HERITAGE DESIGN IN A GLOBALIZING WORLD
A "commons" perspective for sustainable, circular and resilient cities.

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1.   INTRODUCTION

1.1   The two pillars of architectural discourse: Research and Design

Nowadays, in the architectural discourse, research and design are confronted as two separate practices. Usually, research precedes the design, providing a broader contextual setting. In the architectural profession, research is executed in a practical, experiential manner; by carrying out the design. The architect's experience in the field provides a filtering mechanism on the design outcome.[1] Even though such methodologies are important and fruitful to the architectural discourse, they are often confined to the architect's individual interests and one-sided perspective. Consequently, for architecture to progress, more "conventional" research methods are needed. There are several architects like Jo Coenen, who have underlined the existing gap between research/analysis and the design process, bringing to the fore a commercialized architecture, where image prevails over matter.[2] Research into the history and context of architecture and built environment is essential to understand the social and cultural significance of buildings/sites as well as help architects to abstract notions such as the meaning of dwelling, to their fundamental elements, and use architecture to serve the needs of the people.[3]

1.2   The role of the academic field in the discourse of architectural research methodologies

The Lecture Series in Research Methods improved my understanding of architecture's cross-disciplinary character not only as a practice but also in terms of research and the bigger "philosophical" questions associated with it. However, I believe that is crucial for such courses to be introduced earlier in the academic studies so that students are already familiar with such topics before their graduation thesis. Personally, I was fascinated by the cross-disciplinary approach in research methodologies where architecture interferes with social sciences such as anthropology or sociology, as well as the new, innovative means of documenting research information, outside the spectrum of conventional literature research, such as mental maps and documentaries. It is the necessity of this cross-disciplinary attitude that I wish to address with this paper.

1.3   Bandung Shared Heritage Lab

My graduation thesis is part of Bandung Shared Heritage Lab which focuses on the investigation of the main backbones that affected Bandung's (Indonesia) urban, social and economic development. Today, these historic backbones act as boundaries between different communities, enhancing social segregation and inequality between the formal and informal setting of the city. Bandung constitutes a former Dutch Colonial city, which was gradually transformed into a megacity of the global South, unable to relieve the social, economical and political pressures that modernization brought upon. The studio embraces the cross-disciplinary character of architecture and necessitates the cooperation of students between various department such as Heritage and Architecture, Engineering, Landscape Architecture and Urbanism as well as a group of Indonesian students. My personal thesis focuses on *how adaptive-reuse of heritage and/or industrial sites along the railway backbone can be used for place-making that empowers people, and thus contributes to the creation of a sustainable, circular and resilient city. How heritage design can become the means of social inclusion where culture is a process as opposed to a product.*

My research begun with understanding the role of heritage in the fast-growing cities of Southeast Asia and particularly, Java, Indonesia, as well as its meaning in terms of maintaining both diverse identities in a globalizing world.[4] Very often heritage policies are used to promote governmental strategies, which aim at the beautification of cities to attract foreign investment. Heritage has become

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[1] Raymond Lucas, *Research Methods for Architecture*, 01 edition (London: Laurence King Publishing, 2016), 8.
[2] Job Roos, "What Attitude, Position and Method?" (AR3AH100 Heritage and Architecture Graduation Studio "Adapting 20C Heritage," October 25, 2018).
[3] Lucas, *Research Methods for Architecture*, 7.
[4] Brian Shaw, Ismail Rahil, *Southeast Asian Culture and Heritage in a Globalizing World*, Preface, accessed December 1, 2018.

the tool to promote the commodification of culture, completely disregarding the values/benefits it has to offer.[5]

2. RESEARCH-METHODOLOGICAL DISCUSSION

2.1 *"The Etic and the Emic"*

The complexity of the context demands to clarify the perspective from which research is executed. The studio's interest lies on the exploration of shared Heritage between Indonesia and the Netherlands, subsequently, the fact that I come from a different country and cultural background poses challenges but simultaneously creates opportunities in terms of *"the etic and the emic".* I can only act as an observer and reflect critically on the events of the Dutch Colonial period in Bandung and its consequences in the urban development, if I advocate for the people. Nevertheless, the starting point of Heritage design is the cultural heritage values, demanding to be addressed with sensitivity and respect but most importantly from the Indonesian perspective, implying the need to incorporate the "emic" account too.[6] Evidently, my methodology is structured in three phases; before, during and after the field trip to Bandung.

2.2 Selected Research Methods

The constant variable in all phases is context. According to Lucas, context-led methods allow context to become the driving force in the execution of research, underlying the importance of the physical, social and historical aspects.[7] With context being the city, comparative analysis with other colonial cities can draw conclusions on a larger scale. With context being the railway backbone, the unique element of different urban areas showcases diverse qualities and problems. A cross-disciplinary research method, combining qualitative and quantitative data, from literature, films, local newspapers, as well as social studies and environmental analyses, is used to understand what the city was, is and will be.[8]

During the second phase the "etic" account is substituted by the inter-subjective endeavouring to learn the values of the Indonesian people, their interpretation of the built environment and to comprehend how such behaviours are routed into the historical context.[9] Two methods are used; *praxeology*, the study of human action and behaviour[10] and building archaeological research. Praxeology as an episteme offers knowledge regarding everyday life's "messiness". Social inclusion is achieved only by observing people's movement and relationships and incorporating these discoveries into the design. Sketches, photo-reportage and voice and video recordings are key instruments to materialise this research.[11] Quoting Walter Benjamin *"cultural practice apart from knowledge is necessary".* The only way to understand the Indonesian culture, is by embracing it.[12] According to the book *"Research Methods for Architecture"* complementary interviews from various social groups, to remain unbiased, are needed to support this information. Interviewing professionals, urban planners, conservation experts and academics as well as ordinary people, were the means to understand the socio-political setting of the city. Only with the employment of such methods can a programmatic strategy, that addresses people's needs, be established.

Building archaeological research is conducted with the book *"Designing from Heritage: Strategies for Conservation and Conversion"* as my guideline. This research methodology will allow me to figure

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[5] Heidi Dahles, *Tourism, Heritage and National Culture in Java*, 1 edition (London: Routledge, 2015), 6–14.
[6] Lucas, *Research Methods for Architecture*, 10.
[7] Lucas, 11.
[8] Lucas, 73.
[9] Linda N. Groat, *Architectural Research Methods, 2nd Edition*, 2nd edition (Amsterdam; Boston: Wiley, 2013), 78.
[10] Marieke Berkers, "Praxeology" (Lecture Series on Research Methods, September 20, 2018).
[11] Lucas, *Research Methods for Architecture*, 69.
[12] Berkers, "Praxeology."

out and illustrate the historical transformation of my chosen site as well as the building's usage throughout the evolution of the city. Working as a detective the architect must follow *"the traces back in time"* to come up with an understanding of all building phases and construction periods.[13] *"Analytical mapping"* entails archival material, original drawings, historic photographs, illustrative timelines, etc, compiled in a report.[14] The chapter *"Primer Observation"* provides useful guidelines with respect to the information needed to be obtained, while the *"Guidelines for Building- Archaeological Research"* derived from building archaeology, offer architects insight into documenting and referencing. Yet, for both tangible and intangible values to be taken into consideration a cultural value mapping and assessment is required. The architect's challenge is then, the translation of immaterial aspects into spatial terms.

3.   RESEARCH-METHODOLOGICAL DISCUSSION

3.1   The ethic or the aesthetic

The concept of *"built heritage"*, as society's cultural resources, has generated a tempestuous debate for the past two centuries rooted in the fact that both matter and meaning make heritage sites worthy of preservation for future generations.[15] The debate is structured along two fundamental principles, the ethics and the aesthetics, that developed during the 19th century in the opposing views of the English art critic John Ruskin and the French architect Eugene Viollet-le-Duc. Ruskin distinguished the age value, visible in the authentic materials' craftwork and decay as the main quality of built heritage. His approach was a conservative repair of the existing with new interventions honestly articulated. His ethical approach towards conservation has been the subject of various guides and charters on conservation such as Athens (1931) and Venice (1964).[16] On the contrary, Viollet-le-Duc aimed at the creation of an aesthetic harmony between old and new, based on scientific research and documentation. His approach of *"filling the blanks"* to create a complete picture, intended the beautification of heritage buildings.[17]

Understanding these intricacies and ambiguities within the assessment of built heritage, Alois Riegl articulated a dialectic system of indispensable heritage values. In his essay, *"Modern Cult of Monuments"* (1903), he stated that not only scientific values related to the existing structures but also intangible values such as society's emotional attachment to built heritage, needed to be incorporated. Reigl understood society's appreciation of heritage as a universal psychological human need to position ourselves in time and place against an ever-changing environment.[18]

3.2   Striving for Balance

The 21st century demanded a new approach towards heritage research. In some countries, specialists from building archaeology and architectural history are employed to valuate heritage sites/buildings and their evolution in the urban context. The Heritage and Architecture department of TUDelft acknowledged the need for architects/students to develop similar skills and developed a four-steps methodology, that I employed for my graduation thesis.[19] In order to identify the heritage values of the site, research begins with "chrono-mapping" executed in the form of annotated coloured architectural drawings where the the construction periods of each building element are visible.[20]

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[13] Paul Meurs, *Heritage-Based Design*, 01 edition (TU Delft, 2015), 51.
[14] Marieke Kuipers and Wessel de Jonge, *Designing from Heritage: Strategies for Conservation and Conversion*, 01 edition (TU Delft, 2017), 72–84.
[15] Kuipers and Jonge, 66.
[16] Kuipers and Jonge, 66–67.
[17] Kuipers and Jonge, 67.
[18] Kuipers and Jonge, 68–69.
[19] Kuipers and Jonge, 72.
[20] Kuipers and Jonge, 73–84.

The following steps: value-mapping and assessment, require the identification and classification of the tangible and intangible aspects of the site in terms of construction, architectural style and its socio-cultural history, in a matrix.[21] The vertical axis of the matrix is based on Stewart Brand's six layers of understanding the built environment while the horizontal axis constitutes a reinterpretation of Riegl's dialectic model.[22] Today, the notion of authenticity is equally important to the capacity of built heritage to meet the needs of our lifestyle. Value-mapping should be conducted objectively, while the information should be derived from reliable sources, independently of any intervention ambitions from the architect's side. The value assessment is conducted in a traffic-light colouring system which reflects the position of the architect and allows her/him to communicate his interpretation with others.[23] The process concludes with identifying opportunities and dilemmas associated with the proposed change along with obligations towards the existing fabric. This method is undoubtedly useful in terms of understanding heritage values and making design decisions.

3.3   The "commons" perspective

However, adaptive reuse cannot succeed unless the new use addresses people's needs, especially in the multi-layered megacities of global South. Thus, the afore-mentioned, value-based research can be combined with the episteme of Praxeology.

During the 21st century the role of the public in the architectural practice and the architect's attitude towards people was reinstated. Second world war and the oppressive approach towards architectural design that preceded it, demanded the redefinition of the relationship between architecture and people and presented the architect as a syndicalist, populist, activist or facilitator who aimed at social and spatial justice.

The social perspective in the architectural discourse was first explored by GAMMA group [24] during the 1950s. Their project *"Bidonville",* portraited informal settlements in Casablanca as the result of Colonialism's uneven urban development. *"Bidonville"* was presented as both the physical manifestation of daily struggles in terms of spatial needs and the heart of the worker's culture, underlining their adaptability in all aspects of human life; from sheltering to production.[25]

In 1969, in his essay *"Architecture's Public"*, the Italian architect Giancarlo de Carlo argued that architects have been consumed by the contemporary material, power-oriented culture, transforming architectural practice into an aesthetic medium, completely disconnected from the ordinary man. De Carlo recognized that only by reforming the architectural practice towards a societal use and including ordinary people in the design and building process, could architects act as facilitators in addressing real-life issues.[26]

Furthermore, in *"The squatter Settlement: An architecture that works"* Turner suggested that people in *"barriadas"* experience greater freedom in shaping their built environment than people in western city centres, reflecting critically on the role of the architect. He showed how the power of such communities lies on their understanding of adaptability of space to serve the constantly changing needs and behavioural patterns of the community. According to Turner, the global North has more to learn from such urban phenomena than the global South from western architects.[27]

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[21] Kuipers and Jonge, 85.
[22] Kuipers and Jonge, 86.
[23] Kuipers and Jonge, 94.
[24] Groupe d' Architectes Modernes Marocains
[25] Tom Avermaete, "'The Architect and the Public: Empowering the People in Postwar Architecture Culture', in Hunch. The Berlage
 Report on Architecture, Urbanism and Landscape, No.14, 2010, Pp. 83-95.," 2–5, accessed December 1, 2018.
[26] Avermaete, 12.
[27] John F C Turner, "The Squatter Settlement: An Architecture That Works," *Architectural Design*, 1968, 3.

4.   POSITIONING

Undoubtedly, Marieke Berkers' Lecture on Praxeology, Investigating Social and Spatial Practices, was for me the most valuable source of information. Not only did the content of her lecture and additional reading material, allowed me to better understand the context of my thesis project but also to reflect on my position as a future architect.

As a student of Heritage and Architecture, and particularly of Bandung Shared Heritage Lab, I ponder on what the word *"shared"* meant in a larger scale. Regarding the research process defining your perspective, the etic or the emic, is necessary, however, in terms of the notion of Shared Heritage I strongly believe that heritage should not be confined within a country's borders or should be only exchanged between the Dutch and Indonesian people. Adaptive reuse of built heritage, in my perspective, has the power to cross borders.[28]

In Bandung, where the population is expected to reach four million by 2030, informal settlements spread faster than formal planning or while formal planning fails to address pressing issues such as social inequality, segregation or lack of basic infrastructure but adopts a consumerism-oriented policy, architects *must* react and study the cultural, socio-economic context of past, present and future and strive for change. Adaptive reuse of built heritage, working together with urban planning, can create an integrated system of sustaining both the city's cultural continuity and its physical structures, but only if it is directed towards the people rather than financial revenues from heritage-tourism. As Tom Avermaete suggests, architecture needs to be "a matter of the public"[29] and adaptive reuse for the people aims at an inclusive heritage and the redefinition of social and spatial democracy.[30]

The building archaeological research and cultural value analysis is the only way to understand the material and immaterial qualities of a historical context that does not belong solely to the past, but also to the future. The connection between a heritage building and the broader urban context from which it developed offers transformation opportunities for the site and its social environment.[31] The objectivity and the plethora of different sources of information that architects use during this process can not do anything apart from improving our knowledge and understanding of the diverse cultures in the world, breaking racial or national boundaries and strengthen our architectural ontology. Heritage Architecture is not addressed to people interested in history or the past, it is about the future and our capacity and ability to change to something new without losing existing qualities.

The architectural discourse of the 21st century, often addresses issues like durability, sustainability and urban resilience but as Nicholas Clarke and Marieke Kuipers questioned in the book *"Re-centering Tshwane: urban heritage strategies for a resilient Capital"*, *"what aspects of the city should be resilient and at the expense of whom*?" *"can the built heritage in Bandung, play a role in developing the general resilience of the city to become inclusive and livable, given the current socio-political context?"[32]* My answer to this question is yes, if the building archaeological method that was analyzed previously is combined with Praxeology. As M. Berkers states *"by studying the praxis of architecture one can develop an eye for the actual users of building, and not the imagined ones".* Urban resilience is not static, it is affected by the inter-relationship between urban fabric and people's relationships which are constantly adapting and changing especially in the informal environment of Bandung or the "barriadas" or "bidonville". By exploring the human aspect of architecture apart from the heritage values of the site, programmatic connections and a transformation framework can be established so as for resilience to emerge and people to enjoy their "right to the city".[33] From a sustainability perspective the combination of cultural value assessment and praxeology into an integrated approach ensures not only the extension of the life-cycle of material resources that ensures cultural continuity and less waste but also sustainable business opportunities and improved living/working environments.

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[28] Nicholas J. Clarke and M. C. Kuipers, *Re-Centring Tshwane: Urban Heritage Strategies for a Resilient Capital* (Visual Books, 2015), 17,
[29] Avermaete, "'The Architect and the Public," 1.
[30] Clarke and Kuipers, *Re-Centring Tshwane*, 50.
[31] Clarke and Kuipers, 98.
[32] Clarke and Kuipers, 85–86.
[33] Clarke and Kuipers, 85–86.

Personally, this approach helped me to really understand the context with which I must work. In order to maintain objectivity, both methods were used as part of a group research that will now develop into an individual project. In my perspective, the fruitful combination of building archaeological research and praxeology underlines the relevance of Lefebvre's Right to the City as well as the need for socio-political and spatial democracy, in the globalizing setting of the 21st century world. Whether it is the perspective of a syndicalist, populist, activist or facilitator, it is the way I want to work as an architect. It is time for social change.

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