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CIAM's Four-Function Dogma

On the Challenge of Mixing Something that Has Been Seperated

Today's architects, landscape architects, and urban planners understand CIAM — the association Congrès Internationaux d'Architecture Moderne mainly as a movement that demanded to separate the city functions of dwelling, working, recreation, and transportation while failing to foresee the implications of this separation that became apparent since the 1960s. The separation of these functions was preframed during the foundation of CIAM at the end of the 1920s and implemented in many cities after the Second World War. The critique that accompanied this process culminated in Jane Jacobs's *The* Death and Life of Great American Cities of 1961 and continued ever since. The following contribution tries to take a more differentiated look at the discussions of the four-function scheme within CIAM. It intends to show that CIAM, during its existence between 1928 and 1959, grappled with this scheme again and again, tried to develop it further in several attempts, and eventually broke up, being unable to overcome it. The main aim is to show how, in the twentieth century, the mindset of separative analysis took over urban planning, became misunderstood as a design method, and restrained the understanding of the city as complex social, technical, and aesthetic synthesis. 1

The final declaration of the founding congress in La Sarraz, Switzerland, in June 1928 played a prominent role throughout CIAM's history. This declaration included a definition of urban planning (*"Stadtbau"* in the German version of the declaration, *"urbanisme"* in the French), which was essentially the work of Hannes Meyer, Mart Stam, and Victor Bourgeois: ²

- (1.) Urban planning is the organization of all functions of collective living in the city and the countryside. Urban planning can never be determined by aesthetic considerations but only by functional conclusions.
- (2.) The first task of urban planning is ordering the functions: a) dwelling; b) working; c) recreation (sports, pleasure).

[...]

1 Parts of this article were published in Poerschke 2016.

2 See Hilpert 1984: 101.

3 CIAM 1928: 195f., reprintedin CIAM 1931: 207f. The translation in Conrads (1970), 109–113 is based on the French version of the declaration. Here the German version has been translated.

4 See van Es et al. 2014.

5 See Hilpert 1978: 217; Steinmann 1979:

6 In Steinmann 1979: 115 (German).

7 In ibid.: 160, 163.

(4.) The regulation of transportation must comprise the temporal and geographical sequence of all functions of community life. The growing intensity of these life functions [...] inevitably brings with it the growing dictatorship of transportation.³

In this declaration, transportation was not yet a function alongside the other central functions of dwelling, working, and recreation, but, as we will see, during the period that followed it was often discussed as a fourth function. At the two congresses that followed, in Frankfurt am Main in 1929 and in Brussels in 1930, which were primarily concerned with housing—Wohnen für das Existenzminimum (The minimum dwelling) and Rationelle Bebauungsweisen (Rational site development)—, discussions of functions and their separations within the city did not yet come to the fore. During what would become the most famous CIAM congress, held on the ship Patris II and in Athens in 1933 under the title *The Functional City*, these functions became central, later leaving their distinct mark on postwar discussions of urban planning.4 At this fourth congress, for which the titles The Constructive City and The Organic City had also been considered, 5 the Declaration of La Sarraz, and more precisely the above-cited "basic functions of the city: dwelling, working, recreation, with transportation as the linking element," were taken up again. After the congress, the document Feststellungen des 4. Kongresses (Findings of the fourth congress) was prepared, and its German version was published in the Swiss journal Weiterbauen in 1934. It was determined that a city area that was intended for one of the four functions should, on the one hand, be optimized for its own needs and, on the other hand, related to the other areas. Planning steps for the "functional city" and its areas were established:

Proper choice of the site and size of the particular areas for working, dwelling, recreation, and transportation; development and planning of these areas according to their own laws and needs; mutual interrelation of these areas, so that the daily change from working, dwelling, and recreation can occur also from the perspective of the greatest savings of time. [...] The form of the city has to be capable of development in its particular parts. At each stage of development, there has to be a balance between the functions of the particular parts.

It was precisely this theme of the analysis and optimization of the particular functions, on the one hand, and the linking of these functions, on the other, that would later become the biggest point of contention in the urban planning of postwar modernism. With reference to this fourth congress of *CIAM*, functionalism was reproached for recommending separating the functions and ignoring the discussion of synthesis. However, in the *Feststellungen*, the only official congress document, there was no explicit recommendation to separate functions; instead, *CIAM* emphasized the "analytical character" of these studies "as the necessary first step toward further work in the area

of the functional city."8 In addition, it asked for "interrelation" and "balance between the functions." Because the congress in Athens had shown that thus far there had been concern only for analyzing the parts, not for how they interact and can be synthesized into a whole, plans were made to dedicate the next congress once again to the "functional city." However, when this last congress before the war was held in Paris in 1937, under the title *Logis et loisirs*, it concentrated on "dwelling and recreation, two functions that cannot be separated." This focus omitted the question of the totality of the city. So, at the end of this first period in the history of CIAM, two deficits remained apparent. First, the four functions fell short, because functions such as education, administration, and public life were not taken adequately into account; second, although the individual partial functions were described, analyzed, and discussed, how they interacted and were synthesized in the city were not. Both points of criticism were taken up by CIAM after the war. First, however, in the early 1940s, Le Corbusier and CIAM's vice president, José Luis Sert, published two idiosyncratic books on the Athens congress that could not claim any authorization from the CIAM members: Sert's Can Our Cities Survive? of 1942 and Le Corbusier's La Charte d'Athènes of 1943. Both publications were widely and successfully disseminated and contributed to solidifying the view that CIAM called for a separation of functions. Le Corbusier's principles of urban planning, which were agreed upon only to a limited extent by other CIAM members, can be read, more so than the Feststellungen can, as a call to divide the city into zones:

8 In Steinmann 1979: 160. See also Domhardt 2012: 34–35 (German): "In particular, the fourth congress did not give instructions to the members of the organization to spatially fragment the city with respect to its functions. The critique of the congresses' supposed demand to strictly separate the functions in urban planning is a misinterpretation. [...] A general separation and spatial isolation of the functions was by no means intended."

77 The keys to urbanism are to be found in the four functions: inhabiting, working, recreation (in leisure time), and circulation.

78 Plans will determine the structure of each of the sectors allocated to the four key functions and they will also determine their respective locations within the whole.

79 The cycle of daily functions—inhabiting, working, recreation (recuperation)—will be regulated by urbanism with the strictest emphasis on time saving [...].

81 [...] Zoning reforms bringing the key functions of the city into harmony will create natural links between them, in support of which a rational network of major traffic arteries will be planned. [...]

84 Once the city is defined as a functional unit, it should grow harmoniously in each of its parts, having at hand the spaces and intercommunications within which the stages of its development may be inscribed with equilibrium. ⁹

9 Le Corbusier 1973: 95–99.

In addition to various French versions, partial translations in German and English were published in the second half of the 1940s. ¹⁰ Hence, the *Athens Charter* was better disseminated than the official summary document, the *Feststellungen* cited above. The publication of these principles met with favorable but also critical responses, as a comment from 1948 shows:

10 CIAM 1947: 21–26; Kampfmeyer 1948: 66–68; CIAM 1949: 10–17.

Urban planning becomes a gigantic task of calculation. Every function has its own area [...]. The task, framed in this way, can be resolved beautifully—except that it was forgotten to take several important factors into account with all their implications. We mention only a few, chosen almost at random: the existence of old established cities that are effective even in rubble; the principle of economic efficiency; the will to have children; the human drive to design. ¹¹

11 Kampfmeyer 1948: 67.

12 Sert 1942: 5 (emphasis original).

13 Ibid.: 12 (emphasis original).

14 Ibid.: 224.

15 Ibid.: 196. 212 (emphasis original).

As was the case with the Athens Charter, Sert's book Can Our Cities Survive? did not reflect the collective and authorized opinion of CIAM. The publication's single authorship was emphasized a number of times in the book and was also evident from the many American examples illustrated and discussed in the book, which reflected Sert's immigration to the USA in 1939. On the other hand, it is impossible to overlook the fact that the book was based on CIAM, since it was in large parts structured according to the four functions. In the beginning it translated the definition of urban planning established at La Sarraz: "TOWN PLANNING is the organization of the functions of the collective life of cities: DWELLING, RECREATION, WORK, TRANSPORTATION." 12 In the book Sert, repeatedly returned to the fact that "the four urban functions are considered as interdependent and indissoluble." 13 For him, the city consisted of organs that performed different urban functions: "These organs, like those of the human body, are dependent upon each other and are linked together by extensive traffic systems and other means of communication, which are like pulsing blood streams." 14 This analogy reveals very clearly his understanding of the separation of functions, on the one hand, and the way they are linked, on the other. In Sert's view, the existing city was "one of man's greatest failures," which had to be preserved but also radically transformed: "The surgical operation is a delicate one, but clean instruments are at hand." 15 Places to live, work, and recreate should not be located immediately next to one another or even mixed, but they should be connected more or less exclusively by roads. Today's most common interpretation of CIAM's four-function scheme as a radical separation of areas in the city is here quite evident.

During the Second World War, many CIAM members had immigrated to the United States, including Gropius and Sert. Within Europe, the United Kingdom and its group, MARS (Modern Architectural ReSearch), became the intellectual center of CIAM, and English became CIAM's official language. The general secretary of CIAM, Sigfried Giedion, made countless trips as a correspondent between the North American, British, and Swiss members. Whereas many European countries were concerned about rebuilding, providing living space, and the car-friendly city, other planning problems dominated everyday life in the United States; for example, urban sprawl in the countryside and the depopulation of inner cities. For most CIAM members, the spread of large cities into surrounding regions was a shared and relevant problem that could bring the different planning interests together and could both be linked to the prewar discussions and open up new themes.

The first congress after the war, *CIAM* 6, was held in Bridgwater, England, in 1947, organized by the *MARS* group but nevertheless dominated by Giedion, Gropius, and Sert. The summary document, *Reaffirmation of the Aims of CIAM*, testified to the attempt of the national delegations to establish a connection to past congresses and to regroup. The definition of urban planning from the Declaration of La Sarraz was revised in abbreviated form: "Planning is the organisation of the functional conditions of community life: it applies equally to town and country, and operates within the divisions: (a) dwelling; (b) places of work and (c) of recreation; (d) circulation, connecting these three." ¹⁶ Building on that, it was decided to redefine the goals of *CIAM*, in particular with an eye to "the creation of a physical environment that will satisfy man's emotional and material needs and stimulate his spiritual growth." ¹⁷ Giedion noted that the function of recreation was expanded at the congress to the "cultivation of mind and body," ¹⁸ since this better conformed to the redefined goals. Fundamentally, however, the four functions were retained.

Apart from identifying, preserving, and expanding the four functions, Giedion's publication on the sixth congress, A Decade of New Architecture, which was not published until 1951, struck a negative undertone in the description of functionalism for the first time. Aldo van Eyck remarked: "The more tangible functions—those implied by the word 'functionalism'—are only relevant in so far as they help to adjust man's environment more accurately to his elementary requirements. But this, after all, is no more than a necessary preliminary." 19 Van Eyck was presumably scarcely alone in understanding functionalism as covering basic needs with architectural means. A similarly skeptical remark is found in a later section of the book, this time made by Giedion, who said of "churches, assembly halls and theatres" that they "demand something more than a mere functional approach." 20 The quotes reflect the increasing doubts whether the hitherto defined functions were sufficient as they did not comprise the complexity of human needs. However, although the small number of functions and the overpragmatic approach toward them was criticized, we can see that there was no questioning of their separation or mixing. In other words, the discussion was trapped in its own scheme: The analysis of functions was criticized to be insufficiently comprehensive and specific, but the question of how these functions were linked had been forgotten. The focus was still on analysis, not synthesis.

At the seventh congress in Bergamo in 1949, dissonance and tension occurred between the French national group, which had organized the congress, on the one hand, and the British and North American delegations, on the other, because Le Corbusier, in particular, insisted on making housing the focus of *CIAM*'s work. The discussion of the four functions was continued, though its central importance was doubted by several members, especially those of the *MARS* group. Accordingly, at the next congress, *CIAM 8* in Hoddesdon, England, the *MARS* group, which organized it, tried to position itself. The congress was held in 1951 under the title *The Heart of the City: Towards the Humanisation of Urban Life* and was regarded as the most important

16 Giedion 1951: 16. "Reaffirmation of the Aims of CIAM" is published in ibid.: 16–17 (emphasis original).

17 Ibid.: 17.

18 Ibid.: 25.

19 Ibid.: 37.

20 Ibid.: 133.

postwar congress. As its title already suggests, the congress made the center of the city the focus of the discussion. The congress documentation, the only official CIAM publication after the Second World War, does not necessarily read like a rejection of earlier principles but rather like an attempt to continue to refine and improve them. Building on the achievements of the four functions and of housing aspects, the intention was now to expand them by adding social, political, and artistic expression, or, in other words, by including a function that had been forgotten, namely, the political and cultural center of the city. This discussion overlapped with an urge to change perspective, to move away from the "four functions" toward an emphasis of five "scalelevels": first, the village or urban group of houses; second, the rural market center or neighborhood; third, the small town or urban district; fourth, the city; and, fifth, the metropolis. 21 On each of these levels, a core (heart, nucleus) should be placed. Thus the core or community center became a subject with which all generations of CIAM members could identify. The older generation saw the core as an opportunity to connect the four functions and thus address the highly sought after synthesis, whereas the younger generation regarded the core as a new theme and, hence, as overcoming the four functions.

21 Tyrwhitt, Sert and Rogers 1952: 8, 104–105.

22 Ibid.: 28, 59.

23 Ibid.: 167, 6 (emphasis original).

24 Ibid.: 96.

25 Ibid.: 159.

26 Ibid.: 61.

27 Ibid.: 160.

Whereas the four functions had thus far been identified as stereotypical and always mentioned together, and hence were kept relatively general, the community center resulted in a substantially more differentiated discussion of functions. For example, the core was supposed to include "social," "psycho-social," and "spiritual" functions. 22 The community center's "function is to provide opportunities — in an impartial way — for spontaneous manifestations of social life." And: "The social function of the new community centres or Cores is primarily that of uniting the people and facilitating direct contacts and exchange of ideas that will stimulate free discussion."23 The creation of cores was an attempt to respond to the question of synthesis, of producing a holistic living environment. "The Core should provide for the interweaving function of work, trade, culture, education, recreation, government, and transport."24 Planning cores at each of the different "scale-levels" was an effort to create individual identities for neighborhoods, districts, or cities and, thereby, do more justice to the complexity of parts and wholes. The core was understood to be the fundamental solution to satisfy, in Giedion's words, this "longing for 'Ganzheit' — wholeness." 25 A core could store history and hence serve as the epitome of public spirit, declared George Scott Williamson, director of the Peckham Health Centre and a speaker at the congress. Similarly, James Maude Richards, the editor of Architectural Review, defined the core as "the repository of the group's collective memory." ²⁶ And the English CIAM group described it as "the element that makes a community a community and not merely an aggregate of individuals." 27 Also a later description of CIAM by Kenzo Tange makes this reorientation clear. In the journal The Japan Architect, Tange explained the four functions and then described the congresses in Bridgwater and Hoddesdon as follows:

It was found that something was lacking in the four functions of the Athens Charta, something that would bring the functions together into an organic whole, something which would make a community a community. This something was the core of the city. At the eighth conference, which was held in 1951 at Hoddesdon, a suburb of London, this core became the chief topic of discussion. [...] It was after this conference that the necessity for cultural and public architecture in the core became one of the great themes of contemporary architecture. ²⁸

28 Tange 1960: 8.

The debates on the cores show once again how entrapped *CIAM* was in its own tradition of thought: dissection continued. From today's perspective it is clear that the effort to create a whole by adding a new part that would create identity, the core, could only be partially successful. For, although the importance of having a coordinating, higher-level part (head or heart in the analogy of organisms) was recognized, *CIAM* still neither acknowledged the connection between the parts as equally important, nor discussed solutions for their interaction. They also clung to the separation of types of transportation. They did not really break free of the analytical view and approach. Sert called more vehemently than ever for the separation of functions:

If we want to give our cities some definite form we will have to classify and subdivide them by sectors, establishing centres or Cores for each of these sectors. [...] When a city is replanned it is divided into zones of different land uses—industrial, commercial, business, residential, etc. The resulting pattern should then be organic and different from the shapeless growth we have today. ²⁹

29 Tyrwhitt, Sert and Rogers 1952: 6, 11.

Even the center of the city could not escape this strategy of fragmentation. Giedion described the "tendency to separate out the recreation centre, the shopping centre, and the administration centre from one another." ³⁰ This clearly reveals the continued bias in the strategy. What had been initially considered as a method for city analysis was now regarded as a design method. Although *CIAM* had made a step forward, in that functions were thought of in a more complex way, the method of fragmentation was retained.

The final three congresses were marked by increasing unwillingness to settle differences of opinion. At *CIAM 9*, held in Aix-en-Provence in 1953, the younger generation now fundamentally questioned the topicality of the "functional city." A working paper by the *CIAM* member André Wogenscky stated that they would "not resume the study of [...] [the] four functions." ³¹ In lieu of basing the discussion on the four functions, Alison and Peter Smithson now proposed a "hierarchy of associations" consisting of the levels of house, street, district, and city. ³² In the months that followed, *Team 10* (or *Team X*) began to form, taking its name from its task of preparing *CIAM 10*. It consisted largely of members of the younger generation, such as Jacob Bakema, Georges Candilis, Giancarlo de Carlo, Aldo van Eyck, Alison and Peter Smithson, and

30 Ibid.: 162.

31 In Mumford 2000: 226.

32 In Landau 1992: 41.

Shadrach Woods. In 1955 *Team 10*'s proposal for the congress program was met by a renewed defense of the four functions by Sert, Gropius, Giedion, and Jaqueline Tyrwhitt. Referring to the *Athens Charter*, they stated:

Its four functions still comprise an excellent body of doctrine, especially useful when drawing up a general framework for a master plan. Everybody is aware that the generalizations of the Charte d'Athènes need to be amplified when one gets down to details, and the Charte now needs to be developed and completed to include the concept of human association, which was introduced in *CIAM* in our studies of the Core. ³³

33 In Mumford 2000: 244.

34 Ibid.: 252.

35 In Newman 1961: 197, 216.

Here, and subsequently, it became obvious that the older generation was not willing to give up its leadership and that which had made it famous. As *CIAM*'s Advisory Council, they tried to continue to determine its fate and failed completely to see that the younger generation no longer had any interest in the concept of the four functions. The generational confrontations continued at *CIAM 10* in Dubrovnik in 1956. Interesting for our context is the concept of "clusters" introduced by *Team 10* to describe "a distinct total structure of each community, and not one of sub-dividing a community into parts." ³⁴ The cluster thus served as a critique of the concept of "function" as focusing on the organization of parts and pointed to the concept of "structure" as targeting the whole.

The conflict between the representatives of the different opinions escalated. The final congress, which was titled *CIAM '59* and held in Otterlo, The Netherlands, was intended to initiate a new beginning but instead led to the breakup of *CIAM*. In 1961 Oscar Newman, commissioned by the main organizer of the congress, Jacob Bakema, published the documentation *CIAM '59* in Otterlo, which like most *CIAM* publications was accepted by only some of the members. On the whole, the documentation wanted to show how modernism, in its search for universal solutions, had unacceptably neglected the individual human being. It railed against the misguided path of the doctrine of the four functions and that of the "functional city." Van Eyck in particular went on the attack:

Everywhere in Holland you can see the "funktionelle Stadt" and it is absolutely uninhabitable. [...] You can go through Amsterdam and drive for hours through kilometres of funktionelle Stadt made up of the four keys of CIAM—but you cannot live there. That is our enemy. The enemy is this terrible, rational, one track mind. [...] Our enemy is the immediate CIAM past. [...] You all know how suspicious architects have been of the few exceptions that defy measurement in grams and millimetres, and fall through the coarse mesh of the four functions, and are therefore regarded as contraband [...]. Heavens, that we should have been fooled so long. 35

The Smithsons were also very aggressive, not only toward the old doctrines but also toward the work of their own generation of CIAM members. It is interesting for our context that they did not fundamentally reject the relevance of the relationship between forms and functions. Quite the contrary, this relationship was of particular concern to them. For example, Ernesto Rogers and Peter Smithson had an intense battle of words over the project for the *Torre Velasca* in Milan by the architects *BBPR* and about the importance of the history and tradition of architecture. Peter Smithson criticized the fact that its two primary uses, offices and apartments, were legible but that this legibility was "not functional" but had instead resulted from a formalist interest. Accordingly, his assessment of the Torre Velasca—"function is no more than the handmaid of form"—was meant critically. ³⁶

Another important building discussed at the congress in Otterlo was van Eyck's municipal orphanage in Amsterdam, considered to be the central project of structuralism. For van Eyck, functions had to be organized into a structure. The significance of individual spaces derived from their places within the structure: "It is their place, sequence, and subsequent treatment; their relation to each other and the whole which gives them the quality, their specific function claims within the framework of the total plan pattern and constructional idiom." ³⁷ The discussions of the Torre Velasca and the Amsterdam orphanage offer insight into the different conceptions of architecture that came together at this congress. They show how the schematic understanding of the four-function dogma in the urban scale was superseded by a renewed discussion of the relationship of form and function in the building scale.

Differences of opinion between the older generation with Giedion, Gropius, Le Corbusier, Sert, and Tyrwhitt, on the one hand, and a younger generation around the Smithsons, van Eyck, and Bakema, on the other hand, ultimately led to the breakup of CIAM. Many of these differences of opinion still revolved around the "four functions," though it was no longer relevant whether they served analysis or design. Alison and Peter Smithson's proposal "that we should construct a hierarchy of human associations which should replace the functional hierarchy of the Charte d'Athènes" did not lead to a new joint path. ³⁸ Whether this proposal would have led to a new understanding of the city that focused on synthesis must remain unanswered. After CIAM'59, Sert, Gropius, Le Corbusier, and Giedion felt obliged to publish an open letter in the journal Architectural Review, in which they called for the work to continue. In his official reply, published in the same journal a month later, Bakema, as the spokesman of *Team 10*, left the future of *CIAM* open. But here too he indirectly criticized the four functions by referring to the "moral function of architectural expression."39

In the end, *CIAM* remained unable to separate itself from the principle of the analysis of the four functions it had established, no matter how much they tried to expand, refine, or overcome it. As shown, the critique of the four-function scheme started early within *CIAM* itself. However, it was the scheme's lack of complexity rather than the idea of the separation of func-

36 In Newman 1961: 96.

37 Ibid.: 33.

38 Ibid.: 68.

39 Bakema 1961: 226; in response to Sert, Gropius, Le Corbusier and Giedion 1961: 154.

40 Le Corbusier 1973: 96.

41 Jacobs 1961: 41, 45,

42 See, for example, Feststellungen, published in Steinmann 1979: 163 (German): "The city organism must be considered as part of the larger economic area to which it belongs."

tions that was objected to. In summary, the *CIAM* discussions were one of the main reasons why functionalism came to be associated with a simplifying separation of functions. Within urban planning, functionalism was equated with decentralization. This was due in part to the wide dissemination of Le Corbusier's Athens Charter, in which he, unauthorized by the *CIAM* members, wrote: "Each key function will have its own autonomy." ⁴⁰ Moreover, the separation of the urban functions and the separation of automobile and pedestrian traffic were overall regarded positively by all the *CIAM* generations. That this was fundamentally the opposite of "functionalism" and the "functional city" was pointed out by Jane Jacobs in *The Death and Life of Great American Cities* as early as 1961: A city which did not consist of diversely related parts had to be considered a "deep, functional sickness" with "deep, functional inadequacies." ⁴¹

The real problem, which resulted from both the prewar and the postwar phase, was less the separation of functions than the lack of a definition of a whole, into which the functions could be woven together. During the prewar phase, the study of each part-housing unit, neighborhood, city-postponed the determination of the whole to the next larger context, rather than asking about the entity or identity of each part and the whole. The discussion of the housing unit, for example, was primarily about sequences of efficient utilization. The discussion of the neighborhood was never about its unique identifiable qualities; rather, before this question was even asked, it was decided that the next congress would have to look at the whole city before a neighborhood could be designed. Even a city had no identity on its own but had to be discussed in terms of its relationship to the region from which its identity as a part then resulted. 42 In other words, in its ambition to take into account the largest possible complex whole, CIAM attributed only a relative autonomy to the parts and no identity of their own. To a certain degree, this changed with the focus on cores, but that merely shifted the problem. Since rather than asking how a core, no matter whether in a neighborhood or city, interacted with its immediate surroundings, this center was made solely responsible for creating identity and unity. The discussion of clusters and structures can be regarded as the most promising attempt to get away from the function debates and to rethink the relationship of parts and the whole. However, in the end, this attempt of structuralism only led back to the debate on the hierarchy of forms and functions (which followed which?).

The constant postponement of the question of how the parts and whole of an urban fabric are (functionally and formally) connected had fatal consequences for the understanding of the city. In the *CIAM* doctrine, roads were responsible for the communication between the zones of dwelling, working, and recreation, which thus seemed to be areas positioned statically in the city. Only traffic arteries were dynamic. The idea that human actions like dwelling, working, and recreating had direct effects on themselves, and were thus dynamic, was virtually neglected. With this, the essence of the concept of function—the active relationship of parts and the whole—was lost. While ar-

chitects in the nineteenth century, particularly with regard to the analogy of organisms, had a dynamic understanding of functions, all that remained in the twentieth century of the once complex concept of function was isolating and optimizing the parts and understanding a whole as an ordering of parts. Two fundamental questions result from the *CIAM* history presented here. First, in general: How can you break free from a time-determining paradigm? Is this even possible? And second, in particular: How can we—architects, land-scape architects, and urban planners—succeed, after analytically deconstructing a design task, in creating individual entities which are at the same time meaningful contributions for our living environment? For synthesis, rather than analysis, is our central field of activity.

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Literature

Bakema, Jacob (1961): "What Became of CIAM?" Architectural Review, vol. 130, no. 4: 226.

CIAM (1928): "Der Architekten-Kongress von La Sarraz." Das neue Frankfurt, vol. 2, no. 10: 195–196.

CIAM (1931): "Rationelle Bebauungsweisen". Frankfurt am Main: Englert und Schlosser.

CIAM (1947): "Thesen zum Städtebau: Auszüge aus der Charta von Athen." BAU: Zeitschrift für wohnen, arbeiten und sich erholen, vol. 1, no. 1: 21–26.

CIAM (1949): "The Charter of Athens." Marg 3, n. d., no. 4: 10-17.

Conrads, Ulrich (ed.) (1970): "Programs and Manifestoes on 20th Century Architecture," translated by Michael Bullock. Cambridge: MIT.

Domhardt, Konstanze (2012): "The Heart of the City. Die Stadt in den transatlantischen Debatten der CIAM 1933–1951." Zurich: GTA.

 $\it Giedion, Sigfried$ (ed.) (1951): "A Decade of New Architecture." CIAM 6. Zurich: Girsberger.

Hilpert, Thilo (1978): Die Funktionelle Stadt. Braunschweig: Vieweg.

Hilpert, Thilo (1984): Le Corbusiers "Charta von Athen. Texte und Dokumente." Kritische Neuausgabe. Braunschweig and Wiesbaden: Vieweg.

Jacobs, Jane Margaret (1961): "The Death and Life of Great American Cities." New York: Vintage 1961.

Kampfmeyer, Hans Martin (1948): "Die Charta von Athen." Die neue Stadt, vol. 2: 66–68.

Landau, Royston (1992): "The End of CIAM and the Role of the British." Rassegna, vol. 14, no. 52: 40–47.

Le Corbusier (1973): "The Athens Charter," translated by Anthony Eardley. New York: Grossman.

Mumford, Eric (2000): "The CIAM Discourse on Urbanism." Cambridge: MIT.

Newman, Oscar (1961): "New Frontiers in Architecture." CIAM '59 in Otterlo. New York: Universe Books.

Poerschke, Ute (2016): "Architectural Theory of Modernism. Relating Functions and Forms," translated by Steven Lindberg and Ute Poerschke. New York and London: Routledge.

Sert, José Luis (1942): "Can Our Cities Survive?" Cambridge: Harvard University.

Sert, José Luis, Walter Gropius, Le Corbusier et al. (1961): "What Became of CIAM?" Architectural Review, vol. 130, no. 3: 154.

Steinmann, Martin (ed.) (1979): "CIAM. Dokumente 1928–1939." Basel and Stuttgart: Birkhäuser.

Tange, Kenzo (1960): "Aestheticism and Vitalism. On Participating in the New CIAM Talks of September, 1959." The Japan Architect, vol. 35, October: 8–10.

Tyrwhitt, Jaqueline; José Luis Sert; Ernesto N. Rogers (eds.) (1952): "The Heart of the City: Towards the Humanisation of Urban Life." New York: Pellegrini und Cudahy.

van Es, Evelien; Gregor Harbusch; Bruno Maurer et al. (eds.) (2014): "Atlas of the Functional City. CIAM 4 and Comparative Urban Analysis." Zürich: Thoth Publishers.

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