CONSTRUCTING METROPOLITAN LANDSCAPES OF ACTUALITY AND POTENTIALITY

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Abstract

The Flat City space syntax model (Read, 2005), has been developed to extend the functionality of the space syntax method into the 'periphery' (the metropolitan) of the contemporary metropolitan city, and to provide a method for describing and evaluating the form of contemporary urban landscapes. The Flat City model proposes that the environment is structured into strata of 'place-regions', each with their own definitive scales and each with their own connective matrix enabling the 'regional' movement which realizes places. A detailed empirical study of spatial centrality as revealed by the distribution of street-edge commercial functions in the metropolitan territory around Amsterdam, is presented and evaluated in the terms of this model in another paper (Bruyns and Read, 2007). The results of this research suggest that actual physical urbanization or the emergence of settlement form, does not simply follow connectivity, but depends very often for the precise location and character of its emergence, on a factor of 'grounding' within place-region strata at lower scale-levels. This implies immediately a critique of current connectivity-led urban development practices in the Netherlands and a brief critique is developed here in relation to two recent urban development plans. The results also begin to suggest a different mechanism of the transfer of economic and social potential from networks to urban place. This mechanism of transfer has been broadly understood in terms of technologies of connectivity and their simple imbuing of pre-existing places with higher-scaled potentiality - and, for example, Saskia Sassen evaluates a number of global city places in terms of 'connectivity indices' (Sassen, 2006). Our results suggest a strong interdependence between matrices of connectivity at different scale levels, and that the potentials of connectivity emerge out of scaled layers of connectivity considered right down to the matrices of the street grid of the urban fabric. But this also means we can develop a clearer understanding of the relationship between the global, the metropolitan and the local. These terms do not imply any dualistic opposition, as in global-local - rather the properties of the global and the metropolitan become incorporated in the local in a capture of the potentials of larger 'worlds' within smaller, and a realization or materialization of these potentials in the smaller. This implies a monadology of, for example, Leibnitz or Whitehead, more than a straightforward network spatiality of connectivity. This paper will continue to develop this notion as a possible way to understand urban spatialities, by suggesting possible ways of understanding the potentialities of real local fabrics as 'worlds of incorporation'.

Keywords:

Urban morphology Movement layers Amsterdam region Infrastructure Design

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The Amsterdam Region Seen Through the Flat City Model

The Flat City model of the urban surface has been derived from exploratory work on urban movement systems in space syntax, and one of the reasons for its development was to make space syntax capable of dealing more effectively with metropolitan urban fabrics rather than with just central urban fabrics (Read, 2005). The basis of the idea is that urban movement is 'naturally' structured into differently scaled movement grids, layered over each other, and that these grids, and the movements they convey, each draw functional elements of the urban landscape into relations of co-orientation with themselves, drawing the shape of this functional breakdown into physical structures of co-related movement and functions. Neighborhoodscaled functions (baker, supermarket, corner-shop, for example) are drawn into a relation of co-relation with movement particular to the neighborhood-scaled movement grid; city-center-scaled functions (clusters of computer shops, carpet and flooring shops, employment agencies, for example) are drawn into a relation of co-relation with movement particular to the city-center-scaled movement grid; metropolitan-scaled functions (head-office clusters and the services associated with them, industrial parks and agri-industry, residential dormitory neighborhoods, villages and suburbs, for example) are drawn into a relation of co-orientation with movement particular to the metropolitan-scaled grid or grids. We note a high degree of regularity and order in this layering of grids: in the Amsterdam metropolitan region, one can, with little difficulty, break the entire land-bound movement grid (including rail networks) into three coherent scales of working. These may constitute more than three systems - the rail system and the freeway system for example work independently of each other - but these systems taken together can be coherently mapped at three different scales that are significant for the form we try to articulate.

This separability of the movement system (figure 1) appears to the researcher as a 'natural' proclivity of the total movement system. In other words the movement system appears to be already structured in this way. In research reported in a separate paper, the total movement grid has been separated into three scale-levels, represented in three maps (Bruyns & Read, 2007). These maps represent respectively the 'neighborhood' or 'local' grid, the 'city-scaled' or 'middle-scaled' grid (also known as the 'supergrid') and the 'metropolitan' grid. This empirical work of the identification of the separate laminar grids was conducted alongside an empirical (street-edge) recording of the visible commercial functions of the study region. These functions were classified according to the scales of movements of their customers; shops and other businesses serving the neighborhood scale (like bakers, supermarkets etc.) being distinguished from shops and other businesses (computer and electric goods, home decoration, etc.) serving the scale of the city-center and the equivalent out-of-town scale, and shops and other businesses (car dealerships, office suppliers etc.) serving the metropolitan scale.

Space is here reduced in the first place to a congruent simultaneity in co-relation of a movement network conveying movement of a particular scale and the functions that depend on that network 'grid' for their 'customer base', in order to establish a 'spatial datum' which integrates and 'centers' particular 'worlds' of movement and function. These 'spatial data' are understood as space-time (and movement-functional) 'worlds' which function with a certain 'internal' coherence. We postulate space-time coherences and consistencies (centering) attached to these layered movement-functional 'grids'. We set up an urban model of horizontal layers of movement grids and their related functions on this basis and as already reported, find a genesis of

urban form in these layers and in the relations of these layers with each other (see Bruyns & Read, 2007).

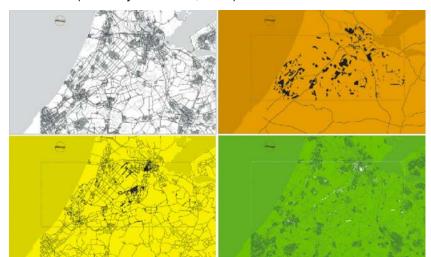


Figure 1:

Top left; Amsterdam and region, total movement system. Movement grids and functions; metropolitan scale, city or middle scale, local scale

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The systematization of urban movement into these three grids clearly owes something to planning practices and especially traffic planning practices and norms. But we believe it may also owe something to a human structuring of the world into 'regions' of identifiable and 'isotopic' (equal-place) 'places', which involves us in a logic of knowing and identifying the world in movement, and then an evolution of movement pattern in the world through human history that has become today a technological systematization of movement. The organizing principle of the movement grid 'layers' is the 'place-region' of Heidegger, who proposed that landscapes are constituted into fields of 'places' by means of the conceptual construct of the 'placeregion' (Heidegger, Casey). Knowable 'places' can only be in relation to other 'places', and those other 'places' which participate in the constitution of a 'place' are called its 'region'. We imagine these 'place-regions' as 'space-time frames' or experiential-perceptual (and functional) 'worlds' whose primary expressions for us here are the movement infrastructures or 'grids' that convey the appropriate circulations between places. Our previous paper showed how these movement-grid systems can be seen as structuring a continuous process of formation in the urban landscape, and we will attempt here to demonstrate the usefulness of this structure of formation for understanding and assessing the functionality and 'viability' of two urban plans.

Dutch Planning and Urban Design

The context in which these places and plans exist is that of the Dutch urban landscape and Dutch planning practice. It is well known that Dutch planning practice understands the urban landscape already as

a system of layers: the first being 'ground and water'; the second, 'infrastructure networks', and; the third, 'buildings, streets, squares and planting'. (Frieling ea., 1998; see also de Hoog pp. 19, 30-33). In addition, there is seen to be a role still for the planning authorities post-welfare-state, as movers of the shape of the city and its qualities and functioning, by way of the promotion of projects that concentrate defined activities in 'infrastructure interchanges' and 'centers'. Maurits de Hoog, commenting on this planning culture, proposes that "directed interventions [in strategic projects] can strengthen the diversity of public life" and can also "serve as motivator for transformations." (de Hoog, p. 21). Interchanges and centers become understood as significant points for public space and the 'public domain' - especially with regard to "urban life" and the quality and character of visible street-level activity. We can therefore understand, according to de Hoog, there being a fourth planning layer of 'concentration points' and 'interchanges'ii planned around locations already understood to be productive of 'urban life'.

What we are proposing here therefore is an instrument that expands layer 2 to take in infrastructure at all scale levels. The city is much more than a distribution of buildings and infrastructure by the hand of the planner, and we propose that in much of its form we can find already embedded a logic of economy, society and human inhabitation which sustains the city and its life as a continuous and dynamic process. We propose that we can find guite straightforward and predictable relations between layer 2 and layer 3 (movement and material in the form of scale-dependant functions) on the basis of our notion of 'scale', and that we can spot the spontaneous emergence of a vital 'urban life' at street-level (layer 4) on this basis as well". What we try to articulate therefore is a logic of a self-forming and sustaining urban landscape; one which holds certain easily understood relations with the Dutch planning framework. There is potentially therefore a role for our model firstly as a way of thinking the urban landscape along the contours of its own 'natural' tendencies and processes of urbanization, rather than against them, and for the generation of ideas for the steering of the growth and change of the metropolitan landscape. It may serve also as a means to the assessment of urban plans for their 'natural' functionality, and their ability to work with, rather than against, a 'natural' momentum of unfolding urbanization processes in the urban landscape.

Laminar 'Thickness'

Two of the most important concepts to emerge out of our way of looking at the urban surface are that of 'grounding' and that of 'thickness' (Bruyns & Read, 2007; Read, 2007). Our urban model takes layers of movement grids, and follows the way these organize quite directly the distribution of functions in the urban surface according to a logic of scale. We note further however that with particular overlaps of layers, there emerge settlement patterns or clusters and formations of functions in a manner that suggests a spontaneous eruption of urban or settlement mass in place. This suggests that what we are looking at here is the coming together in place of particular conditions that are conducive to the emergence of particular urban patterns or forms, and also associated with particular qualities of 'urban life' and public space, by way of two or more movement grids and their overlap. This sounds simple but is interesting in its implications; firstly because it postulates that delivering the conditions of urban formation and 'urban life' is a more complex matter than single-scale connective accessibility. It suggests that the investment of the potentials in place that originate in global or metropolitan connection, may be some kind of cascading process of the investment of these potentials in ever lower-scaled connective

matrices – till they eventually hit the lowest scale of the connective matrix of the neighborhood or the local. We have here in embryo a theory of urban place which owes everything to (differently scaled) 'spaces of flows' and nothing at all to any 'space of places' which understands place as pre-existing and 'substantial' in the Aristotelian or Cartesian sense.

There are therefore, we propose, two quite diametrically opposed ways of seeing the local: in the first it is something self-evident and objective; something like an Aristotelian 'substance', a neutral and 'natural' material 'resource' to be invested with significance and meaning by way of a relationship with locally situated people, social processes, and architecture. In particular, 'meaning' or 'significance' becomes when the human, meaning-giving, subject develops an "affective affinity between material fabric and himself." The "sense of emotional familiarization" (Tzonis, p. 55) that arises becomes a glue that binds identities of self, collective and place into something significant (and something that so often turns out to be proprietary and territorial).

The second way of seeing the local is today more often, and quite unfairly we believe, associated with a 'loss of place' in a disorienting dynamic of global flows, and with urban fragmentation and the loss of a comfortably familiar locus of inhabitation - though a few writers intuit that this may not be the end of the story. Saskia Sassen describes the context of this 'contemporary local' when she proposes that in the midst of global flows, "the city becomes an amalgamation of multiple fragments located on diverse trans-urban circuits. As cities and urban regions are increasingly traversed by non-local, including global circuits, much of what we experience as the local because locallysited is not necessarily local in the traditional sense of the term." (Sassen, p. 50). We can begin to sense here the way Sassen's 'fragmentary local' is what it is precisely by way of the 'trans-urban circuits' that traverse it: it and its fragmentary character is produced by those 'circuits' - even somewhat mechanically produced in a frame of material flows - rather than it simply being neutrally and passively available as a resource to be invested with a meaning whose nature is

Sassen opens up the possibility that the local is produced, and in fact that the nature of this production has nothing to do with the local as it is normally understood - it is a production out of higher-scaled 'circuits'. What Sassen misses still in her conception of the local is a means to understand how a non-fragmentary local (or better perhaps a local which positively and productively combines aspects of the fragmentary and the continuous in a recognizably real urban local which may not always be either as fragmented, as disorienting, as displacing - or as hard-edged and bounded, or as accommodating and comfortable, as the theorists on either side would like it to be) may be produced out of higher-scaled circuits, and what we will speculatively propose and try to demonstrate here is how this may happen by way of the diagram we mentioned earlier - of a cascading process of the investment of higher-scaled potentials in lower-scaled connective matrices till they hit the lowest scale of the connective matrix of the neighborhood or 'local'. This amounts to saying that a 'groundless ground' of the local is constructed out of, and consists of, multiple and multiply-scaled circuits such that they are capable of supporting and investing a practical meaning in each other. We propose therefore that the reintegration of local fragments located on 'trans-urban circuits' is a straightforward matter of drawing them together (not always completely and not always without a residue of 'edginess') in lowerscaled 'circuits' which achieve their own integration by being 'place'. We see the difficulty people have had with this idea as related to a

reluctance to understand the 'physical city' and a movement of integration which is bodily and perceptual as part of the process of everyday 'place' and 'world' formation. We may imagine actors and agents 'suspended' in higher-scaled connective webs that enable their actions, but who exist at the same time in particular local contexts which give their actions intelligibility and sense, and which at the same time make the possibilities of those higher-scaled webs available in place. We need the newspaper kiosk or the internet café in the local in order to access the global. We could imagine, as a start, an urban environment where circuits of the global (locally materialized in the shape of global brands, travel agencies, and global entertainment and communications possibilities) are brought together and made available in place to circuits of people, themselves moving at metropolitan scales, city scales and local scales; their movements bringing the riches of the global into their presence in structured and intelligible ways. A fuller version of this argument is given in Read, 2007.

We all know environments where global functions and possibilities are available but without the richness and 'placeness' evoked in the image of the contemporary metropolitan center at the end of the last paragraph. This is where 'thickness' comes in. Again somewhat speculatively, we propose that the 'place-quality' of the local environment produced in multiple circuits depends on the density and 'thickness' of our 'place-region and grid' layers that are successfully incorporated into a local setting. We note, as we have elsewhere, that in new developments, when they are compared to more traditional central urban environments, it often appears to be the middle-scaled grid, or supergrid, that is critical for the production of an urban 'placequality' that we understand from our experience of traditional, historically evolved, urban centers. It is this scale of infrastructure that seems most often to be omitted, or that fails to work with the effectiveness required, and it is this scale of infrastructure that we don't build any more as a matter of course into our environments. We have proposed before that the qualities of ordinary traditional central urban fabric, with its patterns of street-edge shops and facilities and well-occupied public space, are generated by an overlap of the 'local grid' (the street pattern generated around the traditional urban block) and the supergrid (Read, 2001). To stereotype the new 'big urban project' urban developments in the Dutch metropolitan landscape somewhat: they are always well connected at the metropolitan scale, this being the scale that is understood as being facilitating and productive, and they then assume that 'local place' is a problem that will be solved by way of 'architectural quality' - usually meaning either by way of extravagant architectural gesture (for example, the Utrechtsebaan in Den Haag, Rotterdam center) or a 'New Urbanistic' neo-traditionalism (De Resident in Den Haag, Nijmegen center).

We will use the urban model proposed to briefly critique two current urban projects in progress and to unpack some of their more and less stereotypical features and prospects for delivering a quality (groundlessly) 'grounded' and 'thick' urban place.

Amsterdam Zuidas (South Axis)

The high ambition of the Amsterdam Zuidas project is to draw high-scale transportation infrastructure, urban function and urban form together to fundamentally reconfigure Amsterdam as a metropolitan node. Since the 1970s and 1980s Amsterdam has experienced a drift of its highest-level business and financial functions out of the old center. This drift has been understood as a problematic of 'accessibility' (Buurman & Kloos) while there was not at the same time a very clear understanding of the way the form of the 'movement-city'

has been transforming over the last half century. This transformation has shifted the 'movement center of gravity' of the city (certainly as far as the financial and global business sectors are concerned) in the space of a few years, out of the old center and into the periphery. This evolutionary change, which can be seen in terms of our model as a more or less 'natural' consequence of a general increase in mobility (along with an internationalization of the financial markets and an increase in the importance of inter-city relations), has seen what, from a local perspective, appears as an *inversion* of the accessibility profile of Amsterdam. The central parts of the city that were effectively accessible for the financial and corporate sectors in the first half of the 20th century in the context of a national financial system (within a national capital) have become steadily more inaccessible in the second half of the same century in the context of an international system. Dominant movements shifted, more or less 'naturally', from the inner-city supergrid (where 'center' consisted of the traditional historical center and the 'middle ring' of the 19th century city edge) to the metropolitan grid on the periphery (see figure 1). The Zuidas project amounts to an official recognition of this shift and is envisioned as the wholesale replacement of the city's financial and global headoffice center to the Zuidas site, where they are directly on the metropolitan grids. The plan sees also the placement here of the city's main railway station at the level of the transcontinental high-speed system. Schiphol airport and the important secondary centers of Den Haag and Rotterdam are brought into closer alignment and proximity with the new center. The change will have a profound effect on the way the inner-city fabric functions, inducing a reorientation and recentering of the city towards the south. In order to ameliorate some of the orientation changes within Amsterdam itself, a major infrastructural addition, the Noord-Zuid (North-South) metro line is being constructed between the traditional historical center and this new one.

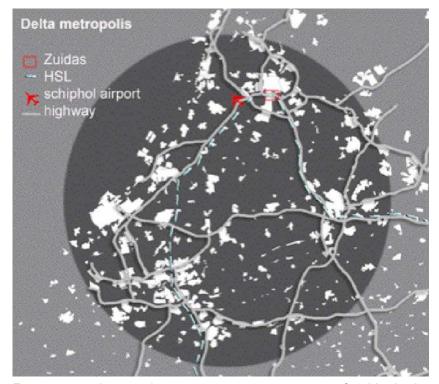
This reorientation and reconfiguration of financial and corporate Amsterdam, by shifting it directly onto the metropolitan-scaled freeway and railway grids, is easy to understand spatially at the metropolitan scale (figure 2). What is more difficult to assess is the way the complex 'node' of Amsterdam is reconfigured with this change. How is a 'place-quality' of the local is established where these global and metropolitan scales 'touch down' in a local context? How global and metropolitan scales are grounded in the new center, and how are they and the reorientation process in general likely to affect other places and scales in the inner-city fabric? Applying what we have learned in the previously mentioned paper about urban formation in the metropolitan region and with the help of our model we can begin to assess how differently scaled movements are brought together at the Zuidas site and the 'thickness' of the resulting layering of connective grids. We can also begin to assess how the reorientation of the central fabric towards a new center is effected. The design aims for the establishment of a center with good local urban qualities and we know from our previous work that the achievement of this aim depends on bringing together convincingly in place different 'speeds' and scales of movement.

The following analysis was carried out as an MSc thesis in the Spacelab laboratory (van den Hoogen). The urban fabric is complex and creates conditions for small-scale economies and socialities in ways that are not always immediately visible. Nevertheless we can see some of the working of the fabric in its effects, and we note from a survey of street-edge functions in the fabric of Amsterdam that the Zuidas site sits in a gap in the spread of functions through the central urban fabric (figure 3).

Figure 2:

The position of the Zuidas site, on the major road networks and in relation to Schiphol Airport and other urban centers

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From our previous work we can propose two reasons for this. In the first place the ordinary central fabric of Amsterdam is structured by the overlap between the middle-scaled or supergrid and the fine-grained local street-and-block grid. The spread of street-edge functions though this structure is at least partially determined by the quality of the intersection between these grids. Where local and middle-scaled grids cross each other in a way which makes for a lot of transparency between grids, shopping functions tend to be more concentrated at the middle-scaled street-edge. Before about 1920, street grids tended to be built in an open and undesigned way; post-1920, spatial design practices became concerned with reinforcing a separation of the 'inside' and 'outside' of neighborhoods and this was achieved by limiting the degree of openness of the relation between the middlescaled and local-scaled neighborhood grids. In general therefore, small-scaled functions oriented to a more local life in the urban fabric distribute themselves through the fabric by way of the middle-scaled grid or supergrid, but this spread is curtailed where the density of intersection between the grids and the transparency of the local grid become reduced (see Bruyns & Read, 2007). We can see that while it remains very important to try to establish a continuity of the supergrid across the Zuidas site (figure 3), that the effect of this on establishing a continuity of everyday urban life in the fabric, on the street, is likely to be limited because of this transparency factor and the difficulty of 'fixing' it wholesale across the fabric.

The second reason for the break in continuity of street-edge functions and street level activity at the Zuidas site is the fact that along the ring road there is a high proportion of functions with rather large footprints whose orientation is clearly towards the ring road and the metropolitan scale. These large buildings are closed to the middle-scale, and contribute very little if anything to the life on the middle-scaled or local grids. They tend, in general, to put up blank walls against the local context and generate 'dead' zones, breaking any continuity of street-edge life in what may otherwise be a more animated street-scene.

Looking at the plan for the Zuidas site, the middle-scaled grid or supergrid is made up through the site, establishing fabric continuity in terms of movement at middle-scale level. It is clear that the Beethovenstraat link to the north will be very significant for maintaining a direct movement continuity with the rest of the fabric but the difficulty of establishing a good experiential continuity is very apparent (figure 4). We propose also to link the site through to the east and the Churchillaan and President Kennedylaan*. What should also be clear though is that the kind of experiential continuity of fabric that goes with a continuity of street level functioning and general street-level activity will not be achieved. The new center will not act to orient life in the fabric at the city-center middle-scale towards itself – it seems clear that its visibility and 'presence' will be limited in the lives of people living and acting at this scale.



Figure 3:

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There is a break in continuity of street-edge commercial functions and in street-life around the Zuidas site. Making up the continuity as well as possible with supergrid connections



Figure 4:

The experiential quality of the Beethovenstraat in the urban fabric and alongside the site respectively

Another very important factor at middle-scale level is public transportation. The link by tram through the Churchillaan will play a very important role in establishing a link at this scale level. What seems also clear though from the public transportation plan at tram level is that here too there is no thoroughgoing attempt to centralize the Zuidas in the inner-city fabric of Amsterdam (figure 5) – the site will remain somewhat peripheral with respect to the zone of intense

tram coverage. Along with the gap in experiential continuity already mentioned, the Zuidas site will remain peripheral with respect to a resident of Amsterdam's everyday perceptual understanding and use of the city center. We propose a revision of the tram system with the addition of a new tram ring especially intended to connect the west and the east of the central fabric to the south and the Zuidas (figure 6).

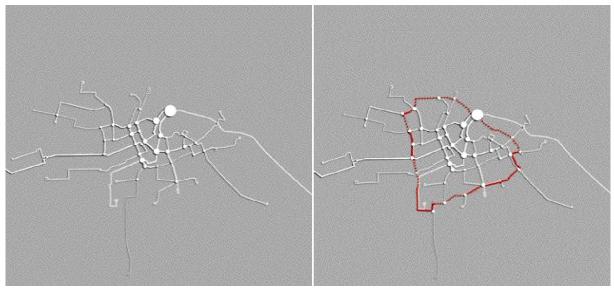
Figure 5:

Supergrid made up to
Beethovenstraat and Pres.
Kennedylaan. Public
transportation plan of tram
014-10 routes



Figure 6:

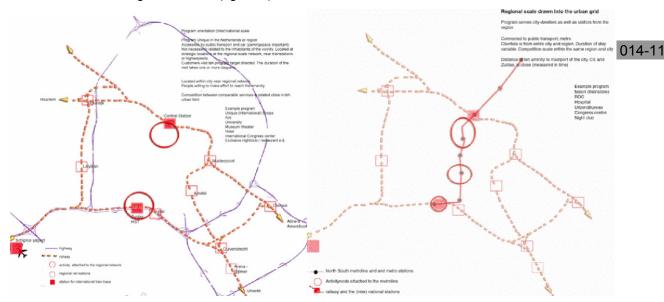
Addition of new ring-tram linking the Zuidas with the east and west of the central city



What is proposed at present as the main link through the fabric to the Zuidas site is new Noord-Zuid (North-South) metro connection. While it is clear this will play a role in reorientating the central fabric to the Zuidas, it is also clear that this reorientation happens through a rescaling by way of the metro and goes along with a 'metropolitanizing' of the reoriented fabric and the relative 'peripheralizing' of the already peripheral west and east of the city-center. Our tram proposal is intended to try to ameliorate some of the

peripheralizing effect on the west and east of the fabric. The axis through the central city traced by the Noord-Zuid line will create a powerfully prioritized zone and reinforce the already strong functional axis from the historical center to Amsterdam Zuid (South). It will tend to make areas on the line of the metro, like the neighborhood of the Pijp, more accessible to the metropolitan and more metropolitan in function and character. One could see the metro as drawing the metropolitan scale from the two stations (Central Station and Zuidas) in a narrow axis through the center (figure 7).

Figure 7:
Noord-Zuid line metro
'drawing the metropolitan
scale in a narrow axis
through the center



We can imagine in the Pijp, the middle-scaled grid being appropriated by more metropolitan functions along the line of the metro and becoming in this sense more of the type of the historic center (figure 8 - for the different types of urban structures and elements see Bruyns & Read, 2007). While at the scale of the existing urban center the Zuidas will remain remote from the experience of urban dwellers, it is when they act and move at a metropolitan scale - therefore also in areas like the historical center and the Pijp which are themselves rescaled to the metropolitan - that it will come back more effectively into focus. It will not itself become though, as we see in figure 8, the kind of center that performs simultaneously at different scale levels and that we think of when we think of evolved European centers. The crucial difference is that it will not be integrated enough with the middle-scaled grid (as the Pijp and the historical center are) to appropriate the middle-scaled grid to the metropolitan scale. The critical point for the working of public space at this metropolitan scale (as discussed in Bruyns & Read, 2007) is the simultaneous scaling of the 'middle-scaled' grid to the middle-scale and to the metropolitan (it has been appropriated by the metropolitan). When people are using the middle-scaled grid (and the local in the case of the historical center and likely in the case of the Pijp) at both metropolitan and middle scales simultaneously (and where the functionals available serve both scales simultaneously), we appear to get the conditions of 'good public space'.

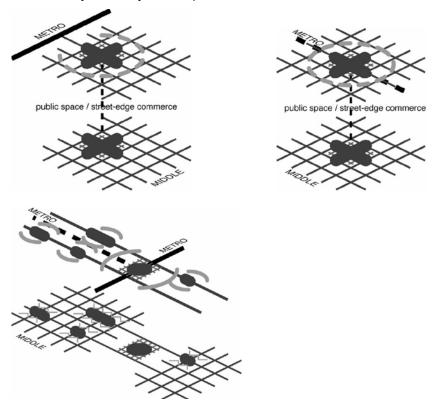
The way the supergrid connects to the local grid becomes very important for the generation of small-scaled (middle and local scaled) activity centers in the urban surface. The designers of the project have been made aware of the importance of the *lowest*-scaled grid for the establishment of a good local public space quality and have in the project linked their local grid simply and directly with the supergrid. It is clear though that the effect of this measure is limited due to discontinuity with the middle-scaled grid (and good local place on the

Beethovenstraat) and the experience on the site itself. The complication of the local grid by off-setting transverse links is unnecessary and risky in our opinion.

Figure 8:

Centralities and public space: historical core; the Pijp neighborhood; Zuidas

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It is clear that the historical development of Amsterdam has established a more logical continuity of the fabric at middle-scale into the historical center - a continuity that succeeds to some extent to make the historical center central at metropolitan and middle scales simultaneously (Bruyns & Read, 2007). It is this simultaneous centrality, a doubling of the scales for which the historical center is 'present' and visible, that is at the center of the qualities we associate with the European historical center. It is not possible to achieve this simultaneity of centralities on the Zuidas site because it is impossible to establish the same continuous and natural alignment of the new center with the total fabric - especially with the middle-scaled grid. The linear links at middle-scale level with the Beethovenstraat and the rest of Amsterdam Zuid and with the Churchillaan and President Kennedylaan, and their future development are going to eventually be very important for the possible further integration of the project into the fabric at the middle scale and if there is to be a chance for a real center in Amsterdam Zuid it will more than likely be on one of these streets. On the other hand, the insertion of the metropolitan scale into the heart of the central fabric in an attempt to create an alignment of the fabric with the Zuidas, will succeed in those areas which become rescaled to the metropolitan scale - but at the cost of peripheralizing areas which are not rescaled. Attention will have to be given to these areas if they are to be prevented from turning into the kinds of edge of center areas Jane Jacobs has drawn our attention to with their potential for "dispriting decay" (Jacobs, p. 35). The effect on a rescaled part of the fabric like the Pijp neighborhood, that also has a well integrated middle-scaled and local grid, is likely to be dramatic, changing it rapidly into the sort of central urban environment prioritized for mass shopping and entertainment. We will see here the 'doubling' of centralities, which is a feature of European metropolitan centers.

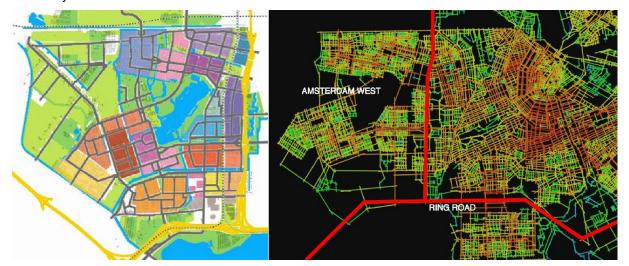
Amsterdam West

If the Zuidas project is one that deals in the main with the whole central city through the way it addresses the *orientation* of that central city to higher-scale, metropolitan grids of infrastructure, and the way we create the conditions for a grounded and 'thick' (doubled) metropolitan centrality, the Amsterdam West project is one which deals more with the continuity and viability of the central urban fabric itself at a city (middle) rather than metropolitan scale. It is a project which tries to exploit the potential for a small-scale liveliness, diversity and richness of a traditional fabric of urban neighborhoods (as opposed to a suburban fabric) as a context for dwelling and everyday life. Amsterdam West is a post-war (1945-75) housing area of relatively high density, a legacy of modernist 'rational planning' that has become something of an ethnic ghetto and been the subject of regeneration schemes and much planning thinking over the last 15 years. There are a number of ongoing schemes focused on the diversification of the population and the housing stock, but it is also understood that some of the area's problems may be a consequence of 'rational planning' itself and the spatial structuring of the area. The situation is not straightforward in that at first sight, in plan view at least, the fabric of the area seems to follow the traditional pattern of a middle-scaled grid or supergrid laid over a local grid. We would expect therefore a reasonably traditional quality of urban public space, but this is not our experience on the ground. In fact if we look at the spread of small-scaled shopping, as we did before, as a diagnostic of the generation of the conditions of street-edge shopping and a vital neighborhood public space, what we see is that the concentration of the kinds of facilities we associate with good local public space is limited by a 'horizon' which sees these conditions stopping substantially before we get into the Amsterdam West area.

The reasons for this are identical to those mentioned in the previous case: first, we get a reduction of the transparency of the overlap between the middle-scaled and the local grids. And then the area is crossed by the ring-road which effectively divides it from the fabric of the city center. It does this by attracting, as mentioned before, large-scaled functions which reduce street-level liveliness and destroy any continuity of street-life.

Figure 9:

Amsterdam West supergrid. Area integration; relatively low area integration (red is high) indicates low transparency between supergrid and local grid



So, while it appears at first sight that the traditional supergrid and local grid overlap continues through the Amsterdam West area, there are 'invisible factors', limiting the spread of 'good public space' into this area. The first 'invisible factor' is shown up by the 'area integration' map (see discussion in Bruyns & Read, 2007). The study – conducted as part of an MSc research in Spacelab (Plomp) – concentrated

therefore on the relation between these two grids, although the relation with the metropolitan grid was also considered for the creation of centralities appropriate to contemporary cities and in relation to the different scenarios considered for the area. The study looked carefully at the possibility of increasing the degree of transparency between middle-scaled grid and local grid as part of a regeneration process that looked also at housing stock and demographics. This increase of transparency involved the lowering of major streets, which are often raised on embankments above normal neighborhood level, to the same levels as the surrounding areas, and the reconfiguration of street-patterns to give a simpler and more direct relationship between differently scaled grids.

Firstly though there is a choice to be made which involves relative degrees of connection with the metropolitan scaled grids and with the supergrid of the rest of the central urban fabric. At one extreme, the area could be conceived purely as a commuter suburb or suburbs, highly dependent on the metropolitan scaled grid for access by people who would be very mobile and who would be most likely to be bound by work and social ties to, and inhabit in movement, a metropolitan world of multiple centers. As a less extreme option, the area may be seen as more a continuation of the central urban fabric of Amsterdam, with a strong sense of continuity with, and strong links by walking and cycling and by public transport with the rest of the central fabric. This scenario would start from a position that people need not necessarily be as mobile as in the previous scenario, and could have strong work and social ties within central Amsterdam.

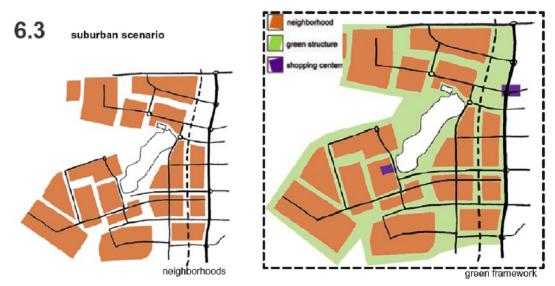
There is a third, supposed 'traditional', 'enclave' option which understands the historical development of Amsterdam by the addition of (by implication disconnected) 'identifiable' 'islands' of fabric at its edges. This is a 'tradition' which certainly has not been part of the growth of Amsterdam since it became bigger than an easily walkable center, unless one understands it to be another way of saying 'suburbanization'vi.

The serious choices to be made therefore appear to be between an 'urban' model and an 'exurban' one - one that sees us as occupying. as a matter of course, a metropolitan world of multiple centers. This would mean that most of our everyday travel should be between centers rather than within them. The Randstad has been understood since the 1970s as the preeminent example in Europe of a polycentric metropolitan city, in an urban discourse that understands polycentrality as the inevitable and desirable condition of our cities it. It is often assumed therefore that rates of travel between Dutch cities are high, when in fact inter-city travel in the Dutch metropolis is the lowest in any metropolitan region in western Europe (Hall & Pain, 2005). At the same time, there is still a strong sense in Holland that our urban condition is metropolitan, and it may be that the inter-center 'complimentarity' so talked about in our urban discussion, does not always have to translate literally into travel. We should consider also therefore another fact about Dutch cities: that in a European context they have a very high proportion of urban dwellers compared to suburban dwellers - urban centers are still substantially residential, and apparently therefore it is possible for populations to be metropolitan while at the same time most of their everyday travel is intra-urban. The idea therefore of trying to maintain and to regenerate an 'ordinary' urbanism of urban neighborhood is entirely practical and real in present-day living patterns, and there is an obvious benefit in terms of energy consumption and carbon emissions in maintaining a high proportion of intra-city travel - where public transport use and cycling can be kept higher as a proportion of total travel. Our choice for an 'urban' model therefore is in line with present commuting

realities and represents a responsible choice as far as the environment is concerned.



Research question 2: because of its strategic location, treat West as a regional center and restructure it to be a multifunctional urban environment?



Research question 3: connect West to a larger regional scale and transform it into a commuter's suburb?

The principle of an ordinary urban neighborhood involves a simple and direct overlay of a middle-scaled grid and a local grid (Read, 2001). We need to consider here therefore the lower-scaled movement grids, seeking ways of opening what was closed to a new realm of urban possibility. We need to exploit opportunities in context to open neighborhoods to the processes of an everyday urbanism, and create the conditions where street-edge commerce can support everyday lives in vital and commodious ordinary urban places.

Conclusions

We see here a way of conceiving and designing the urban world involving the bringing of different 'worlds' or 'ecologies' into relation with each other. Urban generation and regeneration becomes more than a bringing of a new facility or set of facilities into a condition of accessibility at metropolitan or urban levels, but involves rather a setting up of productive relations between 'worlds' of inhabitation and communication working at different scale levels, and the 'irrigation', by this means of actual worlds with ordinary but powerful and enabling

Figure 10:

Amsterdam West research questions as proposed by Plomp

potentials. The flow diagrams we set up of *actual* connections don't necessarily determine anything at all – what really does it is the 'irrigation with potential'. Real worlds come into being – they are *realized* – where the possibility for such realization exists. Such practical possibility resides in the present and the visible in the everyday. And what is present and visible is brought to us by movement and communication. Maurits de Hoog takes his cue from Reyner Banham who understands the urban world of Los Angeles as being made up of different 'ecologies', each with their own character, and each generating a different world so that the whole is various and provides a range of lifestyle options.

De Hoog's ecological worlds are simply too tied to the actual, and miss the really important point – that it is simply impossible today to even imagine what types and social orders are emerging and will emerge. Real cities are made on the go – in the open relationships between 'global' potentials and local realization. And what we begin to understand about urban structures is that where they work, they do so by opening the 'outside' world to us 'in' our local places, and by bringing what is far near – by bringing the potentials of the world to hand. The city does this by bringing movements and communications 'to ground'

What we really need to do is much closer what another Dutch urbanist preaches, even if he doesn't always practice it: Rem Koolhaas encourages us to "stage uncertainty": "If there is to be a 'new urbanism' ... it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallised into definitive form; it will no longer be about meticulous definition, the imposition of limits, but about expanding notions, denying boundaries, not about separating and identifying entities, but about discovering unnameable hybrids; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, short-cuts and redistributions - the reinvention of psychological space." We enter a productive Nietzschian flux which is the stuff of 'urban life' before its definition in Lefebvrian 'moments' or Whiteheadian 'events' - a definition which is not for us, as urbanists, to impose, only enable.

References

Banham, R., 1971, Los Angeles: The Architecture of Four Ecologies, Berkeley.

Bruyns, G., Read, S., 2007, "The Form of a Metropolitan Territory: The Case of Amsterdam and its Periphery", A.S. Kubat, Ö. Ertekin, Y.İ. Güney, E. Eyüboğlu (Eds.), *Proceedings*, 6th International Space Syntax Symposium, Istanbul Technical University, Cenkler, Istanbul.

Bruyns, G., Read, S., 2006, "The Urban Machine", S. Read, C. Pinila (Eds.), *Visualizing the Invisible*, Techne Press, Amsterdam.

Buurman, M., Kloos, M. (Eds.), 2005, *Impact: Urban planning in Amsterdam after 1986*, ARCAM/Architectura & Natura Press, Amsterdam.

Edward, C., 1996, "How to Get from Space to Place in a Fairly Short Stretch of Time", S. Feld, K.H. Basso (Eds.), *Senses of Place*, School of American Research Press, Santa Fe.

de Hoog, M., 2005, 4 x Amsterdam: Ontwerpen aan de Stad, Uitgeverij THOTH, Bussum.

Frieling, E.A., 1998, Het Metropolitane Debat, Uitgeverij THOTH, Bussum.

Gottmann, J., 1961, Megalopolis: The Urbanized Northeastern Seaboard of the United States, The Twentieth Century Fund, New York.

Hall, P., Pain, K., 2006, *The Polycentric Metropolis*, Earthscan, London.

Heidegger, M., 1962, *Being and Time*, J. Macquarrie, E. Robinson (trans.), Blackwell, Oxford.

Jacobs, J., 1961, *The Death and Life of Great American Cities*, Random House, New York.

Lefebvre, H., 2003, *The Urban Revolution*, R. Bononno (trans.), University of Minnesota Press, Minneapolis.

Plomp, M., 2005, "Refinding Urbanity; Embedding the Networks: Amsterdam-West on the Border or in the Center?", *Unpublished MSc Thesis*, Spacelab Research Laboratory of the Contemporary City, Delft.

Read, S., 2005, "Flat City: A Space Syntax Derived Urban Movement Network Model", A. van Nes (Ed.), *Proceedings*, 5th International Space Syntax Symposium, TUDelft, Techne Press, Amsterdam.

Read, S., 2001, "Neighbourhood Spatial Process: Notes on Public Space, 'Thick' Space, Scale and Centrality", M. Carmona, J. Rosemann (Eds.), Globalization, Urban Form & Governance, Delft University Press, Delft.

Sassen, S., 2001, The Global City, Princeton University Press, New York.

Sassen, S., 2006, "Why Cities Matter", Catalogue, 10th International Architecture Exhibition, Venice Biennale.

Tzonis, A., 2006, "Globalized World, Identity, and Critical Regional Architecture", *Proceedings*, Modernization and Regionalism: Reinventing Urban Identity Conference, 2006, Beijing.

van den Hoogen, E., 2005, "The Zuidas: To be Continued...", *Unpublished MSc thesis*, Spacelab Research Laboratory of the Contemporary City, Delft.

Whitehead, A.N., 1979, Process and Reality, Macmillan, New York.

i. The word 'supergrid' has entered Dutch planning and urban design practice (with a steady stream of former students of ours familiar with the concept) along with a recognition of its importance in supporting the qualities of 'traditional' urban place.

ii. 'Knooppunten' in Dutch

iii. While the idea of 'interchanges' and 'centers' doesn't necessarily imply any spontaneous generation of street-level activity, de Hoog makes it clear that this is what he means when he uses a map of 'concentrations of facilities' very similar to our own figures 6 and 7 taken together to illustrate this point (p. 33).

iv. Tzonis, a 'critical regionalist', describes the local as a 'resource'. The view we articulate understands the local as a 'production'.

v. One of the authors was involved in a consultancy role early in the project.

vi. A recent suburban development on the edge of Amsterdam (IJburg) was sold as being a continuation of a traditional pattern of the addition of 'islands' to the edge of the city fabric. We should regard this as an exercise in marketing rather than urbanism.

vii. Polycentrality is enshrined in European spatial planning policy as the way towards competitive and sustainable cities. The idea of the contemporary city being made up of multiple centers in a relation of complimentarity with each other has been current since Gottmann – the question is: what exactly does the comlimentarity in the idea entail? See: Read, 2007.

Read Bruyns	s Hoogen	Plomp:	Constructing	Metropolitan	Landscapes	of Actua	ality and Potentiality	1