17th IPHS Conference • Delft 2016

HISTORY **URBANISM** RESILIENCE VOLUME 02

The Urban Fabric

International Planning History Society Proceedings



17th IPHS Conference, Delft 2016 | HISTORY - URBANISM - RESILIENCE VOLUME 02. The Urban Fabric

The International Planning History Society (IPHS) is dedicated to the enhancement of interdisciplinary studies in urban and regional planning history worldwide.

The 17th 1PHS Conference was held in Delft, The Netherlands, from July 17 to 21, 2016.

The conference theme 'History - Urbanism - Resilience' inspired contributions investigating a broad range of topics in planning history: modernisation, cross-cultural exchange, and colonisation; urban morphology, comprehensive planning, and adaptive design; the modern history of urban, regional and environmental planning more generally; destruction, rebuilding, demographics, and policymaking as related to danger; and the challenges facing cities around the word in the modern era.

Convenor

Carola Hein, Chair, History of Architecture and Urban Planning, TU Delft

This series consists of seven volumes and one Book of Abstracts. The seven volumes follow the organisation of the conference in seven themes, each theme consisting of two tracks and each track consisting of eight panels of four or five presentations. Each presentation comprises an abstract and a peer-reviewed full paper, traceable online with a DOI number.

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PREFACE

Conferences are unique moments of academic exchange; international gatherings allow people from around the world to interact with a scholarly audience and to learn about diverse theories, academic approaches, and findings. Proceedings capture these emerging ideas, investigations, and new case studies. Both the conference of the International Planning History Society (IPHS) and its proceedings place presentations from different continents and on varied topics side by side, providing insight into state-of-the art research in the field of planning history and offering a glimpse of new approaches, themes, papers and books to come.

As a collection of hundreds of contributions, proceedings are a unique form of publication, different from both peer-reviewed journals or monographs. They are also an important stepping stone for the authors; along with the conversations held at a conference, they are opportunities for refining arguments, rounding out research, or building research groups and the presentations they are often stepping stones towards peer-reviewed articles or monographs. Having a written track record of the presentations and emerging research provides allows conference participants to identify and connect with scholars with similar interests, to build new networks.

Many conferences in the history of architecture, urbanism, and urban planning don't leave an immediate trace other than the list of speakers and the titles of their talks; the International Planning History Society (IPHS) has long been different. The first meeting in 1977 has only left us a 4-page list of attendees, but many of the other conferences have resulted in extensive proceedings. Some of them, such as the conferences in Thessaloniki and Sydney have resulted in printed proceedings, while others are collected online (Barcelona, Chicago, Istanbul, Sao Paolo, or St. Augustine). These proceedings form an exceptional track record of planning history and of the emergence of topics and themes in the field, and they guarantee that the scholarship will be available for the long term.

The conference call for the 17th IPHS conference in Delft on the topic of History – Urbanism – Resilience received broad interest; 57l scholars submitted abstracts. Of those proposals, we accepted 439, many after revisions. 210 authors went through double-blind peer review of the full paper, of which 135 were ultimately accepted. The proceedings now contain either long abstracts or fully peer-reviewed contributions. We are currently establishing an IPHS proceedings series, digitizing earlier paper versions, and bringing electronic ones into one location. We hope that the IPHS Delft proceedings and the whole series will be both an instrument of scholarly output and a source for research and that they will contribute to further establish research on planning history throughout the world.

Carola Hein, Convener

Caoli &

Professor and Head, Chair History of Architecture and Urban Planning, TU Delft

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CIAM 8 - THE HEART OF THE CITY AS THE SYMBOLICAL RESILIENCE OF THE CITY

Leonardo Zuccaro Marchi

TU Delft

The "Heart of the City", title of the 8th CIAM held in 1951, is a contradictory and pervasive figure of speech which has marked a thinking and urban transition after the Second World War. In 1951, two opposite urban conditions are considered by Sert, President of CIAM, as main issues which the discourse on the Heart should face: the disappearance of city centres because of the destruction of war and the negation of urban centrality due to urban sprawl and the constant enlargement of city boundaries ad infinitum. However, the Heart itself also represents two different figures of speech, the symbol and the metaphor. On the one side it becomes a humanist symbol 'which springs directly to the senses without explanation', as stressed by Giedion during CIAM 8; on the other, the Heart retains its anatomical and metaphorical organic meaning though translated into the presumed correct physical form and dimension of the city. Analyzing the CIAM 8, the paper investigates these Post-war urban tensions, which lie at the crossroads of intellectual-theoretical and architectural-design worlds. The aim of the paper is to analyze and re-interpret these complex theoretical layers of significance of the Heart between reconstruction and recentralization within the Modern Movement in the 1950s.

Heart of the City, CIAM 8, reconstruction, recentralization, symbol, metaphor

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INTRODUCTION

The years after the Second World War coincided within CIAM (Congrès Internationaux d'Architecture Moderne) — 'the official Establishment of architecture in our time'ⁿ as it was defined by Banham — with a passage from orthodox functionalism to open humanism, from the abstract machine-age interpretations to other 'regional variation, history, and politics as well as socio-economic and anthropological interpretations.'² (Grahame Shane) This critical passage was already evident in 1951 during the CIAM 8, held in Hoddesdon, twenty miles from London, from July 7th to 14th, 1951. The Heart traced the shift from the analytical, 'universalist and exclusive approach'³ (Pedret) of both theoretical and urban compartmentalization of the orthodox pre-war CIAM to a comprehensive synthetic idea of anthropological habitat.⁴ Indeed the Heart became part of the new humanism and existentialism, as already highlighted by de Solà- Morales⁵ and Curtis⁶. It even 'represented the collapse of Modern Architecture'⁷ according to Grahame Shane, becoming a counterforce of the zoning method of planning, of the division into four functions (dwelling, work, recreation and transport) of the Charter of Athens, to the rational development methods of 'The Functional City' of the 1930s.

However, even though this passage at CIAM8 was clear, the problematic issue of finding a correct definition or even a single theoretical frame of the heart theme seemed to haunt CIAM 8. Indeed many of the architects present in Hoddesdon showed and expressed several significant personal - and sometimes contrasting - features of the discussed theme, as Welter already underlined*: 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), and so on.

More particularly the complexity and the difficulty of interpreting the Heart of the City, and its "imponderable nature" (CIAM 8) were mostly caused by its Janus-faced semantic load: the metaphorical and the symbolic. This lack of clarity regarding the organic metaphor/symbol, and its overlapping presence was already expressed by Gropius in December 1949, when answering the MARS proposal he admitted to come across 'a great confusion and misunderstanding of what the organic elements or heart organs should be.\(^{10}\)

As an organic metaphor, the urban structure mirrors the presumed physical properties of the organ: the urban heart is compared with an organ of limited size and growth, with a precise position and relationship with other organs, and whose function is to pump blood. The heart became a functionalist metaphor of restoration of connections and cohesion between urban limbs. As a symbol the heart involved a more 'Abstract Idea'' as described by the Dutch Opbouw Group in Hoddesdon, referring to an 'element of urban culture' (Avermaete), with a social and humanist aim. It is focused on the relationship between the physical space and society, always implying an emotional investment as stressed by Giedion. The symbolic element of the Heart was a clear reference also to the previous theories of the biologist Patrick Geddes (Bosman¹³- Welter¹⁴). His 'ardent disciple' Jaqueline Tyrwhitt had certainly a pivotal role in outlining the Geddesian 'true town plan' based on 'the supreme organs of the city 's life' which enhanced the shift of CIAM 8 towards 'a new humanism and post-modern globalism.¹⁷ according to Shoshkes.

Finally, in front of this ambivalence between the functionalist metaphor and the humanist symbol, a general frame of interpretation of the Heart theme is still lacking and there is still a narrow use of the 'Heart of City' theme in some contemporary urban theories and projects. Hence this paper aims to shed light on the productive theoretical ambiguity which occurred in Hoddesdon, focusing particular attention on the balance, dichotomy, semantic interpretations and influences of the issues of reconstruction and recentralization which characterized CIAM 8 and where the ambivalent symbolic or metaphoric essence of the Heart is better highlighted. As clearly exposed in the words of CIAM's president Sert, the debate about the Heart of the City faced the resilience of the decontextualized social-spatial tabula rasa created by the dangerous mechanical progress which led to the horror of the War. But it also dealt with the resilience of embracing, stemming, and compressing the Galileo scandal, 'the constitution of an infinite, and infinitely open space' as later described by Foucault in the 1960s, which was, for the first time, mirrored in the urban sprawl.

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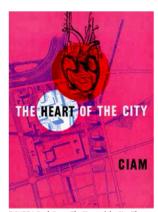


FIGURE 1 Book Cover, The Heart of the City. The subtitle of CIAM 8 – 'Towards the humanisation of urban life'- was aimed at revealing this urgency in relation to the Heart's symbolical interpretation.



FIGURE 2 Hiroshima after the atomic destruction of the War.

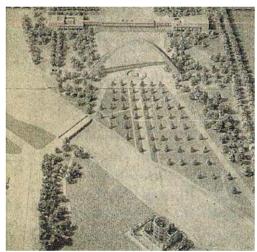


FIGURE 3 Kenzo Tange, Hiroshima Peace memorial park, 1951



FIGURE 4 Kenzo Tange, Hiroshima Peace memorial masterplan, 1951. The proposal aims to resume the synergy between symbol, monument and heart.

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RECONSTRUCTION AND SYMBOLICAL PRESENCE OF THE HEART

Many projects concerning the reconstruction of bombed urban centres were presented at CIAM 8; for instance the heart projects for Coventry, Basle, Providence, Lausanne and so on.

However the topic of reconstruction was treated using different perspectives and nuances.

For instance at CIAM 8 W.J. Holford highlighted the commercial aspect of the inner cores, focusing attention on the reconstruction of the commercial inner land area of London19. With similar attention focused on the commercial side, J. Alaurant- sociologist at the French Ministry of Reconstruction²⁰ - presented a comparison between the inner Cores of New York, Paris, Venice and London admitting astonishment on discovering that in the 18th century these cities had inner commercial centres that were proportionately roughly the same size.

Political supremacy as cause of the destruction of the Core was instead raised by Peressutti, Indeed the Italian Architect lamented the destruction the little Core in Rome which occurred with the disembowelment of part of the old borgo in favour of a scenographic link between the San Pietro Church and the Tiber river21 which was an expression of a political Conciliation between Fascism and the Vatican. 'Piacentini (Mussolini's favourite architect), with an incredible lack of artistic sensitivity, destroyed the approach to Bernini's colonnades' - Giedion reiterated Peressutti's concern, highlighting also an analogy between the Baroque and Fascist urbanism when dealing with the problem of opening this area.22

Le Corbusier`s project for the reconstruction of St. Die` was instead exalted for its sculptural aspects. In particular Giedion later praised it as a brand new urban model of 'sculptural interrelations' of buildings sustained by a basement, as in Piazza Duomo in Pisa.23 St. Die` project was considered by the Swiss historian as the first modern example where monumentality and symbolism gained a modern connotation, which was an expression of the spirit of the time. The same sculptural interrelation praised by Giedion, however, was vehemently criticized in the 1970s by Rowe and Koetter in 'Collage City'24 where San Die' is condemned for the prevalence of the 'object' instead of the 'space' which 'has shrunk to an apologetic ghost' the quality of public space.

Nevertheless, among all reconstruction projects, the most intense and emblematic one, which better resumed the synergy between symbol, monument and heart in relation to the destruction of the War, was Kenzo Tange's Hiroshima Peace memorial park.

Tange's project was a tragic and dramatic attempt to rethink the 'fundamental attitudes towards existence' within the nihilism left by the War: 'How many bodies had been burnt to a cinder by the intense heat?' -Tange asked 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,' 25

Hiroshima, one of the two cities devastated by the atomic bomb, was one of the major symbols of the horrible destruction of the War. Tange presented a fifteen-year program of reconstruction which mirrored 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.'26

The master-plan thus provided a Peace Hall, a Peace Park, a Peace Boulevard and international hotels and dormitories, which were arranged with an axial composition centred on the memorial cenotaph, in order 'to create a unique ethos that would inspire the city's reconstruction.'27 The entire city, rather than a single monument, became a symbol of peace: the new plan for Hiroshima was indeed called the 'Peace City.'28 This project became a relevant case study. Indeed it raised the issue of symbolism at CIAM 8, as already highlighted by Zhongjie Lin.29 The heart remained an abstract symbolical expression of Peace which had to be translated into

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socio-spatial form by the architect. The topic of reconstruction was not merely a physical, urban structural issue. It concerned an abstract symbolical value, always implying "the physiological and biological values of sentiment," as depicted by Rogers at CIAM 8. It answered to necessity of "signs and symbols which spring directly to the senses without explanation" as praised by Giedion in Hoddesdon quoting the French philosopher Jean Paul Sartre and referring to the psychologists' experience of the school of Würzburg. Tange himself later stressed the symbol as 'an important subject in architecture or in the arts'; in front of this presence the architect had to think 'what is the symbol of the day, where the symbol reveals itself, and how the symbol is created.'30

Similarly to Tange, also Siegfried Giedion, underlined the pivotal role of the abstract, humanist interpretation of the Heart during CIAM 8. Giedion highlighted the Heart as a new social symbol of an appropriate relationship between the private and public realm, between collective and individual activities, between 'You and Me,'31 For the Swiss historian the heart was symbol of a collective social idea; it was major example of the rising 'emotional life 32 of 'the human being as such - the bare naked man', in contrast to the 'tyranny of mechanical tools' which led to 'the blood and horror' of the Second World War. Similarly also Jagueline Tyrwhitt later reconsidered the most important aspect of the Core as 'no-thing', its 'emptiness-a space that can be filled with human emotions.'34 Even more radically abstract, the Dutch member Bakema depicted the 'moment of the Core' as a pure system of 'relationship between man and things'35 at CIAM 8. The Heart was conceived as representative or symbol of a collective social 'abstract idea [...] fluctuating from one place to another'36 (Group Opbouw). Neither new urban centres nor reconstruction proposals were first exposed by Bakema. The Cemetery of Asplund became instead the first provocative example proposed by the Dutch Architect in order to express the abstract entity of the symbolic heart, highlighting the importance of the relationship between life and death, social and physical structure, interior and exterior, urban and landscape.

Finally, the necessary reconstruction of the symbolical Heart as 'total relationship', filled with human emotions echoed and introduced to CIAM Buber's dialogic philosophy about 'Ich und Du' (1923, 'I and Thou')

His philosophy based on dialogue, the in-between, 'Zwischen' - was brought to the fore by the young architects Gutmann and Manz in Sigtuna one year later in 1952. Here the topic of habitat reiterated CIAM 8's approach to the social-spatial quality of the built environment and to an 'epistemological shift towards the ordinary everyday life' ³⁷ (Avermaete), even becoming a manifesto of 'the prehistory of TEAM 10'38 (Mumford). The symbolic presence of the Heart influenced later Habitat's multidisciplinary approach within Team 10, its anthropological definition and its critiques to the factionalist analytical urban division.

RECENTRALIZATION AND METAPHORIC REPRESENTATION OF THE HEART

At CIAM 8 president Josep Lluís Sert introduced the issue of the dangerous negation of the urban centrality because of urban sprawl and the constant enlargement of city boundaries.

This negation of centrality was approached by Sert as another form of destruction, but a kind which concerned '[...] a real menace to all our cities and to the stability of civic values'39, rather than the bombed centre.

This need to recentralize the city had already been stressed in previous congresses. For instance, Le Corbusier`s Ville Radieuse was already 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'40. From Sert's point of view, 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 remained of paramount importance.

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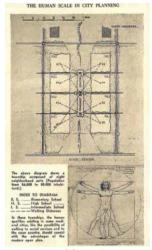


FIGURE 5 Sert LL. 'The human scale in City Planning, 1944. The main aim of the diagram and of the organic metaphor, was the rescue of the 'civic values' inside a urban structure which, for the first time in history, was going to be profoundly deformed.

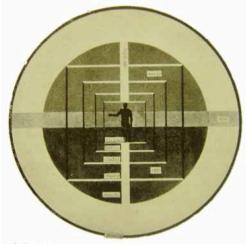


FIGURE 6 PL., Wiener 'Diagram of the human environment' 1953. The diagram shows the biocentric relationships between Man and the environment

For instance, as early as 1944, in his essay entitled 'The Human Scale in City Planning'41, he compared one of his plans to the Vitruvian Man by Leonardo da Vinci, in order to highlight the human dimension of the city itself. In his diagram Sert emphasized the humanization of the city through the strict connections between eight neighbourhood units or organs, using the organic metaphor as counterforce of the decentralized patterns. The proximity and the limited size and the defined relations and functions of the organs aimed to recreate the human qualities existing in some medieval cities, which were menaced, in the political economic conditions of the postwar world. Similarly, in 1953 his collaborator Paul Lester Wiener published, in Nuestra Architectura, the 'Diagram of the Human Environment'42 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 cosmos⁴³.

For both architects, recentralization became the predestined cure for the city's survival. In other words the city should be 'like the comic definition of a cannon'44 - Sert quoted the philosopher Ortega y Gasset at CIAM 8 -with a well-defined and impenetrable boundary between an internal civic space and an external 'geo-botanic cosmos'. In 1954, the Italian Philosopher Enzo Paci vehemently criticized Sert's metaphor. In his article 'Il Cuore della Città' (The Heart of the City) the Italian philosopher foresaw Sert's conservative, anachronistic metaphor of the cannon as the cause the isolation of the city itself, 'even if perfect, as the stellar city of the Filarete.'45 With regard to decentralization and recentralization, Paci conversely reckoned that the city should be considered 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'.46 This had many resonances with Bakema's ideas and later TEAM 10's assumptions about Habitat. Indeed similar critiques would be developed within Team 10's debate. In the latter, the Vitruvian Man inscribed in the limited and absolute boundaries of the circle, similar to the cannon's, was 'no longer in the middle (au milieu)'47 (Canguilhem); in his place the complexity, contradictions and relationships of the entire open social-urban structure became the most intensive point of the scale of association of Geddes' Valley section, as reinterpreted by the youngsters of Team 10.

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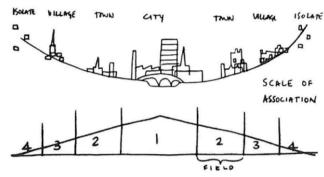


FIGURE 7 Team 10: Scale of Association (first in 1953); Reinterpretation of Geddes Valley Section by adding a comparative and synchronic 'Scale of Association. It is no longer the harveentric Vitrivian Man at the centre of the world, but the relations inside the community the social complex structure which should be physically interpreted by the architect.

Finally, a few years after the meeting at Hoddesdon, Sert reiterated his ideas relying on the younger generations as his main urban-minded supporters: 'The younger generation in this country [...] has become aware that the uncontrolled sprawl of our communities only aggravates their problems, and that the solution lies in the reshaping the city as a whole. The necessary process is not one of decentralization, but one of re-centralization.[...] We must be urban minded.'48 This was 9th April 1956 and Sert was talking at the First Urban Design Conference held at Harvard University in USA, where he was appointed as Dean in 1953.

While Team 10 dismissed the old avant-garde of CIAM, overseas the continuity of CIAM's discussion about the heart as a conservative metaphor of a necessary container or cannon of civic centrality was resilient and it gave rise to the birth of the Urban Design Discipline within the American context. If the roots of CIAM 8 can be traced also in American neighbourhood theory and in a constant transatlantic exchange of ideas between the USA and Europe since the 1930s (Domhardt49), in the 1950s the Heart of the City certainly became 'the precursor of Urban Design'50 in the US, as Eric Mumford already stated, relying on the metaphoric heart, the recentralization, the densification, the organic connections of the urban structure as main concerns of departure.

CONCLUSIONS

CIAM 8 embodied a deep complexity of values and significance which can be hardly compressed within the mere issue of Post-war reconstruction, as erroneously generally thought⁵¹. The same issue of reconstruction enhanced different arguments about the commercial, political, sculptural and symbolical aspect of the heart.

Both Tange's project for Hiroshima as symbol of peace and Sert's plea for a metaphorical cannon, respectively faced two kinds of destruction: the former tackled the radical and the most tragic grubbing of all forms of life and human constructions; the latter concerned the abandonment of a traditional form of the city. They revealed the double entity of the Heart as a resilient reconstruction, namely its symbolical abstract presence and its metaphorical organic physical cohesion.

Moreover the Heart relied on a contradictory discourse which enhanced and stimulated urban design and thinking when faced with the radical urban transformation of the city which globally occurred during and after the War.

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From the tangible binomial reconstruction-recentralization of the urban Core and the symbolical abstract resilience of the Heart as a constituent element at the foundation of the urban structure, the heart introduced an anthropological idea of Habitat as an integrating part of the human settlement, later developed within TEAM 10. It also deeply influenced the Urban Design in the US. Hence the Heart became a resilient trans-national and transinstitutional idea 'as a reference point for the new forms of public space.'2 (Mumford)

However, if the Heart of the City is the 'question of the reform of the structure of the city through the creation of centres of social life'53 – as praised by Le Corbusier – the failures of CIAM (Frampton54) and of the First Urban Design Conference (Alexander55) were surprisingly caused by the incapacity of a 'significant invention of new structure in the realm of urban space'56. Therefore the idea of Heart with its countless interpretations remains a theoretical ground that is still fertile and open for further interpretation and investigation.

Disclosure Statement

No potential conflict of interest was reported by the author

Notes on contributor

Leonardo Zuccaro Marchi started his research in Architecture during his Diploma at A.S.P. (Alta Scuola Politecnica), obtaining a double degree at both Politecnico di Milano and Politecnico di Torino. Over the years he developed a strong liking for the urban theme concerning the "Heart of the City" - the theme of the CIAM 8 - from both the historical as well as the theoretical approach. In 2011 he was Tooliection Research Grant Recipient at CCA in Montreal. In 2018 he obtained a double PhD from both TU Delft and IUAV. In 2014-15 he was Postdo fellow at KTH.

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Figure 1: Book Cover, Ernesto Nathan Rogers, Josep Lluís Sert, Jaqueline Tyrwhitt, eds., The Heart of the City: Towards the humanization of Urban life. New York: Pellegrini and Cudahy, 1952), Courtesy of the Frances Loeb Library. Harvard University Graduate School of Design, CIAM Collection B6A Figure 2-3-4: Tange, Kenzo. "Hiroshima". in The Heart of the City: Towards the humanization of Urban life. Edited by Rogers E. N., Sert J.L., Tyrwhitt J. New York: Pellegrini and Cudahy, 1952, 137-138

Figure 5: Sert, Josep Lluís. "The Human Scale in City Planning". In New Architecture and City Planning. Edited by Zucker P. New York: Philosophical Library, New York, 1944, 405

Figure 6: P.L., Wiener, 'Diagram of the human environment', 1953. Nuestra Arquitectura, 1953 and in Mumford, Eric. Sarkis, Hashim. Josep Lluis Sert: the Architect of Urban Design, 1953-1969. New Haven and London: Yale University Press, 2008, 57

Figure 7: Smithson, A., The Emergence of Team 10 out of CIAM, London, 1982

Endnotes

- 1 Banham, The Architecture of the Well-tempered Environment, 143
- 2 Grahame Shane D., "The Street in the Twentieth Century. Three Conferences: London (1910), Athens (1933), Hoddesdon(1951)", 41
- 3 Pedret, 2002.
- 4 Later CIAM and TRAM X's discourse about Habitat reiterated Heart's multidisciplinary approach, its anthropological definition and its critiques to the factionalist analytical urban division. The discourse about Habitat fostered the complex topic of the human relationship with its social-spatial context, whose research already stared with the Heart of the City-CIAM 8 discourse.

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- 5 de Solà- Morales, Architecture and Existentialism, 49
- 6 '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.' Curtle, The Heart of the City, 52
- 7 See note 2 above
- 8 This variety of definitions has already been listed by Welter in order to highlight the continuity of CIAM 8 with Mumford's social core, Reclus' communal city center, Geddes' cultural Acropolis and Taut's city crown. Welter, "From locus gentif to heart of the city: embracing the spirit of the city" 50.
- 9 CIAM, The Heart of the City: Towards the humanization of Urban life, 165
- 10 Walter Gropius, December 22, 1949 Letter to Mr. Wells Coates, cc. Giedion and Sert. Eth/gta 42/SG/34/54
- 11 Opbouw group, CIAM 8 describing the core of Pendrecht, responsible rapporteur: W. Wissing, Bakema Archive, NAI, Rottedam, g. 18
- 12 '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, Another Modern, 71
- 13 Bosman, "My association with CIAM gave me new perspective"
- 14 Welter, "From locus genii to heart of the city: embracing the spirit of the city"
- 15 Bosman, "My association with CIAM gave me new perspective", 478
- 16 "the true town plan [...] develops onward to the supreme organs of the city's life- its acropolis and forum, its cloister and cathedral.' Geddes, Cities in Evolution, 71. Bosman, "My association with CIAM gave me new perspective", 483
- 17 Shoshkes, "Jaqueline Tyrwhitt and transnational discourse on modern planning and design, 1941-1951," 263
- 18 Foucault, "Of Other Spaces, Heterotopias"
- 19 Holford, "The Commercial Core of London", 97
- 20 Mumford, The CIAM Discourse on Urbanism, 1928-1960, 211
- 21 Peressutti, "Discussion on Italian Piazzas", 79
- 22 Giedion, "Discussion on Italian Piazzas", 79-80
- 23 Giedion, Architecture and the Phenomena of Transition, the three space conceptions in Architecture, 270
- 24 Rowe, Koetter, Collage City, 65
- 25 Riani, Kenzo Tange (20th Century Masters), 8
- 26 Ibid.,137
- 27 Lin, Kenzo Tange and the Metabolist movement. Urban Utopias of Modern Japan. Urban Utopias of Modern Japan, 178
- 28 Tange, "Hiroshima", 136
- 29 See note 26 above
- 30 Tange, Kenzo. "Function, Structure, Symbol"
- 31 Giedion, Architecture You and Me
- 32 Ibid., 37
- 33 Giedion, Historical Background to the Core, 17
- 34 Shoshkes, Jaqueline Tyrwhitt: A Transnational Life in Urban Planning and design. [T.40]
- 35 Bakema, "Relationship between Men and Things", 67
- $36 \quad Opbouw\ group, "CIAM\ 8\ describing\ the\ core\ of\ Pendrecht,\ responsible\ rapporteur:\ W.\ Wissing".\ Bakema\ Archive,\ NAI,\ Rotterdam,\ g.\ 18$
- 37 Avermaete, Another modern.
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- 38 Mumford, The CIAM Discourse on Urbanism, 1928-1960, 224
- 39 Sert, "Centres on Community Life", 4
- 40 Le Corbusier, Response to Moscow, translated and quoted in Cohen, Le Corbusier, 139. Quoted in Mumford, The CIAM Discourse on Urbanism, 1928-1960, 46.
- 41 Sert, "The Human Scale in City Planning".
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- 43 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
- 44 Josep Lluis Sert, "Centres on Community Life", 3
- 45 Enzo Paci, "Il cuore della città," vii
- 46 Ibid
- 47 Canguilhem, "Le vivant et son milieu"
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- 50 Mumford, Eric. "The origins and evolution of Urban Design in the Breakup of CIAM",10
- 51 Welter, "From locus genii to heart of the city: embracing the spirit of the city", 36
- 52 Mumford, The CIAM Discourse on Urbanism, 1928-1960, 215
- 53 Le Corbusier, Conversation at CIAM 8, 39
- Viganò, La città elementare, 87
- 54 "CIAM failed and with It Team 10, not because of their formalistic or conflicted ideological projections but rather because there was ultimately no ground left upon which to continue any kind of rational discourse." Frampton, "Foreword", xv
- 55 Alexander, The Heart of the City. The Necessary Binding Force That Creates The Core Of Every City, 3
- 56 Ibid.

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