42-JLS-27-90

Le Corbusier emphasizes the "*humanity of Venice planning"*, as already deeply expressed in Hoddesdon; in particular Piazzetta San Marco is again mentioned: "*the limit is the horizon of the lagoon that merges with the sky, the city ends with the two tall columns that bear the symbols of the dragon and the lion, and everything becomes unity, 'le bestiaire fraternel', the family, the citizens, the city. The pigeons mix with men, and the gondolas, like huge animals, swaying between the cross bars of their stables. Here, the human scale, lost in most modern cities, is preserved."*[76]

As far as the students' work is concerned, the theme of the course proposed to the younger generation is on the architectural-urban problems of Venice, with particular attention on the link with the mainland. The theme, presented to the students through the "CIAM Grid", is described by the architect Gino Valle as concrete and potentially adequate in order to touch on the aspects concerning the whole of Venice, in *"its extemporaneous essence and in its present day life."*[77]

The theme becomes important particularly in order to study the relation with the city's historical texture and to discuss the value of tradition within the issue of modern design in the historical city[78]. This issue was already present in the discussion in Hoddesdon as far as the bombed cities were concerned, where part of the existing texture of the city had to be substituted with brand new projects. Venice, which has not been touched by the War, is nevertheless a good case study owing to its extremely weak equilibrium between modernization and tradition, in particular in its point of contact between the old historical structure and the new infrastructure. As Ilhyun Kim affirms, the CIAM Summer School of Venice therefore becomes the anticipation of a debate on the historical center which will be crucial for the urban culture in the `60s as well[79].

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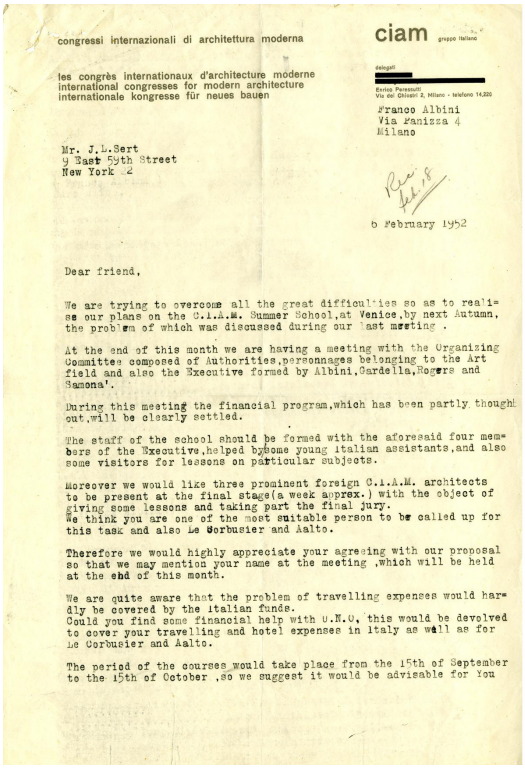
with the title *A propos de Venise* in Venezia-Architettura (1,1953)

76 *"Ecco la piazzetta S.Marco: il limite e` l`orizzonte della laguna che si confonde con il cielo, la città si afferma con le due alte colonne che portano i simboli del drago e del leone e tutto diventa unita`, 'le bestiaire fraternel', la famiglia, i cittadini, la città. I piccioni si mescolano agli uomini, e le gondole, come enormi animali, si dondolano tra i battifianchi delle loro stalle. La scala umana, persa nella maggior parte delle città moderne, qui e` conservata."* The quote is made by Berlanda talking about the discourse made by Le Corbusier. It is probably a summary or a paraphrase of the original speech. Ibid.

77 Valle G., *Il Collegamento Venezia-Terraferma, tema per il C.I.A.M.* In Archivio Progetti IUAV, Venice, Trincanato 2 Attivita' Scientifica 2/011

78 "The international C.I.A.M Summer School demonstrated how the new generation, with the influx of the most updated historical studies, has passed the mania of the total renovation of the old city, which was characteristic of a old Urban [planning??]." Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia, *Prospettive*, n.5 in Archivio progetti IUAV, Venice, AP-Originali/TXT/015 Np=043094 x-0012/7

79 **See Ilhyun Kim, Giuseppe Samona' and the CIAM Summer School 1952-1956 edited by Marras G.,** Pogacnik M, *Giuseppe Samona' e la Scuola di Architettura a Venezia.* Archivio Progetti. ed. Il Poligrafo, Padova, 2006, p. 79



congressi internazionali di architettura moderna

ciam gruppo italiano

les congrès internationaux d'architecture moderne
international congresses for modern architecture
internationale kongresse für neues bauen

delegati
[redacted]
Enrico Peressutti
Via del Ghiaretti 2, Milano - telefono 14.220

Franco Albini
Via Panizza 4
Milano

Mr. J.L.Sert
9 East 59th Street
New York 22

6 February 1952

Dear friend,

We are trying to overcome all the great difficulties so as to realise our plans on the C.I.A.M. Summer School,at Venice,by next Autumn, the problem of which was discussed during our last meeting .

At the end of this month we are having a meeting with the Organizing Committee composed of Authorities,personnages belonging to the Art field and also the Executive formed by Albini,Gardella,Rogers and Samona'.

During this meeting the financial program,which has been partly thought out,will be clearly settled.

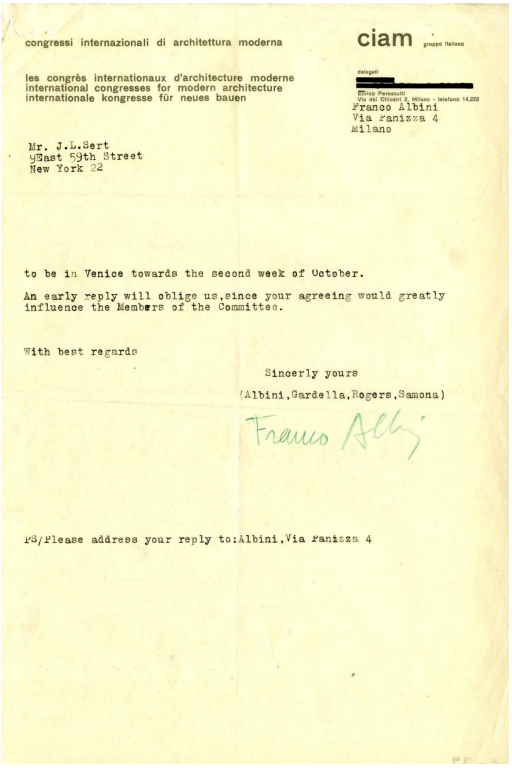
The staff of the school should be formed with the aforesaid four members of the Executive,helped bysome young italian assistants,and also some visitors for lessons on particular subjects.

Moreover we would like three prominent foreign C.I.A.M. architects to be present at the final stage(a week apprex.) with the object of giving some lessons and taking part the final jury.
We think you are one of the most suitable person to be called up for this task and also Le Corbusier and Aalto.

Therefore we would highly appreciate your agreeing with our proposal so that we may mention your name at the meeting ,which will be held at the end of this month.

We are quite aware that the problem of travelling expenses would hardly be covered by the italian funds.
Could you find some financial help with U.N.O, this would be devolved to cover your travelling and hotel expenses in Italy as well as for Le Corbusier and Aalto.

The period of the courses would take place from the 15th of September to the 15th of October ,so we suggest it would be advisable for You



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[redacted]
Enrico Peressutti
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Franco Albini
Via Panizza 4
Milano

Mr. J.L.Sert
9East 59th Street
New York 22

to be in Venice towards the second week of October.

An early reply will oblige us,since your agreeing would greatly influence the Members of the Committee.

With best regards

Sincerly yours

(Albini,Gardella,Rogers,Samona)

Franco Albini

PS/Please address your reply to:Albini,Via Panizza 4

Invitation of Sert at the CIAM Summer School 1952, Letter from Albini to Sert, 6 February 1952, from Harvard Archive, CIAM Collection C11





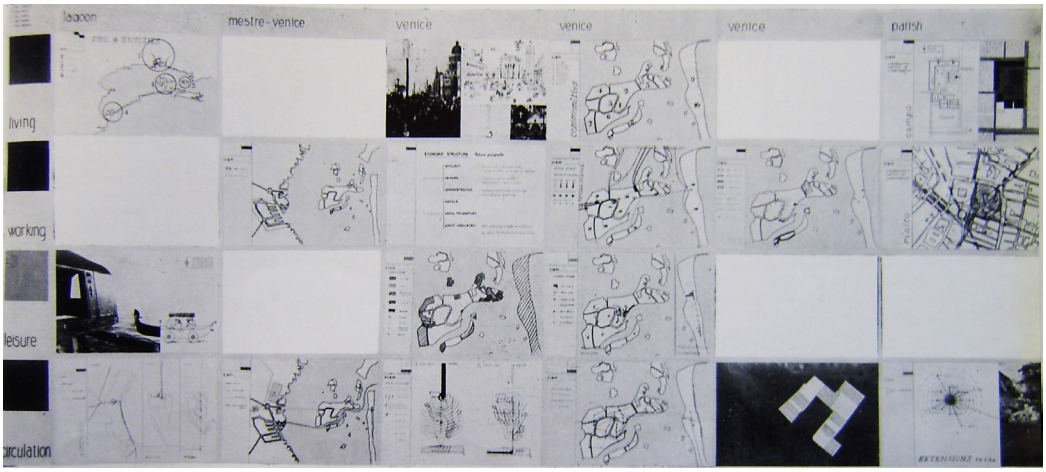
Le Corbusier at Venice CIAM Summer School, September 1952

Discussions are held among different groups of students, exhibiting different ideas and several project proposals. Among the young graduates and students, Vittorio Gregotti is also present. He is the only Italian in an English group composed of M. Burton, P. Crooke, W. Ollis and J. Turner. The group focuses its attention on tourism, considered as a negative factor which destroys the social value of districts, parishes and autonomous communities. *"If we do not insist anymore on the 'uniqueness' of Venice"*[80], then tourism can be limited to a certain quality, the group affirms. This attempt to consider the historical structure of Venice as un-unique, as a normal presence, is very intriguing in the discussion, especially when considered in relation to the potentialities of a new project within a pre-existing context.

This uniqueness seems to have been entirely forgotten by the group composed of R. Fitzhardinge, G. Hall, F. Meisler, M. Newberry and R. Porro which proposes to "modernize" the Canal Grande, inserting modern buildings between the most important existing ones, "*conserved thanks to their goodness"*[81], as Berlanda observes ironically. This proposal seems indeed to be the indirect main reference of Berlanda`s later attack in his article: *"It seems that at least part of the designers have forgotten (or insufficiently considered), an essential circumstance: they didn't deal with problems of a generic city, but of Venice, which is a sort of living,*

80 In Archivio Progetti IUAV, Venice, Trincanato 2 Attivita' Scientifica 2/011

81 *"Avanza poi la proposta di"modernizzare" il Canal Grande inserendo edifici moderni fra i palazzi più significativi, che ha la bontà di conservare."* Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia, *Prospettive*, n.5 in Archivio progetti IUAV, Venice, AP-Originali/TXT/015 Np=043094 x-0012/7



R. Ruprecht, J.Smith, J. Stockla, P.Tauber, A.Wightman, CIAM Summer School, 1952

fragile miracle [...]"[82]

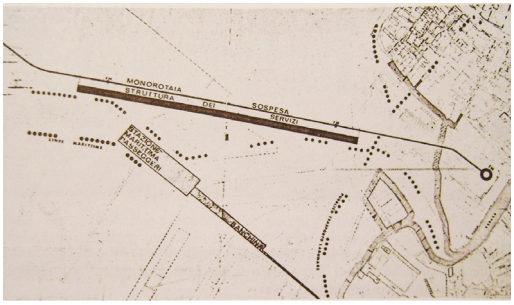
Between Gregotti's "*loss of uniqueness"* and Berlanda's "*fragile miracle"*, other students raise different topics with several projects, including a new area near the bridge crossing the lagoon, a new station, a hotel neighbourhood, new residential areas, new parks and the restoration of many unhealthy houses.

Lastly, of particular interest is the proposal made by the group composed of Dutch, English and Swiss architects: R. Ruprecht, J. Smith, J. Stockla, P. Tauber, A. Wightman. The group uses the CIAM Grid, which will be rejected by the students themselves in later editions, dividing Venice into four main entities (lagoon, Mestre-Venice, Venice and parish), which are analysed through the main four functions of living, working, leisure and circulation. Although there are no references at all to the Heart, the 'parish' recalls small centralities inside the city as the smallest scale of analysis. After this analysis the group claims that it would be necessary to remove all industries, port facilities and railways and the automotive connection from the city in order to keep all the cultural and social heritage in Venice, moving towards an image of Venice as a private island for residence only. An underground metro would connect the mainland with Venice, passing through the lagoon, the Canal Grande to the Lido.

A similar proposal is contained in the later project by Trincanato and Samona`, the already mentioned *Nuovissime*[83] of 1964, where the bridge is destroyed and

82 **Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia,** *Prospettive*, n.5

83 **Competition for the Tronchetto in Venice, 1965 G. Samona` with C. Dardi, V. Pastor, G. Polesello, A.** Samona`, L. Semerani and E. Trincanato

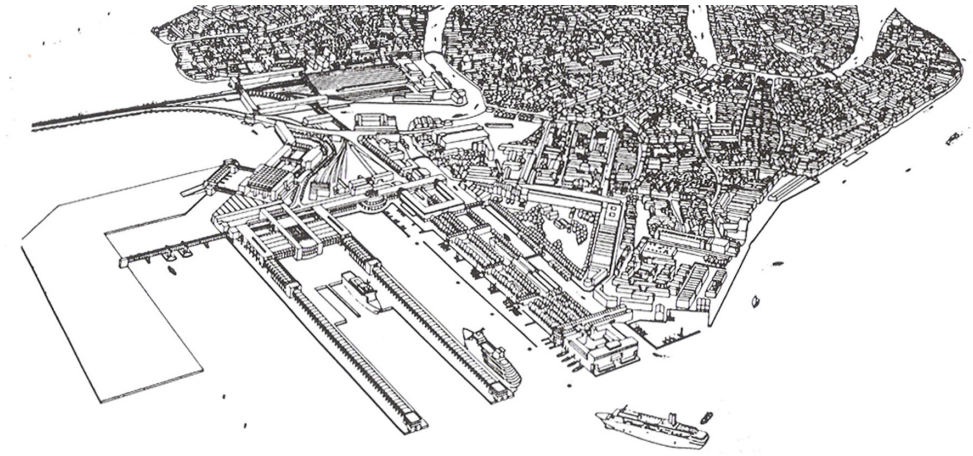




Samona`, Trincanato, Nuovissime, 1964

substituted by a suspended monorail, while Piazzale Roma, where all the cars arrive, is flooded. This resonance is proof of the influence of some of the Summer School ideas and project proposals on the later design of Venice itself.
Moreover, it is interesting to remember that forty years later the first edition of the CIAM Summer school in Venice, Gregotti himself attempts to reorganize the link between the industrial area and the historical context, dealing with the same issue of tourism as when he was student, though with an opposite proposal. The project indeed regards a new system of Maritime station, place of arrival and departure of all commercial tourist cruise liners. The aim is to design a *"more public permeability"* between city activities and the *"touristic monoculture"* defined by Gregotti as *"a culture which is impossible to give up but which must be governed"*[84]: his younger and more ideological positions expressed during the CIAM Summer School therefore appears evidently moderated.

84 *"Venezia va pensata come il cuore di una più complessa città dispersa, da Mestre alla gronda lagunare, dal Lido alle isole urbane, una autentica città d` acqua le cui possibilità ed attività dovranno articolare la monocultura turistica con altre attività compatibili."* Gregotti V. (1992), La Stazione Marittima di Venezia, *Casabella,* n. 589 and Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998, p. 29



Gregotti, Maritime station in Venice, 1992

List of Participants at the First Edition of the CIAM Summer School in Venice[85]:

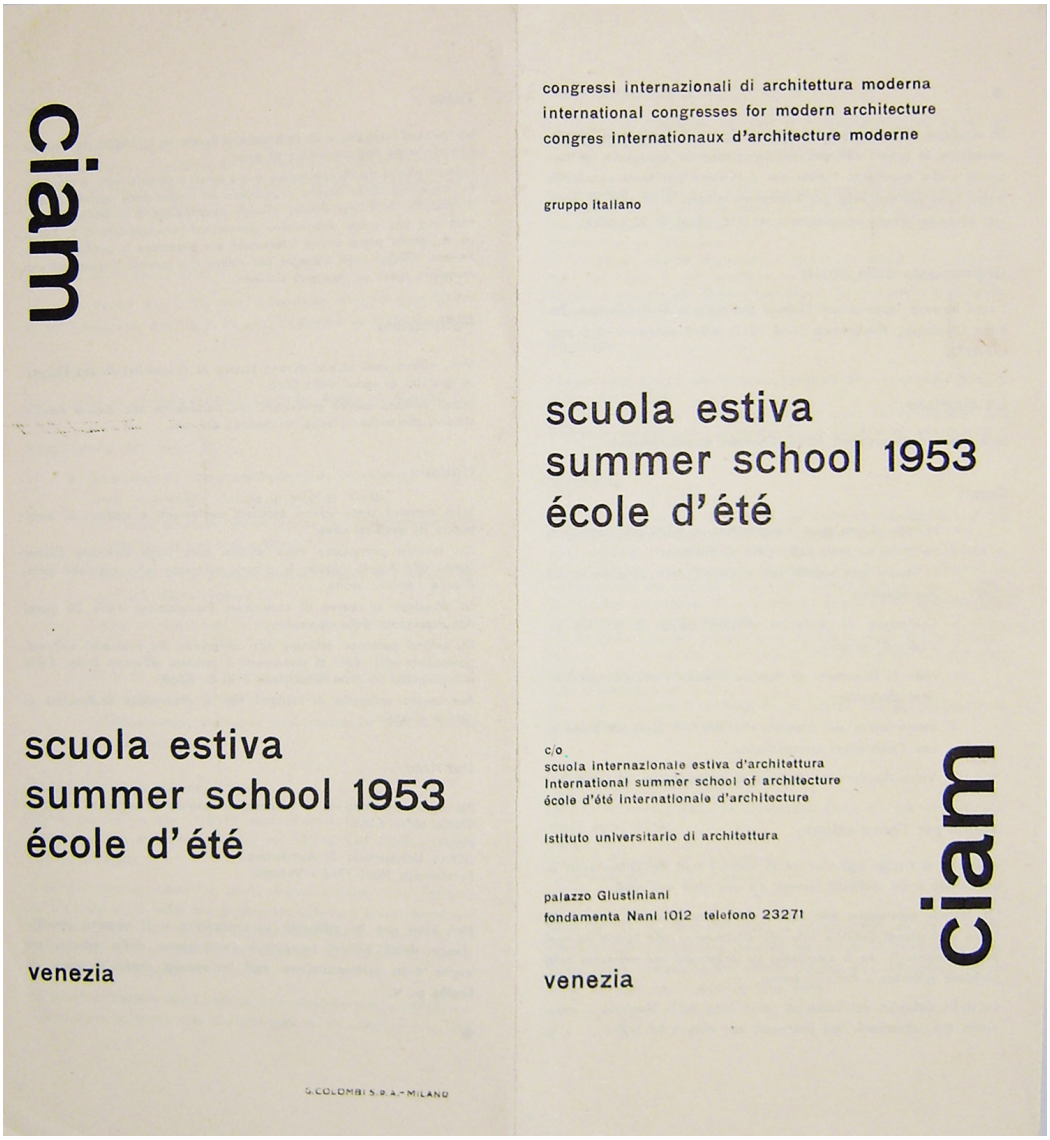
1	2	3	4	5
Rita Ruprecht	Micheal Burton	Richard Fitzhardinge	Pierre Agard	Osvaldo Caceres
Switzerland	UK	UK	France	Chile
John Smith	Patrick Crook	Gordon Hall	George Baines	Gianni Capovilla
UK	UK	USA	Belgium	Italy
Jan Stockla	Vittorio Gregotti	Boldiszai Korab	Adolfo De Carlo	Roberto Merino
Netherlands	Italy	France	Italy	Chile
Pieter Tauber	William Ollis	Frank Meisler	Eduard Franz	Rui Pimentel
Netherlands	UK	UK	Switzerland	Portugal
Alan Wightman	John Turner	Micheal Newberry	Christine Gandziarek	Grez Poblete
UK	UK	UK	France	Chile
		Ricardo Porro		
		Cuba		
6	7	8	9	10
Richard E. Baringer	David Wager	Geuton	Oddino	Hambly
USA	UK	France	Italy	UK
Federico Correa	George Fleishman	Hausberger	Gaffarini	Ruffato
Spain	USA	Algeria	Italy	Italy
Giancarlo Pozzo	Knut Astrup	Marnesson	Neira	Brocchi
Italy	Norway	France	Peru	Switzerland
Nani Valle	Anton Knudsen		Mila'	Tschumi
Italy	Norway		Spain	Switzerland
John E. Wood	John Pine		Page	Schnebli
USA	UK		USA	Switzerland
	John R. Myer			
	USA			

85 **NB: there are only 50 names listed here. These names of participants are found inside Archivio Progetti** IUAV, Venice, Archivio Trincanato 2 Attivita` Scientifica 2/011, 2/012, 2/013. and Berlanda F. (1953), Considerazioni sulla scuola estiva C.I.A.M. A Venezia, *Prospettive*, n.5 in Archivio progetti IUAV, Venice, AP-Originali/TXT/015 Np=043094 x-0012/7 and Berlanda F. (1953) La Scuola del C.I.A.M. A Venezia. *Urbanistica,* n.13. The groups are listed in casual order.

The Second CIAM Summer School in Venice, 1953

In the second edition of the Summer School in Venice (1953), the theme is focused on the historical and tourist city, with the re-design of the Biennale Gardens. The Staff is composed of F. Albini, I. Gardella, E.N. Rogers, G. Samona', E. Gentili Tedeschi, J.R. Myer, G. Valle, N. Valle, V. Cozzi and L. Venini. There are conferences with C. Scarpa, E.R. Trincanato, F. Albini, G.C. Argan, C. Mercenaro, L. Belgiojoso; Max Bill is invited to be in the jury.
Ernesto Nathan Rogers will present the development of the second summer school in Venice, in the first issue of his "Casabella Continuita'". And it is no coincidence that the article entitled *"Attualità di una scuola"*[86] and written by Giancarlo Guarda, is presented in the same issue of the magazine with the famous article "Continuita`" written by Rogers himself, highlighting implicitly the link between the CIAM discourse started at Hoddesdon on the historical continuity of the Core and the Venice Summer School.
Nevertheless, during the Second CIAM Summer School the projects are less in contact with the historical context of the Italian city, than in the other editions: the pavilions in the Biennale Garden are mostly free buildings inside nature, in relationship only with the water of the canals and lagoon. However, some of them, such as Raboni`s proposal, describes a scheme which makes strong reference to the Venetian structure and which might have many resonances for instance with the later project by Le Corbusier for the Hospital of Venice, in the early 1960s.
The Summer School of Venice, described by Guarda as different from any other since *"there is an open waiver to any predetermined system"*[87], becomes a topic of discussion in the same year for the director of the University in Venice, Giuseppe Samonà. *"This international course has been of great importance for us;"* he affirms during his speech at the Opening of the Academic Year "*it has let us know our technical and artistic activity making it enter into the concrete field of the city."*[88]
Indeed in 1953 the study of Venice becomes a didactic theme to propose to the entire IUAV University; the work of the summer school therefore becomes the seed for a deeper, longer and more intensive work on the city, with the aim of transforming and solving the problems of its planning. *"It is for this reason that the*

86 Guarda G. (1953), Attualità di una scuola. *Casabella Continuità,* n. 199, p. v
87 Ibid. and quoted also in *Architettura, misura e grandezza dell`uomo. Scritti 1930-1969* edited by Maffioletto S., Ernesto N. Rogers, ed. il Poligrafo, 2010, p. 474
88 Samonà G., *Annuario a.a. 1952-53, 1953-54* quoted also in *Architettura, misura e grandezza dell`uomo. Scritti 1930-1969* edited by Maffioletto S., Ernesto N. Rogers, ed. il Poligrafo, 2010, p. 474



Flyer of Second CIAM Summer School In Venice, 1953, gta/ETH 42-RV-X-12-39

IUAV has decided to offer the city, the state, its work of collaboration; it decided to define an urban study of Venice, which might be useful as a concrete instrument in order to formulate the problems of the city,"[89] Samona' asserts.

List of Participants at the Second Edition of the CIAM Summer School in Venice[90]:

1
Fulvio Raboni
Italy, MIlan
Adele Oddino
Italy, Venice

2
Osmo Sipari
Finland
Franz Raitzenstein
Austria

3
Jean Lasry
Algeria
Malcom Mair
UK

4
Joel Poilpré
France

5
Dirk Cornelis
Apon
Netherlands

6
Peter Garland
USA
Victor Noel
Saldanha Marinho
Brazil
Renata Gross
UK
Andrea Brass
Italy

7
Perry Morgan Jr.
USA
Rosanna Monzini
Italy, Milan

8
Henri Barnoud
France

9
Margaret Kennedy
Sweden

10
Emilio Terragni
Italy, Milan

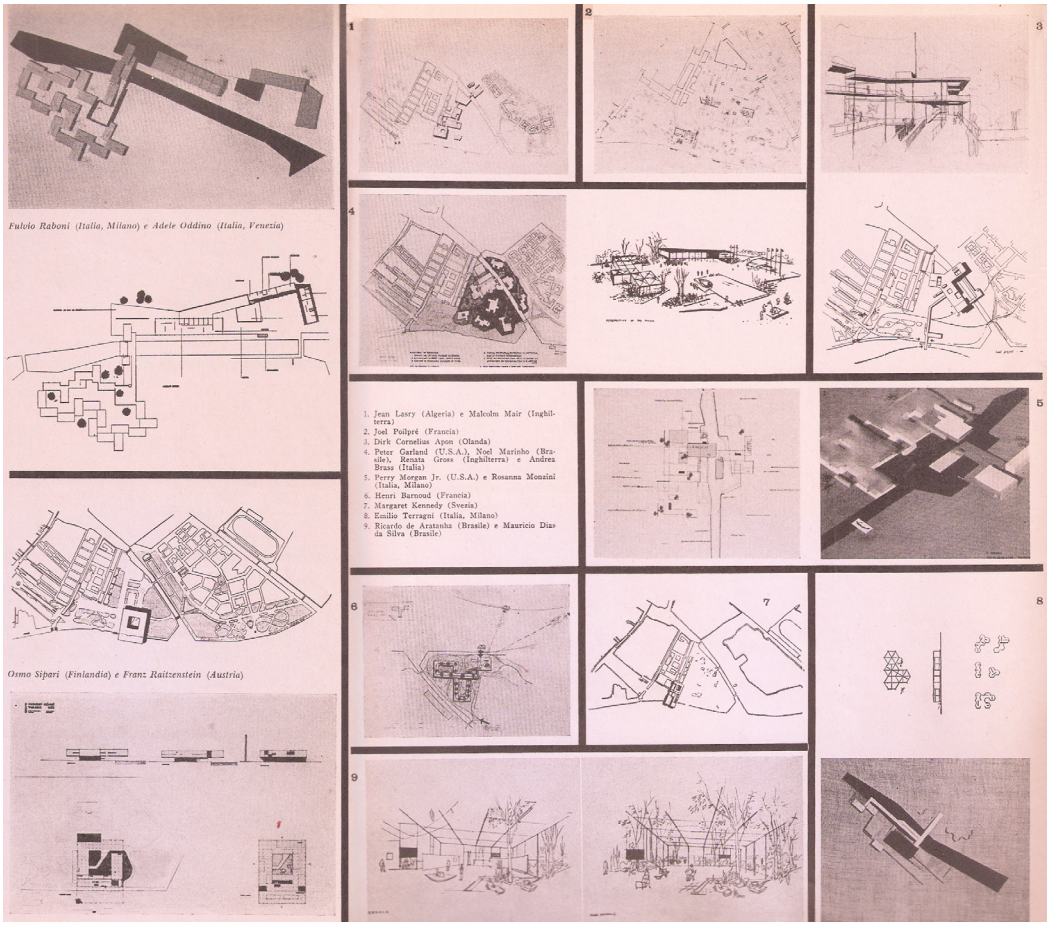
11
Ricardo de Aratanha
Brazil
Mauricio Dias de Silva
Brazil

12
Giancarlo Guarda
Italy
Eduard Bruce Zaetjer
Netherlands
Jacques ...De Chalendar
France

Listeners:
Barnoud Odette
France
Brass Andrea
Italy
Conti Alessandro
Italy
Conley Georges
France

89 Samonà G., *Necessita' di uno studio di Venezia per la Pianificazione Urbanistica delle sue esigenze moderne.* Opening speech of the Academic Year 1953-54, IUAV, November 1953 in *L`unita` Architettura-Urbanistica, Scritti e progetti:1929-1973* edited by Lovero P., Samona' G., Franco Angeli Ed., 1975, Milano, p. 248

90 These names of participants are found inside Archivio Progetti IUAV, Venice, Archivio Trincanato 2 Attivita` Scientifica 2/011 and in Guarda G.(1953-54), Attualità di una scuola. *Casabella Continuità,* n. 199, p. v - vi



Projects at Second CIAM Summer School in Venice, 1953 in Casabella Continuità (1953), n. 199, p. v

The Third CIAM Summer School in Venice, 1954

The third edition takes place from September 3 to October 3, 1954, at the University Institute of Architecture. The directors are Albini, Gardella, Rogers, Samona` while there are 29 students or young architects from 10 different countries. The other architects include the Italian CIAM members Bottoni and Pollini, while Alfred Roth is invited to judge the works. Finally the architects Buzzi-Ceriani, Crooke, Kowalski, and Gino Valle collaborate as assistants and Nani Valle as secretary. During the first presentation the identity of the summer school is stressed yet again as not an academy *"but a working congress attacking the most vital problems of our times."*[91] The theme is therefore centered on the main issue concerning the lagoon city in the `50s and later, *"The bridgehead*[92] *and its harmonious relation to the city"*[93]*,* continuing, in a more specific frame, the research started with the first edition held a couple of years previously, on the relation between the mainland and the lagoon island. The bridgehead is indeed considered as the *inbetween* place where mechanization grows quickly with its harbours, gas works, garages, etc, in contrast with the old city which has transformed slowly layer by layer. This contrast seems to perfectly resonate the relationship between mechanization and the human scale as discussed at Hoddesdon. Indeed the bridgehead *"which is pivoted at the nervous centre between mechanization and man"*[94], has many resonances with that *"return to the human scale and the assertion of the right of the individual over the tyranny of mechanical tools"*[95] as Giedion claims during CIAM VIII.

This reference is explicit in some students' sketches where, for instance, Venice is symbolized as a heart, as the *"responsible center of the lagoon"* (Drews, Letz, Liskam, Samper), or where the flux of persons from the mainland into the city is represented as an organism with arteries passing through the city`s structure (Pedro Aristegui, Cleves, Deplano, Francesco, Petre, Velasco). Other projects are discussed by the assistants Buzzi and Crook in an article which appeared in Casabella in December 1954. The summer school, as the assistants affirm,

91 CIAM Summer School, *The Theme*, 1954 in Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011

92 The first bridge linking Venice with the mainland was opened in 1846 for trains and it was built by the Austrian Empire which dominated Northern Italy and Venice as well. The road-traffic bridge was added under Fascism in 1933.

93 Ibid.

94 Ibid.

95 Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17

ciam

congressi internazionali di architettura moderna
international congresses for modern architecture
congrés internationaux d'architecture moderne

gruppo italiano

scuola estiva
summer school 1954
école d'été

scuola estiva
summer school 1954
école d'été

venezia

c/o
scuola internazionale estiva d'architettura
international summer school of architecture
école d'été internationale d'architecture

istituto universitario di architettura

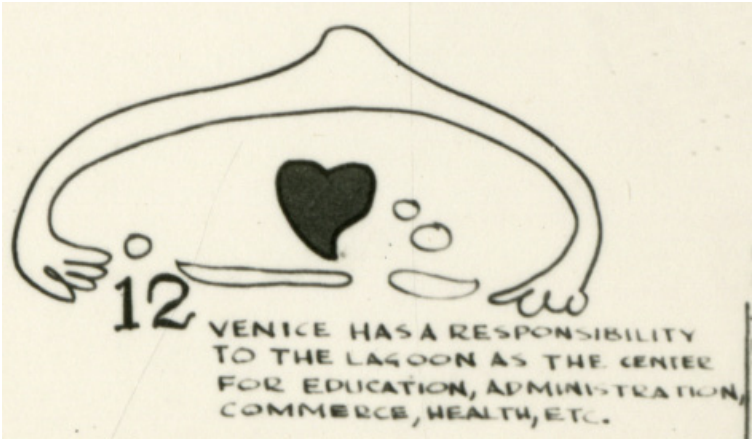
palazzo Giustiniani
fondamenta Nani 1012 Dorso Duro
telefono 31471

venezia

ciam

Tip. Del Bianco - Udine

Brochure of the Third Venice CIAM Summer School, 1954



Drews, Letz, Liskam, Samper - Venice, 1954

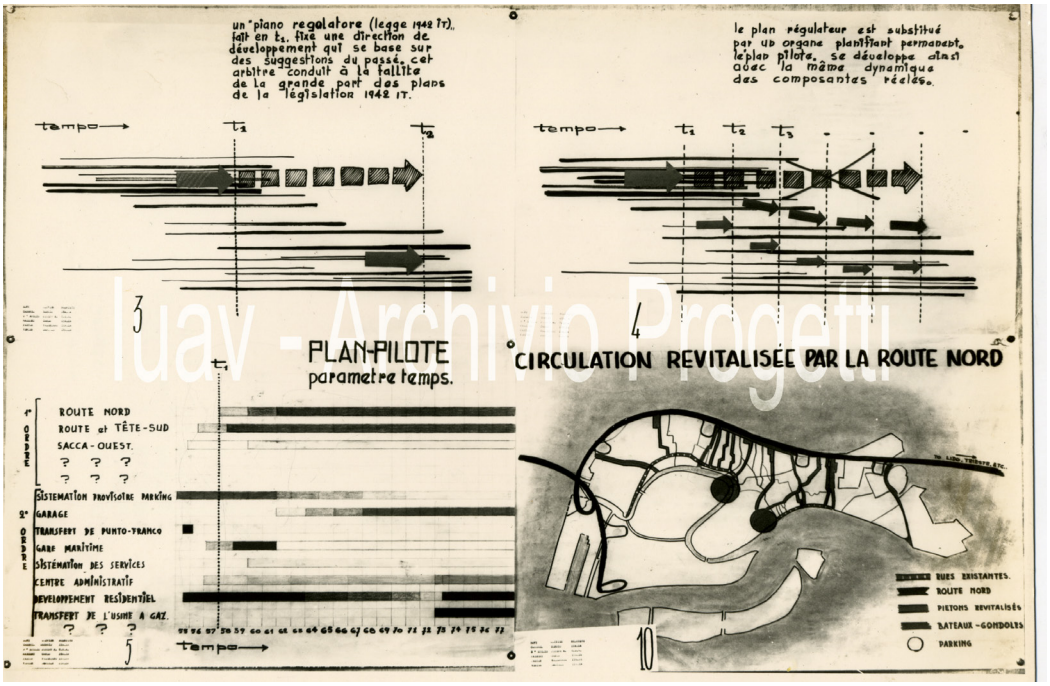
favours common research among participants from different backgrounds. This sharing of knowledge and experience even making it possible for a common position of thought to arise among the different young architects in different parts of the world, influencing an entire generation. This result is exactly what was expected by the TEAM editors a few years before and it perfectly reflects the rise of the young members in CIAM IX held the same year and the start of their opposition to the older members. Moreover, *"today the school can be defined more easily through the negation of some terms and in their critics"*[96] rather than in the affirmation of some radical objective universal beliefs. These criticisms are evident for instance in the work of the students Drews, Letz, Liskam and Samper who have also studied Venice through the four functions of CIAM (work, leisure, dwelling, circulation). These categories are abandoned by the students at the end of the course, since their inefficacy when dealing with the complexity of urban relations is clear. We should note that this rejection of the functional hierarchy as posed by the "Chartes d` Athens", expressed by the students at the summer school in Venice, is almost contemporary to the rejection posed by Team 10 and the substitution of the grid with Geddes` Valley as discussed above. In any case the same group of students uses, as we have already seen, the heart in order to symbolize Venice in the lagoon, thus maintaining a continuity with the CIAM ideas.

Other groups underlined different critical points of the contemporary urbanism. For instance Bovy, Caramel, Mazzeri, Pastor, Venier and D`Amelio focused their

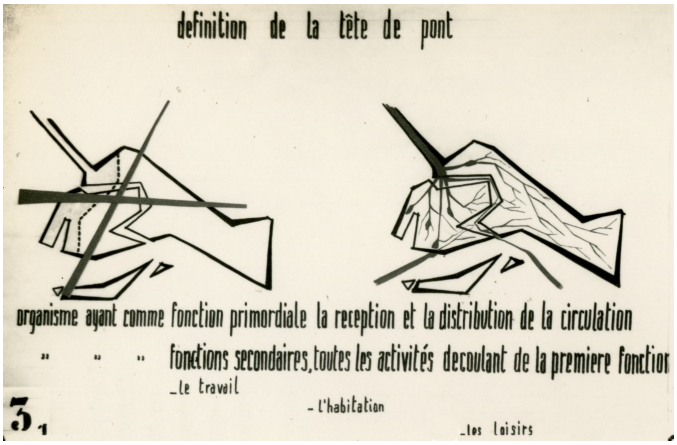
96 Buzzi F., Crooke P.,(1954), La terza scuola estiva dei CIAM a Venezia, *Casabella-Continuita`*, n.203, p.83



Drews, Letz, Liskam, Samper: analysis of Venice in terms of the four functions of CIAM, CIAM Summer School, Venice, 1954



Bovy, Caramel, Mazzeri, Pastor, Venier and D`Amelio - Venice, 1954



Pedro, Aristegui, Cleves, Deplano, Francesco, Petre, Velasco - Venice, 1954

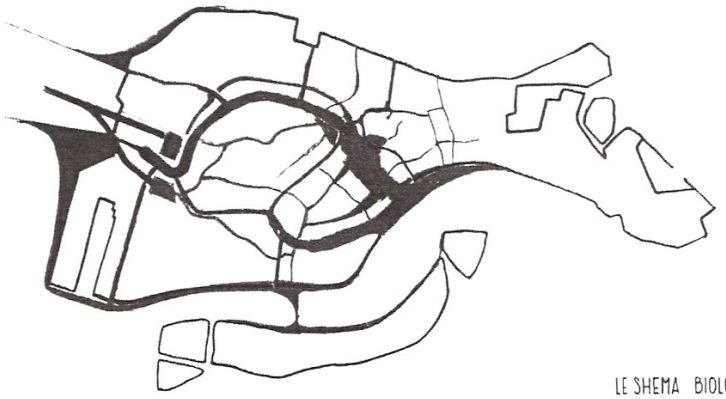
attention on the necessity of the time of the project affirming that *"it is absurd to give an ideal form of a hypothetical content"*: the final proposal is a dynamic *"organ planifiant permanent"* which changes with the new needs in different periods of time. The most important result of the group's work is not the project itself, presented as a North street tangent to Venice, but it is the method of planning to be used for the bridgehead area in Venice as in other cities as well. This is the demonstration, as Crooke and Buzzi highlight, that *"[...]the aim of the school is in particular to clarify some principles, and to define through them the action of the architect"*[97], in direct coherence with the didactic proposals within the ten points presented by Norberh Schulz in Hoddesdon, in 1951. Furthermore, the necessity of considering the flow of time and different events finds many resonances also with what Giedion stresses about time for the Core, talking about the 500 years of Piazza San Marco.

The issue of the time of the project is also considered by the team composed of Kondracki, Kozlowski and Lombaerts who investigate the consequences of the historical evolution of the city. Indeed they compare the *"synthesis of new relationships"* with the *"tissue of existing life",* where the privileged areas, mostly concentrated along the Canal Grande, are defined "*at the expense of the rest of the city".* The functions of the bridgehead are finally integrated with the rest of the city, connecting the present day unconsidered social parts of the urban tissue and transforming *"Venice as a lagoon-centre"*[98].

97 Buzzi F., Crooke P.,(1954), La terza scuola estiva dei CIAM a Venezia, *Casabella-Continuita`*, n.203, p.84
98 Buzzi F., Crooke P.,(1954), La terza scuola estiva dei CIAM a Venezia, *Casabella-Continuita`*, n.203, p.84

TRAME VITALE ACTUELLE

II



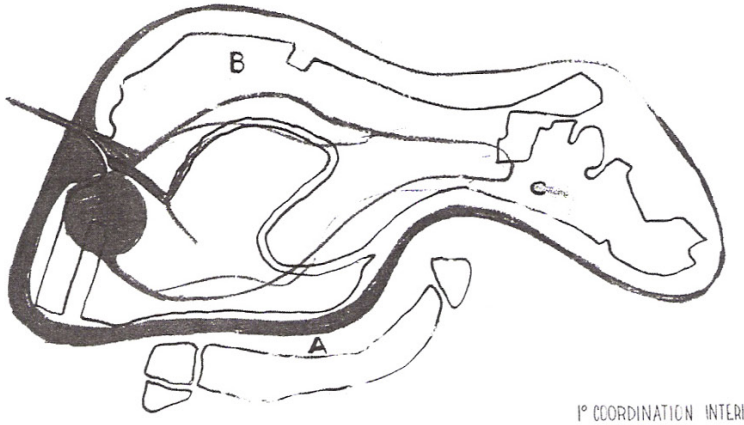
LE SHEMA BIOLOGIQUE MONTRANT LES INTENSITES DE VIE DE LA VILLE AU POINT DE VUE : CENTRES SOCIAUX, COMMERCE, ADMINISTRATION, LOISIRS, TRADUIT LE DESEQUILIBRE ACTUEL.

EXISTENCE DE ZONES PRIVILEGIEES AU DETRIMENT DU RESTE DE LA VILLE ..

G. KONNRACKI
G. LOMBAERTS
J. KOSLOWSKI

SYNTHESE DES RAPPORTS NOUVEAUX

IV



1° COORDINATION INTERIEURE DES FONCTIONS DE LA TETE DE PONT.
2° INTEGRATION A LA VILLE ENTIERERE VERS UN REGAIN D'INTERET DES ZONES HORS DE LA TRAME VITALE.
A. NOUVELLE FONCTION DU CANAL SCILA CIUSECCA COMME ORGANE INTERNE A LA VILLE REHABILITATION DE LA GIUDECCA (CONDITIONS FAVORABLES A QUARTIER RESIDENTIEL)
B. LENTE TRANSFORMATION DE CANAREGIO EN ELEMENT ACTIF DE LA VILLE COMME CONSEQUENCE DES NOUVELLES FACILITES D'ECHANGES.
C. DEVELOPPEMENT ZONE DE L'ARSENAL (SITUATION ROANT L'AXE TOURISTIQUE SAN MARCO - LIDO FAVORISANT L'EXPANTION HOTELIERE.
3° CENTRE DE LA LAGUNE

G. KONDRACKI
G. KOZLOWSKI
G. LOMBAERTS

Kondracki, Kozlowski, Lombaerts - Venice, 1954

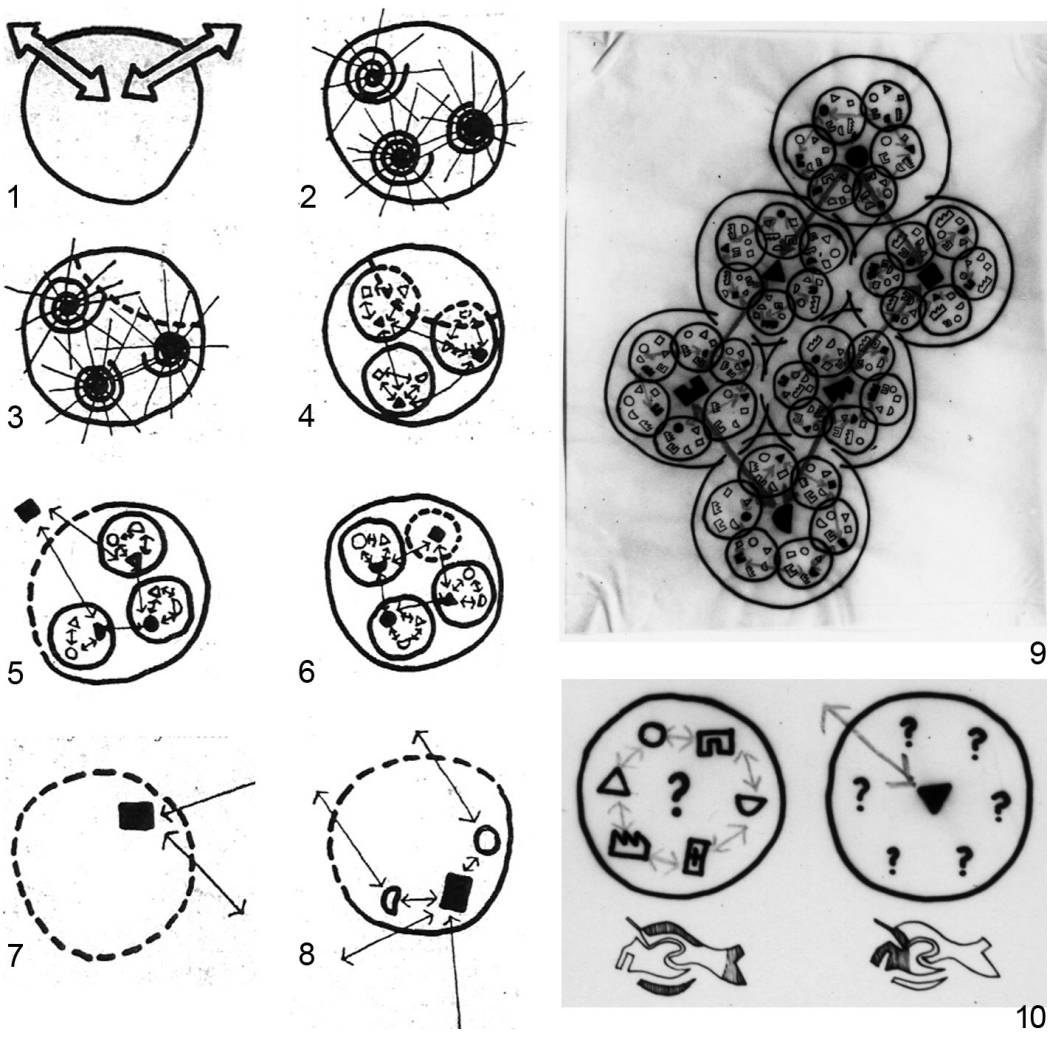
Finally the group composed of Cohen, Gunther and Smith, identifies the social inequities, *"the collapse of the communities"* present in Venice, similar to the previous group, proposing new services where lacking.
This social interest has many resonances again with the Heart of the city theme, as the first attempt to force the rigidity of the four functions scheme with the introduction of a brand new interest on humanity, on the human scale, on the social values.
The scheme used to describe the process of research of the social centres and of the new services regulating the relationships between the inside and outside the city, between the community and the environment, is very interesting.

List of Participants at the Third Edition of the CIAM Summer School in Venice[99]:

1	2	3	4
George Kondracki USA Gisele Lombaerts Belgium Jean Paul Kozlowski France	Martin Cohen USA Juan Gunther Peru Melvin Smith USA	Hans Drews Colombia Peter letz Austria William Liskamm USA Patricio Samper Colombia Paul Spreiregen USA	Olivier Bovy Belgium Sergio Caramel Italy Joseph D`Amelio USA Carlo Mazzeri Italy Valeriano Pastor Italy Daniele Venier Italy

5	6	7
Pedro Aristegui Spain Alfonso Cleves Colombia Luciano Deplano Italy Jacques Petre Belgium Werner Francesco Switzerland Armando Velasco Colombia	Gino Jennewein USA Reina Pietila Finland Robert Swartz USA	Pasqualino Magnavita Brazil

99 Archivio Progetti, IUAV, Venice, Trincanato 2.Attività scientifica/2/011



Collage of schemes made by Cohen, Gunther and Smith - Venice, 1954

1. the field of study
2. apparent centers of social life
3. evidence of the areas distant from the centers of social life
4. introduction of lacking local services
5. lacking services from the outside
6. creation of a new cente thanks to new servicse
7. equilibrium of the inside-outside relationship
8. action of the urbanist as clear satisfaction of present needs
9. combination of centers
10. equilibrium-disequilibrium among parts of the city and the inside-outside

congressi internazionali di architettura moderna
les congrès internationaux d'architecture moderne
international congresses for modern architecture

italian group

ciam

scuola estiva
école d'été
summer school

c/o venezia
istituto universitario di architettura
palazzo giustiniani - fondamenta nani
tel. 31·471

Venice, May 1955.

The international architectural courses held by CIAM in the Autumn of the years 1952, 1953 and 1954 have been a notable success both in attendance and in results.

The course is normally held in September, which is considered the best month as the city of Venice offers many cultural and artistic events at that time.

This year the Congress of CIAM takes place in Algiers during September 12 To 18, and as this means that the staff and a certain number of students will be attending, we have decided that this year the Summer School will have to be held over.

We are glad to able to say already that the course will be held in the Autumn of 1956 and will be concerned as usual with a specific theme dealing with real planning and architectural problems of Venice.

Enrolements and enquiries should be sent after December 1955 to the school secretariat at the following adress:

Segreteria Scuola Estiva CIAM, c/o Istituto Universitario di Architettura, Fondamenta Nani 1012, Dorso Duro Venezia (Italy).

The Directors
Franco Albini
Ignazio Gardella
Ernesto N. Rogers
Giuseppe Samonà

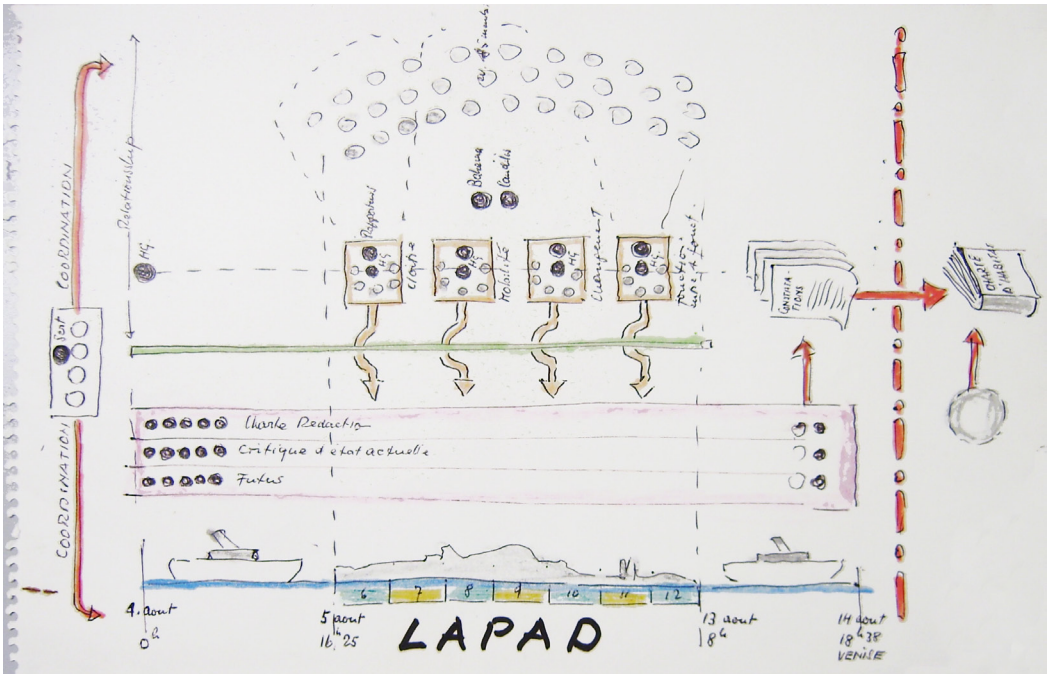
Letter by Italian CIAM Group, GSD Archive, CIAM Collection C15

The Fourth CIAM Summer School in Venice, 1956

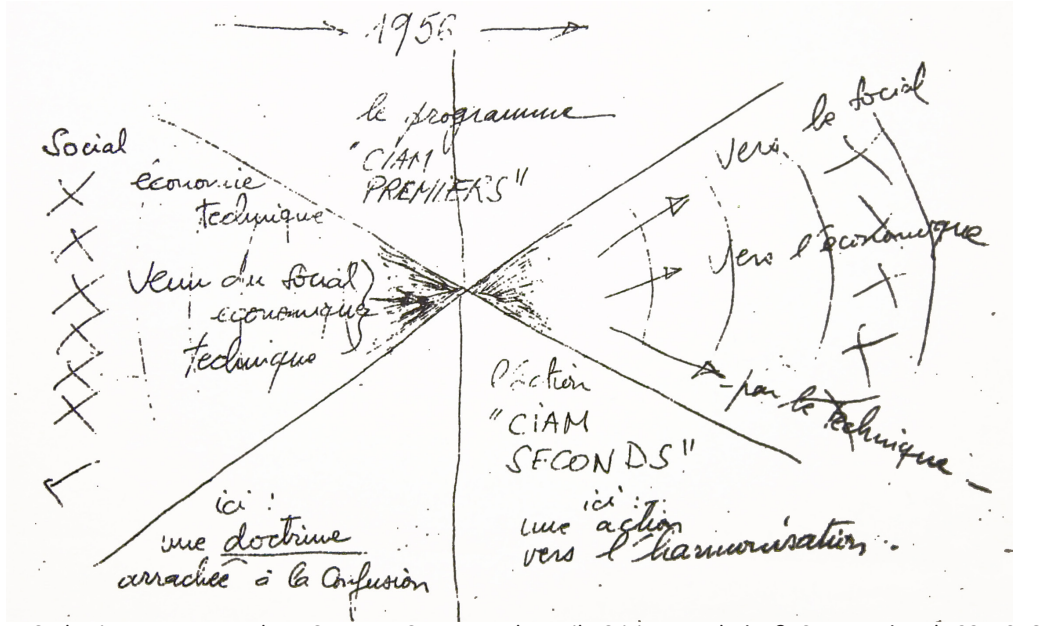
"[...] il faut remettre la roue à sa place, il faut séparer le piéton de l'automobile et donner la primauté au piéton. Vous, gens de Venise, vous avec chez vous ce miracle[...]. Venise reste, au milieu d`un ordre moderne, un don de Dieu qui est là présent et qu'il ne faut pas toucher, qu'il ne faut pas détruire." Le Corbusier[100], 1956

The edition of the Summer School in 1955 is cancelled because of the decision to organize the Congress of CIAM in Algiers in September.
After this interruption, the fourth edition of the CIAM Summer School in Venice takes place from September 6 to October 6, 1956. The directors are again Albini, Gardella, Rogers and Samonà with the collaboration of De Carlo[101]; the visiting critics are Bakema, Quaroni and Gino Valle. And conferences are held by De Logu, Deluigi, Melograni, Olivetti, Piccinato, Quaroni, and Trincanato.
It is important to note that 1956 is the same year as the First Urban Design Conference organized at Harvard by Sert and it is the year of the dissolution of CIAM as well. The summer school indeed takes place exactly one month after CIAM X held in Dubrovnik (3-12 August 1956), considered the last of the CIAM meetings, that of *"crisis or evolution?"* asked by the members of CIRPAC. De Carlo and Bakema[102], members of Team 10, are an imposing presence at the summer school, witnesses of a closed experience of CIAM. It is no coincidence that the 1956 summer school is the last one which will refer directly to CIAM. The following year the summer school will significantly be named the *"Fifth Summer International Seminar".*
As far as the fourth summer school is concerned, the continuity with the previous researches by the CIAM Summer Schools is stressed in the introductory text, entitled *"The theme".* The main problem proposed in 1956 is the future of Venice and its complexity, in particular the continual expansion of the Venice mainland -Mestre/Marghera , *"which is pushing for an indiscriminate building in a NO PLAN WORLD. Today, the problem has become urgent. We expect a doubling of the population in the next ten years, this is the moment when planning action*

100 Le Corbusier is invited by the CIAM Summer School to attend a conference in Ca' Giustinian, the 27th September 1956. in Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011
101 Assistants: Francesco Tentori, Piero Moroni, Edoardo Vittoria, Gabriele Scimemi. Secretary: Giorgia Scattolin, Nani Valle, Dolores Stringaro, Maria Teresa Muffato.
102 Bakema is already in the Veneto region, in Padova, on 2 and 3 August 1956 in order to attend a CIAM meeting at the Hotel Storione, with the aim of formulating a final program for CIAM 10. See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.265



Sketch probably drawn in Padova, the first days of August 1956, showing the program of CIAM in August 1956. From Padova to Lapad to Venice, where the Fourth Summer School is organized in September. Bakema and Candilis are elected as exponents of the Young Groups, and they have the main role of "relationship" among the members, gta/ETh Archive 42-SG-47-222



Le Corbusier, Message to the X Congress CIAM at Dubrovnik: Crisis or Evolution?, Cap Martin July 23, 1956, gta/ETH 42-HRM-X-17

becomes possible and necessary."[103] This "no plan world" has resonances with the issue of the heart of the city as presented by Sert during his first introduction at the Hoddesdon meeting in 1951 and in his speech at Harvard too, a few months before the IV CIAM Summer School in Venice. Sert indeed refers to *"the younger generation in this country"* who are firstly aware, more so than the experienced architects and planners, of the main problems of "*the uncontrolled sprawl of our communities"*[104], that *"process of constant and unchecked decentralization and land speculation"*, which is *"a real menace to all our cities and to the stability of civic values."*[105]

The direct reference to the "younger generation", the students of the summer school in Venice and the younger generation of architects in the US is also an important analogy between the two speeches, highlighting the interest in education and awareness of the responsibility of young architects for the future evolution of the city.

Nevertheless, many differences are obviously present insofar as the American and Venice urban, social and political context are analyzed and discussed.

Several speakers present their opinions and thoughts during their lecture on the proposed issue. Egle Trincanato focuses her attention using a more historical point of view presenting *"Birth and growth: the insular Venice"* and *"The election of the Doge"* (11th September); other presentations are more linked with the practice of the architect and the planner such as the lecture by Carlo Melograni who expounds some thoughts on *"Some aspects of the Italian construction"* (26th September) or the lecture presented by Ignazio Gardella on the necessity for planning (14th September). Luigi Piccinato[106] - co-founder with Zevi[107], Ridolfi and Nervi of the A.P.A.O. (Associazione Per L'architettura Organica) – on the other

103 The Theme, CIAM Summer School in Venice, 1956, NAI, Bakema Archive, g51

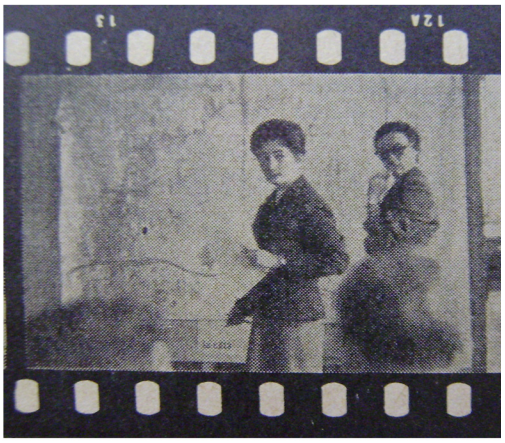
104 J.L. Sert, Opening remarks to the Urban Design Conference, April 9, 1956, Loeb Library, GSD Archive, Harvard, Rare NAC 46 Harv 1956.

105 J.L. Sert, *Centres of Community Life*. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 4

106 Piccinato is moreover a member, together with Samona`, of the committee for the drafting of the plan of Venice (PRG), from 1956 until 1958. He is therefore directly involved in the transformation of the city where the students are proposing their ideas.

107 Zevi already criticizes CIAM in 1949 arguing on Metron: "*[...]the CIAM cannot undertake such a task. […] many of the same architects in the CIAM realize that this body is not well enough equipped to cope with the problems of post-war planning.[...] The problems of planning can no longer be resolved by theoretical studies or by international congresses. […] The CIAM, its significance and its historical limits, its cultural and organizational standing, the presence within it of diverse tendencies and the balance among them: these problems are the consequences of a necessary cultural clarification."* Zevi B. (1949), A Message to the Congres International d` Architecture Moderne, Concerning Architectural culture, *Metron,*n.31-32, p. 5-30









Bakema, Samona`, Scarpa and others at CIAM Summer School in Venice, 1956

hand investigates the validity of programs over long periods of time, posing an issue which has already been discussed by the students during the previous summer school. Venice as a *"live museum"* and no longer a city for the State, for Europe, for the world, Piccinato criticizes; it was just a number. The only way to change this idea of the lagoon city is a cultural movement which can perhaps start a new social idea of Urbanism: *"We must therefore use Urbanism in order to make some facts happen [...] The problems will be solved only when we will be able to make a new society."*[108]

Another architect from the roman school, Ludovico Quaroni (1911-1987), presents a couple of lectures during the Summer School. The major one takes place on 14th: *"From the neighbourhood to general planning"*. The lecture however is organized by firstly presenting the issue of planning. His use of the metaphor of the *"territorial organism"* is interesting - similarly to the CIAM members who adopt the organic metaphor of the "heart" - in order to describe the physical space of Man, which should be *"increased, kept, improved"* by planning itself. "*This space which man lives is an organism, where numberless forces are in action. Planning is closely connected with man`s life"*[109]*,* Quaroni highlights.

Then Quaroni proposes the Church, the political party office (*sede del partito*) or the Chamber of Work and the social center as central elements, revealing the strong role of political forces in the development of the city in Italy in the '50s in Quaroni`s mind. This aspect does not appear so strongly in the discourse of CIAM members during the Hoddesdon meeting, where the planners and architects are still proposed as the main actors of the city development.

The same day Quaroni expounds another outstanding lecture: *"The Architect and Town Planning"*. We have already discussed the issue of coordination between the planner and the architect with regard to three-dimensional design in the Urban Design Conference organized by Sert in April 1956. Also the synergy between artists and architects is already discussed during CIAM VIII when talking about the Heart of the City in 1951. In his lecture Quaroni presents the distinction between planning and architecture, from an interesting point of view, even considering the Renaissance as the cause of the split between them.

Indeed in his opinion, the Renaissance signals the start, in Italy as in the rest

108 Luigi Piccinato, 13th September 1956, CIAM Summer School in Venice, Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011

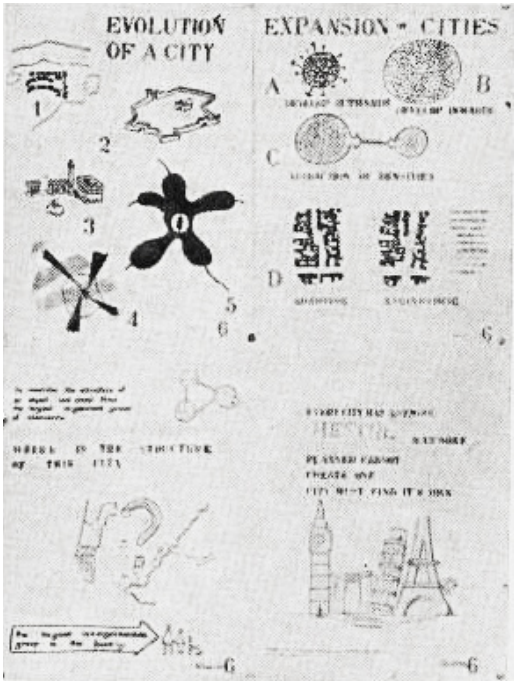
109 Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011 and NAI, Bakema Archive, g51
As far as the *"organic quarter"* is concerned, Quaroni considers it as a potentially useful tool in order to enlarge the city. The main problem is to define the "starting element", which we may call the "core", of this *"organic quarter"*.

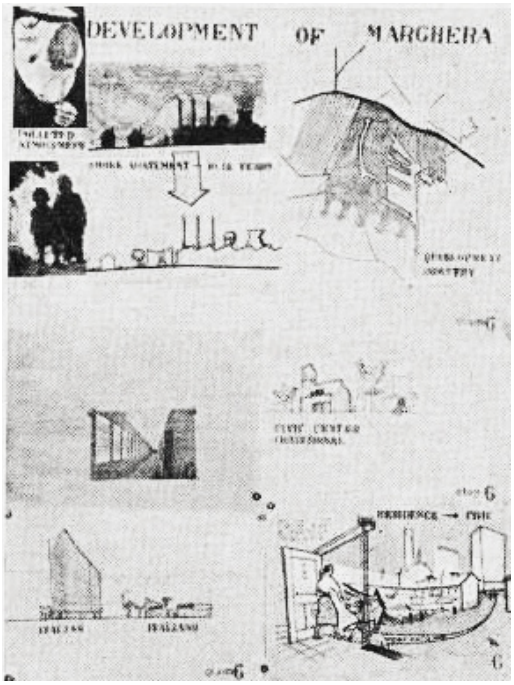
of Europe, of the need for *"a rational organization of the work"* which *"leads to more specialization. The culture had lost its unity."* The world is divided into *"ones who could understand"* and the rest who are in contact with the "masses". This split and high specialization born with Renaissance have been translated in modern architecture as well - *"Le Corbusier as well as Wright are the last specimens of that generation of architects, the founder of which was perhaps Brunelleschi"*- avoiding connections with the past, considering the machine-man inside a machine-house, in an aseptic functionalist point view. Quaroni affirms that he had personally betrayed this principle of functional architecture and *"not having fully digested the idea of function.[...] it is aimless to study the reality of the man himself, without considering him as a part of a superior reality - such as the family, the neighbourhood, the community, the society, the collectivity."*
The relationship seems therefore the main point of a new architecture, open towards a unity of culture that has been lost with the Renaissance, as the roman architect states. It was a new architecture based with the "Continuity" as expressed by Rogers, on the "Core" as highlighted by Gregotti, which contains many resonances also with the idea of Relationship proposed for instance by Bakema, as we will discuss in the next chapter.
Finally this new humanistic value of architecture's role allowed architects to get in contact with society, starting with "*being concerned with the more general problems of territorial planning."* The unity of culture helped architecture to merge with the territorial scale as well. The architect *"succeeded in becoming again part of the cultural life, in operating again for the society, in gaining back the object of his activity."*[110]

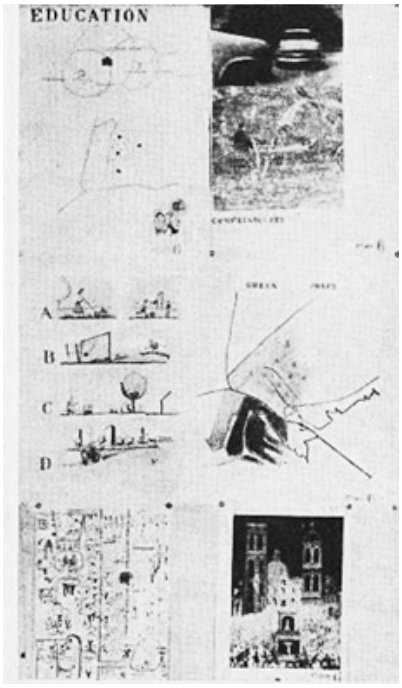
STUDENTS` PROJECTS

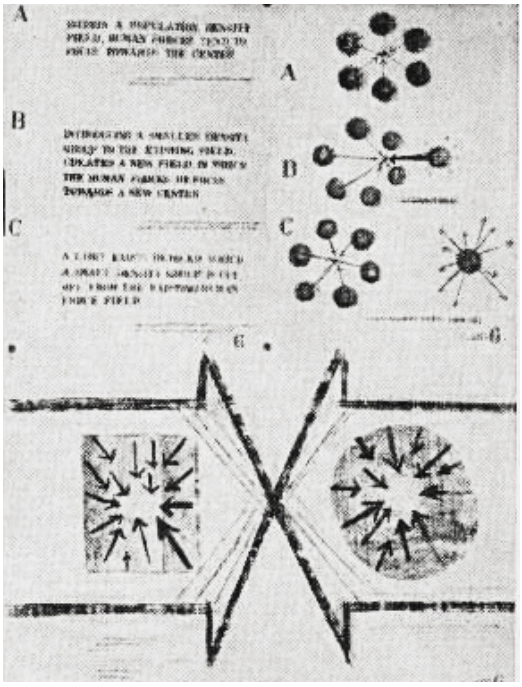
As far as the students` work is concerned, several projects are published a few months later in Casabella-Constinuita', in an article written by Gabriele Scimemi, who is an assistant during the summer school.
In his article Scimemi describes Venice itself as the representative of a contemporary discussion regarding the reconciliation of *"the historic values of our civilization with the characteristic elements of the present"*[111], highlighting the Italian role in the discussion on the continuity of history. He then underlines the origins of the Summer School of Venice, pointing out the Congress of Hoddesdon and the Heart of City as the starting point of these summer courses.

110 **Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011 and NAI, Bakema Archive, g51**
111 **Scimemi G.(1956),** *La quarta scuola estiva del CIAM a Venezia.* Casabella-Continuità, n.213, p.69









Crumlish, Dewhirst, Gottwalles, Richards, Sauer, Saulnier, Stuart, Virdis, Vitra

The articles continue showing the projects proposed by the students, who are organized in several groups, as *"acceding more to the reality of life".*

- Group: Crumlish, Dewhirst, Gottwalles, Richards, Sauer, Saulnier, Stuart, Virdis, Vitra

The project shows a preliminary phase of historical research into the *"evolution of the city"* via five different phases and the "expansion of the cities" via three different developments. At the bottom a question arose as a result of the previous analysis: *"Where is the structure of the City?"*[112] The answer is "the family", as we can see from an arrow indicating a group of people, on the bottom-left side of the panel. The family is assumed to be the only significant unit which can be used, together with individuals, in order to define the structure of the society place by place and time by time.

The result, as Scimemi describes, is a multiplicity of overlaying spheres of relations, each one with a certain centrality. *"The alleged symbolic value of the center may not represent the identity of the community; it can only do it in an artificial way. And not by chance, if it is imposed, it reveals a fragile basis of preconceptions and prejudices."*[113]

Moreover, in order to avoid new urban centralities born from a *"tradizionalismo svuotato e malinteso"*[114], it will become important for the community to find, *"even in the architecture form, the symbols of its own uniqueness, of its own identity."* Many similarities can be found again with the Heart theme. For instance the role of the family is presented by the MARS group in their introduction speech as a strong presence in all five levels of the city[115]. Also during CIAM VIII the group ASCORAL (A. Wogensky) defines the family, classifying the "hearts" as the importance of Social Groups, as the apparition of the smallest "coeur", still limited and incomplete.[116] Finally the role of the overlapping spheres of relations

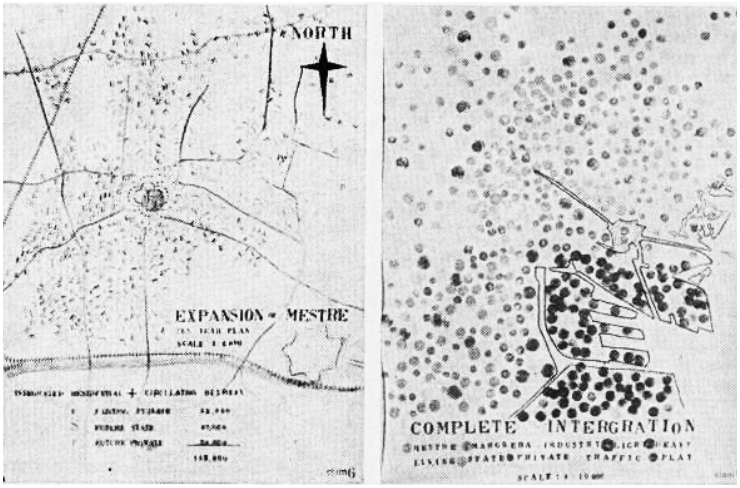
112 Ibid. p. 73

113 *"Il preteso valore simbolico del centro non può rappresentare identità della comunità` se non artificialmente; e non a caso quindi, qualora sia imposto, rivela una fragile base di preconcetti e di pregiudizi."* Ibid. p. 70

114 *"empty and misunderstood traditionalism."* Ibid.

115 *"It is very strong, for example, at the lowest scale level, that of the family. It emerges again strongly at five different levels above this, in the village or primary housing group; in the small market centre or residential neighborhood; in the town or city sector; in the city itself, and in the metropolis, the multiple city. At each level the creation of a special physical environment is called for, both as a setting for the expression of this sense of community and as an actual expression of it. This is the physical heart of the community, the nucleus, the CORE "* CIAM VIII, Text of MARS Group Invitation, The Core. in Report of Hoddesdon Conference, CCA Library, BIB 200583, p.5

116 *"Cœur limite' et incomple".*



Crumlish, Dewhirst, Gottwalles, Richards, Sauer, Saulnier, Stuart, Virdis, Vitra

find many resonances with the ideas of Bakema and later with Team X as well. Nevertheless, the students seem to avoid an idea of centrality as the central square of the city, as some of the CIAM members have justified the role of the heart. Indeed, if the summer school takes its first steps from the "Heart of the City" meeting, the Heart Idea now seems to have nothing in common with the central Italian squares, with the Saint Dié projects, with the central squares of Pendrecht, etc.

The students` proposals seem to provide even more critical and sophisticated thoughts, as we can see below, evidently influenced by the ideas from new currents as well.

In the second and third illustrations, the group of scholars continues to show some studies on the development of Marghera and Mestre, stressing some of their Italian "symbolisms". In the fourth the scholars present an interesting survey of the "field of forces" which act on the social structure.

As we read from the first three schemes:

"A- Within a population density field, human forces tend to focus towards the center;

La famille: Apparition du plus petit "coeur", la foyer familial, correspondant au plus petit groupe social, la famille comprend: cuisine et salle commune, dominante: vie familiale.

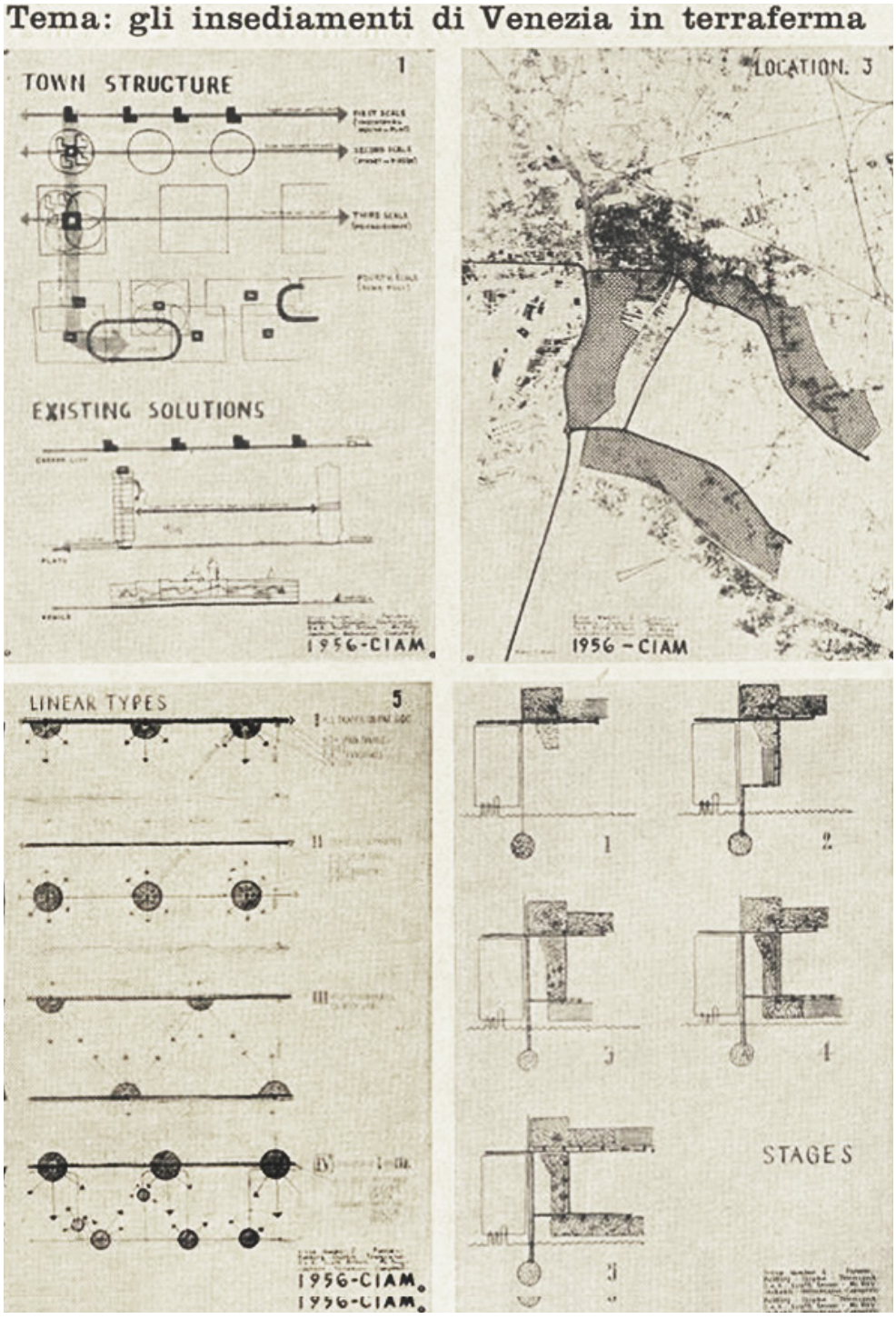
Le groupe du famille (environ 500 habitants): Apparition d'un "coeur" collectif, réserve surtout aux plus jeunes enfants. Comprend: crèche, jardin d`enfants, petit piscine etc., dominante: éducation[...]"

From written comments by the Members of Commision 1, A. Wogensky, France, « Ascoral », *Les « coeurs » en fonctions de l'importance du GROUPE SOCIAL.* in CIAM VIII, 1951, report of the Hoddesdon Conference, CCA Library, BIB 200583,p. 91

B- Introducing a smaller density group to the existing field, creates a new field in which the human forces refocus towards a new center;
C- A limit exists beyond which a small density group is cut off from the existing human force field."
This analysis is aimed at conceiving a new complex urban morphology, where public and private initiatives can be reorganized within the pre-existing structure. The final illustrations show some sketched suggestions for realizing a new plan. The drawings show some proposals for industry (light and heavy), traffic-play; however, the quality of the publishing, its lack of colour prevents us from fully understanding the plan proposal.

Group: Champbell, Chipkin, Heinemann, Hultberg, Jackson, McKay, Peredes, D. & R. Scott-Brown, Townsend
It is important to emphasise the presence of the later well-known Denise and Richard Scott-Brown in the group. Denise Scott-Brown will briefly describe the theme of the summer school as the same issue discussed by Brutalists, but with *"an Italian accent"*, with more emphasis on tradition and heritage, on *"the pre-industrial and peasant societies rather than with an urban mass society"* .[117] After the summer school, the South African couple has the opportunity to work for six weeks in Giuseppe Vaccaro`s studio, for the project INA-Casa in the Tiburtino quarter in Rome. Ludovico Quaroni, whom they probably met for the first time during the CIAM summer school in Venice, introduces them to the Roman

117 *"We planned our itinerary around Mannerist and Modern architecture, and headed toward Venice to attend a CIAM Summer School, held there for young architects from around the world. CIAM in 1956 was in a stage of dissolution following the revolt of the young Turks of Team 10. Nevertheless, the summer school brought together an array of vital people who represented all CIAM trends. There were elderly, old-line Modernists, mainstream Modernists in mid-career, and young members mostly allied with Team 10. Robert and I were moved to hear from some architects, Franco Albini for one, what a beacon of hope Modernism had been for them during Fascist times. The themes of the summer school were the same postwar issues faced by Brutalists, but the lecturers` and organizers` responses to them had an Italian accent. For all groups, the continuity of the Modern Movement – continuita`*- [here the reference to Rogers' continuita` does not seem to have been employed properly by Scott-Brown, L.Z.M.] – *was a major consideration. They, as we, saw their job as loyally pushing Modern architecture to become relevant to postwar conditions. However, in Italy there was much more discussion of tradition and heritage than there had been among the Brutalists, and their take on Neue Sachlichkeit and the realities of urban life had to do with pre-industrial and peasant societies rather than with an urban mass society and the scale of industry. We preferred the tougher-minded Brutalists approach and found ourselves at bay in arguments with middle-aged Italian Architects, amused by us and in sympathy with our passion but puzzled over its focus on the jarring signs and scales of commercial and industrial architecture. They smiled ironically at what they considered our hoary technological romanticism, but I think they were remembering their youth."* Venturi R. Scott-Brown D., *Architecture as Signs and Systems: for a Mannerist time.* Belknap Press of Harvard University Press, 2004, p. 111 ; see also Scott-Brown D., *Imparare da Vaccaro,* in ed. Mulazzani M., *Giuseppe Vaccaro.* Milano 2002, p. 65-75



Champbell, Chipkin, Heinemann, Hultberg, Jackson, McKay, Peredes, D. e R. Scott-Brown, Townsend

architect. This work experience will be considered an outstanding experience for the whole future career of both architects, *"preparing us for urbanism in America*" as Denise Scott Brown affirms.[118]

As far as the project is concerned, Scimemi underlines, in his article in Casabella, the attention of the students focuses on the necessity for *"efficient human relationships"* in order to guarantee the maximum opportunity of contact between *"entities having different 'grades' (individual house, square, neighborhood, town)"* or among different entities of *"the same 'grade' (house with house, neighborhood with neighborhood, etc.)"*[119]. The research is therefore focused on the different relationships of different grades of connections, in order to elaborate and reveal the complexity of the city itself. The Charter of Athens is therefore declared an inadequate tool, while many similarities can be found with the *"scale of complexity of association"* proposed by Team X.

As Scimeni emphasises, Venice represents a perfect case study where both associations can be investigated. If we analyse the project tables, we can observe a study of the city structure in four scales: in the first the arrow flow passes through individual houses and Plots represented by black "L"-shapes; in the second the connections regard the street and piazza are represented as small shapes arranged around a small circle and enclosed in a bigger one; in the third, the neighbourhood is represented as four of the previous circles intersecting each other inside a square shape, creating a central space of connectivity. Finally, a vertical arrow on the left passes through all three different scales (individual, street, neighbourhood) indicating at the end the Fourth Scale, the Town, as result of the addition of the previous scales.

Under the "Town structure" schemes, the students highlight the complexity of Venice, which, in section, looks very different in comparison with new models of the city such as Howard's Garden City or Le Corbusier`s Ville Radieuse.

The comparison of these three sections, in the "Existing solutions" scheme, seems therefore to denounce the lack of complexity, of disjunction with the social needs which has characterized Modern new city models. The study of Venice, of its complex three-dimensional-stratified structure, becomes a tool for the future design of new and more adequate city models. Venice is therefore considered, in a certain sense, more "contemporary" than modern models; it is represented

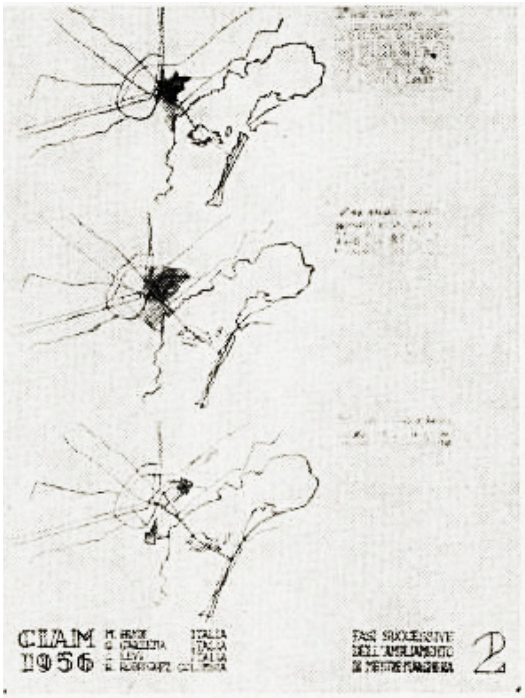
118 *"I think we learned more from Vaccaro than we could have from other architects, whose more famous Tiburtino designs lacked this rationalist edge and seemed simply allusive to traditional societies. Working for Vaccaro helped prepare us for urbanism in America."* Venturi R. Scott-Brown D., *Architecture as Signs and Systems: for a Mannerist time.* Belknap Press of Harvard University Press, 2004, p. 112

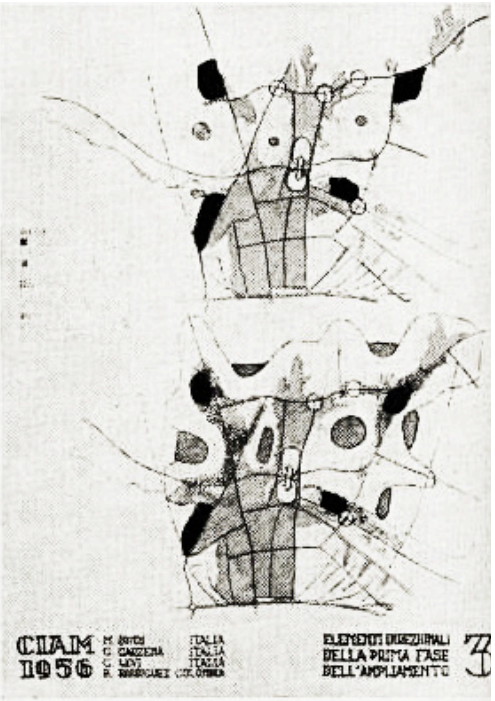
119 Scimemi G.(1956), *La quarta scuola estiva del CIAM a Venezia.* Casabella-Continuità, n.213, p.71

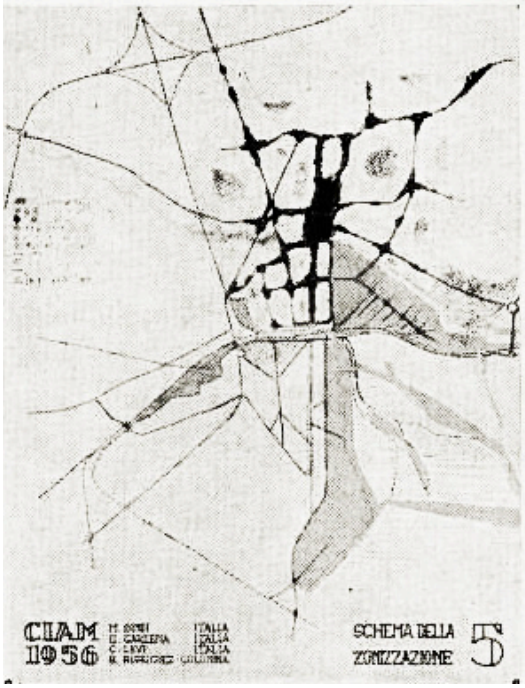
as that "City of the New Modernity" as described forty years later by Gregotti[120]. In the second drawing the students analyze the fast suburban transport network which becomes the backbone of the new plan for "Mestre-Venice-industry-new settlements".
The third illustration shows different schemes of joining points for the fast traffic arterial road which affects the different positions of the living centers. In the first one the residential areas are attached to the principal arterial road, in the second they are distant from it and they are connected via a secondary road, in the third two important parallel arteries have different joining points connected to the residential areas. Finally in the last one, a more complex mixture of main and secondary traffic roads across the settlements seems the best solution to propose. Again a research of the urban complexity is proposed as the main idea for development, even though there might be the possibility of being too vague and unclear.
Finally, the last illustration shows the gradual formation of new settlements around the "bridge heads" originating from the fast traffic highways.

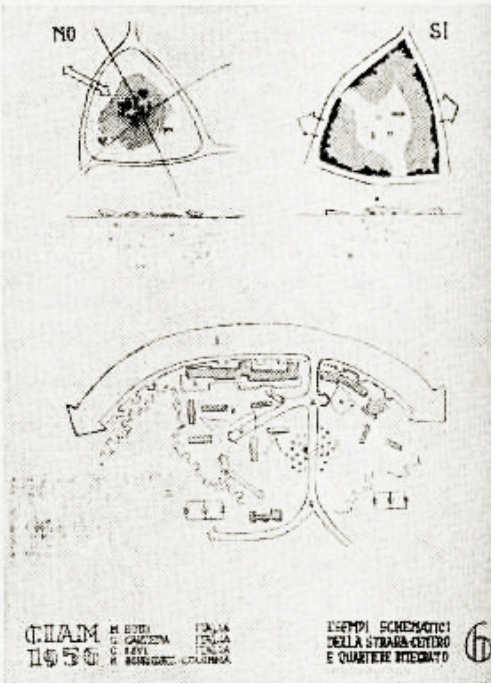
Group: Bindi, Garzena, Levi, Rodriguez
The first illustration exhibits different phases of the extension of Mestre and Marghera. Analysis reveals *"a spontaneous attempt of the community to settle around the 'core-street'"*[121] This *core-street* (in the article sometimes called *centre-street,* or *rue-centre* in French or *strada-centro* in Italian) is presented as an attempt to propose traffic circulation – instead of residential entities - as the central theme for the planning of new and growing settlements. It gives a high degree of connectivity to its neighbourhoods which no longer become "introvert" but "extrovert", as shown in the fourth illustration. *"Only through the full acceptance of the contemporary technological achievements, the proportions of the human dimension are more clear[...]"* Scimemi explains, agreeing with the necessity to use contemporary communication systems as *"integrative tools of the technology in the society, as culture fact."*[122]
The choice of stressing the element of connection, the central street, as the main element of urban force directly recalls the "spine concept" of the Human Core presented later by Bakema and his students in Saint Louis, as will be discussed later. In both cases the attention to modern technology and car-traffic is optimistically

120 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998
121 Scimemi G.(1956), *La quarta scuola estiva del CIAM a Venezia.* Casabella-Continuità, n.213, p.72
122 Ibid. p. 70









Bindi, Garzena, Levi, Rodriguez

considered as part of the contemporary structure of society, or even as the central *"culture fact";* therefore it is assumed to have central importance in the physical urban design as well. Neither "*La royauté du piéton"* stressed at the Hoddesdon meeting nor the pedestrian nature of Venice seem to influence this last Group of students of the Summer School and Bakema himself, who is in Venice in the role of visiting critic.

As we read in the report of the seminar discussion held on 27th September, De Carlo comments on the proposal of the *"line town"* as *"a rational structure with concrete economic hinged"*. However, the Team X member highlights the necessity of thinking about the qualification of the intervention, without losing the characteristic of each area, of different *"parts of the texture". […] It is like a repetition of many 'unité d`habitation' and like many plans of the same 'unité d`habitation'. The qualification too is very important."*[123]

The same day, September 27, other students present their proposals, which are not published then in Scimemi's article. Among them Hoshour (USA) and Muzzillo (Italy-Naples) highlight the correspondence between *'center'* and *'symbol'* and the *'creation of new centers'* as *'the creation of new symbols'*[124]. The proposal suggest the development of the Mestre-Marghera area through new centers with the representative character of the life of the town – Industrial.

A discussion on the value of the symbol in the city begins; this seems very intriguing since the Core itself is defined by Sert during CIAM VIII, as *"the symbol of the city."*[125]. Also Giedion quotes Sartre, regarding the new humanization process of the heart, affirming that "*We need today signs and symbols which spring directly to the senses without explanation."*[126]

At the Venice conference, five years after CIAM VIII, members do not seem so interested anymore in the symbol as a key urban point. Kowalski, indeed states that neither the symbol can be attributed artificially nor can Venice itself have the value of symbol. Then Appleyard criticizes that building according to symbols is just a *"monumental approach"* while the young Sauer stresses the necessity of stratification of time in order to have new modern symbols, as strong as those

123 *Tuesday, September 27, 1956. Seminar: Exhibition of the works of each team debate on them*. NAI, Bakema Archive, g 54

124 Ibid.

125 *"Sert: the Core is the symbol of the city. There are certain places which would no longer exist if the cores were removed, for example Paris; if certain spots were removed Paris would change." The theme of the congress.* Resume of the Open session of 8th July, *Chairman J.L. Sert, in Conversation about the Core* in *CIAM8, 1951, report of Hoddesdon Conference,* CCA Library, BIB 200583

126 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

of the old Italian towns. De Carlo too demonstrates his doubts about the use of symbols in the urban discourse, but he does not abhor it: if symbols are presumed to be necessary in the city, these should be close to the nearest texture of the city and should be the result of something that had determined them, without being determined beforehand. Symbolism, as expressed by Sert and Giedion, seem therefore to be an incorrect and pre-determined entity inside the city. The criticism towards some interpretations of the Heart theme by CIAM members will be more evident during the following discussions.

De Carlo on Centralities

In the two-day period (September 19th-20th) a presentation is scheduled of the preliminary works of each team. After the presentation of the first team, a discussion between students and members of the staff begins on the role of the CIVIC CENTER, as we read from the report of that day. Many references and resonances can be found within the discussion about the Heart of the city and the later ideas of Team X. De Carlo's role is important as he seems to be the most outstanding representative of a radical criticism towards CIAM, the role of centrality and any rhetorical discourse about symbols, included the interpretation of the Heart proposed by some CIAM members. In 1960 De Carlo will even formally criticize CIAM VIII on Architectural Design, asking himself *"how it was possible for the many serious-minded persons who were present – some of whom had assisted in drawing up the Athens Charter – to agree with or even stand it."*[127]
After Robert Scott-Brown has stated that it is possible to keep some functions in order to justify the creation of a center and the South African Chipkin has considered the center as a necessity *"even if symbolic"*, De Carlo explains his point of view on the symbolic character of centrality. He refers to the historical evolution of the public space, as has Bakema and before him Giedion, as we have discussed before, which is necessary in order to explain the character and the evolution of the Heart of the City.
If in medieval communities civic centers had symbolic functions, as De Carlo states, in the cities of the Renaissance they disappeared. Only the function of representation and prestige are indeed present, which are completely different

127 *"[…] Leaping from one subject to another, at Hoddesdon in 1951 a discussion was held on `The Core of the City`and around this such a large quantity of inaccurate and worldly nonsense was collected which, on re-reading the Report to-day after a lapse of time, makes one wonder how it was possible for the many serious-minded persons who were present – some of whom had assisted in drawing up the Athens Charter – to agree with or even stand it."* De Carlo G. (1960), Summary, *Architectural Design,* p. 205 in Harvard Archive, Smithson Collection, E-017

from the previous symbolism. When we refer to a civic center we usually refer to the Renaissance culture, making two mistakes, De Carlo asserts: we aim to recreate the medieval center, being guilty of sentimentalism, or we try to restore some symbols, characteristics of the baroque for instance, as Le Corbusier did for Chandigar (presented at CIAM VIII). *"We don`t think that conditions have changed since and that it is impossible to imitate forms of the past.*- he states – *If we think of the plurality of interests of contemporary life and the confusion of the social situation, we reach the conclusion that only a plurality of centers can exist.[...] The center can have just functional buildings, the rest is rhetoric.[...]*" as De Carlo criticizes, evidently abhorring any symbolic attempt to define a central square as the unique symbolic Heart of the city, as many of the old-CIAM members have done when presenting their projects at Hoddesdon.

Then Albini highlights the need to consider the Center as beyond the specific function of centralization, since there are elements which can be centralized and others which create center by themselves. It would be necessary *"to assume a more complex and less measurable one"*, which seems to fit with the necessity to consider the Heart of the City as an issue. But how to relate this center or plurality of centralities to the plurality of society?

"We cannot consider the life of society as a whole. Communists' and 'Daughters of Mary' activities" states De Carlo as he ends his speech. This ironic answer closes the first session of the seminar, but we can consider it also as the closing down of an absolute attitude of the first CIAM to regulate the city as a whole, with zones and function distinctions whose "Heart" is to be considered a first attempt of rupture. It is the ending of the relationship between CIAM and the summer school in Venice, the last edition of which will be held in 1957, losing significantly any relationship with the *Congres International d`Architecture Moderne*.

Finally we must remember that in 1976 De Carlo founds ILAUD (or I.L.A. & U.D. International Laboratory of Architecture and Urban Design), another school/ laboratory open to all students throughout the world in order to make the younger generation reflect on urban issues and allow them to design in Italy, from 1997 until 2003 in Venice.

If the summer schools held in Venice in the `50s are in direct relationship with CIAM, ILAUD is directly influenced by the ideas of Team X[128], whose members are

128 *"For me, personally, Team 10 was followed by ILAUD. Ilaud was a completely different business, though when I founded it, I obviously carried over a lot of ideas from Team 10."* Tuscano C., *How can you do without history? Interview with Giancarlo De Carlo. Milan , Via Pier Capponi 13, 23 May 1990, 20 February 1995, and 24 November 1999.* in ed. By Max Risselada and Dirk van den Heuvel, *Team 10 1953-81. in search of a Utopia of the present.* NAI, p. 343

born within the discourses of old CIAM itself. Moreover, both laboratories are held in Italy, which becomes the field of study for all the participants for almost fifty years.
If on the one hand De Carlo represents the rupture with the old CIAM and with a certain interpretation of the Heart theme, on the other he is the architect who signals the continuation of the CIAM Summer School experience in Italy, born within the Heart of the City discourse, with those characteristics highlighted already in 1951 by Norberg Schulz.

List of Participants at the Fourth Edition of the CIAM Summer School in Venice:

1
Robert Dewhiest
England
Barrie Stuart
Australia

2
Harvey Hoshour
USA
Raul Rodriguez
Colombia
Maria Bindi
Italy-Firenze
Giuseppe Muzzillo
Italy - Napoli
Corrado Levi
Italy - Torino
Biagio Garzena
Italy - Torino

3
Robert Scott-Brown
South Africa
Denise Scott-Brown
South Africa
Ernesto Paredes
Peru`
Ale Heinemann
Germany
Ian McKay
Australia
Clive Chinkin
South Africa
Erik Hultberg
Norway
Philip Marksen
Australia
Narelle Townsend
Australia

4
Giovanna Caravaggi
Italy - Milano
Matilde Baffa
Italy - Milano
Alberto Hernandez
Cuba
Jaquin Cristofel
Cuba
Henry Fournier
USA
Pablo Monguio`
Spain
Lee Nishikawa
Brasil

5
Louis Sauer
USA
Brian Crumlish
USA
Bruno Virdis
Italy
Leonard Saulnier
USA
Bertrand Gottwalles
France
Karl Virta
Finland

The International Summer Seminar of Architecture of Venice, 1957

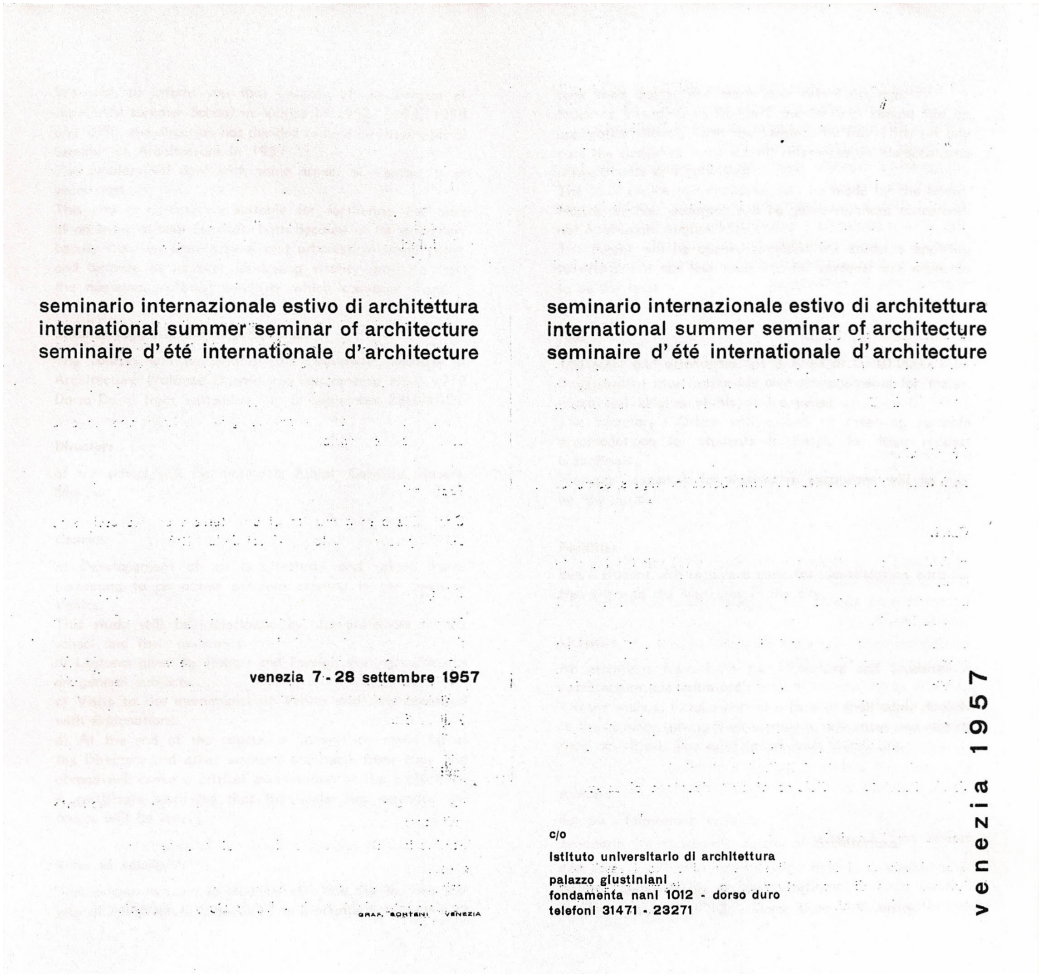
No longer recognized by CIAM, the fifth edition, called the International Summer Seminar of Architecture, is held from 7th to 28th September 1957. The directors are still Albini, Gardella, Rogers and Samona'[129].
The external speakers are Gillo Dorfles, Riccardo Morandi, Enzo Paci, Aral Korsmo[130] and the internal speakers are Scimemi, Piccinato and Trincanato. Venice is still the case study while the five projects which in April have won a National Competition of Ideas for the Plan of Venice are critically examined.
While Gillo Dorfles gives his lecture on the *"Relations between industrial design and visual Arts"* (25th September), Luigi Piccinato expounds his thoughts by continuing the discussion started during the previous CIAM Summer School, presenting *"The problem of the conservation of the City inside urban planning"*. The continual reference to the metaphor of the organism in order to describe the city is interesting. However, "the city as organism" finds just superficial similarities with the Heart metaphor, since Piccinato uses the organism only in order to explain the need for a complete form of the city, its right dimension and the dependence of its internal parts. As we have already discussed, these organic interpretations are easily criticised since even though they are used for instance by Sert and other CIAM members they are not the main focus of this research.
As far as the Heart of the City is concerned, the most intriguing and outstanding lecture during the Summer Seminar is given by Paci.
Enzo Paci (1911-1976) is an Italian philosopher, one of the most expressive representatives of Existentialism in Italy. In his opinion the foundations of Existentialism can be found in the *relational* theme, understood as a condition of existence of all the events that constitute the world, as a new concept which should be sought, cultivated, and kept continuously authentic even though conflictual[131].
On 16th September 1957, Paci presents his lecture *"Relationism and Architecture."*[132]
The philosopher underlines the meaning of Relationism *"characterized by a desire to study the relations existing between the various aspects of reality and not the isolated realities – or substances."* Only through forms, materials or proportions, can the architect discover that he is able to express all his faith in the relations

129 Mentioned on *Gazzettino di Venezia*, 4th September 1957. and *Il Gazzettino,* 4th September 1957
130 He is mentioned to be present the first day of presentation of the course, on the local magazine *Gazzettino di Venezia*, 4th September 1957. A picture portraits him with Rogers
131 see Paci E., *Tempo e relazione.* Taylor, Torino, 1954
132 IUAV University Archive, Signature: Trincanato 2.Attività scientifica/2/014



Il prof. Nathan Rogers (al centro) mentre tiene la prolusione ai corsi del Seminario internazionale estivo di architettura. Alla sua destra è il prof. Albini, alla sinistra il prof. Aral Korsmo di Oslo.

Albini, Korsmo and Rogers at the Summer Seminar in Venice, *Gazzettino di Venezia*, 1957



Brochure of International Summer Seminar of Architecture, 1957

he creates, his faith in a town as well as in the entire world yet to come. We do not have to seek the relations in abstract functions but in concrete, organic, historical and social ones, as Paci affirms. And if *"to be 'organic' means to be poet […] then the Organic Relationism is, at least in philosophy, a fecund synthesis of what architects call 'functionalism' and 'organicism'."*[133]

The reference to an "Organic Relationsim" will be important since in the next chapter we will discuss Bakema and the Heart of the city as Relationships. The philosopher esteems the Dutch architect, praising his contribution in the article entitled *"The heart of the City"*, which has been mentioned before.

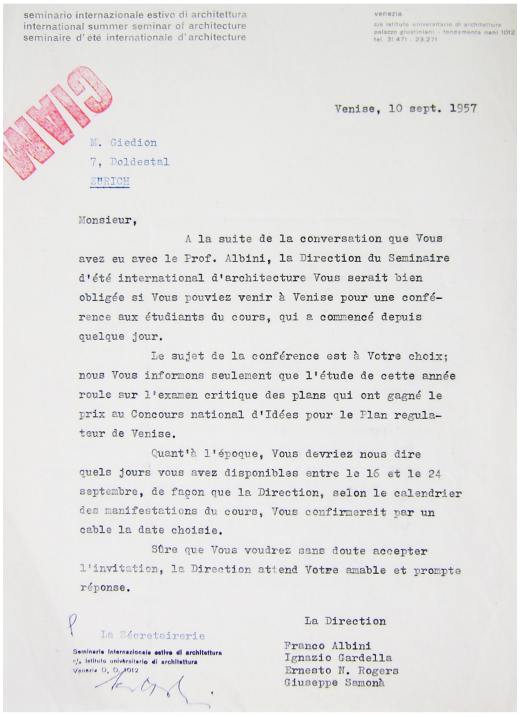
Among others, Paci indeed highlights the importance of the contribution of J.B. Bakema at Hoddesdon because of his insistence on the relational value of the Heart. Bakema`s point of view is seen to be in perfect accordance with his Relationism philosophy considering reality as an organic and relational process:*"As a focus moment of relations, the heart of the city is a social problem in which architectural design and urban planning are closely connected."*[134]

List of Participants to the International Summer Seminar of Architecture in Venice:

1	2	3
Michaele Calthrop	Arthur G. Batt	William K. Goodwin
Scotland	UK	USA
Tunney F. Lee	Elaine K.M. Gooding	Howard Charles Kahn
USA	Ireland	USA
Olivier Marc	Jordan Gueren.....	Franco Sbandi
France	USA	Italy, Naples
Chandrakant Patel	Claude Samton	Wolfram Schlote
India	USA	Germany
Nicole Sonolet	Eleanor Smith	Peter Samton
France	USA	USA
	Einar Holst Throne	William Kaplan
	Norway	USA
	Raymond Lifchez	
	USA	

133 Ibid.

134 Paci E.,(1954) Il cuore della Città. *Casabella Continuità*, n. 202, p. vii *"Il punto di vista di Bakema è in perfetto accordo con il relazionismo, con una filosofia, cioè che combatte ogni concetto sostanzialistico dell'essere e concepisce la realtà come processo organico e relazionale. (Paci, Tempo e relazione, Taylor, Torino, 1954) In quanto momento focale di relazione il cuore della città è un problema sociale nel quale si congiungono strettamente il progetto architettonico e il piano urbanistico."*



seminario internazionale estivo di architettura
international summer seminar of architecture
seminaire d'été internationale d'architecture

venezia
c/o istituto universitario di architettura
palazzo giustiniani - fondamenta nani 1012
tel. 31.471 - 23.271

CIAM

Venise, 10 sept. 1957

M. Giedion
7, Doldestal
ZURICH

Monsieur,

A la suite de la conversation que Vous avez eu avec le Prof. Albini, la Direction du Seminaire d'été international d'architecture Vous serait bien obligée si Vous pouviez venir à Venise pour une conférence aux étudiants du cours, qui a commencé depuis quelque jour.

Le sujet de la conférence est à Votre choix; nous Vous informons seulement que l'étude de cette année roule sur l'examen critique des plans qui ont gagné le prix au Concours national d'Idées pour le Plan regulateur de Venise.

Quant'à l'époque, Vous devriez nous dire quels jours vous avez disponibles entre le 16 et le 24 septembre, de façon que la Direction, selon le calendrier des manifestations du cours, Vous confirmerait par un cable la date choisie.

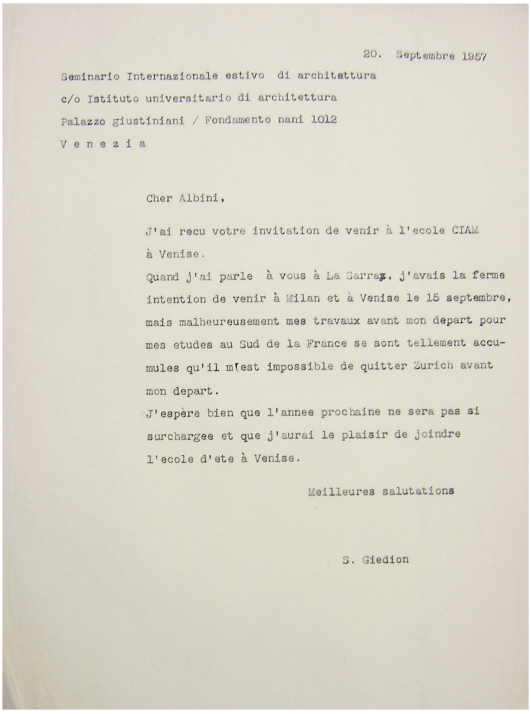
Sûre que Vous voudrez sans doute accepter l'invitation, la Direction attend Votre amable et prompte réponse.

La Secretaireria

Seminario internazionale estivo di architettura
c/o Istituto universitario di architettura
Venezia D. 2012

La Direction

Franco Albini
Ignazio Gardella
Ernesto N. Rogers
Giuseppe Samonà



20. Septembre 1957

Seminario Internazionale estivo di architettura
c/o Istituto universitario di architettura
Palazzo giustiniani / Fondamento nani 1012
V e n e z i a

Cher Albini,

J'ai recu votre invitation de venir à l'ecole CIAM à Venise.
Quand j'ai parle à vous à La Sarraz, j'avais la ferme intention de venir à Milan et à Venise le 15 septembre, mais malheureusement mes travaux avant mon depart pour mes studes au Sud de la France se sont tellement accumules qu'il m'est impossible de quitter Zurich avant mon depart.
J'espère bien que l'annee prochaine ne sera pas si surchargee et que j'aurai le plaisir de joindre l'ecole d'ete à Venise.

Meilleures salutations

S. Giedion

Invitation and refusal of Giedion for the International Summer Seminar in 1957. It is significant that the first letter is marked with the CIAM print, as still important presence among the italian committee, gta/ETH 42-SG-48-55/56

NORBERG-SCHULZ: HEART OF THE CITY AND GENIUS LOCI

"The life-movement proceeds in changing rhytm initiated by a genius of the place, continued by the spirit of the times, and accompained by their good or evil influences. How else should we hear in our survey as we go, at one moment the muses` song, at another the shriek of furies!"[1] Geddes P., *Cities in Evolution*, 1915

Tveten Heart

We have already discussed the central role of the young Norberg-Schulz in the early fifties as far as the education and the organization of groups of young architects are concerned.

However, during CIAM 8, the Norwegian architect is not only concerned with theoretical discussions. Indeed he is one of the young architects who present their projects, showing both a critic`s and designer`s attitude.

The project, designed by Nordberg-Shultz with Mjelva and Østbye[2] is published in the book edited by Tyrwhitt, Sert and Rogers[3] in 1952 and it is also described in the second edition of TEAM[4], published in February, the same year. It concerns the design of a new centre for the town-district of Tveten, in Oslo, Norway. The district core contains facilities for about 25000 people, who live in nearby neighborhoods, and hosts a tramway station, storage, car parks, shops, offices, restaurants, cinemas, a market square, community building, secondary school, gymnasium, health centre and car workshop. The disposition of the building`s blocks and the design of the public space as a platform below them, find many resonances with St. Die` and Ciudad de Motores, designed by Le Corbusier and Sert. The influence of the Swiss-born master and the respect for him by the young Norberg-Schulz is very evident in a letter sent to Giedion Norberg-Schulz, in February 1951: talking about a residential project for 1000 inhabitants, designed in the same period of the Tveten core, the young architect indeed says that the project is so experimental that, *"One may speak almost of a Norwegian-Marseille project!"*[5] Nevertheless, if in St.Die`, Le Corbusier designs a basement which

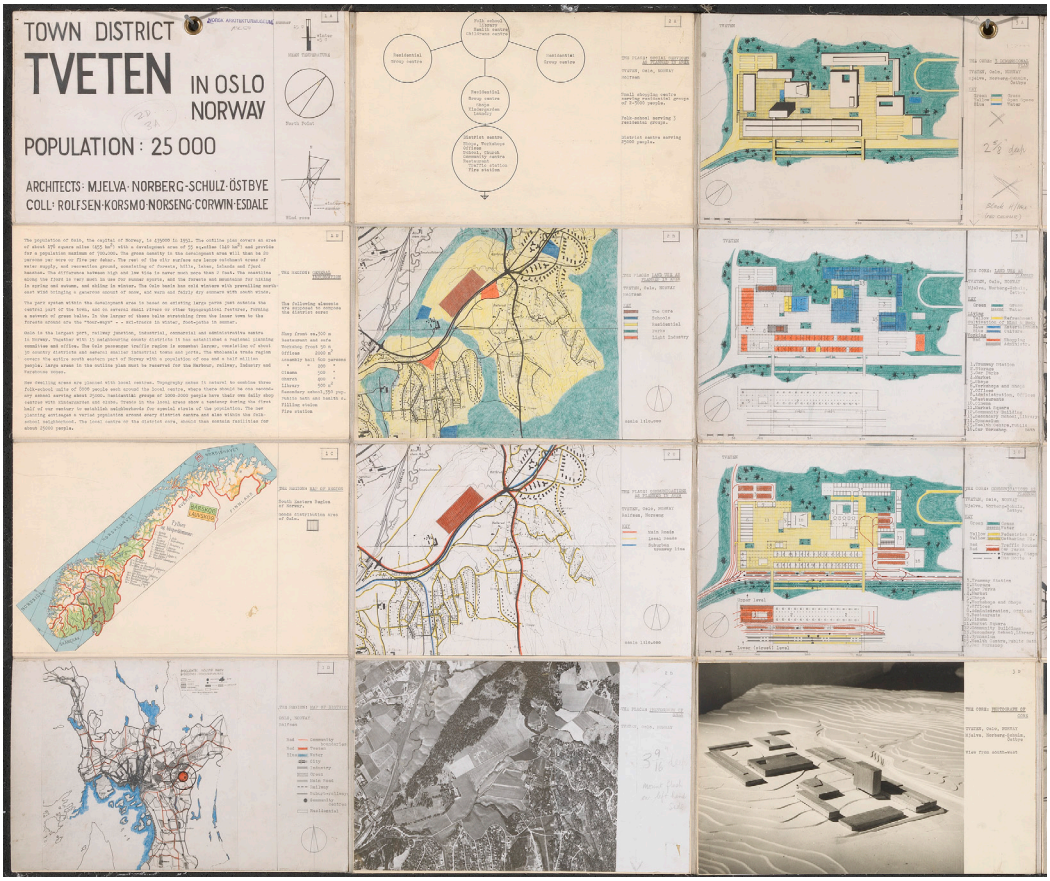
1 Geddes P., *Cities in Evolution,* London, 1949 , p. 136-137. *original Cities in Evolution: An Introduction to the Town Planning Movement and the Studies of Civics*. London, Williams and Norgate, 1915

2 Other architects are listed only as collaborators: Rolfsen, Korsmo, Norseng, Corwin and Esdale. The National Museum of Art, Architecture and Design, NAMT.ako061

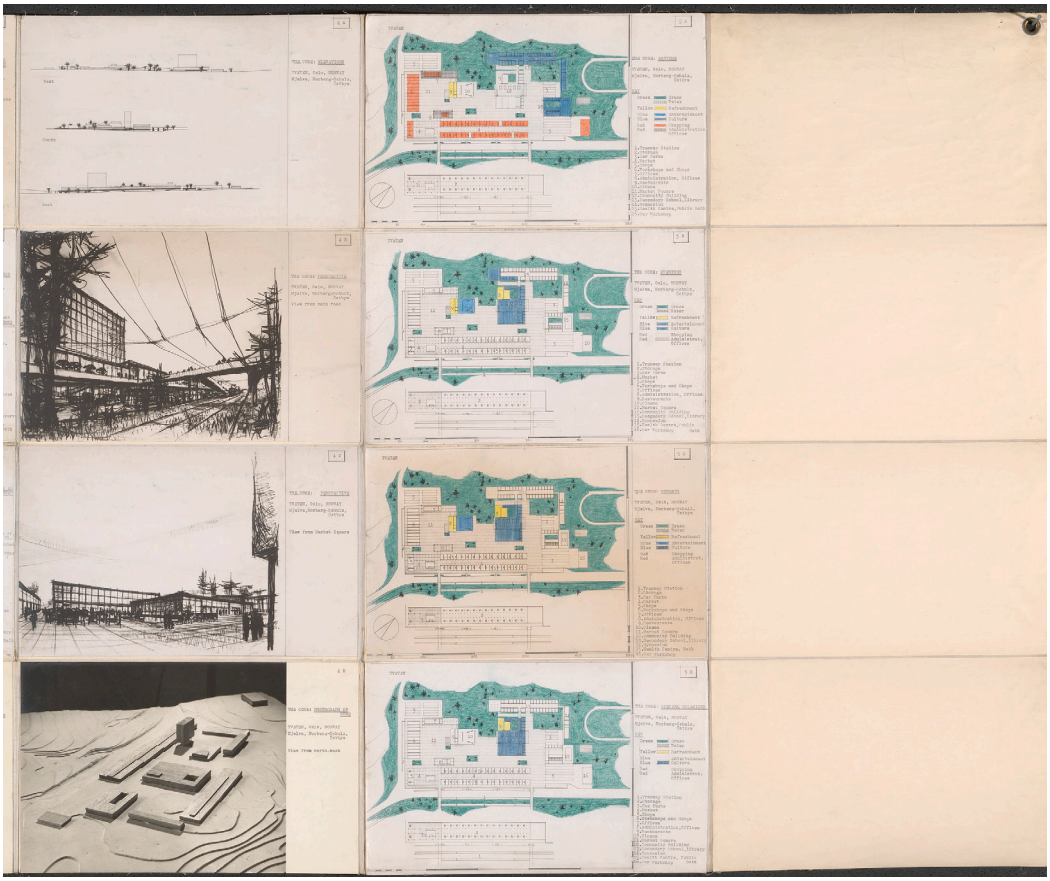
3 See Oslo, a new centre for several suburbs:CIAM Group in ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanisation of urban life.* Pellegrini and Cudahy, New York, 1952, p. 119

4 TEAM 2, Feb. 1952, gta/ETH archive 42-SG-39-62

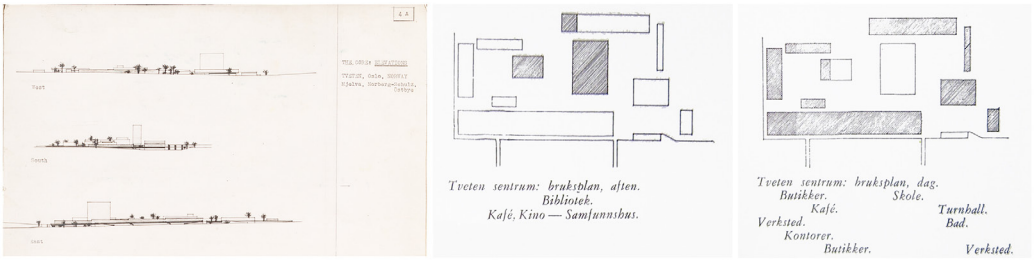
5 "*Die Gruppe funktionieret gut. Den ganzen Winter durch waren wir mit verschiedenen Arbeiten beschäftigt, am interessanten die Studien für "The Core" für den naschen CIAM-Kongress.Selber bin ich mit zwei anderen zusammen an einem Wohnprojekt sehr beschäftigt. Wir planen zwei grossen Blocke für zusammen etwa*



First part pannel
Arch: Mjelva, Nordberg-Shultz, Østbye, Coll.: Rolfsen, Korsmo, Norseng, Corwin, Esdale, Town District Tveten.
CIAM 8, 1951, The National Museum of Art, Architecture and Design, NAMT.ako061



Second part pannel



Sections of Tveten project, NAMT.ako061. Schemes in BYGGEKUNST nr. 6/7 1952, Gta/ETH42-x-14

sustains the buildings with a freedom of sculptural interrelations, as happens in Piazza Duomo in Pisa (Giedion[6]), in Tvenen the straight, long, rectangular buildings follow the sloping ground of the hill, breaking the architectural continuity and linearity shown in the plan.

The final result is a sort of discordance and inconsistency between a modern model of urban design and the topography of the site, whose relationships will find excellent interpretations by other North-European Architects, such as Alvar Aalto (1898-1976) who is one of the most acclaimed architects by Enzo Paci who, writing about the Heart of the City and the *Relazionismo*, considers the architecture of Aalto as the place where the "*new face of nature is reflected",* where *" man, in his construction and in his total commitment, finds again his voice within nature`s voice, discovering himself alive within living nature."*[7]

Finally, if the Heart idea is not so intriguing within the project Norberg Schulz presented at CIAM 8, it will become a more interesting resonance for his later theoretical discourses.

1000 Menschen, und dazu die notwendigen Gemeinschaftsanlagen. Man darf fast von einem norwegischen Marseille-projekt sprechen! Und das beste von allem, die betreffende Gemeinde hat die Plane angenommen, wir haben deshalb die besten Hoffnungen sie durchfuhren zu können." Letter from Norberg-Schulz to Giedion, Oslo 5/2-51, gta/ETH 42-SG-X-133

6 As stated by Giedion . See Giedion, S., *Architecture and the Phenomena of Transition, the three space conceptions in Architecture.* Harvard University press, Cambridge, Massachusetts, 1971, p. 270

7 *"[...] noi riscopriamo, oggi, un nuovo volto della natura, non analitico ma sintetico, non disgregato ma organico. E` il volto che si riflette nell`architettura di Aalto non per l`uso, esteriormente considerato, dei materiali, o per un facile floklorismo, ma perche` l`uomo, nella propria costruzione e nel suo impegno totale, ritrova come sua la voce della natura e si scopre egli stesso vivo nella natura vivente."* Paci E. (1954), Il Cuore della città, *Casabella-Continuità*, n. 202, p. X

GENIUS LOCI[8]

Christian Norberg-Schulz writes again about CIAM 8 almost thirty years later in his well known book *"Genius Loci: Towards a Phenomenology of Architecture",* in the final chapter regarding *"Place Today": "And in 1951 a CIAM conference discussed the Core of the City, that is, the problem of introducing in the open tissue of the modern settlement a gathering focus."*[9]

At the end of the 1970s, the Norwegian architect explains the Core`s idea as the attempt to remediate to the lack of quality of the modern settlement. It is no longer related directly to the problem of reconstruction or of the infinite sprawl of the USA's cities, as Sert posed it. He believes the modern design of the public space is too "open", with its prevalence for the "object" as described in "Collage City"[10], which is now considered the main issue which the Core is facing, introducing "*a gathering focus"* or, as Le Corbusier himself calls it, *"a place of visual acoustic."*[11]

The author continues quoting his master, Giedion, about the Core as *"part of a general humanizing process; of a return to the human scale and the assertion of the rights of the individual..."*[12] This humanizing process within the Core idea, which has been already discussed, is then linked by Norberg-Schulz with the "new regionalism" described by Giedion[13] in 1954.

The reference to the Swiss historian is very important, since his influence on the entire work of Norberg-Schulz is clear. In particular, his attempt to define the concept of place, the *genius loci*, which is an eternal divinity, eternally present as the identity of a place, clearly recalls the *"Eternal present element"* as described by Giedion, *"the one eternal center of all things, […] the recurrent, constant, and*

8 *"The ancient poets animated all sensible objects with Gods and Geniuses", wrote William Blake in The Marriage of Heaven and Hell, and particularly they studied the genius of each city and country, placing it under its mental deity..."* Tunnard C., *The City of Man, a new approach to the recovery of beauty in American cities.* Charles Scribner`s Son, New York, 1953, p. 29

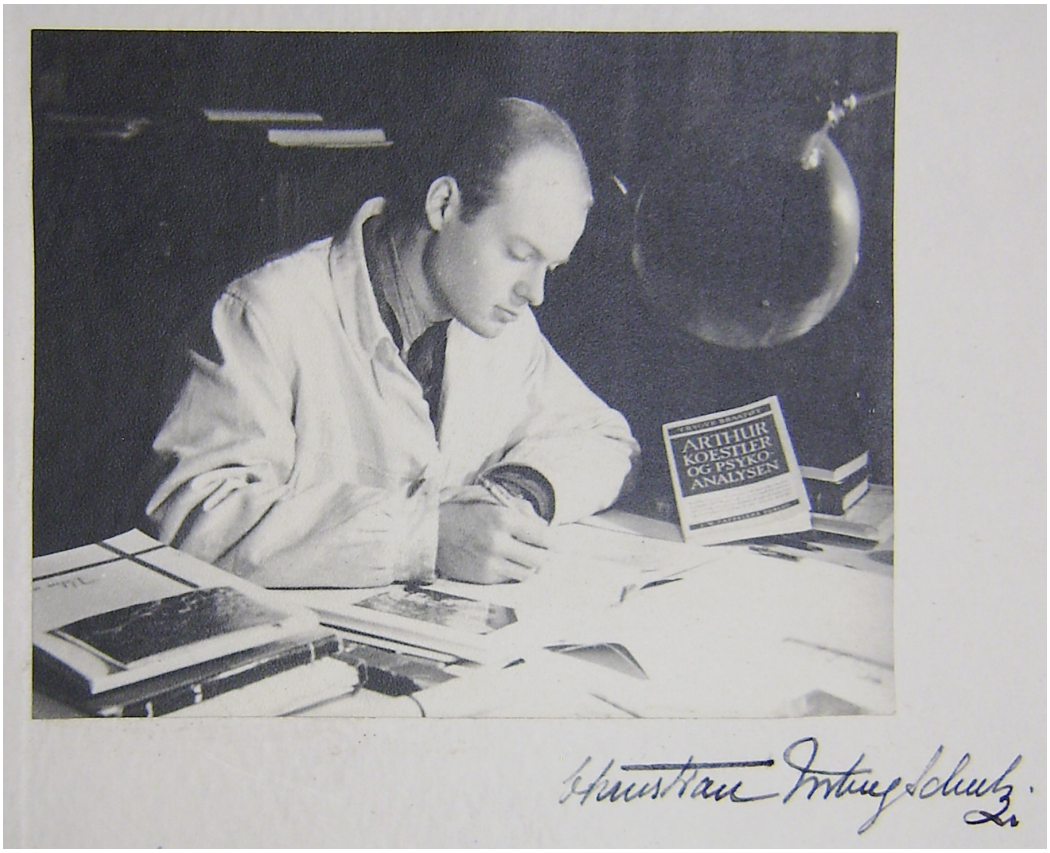
9 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195.

10 Rowe C., Koetter F., *Collage City.* The MIT Press, Cambridge, Massachusetts and London England, 1983. As we read from Acknowledgements the text was completed in December 1973

11 Le Corbusier, *The Core as a Meeting place of the Arts.* In in ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City: towards the humanization of urban life.* Pellegrini and Cudahy, New York, 1952, p. 45-46

12 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195. The quote of Giedion is from Giedion S., *Architecture You and Me*, Cambridge, Mass. 1968, p. 127

13 *"The new Regionalism has as its motivating force a respect for individuality and a desire to satisfy the emotional and* material needs of each area" In Architectural Record, January 1954, "The State of Contemporary Architecture, the Regional Approach. Also in Giedion S., *Architecture You and Me*, Cambridge, Mass. 1968, p. 145, in Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195.



Young Christian Norberg-Schulz _Hans Hofmann Archive, Semester 1948/49 catalogue, gta/ETH Zurich

typical as echoing in us and intelligible through us"[14]*.* Since these references are still strong and actual, Norberg-Schulz concludes that the items and issues discussed in the 1950s are still contemporary[15]. Thus the Core and its humanizing process are still considered an open necessity. The Core idea is not just related to a post-war rhetorical discourse, but it is an idea of the city which finds continuity through history, tending towards a good archetype of the public realm, towards a better future social condition, within a present physical form of public space. The Heart metaphor, betrayed and criticized by some of the youngest members of CIAM, still affirms its validity, thirty years later.

Then the Core as *"a gathering focus"*, finds many references in the discussion about the *genius loci*. The *"gathering"* is indeed an important idea for Norberg-Schulz; the loss of the *"process of gathering"* means the *"loss of space […] man`s loss of identification with the natural and man-made things which constitute his environment"*[16]*,* which causes social alienation. Only through the identification and the gathering based on the human purpose, which we may refer to as the Core idea, we can stop the development of this alienation. Moreover the *"gathering"* implies both a physical and symbolic movement of things from one place to another. The symbolic one is a creative translation; for instance the Greek polis is based on the symbolic movement of meaning of landscapes into buildings. *"It is a grand conception, indeed, to visualize the qualities of a landscape by means of a man-made structure, and then to gather several landscapes symbolically in one place!"*[17] *,* the author affirms.

As far as CIAM 8 is considered, the translation of the qualities of the landscapes into architectural space, into *"a gathering focus"*, is something which has been proposed for instance by Bakema. Indeed the Dutch architect finds in Asplund`s cemetery, instead of some squares, or architectural buildings, the main example for a new man-made architectural urban Core. The Swedish cemetery becomes the symbol of "*the isolation of life from death [which] has been altered into a wonderful relationship."*[18] The same relationship should be present, for Bakema,

14 Jacob Burckhardt, *Lecture on History* (1868) in Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964)*. Bollingen Foundation, Pantheon Books, New York.

15 "*We understand thus, that the leaders of the modern movement already 20-30 years ago foresaw some of the most important problems we are facing now. Those who got stuck with the early images of a green city and standardized form, were the epigones and vulgarizes of modern architecture."* Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195. The quote of Giedion is from Giedion Architecture You and Me, Cambridge, Mass. 1968, p. 127

16 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.168

17 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.170

18 Bakema, NAI, Bakema Archive, Bake, g 16

in the man-made Heart, translating a certain landscape identity into an urban theme. The Dutch architect, who becomes the representative for the young CIAM groups for the last CIAMs, replacing Norberg-Schulz, has other resonances with the *genius loci* discourse.

Indeed Norberg Schulz affirms that man *"is 'thing' among "things"*[19]. He talks about "*an Übereinstimmung, a correspondence, between his own psychic states and the 'forces' of nature",* which become *"meaningful" when man finds "a personal "friendship" with things"*[20].

Bakema, as we will discuss later, considers man as part of a total energy, *"human-being-part-of-total-existence-called-energy"*[21], defining the moment of the CORE as the "*wonder of [the] relationship between man and things"*[22] The relationship therefore becomes an important item for the discourse of the Heart and for both architects.

Moreover, the word *"thing"*, which is used by both architects, is then another outstanding theme for the author of the *Genius Loci*. Its original meaning is again *"gathering"*, as the author affirms, referring to the work of the philosopher Heidegger, who writes *"The Thing"* in 1950*. "A thing gathers world"*[23] as affirmed by the philosopher who is described by Norberg-Schulz as a *"catalyst which has made the present book possible and determined its approach"*[24]. In fact the idea itself of the "*genius loci, the spirit of the place"* Norberg-Schulz is talking about in his book, finds its origins directly within the discourse of Heidegger. In particular Norberg-Schulz refers to the concept of *"dwelling"*, as exposed by Heidegger in his well-known speech *"Bauen Wohnen Denken"* held during the Darmstädter Gespräch, in August 1951, which presents several common issues with CIAM 8, as previously discussed. The place, the space with an identity, is the physical presence where man can fully dwell; catching the deepest meaning of what

19 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195. The quote of Giedion is from Giedion Architecture You and Me, Cambridge, Mass. 1968, p. 168

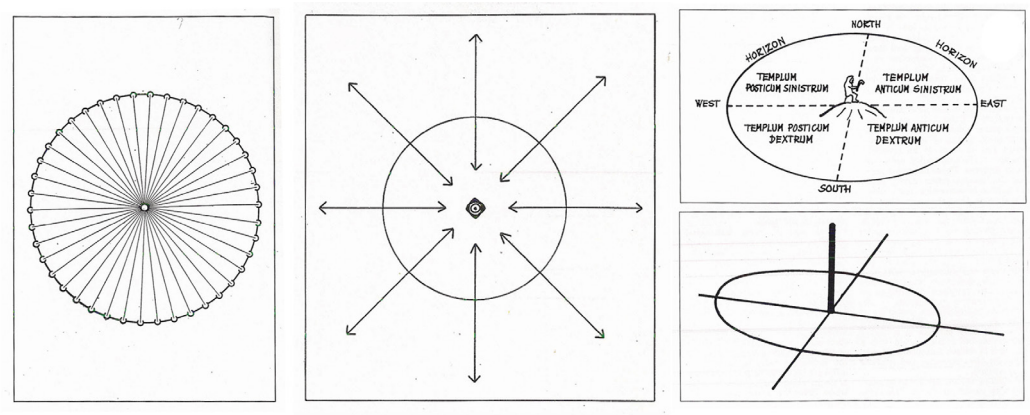
20 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195. The quote of Giedion is from Giedion Architecture You and Me, Cambridge, Mass. 1968, p. 168

21 Bakema J., *Architecturbanism – Total Urbanisation – Labour Union Controlled Society.* In Bakema J., *Thoughts about Architecture.* Academy Editions St. Martin`s Press, New York, 1982, p. 139 also in *a cura di* Gubitosi C., Izzo A., *Van De Broek/Bakema. IV Mostra di Architettura organizzata dall`Istituto di Analisi Architettonica.,* Facoltà di Architettura di Napoli (Napoli, Castel Nuovo, 14-31 Dicembre 1974), ed. Officina, Roma, 1976 p. 34

22 Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952

23 Quoted in Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p. 5

24 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p. 5



Different images of "Centre" used by Norberg Schulz in "Architecture: Meaning and Place" and "Genius Loci"

surrounds him, of a symbolic genius loci, guardian and spirit of the place. "O*nly if we have the ability to dwell, we can build"*[25]*,* Heidegger affirms. The meaning of architecture is therefore "*to visualize the genius loci, and the task of the architect is to create meaningful places, whereby he helps man to dwell.*[26]*"* Finally, only if we recognize the genius of the local place, and therefore if we are able to dwell there, can we become able to transform the social alienation into *"a gathering focus"*, the Core.

On Centre

The Norwegian architect uses G*estalt psychology* in order to explain the *"concept of space"*[27]. In particular, he refers to Jean Piaget's works on child development and to Otto Friedrich Bollnow, who demonstrates the relationships between the human actions and the concept of space in his book, *"Mensch und Raum"*[28].

The gestalt approach is well described in *"Architecture: Meaning and Place"* where the role of the project is stressed as the obtainment of *"a deeper human contact*

25 Heideger M., *Bauen – Wohnen – Danken.* Neve Darmstädter Verlaganstalt, 1952 [trad. eng. *Building, Dwelling, Thinking.* from Poetry, Language, Thought, translated by Albert Hofstadter, Harper Colophon Books, New York, 1971. trad. it. *"Costruire Abitare Pensare"* in Saggi e discorsi, Mursia, Milano 1954 p.100]

26 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.195. The quote of Giedion is from Giedion Architecture You and Me, Cambridge, Mass. 1968, p.5

27 Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.27

28 Bollnow O.F., *Mensch und Raum*. Kohlhammer, Stuttgart 1963. It is interesting to underline that the book of Otto Friedrich Bollnow (1903-1991), *"Mensch und Raum" (Man and Space)*, has the same title of the Darmstadt Congress held in 1951

and a richer interaction"[29], with many resonances with that humanizing process of the Heart, as described by Giedion. He already hints at the gestalt during his speech about the historical background of the Core, when he quotes Sartre - "*We need today signs and symbols which spring directly to the senses without explanation"*- referring to some works carried out *"by certain psychologists."*[30] Particularly interesting is the significance of the centre which is given by Norberg-Schulz through the Gestalt, since we have already discussed its overlapping and sometimes misleading definition compared with the Heart idea.

The centre is not just the main square, or the historical tissue of the city. It can be *Caput Mundi* of Rome`s Capitol or the centre of the nomadic tribes, but *"the individual is at the centre"* for Norberg-Schulz, in a continual *"tension between existential space and immediate egocentric space"*.[31] Therefore the definition of the centre is a consequence of that humanization process described by Giedion, translated in a psychological process. Not considered as a physical presence, it becomes the psychological result of the relationship between the inner mental and the outer experience, of a psychological *in-between*. The sanity of the individual centre is therefore dependent on the presence of a meaningful milieu where the individual can identify himself. Human life depends on this *"system of meaningful places";* Norberg-Schulz affirms this, referring to a poem by Kafka written in 1903, in which the poet attempts to evoke the image of these milieus.[32] However*, "at the most, the city of today inspires the poets to run away"* – the architect affirms ironically – "*The reason for this state of affairs is obviously that the modern city does not offer enough possibilities for life."*[33] This lack of both physical and symbolic milieu within the modern city is also the main issue which the Heart idea is facing, as described before. We may then interpret the Core, not as the centre of the city, but as the significant milieu which fully satisfies the identification necessity for each individual psychological centre. Finally, the centre definition again highlights the necessity to introduce "*a gathering focus",* and the continuing validity of the Heart of the City idea.

29 Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.27

30 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

31 Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.30

32 *"Men walking across dark bridges/past saints/ with dim lights./Clouds, moving across the grey sky / past churches / with fading towers./ One, leaning on the parapet / looking into the evening water / his hands on old stones."* quoted in Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.24

33 Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.26

Genius Loci and the Heart of the City

The relationship between the *Heart of the City* as exposed during CIAM 8, concerning *"the postwar reality, the reduction of man to an atomized and fragmented existence in both city and society"*[34], and the *genius loci* of Norberg-Schulz has also been recently analyzed by the historian Volker M. Welter who reveals the existence of other definitions of the *genius loci*, in addition to that one used by the Norwegian architect. The first meaning is presented through the idea of Patrick Geddes (1854-1932) who considers the discovery and the capture of the *genius loci* as a passive action, which requires almost nothing to do. *"Wait in reverence for the genius loci of the place to work its miracle in its own way*[35]*"* - Geddes indeed affirms. Therefore the best way to actively re-evoke its spirit, in order to have a positive repercussion on the structure of the society itself, is to concentrate the *genius loci* in a *locus genii,* a specific and determined physical place which can itself symbolize the genius of the entire community, which would *"express, stimulate its [the city`s] highest possibility, and so deal all the more effectively with its material and fundamental needs"*[36].

The necessity of this symbolic centre of the city, where the *genius loci* can reveal itself, is highlighted also, according to Welter, by Bruno Taut (1880-1938) who designs the City Crown as a symbol of the spirit of the community, condensed in a physical building, in order to reconstruct a certain civilization lost with the advent of the first World War. Taut seems a perfect example of the second meaning considered by Welter. Indeed the author mentions the philosopher Immanuel Kant who describes, in *The Critique of Judgment,* the genius as a talented person who creates original works which become even models for the others. The architect who designs the city *"as the primal generator of a city`s life and character"*[37], becomes, therefore, the main *genius* who translates, in a physical form, the genius of that specific place. The real *genius* is therefore the human entity who transforms the physical realm rather than the physical place itself.

Finally many similarities and resonances can be found with the Heart of the City Idea.

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34 Welter V.M., Form locus genii to heart of the city. Embracing the spirit of the City. In ed. by Whyte I.B., *Modernism and the Spirit of the City.* Routledge, London, 2003, p. 53

35 Geddes P., Branford V., *Our Social Inheritance,* London, William and Norgate, 1919, p. 280-183 quoted In Welter V.M., *Form locus genii to heart of the city. Embracing the spirit of the City*. In ed. by Whyte I.B., *Modernism and the Spirit of the City.* Routledge, London, 2003, p. 40

36 Geddes P., *Cities in Evolution: An Introduction to the Town Planning Movement and the Studies of Civics*, London, Williams and Norgate, 1915, p. vii, vi quoted In Welter V.M., *Form locus genii to heart of the city. Embracing the spirit of the City*. In ed. by Whyte I.B., *Modernism and the Spirit of the City.* Routledge, London, 2003, p. 41

37 Welter V.M., *Form locus genii to heart of the city. Embracing the spirit of the City*. In ed. by Whyte I.B., *Modernism and the Spirit of the City.* Routledge, London, 2003, p. 45

Each architect who is present at CIAM 8 can be considered as the Kantian genius whose aim is to design a new original model of the public realm. The new City Crown is no longer the architectural building which links man to Heaven, and Earth as Taut considers it, but it becomes the emptiness of the public space, of the *"gathering focus"* of the Heart of the City, which embraces the spirit of the place rather than to raise it in a tower.

Nevertheless, from the *genius loci* to *locus genii*, the meaning seems to remain the same since Norberg-Schulz himself considers the capture of the *genius loci* as a symbolic translation of the identity of a place into an architectural form. This latter action is totally active, (not passive as considered by Geddes) and it needs a genius architect with many strengths, whose aim is to create *"meaningful places"*.

Moreover we must note the examples of Cores presented at CIAM 8, are not always expressions of a local identity. However, they will become models for future urban developments, indissolubly linking themselves forever to the history of their context. For instance, it would be interesting to ask ourselves if the spirit of St. Die` is now better mirrored in the existing city rather than in the unbuilt project of Le Corbusier.

Therefore the link between the *locus genii*, or the symbolical translation into a physical architectural form of the *genius loci,* and the Core is not so direct and easy to confirm, as Welter attempts to do.

Another interesting issue is the relationship between the spirit of the place, g*enius loci*, the so called spirit of the time, *zeitgeist*, and the Core. In accordance with Hegel the *zeitgeist* concept, *"the will of the epoch into space"*[38] (Mies van der Rohe), assumes that the artistic work can only be the expression of the general structure of each epoch[39]. If we consider the city as a work of art, the issue of the overlap of a spirit of place and a spirit of time seems deepened for instance by Sert. Indeed, the project for Chimbote becomes a good example where the genius architect has adopted an interesting new synergy between a new modern model and the local context. As a result, the Core, for Sert becomes the attempt *"to provide a modern extension of an old tradition."*[40] Moreover the symbolical overlap of the two spirits can be found with some similarities in the "continuity" discourse of the Italian CIAM members, as discussed before.

38 Quoted in Curtis W.J.R., *Modern Architecture since 1900*. Phaidon Press, 1996, p. 273

39 See *Le illusioni dello Zeitgeist* in Marti Aris C., *Silenzi Eloquenti.* Marinotti ed. , 2004, p. 71

40 ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City:towards the humanisation of urban life.* Pellegrini and Cudahy, New York, 1952, p. 130

Aldo Rossi and the Core [41]

As far as "continuity" is concerned, it would be interesting to introduce a fourth *genius loci`s* definition which more or less directly refers to the Core as the historical discourse of the Heart of the City idea.

We have seen the importance of Rogers and of the Italian CIAM Summer School for the introduction of the continuity of the history and of the context within the modern discourse. Another Italian architect, Aldo Rossi (1931-1997), a pupil of Rogers, will carry on the discourse of the continuity within the well known book *"Architettura della Citta`"*, published in 1966, clearly basing his theory on the previous ideas of the Italian editor of *"Il Cuore della Citta`"* (1952). Rossi specifically considers the *locus* as the relationship, between the local context and the new construction, rather than the place itself governed by the *genius loci*[42]. Moreover the aim of the *locus* is the identification of a particular urban fact within the undetermined space, with reference to the geographer Max Sorre who identifies the existence of *"singular points"*.

The city as *"cosa umana per eccellenza"*[43], is then considered as composed of "area-residenza" (residential area) and "elementi primari" (primary elements) which are similar to Sorre`s "singular points" highlighted by the locus. As far as their definition is considered, these elements or points can be monuments or fixed activities or only aggregation nuclei; their entity is not well clarified as the *locus* itself which is also considered *"rationally inexpressible"*[44]. This lack of definition is a lack of investigation of the structure and character of places as well, as Norberg-Schulz himself will later criticize[45].

However Rossi describes the purpose of these primary elements as *"the*

41 *"[...] there are clear conceptual parallels between his (Rossi) theory and the system of cores in the CIAM`s urban planning."* Domhardt K.S., *From the "Functional City" to the "Heart of the City". Green Space and Public Space in the CIAM Debates of 1942-1952*. in Brantz D., Dumpelmann S., *Greening the City: Urban Landscapes in the Twentieth Century.* University of Virginia Press, 2011, p. 133-156.

42 *"[...] la situazione, il sito, era governato dal genius loci, dalla divinità locale, una divinità appunto di tipo intermedio che presiede a quanto si svolgeva in questo luogo."* Rossi A., *L`architettura della città.* Città Studi ed., Milano, 1978, p. 139

43 Rossi A., *L`architettura della città.* Città Studi ed., Milano, 1978, p. 31 Norberg-Scgulz instead criticizes: *"What is most disturbing in Rossi`s book is in fact the total absence of man."* Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.183

44 *"[…] e forse non resta che l`affermazione pura e semplice del valore del locus; poiché questa nozione del luogo e del tempo sembra inesprimibile razionalmente anche se essa comprende una serie di valori che "sono" al di fuori e oltre i sentimenti che noi proviamo nel coglierli."* Rossi A., *L`architettura della città.* Città Studi ed., Milano, 1978, p. 140-141

45 *"Although the word locus appears frequently in Rossi`s book, he does not investigate the structure and character of the places. Therefore he cannot apprach the problem of adapting a type to local circumstances."* Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.183

acceleration of the process of urbanization" or the participation in *"the evolution through time of the city in a permanent way*[46]*",* highlighting their importance for the construction of the urban structure itself. We may affirm then that the definition and aim of the primary elements of Rossi clearly recall the "gathering focus" described by Norberg-Schulz when considering the Heart of the City. Moreover they have resonances also with the Heart idea as described by CIAM 8, or at least with some of its interpretations. Indeed if we read one of the definitions proposed in *"A short Outline of the Core"* in 1951, we may find an interesting echo of what we have read before about Rossi:

"The word "Core", in the sense we are using it, does not mean merely the centre of the urban agglomeration, nor the busy heart of the city traffic or economic activity; sometimes it may be united with these areas, but the Core includes other elements, often of imponderable nature"[47]

We can find of course some differences such as the reference to the monument, to the architectural building by Rossi and to the public space, to the urban void by CIAM members. Moreover the primary elements have active functions as catalysts of the city while the Core`s definition usually lack of an interest on the positive effects on the surrounding sites. However it is important to note that the Italian architect highlights the permanent quality and the eternal presence of the *primary elements*; le *"permanenze"* are considered a past presence which we experience now and which are detectable within monuments or urban routes. *"Rossi looks for an eternal truth"*[48], as Norberg Schulz affirms, similarly again to Giedion with his *"Eternal present"*.

The permanence of the Core is not considered by all CIAM members. But not by coincidence, it is Rogers, Rossi`s *maestro*, who highlights this issue during CIAM 8 with the non-existent separation between *"eternal and temporary art"*, since *"every time you draw a line you should do it as if it is thought to stay forever"* [49]. The influence of Rogers on Rossi is evident. Indeed le *"permanenze"* of Rossi has a similar meaning to the *"preesistenze ambientali"* as described by Rogers in his magazine Casabella-Continuità, where Rossi himself works as collaborator since 1955[50]. Since this *"continuity"* discourse finds its origins (or one of its

46 Rossi A., *L`architettura della città.* Città Studi ed., Milano, 1978, p. 105-106

47 ed. by Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City:towards the humanisation of urban life.* Pellegrini and Cudahy, New York, 1952, p. 165

48 Norberg-Schulz C., *Architecture: Meaning and Place*, Electa, Rizzoli, New York, 1988, p.183

49 Krieger, A., Saunders W.S., *Urban Design.* University of Minnesota Press, Mineapolis-London, 2009,p.26; *cit in Ernesto Rogers,"Resume of Open Session, Wednesday July 11", in un procedimento non pubblicato del CIAM 8, CIAM JT-6-16-75*

50 The importance of the ideas of Rogers on Rossi is mentioned also by Eric Mumford : *"Well before Aldo*

origins) at CIAM 8 in Hoddesdon, as Gregotti affirms, then we may assume that also *"L`Architettura della citta`"* is indirectly influenced by the Heart of the City debate; or at least it has many resonances with the interpretation proposed by the Italian CIAM group: the Core as the historical continuity of the Heart idea.
Finally, it is interesting to underline that both *"L'architettura della citta"* and *"Genius Loci"* are first published in Italy. The similar echoes of the Core which we find in both books are symptoms of a cultural influence, which is present at the CIAM Summer Schools as well. It is a *"pride in modesty"*[51] which refuses to adopt all modern movement axioms, *"not having fully digested the idea of function"*[52], as Quaroni states during the CIAM Summer School in Venice, in 1954. It is a cultural context where the Heart idea has found a deep significance, modelling and influencing the theoretical and design practice of later decades.

Rossi, Rogers had introduced the concept of the "preesistenze ambientali", emphasizing how preexisting urban conditions continue to shape those of the present." Mumford E., Defining Urban design. CIAM Architectus and the Formation of a Discipline, 1937-69. Yale University Press, New heaven and London, 2009, p. 115

51 Sabatino M., *Pride in Modesty: modernist architecture and vernacular tradition in Italy.* University of Toronto Press, Toronto, 2010

52 Quaroni L., CIAM Summer School in Venice, 1954, *"The Architect and Town Planning"*. Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011 and NAI, Bakema Archive, g51

III ACTOR:
BAKEMA, the Heart as Relationship

BAKEMA AND THE RELATIONSHIP

"We all have to meet in this process at the station called 'Idea'. "[1] *J.Bakema*

Jacob Berend (called Jaap) Bakema (1914 – 1981) is one of the young CIAM`s architects, attending his first meeting in Bridgwater in 1947. Bakema, who is the principal with J.H. van den Broek (1898-1978) of one of the most famous and productive Dutch architectural firms after the war, becomes an important key figure inside the CIAM organization in the 1950`s: on one hand he receives the duty from Le Corbusier and Giedion to continue the old CIAM tradition when its disintegration is forewarned; on the other he is later so influential inside the young Team X, that in Giancarlo De Carlo`s opinion the cultural death of Team X coincides with the physical death of Bakema himself in 1981[2].
Bakema`s crucial role of link between the old CIAM`s and the young TeamX`s debates is already evident at CIAM 8. Indeed the 37 year old Dutch architect presents an interesting point of view about the Heart of the City which seems different, even if not in contrast, with the other architect`s statements:

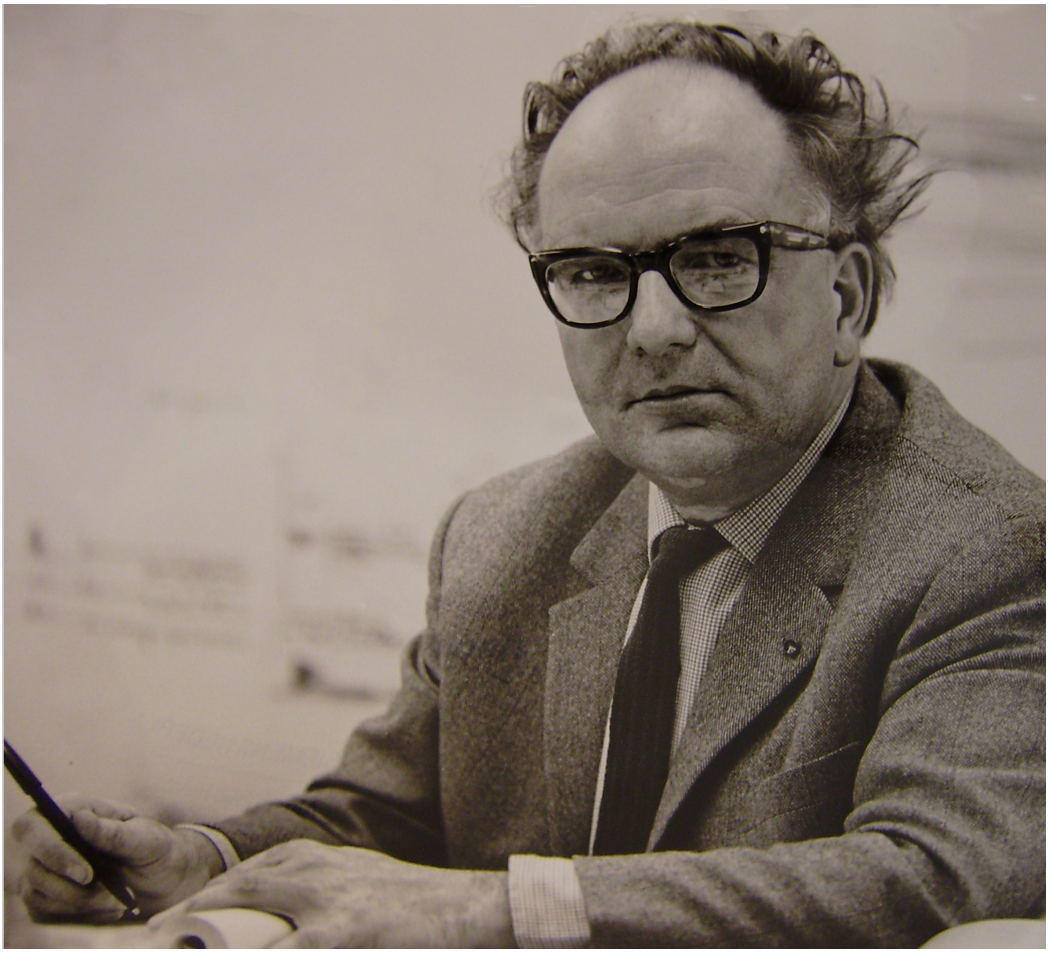
"What I ask myself is, at what moment can we really speak of CORE – the Core that we can plan in architecture and in town planning. Perhaps we can answer this: There are moments in our life in which the isolation of man from things becomes destroyed: in that moment we discover the wonder of relationship between man and things. That is the moment of the CORE: the moment we become aware of the fullness of life by means of cooperative action."[3]

Bakema doesn't present any city centers` projects as first examples of this *"moment of the Core",* which is instead firstly represented by a Cemetery. Indeed he affirms to have visited Stockholm some months before the meeting in Hoddesdon and to have enjoyed the cemetery designed by Erik Gunnar Asplund

1 Bakema J.B., *Thoughts about Architecture.* Academy editions, London, St. Martin`s press, New York, 1981, p. 31

2 *"Team 10 ended because we stopped meeting; and this hapened when Bakema died and his post box was closed. We continued to see each other but there were no more meetings after Bakema died."* from an interview between Clelia Tuscano e Giancarlo De Carlo in AA.VV., *Team 10.1953-81 in search of a Utopia of the present.* NAI Publisher, Rotterdam, 2005, p. 343

3 Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952



Jacob Berend Bakema (1914 – 1981)

(1885 – 1940),[4] :*"I think in this cemetery there is a core, though of a special kind. It is a place where the isolation of life from death has been altered into a wonderful relationship."*[5] Indeed the Cemetery, especially in North Europe, is considered as the place where alive people can enjoy the landscape as a public space for collectivity, in a synergy between life and death. But the heart can be also inside a building, as already stated by Le Corbusier who explains that in every private house there is a core around the hearth. Therefore Bakema continues recounting that a few days before the Swedish visit he was in Aulanko in Finland waiting for a typical local sauna. Well, *"I can assure you a Finnish steam – bath can be an element of a core"* too.

The immediate questions we pose ourselves is how the Heart can be represented by both a cemetery and a Finnish bath and why the Dutch architect doesn't firstly use urban examples in order to explain his point of view. Bakema answers that the Relationships between things, from the small to the large, from the Sauna to Asplund Cemetery, are the most important realities which are present in nature, as already supported in all kinds of knowledge in the XXth Century: we can recognize it in the art works of compatriot Piet Modrian (1872-1944) where *"plurality of forms, lines, colors, and empty spaces creates relationships"*[6],

4 "*Some months ago I was walking in the cemetery of Asplund`s crematorium in Stockholm - in this wonderful composition of trees, grass, halls, flowers, hills, rocks and living and dead people."* NAI, Bakema Archive, Bake, g 16

5 Ibid.

6 *"Plurality of forms, lines, colors, and empty spaces creates relationships. In single forms, the proportions of the different parts of these forms represent the relations that create rhythm. It should be emphasized that forms, colors, lines, spaces are as important as the relationships, and conversely, all means of expression determine the character of the rhythm. The same is true in social life: the constituent elements are as important as their mutual relations."* Mondrian P., *Plastic art and pure plastic art and other essays, 1941-1943.* Wittenborn and Company, New York, 1945, p.44

In Art field, Cézanne (1839-1906) is the beginner of a visual revolution of the XX Century art, continued by Cubism, by Picasso (1881-1973) and Braque (1882-1963) by the others, in their master pieces of art where the relativity theory gains a visual existence thanks to a rejection of the central perspective, the rejection of a fixed space in favor of multiple view points, in favor of the expression of the time in the visual image,...

In the Italian Futurism the Bergson relativistic idea is still stressed by the simultaneous states of mind, by *"the simultaneousness of the ambient, and therefore, the dislocation and dismemberment of objects, the scattering and fusion of details, freed from accepted logic, and independent from one other."* In the same way the dynamism shown in Boccioni (1882-1916) sculpture is nothing else than *"the lyrical conception of forms, interpreted in the infinite manifestations of the relativity between absolute motion and relative motion, between the environment and the object which come together to form the appearance of the whole: environment + object."* Boccioni U., Carrà C., Russolo L., Balla G., Severini G., *The Exhibitors to the public 1912. in Apollonio U., Futurist Manifestos.*, Thames and Hudson, London, 1973, p.47/93

Any relativistic correspondences can be found also in Surrealism, in Dadaism, in Costructivism and of curse in the dutch De Stijl group as well, formed firstly by architects Oud, Rietveld, van Eestern, the painters Mondrian and van der Leck and the sculptor Vantongerloo.

For a deep analysis of Relationship and Relativity in different areas of knowledge see Strauven F., *Aldo van*

in physics in the "*General Theory of relativity"* (1916) of Einstein (1879-1955), in Riemann`s geometry of variable curvature, in Heisenberg`s measurement interactions(1927)[7], in philosophy and humanities in Husserl`s (1859-1938) *Logische Untersuchugen* (1900), in Bergson`s (1859-1941) "*la durée"*[8] or in Joyce`s (1882-1941) "*Stream of Consciousness"*, and so on.

Bakema, similarly to his colleague Aldo Van Eyck (1918-1999), is fascinated by its new worldwide vision of the world and he seeks a translation of these theories in Architecture. As Van Eyck states: *"Our unbounded gratitude is due to them: to Picasso, Klee, Mondrian, and Brancusi: to Joyce, Le Corbusier, Schoenberg, Bergson, and Einstein: to the wonderful gang."*[9] Anyway, among the multitude of references, Mondrian (1872-1944) clearly remains the fundamental one, for his proposal to seek the purest expression between geometry and color: the reciprocal relationship between the horizontal, the vertical, their right-angled intersection and "*the rhythm of color and size relations"*[10] as a pure and dynamic equilibrium between universal and individual.

The reference to Mondrian`s and De Stijl`s art movement is clearly expressed for the design of Pendrecht II, which is presented in Hoddesdon by the dutch group Opbouw, within which Bakema has a significant role.

The first proposal for Pendrecht, a district in Rotterdam-south, is already exposed in 1949 at CIAM meeting in Bergamo. It consists of five built volumes containing different dwelling types corresponding to four different family types (older, large, medium, small families); these types are organized in a pattern which creates a barycentric small and centrifugal form like a public square. "*Space flows from building to building and from housing unit to housing unit"*[11], Bakema affirms. The designed district is then composed hierarchically by five neighborhoods, which

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Eyck, The Shape of Relativity. Architecture and Natura, Amsterdam, 1998

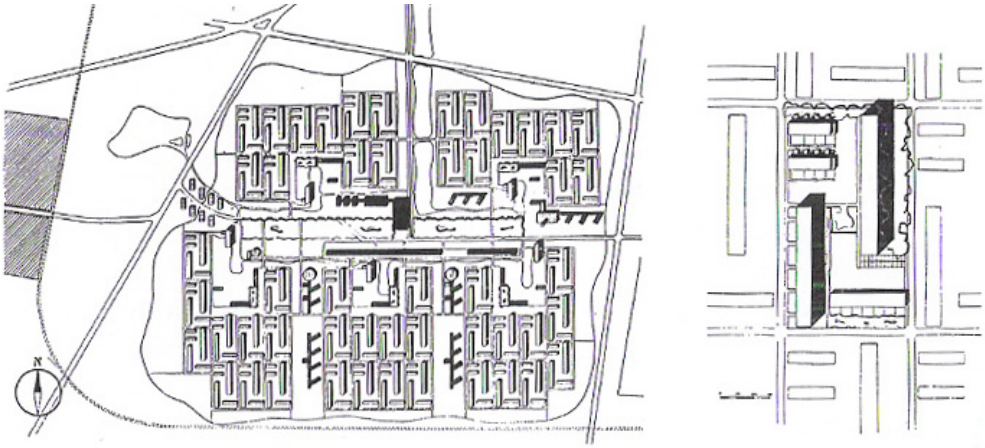
7 Heisenberg W., *Das Naturbild der heutigen Physik.* Hamburg, 1955, p.22; trad.En: Heisenberg W., *The Physicist`s Conception of Nature*. Greenwood Press, westport Conn. 1965, p. 28; quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.430

8 *"the mutual penetration, an interconnection and organization of elements, each one of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought."*Bergson H., *Time and Free Will, an Essay on the immediate Data of Consciousness.* Allesn and Unwin, New York, 1910, p.101

9 Van Eyck A., *The Role of the Architect in Community Building, Team 10*. in Bell G., Tyrwhitt J., *Human Identity in the Urban Environment.*Pinguin book Ltd, England, 1972, p. 376

10 *"The rhythm of color and size relations reveals the absolute within the relativity of time and space.[…] Its exact visualization of the cosmic relation makes it a direct expression of the universal- the rhythm, the material reality of the work of art makes it an expression of the subjective, of the individual." Mondrian P., De Nieuwe Beelding in de Schilderkunst, in De Stijl, 1917, n.1, p.2-6 quoted in Strauven F., Aldo van Eyck, The Shape of Relativity. Architecture and Natura, Amsterdam, 1998, p.448*

11 Quoted in Bauen+Wohen (1959), n.3, p.88 and in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.365



Pendrecht I, 1949

are the result of ten housing units and each of which constitutes a sub-center.
The Pendrecht II (1951) certainly presents a clearer drawing of the centrifugal public central square, as we can note from the master-plan. Moreover, differently from the first version, this project seems socially richer since it no longer presents mono-functional residential zones, but develops facilities and activities situated inside a circular central road, connected to the central activities and the four different central cores. Indeed "*the square does not form that heart in itself and alone, but together with the activities expressed alongside it."*[12] - the Opbouw group explains. Finally these activities are provided at all scale levels from the district, to the neighborhood, to the housing unit.
As far as the Heart is concerned, Bakema mostly uses "Core"[13] in order to delineate both the physical public space and the theoretical idea of Heart. The Central Square of Pendrecht itself is described "*as the expression of the totality of the core, as living heart of the locality"*[14] . It is therefore both the central square and a sort of symbol of the local identity of the city. This double entity of the Core-Heart is highlighted at the end of the report about Pendrecht II at CIAM 8, when Wissing resumes very interesting theoretical points evoked iwithin the project:

1e. the abstract core is not one point, or one space, or an expression of only one activity, but an idea , expressed now, by one, then by another activity, fluctuating

12 Ibid.
13 See the chapter about CIAM 8 for the distinction between Core and Heart.
14 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18



Pendrecht II, 1951.

Pendrecht II, 1951

from one place to another, reaching his extreme expression perhaps within a certain, but not distinctly bordered, region;

2e. there can be traced a certain scale of different importance as core-forming elements, that must be expressed by a different situation in relation to each of the various activities;

3e. however this may not lead to a distinct separation between the primary and the secondary activities related to the core and between these and the residence;

4e. on the contrary there must be a dynamic continuity of space, expressing the totality in every of its components.[15]

The project of Pendrecht has to be considered therefore as an intriguing overlapping of both a concrete physical project and an abstract theoretical research about the Heart theme.
The definition of the Heart as Idea definitively contrasts with the functionalist centrality of the Core: even if the central square of Pendrecht is the Core of the City, its significance is recognized as a more complex theoretical issue which is not possible to resume with its centrality in the city as a mere CBD. This is clearly expressed[16] by the Opbouw Group, in contrast with some more superficial interpretations of the central Core given by some of the other CIAM`s member as already stated in the previous chapters. Moreover this definition of the Heart as *`idea`* seems coherent with the symbolical abstract emphasis given for instance by Giedion to the Heart of the City and with its archetypical entity, as *"eternal present element"*.[17]
In particular we can consider the Heart as an "idea" of Relationship, of a *"dynamic continuity"* where each component and totality are physically and theoretically connected avoiding any functionalist division. The Heart as relationship is thus another antagonist to the Heart as 5th element in addiction to the four functions, as depicted by MARS Group in the CIAM8`s invitation. Moreover it is an interesting interpretation of the heart theme, which can be considered as a bridge between

15 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18
16 Unfortunately this part about the abstract Idea, is missing in the published book of the CIAM 8 edited by Sert, Rogers, Tyrwhitt.
17 See chapter about CIAM 8, Heart and symbol. See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238 See also Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964)*; Giedion S., *The background of the heart* in Sert, Rogers, Tyrwhitt, *`The Heart of the City – towards the humanization of urban life.`,* London, 1952

the old CIAM`s themes and the brand new interpretations of the urban association by the Team X. This is evident for instance in the St. Louis` project (1959-`60), which is later analyzed and in the theoretical consonances with the already quoted Enzo Paci: the italian philosopher is invited to talk about his *Relazionismo*, which perfectly mirrors Bakema`s theory, only in the last International Summer School of Venice in 1957 when the CIAM is already dead and his ideas seem coherent with the arsing of the new generation of Team X, as already discussed in the second actor. Paci`s interest in the Relationship also finds consonances with the debate of the First Urban Design Conference at Harvard in 1956, and therefore with the continuity of old CIAM too, since the Heart as Relationship, *"as the focus moment of relations,[...]"* is depicted as *"a social problem which is closely connecting the architectural design and urban planning."*[18] The Heart as Relationship is, therefore, both a terrific theoretical and urban design theme in the late 1950`s, which involves a transatlantic debate about the City and which guarantees, as a *'theoretical inbetween'* , a continuity between the CIAM and Team X[19].

Finally the Heart as Idea has then many resonances for the later *"story of another Idea"*[20], which appears in 1959 in the first issue of Forum edited by Aldo van Eyck: it is, on one hand, a polemic criticism to the *"misfit planning"* of the old pre-war CIAM and on the other it is a statement of the TeamX`s *"inter-human relationships"*[21] which gives a better description of the real complexity of the city and which is already present in the Idea of the Heart as Relationship.

As far as the Relationship is particularly conceived by Bakema, the Dutch architect imagines a new type of society which is linked to a new sense of space, in a world which is considered as an all-embracing energetic unity where the relationships are more important than the things themselves. In this sense life is conceived as a special state of energy, a dynamic – creative process in a continual transition from one condition to another: it is *"a flowing process"*[22] coherently with the Heart which is "*fluctuating from one place to another […]"* with no *"distinctly*

18 *"In quanto momento focale di relazione, il cuore della città è un problema sociale nel quale si congiungono strettamente il progetto architettonico e il piano urbanistico."* Paci E., *Il cuore della Città.* Casabella Continuità, agosto-settembre 1954, n. 202, p. vii

19 We have already discussed the similarities between the Urban Design and Team X`s Scale of Association. See chapter about the First Urban Design Conference.

20 See Forum (1959), n.7 and Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.339

21 See Ibid., p.345

See Scale of Association which has been described in the Chapter about the Urban Design.

22 Bakema J.(1948), New Architecture and Freedom, *Forum*, n.2, p. 48-50

bordered, region"[23]*.* Bakema then describes Man as the unique part of this total energy which might be conscious about it and which has to find the way to keep an harmonious relationship: Bakema calls Him the *"human-being-part-of-total-existence-called-energy".*[24] Bakema`s idea of Humanism finds many consonances with the Existentialism of Sartre, quoted by Giedion at CIAM 8[25], avoiding any Universal Centrality of Man who, instead, exists only thanks to the relationship with other forms of energy.

In this sense the Architecture has the duty to reconcile the right physical connection between the individual and his surrounding energy`s forms. Furthermore, this right and fair reconnection between Man and his environment has to be made through the most gradual and transitional elements. Therefore the Architect`s duty, according to Bakema, is to design *"as many as possible variations in space qualities"*, between the individual, "*his fellow man, horizon sun and stars";* while the Architecture is the discipline which regulates the Relationship at different scale levels, as a *"Social – Cosmic- Spatial Composition"*[26], as *"an expression of the new relationship between the man-made environment and total space."*[27]

The City itself should maintain, as reference, the Schröderhuis house designed by the dutch architect Gerrit Rietveld (1888 – 1964), whose dynamic interior, its floating flexible surfaces create a connection between the inside and the outside in a total energy dynamic, changeable open zone[28]. The De Stijl remains therefore

23 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18

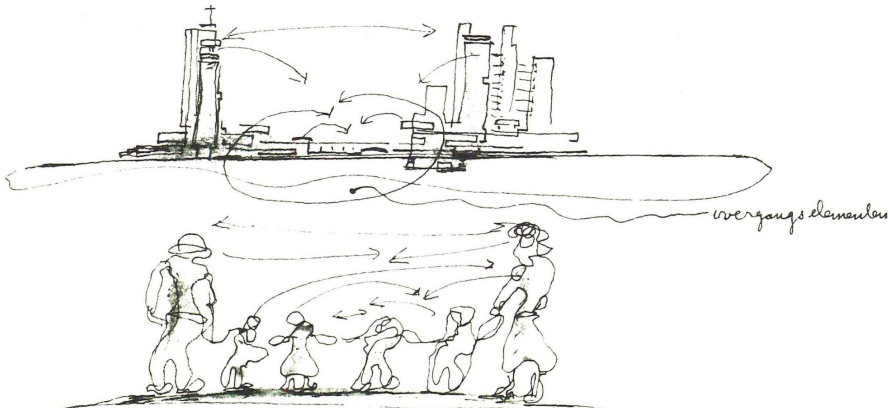
24 Bakema J., *Architecturbanism – Total Urbanisation – Labour Union Controlled Society.* In Bakema J., *Thoughts about Architecture.* Academy Editions St. Martin`s Press, New York, 1982, p. 139 also in *a cura di* Gubitosi C., Izzo A., *Van De Broek/Bakema. IV Mostra di Architettura organizzata dall`Istituto di Analisi Architettonica.,* Facoltà di Architettura di Napoli (Napoli, Castel Nuovo, 14-31 Dicembre 1974), ed. Officina, Roma, 1976 p. 34

25 See the chapter about the HEART AS SYMBOL OF NEW HUMANISM. The Universal centrality of Man is instead proposed by Wiener and Sert in their urban diagrams as already discussed in the chapter about the First Urban Design Conference.

26 *"Social – Cosmic- Spatial Composition […] an organism, a thing, a happening that is part of the social-universal happening, but which within this general happening nonetheless acquires a distinct value and become a sign."* Bakema J., *Het nieuwe bouwen en verder.* In Forum (1947), n.2-3, p.66-68, quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.217. also *`To make man familiar with space `endlessness` will become the main function of the art of making space (architecture)`* J. Bakema, Discussion with architect Kloos about `Neue Sachlichkeit` 8 and Opbouw, 1942 in edited by Smithson A., *Team10 Primer.* Studio Vista London, 1968, p. 27

27 Bakema J., L.C. Van der Vlugt (Amsterdam, 1968), p.6 ; Bakema J., *Rietveld, the social individualist*. De Groene Amsterdammer (Amsterdam, 17 May 1958) where he says: "*In those barracks they tried to turn me into a soldier, but the house opposite the barracks turned me into an architect."* quoted in note n.3 in Strauven F., *Bakema* in Forum (1990) *Bakema Bakema*.n. 34/3, p. 29 and p.20

28 As Francis Strauven again reminds, Bakema didn't want to become an architect until the period of his military service in Utrecht, where across the army barracks he saw the little De Stijl house obtaining, out of



Bakema, *"Friendship Diagram"*,1961: *"The way in which high, low, big and small buildings are spatially related, can help man feel at home in total space."* Bakema J., *`Architecture as an instrument of man`s self realisation`* in Forum (1961) 2, p. 56

a main artistic-architectural reference which is translated by Bakema into a urban-*"total energy"* form.

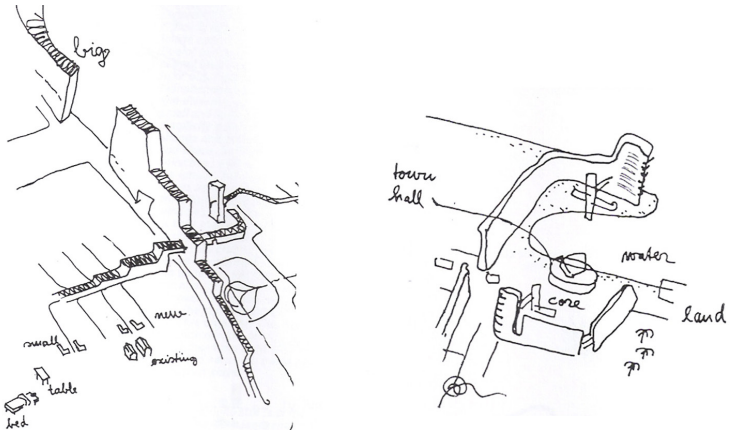
The most important image for the right relationship between different parts of the built environment through transitional elements is given by the private family itself: from the hearth to the heart[29], Bakema draws the *"Friendship Diagram"* where a hierarchically disposed group of people simulates the right disposal and relationship of the buildings facing the street, from the external towers (the adults) toward the internal small buildings and canopies (the children) which are directly in contact with the human scale of the public space.

These different dimensional relationships, from the individual to the cosmos, are well represented through some sketches of Bakema`s projects, such as the master-plan for Tel Aviv, in 1962: Bakema shows the gradual relationship between different scale levels which compose the city, from the bed to the *`Core-wall building`*[30], or *`backbone buildings`* which guarantee a natural entrance for the national road to the city center and embraces the old city square of the city, the old Core. These scale levels have many resonances with Geddes' Valley Section, used by Team X in 1953, where the four functions of the Charter of Athens are

the blue, the consciousness of the essence of the architecture. Bakema J., *Rietveld, the social individualist*. De Groene Amsterdammer (Amsterdam, 17 May 1958) where he says: "*In those barracks they tried to turn me into a soldier, but the house opposite the barracks turned me into an architect.*" quoted in note n.3 in Strauven F., *Bakema* in Forum (1990) *Bakema Bakema*.n. 34/3, p. 29 and p.20

29 See chapter aboutCIAM, Hearth and Heart

30 The *`Core-wall building`* underlines the structure of a "linear Core". Which will be later analyzed in the case study of St. Louis.



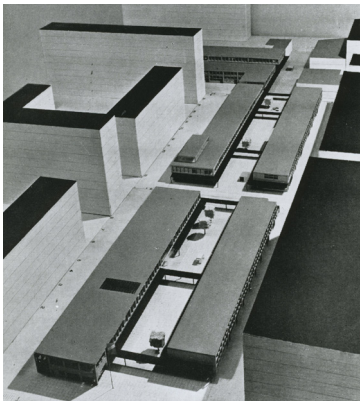
Bakema, Tel Aviv, Israel (1962)

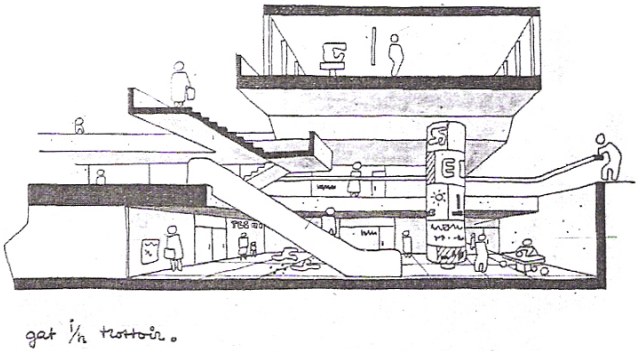
substituted by the concept of the *"human association",* from the isolate buildings, the villages, the towns to the city which is the most complex social-physical entity. In the Project of Tel Aviv the 'Wall' is depicted as the last element of the scale, becoming the linear Core which structures the City, similarly to the linear development of St. Louis, as later described. By now it is important to underline again the recurrent references to both the CIAM`s themes, such as the Core, and the Team X`s principles, such as the Scale of Association, which are theoretically mixed together for the physical design of the city.

Another intriguing project is the "Lijnbaan[31]" Shopping Center in Rotterdam (1951-`53), considered one the first pedestrian shopping city centers in the world. The project perfectly mirrors the idea of the *Friendship diagram* since it is characterized by canopies and by the floating volumes of the shops which serve as transition elements between the public spaces and the high apartment blocks behind. The extension of the project, commissioned in 1960 and completed in 1970, then shows an interesting development in section with the creation of three pedestrian levels[32], with some resonances with the commercial differentiation of flows made coevally by Gruen, as already analyzed.

31 In a first phase it seemed that the shops should have been built separately from each other, probably because of the `5os Dutch: it was possible to own only a vertical slice of the building, from ground floor to the top one. In order to allow the shoppers to not have to own apartments too, the shops are simply moved in front of the high apartments, becoming, in van Broek and Bakema project, floating volumes in the space as in the dutch vanguard paintings. The remaining narrow public space becomes car free, with different canopies linking the opposite shops. See Cornelis Wagenaat, *Jaap Bakema and the Fight for Freedom* in AA.VV., *Anxious Modernism*, CCA press, 2000, p. 265-266

32 At at street level with a square, above it where there is a art center and under the street with theater, restaurants, cinemas.





van Broek, Bakema , *Lijnbaan Shopping Center* in Rotterdam (1951-`53), model. Section of extension (1960-1970) in Forum 34/3, p. 33

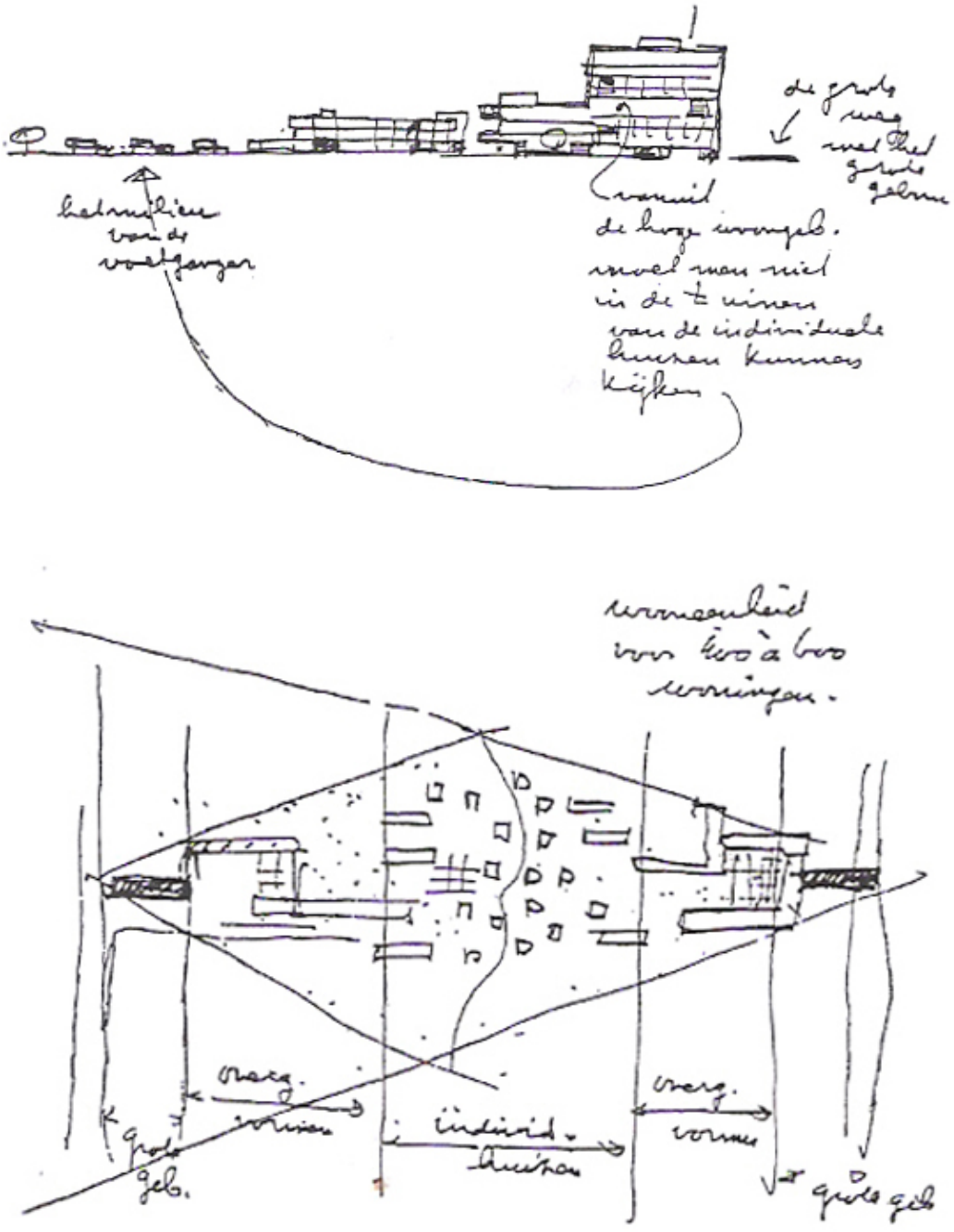
Visual Groups

Within this theory of Relationship Bakema then introduces the concept of "*visual groups"*[33]*,* which is firstly experimented in his firm and then exposed at CIAM. *"The "visual group" idea is purely based on relationships one can see"*[34] as Bakema affirms. It is interesting again to underline the use of the Idea as theoretical concept related to a physical presence. Indeed the idea of the visual group is related to a physical *"repeatable and variable cluster"*, whose design should follow intermediate visual relationships and multiple social ways of living of *"low, highrise and transitional types of housing: under, over and against the trees."*[35] These three categories are therefore related to a vertical relationship with the height of a tree, instead of a horizontal walking distance between buildings. This vertical relationship is caused by the improved technology which enables Man to

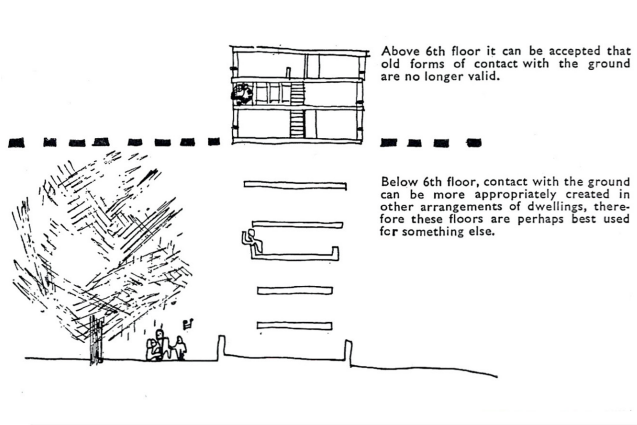
33 Smithsons reject `visual groups` of Bakema and they introduce the `appreciated unit`: a part of a human agglomeration which can be felt.
As Jos Bosman states, also van Eyck uses this notion for the design of repetitive living units, referring to Van Doesburg, as main vanguard art reference. This reference is happily applauded by most of the VIII CIAM Participants, as Jos Bosman underlines, in contrast to the Stalinist point of view of Helena Syrkus according to which the abstract should be forbidden because of the entrance into a new 'positivist phase'. Giedion S., Stadtbau, *Kunst und Erziehung. Neue Zürcher Zeitung*, 30th August 1949 quoted in Bosman J., *I CIAM del dopoguerra: un bilancio del Movimento Moderno.* p. 43 in Rassegna (1992) n.52

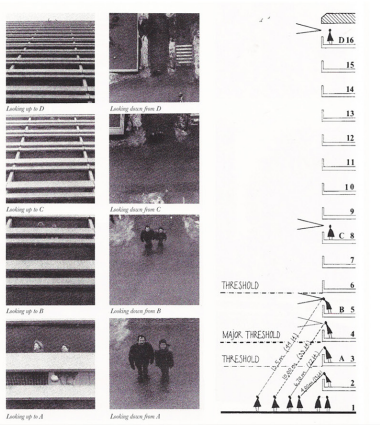
34 *"So the more the different human actions which have to be served by building-programs are expressed by specific elements (parts) in the built environment the more the human quality to compare by seeing is stimulated and becomes vital"* Bakema J.B., *Thoughts about Architecture.* Academy editions, London, St. Martin`s press, New York, 1981, p. 139

35 Ibid. p. 31 The meaning of "cluster" in Team X has already been discussed in the chapter concerning Gruen and Fort Worth.



Different scales and types of living in a visual group





"Only in the last century he has been able to live above the trees in contact with the horizon. So now the whole alphabet has to be used. We have to harmonize life on the ground and life which is in touch with the horizon" J. Bakema, 1961

"Contact between building and street is possible from the lowest five floors. Contact with the city quickly dissipates above the fifth floor, with the contact interface changing to views, clouds and airplanes." J. Gehl, 1971 and 2010

live, for the first time in history, above the trees *"in contact with the horizon".* This evolution should stimulate several solutions of dwelling, using a more enlarged architectural vocabulary. In particular Bakema considers the floors under the top of the trees, from the first to the sixth, as in direct contact with the soil and with the other dwellings: the different arrangements of dwellings should, therefore, be regulated in order to consider different possibilities of visual and physical relationships between them. Above the sixth floor there is no more visual contact with the ground and the dwelling has to be conceived in relationship with the horizon.

This new dwelling`s condition should also stimulate several solutions of housing, using a more enlarged architectural vocabulary. In this way every man should be able to dwell in a house *"according to his character and capabilities"*, in a more democratic, personal relationship with the total space[36].

It is interesting to note that the same idea of vertical relationship has been re-

36 Also the external open space should be proportionally design to the high and to the scale of the building related. This visual groups might be used even to make a urban master-plan using the cluster as a urban transitional form between the house an the entire city. The extremes of this concept of changeable living scale is the `growing house`, sketched by Bakema, Stokla and Kruyne firstly in 1959 for a new residential area in Eindhoven ('t Hool). The general aim is *"to create a framework in which man will again be master of his own home, his own personal sphere, within the universe."* Bakema , *The growing houses,* in Bakema J.B., *Thoughts about architecture.* Academy Editions St. Martin`s Press, 1981, p.131

interpreted since the `70s by Jan Gehl, but referring neither to Bakema nor to Team X. Indeed the Danish architect analyzes the same vertical relationships of the building considering the sixth floor too as "threshold" between the relationship with the ground and with the horizon, in both "*Cities for People"* (I ed. 1971) and *"Life Between Buildings"* (2010)[37]. The main difference is that Gehl uses the same section[38] of Bakema and Team X, in order to specifically stress a physiological quality of the human scale in the public space instead of a democratic dwelling: Gehl considers the *"horizontal sensory apparatus"*[39] as an objective characteristic of Man thanks to which only the first floors of the buildings can influence the visual and physical quality of the public space; the design of the public space should therefore concern the right design of these first floors which create the right human scale quality. Therefore the "visual groups" and the relationship with the tree`s height is considered as a contemporary theme for the right design of our present-day public space too.

Finally in 1953 the "visual groups" become for the Opbouw group a linking Idea between the Heart of the City and the Habitat, which is the main theme of the CIAM IX Congress which looks for a "Charte de l'Habitat": a charter which might substitute the old Ciam`s Charter of Athens, defining in a more complex and realistic way the *"environment that could accommodate the 'total and harmonious spiritual, intellectual, and physical fulfillment' of inhabitants"*[40].

Indeed, as we can see from the panel of the plan of the Alexanderpolder, the Opbouw Group considers the Heart of the City as both the *"expression of interrelationship"* of the Visual groups and *"the indispensable conditions for `habitat`"*[41].

37 Image on the top: Gehl, J., *Cities for People.* Island Press, 2010, p. 41. The Image reported here is published in Gehl, J., *Life Between Buildings: Using Public Space*, translated by Jo Koch, Van Nostrand Reinhold, New York, 1987, p. 98

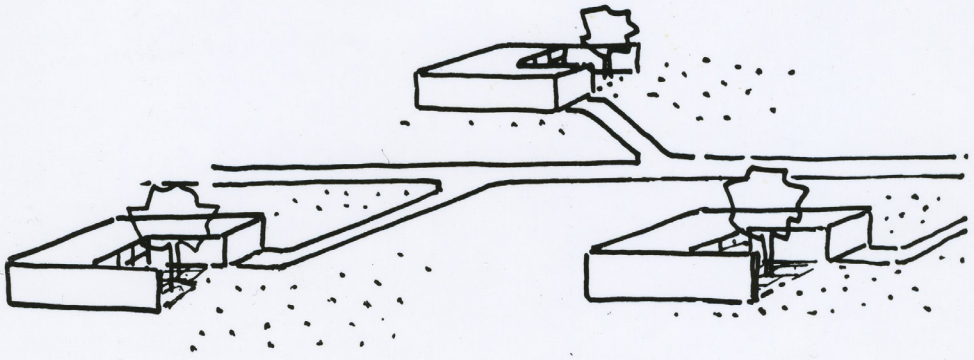
38 Image of Section: Bakema J., *Role of the Architect.* In ed. By Bell G., Tyrwhitt J., *Human Identity in the Urban Environment.* Penguin Books, 1972, p. 377 from Carre` Bleu (1961)

The sketch which is reported here is indicated as a diagram made by Alison Smithson. See Smithson A. (ed.), Team 10 Primer, London 1965, p. 26. A similar sketch is published in *Human Identity in the Urban Environment* as Bakema`s one.

39 Gehl, J., *Cities for People.* Island Press, 2010, p. 41

40 Pedret A., *Aix-en Provence 1953/ CIAM IX: discussing the charter of habitat*. in (ed. by) Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81.*NAI Publisher, Rotterdam, p. 20

41 The panel is published several magazines and books. See Bakema J.B., *Van Stoel tot Stad, een verhaal over mensen en ruimte.* Uitgeversmaatschappij W. de Haan N.V., Zeist, N.V. Standaard Boekhandel, Antwerp, 1963, p.84 ;Forum (1956), n.4, p. 105-106 ; Barbieri U. (ed.), *Architectuur en Planning. Nederland 1940-*



één van de noodzakelijke voorwaarden voor „habitat" is de expressie van samenhang (core) tussen de verschillende woonvormen in herhaalbare wooneenheden (visual groups)

une des conditions indispensables pour habitat c'est l'expression d'interrelation (core) entre les différentes formes de logis en unités d'habitation répétantes (visual groups)

the expression of the interrelationship (core) of the various dwellingtypes in repetable units (visual groups) is one of the indispensable conditions for „habitat"

Opbouw, Alexanderpolder, CIAM IX,1953

Finally, since CIAM IX is the first Congress made up prevalently of young members[42], and the Habitat is a theme which will be deeply developed by the young Team 10, then the Visual Group can also be considered as another linking Idea between the last urban theme of the old CIAM`s members and the first one deeply discussed by the next generations of architects, Team X.

Van Eyck and other references to the Relationship

Both Bakema and Van Eyck, who meet for the first time in 1947 before the Bridgwater Congress, recognize that they share the same interest in the Relationship issue. For instance the "*Play"* is a very important concept which is shared by both two Dutch architects*. "A Play with space"* is an expression often used by Bakema in his articles in *Forum* magazine, as Strauven reminds[43], referring to the ability of the *play* to create relationships between architecture and space and to satisfy human needs of the variations in space as well. As Cornelis Wagenaar states[44], the 'Play' concept in Bakema is related to the *Homo Ludens* described firstly by the Dutch historian Johan Huizinga, who highlights the social role of playing: *"Social life is endued with supra – biological forms, in the shape of play, which enhance its value. It is through this playing that society expresses its interpretation of life and the world."*[45] Thus *playing* is crucial in society since it is able to preserve the individuality of modern Man from the mass culture or from the depersonalized individualization, as Huzinga already writes in *Man and the Masses* (Harlem 1938). The *Homo Ludens* is a reference for Aldo van Eyck and for the circle of Cobra too: in particular the definition of `play` as a primary creative and cultural force is radically expressed in van Eyck `s famous design for child playgrounds. These last ones are also eulogized by Giedion in his discourse about the *"Historical background to the Core"* at CIAM 8 in 1951, after having introduced the need for the *"the bare and naked man, who is not a symbol but we ourselves."*[46]

1980. Uitgeverij 010, Rotterdam, 1983, p. 57. See also Archive NAI, Rotterdam.

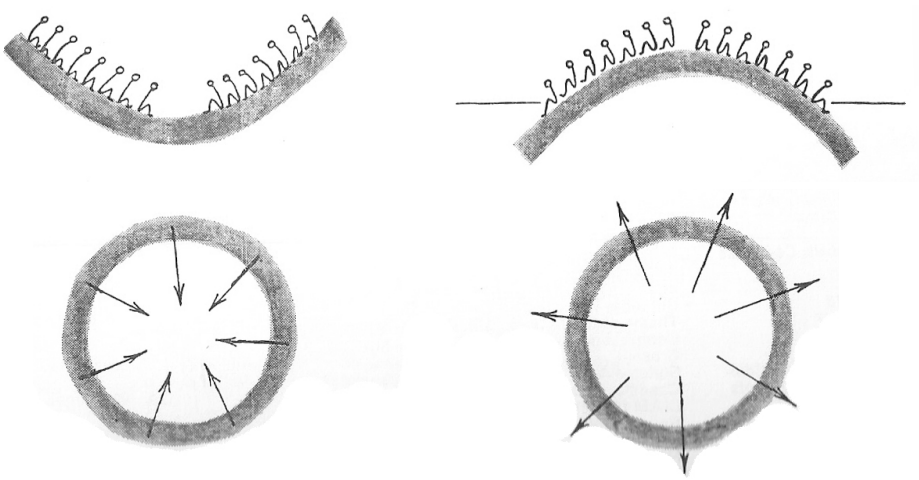
42 *"[...],many of whom who would later become members of Team 10, including Jaap Bakema, Aldo van Eyck and Georges Candilis." Pedret A., Aix-en Provence 1953/ CIAM IX: discussing the charter of habitat. in* (ed. by) Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81.*NAI Publisher, Rotterdam, p. 20

43 See Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.365

44 Wagenaar C., *Jaap Bakema and the Fight for Freedom.* In AA.VV. , *Anxious Modernism.*Centre Canadien d`Architecture/ Massachusetts Institute of Technology, 2000

45 Huizinga J., *Homo Ludens – a study of the play element in culture.* Beacon Paperback edition, USA, 1955, p.46

46 *"A few days ago I had another experience in Amsterdam. I saw the children`s playgrounds that have been created under the guidance of Van Eesteren and designed by a young member of the Dutch CIAM group,*



Van Eyck`s diagram

Both Bakema and Van Eyck use similar examples in order to express their Idea of Relationship[47]. Indeed if Bakema asserts that present-day Architecture has to be recognized as an essential function of the society between "c*reation or routine. way of living or aesthetics, freedom or dictatorship, simultaneity of hierarchy, integration or chaos, town-planning or administration, structure or decoration, function of architecture or functionalism"*[48]; then, for Aldo Van Eyck Architecture and Urbanism are "*inseparably linked as all basic twin phenomena : […] part- whole, unity–diversity, large-small, many-few, as well as others equally significant – inside outside, open-closed, mass-space, change-constancy, motion-rest, individual-collective, etc.etc."*[49]

Van Eyck. They have been made from very simple elements […]. But these simple elements are grouped so subtly – with a background of the Stjil movement and modern art which injects some kind of vitamin into the whole thing – that they act as fantastic starting points for the child`s imagination. These playgrounds also, simultaneously, fulfill another function. A formerly useless piece of waste ground has been transformed, by an extremely careful layout, into an active urban element. One need only provide the opportunity and we – the public, who are also maybe children of kind – will know how to use it." Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.48

47 However Francis Strauven underlines that if Bakema`s thought is based mostly on the cosmic interest of a total energy, in Van Eyck`s point of view the relationship is a concept based on the aesthetic of the modern art. *"You are a quantity of energy […] You have received the duty to help and create a society in which everybody has the best possible chance of finding out in what way he is part of the state of energy."* From an interview C.Boekraad had with Bakema, published in Wonen (March 1972), p. 19-30 quoted in Strauven F*., Bakema* in *Forum (1990) Bakema Bakema.*n. 34/3, p. 24

48 Bakema J., Carré Bleu, 1961 in edited by Smithson A., *Team10 Primer.* Studio Vista London, 1968, p. 30

49 Van Eyck A., Dutch Forum on Children`s Home, in edited by Smithson A., *Team10 Primer.* Studio Vista London, 1968, p. 100. In a note Francis Strauves asserts that the main oppositions that occur in Aldo van

These examples of bilateral relationships or twin-phenomena are graphically exposed by Van Eyck: people seated concentrically in a hollow gazing inwards towards the center and people seated concentrically on a hill gazing outwards toward the horizon. "*Two kinds of centrality, two ways of being together – or alone?"*- Van Eyck asks him self - "*The Man is both centre-bound and horizontal bound […] Neither centralized nor decentralized but centred in every place."*[50] This interesting interpretation of the human condition has many resonances with the existentialism of Sartre, as quoted by Giedion at CIAM 8, which is focused on the centrality of the individual rather than on the universal supremacy and centrality of Man inside the Universe. Furthermore Van Eyck`s sketch seems a perfect graphic representation of the Heart`s interpretation given by the italian philosopher Enzo Paci . Indeed the heart is considered as both *"a centripetal diastolic movement, but, at the same time, a systolic centrifugal one"*[51], refusing any unilateral Man`s centrality which might transform the Heart of the City into a Filarete`s Stellar City[52]. Thus Paci`s criticism to CIAM`s members, for instance to Sert as already described in the first actor`s chapters, perfectly agrees with the young TeamX`s members` relational design of the environment.

As far as the twin phenomena is concerned, the continual relationship of different entities poses the issue to define the middle limit between them: a threshold, an *inbetween* as the doorstep between a inside and outside. The Threshold is an ancient figure, an archetype in the field of Architecture and Urbanism, from the rites of foundations to the myths of origin. Sergio Crotti[53] explains that

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Eyck writings are:`*multiplicity-unity, unity-diversity, part-whole, large-small, simplicity-complexity, costancy-change, many-few, inside-outside,open-closed, movement-rest, near-far, clear-laybrinthian, order-chaos, bounded-unbounded, microcosm-macrocosm, mass-space, time-space, energy-matter, past-future, organic-inorganic, subject-object, light-dark, body-mind, man-god, good-evil, male-female, imagination-reason, conscious-subconscious, `outer`and `inner reality`, `head-heart and abdomen`, dream-reality, myth-reality, romanticism-classicism, individual-collective, architecture-urbanism, house-city, old-new.*' in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, note 638 p. 460

50 Van Eyck, 1965, in edited by Smithson A., *Team10 Primer.* Studio Vista London, 1968, p. 104

51 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

52 Ibid.

53 Crotti S., *Figure architettoniche: soglia. Architectural Figures: the Threshold.* Unicopli ed., Milano, 2000. *"The project acception of the threshold renders indissoluble its abstract attributes, its spacial connotations and its tectonic device that marks the bounds, interferes and discriminates places implying a thesis. It is rather that threshold initially takes on shape that coincides with the concept of ´border´, precisely that of the lat. Solea ([…] contended between two complimentary meanings: one is related to abstract projection among the most difficult of ancient thought, which can be summarized in the lat. Limen; the other is proximal to concrete figuration of the lat. Solum physicality, place in which to exist, which records the prints of those who move through real or virtual places); this then becomes ´interval´ between doorways, acquiring an inveterate extension of dividing device, and finally becomes ´sequence´ akin to the dynamic conception of space."* p.65-75

the Threshold is an interval contested between two fronts, an ambiguous and inhabitable limited place, a context non-place, which is condemned to a "*singular ethnological squint"* looking towards both sides as a double-faced Janus.
The main reference for the *inbetween* theory of Van Eyck and Bakema is the work of the Austrian Jewish philosopher Martin Buber (1878-1965) who in 1923 writes the book "*Ich und Du"* (later translated into English as *"I and Thou"*)[54]. Buber`s theory is based on the philosophy of dialogue, a religious existentialism focused on the distinction of two different relationships: the '*I-Thou'* is a concrete encounter, a relationship that stresses the existence of two beings; nor `*I*` nor `*Thou*` can live separately but together in the sphere for the *'I'* and *'Thou'*; this subjective reality has roots in the dialogue. In the '*I-It'* relationship the beings do not meet, it is a relationship with oneself, qualifying an idea of the being in its own presence and treating it as an object; this reality is based therefore on the monologue. In Buber`s thoughts Man can live without dialogue, but those who have never met a '*Thou'* are not fully a human being.*"The fundamental condition of being is man with his fellow man."* as Buber asserts, naming this sphere as *"the `sphere of the in- between`. It is a primary category of human reality. It will be the starting point for the real third."*[55] In this sense we can assume also that the private single 'hearth' can not substitute the pubic 'heart' or the public space, as already discussed, which is the basic condition for humanity itself, as stressed for instance by Giedion in *"Architecture You and Me"* - with many resonances with Buber's book- or by other theorists such as Hannah Arendt[56]. The in-between theory of Buber is thus coherent with the main aim *"to reestablish an equipoise between the individual and the collective"*[57] as highlighted by Giedion talking about the Heart of the City.
In July 1951 Van Eyck is sick and so he can not attend the VIII CIAM; anyway he will express his ideas about *inbetween* as editor of the magazine Forum[58] with Bakema.

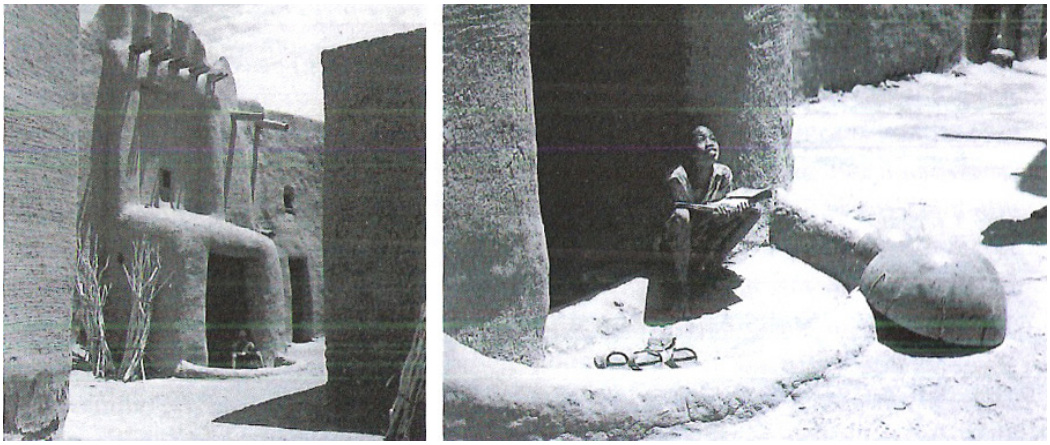
54 See Buber M., *Ich un Du.* 1923, trad.eng. *I and Thou a new translation.* Scribner, New York, 1970; Lefaivre L., Tzonis A., *Aldo Van Eyck. Humanist rebel. Inbetweening in a Postwar World.* 010 Publisher, 1999, Rotterdam; Mantia G., *Devices, lo spazio poroso figure e dispositivi* in Vigano P., Pellegrini P. eds., *Comment Vivre Ensemble.* Officina Edizioni, 2006, p. 194-196

55 *"The fundamental condition of being is man with his fellow man. It is rooted in the fact that a being considers another as another, as a clearly distinct being, so as to be able to communicate with him in a sphere which is common to both and which trascends the individual spheres of both. This sphere, which arises with the existence of man as man, but which is not defined as a concept, I call the `sphere of the in- between`. It is a primary category of human reality. It will be the starting point for the real third."* Buber M., *Das problem des Menschen.* 1943; quoted by Hardy in Forum (1959), n.8, p. 249

56 See Arendt H., *The Human Condition.* University of Chicago Press, Chicago,1958

57 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 126

58 From 1959 to 1963, *Forum* editorial board members are: Bakema, Van Eyck, Apon, Boon, Hertzberger,



Entrance of a house in Djennè

During these years as editors, both architects present and explore different subjects under a main issue, "*the story of another idea",* inside which *"the shape of the in-between"* begins to be shared by many young architects from all Europe in the 1950`s and the 1960`s. For instance Gutmann and Manz, young architects from Basel who are present at Hoddesdon Congress, use in the 1950s some quotes of Martin Buber in order to propose a vision of the dwelling as a synergistic part of human settlement, studying the various relationships within the design of in-between, called *Zwischen*. [59]

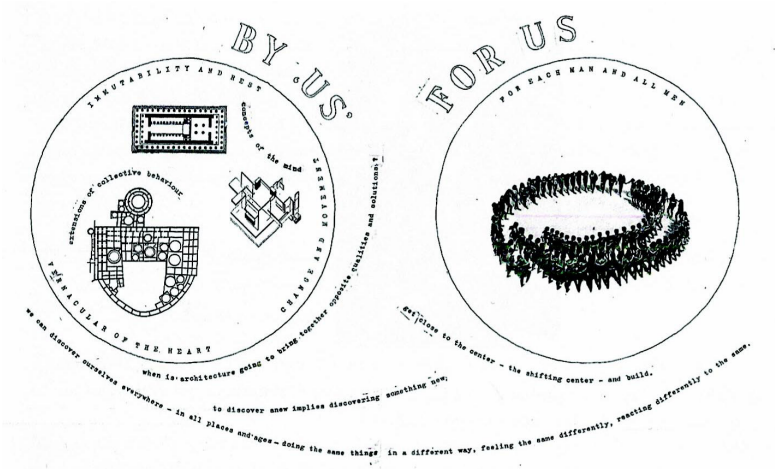
Alison (1928-1993) and Peter (1923-2003) Smithsons use the term *doorstep* in their notion of *"hierarchy of human associations"* based on four levels: house, street, district and city.

The *doorstep* is first used at Aix-de -Provence as a mere transition between public and private, from street to home, and later it is symbolically revalued by Van Eyck for all levels of association, as an essence of architecture, as the "*place of a wonderful human gesture: conscious entry and departure"*; as the "*place for an act that is repeated millions of times in a lifetime between the first entry and the last exit."*[60] The concept of the door becomes for the Dutch architect a universal

art pedagogue Hardy and graphic designer Schrofer.

59 Gutmann R., Manz Th., *Ueberlegungen über das Wesen des Themas*, in Les Documents de Sigtuna 1952. and Forum(1959), n.7, p 215. Buber writes in his *Urdistanz und Beziehung*: "*Art is neither the impression of natural objectivity, nor the expression of soulful subjectivity; it is work and witness to the relation between the substantia humana and the substantia rerum, the in-between that has taken place." ([…] `das Gestalt gewordene Zwischen`)* quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.243

60 Van Eyck, 1965, in edited by Smithson A., *Team10 Primer.* Studio Vista London, 1968, p. 96

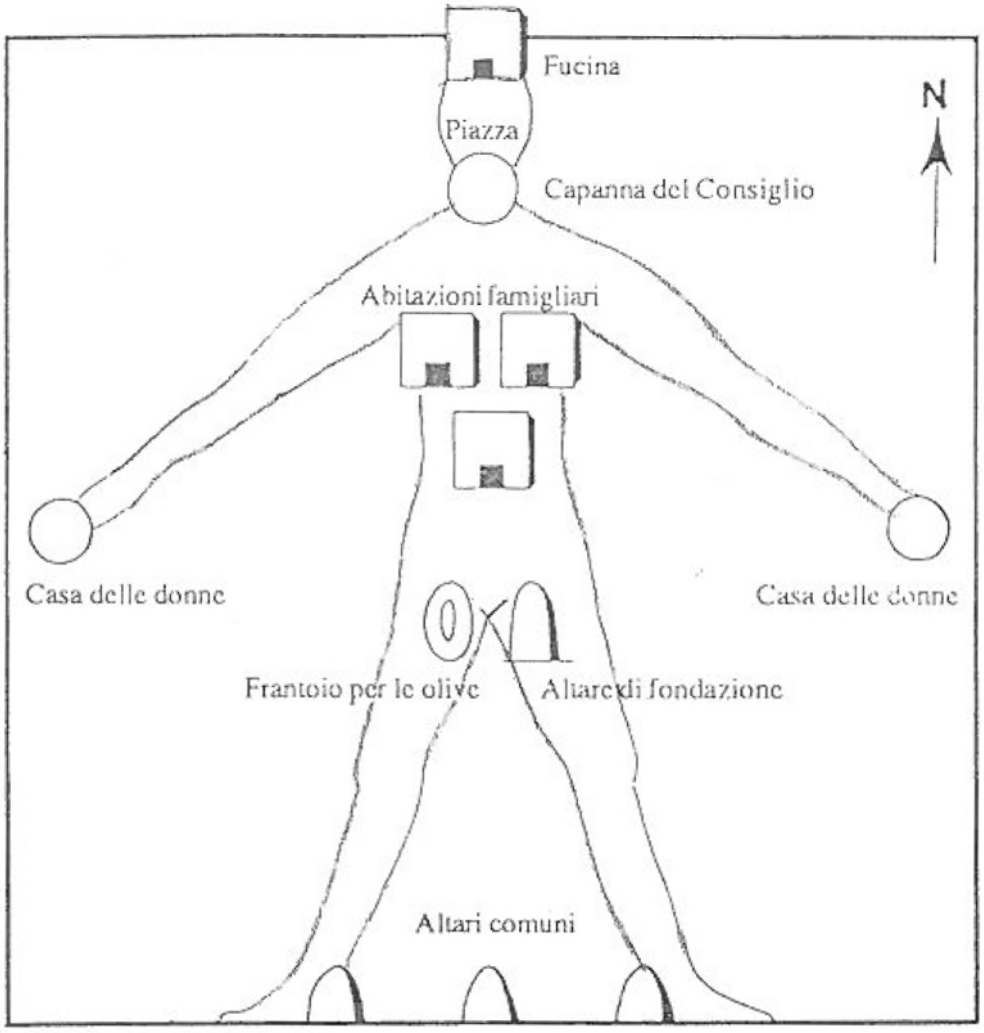


Van Eyck`s diagram: Otterlo Circles, later version of the first in 1959

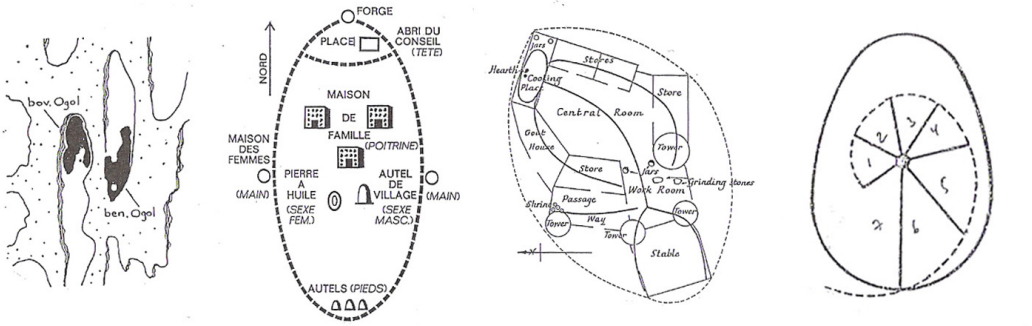
archetype of openness and enclosure, expressed in many photographs published in Forum, such as that one of the entrance of a house in Djenné in Mali, 500 km from Timbuktu, as described recently by Strauven: the picture focuses on the entrance of a house characterized by protuberance form like entrance, extending the private into the street; only a little semicircular mud wall divides the public from the private proprieties in an architecturally deep, symbolical, significant and even gradually habitable threshold where a kid is immersed in the Koran reading. Van Eyck presents a second important scheme during the CIAM in Otterlo in 1959. It consists again of two circles which represent the synergy between architecture on the left and the human identity on the right. In particular this diagram wants to underline the need to reconsider a sort of structural continuity, of proto-condition[61] which links the essence of the architecture to the essence of humanity, in the past as in the future. Indeed the Dutch architect represents three main groups of Architectural traditions which are related to specific recurrent values: the Classical tradition linked to the *"immutability and rest"*, the tradition of the spontaneous building and *"the vernacular of the heart"*, the Modern tradition and *"the change and movement"*[62]*.* These forms of traditions have to be reconciled with human society, represented by a group of embracing persons, underling the relevant social role of the architecture which is eternally

61 (proto- , *gr. Πρωτο* as *"first, first element"*)

62 This division and the skecth are deeply described by Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.349-350. See also Newman O., *CIAM`59 in Otterlo*. Stuttgart, 1961.



Human Body in Dogon Village



Situation of the twin villages Upper and Lower Ogol

Schematic plan of a Dogon village (from Griaule, Dieu d'Eau)

Plan of a tribal house (after Griaule & Dieterlin 1954)

Dogon cosmology, World-egg concept (after Griaule & Dieterlin 1954)

Dogon Village

valid in front of the immutable identity of Man. Indeed, *"man is always and everywhere essentially the same. He has the same mental equipment although he uses it differently according to his cultural or social background, according to the particular life pattern of which he happens to be part."*[63] This human *"constant identity"*[64] shares many similarities with Giedion`s research for the "Eternal Present", as discussed before. Indeed similarly to the Giedion`s interpretation of the Heart, the relationship between architecture and society is described by Van Eyck as an eternal present condition whose balance should be always re-gained, *"in an endless sequence of possibilities that will really fit man."*[65] This synergy between Giedion`s discourse about the Heart and Van Eyck`s diagram is more evident in the project for St. Louis by Bakema, designed almost in the same period of the meeting in Otterlo: the project literally considers the "Human Core" or Heart of the city as the right overlapping between physical and social structure of the city, similarly to the two circle`s diagram, as later described. Therefore Van Eyck`s twin-phenomena between architecture and society can be considered in coherence and continuity with the Heart`s discourse and in particular with Giedion`s eternal present condition of the architecture. This is clear with the *"vernacular of the heart"* , as described within the first circle under the plan of the temple of Nike, which highlights the deep interest of Van Eyck for the archaic societies. The Dogon culture[66] is one of the most interesting for him. Indeed

63 Ibid. Strauven F., p. 349 Struven adds that *"Modern architecture habitually ignores this constant identity however."*

64 Van Eyck in Ibid. p. 349

65 Van Eyck in Ibid. p. 351

66 Dogon is in the South of the ex French Sudan.

this archaic culture is based on a sort of complex cosmology according to which everything in the world is immersed in analogous levels, connected as a chain, from the lowest scale level to the totality, the universe.
According to the Dogon cosmology the world emerged from a primal egg, from which, in a spiraling movement, all levels of nature come out with an anthropomorphic structure: the entire world is seen as a gigantic human organism, whose parts have the same image in different scale. The human body[67] regards all dimensions and cosmic levels of the built environment. The symmetric twin-relationship is emphasized in all Dogon Culture as the symmetric part of a whole body. Van Eyck will call it the already cited "twin-phenomenon", which allows the Dogon to make "*the world system graspable […]; they made the world a habitable place, they brought what was outside, inside."*[68] The in-between takes a primordial significance in the Dogon Village as in the Zuñi of New Mexico, in a magnificent example for the Dutch architect of harmonic relationship between man and cosmos, man and environment, man and man as he describes later in *The Child, the City and the Artist* (1962, unpublished book). In front of this perfect, admired cosmology in 1963, Joseph Rykwert writes in Forum *"The idea of a town"* describing the relationship between urban settlements and cosmos which are recurrent in all parts of the World, as an *"irreducible element, an atom of human experience"*[69]. Rykwert is therefore concerned with both an *"Idea"* of the City and with a recurrent myth of foundation of the ancient cities in contrast with a contemporary functionally based urban design or with the *"abandonment of the urbanity by the architects"*[70]. Thus the Heart of the City, as "abstract Idea"[71] of a proto-condition of public space, might perfectly fit into the research about "the idea of a town", where the fundamental essence of the ancient urban pattern is

67 It seems interesting what Bernardo Secchi says about the organic metaphor, usually used for the analysis of the society and of city from the body, but sometimes used inversely for the analysis of the body from the city itself. Is Dogon village this case? Secchi B., *Il racconto Urbanistico. La politica della casa e del territorio in Italia.*Einaudi ed., 1984, Torino, p. 55 – See also Vegetti M., *Metafora politica e immagine del corpo nella medicina greca,* in *Tra Edipo e Euclide.* Il Saggiatore ed., Milano, 1983 and Portoghesi P., *Natura e Architettura.* Skira ed.,Milano,1993, p. 114

68 Van Eyck in Forum (July 1967), p. 35; quoted in english in Via, n.1, p.15 and in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.386-387

69 Rykwert J. (1963), *The idea of a town.* Forum, n.3, p.139

70 *"Siamo in un prospettiva violenta in quale il esempio di San Marco sembra purtroppo molto lontano, invece anche la Lijnbaan non e` pensabile a Dubai o Shanghai. L'abbandono dell'urbano da parte dei architetti che si credono affaristi presenta una situazione senza vero precedente. La città nel passato sussisteva nella dialettica cuore/centro e limite/orlo, come peraltro lo dice lei chiaramente"* Rykwert J. from personal mail 18/11/2010

71 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18

compared with the contemporary new urban condition. Indeed Rykwert concludes the article asking himself if contemporary cosmology can still regulate the design of our cities. Since modern scientist have failed to give a clear definition or a certain picture of what the universe looks like, we may assume that it might be better to seek this relation somewhere else: "*We must look for it inside ourselves: in the constitution and structure of the human person."*[72] The ambiguity of the human insight should be therefore the main reference for the contemporary urban structure, rather than the perfect and immutable dispositions of the stars. The final hypothesis is in contrast with any prefigured and fixed urban forms as represented for instance by the "canon" metaphor of Ortega Y Gasset as used by Sert in the first actor. The impossibility to design a closed and defined boundary of the city is in accordance with the already quoted criticisms made by Paci, Team X, Lynch,...to the organicism as the too risky and direct translation of the Heart into the physical Core or CBD of the City. Instead the Heart remains a still valid *"abstract idea […] fluctuating from one place to another"*[73], representing the psychological interior of man, *"imperfectly controlled […], more like a dream than anything else."*[74] Thus the architect has the duty to translate this un-framed Idea into a right physical project, using architecture as *"counter-form of the mind"*[75].

72 *"We have lost all the beautiful certainty about the way the world works – we are not even sure if it is expanding or contracting, whether it swas produced by a catastrophe or is continuously renewing itself. This does not absolve us from looking for some ground of certainty in our attempts to give form to human environment. It is no longer likely that we shall find this ground in the world which the cosmologists are continuously reshaping round us and so we must look for it inside ourselves: in the constitution and structure of the human person."* Rykwert J. (1963), The idea of a town. *Forum,* n.3, p.143

73 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18

74 The town is *"an artifact of a curious kind, compounded of willed and random elements, imperfectly controlled. If it is like any other piece of physiology at all, it is more like a dream than anything else"* Rykwert J. (1963), The idea of a town. *Forum,* n.3 p.100

75 Van Eyck, quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.391

ST. LOUIS PROJECT – THE HUMAN CORE

Civic Centre-Human Heart

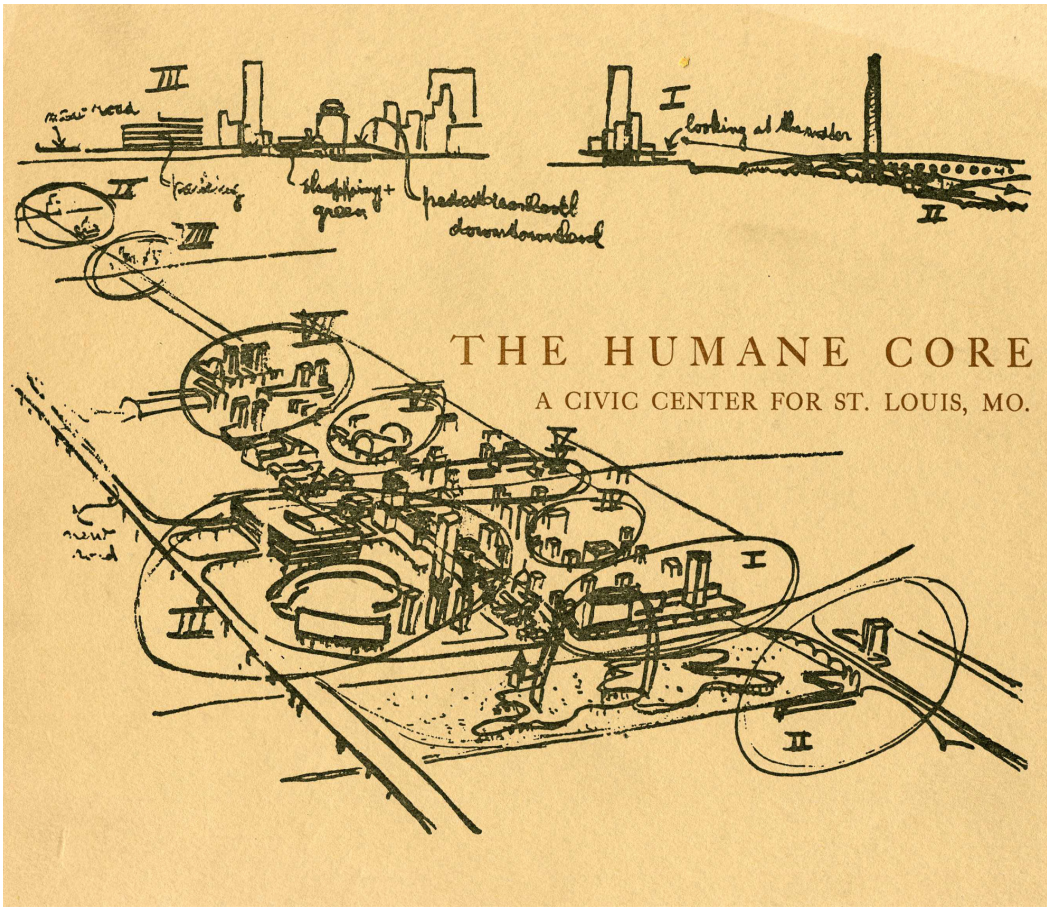
In 1959 Jaap Bakema is invited as Professor at the School of Architecture at Washington University, in USA. The theme chosen for the urban design course is "*The Human Core - a new Civic Center for St. Louis."* As the Dutch Professor explains, `Civic Center` includes the term `Civic`, which is supposed to refer to Man as member of a society, and `Centre`, as "*central part of anything"*. The `Heart``s concept is taught to students as the compression of the two terms in one word, as the "*heart in a settlement of a group of people being in enduring cooperation in order to maintain itself !!!*"[1] It assumes also the same significance for the city and society as the living room has for a single house and family. The public 'heart' has a correspondence therefore with the private 'hearth', as already discussed in the previous chapters.

Moreover if we can consider "*the architecture of the city as the structure of society"*- Bakema affirms- *"the core then indicates a place which is the heart of the matter..."*[2] This interesting quote reminds us first of all the book of the well known Italian Architect Aldo Rossi, *"Architettura della Città"*, printed in 1966. Rossi underlines the need to re-conduct Urban Science into the complex of the Human Sciences; moreover the study of the city is an autonomous science, according to Rossi, only when it is considered as architecture, as a built existence within history[3] . The human condition of the city and its built essence, above other studies (sociological, political, …), are also stressed few years before by Bakema: indeed he overlays the structure of society (human value) with the structure of the city (its architecture, with its buildings, beams, pillars,...). The Core, as physical expression of the Idea of the Heart, exists where these two built entities, these two built structures find an extreme interaction: *"where the matter is".* Then we can interpret this perfect social and physical overlapping as an ideal condition towards which we should tend, but which is probably not possible to obtain in a total realistic synergy. Thus we can consider Bakema`s interpretation of the Core-Heart as a progressive Idea, towards a future social condition in a present physical form, similarly to Michelangelo`s Capitol as described by Giedion at CIAM 8 and already deeply discussed in the previous chapters.

1 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part IV* In Bakema Archive, Bake, NAI Rotterdam, d264

2 Bakema J., *The Humane Core, A Civic Center for St. Louis, MO.*Washington University Press., 1960, p.2

3 *[…] riportano la scienza urbana al complesso delle scienze umane […] Noi possiamo studiare la città da molti punti di vista: ma essa emerge in modo autonomo quando la consideriamo come dato ultimo, come costruzione, come architettura.'* A. Rossi, *L'Architettura della città.* Città Studi, 2006, Milano, p. 12



Bakema J., *The Human Core,* 1959, In Bakema Archive, Bake, NAI Rotterdam, d264

Then as far as the `Human` term is concerned, Bakema affirms that the main problem nowadays is to understand how "*to discipline personal human emotions towards the approach of the total aspect of things"* [4]. But how is it possible to combine the human aspects of an "*invisible city"* (Joseph Hudnut) with the artifact of steel, stone and asphalt of the "*visible"* one?

Bakema sketches a figure of man in some private notes, as an attempt to answer this question: the head is drawn as a big open eye looking toward an arrow indicating his writing about the importance of architectural history and examination of the buildings which have passed the test of time; from the chest, maybe from his heart, some lines come out linking a rectangle form with a clock inside. The entire drawn system is named by Bakema as the "*handy Arch-o-Meter"*, or as "*a three element architectural measuring device"*: the man is the "*sensitive human being"*, the lines with small boxes are the "*array of potentiometers"* while the clock in the rectangle is the "*differential analyzer".* All the system seems to be a sort of playful[5] experiment for the development of an analysis of the facts and of decisions which caused the actual urban realm. This analysis is also aimed at describing the actual conditions which are necessary for the development of an abstract Idea of the City, of its Theory[6]. Thus it is also aimed at describing the abstract Idea of the Heart, whose values and principles have to be translated by the architect into a physical form. Furthermore it is an important attempt to represent the relationship between the sense of human being and the physical aspects of the architecture.

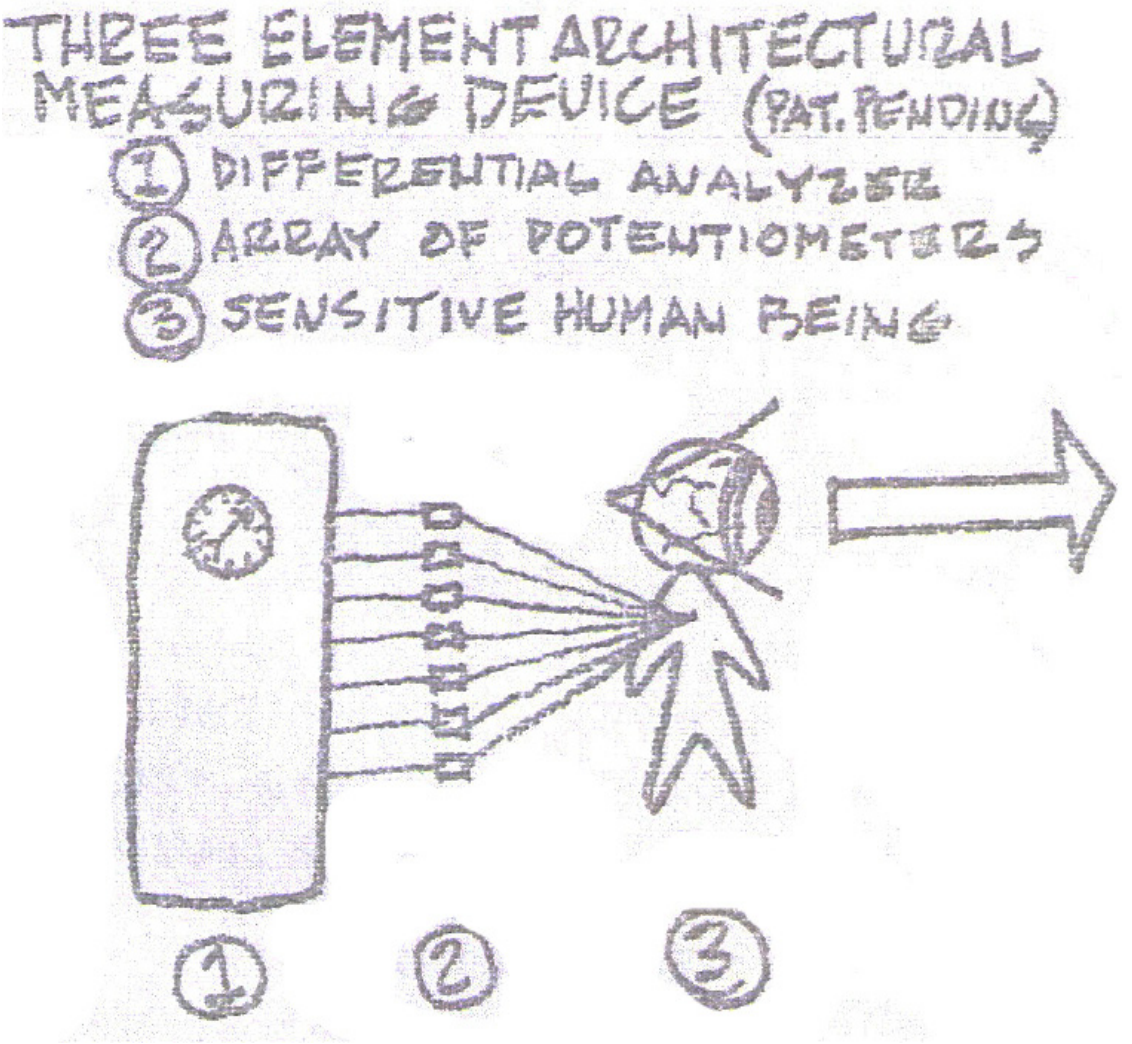
If Giedion refers to the existentialism-humanism of Sartre, then Bakema transcribes in his notes some quotes from *"The Architecture of Humanism"*, written in 1924 by Geoffrey Scott, highlighting again the symbolic humanistic aspect of the Heart: under the 'Arch-o-Meter' sketch Bakema rewrites that "*humanism is the effort of Men to think, to feel, to act for themselves and to abide by the logic of the results*"[7]; thus the human choice to evaluate if something has values or

4 Bakema J.B., *Letter to Mr. Haskell.* In Bakema Archive, Bake, NAI Rotterdam, d264

5 With many references to Homo Ludens of Huzinga and with many consonances with the playful-musical charter of the three dimensional design, drawn by Gruen.

6 These facts have to be explained by a Theory. "*The first step in developing a Theory is to establish the facts to be explained […] The handy arch-meter blue printed at the left would establish the facts with precision, but unfortunally it is still in a very crude stage of development.* `Among these the established facts, few questions are exposed about the *`Institutional themes to be explained: HOUSE: Why do some people like Georgian row house? Why do many people live in suburbs? What kind of people live in `advanced`design? Etc.. CHUCRH: What motivated Gothic Builders? And Jesuists? What motivates Modern Building committes?STREET: What shaded medieval Street? Victorian streets? 1930 Streets? 1955 Streets? 1980 Streets?"* Bakema J., *Notes about Theory.* Bakema Archive, NAI, Rotterdam, d 264

7 *Architecture of Humanism*, p. 144 quoted by Bakema in his notes about Theory. In Bakema Archive, Bake,



Bakema: Arch-o-meter

not has to be considered as an "*enlargement of human power"*. In this sense Scott`s humanism should be considered in order to educate students mostly for the development of their human sensitive ability to choose, for their "*sensitive human being"* (the third in the image element of the measuring device), since the "*study of Architecture is the study of people, not buildings.*"[8]
As far as Scott`s book is considered, the subtitle reveals the character of the writing: *"A study in the history of Taste"* . As the author explains and Bakema re-writes in his notes, *"We have few "fully reasoned' theories";* every bad building can be praised with some vanishing arguments while everyone may find some problems, imperfections in a very good project. *"If we desire clearness"*, Scott asserts, it is necessary to pass *"from a priori aesthetics to a history of taste, and from the history of taste to the history of ideas"*[9] (underlined twice by Bakema). The Idea, such as the abstract Idea of the Heart as depicted by the Opbouw Group at CIAM 8, seems therefore the final passage from Aesthetic to Taste and from Taste to Idea, for the definition of a proper clear Theory, which is the title of Bakema`s notes and which is considered as the unique objective way in order to obtain "clearness" in the design at any scale. From this point of view, the theoretical abstract discourse about the Heart might be considered therefore as a unique opportunity for a later physical design of the public space of the city.

Three-dimensional planning
The importance of the three-dimensional design is repeatedly stressed by the Dutch architect during the course lessons; its relevance for our daily life is even compared to that of *"oxygen"*[10] for our organisms.
Many other architects have already highlighted this aspect of the architectural and urban project, as already described in the first actor. Similarly to Gruen and Sert, Bakema considers, for instance, the third dimensional planning as a serious matter as far as the use and planning of the land are concerned: since the end of the War the growth of population becomes a huge visible problem, especially where there is no available space for urban expansion, as in Holland; therefore in these places people have already understood the overwhelming necessity of coordination between planners and architect for a proper vertical design developed in section, not only in two-dimensional width and length. Bakema

NAI Rotterdam, d264
8 Bakema notes about Theory. In Bakema Archive, Bake, NAI Rotterdam, d264
9 NAI Archive, Rotterdam, d264, quotation from Scott G., The Architecture of Humanism, *A study in the History of Taste.* Constable and Company LTD., London, 1924, p.7-8
10 Bakema J.B.,*Letter to Mr. Haskell.* (December 1959) in Bakema Archive, Bake, NAI Rotterdam, d264

suggests that the typical Dutch concern about land use should be imported into USA, where no physical limitations of the land has favored the explosion and the spread of cities over the country. The result is an *"enormous public space called USA"*, where single floor private expansions have contrary deprived the cities of any public identity. "*City and nature are destroyed in the same instant."*- Bakema affirms- "*There could be no harsher indictment."*[11]

Secondly, the third-dimensional design has, in Bakema`s mind, a humanistic value too. Only through the *"3-dimensional language",* Architecture, which has the "*monopoly of Space"*[12], and Urbanism can indeed "*explain to man what life is"*[13] and "*acknowledge every aspect of life: how to care about your body, the way you cook and eat, how you work, how you lie down and how you sit, how you walk and drive a car, how you feel the sun on your body."*[14] Therefore the three-dimensional structure in St. Louis has to be, first of all, the interpretation of the various aspects of St. Louis` life. Indeed, this is supposed to be the basic step in order to transform the city into a "*symbolic value, a monument which can be used by people and can use the people, stimulating peoples imagination about life."* [15] Thus the necessity for the *"symbol"* and for the *"monument"* are again stressed, similarly to Giedion`s discourse in *"Architecture You and Me"*.

Then Bakema denounces that, in the immediate pre- and post- Second War, functionalism used to approve everything which could increase the use of the machine for production of numbers or which could be sales promoting. Moreover, the "*expression of a way of understanding of life by means of a three-dimensional form"* was abhorred because considered "*luxury for common life"* or *"a kind of snobism when used by few conoisseures".*[16] On the contrary the Heart of the City and its three-dimensional design is a counterforce of functionalism: it concerns the quality of the human space, with a right integration of both functions in the three dimension space and synergy between professional figures operating in the city, as studied in some historical examples.

11 Bakema J.B., *Enclosure A: The Modern Industrial City.* In Bakema Archive, Bake, NAI Rotterdam, d264

12 *Architecture of Humanism*, p. 168 quoted by Bakema in his notes about Theory. In Bakema Archive, Bake, NAI Rotterdam, d264

13 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis.* In Bakema Archive, Bake, NAI Rotterdam, d264

14 Bakema J.B.,*Letter to Mr. Haskell.* (December 1959) in Bakema Archive, Bake, NAI Rotterdam, d264

15 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part V.* In Bakema Archive, Bake, NAI Rotterdam, d264

16 Bakema J.B.,*Letter to Mr. Haskell.* (December 1959) in Bakema Archive, Bake, NAI Rotterdam, d264

Historical Importance of the city Heart

The study of the city in the past is considered by Professor Bakema as a basic point in order to analyze the clearness of old urban structure in comparison with the chaotic modern one. It is important to find out which "*forces make a town*"[17] and to understand them in the past and in the present identifying ourselves with the actual moment; finally we have to figure out how they will evolve in the future as well. The first reason of the town`s existence is, as described by Bakema, the crossing of traffic lines, for instance the crossing point of a river where a settlement can be born, similarly to St. Louis near the Missouri river.

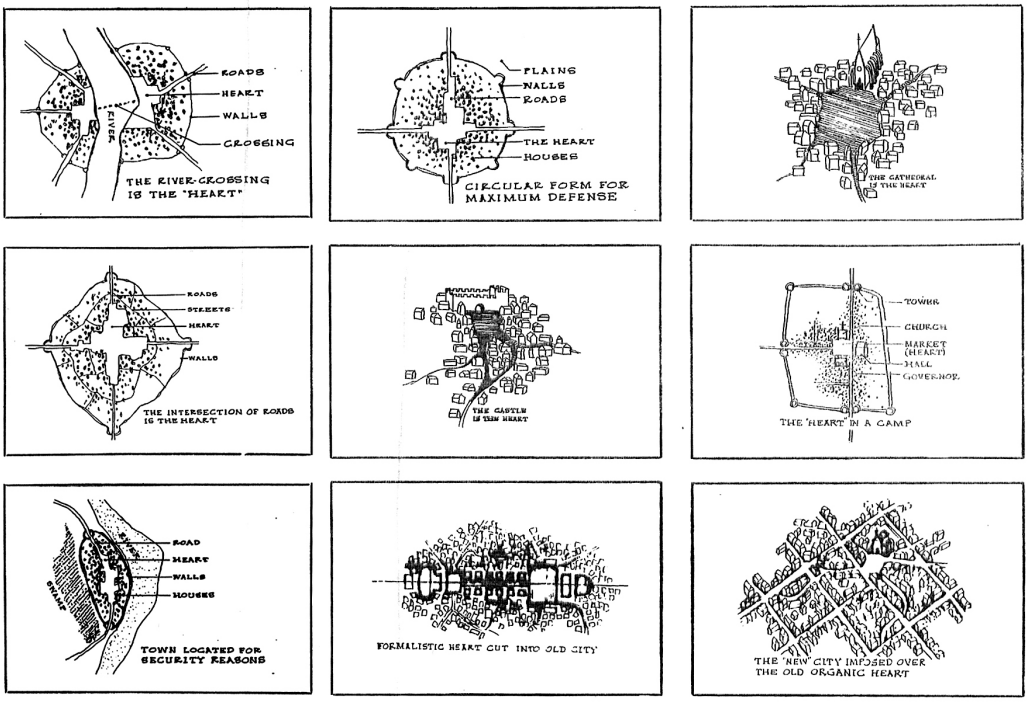
The need of protection from enemies rendered the erection of defensive walls and military camps necessary, thereby creating the centre of the town. The city of St. Louis was founded, in this period, as a kind of military camp without big fortifications, due to the 18th century mechanization. In contrast with many clustered medieval fortified towns in Holland for instance , St. Louis has thus no primordial physical limits. Other reasons for the growth of "*forces of life"* of the heart of cities are shown by Bakema.

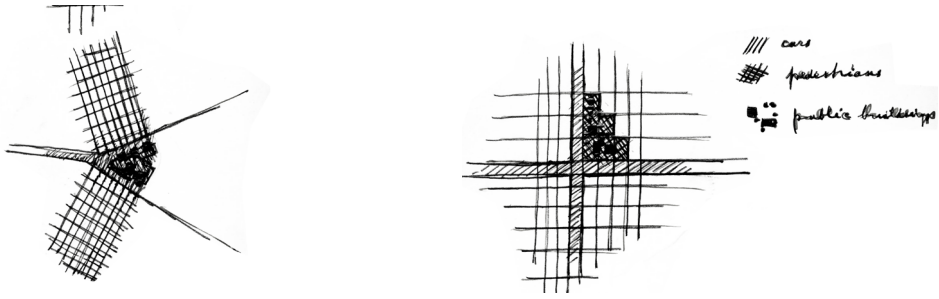
The town can grow indeed by surrounding a point of political power, the castle, or a center of religious entity, with the public space in front of the cathedral as public heart of the town. Later in the Renaissance Formalism new formal "hearts", which are expressions of a new growing power, are inserted inside the existing patterns. Finally during the Industrial Revolution new urban grids overlay the old city and the mass production of goods grows so fast that mankind is no longer able to relate himself three-dimensionally with the surrounding environment. "*Slums were bred with industry. Mass housing killed individualism. `Civic` became chaos."* - Bakema affirms, demonstrating many similarities with the strain of the old CIAM`s president Sert, in front of the presumed loss of the Civic values inside the contemporary sprawling of the american cities. Indeed during this period St. Louis loses even its "*forces of life*"[18].

Then Bakema continues analyzing the period between 1700 and 1800, when the structure of houses, workshops and public buildings still present galleries, courtyards and other small transitional elements between the building and the street; the block is moreover occupied by several small scale buildings. Near the end of the 19th Century, big scale buildings occupying the whole block become more characteristic than smaller old ones; skyscrapers also appear for the first

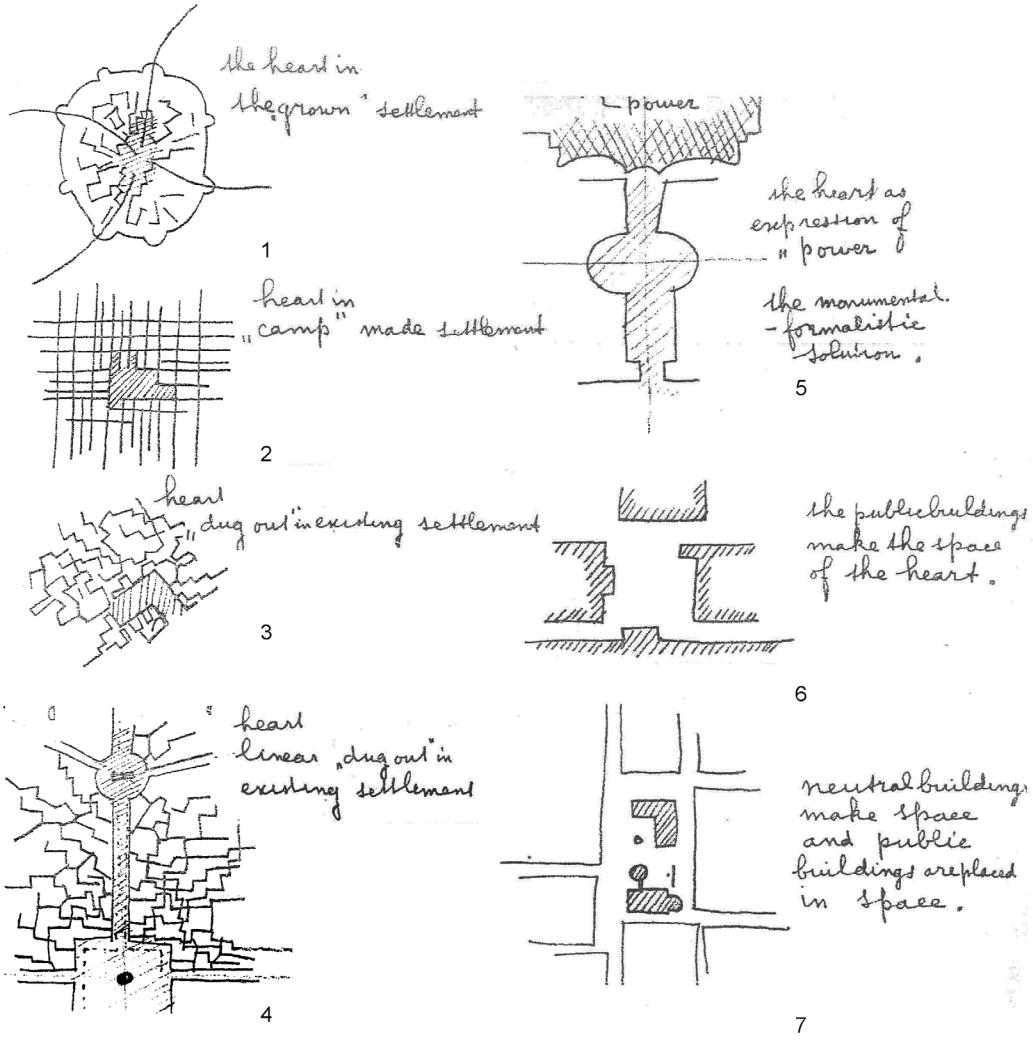
17 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part II.* In Bakema Archive, Bake, NAI Rotterdam, d264

18 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis.* In Bakema Archive, Bake, NAI Rotterdam, d264



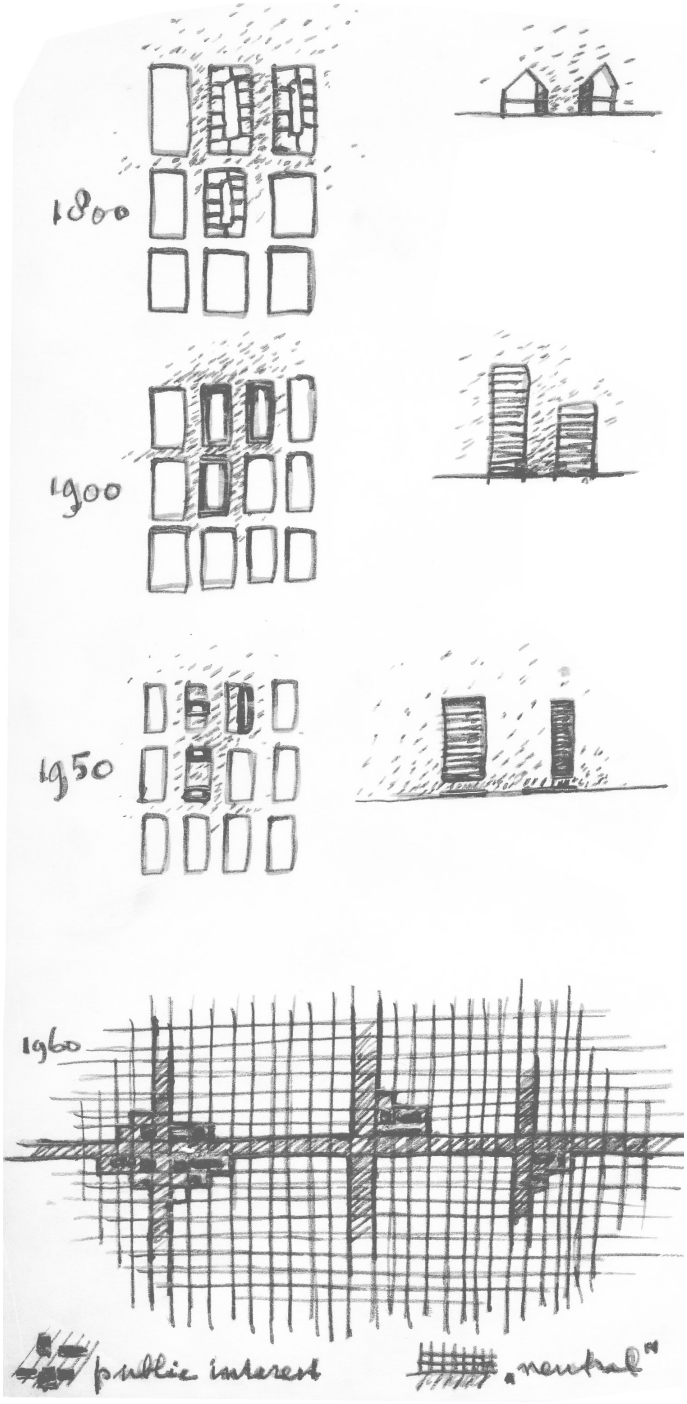


Bakema: Historical hearts and grid schemes



Bakema:

1_Heart in “grown” settlement
2_ Heart in “camp” settlement
3_ Heart “dug out” in existing settlement
4_ Heart linear “dug out” in existing settlement
5_ Heart as expression of “power”, the monumental – formalistic solution
6_ Heart space made by the public space buildings
7_ Neutral buildings make space and public buildings are placed in space



1800_ between the space of the street and the space of the house(3-20 persons were transitional elements – galleries a.s.o)

1900_ the block became filled up with one highrise block building between the space of the building (100-500 people) there were no transitional elements left (except some doors)

1950_ block is partly filled up for example by one slab and under and around this slab transitional elements again appear but now in modern terms

1960_ how an existing street or boulevard in the American grid pattern can be prospected and transformed into spaciousness for "civic center".
Evolution and use of an existing problem!.

Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis.* In Bakema Archive, Bake, NAI Rotterdam, d264

time, such as that one designed by Louis Sullivan (the Wainwright building, 1890). As a consequence, the remaining relational element between the street pattern of the town and the huge new buildings is a mere single door, with direct access to the street. The door is thus transformed from the symbol of a transitional positive element between inside and outside, as expressed by Team 10, into a symbol of the lack of relationship between the brand new architecture and the social life, in Bakema`s historical review. Indeed all architectural devices of transitions are lost, while the inhabitants of skyscrapers are 5-10 times more than in the previous buildings. This problem still seems to be present in 1960`s and its solution, such as the restoration of the transitional elements in a three-dimensional design, should be the main task presented to students, for the re-design project of St. Louis.

History of The Heart of City by Giedion

Before Bakema, Giedion already studies the *aporia*[19] of the Heart of the City, presenting his lecture titled "*Historical Background to the Core"*, at CIAM 8 in Hoddesdon.

This interest of both Giedion and Bakema on the historical evolution of the Heart is coherent with the consideration made by Gregotti who considers the CIAM 8 as the starting point of a new relationship between the new project and the historical context, as already mentioned in the second actor. However the historical importance is already underlined in the the works of the CIAM`s members even before the CIAM 8, as already stated by many historians rejecting the idea of a modern movement`s *tabula rasa*[20].

Giedion highlights in his discourse both the eternal need and presence of the Heart in the urban discourse, as one of the "*certain continuous things running through history – certain experiences which appear and are lost and then come up again"*[21].These eternal present elements, these sort of architectural and social archetypes come back from time to time, can be found in art and in architecture as well. Indeed Giedion stresses this hypothesis in his books *'The eternal present: A contribution on Constancy and Change'- I. The Beginnings of Art (1962) 2 The beginnings of Architecture (1964)'*[22] In the first page of '*The Beginnings of Art'*

19 Aporia (Ancient Greek: ἀπορία: *impasse*; *lack of resources*; *puzzlement*; *doubt*; *confusion*)

20 For Instance: *"In founding anti-history and presenting their work not so much as anti-historical, but rather as above the very concept of historicity, the avant-gardes perform the only legitimate act of the Time."* Manfredo Tafuri, 1968, quoted in Forty A., *Words and buildings. A Vocabulary of Modern Architecture*. Thames and Hudson, 2000, p. 198. See Second actor.

21 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

22 Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964)*.

the Swiss historian offers some quotes of different writers; among them, one by Jacob Burckhardt seems very appropriate for our discourse:

"...we shall start out from the one point accessible to us, the one eternal center of all things – man, suffering, striving, doing, as he is and was and ever shall be... We shall study the recurrent, constant, and typical as echoing in us and intelligible through us."
Jacob Burckhardt, *Lecture on History* (1868)

The study of the heart, the aim of this research, seems therefore to fit perfectly into the necessity described by Burckhardt to study *"the one eternal center of all things"* which has an echo in present-day society as well. Moreover, Giedion affirms that a revolution has occurred in all arts during the last forty years, a new development which "*is not without an inner significance"*. As result a new "*humanizing process"*, a "*new stage of civilization"* is growing in his opinion, where "*the human being as such – the bare and naked man"*, will finally have the opportunity to express himself as he is. "*We need today signs and symbols which spring directly to the senses without explanation"*, then Giedion says quoting the French philosopher Sartre, with reference to some works carried out "*by certain psychologists"*. We may assume that Giedion is thinking about the *Gestaldt psychology* (from German *Gestalt :essence or shape of an entity's complete form*) whose manifesto might be summarized in '*The whole is greater than the sum of the parts'*. Even if the *Gestaldt* theory is not going to be deeply discussed in this research[23], it seems important to underline the importance of Immanuel Kant (1724-1804) as one of the precursors of this theory: in his *Critique of Pure Reason* he describes the *a priori synthesis* as a transcendental knowledge, as the unitarian activity of knowledge in which the material supplied by the senses is organized *a priori (from latin: prior to)*, without any relation to previous experiences but only according to the preexisting forms of the mind, to a pre-existing conscience. These *a priori cognition* seems to fit into the already discussed *eternal present elements* described by Giedion, which recur in history and, in the post-war scenario, they reveal the necessity to re-discover *"the bare and naked man"*, in a new deep humanizing process.

Bollingen Foundation, Pantheon Books, New York. These book are part of the volumes of the A.W. Mellon Lectures in the Fine Arts, annually delivered at the National Gallery of Art, Washington. This interpretation in Giedion of the core as an eternal element is underlined by Francis Strauven in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238

23 We can find other interesting references to the Gestalt theory: see Venturi R., *Complexity and Contradiction in Architecture.* The Museum of Modern Art, *New York,*1966, p.88 in the chapter 'the obligation toward the difficult whole'; Norberg-Schulz C., *Architecture: Meaning and Place.* Electa/Rizzoli, New York, 1988, p.29-30, in the chapter about 'The Concept of Place'

As far as the Core is concerned, Giedion defines the right of the pedestrian inside the Core, as the simple example of "eternal elements". This human right can be found firstly in the Greek *agora*, which is the public place where people gather. Only in the fifth century BC the *agora* becomes the place for the exchange of trade as well. Giedion underlines that the *agora* is bounded by simple standardized elements which form the *stoa,* a covered path where the public full of ideas and opinions may flourish even with rainy or sunny weather. All public buildings are close to the square although they are designed always behind the *stoa.* Furthermore , there is a hierarchic separation within the Greek city among the monumentality of the Gods in the Acropolis, the public space, the Agora and the *"very humble"* private life.

Nevertheless, as previously highlighted in many chapters, the most important characteristic of the public *agora* is that its final form and status, which are the maximum expressions of "*the democratic conception of the Greek life"*, are reached only after the Greeks have lost their freedom, at the time of Alexander or later. That seems very interesting since the structure of a better past society remains in the *"architecture of the city"*, in its built presence, even if the conditions are changed.

Then Giedion moves to the Romans, to the Roman Forum which, unlike the Greek agora, is a disordered place (where the the prison, carcer, temples and comitium fit togheter,...). However the right of the pedestrian still persists in both Greek and Roman public space, as well. "*This was sacrosanct"* - Giedion affirms and the reader feels a sense of nostalgia in his words. And what happens during later centuries? "*Decay, decay, decay, through centuries!"* As a result the ordered, coherent separation between public and private sinks; the public space of the city, the Core, is definitely turned from a gathering place for the community to a market place, sometimes bordered with arcades and surrounded by private houses of the citizens. In the medieval cities moreover the care of pedestrians is no longer sacrosanct and the traffic starts flowing also inside the public square and the street gains a shopping function. This shopping character of the public sphere of the medieval city is the same that Gruen considers as archetype for the renewal of USA downtown in `50s and `60s project as already discussed in the first actor. Moreover the emphasis given to the right of the pedestrian in the ancient city is an outstanding factor which is vehemently reconsidered in the 1950`s and 1960`s from the projects of the CIAM`s members until the social segregation of the *"analogous city"*[24] of Vincent Ponte, as already discussed and criticized.

24 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park.*

Finally, Giedion wonders if there is a relationship between the social structure of the city and the physical structure of its Core,[25] anticipating that relationship argued by Bakema ten years later between the *"architecture of the city"* and *"the structure of the society"*.

As an answer, he reminds that this connection is not strictly true since in history as in physics Newton`s rule of direct effect and cause doesn't exist any-longer. As an example he focuses on the Michelangelo`s Capitol, which is a perfect urban heart since it doesn`t reproduce the present *"structure of the society"* but it anticipates it.[26] If the Agora expresses freedom after having lost it, the Capitol is an expression of a better future social democratic development which is not present yet. Even if perfect Hearts, both examples are not, however, the straight reflection of the society, since they anticipate it or they remember it. Thus the social role and duty of the architect, of the *"great artist"* is to build the physical heart symbolizing a better condition of the society which is not present yet, rather than passively mirroring its social coeval presence. So the Heart is considered as a pro-active symbolic idea, with a physical presence, which has to improve the social structure of the city itself. From the Greeks to contemporary society, the 'architecture of the Core' anticipates and educates the 'architecture of the society'. "*This is our task today."* [27] Giedion concludes.

The Swiss historian then shows some plans of the ancient Cores in order to explain his thoughts. He draws these plans with the help of his friend, the Hungarian-born artist Gyorgy Kepes (1906-2001), who suggests to work on grey papers and to draw with black and white the lines of the buildings at the Core. Moreover some letters are written inside the drawing, in order to help to determine the different functions (R: Recreation, M: Meeting Places, S: Sanctuaries, B: Business).

The need of an important and well known artist's help, in order to show in the best way the Core plan, seems very interesting and intriguing. Indeed, not only does the design of the Core but also its representation becomes an issue for 'great artists'. It also brings to mind many other important proposals representing cities, from the Nolli's Plan (1748) where the white of the public space penetrates also into the interior of the public buildings to the representation of *'Nolli`s Las Vegas'*[28] by

The new American city and the end of public space Hill and Wang, New York, 1992, 123-15

25 See Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

26 Built in a society which doesn't know yet what freedom is, it is "*symbol of the vanished liberties of the medieval city-republic that he held in his heart"* Ibid.

27 Ibid.

28 *"A 'Nolli' map of Las Vegas Strip reveals and clarifies what is public and what is private.[...] Mapping the Nolli components from an aerial photograph provides an intriguing crosscut of Strip system."* in Venturi R.,

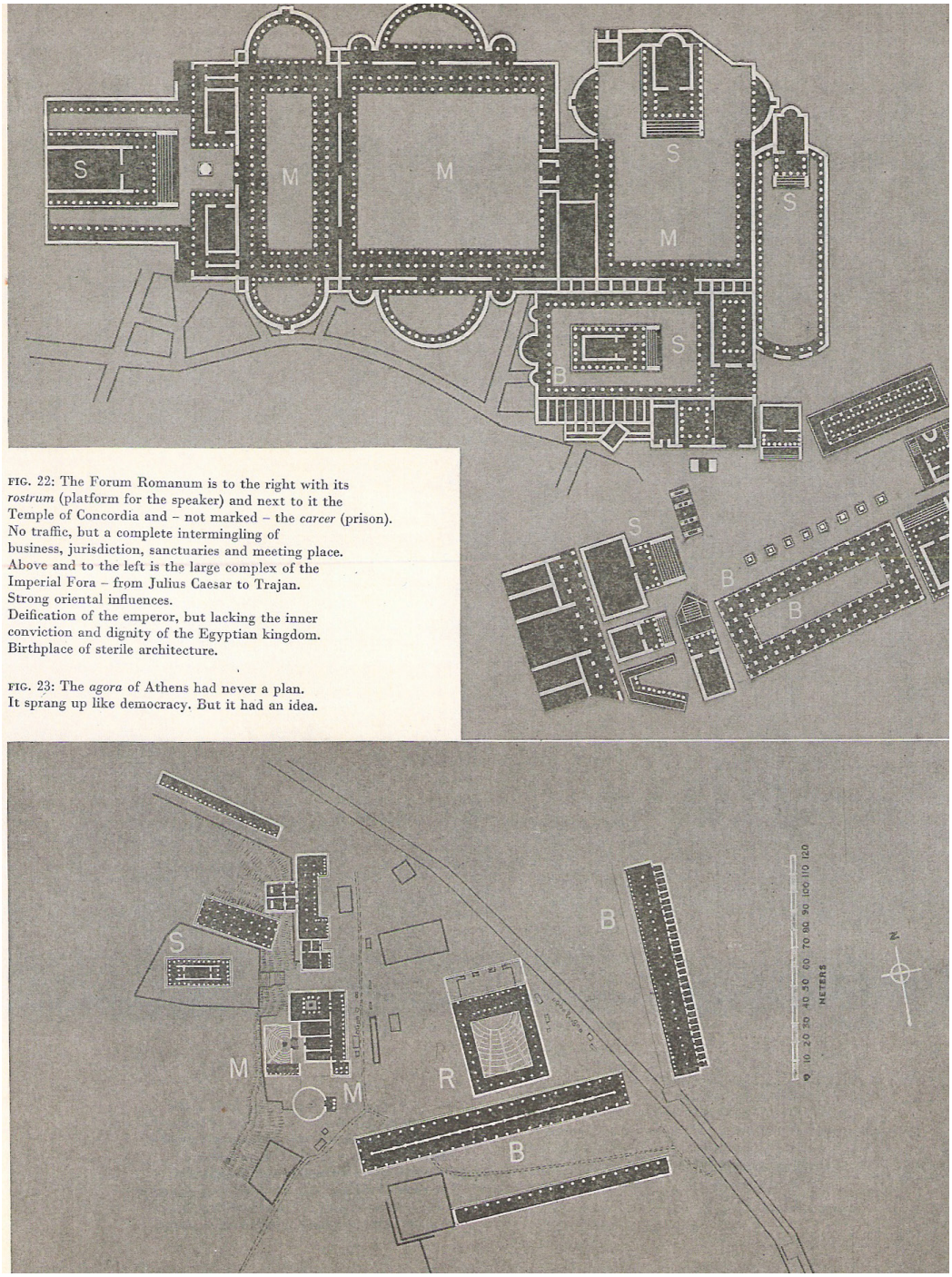


FIG. 22: The Forum Romanum is to the right with its *rostrum* (platform for the speaker) and next to it the Temple of Concordia and – not marked – the *carcer* (prison). No traffic, but a complete intermingling of business, jurisdiction, sanctuaries and meeting place. Above and to the left is the large complex of the Imperial Fora – from Julius Caesar to Trajan. Strong oriental influences. Deification of the emperor, but lacking the inner conviction and dignity of the Egyptian kingdom. Birthplace of sterile architecture.

FIG. 23: The *agora* of Athens had never a plan. It sprang up like democracy. But it had an idea.

Giedion S. and Kepes G., Historical Background to the Core, 1951

Venturi, Scott Brown and Izenour. In particular it is important to remember that in the late 1950`s Kepes will also help for the representation of the "The Image of the city" (Lynch), where the citizens' memory of their city is considered and the 'node' is described by Lynch as the Core of the city, as *"the focus and symbol of an important region"*[29] with many references to Giedion`s discourse.

St. Louis: where modern turns into post-modern

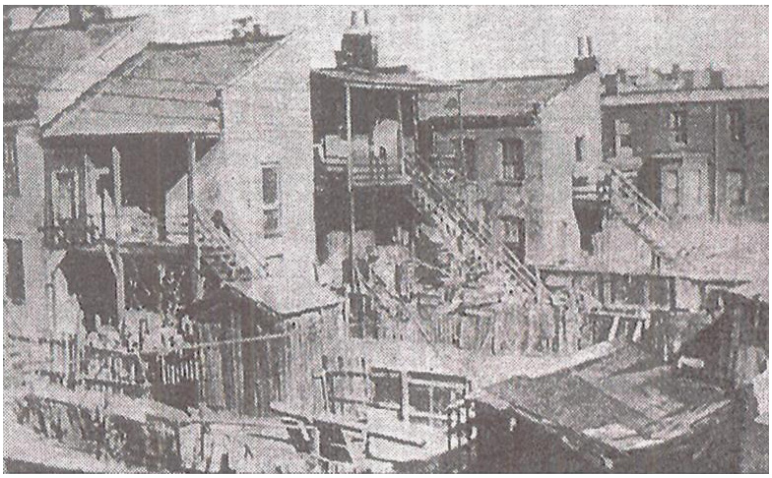
Some important projects, that should be briefly discussed, are developed in`50s and `60s in St. Louis. In 1955, the Pruitt-Igoe complex is built by the architect Minoru Yamasaki (1912-1986). It is a complex of 33 social housing buildings designed on the functionalist wave of the *machine a habiter,* of Le Corbusian invention. They are long lines of buildings imposed on a small scale buildings context, with no relationship with any external side of the site and with interstitial public spaces between the 11 floor high stripes.

Almost twenty years later, in 1972, it is decided to destroy all the residential complex because it is finally considered impossible to live in. As Bakema affirms ironically in his *"Van Stoel tot Stad"* (From doorstep to City) under the published image of Yamasaki's project: "*What a pleasure those people must have had with buildings in their back-yards and what has been left of it when they had to move into these blocks"'*[30] For Bakema it is an evident example of lack of any transitional elements, of any human scale, of any relationship. It is a perfect negative example to illustrate his theoretical urban belief. It is interesting moreover to note that while Bakema proposes as title of his course *"The human core of St. Louis"*, the city is becoming famous for its Yamasaki`s anti-human project. This demolishment indeed has been considered so important as to become a sort of main symbol of the failure of the pre-war functionalist modernism. Few years later, in 1977, Charles Jencks will write: "*Modern Architecture died in St. Louis, Missouri on July 15, 1972 at 3:32 p.m. (or thereabouts) when the infamous Pruitt-Igoe scheme, or rather several of its slab blocks were given the final coup de grâce by dynamite.*

Scott Brown D., Izenour S., Learning from Las Vegas. MIT Press, 1972, p. 18-19

29 Lynch K., The image of the City. MIT Press, Cambridge, First Edition 1959, p. 76 *"these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as symbol. They may be called cores" Ibid. p. 48. See also chapter about* HEART AS SYMBOL OF NEW HUMANISM

30 "*Wat moeten die mensen een plezier gehad hebben in die bouwerij en wat is daarvan overgebleven, toen ze moesten verhuizen naar déze blokken."* in Bakema J.B., *Van Stoel tot Stad, een verhaal over mensen en ruimte.*Uitgeversmaatschappij W. de Haan N.V., Zeist, N.V. Standaard Boekhandel, Antwerp, 1963, p. 73 translated in English in a manuscript Bakema J., *From Doorstep to City.* Available at University of Illinois-Urbana, 711.4 B78vEw, p. 25. The first two images are published in Bakema`s book.







Pruitt-Igoe, before and after

[…] Boom, boom, boom.'[31]

The 8th of April 1959, at GSD Harvard during a Seminar about Human Scale[32], other important projects in St. Louis are presented. The site, called Mill Creek, is in downtown to the east of the central business district. Its area is 475 acres and it will host both industrial and residential buildings. Two schemes are shown: the first, designed by Mayer, Whittlesey and Glass Architects, consists of 1,700 dwelling units, mostly designed as longitudinal and transversal linear blocks. The project is shown and explained with the help of sketches of wading pools, housing groupings and play areas in order *"to present the human aspects of the area"*. Moreover, the project is characterized by a gradation of scale from low houses to towers, emphasizing the need of a human scale.

The second scheme is proposed by I.M.Pei and Associates Architects, for 1550 dwelling units. This more formalistic proposal shows oval and rectangle public spaces, aligned on a central axis which is visually interrupted sometimes by transversal buildings. The main reference is the inclusion of the industrial area; however the form of the public spaces slightly recalls a renewal of St. Peter`s square, recalling also Bakema`s sketch about the Heart and the Power, which will be later discussed. Historical examples seem therefore to be re-interpreted, though not yet in an explicit post-modern attempt. Indeed, at a certain point of the discussion, Mr. Alexander calls it a "*Renaissance plan, produced thirty years after C.I.A.M"* and he wonders why it is being given so much praise. In favor of Pei project, the Dean of the School of Architecture at Washington University in St. Louis (where Bakema will be called a few years later), Jospeph Passenau considers it a positive experiment, "*which might have failed but at least it is going somewhere"*. Also Giedion considers it positively as a scheme with "*potentialities, a sense of wholeness, order."*

As a conclusion of the discussion about the two projects, Professor Sekler notes on the contrary that *"the Pei scheme is not a new experiment. I believe in creating order but not by taking historical examples and copying them. We must work slowly to produce our own order in today`s context."*[33] The slow production of *"today`s context"* is something very crucial also in the creation of the Heart of the

31 Jencks C., *The Language of Post Modern Architecture.* Academy Editions, London, 1977, p.9 Minoru Yamasaki is also the architect of the Twin Towers, fallen down the 11th September 2011, by terroristic attack and of the Picasso Tower In Madrid, targeted by Basque separatists who tried with failure to blow it up.

32 The Human scale Advanced Seminar for the master`s Class, conducted by Prof. S.Giedion and Prof. E.F. Sekler with the cooperation of Dean Jose Louis Sert, GSD Harvard University, Cambridge, Massachusetts, Spring Term 1959

33 Ibid.

MILL CREEK REDEVELOPMENT

Proposal of I. M. Pei and Associates, Architects

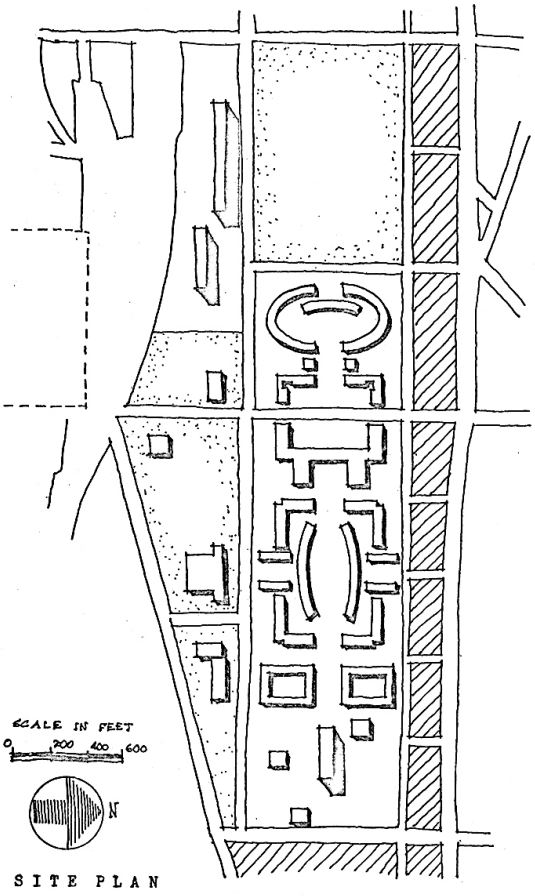


Plate No. 18, Fig. 1

MILL CREEK REDEVELOPMENT

Proposal of Mayer, Whittlesey & Glass, Architects

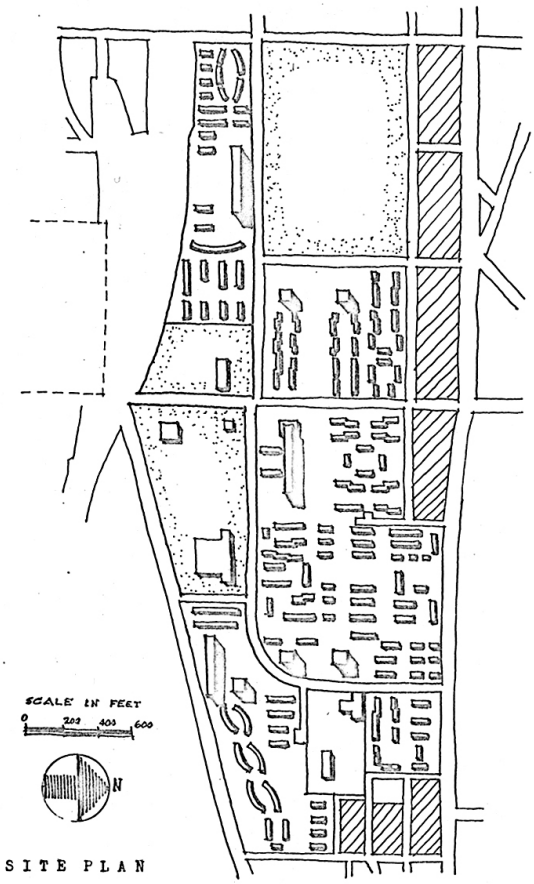


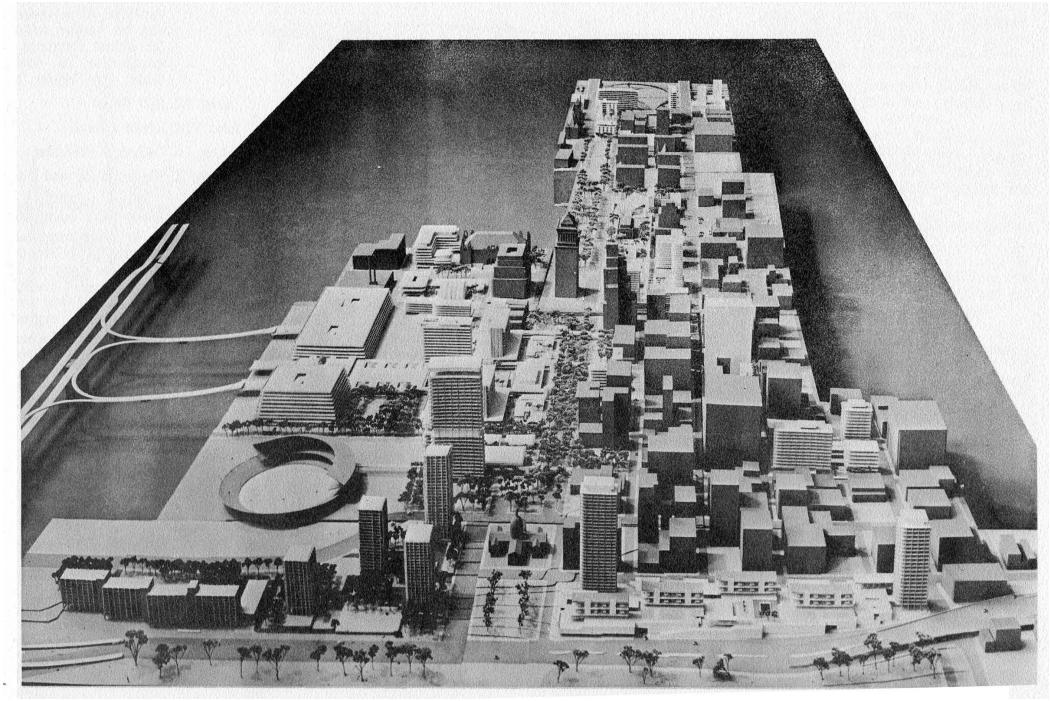
Plate No. 18, Fig. 2

Pei and Mayer proposals for Mill Creek

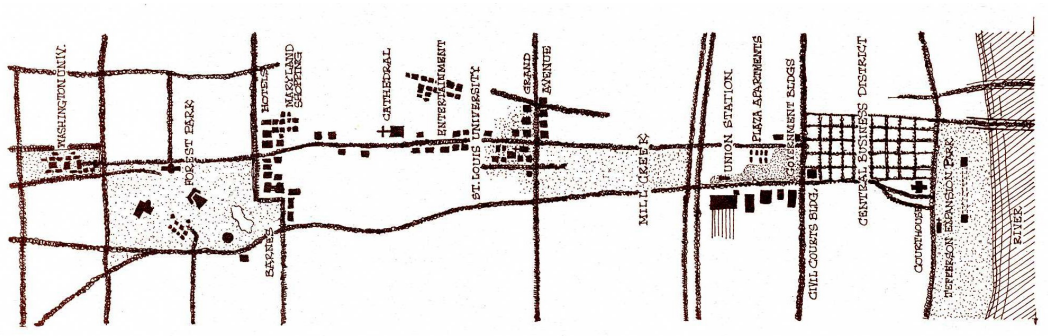
City, with a coherent continuity with both the history and the coeval identity. This equilibrium is already stressed for instance by Giedion, Rogers and Sert at CIAM8 and through their projects, as discussed in the first and second actor. Furthermore it will be an important issue also for the following decades, with many extremes between traditionalist-postmodern and super-modernist proposals[34].
Finally, the pre-post-modern attempt of Pei is rejected[35], because it is considered bold and formal while the Meyer and Whittlesey`s scheme is described as "*suggestive of a more humble, human approach"*.
If, on one hand, Yamasaki's buildings` demolishment is considered as the end of modern architecture, on the other, the second American-Asian architect, Pei, anticipates the introduction of the historical urban form in the design of the city which will be common in the post-modern project of following years. St. Louis becomes therefore the place of this architectural, social and cultural turning point, while Bakema re-introduces the theme of the *"human core"*, of the Heart of the City within its urban discourse and development.[36]

St. Louis: Bakema`s and students' proposal
As described by Dean Passenau during the meeting at GSD Harvard about the Human Scale, St. Louis is characterized by two important formal elements: the first is the river toward which the city has now turned its back with a lack of relationship with it; the second is an axis of both useful and interesting urban elements, starting from the river to the Washington University.
The general master plan, proposed by Bakema, follows these general indications consisting of a Linear Civic Center, a "*Spine Concept"*, as he defines it, from the eastern Missouri river where the City was born to the Forest Park on the West. This linear spine is thought to be designed with the possibility of future development , from East to West, and it hosts, in succession from the River side, the Central Business District, the Civil Courts Buildings, the Government buildings, the Union Station, the Mill creek, the St. Louis University, the Cathedral, the Maryland Shopping and the Washington University after the Forest Park. The final result is

34 It is interesting for instance the contemporary antagonism between Koolhaas and Krier, who might be representatives of these contemporary extremes. See also Second Actor.
35 "It was concluded that the Pei scheme was a bold, formal design somewhat based on forms developed and applicable to a past age. This scheme with its unity and order, might, however, be a better starting point for the redevelopment of the center of St. Louis." Ibid.
36 Another interesting asian architect is Fumihiko Maki who publishes at Washington University-St. Louis, in 1964, his outstanding '*Investigations in Collective Form'*. It is discussed in the chapter about Gruen. For a more detailed study of St. Louis projects see ed.by Mumford E., *Modern Architecture in St. Louis.* Washington University in St. Louis, 2004



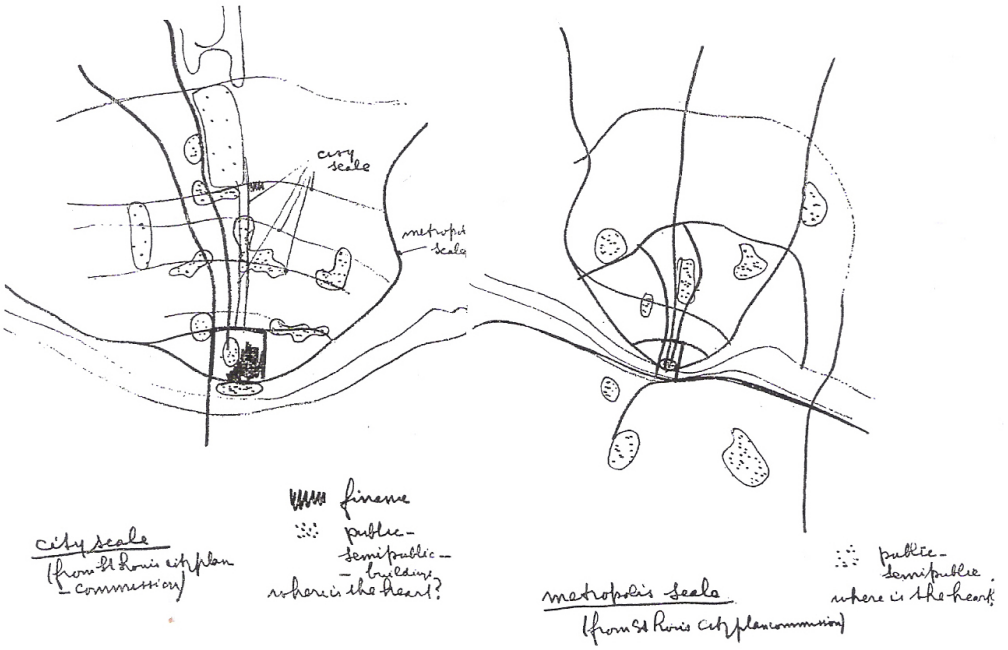
Model of the project for St. Louis



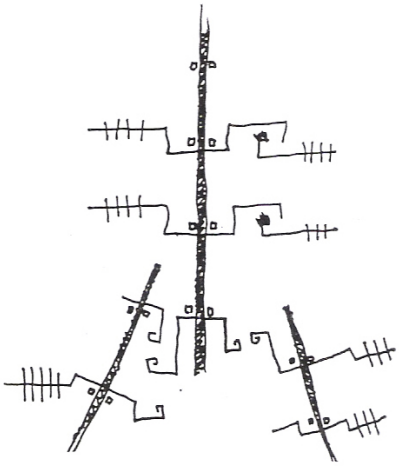
Project for St. Louis

a sort of `empty` version of the later linear "*Core Wall"* in the already discussed Telaviv project.
Moreover the spine is physically thought as a east-west double-deck road which penetrates toward the focus of the city near the bridge. "*The visual expression can be stronger, as that of the river!"*[37] Bakema emphasizes. The choice to promote the passage of the main traffic line through the heart is a radical expression of a point of view according to which the flow of the traffic is the basic element for life in the city, since it gives life to human settlement. Indeed without the traffic flow the city is destined to die, as the participants of the course affirm, while the "*traffic lines can promote new structures in the heart"*. This solution and these positive considerations about car mobility and traffic result in total opposition, for instance, with Gruen's Fort Worth project, as already discussed, where the traffic line embraces the center, instead of penetrating it, keeping the Core totally safe for pedestrians. The Spine Heart is totally in contradiction also with the symbolic meaning given by Giedion to the Heart as counterforce of the symbol of the machine: even if both interpretations consider the human values as the main themes, their attitude toward the traffic is opposite[38].
The project for St.Louis is published in "*Team 10 primer"*, edited by Alison Smithson. As a footnote of the diagrams based on St. Louis, Bakema writes: "*It is the architect who can demonstrate the special conditions that have to be recognized for the future development of the part ."*[39] The system of traffic and the central Spine seem thus to be a right device for the architect for the design of a Civic Centre in evolution and in future expansion, without being enclosed in medieval defensive walls as in Forth Worth for instance. Finally it is interesting to note the similarity between Bakema`s St.Louis traffic lines (1959-`60) and Smithson`s traffic net for Berlin competition (1958), which are both published in "*Team 10 primer"*: in both projects the urban traffic infrastructure and the urban motorways define indeed the structure of the community; moreover the patterns of the streets appear similar in their linear development and in their relationships with the River presences, the Missouri in St. Louis and the Spree in Berlin. The *"idea of mobility"* as main characteristic of two plans is tangible and visible in both sketches. However, the St. Louis project seems to pay attention about the pre-existing structure of the city which is the mirror of the existing

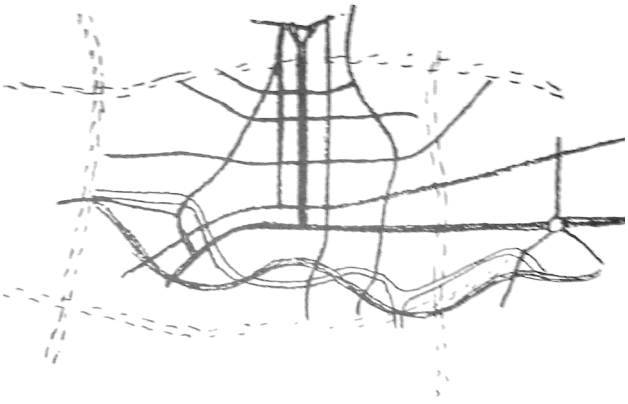
37 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part IX.* In Bakema Archive, Bake, NAI Rotterdam, d264
38 This apparent contradiction is already discussed talking about Tange`s view of the symbol, as linking element between technology and human. See Chapter about CIAM 8.
39 Bakema J.B. In Smithson A., (ed. by), Team 10 Primer. Studio Vista London, 1968, p. 44



Bakema, Project for St. Louis, 1959-`60



Bakema, Telaviv Core Wall, 1962



Smithsons, Project for Berlin, 1958

social structure as well; on the contrary Smithsons overlay a megastructure, in order to differentiate different layers of mobility, over the bombed city which nevertheless still reveals an existing texture, form, and urban structure. [40]

Students Project

After a few reports of the urban analysis, it is decided on November 15, 1959, that students[41] will have to work on 7, later 11, areas in which the city has been divided. Bakema remembers the participants to design the areas in coherence with the linear Spine concept and he recommends to think about the need of social transitional elements and about the *"3-dimensional expression"*. [42]

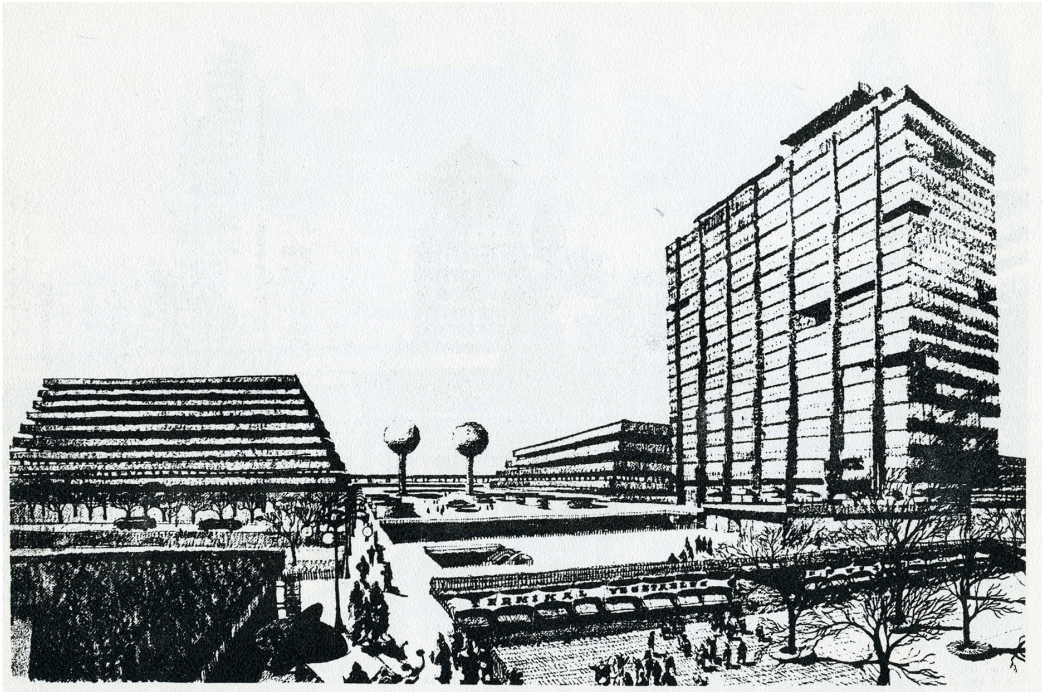
Finally the most astonishing project, among all students` ones, is certainly the proposal presented by Team 3 (Bonville, Ford, Johnson, Pruett, Smith), regarding the parking area in front of the River, saving part of the CBD for pedestrians. The project consists indeed of two gigantic parking garages, hosting 9000 cars, with a mound form like "*literally hills defining car access to the city."*[43]: this form is the result of the fact that, since the traffic flow is less in the upper floors than in the lower ones, each ramp can be smaller at each succeeding floor with the consequent tapering of the volume. Finally between the two mounds, which can

40 Robert Venturi will list The Berlin project inside his book 'Complexity and Contradiction in Architecture' in the chapter "evident contradictions", talking about almost random 'Superadjacencies' , which are separated in the space as an overlay-ed coating. "*In this kind of superimposition the degree of separation lies between the changing, almost incidental superimpositions of forms that are very separate in space and the interpenetration of superimpositions on the same plane. Superadjacencies at this intermediate degree are closely related but not touching, like the configuration of separated lining. They are also rare in Modern architecture".* Venturi R., *Complexity and Contradiction in Architecture.* The Museum of Modern Art, *New York,*1966, p. 64

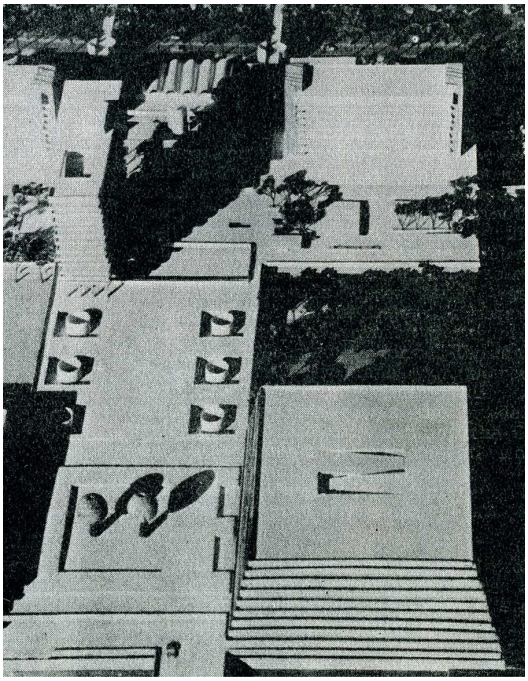
41 6th year design class project; October 1, 1959; to February 1, 1960. The class: Brewer, Bonville, Bortnick, Cannon, Day, Ford, Gilmore, Hanser, Heneghan, Henriken, Hosier, Johnson, Martin, Pruett, Richardson, Sarnoff, Skubiz, Smith, Torno, Vickery.

42 *"[…] it is not unreasonable that we should be able to communicate about life in our days in a way by 3-dimensional expression."* Bakema J., *The Humane Core, A Civic Center for St. Louis, MO.*Washington University Press., 1960, p.5 Team 1 (Brewer, Henrekin, Vickery) redesigns the area adjacent and north to the Jefferson Memorial Park where a new workmen` s housing complex will be built. Team 2 (Gilmore, Sarnoff, Skubitz) has to rethink and area adjacent to and west of the Jefferson memorial Park, to be developed as luxury and upper-middle class apartments. Team 3 (Bonville, Ford, Johnson, Pruett, Smith) designs the main parking area and the Lower Market, with the pedestrian entry into the CBD. Team 4 (Cannon, Torno, Veron) task is to revitalize the CBD area by a system of pedestrian walkways and brand new transitional spaces. Team 5 (Bortnick, Hanser, Heneghan, Richardson) redesigns the 12th Street Complex, a cultural government center bordering the Civil Courts Building, the City Hall and Kiel Auditorium. Team 6 (Day, Hosier, Martin) has the task to develop the area facing the Union Station, which should be considered as a new sub-center. Finally the other developments will involve the Mill Creek (Area VII), the Grand Avenue (Area VIII), the Cathedral Subcenter (Area IX), the Kingshinhway and Forest Park (Area X) and the Forest Park apartments (Area XI).

43 Ibid., p. 29



The parking garages from the crosswalk over Market-Locust Boulevard. The gasoline tanks serve as "entrance" markers to the downtown area.



Parking garages with mound form and gasoline as entrance to the City Center



Students showing project

be considered two Megastructures with their similar monumental character to the Philadelphia Garage project by Kahn, "*a new dramatic entry for the CBD*" is designed. Indeed, as optimistic symbol of a modern mechanized present, in coherence for instance with Tange`s interpretation of symbol[44], *"a large gasoline tank provides a modern focal point – the counterpoint of the medieval city`s tower."*[45] In a linear Core where the mechanized traffic is considered at the Heart of the society, the urban monumentality mirrors this convincement which is in contrast with Giedion`s opinions: if both Bakema and Giedion consider the "You and me" and the relationship as outstanding characteristic of the Heart of the City, their opposite interpretations demonstrate again the complexity and the contradictions of the Heart Idea, as assumed since the introduction.

44 Tange considers the symbol as the melting element of technology and humanity. See Kenzo Tange, Function, Structure, Symbol. 1966, in von Udo Kultermann H., Kenzo Tange 1946-1969, ed. Verlag für Architecktur Artemis Zürich

45 Ibid., p.18



Jaap Bakema, St. Louis, 1959

THE 'HEART OF POWER'

"The heart was hailed as the sun, indeed as the king, yet closer inspection reveals no more than a muscle."
Niels Stensen, *Opera philosophica* [46]

Among Bakema`s sketches about the historical heart, that one about the Heart of the city and the Power Establishment seems very fascinating and of deep interest, since it introduces another contradiction concerning the Heart. Indeed it focuses on a totally different point of view of the Heart theme, in which the public realm is no longer the positive "*proper place for human excellence"* [47], as we have always considered it until now, but it finds its representation into the barycentric point of Control of the entire territory surrounding it: it is the physical part of the city which represents the non-discussable, even owner of God Power, Authority of the entire society. This interpretation of the Heart finds many similarities for instance with the criticisms made twenty years later by Lynch to the organic city, as already discussed in the chapters regarding Gruen: Lynch in particular highlights the danger of the idea of hierarchy which is implicit inside the organicism, which is a "*common pattern of social organization"*[48], used by emperors, generals or kings in order to impose their authorities. On the contrary Giedion states during the VIII CIAM that a dictatorship will never be able to propose "*the essential quality of organic diversity"* which is essential for the design of the public space.[49] However, Bakema rediscovers in the history the `Hearts' as expressions of a new growing Power inserted inside the existing pattern structure of the city, for instance in the Renaissance Formalism[50]. The instrument of Power for the design of the

46 Vol. 1, p.168, quoted in Schippergers, *Die Welt des Herzens Sinnbild, Organ und Mitte des Menschen, Knecht*, Franfurt, 1989, p. 63f and in Sloterdijk P., *Bubbles: Spheres Volume I: Microspherology.* Semiotext(e), 2011, p. 101, originally published as Sphären I – Blasen, Mikrosphärologie, Suhrkamp, Frankfurt am Main 1998

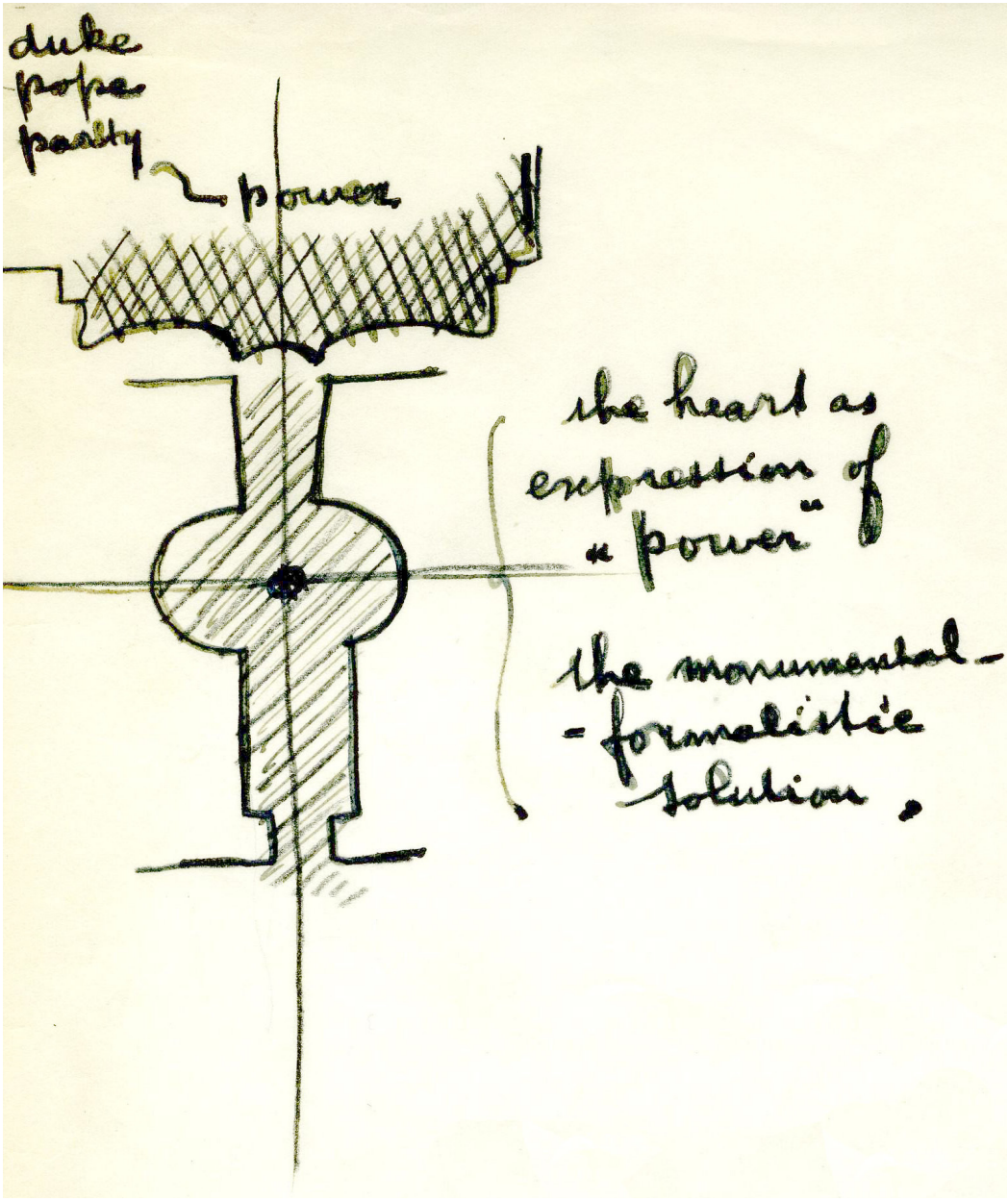
47 Arendt H., *The Human Condition.* University of Chicago Press, Chicago, Second edition 1998, p. 49

48 See Lynch K., *A theory of Good City Form.* MIT Press, 1981 and the chapter about GRUEN`S NEW URBAN PATTERNS

49 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 19

50 Rudolf Wittkower publishes in 1949 '*Architectural Principles in the Age of Humanism*' which has been a very important lecture for a whole young generation of architects, as he will admit in a preface of the book in 1960. In the first chapter he criticizes this idea of Renaissance Architecture as *'an architecture of pure form'*, as mentioned for instance by Ruskin. "*We maintain, in other words, that the forms of the Renaissance church have symbolical value or, at least, that they are charged with a particular meaning which the pure forms as such do not contain.*", in chapter "*The Centrally planned Church and the Renaissance"*, Ibid. p. 15

At this point we have to admit that, since the Renaissance is a cultural movement born in Italy, a



Bakema`s sketch: Heart of Power

Renaissance Italian city is the use of Perspective, as represented by Sebastiano Serlio in the *Tragic or Noble Scene,* inside the *Five Books of Architecture,* as highlighted by Graham Shane[51]. This "*new space conception"*[52] has two interesting opposite consequences: on one hand, Sigfried Giedion connects the growth of the modern individualism with the invention of the perspective, with which every element "*is related to a unique point of view of the individual spectator.*"[53]
On the other hand, there is the possibility to represent the 'Infinity', fixed for the first time on the table in a precise geometrical point. "*From the Closed World to the Infinite Universe"* [54] is the title of the book of Koiré, where the passage from the classical view of the *mundus* is substituted by a *uni-versum,* by a unique way of direction, the *novum,* which is the Modern world according to Vittorio Ugo[55]. Therefore the use of the perspective devices in the city has also permitted determinant places or symbols of Power (the Church, the Duca, the King,..) to be fitted together with the "*punto di fuga"*: the collapse of Infinity Universe into a geometrical infinitesimal point. Consequentially, the final result is the rise in the

continual recurrence to Italian culture is present in the Heart discussion: we have direct proofs of that during the 8 CIAM when an open discussion about the Italian Piazzas is even organized; furthermore after the Heart of the City Conference, the CIAM Summer School moves from London to Venice, where piazza San Marco is "*the most generous of the hearts"*; then in the '50s the Italian CIAM architects seem to be the first ones to underline the necessity of an historical continuity in the city, which is firstly stressed in Hoddesdon; finally we can consider the 'Heart of city' as the starting point of the impetuous shift from a mechanical-functional thought to a organic-humanistic view where the Man is even too eccentrically positioned in the middle of the Universe, as in Wiener sketch, or He becomes the measure of everything, as in the Modulor of Le Corbusier, with a so clear reference to Leonardo da Vinci, Francesco di Giorgio, Francesco Giorgi, Cesare Cesariano, Fra Giocondo, Leon Battista Alberti, Sebastiano Serlio,... It is interesting to note some important publications during `40s and `50s about this theme: Wittkower R. - *Architectural Principles in the Age of Humanism* (1949), Paatz W. *Die Kunst der renaissance in Italien* (1953), Ehrenkrantz E.D. - The Modular Number pattern (1956), Scholfield P.H. - *The Theory of Proportion in Architecture* (1958)

If Hoddesdon is the physical place where most of the outstanding architects of the '50s make this shift, then Italy seems the main cradle linked with the 'Heart of the City' as Idea, as the Opbouw group defines it.

51 *"Perspectival vision and visual inspection, […] had previously helped display the power of the Prince in Renaissance theater.[...] Serlio's Noble Scene corresponds to the state city, an administrative center and setting for the public display of Power."* in Grahame Shane D., *Recombinant Urbanism, Conceptual Modelling in Architecture, Urban Design, and City Theory*. Wiley Academy, Great Britain, 2005, p. 86\87, 155

52 Giedion S. *The new space conception: Perspective* in *Space, Time, Architecture*. Harvard University Press, 2008, p. 30

53 Ibid. p. 31

54 Koiré A., *From the Closed World to the Infinite Universe,* The John Hopkins Press, baltimore, 1957

55 "*[...]la prospettiva verrà assunta, nella sua struttura e nella sua portata epistemologica, quale paradigma della rappresentazione del Moderno […].Con la codificazione della prospettiva, l' infinito cessa di essere mero attributo divino, concetto metafisico o vaga designazione massima della grandezza, per farsi precisa ed operabile entità geometrico-matematica ed offrirsi ad una rigorosa rappresentabilità.[...]'"* in Ugo V., *Architettura ad Vocem. Verso un glossario dei termini di architettura.* Guerini e Associati ed., 1996, p.106-108

Power presence inside the city, instead of the spread of an individual democracy. As an example of a later Power restructuring of the city, between 1585 and 1590, Pope Sistus V, "*the first of the modern town planners"*[56]*,* attempts to redesign all Rome in order to impose for the eternity his personal Power establishment and, in the meantime, to stress the *Caput Mundi* character of the city. The previous Popes had left a fragmentary urban systems of roads and monuments which should have been reorganized by Sistus V in a unique masterplan, toward a "*single holy shrine"*'[57] City. As Giedeon remembers, Roma presents different kinds of topography types, and Sistus makes use of his "*various and diverse perspective[...] in order to charm the senses of the body"*[58]. As a result, the masterplan that he imposes, 'digging out' in the existing chaotic settlement (similarly to Bakema's second sketch), is organized as a net of streets connecting nodes, where Sistus V places fountains, obelisks which are used as landmarks, as '*punti di fuga*', as focal points, visible from any directions. This Baroque network model of connecting symbolic nodes gives a sense of central control and power; "*it produces strong visual effects and lays the ground-work for public symbolism"*'[59] (Lynch). The symbol and the monument inside the City are therefore expressions of the Authority and of the Power of the Pope, rather than a positive humanistic presence of *"monumentality (which) springs from the eternal need of people to create symbols for their activities and for their fate or destiny"*[60], as Giedion instead affirms.

It is interesting to note also that in the same period of the master-plan of Sistus V, also Michelanelo`s Capitol is under construction[61]: if the former is a network of Power which will become a model for other later urban plans, then the latter is considered by Giedion as a true Heart since it symbolizes the democracy even if not present yet under the Pope`s despotism, as already discussed many times in the research. In this sense in XVI Century Rome becomes the main expression of both Power and Democracy, symbolized in the design of the public space of the urban structure. Then Giedion`s Heart is thus totally in opposition with Bakema's

56 Giedion S. *The new space conception: Perspective* in *Space, Time, Architecture*. Harvard University Press, 2008, p. 100

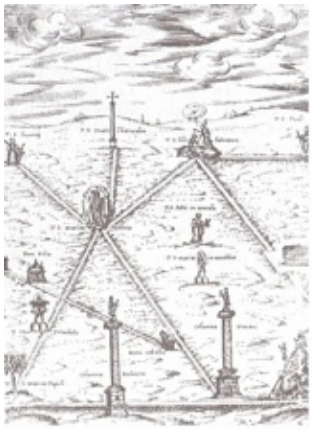
57 Ibid. p. 92, More recently the plan of Situs V and the Renaissance streets as representation of power have been studied and discussed in (*ed.by)* Aureli P.V., Giudici M.S.,Mastrigli G., Tattara M., *Rome, The Centre(s) Elsewhere. A Berlage Institute project.* Skira, Milano, 2010; See also Aureli P.V., Tattara M., *The city as political Form.* In *Visionary Power. Producing the Contemporary City*. NAI, Rotterdam

58 *Della Trasportatione dell' Obelisco Vaticano et delle fabriche di Nostro Signore Papa Sisto V, fatto dal Cav. Domenico Fontana, Architetto di Sua Santita,* Libro Primo (Rome, 1590) in Ibid. p. 93

59 Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 281

60 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 28

61 The Capitol is commissioned to Michelangelo under Pope Paolo III (1534-1549)



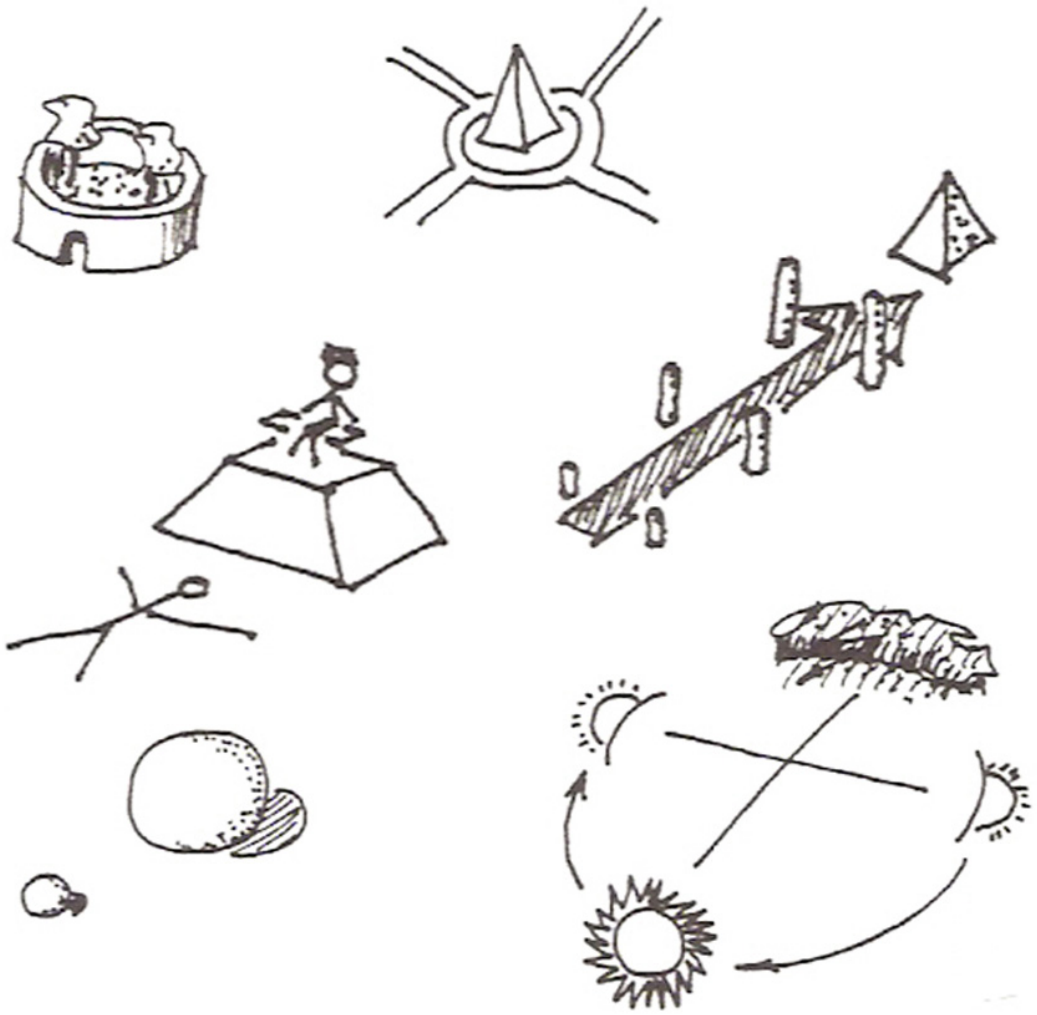


Sistus V, Roma, (1585-1590) Lynch, Baroque System of Power L' Enfant, Plan for Washington D.C.(1791)

definition of the already described 'Heart of power' which is perfectly mirrored by the Pope`s master-plan: it is the expression of a new growing Power which is inserted inside the existing pattern structure of the city and thus it is eternally immutable. During the coming centuries, successors will indeed find an already given and unchangeable structure, whose spots will be later surrounded by public squares and buildings. Finally this successful system is used also in later urban development, from Paris under Haussman (1860s) to the Plan for Washington D.C. drawn by Major Pierre Charles L' Enfant (1791).

Kevin Lynch describes, in his book "*A theory of Good City Form"* (1981), three traditional 'normative theories', dividing them in ceremonial centers, city as a machine and city as organism which has been already described in the First Actor. He calls the first of his city models and theories, the "*City of Faith"* or "*Cosmic City"*[62], which is a primordial urban settlement usually oriented and organized following cosmological rules. This city usually arises as a ceremonial center of Power where, as we can see from his sketches, a sacral priest on the the top of a ziggurat imposes the Gods' wills to the inferior peasants, or a procession proceeds towards a Pyramid, which might be also the central celebratory monument of the village. Then we find boundaries and gates regulating who can enter the inner sacred city, the dominance of size and elevation and finally the symmetry and the order as characters of Power. These devices of dominance can be found, with some differences, in both old Chinese and Indian Cities, in the Imperial Rome and

62 As we have seen also Rykwert studies these cosmological analogies in the ancient cities, which are considered also in the studies of Van Eyck. See Rykwert J., *The idea of a town,* in Forum(1963), n.3



Kevin Lynch, City of Faith

in the Aztec temple-city as well. This use of the "*site and form to symbolize and reinforce Power,"* he continues – "*has been carried through Western civilization and survives today."*[63] Indeed he explains that if Renaissance expresses in the urban form "*a symbol of the orderly, mathematical universe"*, then the Baroque model uses the urban axes as *"expression and instrument of Power and order"*, even in the already cited later Washington plan.

Furthermore, nowadays these expressions of Power inside the public space of the city have still influence on our lives, as Lynch reminds us: "*Yet we are still affected by those devices of rite and form."* Power is therefore present in our cities, most of the time as expression of a past authority, but we still feel affected by these "*cold devices of power"* designed only with the aim to subjugate people; we still feel their psychological power which can not be dismissed, "*because they speak to deep emotions of anxiety in people"*[64]. These devices are very clear especially in Capital cities, characterized by the "*monumental formalistic solution"* as Bakema writes on the right side of his first 'Heart of Power' sketch. For instance St. Petersburg and Moscow show what Lynch calls "superhuman scale" squares in order to display the Power concentrated in the center of the city and shifted form one city to the other; the capital city of Punjab, Chandigar (presented by Le Corbusier to the Hoddesdon CIAM as well) finds in its Capitol a new modern monumentality; Brasilia seeks to break with the colonial heritage moving its centre from its historical position, towards the hinterland, "*in the literal geographical centre of the national territory"*[65]; finally Rome finds in Sistus V an urbanism of spiritual Power.

Recently the philosopher Peter Sloterdijk has considered the contemporary role of the Heart in our civilization, in particular through the domain of Christianity. In his book Bubbles-Spheres I (1998), the author highlights on one side the emotional-spiritual symbol of the Heart (through Konrad von Würzburg`s *Herzmaere* [Heart Fable], Raymond of Capua`s *La vita di Santa Caterina da Siena*) and on the other its dictatorial image. As far as this latter is concerned, he compares the *"Platonic image of the sun`s kingship"* in the cosmos to the *"heart as the monarch in the world of animal-human bodies"*[66]. The Sun-King corresponds to the Heart-King, since both the Sun and the Heart work in the mode of radiation. This similarity

63 Ibid. p. 75

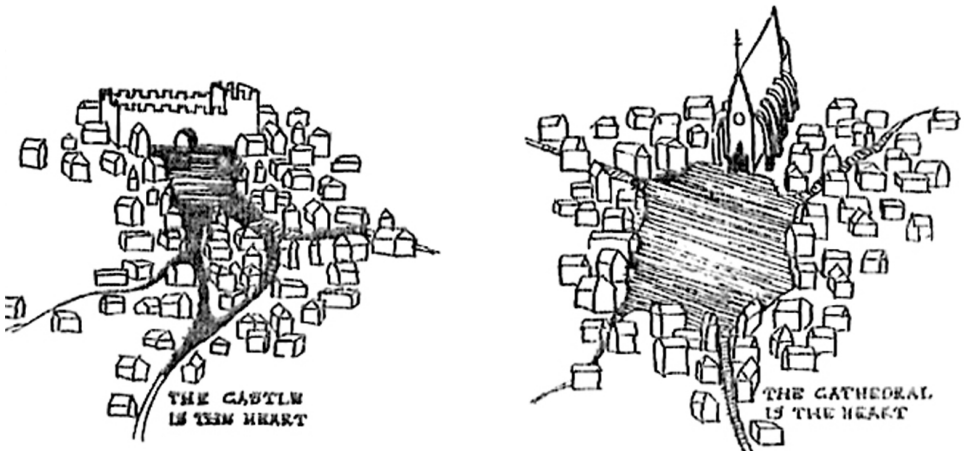
64 Ibid. p.79-81

65 Aureli P.V., Tattara M., *The city as political Form.* In *Visionary Power. Producing the Contemporary City*. NAI, Rotterdam, p. 23

66 Sloterdijk P., *Bubbles: Spheres Volume I: Microspherology.* Semiotext(e), 2011, p. 119-120, originally published as Sphären I – Blasen, Mikrosphärologie, Suhrkamp, Frankfurt am Main, 1998

of the Heart-King is so strong that until the first decades of the XVII Century the anatomic study of the circulatory system provides only the flow of blood from the heart to the extremities with no return. Indeed the idea of the monarchical power has *"imagined the king and the heart as absolute givers"*[67]. The opposite would be an insult to sovereign, to the center *"as the heart by the Grace of God"*[68]. In this sense the "Heart of Power" doesn't influence only the physical structure of the city but also the scientific anatomic research of the human body itself. This cardiological power typical of both the monarchy and the baroque church is then opposed by the anatomists who try to subvert *"the heart from a sun to a machine, demoting it from a king of the organs to a leading functionary in the blood circulation."*[69] Among these anatomists, Julien Offray de La Mettrie (1709-1751) publishes in Leiden, in 1747, his text *L'homme machine*. In this writing the author presents the human body as an entire mechanical process (even the soul which *"is clearly an enlightened machine"*[70]). This celebration of being an enlightened machine is considered by La Mattrie as *"a possibility to satisfy the interest in well-understood human freedom."*[71] As far as our discourse about the Heart of the City is considered, it is very interesting to underline that if in the XVIII Century a new human machine concept has the role to free the humans from the temporal and spiritual dictatorship of the Heart-king, then three centuries later at CIAM 8 the Heart is considered vice versa as the renovated symbol against *"tyranny of mechanical tools"*[72] (Giedion), as already discussed in the previous chapters. In three hundred years the roles of Heart symbol and of the Machine symbol in front of the Power are inverted, keeping a still contemporary and contradictory presence in our societies, as highlighted by Sloterdijk himself.
The temporal and spiritual Power is described also by Bakema who considers in 1959 the relationship between monument-power and the public space in his sketches about the "Castle" and the "Church". Indeed the Dutch architect presents to his scholars other sketches about the Church Institution and the Heart of the City, drawing *"the Cathedral is the Heart"* as an expression of a Spiritual Power in parallel with the Castle, as another kind of Heart of the City as an expression of the Temporal Power: if in front of the Cathedral there is a square, a place of Centrality

67 Ibid. p. 123
68 Ibid. p. 123
69 Ibid. p.130
70 Ibid., p.136
71 Ibid., p. 136
72 Giedion S., Historical Background to the Core. in Rogers E.N., Sert J.L., Tyrwhitt J., (Eds.) *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17



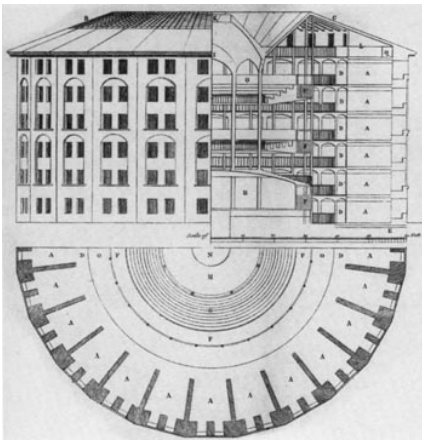
Bakema`s sketches

dominated by the dimension of the Spiritual Power, in the second drawing the Castle itself looks like an inner city with its defensive walls, where all streets come from. In this case we might superficially summarize that the main central square is usually mirroring the image of an Authority while the Heart as relationship hasn't any links with the Power and the despotism. This historical review of the Heart of power, might thus be considered thus also as a reinforcement of the Idea of the "Human Core" as presented by Bakema.

As far as the Power-Control and the Centrality-Heart are concerned, the French philosopher Foucault uses, a few years later, Bentham[73]'s Panopticon prison project in order to stress the heterotopia[74] of deviance and discipline idea. It is a project designed in 1791, where a central tower hosts the 'eye of Power', surrounded circularly by all prisoner cells, which are continuously controlled and observed. This centrality, as the physical and geometric barycenter of control, still persists in our age in a mental control similar to the old feudal hierarchical structure. As underlined by Graham Shane, this hierarchical organization is perfectly reflected in the urban context for instance in the annular organization of Von Thünen's

73 Jeremy Bentham (1748-1832) is not an architect. He is a English Philosopher and Jurist. Foucault discusses Bentham`s project in his book *'Discipline and Punish'*, as the incarnation of a modern institution where nobody knows exactly when and if he is surveilled and therefore he`s less encouraged to make a crime. See Foucault M., *Surveiller et punir, naissance de la prison.* Paris, Gallimard, 1975

74 If Utopias are perfect form sites with no real places, Heterotopia might be considered as an excess of site, an overlapping of real sites which are *'"simultaneously represented, condensed and inverted." See Foucault M., Of Other Spaces: Utopias and Heterotopias.* In Documenta X: The Book, Catherine David and Jean-Francois Chevrier, eds. (Cantz-Verlag, Kassel, Germany, 1997), 265 (Originally published in Diacritics 16-1, Spring 1986)



J. Bentham, Panopticon, 1791



G.B.Piranesi, Carceri, 1745-1761

Central Place Theory or in the Howard *Garden Cities of Tomorrow* (1904) where the ring system becomes a urban model in contrast with the chaos of the suburb city[75].The opposite system, continuing to use the prison image, is of course the '*Carceri'* (1745-1761 ca.) of Giovanni Battista Piranesi, where the space has no centrality or an order in a mix of the irrational, anguish and sublime.[76] It would be interesting to interrogate ourselves on what kind of society and city form would correspond to Piranesi's sketch, since its opposite Panopticon has many "*urban translations"*. Anyway what seems very interesting to underline is that both systems, one of centrality order and the other of infinity chaos, find their maximum expression in two Prison projects where Man can be only controlled or tortured, without any alternatives of freedom. Moreover, as stressed by Vittorio Ugo, the power of the use of the Perspective is present in both drawings: in the *Carceri* the perspective shows "*in the most dramatic way the excess and the absence of space, of boundaries, of geometrical relations*" , while in the Panopticon the representation is used "*for the omnipresent control by the central eye, rigorously unidirectional one. […] The one who in the Renaissance was 'observer', now is a 'guardian' and a 'voyeur'.*" [77]

75 *"This social and conceptual organizational 'tree' apparatus did not disappeared overnight but remained as a central- place model within the new system, impeding expansion and limiting movement across the center".* Grahame Shane D., *Recombinant Urbanism, Conceptual Modelling in Architecture, Urban Design, and City Theory*. Wiley Academy, Great Britain, 2005, p. 283

76 *"Ciò che viene distrutto è il «centro» di quello spazio: vale a dire, che al crollo degli antichi valori, dell'antico ordine, corrisponde la «totalità» del disordine.[...] Siamo già, nelle Carceri, in presenza di un'angoscia generata dall'anonimato del soggetto e dal «silenzio delle cose."* Tafuri M., *Progetto e Utopia*. Laterza ed., 1973, p.20-21

77 *"Colui che nel Rinascimento era 'osservatore' è adesso un 'sorvegliatore' e un voyeur: egli non guarda*

However, the Panopticon system is useful for us in order to discuss the correspondences between the Ideas of Heart of City, the Centrality and the Power. Indeed we have already discussed the fragility of the correspondence between the Heart of the City and the center of the city, as the CBD or the central square[78]. Of course the Heart may coincide with them but it has a more complex constitution and presence. For instance we can no longer tie the heart concept to the CBD of Philadelphia as Le Corbusier does in an aerial view in '30s in "Aircraft", or consider Piazza Duomo as the Heart of Milano, as shown in Hoddeson. Furthermore also the idea of centrality is changeable: indeed, during history, the centres of the cities have always moved[79]. And what happens in the present-day society? *"Centrality now aspires to be total*", Lefebvre affirms, connecting *"the punctual to the global*"[80]. Indeed the continual physical spread of the cities has led to polycentric networked urban regions, it has transformed the classical urban form into a "*single urban soup"* (Deyan Sudjic, 1995), into "*a liquefation of the urban structure"* (Polo 1994), where the urban distinction between the inner and the outer, the historical centre and the periphery, "explodes into a regional carpet (Woodroffe, 1994) of fragmented communities, zones and spaces" [81].

The loss of centrality is not only an urban reality of particular regions but it is also a sort of cultural position for instance for the Situationsts of the'50s and '60s: in 1957 Guy Debord and Asger Jorn present *"The Naked City, illustration de l' hypothése des plaques tournantes en psychogeographique"* , a collage of parts of the old Paris, linked to each others with arrows which underline the relations of "*unitary urbanism"* (Debord) based on connections between cognition, language and narrative.[82] In 1959 Reyner Banham appreciate Situationists attempt to redraw the city map on the behaviour and emotion of the individuals. Moreover in opposition to the nostalgic image of the Medieval City as an 'egg' with a dense

dalla finestra per acquisire conoscenze scientifiche da offrire al mondo o per progettare il mondo, ma dal buco della serratura per acquisire potere sul mondo e sulla popolazione; e per questo non deve essere visto, affinché le profondità e le complessità possano dispiegarsi in superficie ed essere controllate dal sistema." in Ugo V., *Architettura ad Vocem. Verso un glossario dei termini di architettura.* Guerini e Associati ed., 1996, p.118

78 See chapter about CIAM 8, Heart and Centre, Heart and Core

79 See for instance the studies of Vernant about Greek cities.

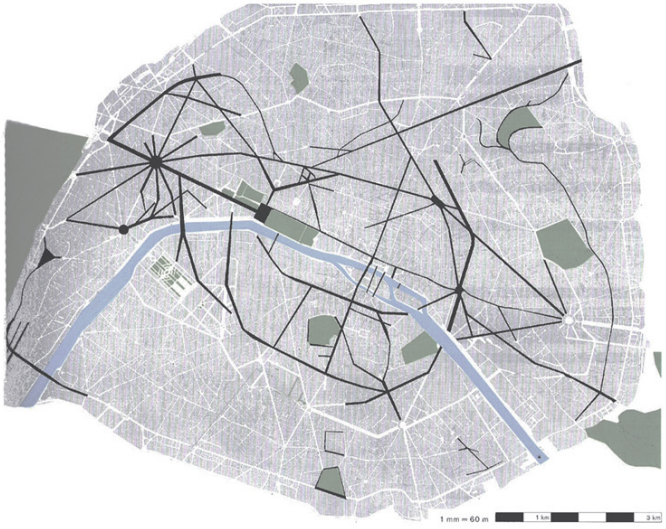
80 *"Centrality is therefore a form, empty in itself but calling for contents – for objects, natural or artificial beings, things, products and works, signs and symbols, people, acts, situations, practical relationships.[...] Centrality as form implies simultaneity".* Lefebvre H., *The production of Space.* Blackwell Publishing, p. 332 transl. By D. Nicholson-Smith, *La production del l'Espace.*1974

81 All quotes in Graham S., Marvin S., *Splintering Urbanism, networked infrastructures, technological mobilities and the urban condition.* Routledge, London and New York, 2001, p. 115-116

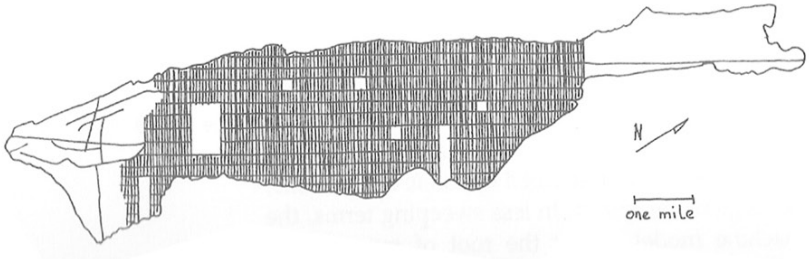
82 See Sadler S., *The Situationist City.* MIT Press, Cambridge, London, p. 60



Venice Biennale 2010, Japan Pavilion



Haussmann, renovation of Paris, 1860s



New York Plan, 1811

inner Core surrounded by a wall-shell, which is similar to Gruen`s nostalgia of Vienna, he proposes an alternative contemporary "*scrambled egg"*[83] city whose yolk is pressed and broken, spreading in the landscape[84].

In '90s Rem Koolhaas continues this cultural battle against the centrality of the city. The Dutch architect indeed eulogies the *'Generic City'*, as already presented in the introduction underlying its contradictions in front of the master-plan of Almere. Then the suppression of both Center, Identity and History, as main character of this Generic City, is dramatically typical also of what Bogdan Bogdanovic called "Urbicidio" (Urban murder): the destruction, the bombing of the Balkan inner cities (as in Sarajevo) because of their cultural, political significance and symbolic value in the Territory; *"the violent and clear opposition to the highest civil values"*. (Bogdanovic) Therefore it is not only a cultural or urban agenda against the "*suppressing center"*, but it turns even into a War strategy of "*suppressing the center"* values.

Finally we may assume from these positions, that the 'Centrality' has not disappeared at all; its current presence even frightens and worries many cultural and no-cultural urban exponents, especially due to its ever-present authority and Power Control: "*the classical concept of the Polis still has authority worldwide''*[85]*!* Moreover, Power of centrality has "*no precedent in history. Thought the metropolitan container has burst, the institutional magnets still maintain to a large degree their original attractive Power"* [86], as Mumford writes in the '50s.

The Power in the city is still a contemporary issue: for instance in 2007 the 3rd International Architecture Biennale in Rotterdam proposes the exhibition "*Visionary Power"*, an appeal to a few young generation architects to discuss the relation between Power and the forces that affect cities in the contemporary situation. Among the other architects, Dogma studio stresses the importance of the Capital Cities in order to rethink contemporary cities as Centres of cultural and geopolitical entities. Furthermore, inside the later 2010 Venice "Biennale", on the facade of the Japan pavilion a striking manifesto is shown: *"Urban public spaces are authoritarian devices for suppressing people."* The Japanese architects, Kitayama

83 Banham R., *City as Scrambled Egg.* Cambridge Opinion, n. 17, *Living with the '60s* issue (Cambridge, 1959), p. 18-23

84 *"The drive-in cinema[...] was the first of the radically new centers of popular aggregation produced by the diffuse, well-mechanised culture of motorised conurbations,[...] it can be used to manipulate and direct movements of population from hour to hour.[...] - a start could perhaps be made with some such technique as Guy Debord's theory of Psychogeographical drift."* Ibid. p. 19

85 Grahame Shane D., *Recombinant Urbanism, Conceptual Modelling in Architecture, Urban Design, and City Theory*. Wiley Academy, Great Britain, 2005, p. 99

86 Mumford L., *The City in History.* Harcourt, Brace and World, New York, 1961, p. 552

Tsukamoto and Nishikawa, who present the exhibition in the pavilion, are indeed convinced of a conjunction, a superimposition between the totalitarian Power and the entire public realm. In order to stress their idea, they argue that Haussmann's masterplan of Paris (very similar to Sistus V power idea), which transformed the French Capital City into a permanent grand urban space during the short span of 20 years, is only a political measure to impose the totalitarian authority of Napoleone III on the proletariat. Also New York[87], the capital of the XX century, embodies the new public symbols of financial Power, becoming a sort of anti-human grid where Capitalism can play. In contrast to these two examples of Occidental cities, Tokyo of the XXI century is described as a democratic city, where any ideology or authority has been nullified; it is a Metabolizing city (with clear reference to the Metabolism Movement of the 1960[88]), a city which changes continuously as an organ, a city where the "*totalitarian public"* is substituted by the "*private"*, inside a *"urban landscape of democracy".*[89] Therefore, from their point of view the Heart of the city is entirely considered as expression of Power, while the private Hearth is the symbol of democracy: no connections between them is possible as described on the contrary during the CIAM 8 and in particular in the scheme *"Community and Privacy"*[90] *made by* Chermayeff and Alexander.

The Centrality-Core, as "*a spatial link with History and a temporal link with economic and political Power"*[91], is depicted in a sociological point of view as

87 *"This mechanical plan,* (The Commissioners' 1811 plan for NY City) *vast in extent and heedless of topography, was motivated by the need to provide for future streets and to clarify land titles after the Revolution."* (Kevin Lynch) in Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 85

88 They call themselves as Void Metabolists because they refer to Metabolism Movement which poses the basis, after the World War destruction, for a new spirit of thinking according to which the existing city is considered as a rigid, constrain, diseased despot, as sustained by Kitakute, in opposition to the autonomy, flexibility and power of the individual. However they negate the 'core spaces' used by Metabolists, substituting them with Voids or being themselves a core."*Not having a core conversely means that you can create a core. You might say, "I am the core." […] In Japanese, we have words like Kinjo and Kaiwai (both of which might be translated as "neighborhood"), which suggest that are at the core of something."(R. Nishikawa)*

89 Since its land is in majority subdivided into small plots distributed to their 1.8 million owners: "*[...]due to the fact that each grain or house both constantly maintains and replaces a gap (void) though the initiative of the individual owner, the capital and authority[...] is thoroughly dispersed, and Tokyo can be still seen as an urban landscape of democracy."* Kitayama K., Tsukamoto Y., Nishikawa R., *Tokyo Metabolizing.* ed. TOTO LTD., Japan, 2010, p.29

90 Chermayeff S., Alexander C.,*"Community and Privacy. Toward a new Architecture of Humanism", 1962*

91 "*The reassertion of Power in the center is shaped by the narrowness of streets and the historic gathering functions of the Core, the jigsaw of social uses that reflect uneven economic values, and over all, the density of the built environment that permits markets to generalize the products of a highly specialized place – and to communicate them through a larger market culture."* Zukin S., *Landscape of Power, from Detroit to Disney World.* Univerity of California Press, 1991, p. 186

well. For instance Mike Davis' "*Core of Fear"*, which has been presented in the introduction in comparison with Roger`s Grand Paris, has the features of a cruel reality which tends toward a "Dystopia"[92]: from an "*Ecology of Power"* (Zukin) to this last "*Ecology of Fear"* (Davis), the Core is in this case at the center of a negative 'Utopia of Fear', a terrible and frightening melting pot of Piranesi's and Bernham's prisons, characterized by a repressive, frightening social control system.

In conclusion, are we still able to find a place of freedom, where the Heart of the City can express all its values, as thought and expressed for instance during the VIII CIAM?

Can we still state that *"the Heart is the ultimate expression of this quality: it must be the place where freedom is exercised and perfected."*[93] - as Ernesto Nathan Rogers highlights?

We are still under the pressure of past authorities once we are inside the monumental public spaces, as both Lynch and the Void Metabolists state; then the Core becomes even a dystopia in LA in Davis` *ecology of fear* while the centrality concept itself is often culturally abhorred as in the *Generic City.* Moreover, more recently Zygmunt Bauman[94] highlights the loss of boundaries between freedom and control, in the so called *liquid modernity.* Liquidity means that there are no more solid institutions to break, no more zyggurats to escalate. The only possible form is the one of its container[95]. In this sense the *panopticon* model becomes a *synoptic* one where every one is immersed in the consumerism society[96] , in a totality where punishment and control are mostly hidden within an apparent freedom of desire and caprice.]

No distinctions seem to be found therefore between next two images, between the centralized power and the totally freedom utopia. As again Lynch states: "*But is it really a place of Freedom? […] look at those brilliant fantasies created by the team of designers called Superstudio: perfect geometric environments in which every person is isolated from every other, and no one <u>controls</u> any fragment of his life. Such <u>cacotopias</u>, billed as nightmares of the future, are written to expose the injustice of the present."*[97]

92 From Ancient Greek: *δυσ-, "bad, ill"*, and Ancient Greek *τόπος, "place, landscape*". A synonym of Dystopia is Cacotopia (from Greek *κακός, 'bad', 'the worst*'), which is firstly used in 1818 by our well known Panopticon inventor, Jeremy Bentham.

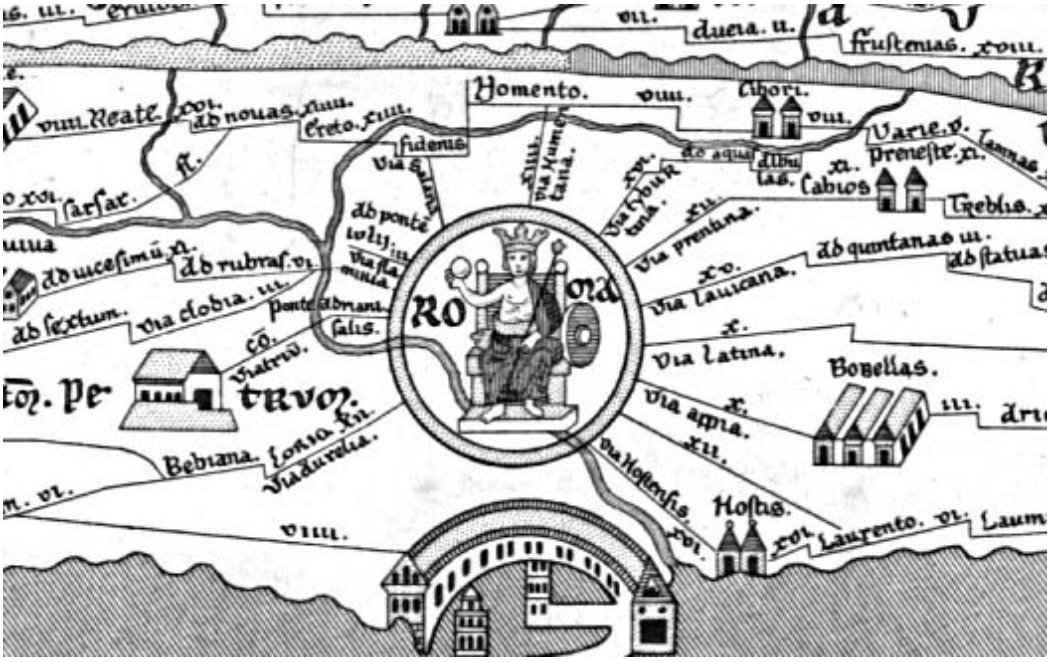
93 Rogers E.N., Sert J.L., Tyrwhitt J. (a cura di), (1954) *Il cuore della città.* Hoepli, Milano, 1954, p.69-70

94 Bauman Z., *Liquid Modernity.* Polity Press, Cambridge, e Blackwell Publisher Ldt, Oxford, 2000.

95 See Branzi A., Modernità` *debole e diffusa. Il mondo del progetto all` inizio del XXI secolo.* Skira, 2006, Milano, p. 20

96 The link between consumerism and the Heart of City is described in more detail in the chapter about Victor Gruen, considered the inventor of the regional shopping centers.

97 Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 69



Central Power: *Tabula Peutingeriana*, detail



'Freedom' Utopia: Superstudio, *'Un Viaggio da A a B' (1969)*

04 CONSCLUSION:

INTERACTIONS OF DIFFERENT LAYERS OF THE HEART OF THE CITY

CONCLUSIONS

In *"La citta`del ventesimo secolo"* Bernardo Secchi writes a chapter called *"Crescita e Dissoluzione della Citta`"* (Growth and dissolution of the city). In the first lines, he proposes a quote by Pietro Rossi, written at the end of the 1980s, about the possibility of the disappearance of the city *"as characteristic form of settlement and social organization"*[1]. Inside the fear of the vanishing of the city which has characterized the last century, and inside "*the dissolution of the contemporary urban elements",* Secchi affirms that *"we need to come back to study the elements which are at the basement of the urban structure"* .[2]

This contemporary *"necessity of the simplification of the real sphere, of the selection of some of its constituent elements"*[3], seems coherent to me with this research about the Heart of the City. This is clear if we really consider the issue of the Heart as the *"question of the reform of the structure of the city"*, through *"the creation of centres of social life"*[4] as Le Corbusier himself proposes during the CIAM 8 in Hoddesdon, in 1951. In the 1950s this question is expressed by an elementary symbol, "*Un simple Coeur"* [5] (Flaubert 1877), which might *"spring directly to the senses without explanation"*[6], similarly to the works of the first XX Century artists: they are the first who discover the *"necessary structural abbreviations"* which are perceivable by children as well, *"because these figurations are so close to primitive life as they are to our complicated civilization"*[7]*.* From primitive to contemporary

1 Secchi B., *La città del ventesimo secolo.* ed. Laterza, 2005, Roma-Bari, p. 13

2 Bernardo Secchi, Conversation during Phd Defence at IUAV Venice, 26 March, 2012

3 *"La percezione del frammento e, insieme, del continuo e del complesso spinge il nostro sguardo ad articolare le proprie strategie cognitive, ma allo stesso tempo richiama la necessita` di una semplificazione del reale, di una selezione di alcuni suoi elementi costitutivi, di unita` elementari che consentano di superare l`idea di irriducibilità di una cosa all`altra."* Viganò P., *La città elementare.* Skira, Milano, 1999, p. 7

4 *"The question of the Core – of the creation of centres of social life – is really the question of the reform of the structure of the city"* Le Corbusier, *Coversation at CIAM 8*, in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.39 quoted also in Viganò P., *La città elementare.* Skira, Milano, 1999, p. 87

5 Flaubert G., *Un cœur simple* ; suivi de La légende de Saint Julien l'hospitalier et de Par les champs et par les grèves; illustrations de R. Lelong.,Paris : P. Lafitte, c1909.
CCA Library, MAIN CORMID CORM22; ID:90-B3030

6 *"It seems that a new stage of civilisation is in formation in which the human being as such – the bare and naked man – will find a direct means of expression."* in Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 and Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 127-128 48 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

7 Giedion S., Architecture You and Me. Harvard University Press, Cambridge, 1958, p. 35

civilizations, this *"Elementarism"*[8] (van Doesburg, 1927) of the Heart image is indeed part of "*certain continuous things running through history"*[9]*,* such as the powerful comparison with the human body which has deeply influenced both the architectural and the urban planning practice and theory in History.

However during the study of the Heart theme, we have discovered that this "simplicity" (Giedion) is immersed in complex layers of significances and interpretations, which were already traced by some historians[10] but without a complete frame.

The relevance of the theme and this complexity of ideas which are implied within the Heart concept, have guaranteed the influence or continuity of the Heart of the City inside many other urban theories and projects in the second part of the Century, as discussed in the previous chapters.

Indeed after having presented in the introduction the contemporary relevance of the Heart theme in our contemporary condition, we have presented the debate during the CIAM 8 where the most outstanding architects of the world analyze together the theme from theoretical, historical and urban design point of view. The CIAM 8 is then compared with a coeval debate in Darmstadt where the philosophical discourse by Heidegger (*"Denken, B*ouwen*, Wonen"*) and the Scharoun`s project proposal are considered in comparison with Giedion`s ideas and the community Centre of the doctor Williamson, as presented at Hoddesdon in 1951.

Then we have used the image of the phylogeny tree of Kroeber[11], in order to affirm that if the theoretical complexity of the Heart of the City can be conceived as the interactions among all the branches together, then it is not possible to analyze all the tree (the Heart theme) describing each singular branch.

For this reason the three actors - Victor Gruen, the CIAM Summer School and Jaap Bakema – have been considered and selected because of both their theoretical and projectual practice approach to the Heart theme and because they are

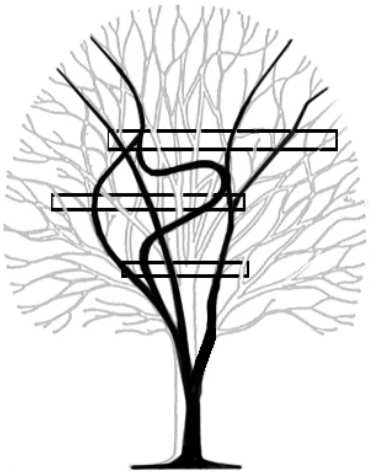
8 Il Cuore della Citta` is described inside the chapter *"Elementarismo Urbano, Materiali urbani e strattura della citta`"*,Viganò P., La città elementare. Skira, Milano, 1999, p. 87

See also Theo van Doesburg, *"Painting and Sculpture: Elementarism"* (1927)

9 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

10 See Introduction

11 The phylogeny tree differs from a classical tree structure for its overlapping branches which melt, hybridize with the others, similarly to the semi-lattice structure defined by Christopher Alexander. See Martí Arís C., *Le variazioni dell'identità. Il tipo in Architettura.* Clup, Torino, 1990, p.49 See also Steadman P., *The evolution of design.* Cambridge university Press, 1979; Kroeber A.L., *Anthropology. Race, language, culture, psychology, prehistory.* Hacourt Brace Jovanovich, New York, 1948



Conclusions: the main thematic arteries of the Heart of the City passing through the three actors

supposed to intersect the most outstanding thematic arteries, or branches, which constitute the complexity of the Heart of the City[12], between the 1950s and the 1960s.

We have also assigned three different concepts to each actor, which are directly related to the Heart of the City: the Heart as Urban Design; the Heart as continuity with the historical and physical Context; the Heart as Relationship.

Now if the three actors intersect most of the thematic arteries of the Heart of the City, then it is probable that the most important branches which pass through all three actors will constitute the main themes for our theoretical and historical discourse about the Heart of the City.

Moreover, these strong resonances, consonances and analogies among the three actors highlight moreover the development of important and recurrent aspects of the Heart idea which might have a place in our contemporary urban design practice too, as already affirmed within the research. In particular both the failures and the successes of the interpretations of the Heart of the City inside the three actors become outstanding lessons for the comprehension of the reflections of the Heart theme on our contemporary urban condition.

12 Other influences or consonaces have been traced with the works of the Team 10, Norberg Schulz, Lynch, the Metabolists, Aldo Rossi, in addition to some of the CIAM members such as Le Corbusier, Sert, Tyrwhitt, Rogers.

Criticisms and Oppositions inside the Heart of the City

In the introduction we have reported Christopher Alexander`s thought which has recently underlined the failure of the First Urban Design Conference at Harvard in 1956 (See First Actor), within an essay entitled "The Heart of the City. *The Necessary Binding Force That Creates The Core Of Every City."*[13]. The main mistake of the 1956 Conference is, for Alexander, the unawareness, the incapacity to focus the attention on the public space or on the *"positive space"* as generator of the city [14].
Since we have traced the continuity between the Harvard Congress and the CIAM 8[15] which is the "precursor"[16] of the former, then we should wonder if the discourse about the Heart concept itself has failed too. Indeed if in 1951 Le Corbusier considers the discourse about the Heart of the City as the *"question of the reform of the structure of the city"*[17] , then in 2006 Alexander states that the *"1956 conference, and the fifty years which followed it, are remarkable chiefly because there was no significant invention of new structure in the realm of urban space."*[18]
This uncertainty about the results of Heart discourse is already included inside the famous criticism made in the 1970s by Rowe and Koetter to Le Corbusier`s project for the Heart of St. Die`, presented at CIAM 8 in 1951. The prevalence of the "object" instead of the "space" has indeed transformed the quality of public space, which *"has shrunk to an apologetic ghost"*[19] in the author`s opinion. However if in *"Collage City"* St. Die` is negatively described in comparison with the traditional urban structure of Parma, then in the same years Giedion praises positively the freedom of the sculptural interrelations among the buildings which is reached in Le Corbusier`s

13 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006
See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf
14 Ibid.
15 See Actor 1, Chapter about teh Urban Design. And
16 *"Sert and the CIAM `Heart of the City`: Precursor to Urban Design, 1947-52"* in Mumford E., Defining Urban Design – CIAM Architects and the Formation of a Discipline, 1937-69, University Press, New Haven and London, 2009, p.80
17 *"The question of the Core – of the creation of centres of social life – is really the question of the reform of the structure of the city"* Le Corbusier, *Coversation at CIAM 8*, in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.39 quoted also in Viganò P., *La città elementare.* Skira, Milano, 1999, p. 87
18 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006
See www.livingneighborhoods.org/library/the-heart-of-the-city-v18.pdf *p.3-4*
19 Rowe C., Koetter F., *Collage City.* The MIT Press, Cambridge, Massachusetts and London England, 1983, p. 65 See Chapter Heart of the City and Urban Design (First Actor).

unbuilt project, similarly to Piazza Duomo in Pisa[20] or the Greek Agora[21]. Giedion presents St. Die` even as the first architectural project of Third Space Conception in history (the first starts with Greeks, the second with Romans)[22].

These oppositions of judgement concerning St. Die` described in the first actor make us reflect on the complexity and difficulty of evaluation given the results of Heart of the City. This is evident as far as some particular concepts about the Heart are concerned, such as the split between humans and machines[23], for the preservation of the right of both the pedestrian and the human scale, as vehemently claimed during CIAM 8. This particular theme is almost present within all the three actors: the third actor Bakema bypasses this issue considering the *"Human Core of St. Louis"* as a Linear Civic Center, following a "*Spine Concept",* where the preponderance of pedestrians over cars is negated since the *"traffic lines can promote new structures in the heart"*[24]*.* In the second actor the site of the summer school itself, Venice, exalts on the contrary the total absence of the cars. Nevertheless the Summer School proposes for many editions the theme of the bridgehead of Venice: this still constitutes *"the nervous centre between mechanization and man*"[25], between the fast growth and change of the mechanical harbor and the slow process of the ancient city, between the dependence to the mainland due to a mechanical link and the independence of the old man-made island.

Finally the First Actor seems the most important as far as the theme of the right of the pedestrian is concerned inside the Heart of the City. In particular the First Actor shows, on one hand, the fragility and failure of the radical split between cars and pedestrians and on the other it highlights the physical consequences of this theme in our contemporary urban condition[26]. The failure is clearly recognized for

20 Giedion, S., *Architecture and the Phenomena of Transition, the three space conceptions in Architecture.* Harvard University press, Cambridge, Massachusetts, 1971, p.270 See Chapter Heart of the City and Urban Design (First Actor)

21 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 162, See Chapter about CIAM 8, Monument and Symbol

22 Giedion, S., *Architecture and the Phenomena of Transition, the three space conceptions in Architecture.* Harvard University press, Cambridge, Massachusetts, 1971. See I Actor

23 The machines are the cars which have transformed the city itsef but also the " *tyranny of mechanical tools" of the Second World War. See Giedion S., Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

24 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part IX.* In Bakema Archive, Bake, NAI Rotterdam, d264 See Third Actor, ST. LOUIS PROJECT – THE HUMAN CORE

25 CIAM Summer School, *The Theme*, 1954 in Archivio Progetti IUAV, Venice, Trincanato 2.Attività scientifica/2/011, See Second Actor

26 See for instance the issue of "la dalle", or the commercial design in the public space. See First Actor, GRUEN`S NEW URBAN PATTERNS

instance in the first experiments of the *"mall maker"*[27] Victor Gruen (I Actor) for his Regional Shopping Centers in the 1950s, where the parking area, which is separated from the internal pedestrian area, hinders any possible connections between the new commercial centralities and the context. However after these recognized urban flops[28], the Austrian architect evolves several urban projects where the relationship between public space and commercial activity is proposed as an intriguing and not banal structural link for the generation of the urban structure, as in Fort Worth[29] in first 1950s or in Louvain la Neuve[30] in the late 1960s.

Then the case study of *"the Heart of Montreal"*[31] in the 1960s is very attractive since the separation between cars and pedestrians is firstly conceived for a functionalist anti-congestion purpose instead of a social-humanist idea. The "*traffic engineer"*[32] Vincent Ponte, as Trevor Boddy calls the planner of Montreal, transforms the city soil into a huge underground commercial center which facilities the flow of pedestrians to move far away from the traffic with many resonances with Gruen`s commercial experiments. In Ponte`s later project of the *"analogous city"*[33] of Dallas (late 1960s), this split is then mirrored above the ground into a *"Skywalk city"*[34], where *"la royauté du piéton"*, as claimed by Le Corbusier at CIAM in 1951, is almost mutated into a socially dangerous "*metaphor of spatial apartheid"*[35]. The ideal positive purposes of the return of the right of the pedestrian as claimed at CIAM 8 are turned into negative urban devices of social segregation.

These negative social aspects also bring to mind Authority, Power and Hierarchy which are related to a specific aspect of the Heart of the City too, in opposition with its interpretations of Democracy and Freedom given for instance by some of the CIAM`s members. As far as the Heart as Hierarchy/Power is concerned, this aspect is mentioned for instance by Bakema (Third Actor) in his historical sketches. Studying this proposal, we have mentioned that the idea of hierarchy and organ metaphor of the city is denounced by Kevin Lynch too in the 1980s. Indeed in *"The good city form"*

27 Hardwick M.J., *Mall Maker – Victor Gruen, Architect of an American Dream.* University of Pennsylvania Press, Philadelphia, 2004

28 These failures are recognized by Gruen too. See First Actor.

29 See chapter: HEART OF CITY AND VICTOR GRUEN

30 See chapter: Gruen and the New urban Patterns.

31 Ponte V. (1969), Montreal gets a new heart, The Architect and Building News, Vol.2, n.8

32 Boddy T., Underground and overhead: building the analogous city. in AA. VV., Variations on a theme park. The new American city and the end of public space Hill and Wang, New York, 1992

33 Ibid.

34 Graham S., Marvin S., *Splintering Urbanism. Networked infrastructures, technological mobilities and the urban condition.* ed. Routledge, London and New York, p. 256

35 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space.* Hill and Wang, New York, 1992, p. 151

the American author considers it as a dangerous and overbearing characteristic of the organicism in the city, as "*common pattern of social organization"*, used by emperors, generals or kings in order to impose their authorities. However the autonomy which is typical of the natural organism is in total antithesis with the hierarchical structure which instead controls all the organic city development, as Lynch underlines[36].

The contraddiction between Power/Democracy , Heart/Machine has been then analyzed throught the recent work of the philosopher Sloterdijk about the heart. Ideed we have highlighted the similar symbolic role which has, in 1747, La Mattrie`s Man Machine against the Heart-King and, in 1951, Giedion`s Heart against the *"tyranny of mechanical tools"*[37] , as already described in the chapter about the Heart of Power. In three hundred years the roles of Heart symbol versus the Machine symbol are inverted, keeping a still contemporary interest in our societies as highlighted by Sloterdijk in Bubbles (1998).

Moreover, the Power is also recently associated with the public sphere itself inside the City. Indeed the Void Metabolists[38] affirm during the Venice Biennale in 2010: *"Urban public spaces are authoritarian devices for suppressing people."* The good balance between the private and the public sphere, *"the endeavor to reestablish an equipoise between the individual and the collective sphere[...] between YOU and ME"*[39], which is the main reason for a discourse about the Heart of the City in Giedion` s mind, becomes even an expression of Power inside the city.

Nevertheless the most basic idea of Power inside the City is associated with the Centre of the City, with the "*Centrality as a Landscape of Power"*[40]. This has been analyzed for instance in Mike Davis` Ecology of Fear (1998), which has been compared in the introduction with the 'human core' by Richard Rogers` project for La Grand Paris (2009). Another recent example is Rem Koolhaas` *'Generic City'* (1995), which is *"the city liberated from the captivity of center, from the straitjackets of identity".* It is the city which is finally released by "*the present concentric obsession"* which makes "*us all bridge-and-tunnel people, second-class citizens in our own civilization."*[41] However in the introduction we have already highlighted the

36 Lynch K., *A theory of Good City Form.* MIT Press, 1981, p. 98

37 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life*. New York, Pellegrini and Cudahy, 1952, p.17

38 See Kitayama K., Tsukamoto Y., Nishikawa R., *Tokyo Metabolizing.* ed. TOTO LTD., Japan, 2010, p.29
See Chapter THE 'HEART OF POWER' AND OTHER BAKEMA`S SKETCHES

39 Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 124,126-127
See Also *'Anatomy of Dwelling'* and *'Urban Realms'*. Serge Chermayeff, Christopher Alexander,*"Community and Privacy. Toward a new Architecture of Humanism", 1962*

40 Zukin S., *Landscape of Power, from Detroit to Disney World.* Univerity of California Press, 1991, p. 181

41 Koolhaas R., *S,M,L,XL.* Monacelli Press, New York, 1995, p. 1249

contradictions between the theoretical Generic City and OMA`s project for Almere, designed almost in the same period, where the main purpose is the creation of a new Centrality and Identity for the existing urban Dutch agglomeration.
This allows us again to consider the difference with regard Centre, Centrality, CBD and Heart, as entities which might overlap but with distinct characteristics[42].
This is already clear at CIAM 8 in 1951. Indeed in *"A short Outline of the Core"* we read that *"the word 'Core', in the sense we are using it, does not mean merely the centre of the urban agglomeration, nor the busy heart of the city traffic or economic activity; sometimes it may be united with these areas, but the Core includes other elements, often of an imponderable nature.[43]"*
The sense and the frame of the complexity of this *"imponderable nature"* of the Heart theme has been the main purpose of this research. And this complexity of the Heart concept indicates the possibility of different contradictory interpretations.
As far as the three actors are concerned, in the First one this overlapping is almost always present: Gruen, similarly to Sert and Wiener, always presents the Heart-Core-CBD as synonyms; the Heart is indeed considered by the Austrian architect as an ecological[44] and social metaphor of the condition of the CBD. On the contrary in the other two actors the Heart concept assumes a more abstract significance, which has to be translated into physical form by the architect/urbanist. Already in 1954, in an article entitled "Il Cuore della Citta`"[45] (The Heart of the City), the Italian philosopher Enzo Paci criticizes the superimposition (typical of the architects within the First Actor) of the Heart abstract Idea with the physical centre of the city carved into the '*ingens sylva*' of savagery, similar to a "*cannon*"[46](Ortega y Gasset). This excess of attention on centrality of Man, in opposition with the humanism claimed for instance by Sartre[47], is opposed by Paci`s interpretation of the Heart as "*a centripetal*

42 See Chapter about CIAM 8. CORE-HEART, HEART-CENTRE, HEART-HEARTH

43 A short Outline of the Core, in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.165 See chapter about CIAM 8, HEART-CENTRE

44 See Chapter Vienna and Die Charta von Wien: the ecological Heart

45 Paci,E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

46 *"For in truth the most accurate definition of the urbs and the polis is very like the comic definition of a cannon. You take a hole, wrap come steel wire tightly round it, and that` s your cannon. So, the urbs or the polis starts by being an empty space, the forum, the agora, and all the rest are just a means of fixing that empty space, of limiting its outlines.[...]"* Josè Ortegay Gasset, *The Revolt of Masses.* W.W. Norton and Company Inc.1932, New York, p. 164-165 quoted in Sert J.L., *Centres on Community Life* in Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p.3 See First Actor, HEART OF CITY AND URBAN DESIGN

47 Giedion refers to the humanism of Sertre. See Sartre J.P., *L` existentialisme est un humanisme.* Les Editions Nagel, 1946, Paris

diastolic movement, but, at the same time, a systolic centrifugal one"[48]. Paci`s intriguing proposal eliminates the concept of hierarchy, since the Heart becomes the relationship between the urban elements rather than the central one, with many important references to the work of Bakema. (See chapter about III Actor)

This is just one of the few interpretations of the Heart which confute the hierarchical and Authoritarian implication of the organic metaphor[49] of the Heart as criticized by many authors. Other attempts to describe a positive *"imponderable nature"* of the Heart consider it as *"symbolic centre of love"*[50] *(Ernesto Nathan Rogers)*, as *"eco of the interior sentiment of Man"* [51](Giedion), expression of democracy and freedom[52], such as in Michelngelo`s Capitol and in the Agora (Giedion)[53] , in opposition to the *"tyranny of mechanical tools"*[54].

These symbolic interpretations do not refer to a preconceived physical position or hierarchy, since they concern only some abstract Ideas. In this sense the Heart of the City is dissimilar from the other metaphors of the human body, which have been largely used since the Renaissance. Indeed its symbolical interpretation does not refer to *"a "natural" way to give a role to different parts of the society: form, location and function*[55]", which is typical of the metaphor of the city as a human body[56] . For this reason it is important to stress the difference between the metaphor and the symbol, the two figures of speech which constitute the Heart of the City.

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48 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii The attention is therefore focused on the relationship between the two movements, with many resonances to Bakema`s theory, which will be later discussed.

49 In the next chapter we will compare the metaphor and the symbol of the Heart.

50 Rogers E.N., *The heart: Human Problem of Cities.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.69

51 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958 trad. it. *Breviario di Architettura,*Garzanti, 1961, ed. Bollati, 2008, p.137

52 *"the Heart is the ultimate expression of this quality: it must be the place where freedom is exercised and perfected." Rogers E.N., Sert J.L., Tyrwhitt J. (a cura di), (1954) Il cuore della città. Hoepli, Milano, 1954, p.69-70*

53 *"The Agora of Athens had never a plan . It sprang up like democracy. But it had an idea"* See Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 . The same discourse is present in *Space, Time and Architecture*, 1941 and in *Architecture You and Me,* 1958 See Chapter Introcution and HEART AS SYMBOL OF NEW HUMANISM

54 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

55 Secchi, B. *A new urban question 3: when, why and how some fundamental metaphors were used.* École spéciale d'Architecture, Paris 2009, Secchi affrims also that "Since the antiquity the human body and the city were metaphorically linked together; but in the antiquity , when what was difficult to understand was the human body, the metaphor was used in a reverse way: the human body was as a city (B. Secchi, 2000, *La prima lezione di urbanistica,* Laterza. Roma)

56 Secchi, B. *A new urban question 3: when, why and how some fundamental metaphors were used.* École spéciale d'Architecture, Paris 2009

Symbol[57]-Metaphor[58]

During the CIAM 8 and later in his *"Architecture You and Me"*, Giedon affirms the absolute necessity of the raising of new real symbols which might reflect the contemporary society.
In particular the historian hopes for the growth of new symbols which might substitute the still existing sad symbol of the *"tyranny of mechanical tools"*[59] which led to *"the blood and horror"* of the Second World War. The Heart of the City corresponds to this aim, since it is described as the symbol of "*the human being as such – the bare naked man"*[60], which works as *"eco of the interior sentiment of Man"*[61]. It represents therefore an abstract idea implying always "*an emotional investment"*[62] inside the city, whose physical form has to be translated each time by the architect-urbanist, without a prearranged solution or function: it can not be merely and literally compared, as a metaphor, to the human organ, assimilating its characteristics of limited size and growth, of precise position and relationship with other organs and of pumping blood. Indeed since the *"Cities are not organisms"*[63] *(Lynch),* their too direct analogy with the physical biology transforms the social and humanist entity of the Heart of the City into a potentially misleading and criticizable discourse. This is evident for instance in some of Sert`s proposals where, in Paci`s opinion, the organic city risks being transformed, *"even if perfect, as the stellar city of the Filarete"*[64] (Paci). The same risk is detectable also in Gruen`s Cellular Metropolis because of the too literal reference to the 'cell' and the strict use of the 'tree structure' for the urban development[65].

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57 In late Middle English (denoting the Apostles' Creed): from Latin *symbolum* 'symbol, Creed (as the mark of a Christian)', from Greek *sumbolon* 'mark, token', from *sun-* 'with' + *ballein* 'to throw. Oxford Dictionary

58 In late 15th century: from French *métaphore*, via Latin from Greek *metaphora*, from *metapherein* 'to transfer'. Oxford Dictionary

59 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17
However Tange considers the symbol as unifying element between the technology and humanity.See Kenzo Tange, *Function, Structure, Symbol.* 1966, in von Udo Kultermann H., *Kenzo Tange 1946-1969,* ed. Verlag für Architecktur Artemis Zürich

60 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

61 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958 trad. it. *Breviario di Architettura*,Garzanti, 1961, ed. Bollati, 2008, p.137

62 Lefebvre H., *La production de l'espace.* Ed. Anthropos, 1974, p. 75-76

63 Lynch K., *A theory of Good City Form.* MIT Press, 1981, p.95

64 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

65 However both architects` contributions obtain intriguing synergies between modern and traditional presences in Sert`s Latin America cities, and between the commercial devices and the urban structure in

If in Sert and Gruen the symbolic meaning of the Heart is overlapped with the organic metaphor of the cell or of the human body, then in Bakema (Third Actor) there are no correspondences between the symbolical and metaphorical interpretation of the Heart. Indeed the symbolical-abstract entity of the Relationship of the Heart surpasses its metaphorical interpretation, or literal interpretation, without any anatomical references to the human body.

Indeed the form of the structure of the city, doesn`t have to mirror automatically the physical image of the Heart, but it has to reproduce instead its abstract, emotional and cognitive essence.[66] This is clear first of all in the examples of literature, where the Heart is imbued of only symbolical and emotional reflections without any analogy with the functional or dimensional characteristics of the human organ[67].

Thus the Symbol kills the Metaphor, solving in part that "*great confusion and misunderstanding of what the organic elements or heart organs should be"*[68] as expressed by Gropius already in December 1949. Moreover the organic symbolism of the Heart theme clarifies the ambiguity between the functionalism and the organicism which share *" a common root and the cause of their weakness"*[69], as exposed for instance by Rossi in *L' Architettura della citta`.*

The CIAM 8 itself is described by De Sola-Morales as the passage from 'function' to 'passion' in the architectural debate[70]. The organic symbol of the Heart is indeed a humanist counterforce to any functionalist interpretations of the City.

It is *"the central organ of internalized humanity in the dominant language games of our civilization"*[71], which is still contemporary, in opinion of Sloterdijk. Thus the

Gruen`s projects. See First Actor.

66 For example, If we design a new city which has all the physical characteristics of the organ-heart, it doesn`t mean that automatically the city will be saturated of freedom, peace, social equity,... which are identifiable in the symbolic image of the Heart.

67 See introduction for the recent urban interpretation of Flaubert`s *Un simple Coeur*, by the studio DOGMA.

68 Walter Gropius, December 22, 1949 Letter to Mr. Wells Coates, cc. Giedion and Sert. Eth/gta 42/SG/34/54

69 *"Qui si respinge appunto quest'ultima concezione del funzionalismo, dettata da un ingenuo empirismo, secondo cui le funzioni riassumono la forma e costituiscono univocamente il fatto urbano e l`architettura. Un tale concetto di funzione, improntato alla fisilogia, assimila la forma a un organo per cui le funzioni sono quelle che giustificano la sua formazione e il suo svilupo e le alterazioni della funzione implicano una alterazione della forma. Funzionalismo e organicismo, le due correnti principali che hanno percorso l`architettura moderna, rivelano cosi` la propria radice comune e la causa della loro debolezza e del loro fondamentale equivoco."* Rossi A., *L`architettura della città.* I ed.Città Studi , Milano, 1978. ed. Citta` Studi, Novara, 2006, p. 36

70 *"The understanding of the core as a human heart emerged from an architectural debate in which function seemed to have yielded to passion."* De Sola-Morales I. , *Differences. Topographies of Contemporary* Architecture. MIT Press, 1997, p. 49

71 **"***The heart, even in the age of its transplantability, is still viewed as the central organ of internalized humanity in the dominant language games of our civilization. […] the heart has by no means been equated*

symbol makes the Heart lose any criticizable and incoherent aspects which might transform it into a conservative, traditionalist and functionalist concept, because of a too close interpretation of the urban structure with the human organ: the heart is not part of an organism with a brain, arms, and blood in the veins, similar to the Ville Radieuse by Le Corbusier or to Richard Rogers` recent proposal for *La Grand Paris.* As a result, the abstract Heart is not merely defined as a central square, or as a centrality of Power, but as the symbol of human exigences such as democracy and freedom.

Then Bakema makes even a step further in comparison to Giedion, since he translates his theoretical thought, which finds many similarities with Giedion's one, into a coherent urban project. In fact the Dutch architect uses the Heart as an image of social and physical urban synergy, using the section and the three-dimensional design as the main tool for the explication of this aim.

The translation of this emotional symbol into the physical urban form, finds with Bakema the scission with the functionalist straight use of the organic image of the heart: the Heart symbolizes the right overlaying of the social and physical structure, rather than the pumping blood-traffic or the centrality inside the human-urban body.

Criticisms of the *"Organic City"*[72] (Lynch, 1981) and its physical analogy with the human body, no longer concern the Heart of the City in Bakema`s project: it is no longer representative of a functionalist use of the physical characteristics of a human organ; it is the simplest symbol for the acknowledgement of *"the physiological and biological values of sentiment."*[73] which is physically designed through the right relationships between the scale of buildings and the human scale, as described for instance in his "Diagram of Friendship"[74] (1961).

Finally Giedion affirms that a symbolical heart can be designed only by a *"great artist"*[75], similar to Van Eyck`s *"counter-former of the mind"*[76]: this is still our task, in

with the deepest interior of humans – one could also call it the source of their sense of self and their capacity for relationships – in all places at all times.". Sloterdijk P., *Bubbles: Spheres Volume I: Microspherology.* Semiotext(e), 2011, p. 101, originally published as Sphären I – Blasen, Mikrosphärologie, Suhrkamp, Frankfurt am Main 1998

72 Lynch K., *A theory of Good City Form.* MIT Press, 1981

73 Rogers E.N., *The heart: Human Problem of Cities.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.69

74 *"The way in which high, low, big and small buildings are spatially related, can help man feel at home in total space."* Bakema J., *`Architecture as an instrument of man`s self realisation`* in Forum (1961) 2, p. 56

75 Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

76 Van Eyck, quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.391

the opinion of the Swiss historian, encumbering the profession of the architect with an outstanding social role[77].

Thus this symbolical interpretation of the Heart is still a valid, progressive, contemporary issue of a right synergy between the social and physical space, between the private and public sphere, which is too often missing in the design of our contemporary public space. If the first aims of the First Urban Design Conference in 1956 have failed, as claimed by Christopher Alexander [78], then the social role of the architect for the design of *"positive public spaces"*[79] through the interpretation of the symbolical Heart, remains for the author a primary contemporary purpose.

Abstract Idea

As we have just argued, the Heart of the City finds its more coherent significance with its symbolical interpretation, rather than with its metaphorical-physical analogy which is ambiguous with an *"ingenuous functionalism"*[80]. Therefore we can consider the Heart of the City as an abstract theme, whose translation into a physical form is delegated to the ability of the architect, of the *"great artist"*[81]. Even if the abstract Idea of the Heart is present in all three actors, it finds its independence from a prearranged structure of the city only in Bakema, the last actor, as already mentioned.

In his notes about Theory[82], The Dutch architect quotes Walter Scott`s *"The Architecture of Humanism"*, for a passage *"from a priori aesthetics to a history of taste, and from the history of taste to the history of ideas"*[83]. The Idea is the

77 The renovated social role of the architect is another criticism to the functionalism. Also Sert, criticizing the Functionalist city admits the social role of the architect "towards a better life": *"To many, the functional city would therefore have a purely material meaning. To us however, a city would not be functional unless it satisfied and simulated the more noble aspirations of its people as well – aspirations which strive towards a better life and which have always impelled men seek a community existence"* Sert J.L., ***Can our cities survive?*** an ABC of urban problems, their analysis, their solutions. *Harvard University Press, Cambridge. Humphrey Milford, Oxford University Press, London, 1944, p. 228*

78 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006

See www.**livingneighborhoods**.org/library/the-**heart**-of-the-**city**-v18.pdf

79 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006

80 Rossi A., *L`architettura della città.* I ed.Città Studi , Milano, 1978. ed. Citta` Studi, Novara, 2006, p. 35

81 See Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25

82 Bakema notes about Theory. In Bakema Archive, Bake, NAI Rotterdam, d264

83 NAI Archive, Rotterdam, d264, quotation from Scott G., The Architecture of Humanism, *A study in the History of Taste.* Constable and Company LTD., London, 1924, p.7-8

final stage for the right definition of a Theory, which is considered also the unique objective way in order to obtain "clearness" in the design at any scale. From this point of view, the theoretical abstract Idea of the Heart, or of the "Human Core of St. Louis"[84], becomes for Bakema a unique opportunity for a later clear and correct physical design of the structure of the city.

The Heart as symbol, as proposed by Giedion, is then coherent with both the definition of the Heart as *"abstract idea [...] fluctuating from one place to another"*[85] given by the Dutch Group Opbouw at CIAM 8, Rykwert`s *"Idea of Town"*[86] (1963) where the city is even presented "*more like a dream than anything else"*[87] and the recent Tom Avermaete`s intuition of the Heart theme as "*element of urban culture.*[88]*"*

Its abstraction reveals a deep and archetypical presence inside the existence of the city and of public space itself. Thus we might agree with its *"eternal present"* essence as mentioned by Francis Strauven while he describes Giedion`s attitude toward the Heart of the City: *"the core as an urban archetype, as the place where the individual can participate in public life"*[89] , as *"symbol which springs directly to the senses without explanation"*[90].

If on one hand the Heart expresses an archetypical essence of public life (Giedion), from the other side few CIAM members have underlined its progressive role inside city (Giedion, Bakema). For this reason we might consider it as both an archetypical, "proto-Idea" and a progressive, "pro-Idea" of the City.

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84 Bakema J., *The Humane Core, A Civic Center for St. Louis, MO.*Washington University Press., 1960

85 Opbouw group, *CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing*. Bakema Archive, NAI, Rottedam, g. 18

86 Rykwert J., The idea of a town, in Forum(1963), n.3

87 The town is *"an artifact of a curious kind, compounded of willed and random elements, imperfectly controlled. If it is like any other piece of physiology at all, it is more like a dream than anything else"* Rykwert J., *The idea of a town,* in Forum(1963), n.3, p.100

88 *"The term CORE was not referring to a purely physical matter, even to a social issue [...] Briefly, it referred to an element of urban culture."* Avermaete T., *Another Modern.* NAI, Rotterdam, 2006, p.71

89 The interpretation in Giedion of the core as an eternal element is underlined by Francis Strauven. He affirms that Giedion`s discourse about the Heart *"ties in closely with the research into "the eternal present" he was engaged in at the time, a search for the original archetypes of art and architecture, for the primal, prehistoric forms that he saw simultaneously re-emerging in the art of the contemporary avant-garde. He regards the core as an urban archetype, as the place where the individual can participate in public life."* in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p.238 See Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964)*. Bollingen Foundation, Pantheon Books, New York.

90 Giedion S., *Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., The Heart of the City – towards the humanisation of urban life.* London 1952, p. 17 and Giedion S., Architecture You and Me. Harvard University Press, USA, 1958, p. 127-128

Proto- and Pro- Public space

The theme of the Heart of the City principally regards the public space and its community life. This is vehemently stressed during the Congress in Hoddesdon and it is evident in both projects and theories of all three actors. For instance in the first actor the Heart theme deals with the conception of new forms of public spaces, such as the contemporary Agora of St. Die`, as symbolically considered by Giedion[91], or the pedestrian commercial paths which are separated from the car and goods flows in Gruen`s urban-architectural experimentations or the underground public space of Vincent Ponte in Montreal: from *"La Royauté du piéton",* claimed by Le Corbusier at CIAM 8, to the social segregation of Ponte`s "*analogous city"*[92], the first actor is already imbued of the crisis of the public sphere as the main issue. Alexander[93] recently denounced (2006) the First Urban Design Conference for its incapacity to focus the attention on the public space as generator of the city, even if it is based on the CIAM 8 discourse about the reestablishment of *"an equipoise between the individual and the collective."*[94] Therefore the first actor still finds many contradictions between a theoretical and physical design of the public space and its social, collective component. In the second actor Piazza San Marco becomes the main
discussed square in the debate within the CIAM 8. On the one hand becomes representative of the memory and the public life and on the other hand it is considered a progressive example for the future design of the public space as well. Venice itself becomes the main case study where the 'continuity' is expressed and experimented through the projects of the students.
Finally Bakema - third actor- proposes at CIAM 8 the cemetery of Asplund as the major model of public space where the relationship between life and death unexpectedly stresses the collective characteristics and the Relationship of the Heart of the City. The Heart of the City is not the central square of the *"cannon"* of Ortega Y Gasset, but it is any open space where a correspondence, a *"process of gathering"*[95] is achieved.
Some authors have already stressed that the Heart discourse has many similarities with many other definitions of public space concerning other fields of knowledge

91 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 162
92 Boddy T., *Underground and overhead: building the analogous city.* in AA. VV., *Variations on a theme park. The new American city and the end of public space* Hill and Wang, New York, 1992, 123-15
93 Alexander C., Alexander M.M.(editor), *The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City.* Center for Environmental Structure, 2006
See www.**livingneighborhoods**.org/library/the-**heart**-of-the-**city**-v18.pdf
94 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958, p. 126
95 Norberg-Schultz C., *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, New York, 1980, p.168

and different periods of history[96]. In particular the definition of public space as the "*proper place for human excellence"*[97], given by Hannah Arendt in 1958, seems to perfectly embody a double entity of the heart theme in relation to the public sphere, which is clearly expressed for instance by Giedion.

On one hand the *"proper place for human [...]"* , emphasizes the humanist aim of the CIAM 8, which is focused *"Towards the humanisation of urban life"*[98]. As we have already discussed in the previous chapters, it is a new humanism which is centred on the subjectivity of Man rather than on Man as a superior value, as argued by Sartre[99]. The attention given to *"the human being as such – the bare naked man"*[100] is related to an eternal present human condition which has recently been betrayed by the *"tyranny of mechanical tools"*[101], in Giedion`s discourse. This human condition of the public sphere, which is symbolically represented by the Heart of the City, is a *Proto-Urban* condition (proto- , *gr. Πρωτο* as *"first, first element"*) or *a priori condition* as described by Kant in his *Critique of Pure Reason.* It is a *"condition shared by cities anywhere"*[102] , but not equal in any place, which might have resonances with the *"eternal present element"* as described by Giedion: *" the one eternal center of all things, […] the recurrent, constant, and typical as echoing in us and intelligible through us"*[103]*; "certain continuous things running through history – certain experiences which*

96 For instance Tom Avermaete highlights the flux of resonances with other disciplines, comparing the Heart of the City with other *"definitions of the public sphere by Hannah Arendt, Jürgen Habermas and Richard Sennett"*. See Avermaete T, Havik K, Teerds H., *Architectural Positions. Architecture, Modernity and the Public Sphere.* SUN Publisher, 2009, Amsterdam, p.38

97 Arendt H., *The Human Condition.* I ed.1958. University of Chicago Press, Chicago, Second edition 1998, p. 49

98 Subtitle of the book Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952

99 See Chapter about CIAM 8 and Sartre J.P., *L`existentialisme est un humanisme.* Les Editions Nagel, 1946, Paris, p.90-93

100 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

101 Giedion S., *Historical Background to the Core.* in Rogers E.N., Sert J.L., Tyrwhitt J., Editors, *The Heart of the City: Towards the humanization of Urban life.* New York, Pellegrini and Cudahy, 1952, p.17

102 "The case for studying proto-urban conditions—-conditions shared by cities anywhere—-is made in the hope that what architects already know can be deepened to the level of principle. If such a deepening could occur, local variations on prototypical conditions would become more possible, and the present era of typological impositions of one culture upon others would gradually be brought to a close." Lebbeus Woods Woods L., THE PROTO-URBAN CONDITION in http://lebbeuswoods.wordpress.com/2008/02/29/the-proto-urban-condition/

103 Jacob Burckhardt, *Lecture on History* (1868) in Giedion S., *The Eternal Present: I. The Beginnings of Art (1962);2 The beginnings of Architecture (1964).* Bollingen Foundation, Pantheon Books, New York.

appear and are lost and then come up again"[104]*.* Moreover the *proto-urbanity*`s definition of *"the emotion of the city"*[105], given recently by Bunschoten, perfectly overlaps with the emotional and sentimental significances which are implicitly hidden within the symbol of the Heart[106]. Then it finds many consonances with both the always present Spirit of the Place which is described by Norberg-Schulz in his genius loci`s theory and the locus genii *"as the primal generator of a city`s life and character"*[107] (Welter), as already analyzed in the second actor.
Also both Ernesto Nathan Rogers` *"preesistenze ambientali"* and Aldo Rossi`s *"elementi primari"*, which have been already discussed in comparison with the Heart theme (II Actor), share many resonances with this permanent-archetypical character of the Heart of the City.
Finally the proto-urban condition is clearly present also in Van Eyck`s discourse about the *"constant identity"*[108] of both human and architectural essence, as resumed in his diagram "BY us, For Us", *"in an endless sequence of possibilities that will really fit man."*[109] On the other hand the *"proper place for [...] excellence"* implies an amendable condition, an ideal future condition which is probably not completely achievable. In particular Bakema (III actor) refers to the Heart of the City as the ideal overlap between the social and physical structure of the city. Piazza San Marco (II actor) itself is perceived by the CIAM members as a steady example for the contemporary public space. We can talk therefore about a sort of *Pro-Urban condition* (pro -, *gr. Προ-* as *"in front of, before"*), in opposition to the previous proto-condition: a progressive idea of a better future social condition or physical space, translated into a real present urban form.
The most exhaustive example is again Giedion`s description of Michelangelo`s Capitol, which symbolizes democracy in Rome even if it is not yet present because

104 Giedion S., Historical Background to the Core. In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 18

105 *"Proto-urban conditions are like emotions; a city has emotions. […] To understand the second skin as a dynamic environment requires an awareness of its emotions. The emotions of the city are called proto-urban conditions".* Bunschoten R., Hoshino T, Binet H., Urban flotsam: stirring the city. 010 Publishers, Rotterdam, 2001, p.33-62

106 The relevance of the emotions inside the city and in the Heart discourse is already deepened inside "HEART AS SYMBOL OF NEW HUMANISM", in the Chapter about the CIAM 8.
The symbol itself, as described by Lefebvre, "always implies an emotional investment, an effective charge" Lefebvre H., La production de l'espace. Ed. Anthropos, 1974, trad. Eng. The Production of Space. Blackwell, 2010, p.141

107 Welter V.M., *Form locus genii to heart of the city. Embracing the spirit of the City*. In ed. by Whyte I.B., *Modernism and the Spirit of the City.* Routledge, London, 2003, p. 45

108 Van Eyck, quoted in Strauven F., *Aldo van Eyck, The Shape of Relativity.* Architecture and Natura, Amsterdam, 1998, p. 349 See Chapter about Bakema, third actor.

109 Van Eyck in Ibid. p. 351



Sketch of Professor Sparenberg of time overlapping in the same place, 1963

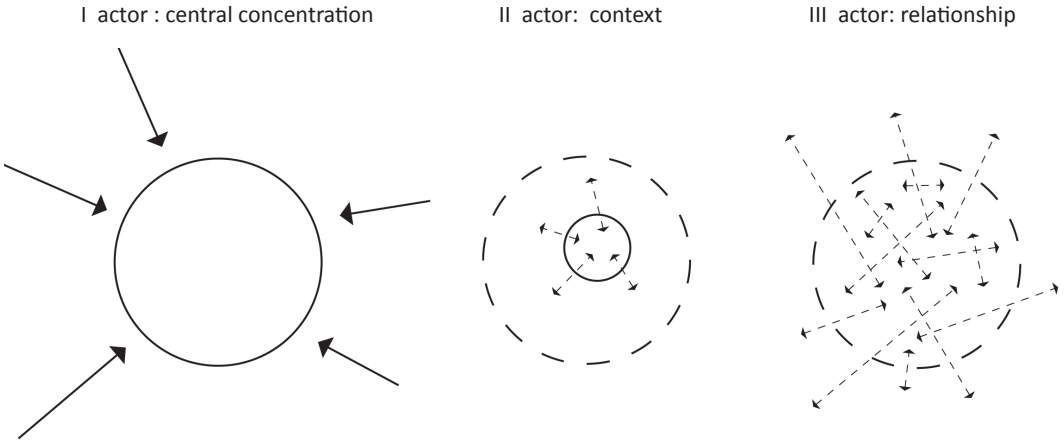
of the despotism of the Pope[110]. The Heart has to be considered therefore as a progressive concept rather than a traditionalist idea or a celebration of a lost way of life, as abused by some contemporary architects.

Finally we can consider the Heart of the City both as a both Proto- and Pro-Idea of the public sphere, similar to Professor Sparenberg`s sketch[111], where the same place introduces a future or already past condition. The Heart of the City can be interpreted, in its most intriguing layer of significance, as a complex interaction of both dynamic and *"submerged"* conditions: the Heart of the City, in its deepest and most interesting layer of significance, is neither conservative, nor traditionalist, nor functionalist; it expresses eternal values and in the same time can become a progressive, active and anticipator element for the evolution of society and of "*new forms of urbanity"*[112], through the physical design of brand new collective public space.

110 *"symbol of the vanished liberties of the medieval city-republic that he held in his heart"* See Giedion S., *Historical Background to the Core.* In Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p. 25 . The same discourse is present in *Space, Time and Architecture*, 1941 and in *Architecture You and Me,* 1958

111 Sketch sent to the dutch artist Escher for a new work in 1963.

112 *"Certain Urban problems are derived from a malfunction of the exchange between the open dynamic city and submerged proto-urban conditions. These conditions are constantly changing our environment towards new forms of urbanity."* Bunschoten R., Hoshino T, Binet H., Urban flotsam: stirring the city. 010 Publishers, Rotterdam, 2001, p.45



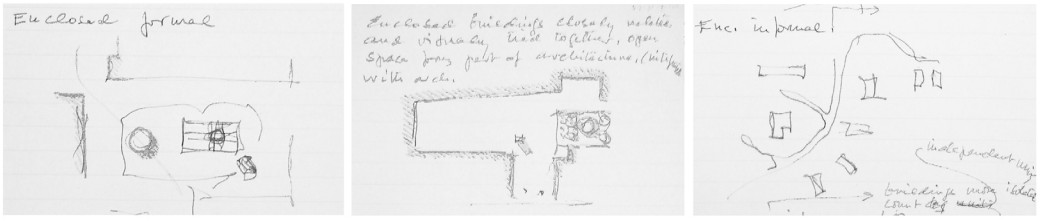
Relationship

We can reconsider the three actors analyzing their *"rate of growth"*[113] of complexity of the relationships concerning the Heart of the City. Indeed from Sert to Bakema it is interesting to note how the quantity and quality of factors of relationship change, passing form the *"canon"*[114] of the Ortega Y Gasset, where the civic space has to be separated from the landscape, to the harmonious and total relationship of the *"human-being-part-of-total-existence-called-energy."*[115] As we can see from the first scheme concerning the first actor, the relationship is univalent since it is focused only towards a single entity: the central

113 Similarly to Lynch, who criticizes the organic metaphor preferring a *"rate of growth"* of the city rather than the "*elusive concept"* of a presumed optimum size of the city, we can consider this scheme as a *"rate of growth"* of complexity of the relationships concerning the Heart of the City. Lynch K., *A theory of Good City Form.* MIT Press, 1981, p.281

114 *"For in truth the most accurate definition of the urbs and the polis is very like the comic definition of a cannon. You take a hole, wrap come steel wire tightly round it, and that` s your cannon. So, the urbs or the polis starts by being an empty space, the forum, the agora, and all the rest are just a means of fixing that empty space, of limiting its outlines.[...]" Josè Ortegay Gasset, The Revolt of Masses.* W.W. Norton and Company Inc.1932, New York, p. 164-165 quoted in Sert J.L., *Centres on Community Life* in Tyrwhitt J., Sert J.L., Rogers E.N., *The Heart of the City – towards the humanisation of urban life.* London 1952, p.3

115 Bakema J., *Architecturbanism – Total Urbanisation – Labour Union Controlled Society.* In Bakema J., *Thoughts about Architecture.* Academy Editions St. Martin`s Press, New York, 1982, p. 139 also in *a cura di* Gubitosi C., Izzo A., *Van De Broek/Bakema. IV Mostra di Architettura organizzata dall`Istituto di Analisi Architettonica.,* Facoltà di Architettura di Napoli (Napoli, Castel Nuovo, 14-31 Dicembre 1974), ed. Officina, Roma, 1976 p. 34



Tyrwhitt:_Enclosed informal_Enclosed Formal _Open Informal, 1951

concentration, or *"urban re-centralization"*[116] as called by Sert, of the urban structure for high density centers. This is a common aspect of the Urban Design of the Heart for Sert, Gruen and Ponte in contrast with the sprawling of the urban structure which is considered as responsible for both the loss of the civic values and the death of the environmental qualities of the natural landscape. This Relationship causes the Heart concept to overlap with its physical central Core finding many contradictions and limits: for instance Enzo Paci considers this excess of centralization as a risky attempt to transform the Heart of the City into a perfect Filarete`s Stellar City[117], without any correspondence with the contemporary urban and human condition. Nevertheless the projects presented inside the First actor are still intriguing proposals, whose contradictions and inventions still remain at the base of our Urban Design experience, as already described.

The second scheme represents the second actor, the CIAM Summer School in Venice: there are two grades of relationships because the attention is focussed on the link between the new project inside the preexisting historical surrounding, such as Venice. This theme is already present within Sert`s Latin America master plan in the 1940s where the modern master-plan is characterized by local and traditional urban presences.

116 *"The necessary process is not one of decentralization, but one of re-centralization.[...] We must be urban minded"* J.L.Sert, Opening remarks to the Urban Design Conference, April 9, 1956, Loeb Library, GSD Archive, Harvard, Rare NAC 46 Harv 1956.

117 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

Moreover, this relationship between the new and the existent is a theme which will influence the theoretical debate of the last six decades in the USA and in Europe, and it will become the mainstream of many architects such as Vittorio Gregotti. Gregotti himself, who participates to both the CIAM 8 in Hoddesdon in 1951 and the First CIAM Summer School in Venice in 1952, considers the CIAM 8 as the starting point of this urban reflection[118].

Finally the third scheme considers the Heart of the City totally represented by the Relationship concept. The Heart of the City becomes the symbol of the Relationship for Bakema, mirroring in the architectural debate some of the most intriguing philosophical contributions of the mid century: for instance the Enzo Paci`s *Relazionismo* who reconsiders the movement of the heart *"with a centripetal diastolic movement, but, at the same time, a systolic centrifugal one"*[119] rather than its organic structure; Huizinga`s *"Homo Ludens"*; the references of the *inbetween* theory from "*Ich und Du"*[120] by Martin Buber, which has already many resonances with *"Architecture You and Me"*[121] by Giedion.

Furthermore, as already mentioned when we have discussed the project`s grid presented by MARS Group, the three sketches made by Jacqueline Tyrwhitt can be representatives of the three actors and of their grades of relationship. Indeed in Piazza Duomo in Pisa the architecture is central to the space with a well defined boundary which cuts the internal space from the external one, as the iron ring of the *"canon"* of Ortega Y Gasset. Piazza San Marco is an open space inside the urban organicity of Venice: the emptiness of the square is exalted by the narrow paths of access and by its continual relationship with the dense urban structure which surrounds it. Finally the cluster[122] is representative of a continual relationship among the buildings and between the buildings and the landscape: it well represents the third actor, highlighting the importance of the continual flux of physical relationships rather than a defined physical central space of a functionalist organic metaphor.

118 *"Peraltro, proprio al CIAM di Hoddesdon, anche attraverso il tema del 'Heart of the City', comincia a emergere la questione che si dimostrerà centrale per i quarant'anni successivi: il problema dell`ascolto del contesto, del progetto come dialogo con esso in quanto forma depositata della storia del luogo specifico."* Vittorio Gregotti (1992), Editoriale, *Rassegna,* n.52/4

119 Paci, E. (1954) Il cuore della città. *Casabella Continuità,* n.202, p. vii

120 Buber M., *Ich un Du.* 1923, trad.eng. *I and Thou a new translation.* Scribner, New York, 1970

121 Giedion S., *Architecture You and Me.* Harvard University Press, Cambridge, 1958 trad. it. *Breviario di Architettura*,Garzanti, 1961

122 A definitions of different kinds of clusters has been already presented in the Chapter about Gruen.

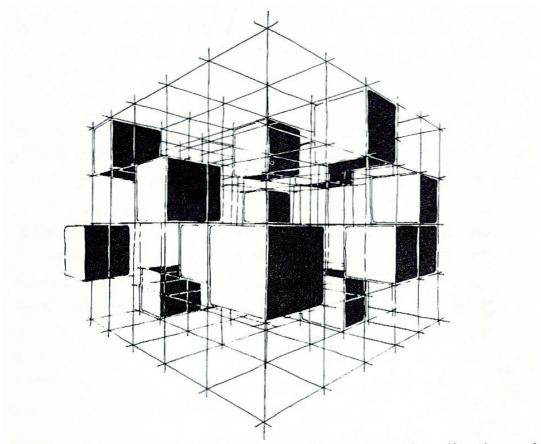


Figure 5-5 Drawing of a space frame for visualization of three-dimensional planning.

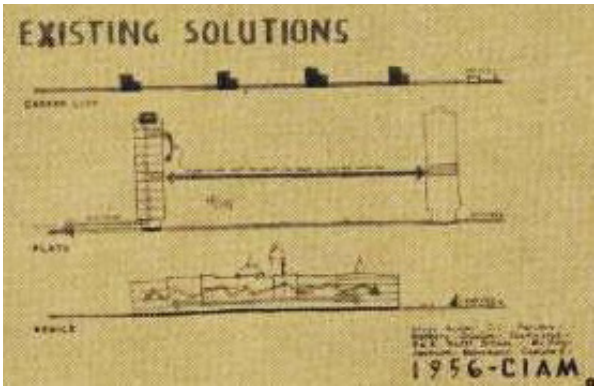
Gruen V., Centres for the Urban Environment, 1971

Three-dimensional design

It is important to notice the recurrent attention given to the three-dimensional design of the Heart which gains different interpretations and facets by the three actors. Indeed in the First Urban Design Conference (I actor), the three-dimension is associated by Sert with the cooperation of different professional figures operating together with a common language for the structuring of the city. It becomes therefore the linking tool between planning and architecture, defining the basis for the discipline of the Urban Design or of the Architecture of the City[123]. Few years later Siegfried Giedion considers it as the major character which emphasizes the passage to a modern third phase of the architectural development: from the individuality of the Greek first phase, to the accent of the interior space of the Roman second phase, the three-dimension becomes a particular element of the cubism in art and in modern architecture. Some of the projects presented in Hoddesdon, such as St. Die`, are listed among the major examples of this brand new phase of the architectural space and thinking. Then we have considered the 'mall maker' Victor Gruen who composes even a three-dimensional chart, a sort of musical score which should help the architect for the right design of the physical structure of both multilayer cities and architectural megastructures. His own commercial architecture, which is now spread around the world into banal and consumerist examples ("*those bastard developments"*[124]), is an amazing experimentation of

123 Rossi A., *L`architettura della città.* I ed.Città Studi , Milano, 1978.

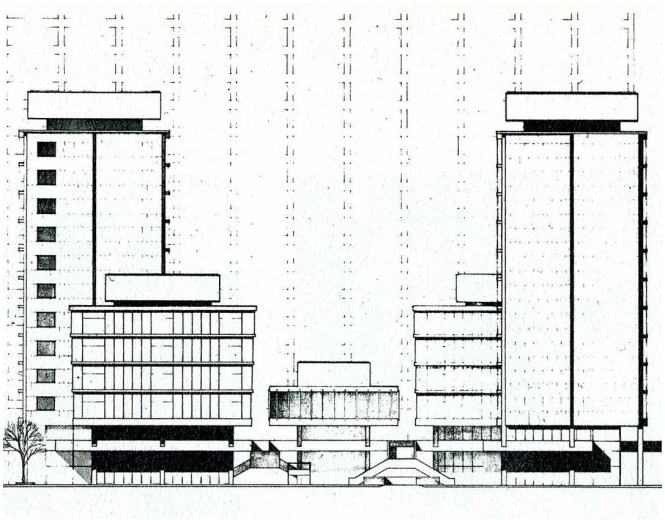
124 See Hardwick M. J., *Mall Maker. Victor Gruen, Architect of an American Dream.* University of Pennsylvania



D. and R. Scott Brown, CIAM Summer School Venice, 1956

different flows in a three dimensional-environmental space, whose devices might be reconsidered positively nowadays if it is true that *"the world of the shopping mall […] has become the world."*[125] Furthermore the three dimension is one of the most important tools for the preservation of the environment, as described in the Charter of Vienna (1971) which is an environmental reinterpretation of the CIAM`s Charter of Athens(1933): for Gruen the distinction between civic-space and landscape and the preservation of the natural environment from the sprawl of the city are possible only through the high density, the concentration of the urban services and their right distribution into a three dimensional space.
In the CIAM Summer School (II actor), the third-dimension is not expressed explicitly in most of the projects proposed by the students. Nevertheless the intriguing proposal put forward by Denise and Robert Scott-Brown and their colleagues considers Venice itself as a contemporary and complex three-dimensional-stratified model for urban design: its complexity of paths, passages and visual relations are in contrast with the repetition of elements and with the flatness of the modern masters` proposals, such as Howard's Garden City and Le Corbusier`s Ville Radieuse. Moreover the sketch of Venice, drawn in 1956, does presage a new interest in the "*recapture (of) the spatial and functional density of the traditional European City'"*[126] which will be clearly expressed in some urban projects of the succeeding

Press, Philadelphia, 2004, p. 216
125 Crawford M., *The World in a Shopping Mall.* In Sorkin M. ed. by, *Variations on a theme park.The American city and the end of the public space. Hill and Wang, New Yor, 1992, p. 30*
126 See Tom Avermaete, *Mat-building. Team 10's reinvention of the critical capacity of the urban tissue.* in ed. by Risselada M., van den Heuvel D., *Team 10 In search of a Utopia of the past, 1953-`81.*NAI Publisher,



Bakema and Students, St. Louis project section, 1959-`60

decade: for instance the *mat building* of the Free University competition in Berlin designed by Candilis-Josic-Woods (1963) or Le Corbusier`s Hospital of Venice (1965) where the particular urban structure of the Lagoon city is the main reference for the design of the architectural building.

This density and stratification of the city is well recognized in Venice during the CIAM 8. In particular Piazza San Marco is the a result of a slow process of transformations, developed in 500 years. In this sense the third-dimension of the main Square of Venice is representative of the slow process of the stratification of the city which is recognized by Giedion as necessary to obtain a right human scale and balance between the urban elements. Thus in the 1950s, Venice is already the *"City of the New Modernity"*[127], as Tafuri and Gregotti will later call it in the 1990s[128].

Indeed, only through the "*3-dimensional language",* Architecture, which has the "*monopoly of Space"*[129], and Urbanism can indeed "*explain to man what life is*"[130] and "*acknowledge every aspect of life: how to care about your body, the way you cook and eat, how you work, how you lie down and how you sit, how you walk and drive a car, how you feel the sun on your body."*[131]

Rotterdam, p. 135, 307-312

127 Gregotti V., *Venezia Citta` della Nuova Modernita`*, Consorzio Venezia Nuova., 1998

128 See the Introduction chapter about the contemporary references of the three actors, where this discourse is already deepened.

129 *Architecture of Humanism*, p. 168 quoted by Bakema in his notes about Theory. In Bakema Archive, Bake, NAI Rotterdam, d264

130 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis.* In Bakema Archive, Bake, NAI Rotterdam, d264

131 Bakema J.B.,*Letter to Mr. Haskell.* (December 1959) in Bakema Archive, Bake, NAI Rotterdam, d264

Then Bakema (III actor) re-interprets the "*3-dimensional language"* as the necessary tool for the right overlapping of the social and physical structure of the City: it is the unique way for Urbanism to physically *"explain to man what life is"*[132]. Its importance and dependence for our public life is even similar to the *"oxygen"*[133] for our organisms. Moreover it is the unique tool for the right mutation of the city into a "*symbolic value"*[134]*,* which is the Heart of the City itself as later discussed. Bakema thus uses the section in order to establish the most important relationships between urban and human forces which constitute the city, as we can see from his Friendship`s diagram: the St. Louis project (1959-`60) thus perfectly mirrors the link between the three-dimensional design and the symbolic Heart of the City as Relationship in a linear development rather than a public centrality.

Finally we can affirm that the three-dimensional design has several facets within the Heart theme: we might resume considering it as the necessary tool for both the integration of several functions (Gruen), the cooperation among different professions (Sert), the social identity of the city (Bakema), the environmental preservation (Gruen), the evolution of a new architectural phase (Giedion),...

It is therefore imbued of theoretical, social, historical, functional and physical interpretations which clearly mirror the complexity of the Heart theme.

Furthermore the insistence on the necessary three-dimensional design inside the Heart theme highlights the fact that the Heart of the City is not merely the 5th element added to the four functions (dwelling, work, transportation, recreation - defined in the Athens Charter in 1933), as presented by the MARS Group in the presentation to the CIAM 8, and later criticized by some members of Team 10. The Heart of the City, with its complex three-dimensional character which involves different aspects of the city as already asserted, is instead a counterforce to the zoning method of planning, abhorring any functionalist division of the city.

Finally the third-dimension is also recognized within all three actors as the proper way to reach that humanist (Sartre, Giedion), social and cultural purposes proposed within the CIAM 8, which are embedded in the elementary symbol of the Heart.

132 Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis.* In Bakema Archive, Bake, NAI Rotterdam, d264

133 Bakema J.B.,*Letter to Mr. Haskell.* (December 1959) in Bakema Archive, Bake, NAI Rotterdam, d264

134 "*symbolic value, a monument which can be used by people and can use the people, stimulating peoples imagination about life."* Bakema J.B., *Problem: Civic Centre for Metropolis St. Louis. Part V.* In Bakema Archive, Bake, NAI Rotterdam, d264

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Un Coeur Simple

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