

**Stem and Web:**

**A Different Way of Analysing, Understanding and Conceiving the City in the Work of**

**Candilis-Josic-Woods**

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There are today a few who are across the brink of another sensibility – a sensibility about cities, a sensibility about human patterns and collective built forms. Looking back to the fifties it was then that that brink was crossed, it was then that architectural theory convulsed, then that the social sciences suddenly seemed important. A change of sensibility is what I now think Team X was all about. (Peter Smithson)<sup>1</sup>

La structure des villes réside dans les activités humaines; elle est définie par les rapports entre ces activités.<sup>2</sup>

### 1 : Urban Modernization and Vanishing Architectural Dimensions

If until the Second World War the discussions about the city and housing in France were largely held in architectural circles, in the post-war period these issues were recaptured by a centralized, technical planning ministry. After 1944 France entered a second and decisive stage of its *révolution urbaine*. Substantial shortages in the realm of social housing urged the government to take large urban planning initiatives.<sup>3</sup> Urban planning became completely embedded in the project for the modernization of the country, represented by the subsequent *Plans de Modernisation et d'Équipement*. The centralized and technocratic character of these modernization plans was practically literally translated in the urban planning approaches used. The large housing complexes that arose in the peripheries of all of the French cities, the so-called *Immeubles Sans Affection* (ISA), demonstrate this.<sup>4</sup> Completely detached from their local or regional context, independent of the existing urban morphology, these complexes were the first exponents of an understanding of the urban as a mere facility, a presumption that gained importance in the 1950s and 1960s *Grand Ensembles*.<sup>5</sup> In these projects urban form was no longer considered as a spatial phenomenon embedded in a context, but rather as an accountable and independent unit. As Georges Candilis pointed out:

L'immense destruction due à la guerre, l'urgence et la pauvreté ont fait dévier ces tendances vers des solutions répondant à la nécessité de faire vite et bon marché: UN STYLE 'RECONSTRUCTION' apparaît en Europe. . . . La notion de plan de masse prenait une valeur secondaire: le grand souci était surtout l'objet même de l'habitation.<sup>6</sup>

Hence, the post-war history of many French cities, reads as the story of the increasing independency of the architectural and the urban realm: first the disruption of architecture out of the framework of the existing city (1950-1956), subsequently out of the *banlieu* under the heading of *Grand Ensemble* (1960) and finally the complete liberation of architecture by the *Ville Nouvelle* (1965). Marcel Cornu described this process strikingly:

Au milieu des années cinquante, apparurent d'étranges formes urbaines. Des immeubles d'habitation de plus en plus longs et de plus en plus hauts, assemblés en blocs qui ne s'intégraient pas aux villes existantes. Ces blocs s'en différenciaient ostensiblement et parfois comme systématiquement, s'en isolaient. Ils semblaient

faire ville à part.<sup>7</sup>

*Faire ville à part* or the complete dislocation of architecture out of the logic and structure of the urban realm, was the result of the French post-war approach to urban planning. As Candilis noted, the inner logic of new housing developments were often completely detached from the surrounding urban matrix, resulting among others in 'l'indépendance du plan de masses par rapport à l'ordonnance des rues'.<sup>8</sup>

## 2. Ethnologie Sociale: Critiques, Perspectives and Alternatives

The dislocation of architecture from its urban matrix rapidly became subject to severe criticism. From the beginning of the 1950s in France, a substantial debate centred on the changing urban condition emerged from the realm of the social sciences.<sup>9</sup> An important contribution was the book *Paris et l'agglomération Parisienne: L'espace social dans une grande cité*, written in 1952 by French social geographer Paul-Henry Chombart de Lauwe.<sup>10</sup> The *ethnologie sociale* of Chombart de Lauwe and his team was in the first place a critique of the environments that resulted from the post-war *hard French* planning methods.<sup>11</sup> Chombart de Lauwe questioned the dwelling conditions of the new urban developments in the periphery of Paris:

Ce dernier se caractérise le plus souvent par la présence de cours intérieures autour desquelles une série de hauts bâtiments se distribuent méthodiquement. Il amène ses habitants à se situer en masse compacte au milieu ou à l'écart d'agglomération existante. Des ensembles de population sont ainsi posés de façon très distincte dans l'espace; leur distribution intérieure ne les groupe pas d'abord en fonction d'une rue, mais autour 'd'escaliers' et de courées sur lesquels la vie des quartiers environnants n'a pas la même emprise que sur les habitations voisines.<sup>12</sup>

In his 1952 publication Chombart de Lauwe was extremely critical of the dwelling conditions in the new urban developments. Especially their failure to underscore public life was heavily criticized. It is to the merit of Chombart de Lauwe that this critique was not formulated *ex-nihilo*, but emerged from – and was confronted with – investigations of the characteristics of the historical city of Paris.<sup>13</sup> This approach is illustrated in the 1952 study *Paris et l'Agglomération Parisienne*. The research in this book focuses on the combination of physical entities and practiced entities, using notions such as the neighbourhood (*le quartier*), the urban block (*l'îlot*), the building (*l'immeuble*) and the street (*la rue*).<sup>14</sup> In order to understand these entities simultaneously as physical matter and as spatial practices, Chombart de Lauwe proposed to regard them as elements of '*les paysages de la vie quotidienne*'.<sup>15</sup> In the fashion of the contemporary structural anthropology of Claude Levi-Strauss, Chombart's *ethnologie sociale* compares everyday urban landscapes in different neighbourhoods, in order to trace the recurrent and thus structural elements. According to Chombart de Lauwe one of the structural elements of the neighbourhood, in both a physical and a social sense,

is the entity of the street:

Ce lieu géométrique, c'est la rue, dont l'importance est d'ailleurs fonction de l'exiguïté de l'habitat. La vie de quartier est intimement liée à cette rue où elle est appelée à se traduire. (...) On pourrait dire que la vie de la rue donne la mesure de la vie du quartier.<sup>16</sup>

Beyond the recognition of the street as a structural element for the neighbourhood, Chombart also investigated the structural components of the street. It is from this perspective that he underlined the importance of commercial and other services (*l'équipement*):

L'ors qu'on étudie la vie de la rue, on remarque vite que la structure des boutiques est aussi important que les formes d'habitat.<sup>17</sup>

This statement was underscored with a detailed cartography of the structural qualities of the services of the street. Through a comparative analysis of maps of different Parisian neighbourhoods, Chombart de Lauwe demonstrated that within the urban tissue of an ordinary Paris street a densely woven social and spatial structure of services can be detected. This structure is a compulsory quality of the well-functioning of the street according to the French social ethnologist:

'Le jeu réciproque de la vitrine et de la rue.' Avec ses étalages qui souvent envahissent les trottoirs, avec ses illuminations qui, à la tombée de la nuit, égayent et 'enrichissent' les rues aux apparences les plus misérables, toute boutique représente par elle-même une structure concrète dont l'influence est fondamentale sur la vie d'un quartier urbaine.<sup>18</sup>

Against the background of the contemporary *hard French* approach of the post-war urban developments and the related disconnection of the urban and the architectural realm, Chombart's study appeared as the story of a different reality. In French architectural circles Chombart de Lauwe's unravelling of the historical urban tissue of Paris did not remain unnoticed. On the one hand it was perceived as a critique of the disruptive logics of post-war urban planning. On the other hand it was understood as a useful study of characteristics and principles that could guide architectural and urban design in the future.

### 3 Another Modern Architectural Tradition

#### The Architectural Critique on Post-War Urban Planning

The precise moment that, following the developments in the social sciences, a general critique of post-war urban planning was brought to the fore within the realm of French architecture and urbanism is difficult to trace. In the pages of *L'Architecture d'Aujourd'hui* and *Urbanisme* a substantial and public critique of post-war urban developments did not

appear until the beginning of the 1960s.

Surprisingly, the bulk of this 1960s architectural critique did not turn against the *hard French* state apparatus and its planning methods, but rather held CIAM responsible for the dislocation of architecture from its urban matrix. As both Kenneth Frampton and Manuel de Sola-Morales have argued, this negative attitude towards CIAM gained adherence in the second half of the twentieth century<sup>19</sup>:

The breakdown of European cities, that has occurred over the last forty years has cast a heavy shadow of guilt over the ideology of city planning derived from functional architecture. Critics like Bernard Huet and Leon Krier have accused the Athens Charter and its descendents of the grave crime of 'treason' against city planning. Before them, Gordon Cullen and the 'townscape' of the sixties, and the morpho-typological school of the seventies . . . have joined the ranks of the detractors, sometimes with more opportunism than justification, thereby setting off a banal and superficial campaign of denigration of such concepts as zoning, planning regulations, and general schemes of development, to the point of rejecting any rational basis for the organization of cities as mistaken or counterproductive.<sup>20</sup>

From this standpoint the position of Candilis-Josic-Woods is remarkable, since their negative evaluation of the post-war urban developments in France and elsewhere in Europe was not connected to a condemnation of the urban models that were developed within CIAM. In a text with the telling title 'Urbanisme: Repenser le problème' Georges Candilis developed a distinct view on the underlying reasons of the urban developments in the immediate post-war period:

La période de la reconstruction dans toute l'Europe, par l'ampleur de son programme, fait apparaître la nécessité d'une doctrine: la Charte d'Athènes a 'servi' comme 'planche de salut'.

L'application de la Charte d'Athènes, par des gens qui voyaient uniquement la recette et non l'esprit a provoqué la confusion et le désordre de nos plans d'urbanisme actuels.

...

En traversant la France, l'Allemagne, l'Italie, on découvre à l'infini le même aspect uniforme et désolant des collectifs en 'morceaux de sucre', des blocs d'immeubles, témoins tristes, éléments isolés de la vie, juxtaposés sans aucune liaison entre eux, sans aucune liaison avec ce qui existait, sans aucune liaison avec ce qui va venir.

L'académisme d'avant-guerre a donné place à un pauvre 'modernisme' sans âme et sans consistance.<sup>21</sup>

According to Candilis-Josic-Woods, besides the 'poor modernism' that emerged in post-war France, other more valuable approaches of the urban realm exist. In contrast to many of the post-war critics, Candilis-Josic-Woods did not claim that this tradition had to be sought outside the modern movement, but rather within its very confines. According to the

partnership the origin of this other modern tradition is situated before the general introduction of the principles of the functional city in Germany during the 1920s:

Avec la naissance du XXème siècle apparaissent les premières études, publications et, quelquefois, réalisations qui nous amènent vers un autre esprit d'urbanisme où son rôle par excellence, social, est destiné à tout la société. Les architectes démontrent que 'l'Art de Bâtir les villes': c'est aussi et surtout leur affaire et pour résoudre les problèmes d'urbanisme, il est nécessaire de posséder une technique très poussée afin de dissocier l'apparence et la réalité.<sup>22</sup>

Georges Candilis pointed to the modern architectural tradition of conceiving cities that has its origins at the turn of the nineteenth to the twentieth century in the seminal work of the Viennese architect and historian Camillo Sitte, translated in French as *l'Art de Bâtir les villes*.<sup>23</sup> For Candilis, Sitte stands at the beginning of the modern tradition of *urbanisme*. This other modern tradition is believed to take as its point of departure 'les valeurs plastiques et spatiales' of the urban realm.<sup>24</sup> The spatial characteristics that result from the material articulation of the city are the central concern of this tradition, according to Candilis:

La recherche des relations harmoniques entre les volumes bâtis et les espaces libres: la recherche de l'ESPACE.<sup>25</sup>

Besides the fact that this modern tradition approaches the city as a material articulation that defines space, it is also characterized by a particular affection for the existing city. In his 1954 article 'L'esprit du plan de masse de l'habitat' Georges Candilis underlined that this other modern tradition regards the city as a repository of knowledge concerning material articulations and spatial practices:

L'Urbanisme, c'est la science qui a comme but d'organiser la vie d'une ville; c'est une science très vieille; dernièrement encore on a découvert des villes vieilles de plusieurs milliers d'années dont on peut constater d'après leurs ruines et leurs traces que leur vie était organisée, structurée. Qui dit organisation, dit plans, prévisions, équilibre, structures. C'est justement la recherche d'une structure harmonieuse entre les différentes activités urbaines que la science urbanisme a comme but et aussi prémouvoir et surtout de prévoir.<sup>26</sup>

Candilis' definition of *urbanisme*, brings to mind the posterior definition of a *culturalist* model of urbanism by French scholar of urban history Françoise Choay.<sup>27</sup> By means of an analysis of the work of Camillo Sitte, Choay explained that one of the main characteristics of the *culturalist* model of urbanism is that it relies on knowledge of the existing spatial organization:

'Ce n'est qu'en étudiant les oeuvres de nos prédécesseurs que nous pourrions réformer l'ordonnance banale de nos grandes villes', écrit Sitte.<sup>28</sup>

Choay opposed the *culturalist* model to a so-called *progressist* approach to urbanism. This last approach, embodied by CIAM, holds that modernity requires a rupture with the historical city.<sup>29</sup> According to Choay these two models of urbanism are diametrically opposed because they are orientated 'selon deux directions fondamentales du temps, le passé et le futur, pour prendre les figures de la *nostalgie* ou du *progressisme*'.<sup>30</sup>

Candilis did not subscribe to the binary discrimination between *culturalist* and *progressist* models of urbanism that Choay later held to. On the contrary, Candilis was in search of an approach to urbanism that could gather an understanding of urban forms from the past while envisioning those of the future. His writings can be regarded as attempts to uncover within the *progressist* current of the modern movement, *culturalist* approaches to urbanism. According to Candilis, it is precisely the simultaneity of the two tendencies that reveals the meaning of the *other modern tradition*.<sup>31</sup>

The architects that belonged to this other modern tradition studied existing cities from synchronic and diachronic perspectives and based their urban visions of the future upon them. Commenting on a project by P.L. Wiener and José-Luis Sert (fig.IV.6) Candilis underlined:

En Amérique Latine, Sert et Wiener ont étudié a grande échelle l'habitat de populations pauvres. Dans l'ordre existant des 'quadras' espagnoles une forme est apparue: le logement constitue un ensemble, les circulations sont bien séparées et la tradition des patios respectée.<sup>32</sup>

In his article Candilis presented a wide spectrum of contemporary projects that regard the investigation of existing forms of dwelling and building as a basis for new urban design. He did not, however, call for a literal transposition of existing urban forms or principles. His selection of projects illustrated how existing architectural and urban spaces are comparatively investigated, in order to uncover their underlying structural principles. In turn, these structural principles become guiding codes for future urban planning and design. According to Candilis this particular strain of urban thinking is not necessarily absent from the work of the 'fathers' of the modern movement, but rather was neglected. Moreover it was interrupted on several occasions:

La notion d'urbanisme née avec notre siècle a été interrompue deux fois par les deux guerres mondiales et n'a pas pu atteindre sa matérialisation dans l'art de vivre et dans l'art de bâtir.<sup>33</sup>

In his 1954 article 'L'esprit du plan de masse de l'habitat' Georges Candilis traced a renewed interest and re-vitalization of this other modern tradition in post-war projects by Merkelbach and Elling (Frankendaal Housing Complex, 1947-1951, Amsterdam) and by Tecton, Lasdun and Drake (Hallfield Estate, 1947 Paddington, London). A few years later,

in his text 'Habitat sous forme de trame' Candilis added the work of Sert and Wiener in South America and of Ecochard in North Africa to the tradition of *urbanisme*.

It is also this other modern tradition of *urbanisme* that Team X aimed to re-vitalize according to Candilis:

Pour la première fois, à Dubrovnik, certains architectes prennent conscience du moment critique où les choses ne peuvent pas devenir pires et où la notion officielle d'urbanisme a perdu tout son rôle primordial dans la vie de la société. Pour la première fois, on essaie d'introduire des critères nouveaux:

- L'importance de la découverte de l'interrelation des fonctions d'urbanisme,  
- La mise en évidence de l'homme et de son échelle, élément primordial de la continuité des établissements humains,

- L'intervention de la mobilité de notre époque où tout change de façon de plus en plus accélérée, faire des plans stratifiés, c'est aller contre la nature, c'est être aveugle.

La notion de l'identité et du caractère personnel de nos établissements humains qui est une révolte contre l'uniformisation absurde et la platitude.

Et avant tout, tenir compte de la croissance constante qui fait éclater les limites, modifie l'aspect des territoires et la façon de vivre.

Pour la première fois, on essaie de revitaliser cette autre tradition moderne.

. . . Ces architectes se sont groupés en équipe = TEAM, au 10ème congrès des C.I.A.M. et ils sont devenus les TEAM X.<sup>34</sup>

In this text Candilis defined the objective of Team X as the re-vitalization of the tradition of *urbanisme* from a particular set of criteria. His definition of the criteria for this reconceptualization reverberated the perspective that Chombart de Lauwe, Lefebvre and other sociologists had opened on the French post-war urban realm a few years earlier. The proclaimed importance of the interrelation of different urban functions, the continuity of the urban tissue and the importance of mobility within the urban realm illustrate the kinship.

Candilis' definition situates the work of Team X and of the partnership at the crossroads of two traditions of urban research: an *ethnologie sociale* tradition of understanding the city as the result of practices of dwelling and building, and 'another' modern architectural tradition of regarding the city from its material articulation and spatial characteristics. By situating Team X within these two traditions, he identified – in my opinion – one of the most productive fields of tension for the work of Candilis-Josic-Woods. The urban projects and thinking of the partnership are permeated by the search to combine considerations on spatial practices with a nuanced understanding of the spatial qualities that result from the material articulation of existing cities. Hence, the work of the partnership appears as the revitalization of the modern tradition of *urbanisme* on the basis of an understanding of the built environment as frame, substance and goal of spatial practices.

#### **'A la Recherche d'une Structure Urbaine'**

This revitalization of the other modern tradition of urbanism is most clear in the 1962 article



'A la recherche d'une structure urbaine' by Candilis, Josic and Woods. In this text the partnership clarified its intention to search for, analyze and make operational that which structures the material articulation and the spatial practices of the urban realm. If, as the partnership held, the urban realm should be looked upon as the combination of spatial practices and material articulation, which instruments, what logic or which structures can guide these? The possible answer to this question was primarily sought within existing cities.

Within the practice of Candilis-Josic-Woods the research into existing cities played a paramount role:

Les plans de ses villes, leur tracé de réseaux routiers, leurs équipements collectifs: adduction d'eau, évacuation, nettoyage, enlèvement des ordures ménagères, etc. . . . la détermination des différentes fonctions basses: le quartier d'habitation ou de résidence, le lieu de commerces, le quartier administratif et de cultes, les établissements de la culture et des loisirs: c'est-à-dire tous les éléments qui nous préoccupent actuellement, pour le tracé de l'organisation de l'extension de nos villes, et la création de nouvelles villes, peuvent être constatés et découverts dans les plans des villes existantes.<sup>35</sup>

Against the background of this appreciation of existing cities as a knowledge basis, articles such as 'A la recherche d'une structure urbaine' (1962) or 'Problèmes d'Urbanisme' (1965) were in search of those elements that structure the urban realm. For these historical investigations, Candilis, Josic and Woods made use of their own research on existing cities and on the contemporary corpus of Italian research that focussed on patterns of urbanization and models of urbanism. Candilis, for example, founded his 1965 article on the *Atlante di Storia dell'Urbanistica* by the Italian scholar Mario Morini.<sup>36</sup>

The main aim of the historical studies in the work of Candilis-Josic-Woods was the recognition and the study of the perennial character of certain elements within the historical development of cities:

A travers et par les Romains, on peut constater une continuité de l'esprit et du tracé urbain de nos villes et de nos capitales. En effet, si on analyse l'origine et l'évolution historiques des structures de la presque totalité des villes actuelles, nous apercevons que les schémas d'origine sont des tracés de l'époque romaine.<sup>37</sup>

The duration of *tracés* and other perennial elements and the fact that these have been able to fulfil a function that reaches beyond their very reason of creation, received ample attention. This investigation of the perennial character of certain urban elements was not a goal in itself, but was pursued as part of the search for a more dynamic conception of urban planning:

Il ne suffit plus de faire une 'composition' grande ou petite, comme celle de Versailles

hier et celle de Brasilia aujourd'hui, mais il faut démontrer . . . comment ils vont changer et croître, et surtout, il faut traduire la notion 'Espace-Temps'.<sup>38</sup>

Hence, Candilis-Josic-Woods' interest in the perennial character of urban *tracés* and elements is thus not fuelled by the belief that the city must be a stabile entity, but rather by the conviction that perennial urban elements encompass the capacity to structure change and growth.

This attention for the structuring logics of the European city and its capacity to accommodate growth and change was common to most of the Team X contributors. In this respect Jakob Bakema's 1962 article 'An Emperor's House at Split became a town for 3000 People', published in the Dutch architectural periodical *Forum*, played a major role within Team X.<sup>39</sup> In this text Bakema documents Split, a town that had grown out of a palace built by Diocleation circa 300 BC and was quartered by the traces of the Roman *cardo* and *decumanus*. (fig.IV.7) He illustrates how within the quarters defined by these two axes, the urban tissue has gradually changed and renewed throughout history. The article includes photographs of busy contemporary streets that have emerged within the Corinthian colonnades of the original palace. (fig.IV.8) Bakema discerns the perimeter and the *tracés* of the historical palace as the perennial and structuring elements of the urban fabric's development throughout time. The fascination for physical (gates, perimeter) and non-physical (*tracé*) elements of *longue durée* that can structure urban development reappeared in Shadrach Woods' 1961 'Stem' article. Under the heading of *stem* Woods dwelt upon the possibility of a linear *tracé* operational as a conceptual instrument of urban planning. The *stem*-article is an investigation into the characteristics and the role of the defining elements of such a *tracé*.<sup>40</sup>

In his book *The Man in the Street* Shadrach Woods underlined that these investigations into perennial elements and change and growth are based on a specific understanding of the city. For, as the result of the spatial practices of dwelling and building, the city was for Candilis-Josic-Woods not a static entity, but the outcome of relentless building, modification, decay and re-building:

Any building, no matter how well conceived and built, needs maintenance and replacement of parts to keep it in a state of useful repair. A city is such an enterprise, and certainly maybe be thought of as a building. Change and decay, and replacement to accommodate those changes and to repair that decay, are fundamental to the continued existence of the city.<sup>41</sup>

Woods emphasized that the presence of perennial elements is essential to the conception of the city. More precisely, he considered the relation between long- and short-term elements fundamental to the very existence and continuity of the city. According to the partnership in the post-war period the relation between both came under severe tension. In France and elsewhere in Europe the post-war period was characterized by the introduction

of the new short-term time rhythms of automotive mobility, mass distribution and mass consumption. The relation between the *longue durée* of the European city and these new time rhythms was, according to the partnership, one of the main questions for post-war urban planning. It became one of the main concerns within the partnership's urban projects, as I will discuss further on in this paper.

### **Attitudes of Modification and Intromission**

The analytical and conceptual interest in the perennial character of urban traces that characterized the work of most Team X contributors, also led to a specific understanding of urban design. The understanding of the existing urban realm as structured by elements with a *longue durée*, bestowed urban design with a specific status:

Change made by one generation to the general scene in terms of building and engineering works is relatively small, and no matter how large the area of development may be, it cannot stand alone, and its effectiveness must also be measured in its inter-actions with what exists and with what it calls into being, both socially and plastically. . . .

Buildings should be thought of from the beginning as fragments; containing within themselves a capacity to act with other buildings; be themselves links in systems of access and servicing.

What is proposed is the abolition of planning as we know it . . . the disappearance of the 'master plan'.<sup>42</sup>

Peter Smithson put into words a more general tendency among Team X contributors. He pointed to an attitude of regarding urban projects and realizations as spatial acts that interrelate with a wider and long-standing urban framework. Within the texts and projects by Candilis-Josic-Woods, urban projects were not considered as independent entities, but rather as fragments that acquire most of their significance by their very situation within a larger existing urban matrix:

The difference between our situation and previous situations is that we are capable of seeing a building as a *fragment*, not as an isolated act like a poem, which you can read and put in your mind and keep separate.<sup>43</sup>

This understanding of the urban project as *fragment* that interacts with a larger existing urban realm, is one of the main premises to be found in the work of several Team X contributors. Peter Smithson rightly underlined that it can also be considered as a clear shift of attitude within CIAM. On the one hand this 'fragment' attitude represented a move away from the encompassing character of master planning 'towards the partial and incomplete' as Denise Scott Brown argued in her 1967 article 'Team 10, Perspecta 10, and the Present State of Architectural Theory'.<sup>44</sup> In the work of Team X urban design was not considered as a final and independent project, but rather as a fragment that is situated within, and contrib-

utes to, a larger entity.

On the other hand, the 'fragment' approach counters what Bruno Fortier designated as one of the main legacies of the modern movement in urban planning: the concept of rupture.<sup>45</sup> Fortier argues that the bulk of urban planning methods of the modern movement as represented by CIAM were characterized by an attempt to literally distance new parts of the city from existing ones. Manfredo Tafuri shares this viewpoint when he underlines the significance of the distance between the new and the existing in the urban plans of Le Corbusier.<sup>46</sup> In post-war France this disruptive attitude towards the existing urban realm became general practice, as Candilis remarked:

La rupture d'une évolution organisée des agglomérations urbaines devient un acte éhonté.<sup>47</sup>

Within the work of Team X in general and of Candilis-Josic-Woods in particular, this modern idea of rupture with an existing urban context became subject to careful reconsideration. The division between historical and modern parts of the city that was propagated by some CIAM architects during the inter-war years and fully elaborated immediately after the Second World War in the centrally planned *hard french* urban developments, was critically re-examined.

Instead of a rupture with the existing urban environment, the contributors of Team X developed within their debates and writings a different approach, centred on the notion of continuity. Within Team X the idea of continuity was developed along two different lines, most clearly illustrated in the polemical positions taken in the debate at the Otterlo meeting of 1954. At this meeting, held to define the goals and approaches of a new CIAM, the issue of relating to existing urban environments was one of the key-points of debate. On one side of the spectrum there was the – particularly Italian – position that represented a growing awareness that additions to the urban realm should communicate in a concrete, architectonic way with the existing urban fabric. Nathan Ernesto Rogers, a prominent Italian architect who was in the 1940s and 1950s subsequently editor of *Domus* and *Casabella* and the most important CIAM representative of his country, was one of the important voices within this discussion. Rogers launched the notion of 'preexisting environment' (*preesistenza ambientale*); pointing thereby to precedents that could be found within the existing urban realm and that could through 'linguistic transposition' be made operational in a new urban design.<sup>48</sup> As Vittorio Gregotti, a privileged witness of the Italian debate, retrospectively explained:

For Rogers, though, the concept of a pre-existing environment was not at all a stylistic one; above all it corresponds to the idea of opening a dialogue with ways of looking at history from the point of view of contemporary culture using as a starting point the specific political and social conditions.<sup>49</sup>

Historical interpretation had, according to Rogers, a constitutive role within urban design where everything is staked on the relationship between memory and invention. Rogers did not consider continuity a function of literal transposition, but rather a matter of understanding and re-considering the forms of the historical urban context. According to the Italian architect new urban design did not necessarily have to mimic historical urban forms, but by all means had to strive for a strong affinity and continuity with them.

In addition to the Italian attitude there was another position that sought the continuity with an existing urban context not so much in formal matters, but rather in what lied behind them. Alison and Peter Smithson were important spokesmen of this approach that sought continuity in the so-called 'scale of associations'.<sup>50</sup> The Smithsons proposed a scale that demonstrated that different social attitudes and associations of men resulted in various built environments. It would run – 'isolated buildings, villages, towns and cities', borrowing rather superficially a characterization found in Patrick Geddes valley section. (fig. IV.9) In the Smithsons viewpoint:

The problem of re-identifying man with his environment cannot be achieved by using historical forms of house-groupings, street, squares, greens, etc., as the social reality that they represent no longer exists.<sup>51</sup>

At the Otterlo meeting of 1959 Ernesto Rogers led the discussion with the Smithsons concerning the *London Roads Study*. His main objection concerned the attitude toward the history of the city, since, even though the built fabric that defined the roads was destroyed, the guidelines of the latter were nevertheless preserved. Rogers argued that, if the intention was to alter the city drastically, in other words to make it appropriate for the post-war reality of the different flows and types of traffic, then it would be more logical to build a completely new city. Rogers proposed a position that would remain more faithful to the architectural articulation and structure of the historical city.

Candilis-Josic-Woods took up a position in between that of Ernesto Rogers and Alison and Peter Smithson. Just as their fellow Team X contributors, the partnership situated the continuity of the city not in a slavish replication of the past, nor in a complete adherence to modern infrastructures, but rather in the field of tension between what is and what has been. Two categories of elements keep this field of tension alive according to the partnership: the material forms of the past and the spatial practices of the inhabitants and users of the city that are impregnated with history. Concerning the first category Woods wrote:

It is clear, to any urbanist, that history and historical markers are important to the continuity of the city. No group, people or nation can hope to live without some continuity, and historical markers in the form of buildings are an important part of that sentiment.<sup>52</sup>

Besides this first category, the partnership insisted especially on the historical meaning of spatial practices:

La ville est avant tout un lieu contenant des espaces qui englobent les fonctions dans une entité bâtie. C'est un lieu qui favorise les activités de l'homme et de sa société. Animée par l'homme, c'est aussi un organisme vivant qui rend possible à chaque instant de son existence, évolution, changements et adaptations.<sup>53</sup>

For Candilis-Josic-Woods the everyday practices – the daily trajectories of inhabitants between house and work, shop and church through which the structure of the city is imprinted on bodies and memories – represented an important aspect of the continuity they sought. Continuity was, however, not considered as an exclusive characteristic of spatial practices, nor of urban form. Urban forms and systems, as well as the practices, rhythms and routines of urban dwellers were considered essential aspects for the continuity of the city:

The new urban world is not a desert. It is full of old urban things, systems, structures and attitudes. To make it new and fitting, we see the need . . . to repair and to renovate these systems and structures.<sup>54</sup>

This quote from Woods underlines that the new is not understood as a rupture with the existent, but rather as a way of relating to the existing structures that underlie the material articulation and the spatial practices of the urban realm. By openly defining the new as alteration of the existent, the work of Candilis-Josic-Woods represents a sheer change of attitude within CIAM. If the avant-garde architects of the inter-war period made their awareness of the existing urban context explicit through the propagation of an idea of extraneousness or rupture, then the work of Candilis-Josic-Woods is characterized by an opposite attitude. The partnership, just as the majority of the Team X contributors, abandoned the idea of a rupture with the existing urban context and replaced it with attitudes of continuity and modification. As Woods underlined in his 1960 'Stem' article the partners held to

the basic axiom that every extension to the city is an extension *of* the city and cannot be considered as a self-contained unit, isolated by its introspective nature from the rest of society.<sup>55</sup>

In the work of Candilis-Josic-Woods the focus of design is not directed at a rupture with the existing, but rather at the question of 'how to renew and extend our cities'.<sup>56</sup> This is not to say that the partnership placed its work exclusively in relation to the traditional city, but rather that the big city, the urban realm as a whole – encompassing both the historical and the new – figured permanently as a background for their actions. Every urban design is understood as a strategic positioning in the field of tension that exists between what has

been and what is.

This positioning is understood as insertion and modification of the existing urban realm. Commenting on the work of Candilis-Josic-Woods, Peter Smithson described the partnership's design attitude as the belief

that a new thing is to be thought through in the context of the existing patterns. Thought through in the context of the patterns of association, the patterns of use, the patterns of movement, the patterns of stillness, quiet, noise and so on, and the patterns of form, in so far as we can uncover them.<sup>57</sup>

Candilis-Josic-Woods' conception of urban design as intromission and modification of a pre-existing field of urban forms and practices, epitomized an important shift in post-war architectural thinking. In the urban designs of Candilis-Josic-Woods one of the guiding principles reads:

The planning, the method of siting, and the aesthetic character of the new town are integrated as completely as possible into the existing geographical and cultural environment of the old town and the region.<sup>58</sup>

The ideas of intromission and modification are beyond doubt two of the most important themes within the approach to the urban realm by Candilis-Josic-Woods.

#### 4 On Streets and Stems

The feeling is prevalent in Western societies that something basic has gone wrong . . . the street is no longer his, no longer functioning as a life-line which he rightly expects it to be.<sup>59</sup>

One of the main structuring elements of the urban realm that the work of Candilis-Josic-Woods focuses upon is the street. Just as for many other Team X contributors, the idea of finding an alternative for the ordinary street was one of the central concerns of the partnership.<sup>60</sup> It is instructive to note that less than thirty years separates the anti-street thesis of Le Corbusier from the pro-street preoccupations of Team X. Where Le Corbusier in 1929 castigated the traditional street for being 'no more than a trench, a deep cleft, a narrow passage',<sup>61</sup> Georges Candilis in 1962 held a plea to

rétablir la notion 'rue' disparue des réalisations nouvelles. La Chartes d'Athènes élaborée par les C.I.A.M. a détruit la 'rue corridor' périmée, pour la remplacer par de passages, des trajets. Mais la 'fonction rue' reste un élément primordial dans la cité. Il faut retrouver la 'rue-centre linéaire' comme structure de base d'un plan urbain.<sup>62</sup>

#### The Modern Movement and the Road

Though Candilis' plea for a return to the street as the structural principle of the urban realm



might seem to be diametrically opposed to the models of the modern movement as embodied by CIAM and Le Corbusier, at closer inspection the approach of the partnership also represents a certain continuity. Within the modern movement roads were often relied on for their capacity to structure the urban realm. In the post-war period this modern tradition of assigning to the road a structuring role was revived from a complementary perspective. Under the header of 'street', the spatial practices and the experience of the road were put into the centre of attention. Between 1955 and 1965, particularly at the M.I.T. and in the pages of *The Architectural Review*, a notable debate was held on how streets structure spatial practices and the experience of the urban realm. Two special issues of *The Architectural Review*, one titled 'Outrage' (1955) and the other 'Counterattack' (1956), formulated a strong plea against the contamination of the landscape by muddled, uselessly meaningless and antidistinctive elements.<sup>63</sup> (fig. IV.11) The editors Kenneth Browne, Gordon Cullen, Jim Richards and Ian Nairn held a plea against what they called the 'subtopia' phenomenon, combining the words suburb and utopia. They sought to re-install the distinct characteristics of streets that structured the spatial practices, the perception and the experience of the urban realm. They assumed that the elements introduced by the modern world – such as new road systems, advertising and new building typologies – could contribute by intensifying the character of the urban realm.

A second strain of post-war research on streets relied foremost on the name of Kevin Lynch. Lynch published *The Image of the City* in 1960, *Site Planning* in 1962, and the highly appreciated *The View from the Road* in 1964.<sup>64</sup> Throughout his publications Lynch underlines the quality of roads in structuring the experience of the environment. The road and the practice of moving on it by car offered a way to structure the dispersed post-war urban realm.

### **The Stem: Aligning Urbanity**

The re-establishment of the street in the practice of Candilis-Josic-Woods should be situated within the perspective of both understandings of the structural role of the road. Both the structural characteristics of the physical form and the spatial practices and experience of the road played a major role in the partnership's approach. More precisely, it is the tenuous relation between both that was the focus of Candilis-Josic-Woods' attention.<sup>65</sup> This focus on the interrelation between physical form and experience does not distinguish the position of the partnership from the international architectural debate, but merely echoes the perspectives of Gordon Cullen and Kevin Lynch. However, the very definition of the interrelation between form and experience sets the approach of the partnership apart from their Anglo-Saxon contemporaries. Cullen's and Lynch's methods were largely coloured by a phenomenological perspective that regards the relation between form and experience as a faculty of visual perception; of the human eye moving through space. Candilis-Josic-Woods tackled the relation from the much wider cultural framework of everyday spatial practices. Not the eye moving through space, but spatial practices that reflect cultural and



social logics were the point of departure to contemplate the relationship between form and experience.

A notable example of such a broad cultural and social approach to the street was to be found in the realm of the social sciences. The *ethnologie sociale* and its detailed analysis of the composing elements of the street that Chombart de Lauwe brought to the fore in the beginning of the 1950s in *Paris et L'agglomération Parisienne* was an important model for the Candilis-Josic-Woods partnership.<sup>66</sup> Especially the investigations of allotment settlements in the agglomeration of Paris were indicative. Under the heading of *description écologique*, Chombart unfolded a comprehensive analysis of the historical development of the allotment settlements, that took into account both physical and social parameters. He indicated how the different historical extensions of the original development, though composed of different dwelling typologies, are experienced as integral parts of one coherent urban entity. (fig.IV.12) One of the reasons for this coherence is explained under the heading of 'Factors of Unity' (*Facteurs d'Unité*). Chombart demonstrated how in the everyday spatial practices of the inhabitants collective buildings such as schools, cinemas and libraries generate the main street that functions as a spine for the allotment development. He suggests in his diagrams that, though the different collective buildings are not physically interconnected, their very role within everyday practices creates a certain coherence of experience and results in a backbone that structures the urban development.

This understanding of the street as a central figure that is the result of particular relations between spatial practices and entities, reverberates in Candilis-Josic-Woods' approach to the street:

Cette 'rue-centre' qui se construit par les éléments qui la composent: immeubles d'habitation, magasins, marchés, salles de spectacles, édifices de culte, centres sociaux, jardins et parcs . . . a pour rôle d'associer les logements aux sièges des diverses activités de la Cité . . . boulevards, avenues, places, ronds points, squares et jardins, forment l'ossature urbaine qui donne le caractère spécifique à la ville actuelle.<sup>67</sup>

This particular conception of the street not only guided the analysis of the urban realm, but was made operational in the designs of Candilis-Josic-Woods. The most important outcome was the article titled 'Stem', written by Shadrach Woods immediately after the 1959 meeting at Otterlo and published in 1960 in *Architectural Design*.<sup>68</sup>

In his article Woods underlined that the *stem*-concept is in the first place a criticism of the *hard French* urban planning approaches and of their use of the *plan masse* as main planning instrument. This method of outlining the envelopes of buildings and their disposition as a way of planning the urban realm was, according to Woods, contradictory to the practices, rhythms and logics of post-war urban development:

In an urban complex the idea of *plan masse* as an independent, plastic arrangement does not correspond to the basic axiom that every extension to the city is an extension

of the city and cannot be considered as a self-contained unit, isolated by its introspective nature from the rest of society.

It seems clear then that the aesthetic, monumental or symbolic grouping of cells (hence, of families), in the tradition of *La Grande Architecture*, leaves out too many factors of human ecology. It is the wrong tool for the job.<sup>69</sup>

Echoing Chombart's *description écologique*, Woods argued to take into account the 'many factors of human ecology' in urban design. He insisted on the embedment of urban design in real circumstances and pointed out that this involves taking into account new parameters. Underlying Woods rejection of the *plan masse* as an instrument that is incapable of extending the city, lies – as earlier mentioned – a critique of CIAM's neglect of an important parameter of urban planning: modification. As Bruno Fortier pointed out, this idea of modification was short-circuited by modern movement architects:

More than by a rejection of the city, the modern movement has been characterised by the abandoning of the culture of modification which, after the renaissance, was at the base of processes of transformation.<sup>70</sup>

Fortier pointed out that CIAM's neglect of modification was reflected in the static and a final images by which the urban projects were presented at the different meetings. He argues that, though the imagery of CIAM projects often stressed movement and mobility, the underlying planning approach gave ample attention to growth and change.

It is within this perspective of re-introducing a parameter of modification into urban design that Team X's large and relentless attention for change and growth in urban planning should be situated:

The practice of urbanism is chiefly an organizing process, as indeed is the practice of architecture. Urbanism is essentially concerned with organisation through minimal structuring. Urban design is concerned with order within organization. By order we mean the judicious disposition of activities and communications in the form of built or open spaces, in such a way that they function well. The organization we propose must be conceived so as to permit and to encourage order. They must also be dynamic, i.e. adaptable to change and capable of accepting change.<sup>71</sup>

The *stem* article by Woods was an attempt to introduce a dynamic conception of urban design. Under the heading of 'mobility' Woods underlined that a dynamic approach to planning is better adjusted to the rhythms and practices of post-war society:

For architects, mobility has several connotations: in terms of movement it signifies the shift from 2,5 miles per hour to 60, 100, or 500 miles per hour. In terms of time it means the appreciation of fourth dimension, i.e. change on a short time cycle. In terms of economy, it means rapid mass-distribution, consonant with the potentialities of mass-production and mass-consumption. In terms of housing, it means the easy, unquestioning rootlessness of the urban population.

Architects and planners are principally concerned with mobility, in all its connota-

tions.<sup>72</sup>

Woods suggested that urban form in the post-war period be analysed and understood through the multifarious notion of mobility. In his opinion, urban form could not be pinned down in clearly circumscribed envelopes or forms, but rather should respond to a culture of modification, requiring a different form of planning. Surprisingly, the inspiration for this different approach to planning was not sought within a newly devised system, but rather within the history and logic of the European city. In two sketches that accompany the stem article Shadrach Woods seems to suggest that for the partnership the traditional European city fabric – with its density, scale and especially its elements of *longue durée* – figured as a background against which alternative planning strategies for the urban realm were developed. (fig.IV.13)

It was, however, a specific understanding of the historical urban realm that informed Woods' stem-concept. This can be clarified by looking at the work of another scholar of the urban realm who was in close contact with the Team X circles and with Shadrach Woods: social geographer Erwin Antonin Gutkind. After the Second World War, Gutkind came into close contact with the English CIAM contributors, the so-called MARS group to which Alison and Peter Smithson belonged. In the middle of the 1950s Gutkind wrote to the MARS group:

I am glad that at long last the Athens Charter has been recognised as what it is in reality, namely an utterly useless and nonsensical salad of meaningless phrases. It has nothing whatever to do with LIFE, for it neglects the greatest reality, the human beings whom it degrades to functions of the Functions on which it purports Town Planning to consist. . . . I enclose my latest book, *The Expanding Environment*, which I believe contains a discussion of some of the problems which could form the basis for a new Charter.<sup>73</sup>

In his book *The Expanding Environment* of 1953 Erwin Antonin Gutkind unfolded a different perspective on the urban realm by placing *l'homme habitant* central. Gutkind's subject of study was not man as the product of nature or economic forces, but man as the creator of dwellings and landscapes, of his own dwelling environment and his own microcosm. Gutkind investigated the urban and rural landscape as the result of man's practices of dwelling and building. He went in search of structural principles in the relation between the spatial practices of man and the landscape. One of the structuring elements that Gutkind traced within the landscape is the figure of the street. Under the heading of 'Street Villages' Gutkind illustrated that the *tracés* of streets are perennial elements that have structured and guided the spatial practices of dwelling and building and thus urban development throughout time. (fig.IV.14) Gutkind's analysis of *tracés* as elements that structure the spatial practices of the urban realm was a main source of inspiration for Shadrach Woods' stem-concept.

The most suggestive explanation of the principles of the stem-concept is a collage

that was elaborated shortly after the publication of the *stem*-article. (fig.IV.15) The collage reveals the twofold characteristic of the stem. In the bottom left corner aerial photographs of linear urban developments suggest how the stem attempts to recapture the capacity of existing *tracés* to structure urban development. In this part of the collage the stem appears as a device that structures the practices of dwelling and building and their resulting forms.

At the top of the collage a completely different view of the stem can be seen. Here photographs of markets, squares and streets demonstrate how the *stem* is thought of as a figure of social practices. The stem appears here as the locus of collectivity; as a site for meeting, trade and play. The middle part of the collage demonstrates, through a mixed technique of plan and photographic material, how the final goal of the stem concept is the reconciliation of physical and social characteristics. Here it becomes clear that the stem is initially a *tracé* and thus no more than a path. The stem acquires its actual form and span from the alignment of entities that are simultaneously built architectural volumes and collective functions. According to Candilis-Josic-Woods, the very presence of these janus-faced elements defines the essential characteristic of the *Stem*.

It is especially in the middle part of the collage that the similarities of the stem concept and the analysis of the traditional European street by social ethnologists in the early 1950s become clear. Just as in Chombart de Lauwe's historical analyses of the main avenues of Paris (fig.IV.16), the figure of the stem is completely defined by the adjacent architectural volumes that contain collective functions, as another collage of the stem-concept illustrates. (fig.IV.17) The traditional European street, simultaneously epitomizing principles of architectural form, spatial practices and of urban structuring, features as an exemplary figure for the development of the stem concept. The stem concept is an attempt to recapture the simultaneous characteristics of the traditional street in a new concept for urban design. As the Candilis-Josic-Woods collage demonstrates, like the street, the stem is primarily thought of as the thread that holds the basic characteristics of the urban fabric together. The overlay and weave of the different threads result, according to Candilis-Josic-Woods, in a true urban tissue.

### **Caen-Hérouville (France, 1961)**

The principle of the *Stem* is most convincingly elaborated in the competition submission for the extension of the city of Caen (Normandy, France). (fig.IV.18, 19) In 1961 Caen had a population of about 110.000 which was expected to increase at the rate of five or six thousand inhabitants per year for the next ten to fifteen years. The competition brief called for a residential environment for about forty thousand people in an area of three hundred hectares.

In the Caen project the main assignment for Candilis-Josic-Woods was to design an organization principle which could generate and support the eight to ten thousand dwellings needed. Since the increase in population was expected to cover a ten to fifteen year period, it was compulsory to create an organization that could be executed in phases, and

which would be valid at all stages of growth. As a consequence of being phased, the plan had to allow for modification as the programme would naturally change over the relatively long span of development. As Woods pointed out there were

two basic conditions, growth and change, as imperatives of the plan. We needed to discover a minimum structuring device which could be effective for fifteen hundred dwellings but could grow to ten thousand, which could adapt itself to changing conditions, whether these be economic, social or technological, which could be comprehensible to our clients (that they could use it and find their way about in it), and which would allow for adaptation to its physical environment.<sup>74</sup>

The fulfilment of these requirements was not achieved by the proposal of the customary definition of building volumes in a certain lay-out, the so called *plan masse*, but rather by the introduction of a new structuring device:

In this way it is felt that a basic structure may be determined: this structure or *stem* includes all the servants of homes, all the *prolongements du logis*; commercial, cultural, educational, and leisure activities, as well as roads, walkways and services.<sup>75</sup>

As Woods indicated, instead of the *plan masse* the project was conceived around a new basic structure: the *stem*. In Caen, the stem was in the first place a figure that resulted from a clear distinction:

Our first approach was an analysis of the complex. We started working with two families of components, the dwellings and their ancillaries. Or, as Louis Kahn puts it, the served and the servant. Dwellings are served and supported by ancillaries which include educational, cultural, social and commercial activities, as well as roads, paths and services, etc.<sup>76</sup>

Candilis, Josic and Woods based their conception of *stem* on a precise understanding of the interrelation between these two categories of 'components'. As a conceptual plan of the competition project illustrates, the stem is primarily is a product of the various 'ancillary' collective functions, represented in dark. (fig. IV.20). These commercial, cultural, educational and leisure buildings literally define the spatial articulation of the stem. The negative space that results from the disposition of these architectural volumes is, much as a traditional street, the urban space of the Stem. However, by placing mainly collective functions along the stem, the partnership also related its form indirectly to the character of the housing development.

The stem-concept was based on one of the important mutual relations in the urban realm: the relation between the largeness, quantity and character of collective facilities and the size of the housing development. The rapport between a certain amount of dwelling units and a specific spectrum of collective functions (shops, sports and cultural facilities,

administration) – which the social sciences had been analyzing since the early 1950s – was turned into a logic for design. This relationship between collective functions and housing is made into a structuring device of urban development with the concept of *stem*. It is as such that Woods statement should be understood:

The structure of cities lies not in their geometries but in the activities within them. The clearest organization in the housing developments is the linear centre of activities – the Stem.<sup>77</sup>

In the conceptual sketch of the Caen-Hérouville project (fig.IV.20) the stem is given a structuring role vis-à-vis the housing developments. The sketch demonstrates how the ancillary functions define an open vertebral structure that is punctuated by open spaces. Housing blocks can be nested within the openings and in-between spaces of the vertebral spine. The size, character and spacing of the collective functions gives structure to the implantation of the whimsical housing blocks and thus determines the character and density of the urban lay-out to a certain extent. As Woods remarked:

The density of development is controlled by the intensity of activities along the stem.<sup>78</sup>

However, the stem is only one side of a twofold structuring logic. In an attempt to accept the different sorts of 'mobility' that are part of the post-war urban realm, for his concept of the stem Woods relies – besides on the schism between dwellings and ancillary functions – on the partial division between automotive and pedestrian mobility. As he explained about the Caen-Hérouville project:

We tried to reconcile the scales of speed of the automobile and the pedestrian and found that these speeds are, in geometric language, not supplementary but complementary, not parallel but perpendicular. They can only meet at points, never in lines. If the pedestrian is to take the shortest way from one place to another, to go straight as it is his nature to do, then the automobiles must take a longer way; they must go around. Since the normal speed of the auto is fifteen to twenty times that of the pedestrian, the automobile can go around, taking a longer way, while the man on foot goes straight. The inference here is that we can and should apply to private motorized transport (where it exists) the same principle which has always held for any public transport: it goes from one predetermined point to another, along a fixed path, which is not necessarily the shortest one but which relates to the speed of the device.<sup>79</sup>

As the two diagrams for the competition project for Caen-Hérouville illustrate, the urban development is defined as the in-between space of a pedestrian network, that coincides with the stem, and an automotive network. On the one hand

le centre linéaire est le domaine exclusif du piéton, il est desservi par la voiture et il rétabli la rue: fonction primordiale et permanente de l'urbanisme.<sup>80</sup>

Both dwelling entrances and parking spaces are located along this pedestrian network. (fig.IV.24b) A second network for cars (fig.IV.24b) connects the North-West sector of the site, reserved for light industry, to the entrance roads of the different apartments blocks through a peripheral road system. All roads leading into the site terminate in parking lots. There is no traffic through the site. The car is assigned a clear place on the edges of the urban development:

On arrête la voiture à l'endroit où il le faut: les circulations verticales mécaniques sont localisées au points essentiels de l'ensemble.<sup>81</sup>

The pedestrian network at the centre of the site and the automotive network on the periphery define the confines of the urban development. In between both the project evolves:

la synthèse: arrêt-voiture  
parcours piétons  
ascenseurs localisés  
devient génératrice des éléments composants<sup>82</sup>

That Candilis-Josic-Woods' Stem concept for Caen-Hérouville is based on knowledge about traditional street *tracés*, is illustrated by the ample attention for the adjustment of the stem *tracé* to the geographical characteristics of the site. In the same way that in historical cities the *tracés* of streets often obtain a differentiation through the particularities of the landscape, the stem -concept takes advantage of the geographical characteristics of the site to obtain a certain hierarchy. As a detailed plan of the initial stage of the Caen-Hérouville project illustrates (fig. IV.23), the actual situation and layout of the stem are adjusted to the geographical characteristics of the landscape. Both the initially built parts of the stem and the planned *tracés* seem to take maximum advantage of the natural inclination of the site. The different branches of the stem are designed in order to fully experience the hilly landscape. The main parts of the different stems are located at the highest point of the site. The qualities of the landscape are relied upon to diversify the experience of the stem, as well as to introduce a hierarchy into the urban lay-out. This hierarchy is enhanced by locating the parking lots along the main part of the stem in the slope of the existing landscape, so that the main stem overlooks the whole site. (fig.IV.24). As explained before, the housing blocks present themselves as whimsically articulated branches that are grafted onto the stem, in the margins left open by the collective functions. As a sketch of the Caen-Hérouville project illustrates this results in a dense layering of collective and dwelling functions and allows for a continuation of the public domain of the stem in the housing blocks. (fig.IV.20) Just as in the Golden Lane Project (London 1952) designed by Team X contributors Alison and Peter Smithson, the public realm of the stem is continued within the dwelling blocks as so-called 'streets in the air'. These collective and continuous pedestrian galleries, situated on several



levels of the housing blocks, not only serve the entrances to the dwelling units, but continue the public realm of the stem. Hence, the stem concept can be regarded as Candilis-Josic-Woods' attempt to re-introduce into the urban realm a continuum of experience between the public and the private realm, characterized by nuanced and diversified transitions between both realms.

The Caen-Hérouville project clearly shows that the stem-concept represents an attempt to re-capture the structuring role of the traditional street in a new urban design project. An understanding of the urban realm as frame, substance and goal of spatial practices guided this attempt. The first category that the stem relates to is the spatial practice of building. The stem as a vertebral structure of collective functions structures the concrete practices of building, destruction and re-building throughout time. More precisely, it offers a concrete framework within which these practices can unfold. A second category of practices that the stem attempts to structure is the everyday practice of dwelling. The stem attempts to structure the quotidian practices of the urban dweller by offering a continuous and diversified realm that mediates between the private and the public sphere.

#### **Aménagement du Quartier Cuvette Saint-Martin, Fort Lamy (Chad, 1962)**

In the project for the development of the Quartier Cuvette Saint-Martin for Fort Lamy (fig. IV.40), the capital of the young North-African republic of Chad, the planning concept 'from Stem to cluster' was fully elaborated.<sup>83</sup> Fort-Lamy had been the capital of colonial Chad since 1920. The city had played an important role as a military fortress that secured defence and the distribution of arms and provision in the French colonial territories. After the installation of the republic of Chad in 1960, it was decided that Fort-Lamy would remain the capital. However, the urban form of Fort-Lamy, was – as it were – the material reflection of the historical colonial power relations. The city was clearly divided in an African quarter, comprised of courtyard dwellings within a dense urban tissue and a European quarter planned during the French colonial period and consisting of detached housing and public buildings along large avenues. Each of these quarters had its own urban morphology and both were separated by a large *terrain vague*. It is precisely this *terrain vague* that became the subject of a competition in 1961. The competition brief demanded the planning of four districts of about 1200 dwellings that could bridge and reconnect – materially as well as symbolically – the two halves of the city. In the competition proposal the main principle of Stem was simultaneously refined and expanded. Candilis-Josic-Woods once more relied for their answer to this difficult brief on the principle of the Stem that is refined and expanded. In Fort-Lamy the Stem or 'grand rue', defined by its adjacent buildings that house collective activities, represents only one structuring level. (fig. IV.40) To this first structuring axis a second figure of multi-level whimsical buildings is added. Within the building envelope of these buildings the public domain of the Stem is continued as 'streets in the air'. In its turn the public domain of the 'streets in the air' is prolonged in a fine weave of small streets or alleys that structure low-rise patches of urban tissue. The result is a continuous



public realm that gradually becomes more private in character and unfolds within – and connects – the distinct urban environments. (fig.IV.41) Both the differentiation within the public domain and the varying heights of the buildings were believed to introduce a certain hierarchy within the urban realm:

The first stage of an aggregate is represented by the assembling of cells round the street. Several streets leading to one public square form a district . . . the gathering of several districts leads to the notion of an urban scale.<sup>84</sup>

From this quote by Woods it becomes clear that the ‘from Stem to cluster’ principle represents and attempt to re-introduce the generating logic of a historically developed city. Candilis, Josic and Woods intended to re-install the relation between house, street, neighbourhood and city – as well as their particular degrees of privacy and publicity – within the urban design for Fort-Lamy. The partnership underlined that it did not intend to recreate an urban tissue in one simple and immediately realized architectural project, but rather to introduce structuring elements that can support its development. The inspiration for these structuring elements was found in the existing subdivision of the city:

Dans cette proposition – Il ne s’agit pas d’importer une ‘Nouvelle Architecture’ dans un pays de grand bâtisseurs des temps passés. Mais – d’établir un système de lotissement – souple et divisible comportant toute l’infrastructure, permettant le contrôle de la croissance accéléré de la capitale.<sup>85</sup>

In a conceptual drawing of the overall principle, the partnership suggested that the project for the Cuvette Sint-Martin is a continuation of the principles and structure of the existing African urban fabric. (fig.IV.42). This relation to the existing context is especially exemplified in the research on the composition of the urban tissue and its relation to the public realm. Through plans and sections the partnership illustrated how their proposal for a specific parcelling and its relation to the street derived from a detailed investigation of the urban morphology of the African quarter. (fig.IV.43) Particularly the proposed low-rise parts of the development are based on a careful understanding of the inextricable relation of house and street present in the existing urban context:

Ici la notion de voisinage se résume a la notion de mitoyenneté. C’est la continuité de l’assemblage des maisons qui crée l’espace commun public: la RUE.<sup>86</sup>

With the idea of *mitoyenneté*, Candilis, Josic and Woods pointed to the inextricable relationship that exists between the presence of a certain housing typology and the articulation, dimensions and character of the street. With the concept of *mitoyenneté* the partners touched upon one of the important characteristics of the urban fabric: that the public realm of the street obtains its specificity only by virtue of the ‘placing in common’ of the façades of private houses. The street is formed through the continuous alignment of houses and

moreover the typology of the house exists by virtue of its particular situation towards the street. This interrelation is according to Candilis-Josic-Woods one of the essential characteristics of the urban realm that was lost in some of the models that were put forward by CIAM and in some of the post-war suburban developments. Hence, *mitoyenneté* or the interrelation of street and house that existed within the traditional African urban tissue of Fort-Lamy, was brought to the fore as the conceptual centre of the project. It was applied and further elaborated in the Candilis-Josic-Woods proposal for the new quarter. Comparative sections (fig.IV.43) of the existing urban fabric and the proposed development illustrate how the collective realm is conceived as a function of the private realm in both:

**Chaque logement – étant a deux niveaux – constitue une partie de la rue.<sup>87</sup>**

Just as in the traditional city the private and the collective are functions of one-another, in social as well as in architectural terms:

One must not exaggerate the importance of the cell in the collective habitat what reveals the true nature of a society is neither the shape of its cells nor their standing but the relationship between the individual and a collectivity. . . . In our proposal the street tends to be the vital element of a new urban structure. It brings life to the inhabited cells and changes this agglomeration into a living complex.<sup>88</sup>

##### 5. Web: Weaving the Urban

###### Urban Tissue

The interest in the Stem as structuring device can not be disconnected from a new conception of the urban realm that fully entered into the partnerships thinking and projects in the late 1950s. If early projects such as Bagnols-sur-Cèze (1955) addressed the urban realm – at least partially – from an idea of composition, then from the middle of the 1950s another design approach of the urban emerged. Social sciences such as the *ethnologie sociale* that Paul-Henry Chombart de Lauwe and his team brought to the fore in the beginning of the 1950s, were of major importance to the development of this new approach. In his study *Paris et l'agglomération Parisienne: L'espace social dans une grande cite*, Chombart de Lauwe had underlined the complex and diversified character of the urban fabric of traditional European cities.<sup>89</sup> Through the example of *XIIème arrondissement* of Paris the French geographer demonstrated that the traditional European city was the result of a complex weaving of interrelated physical and social entities. By means of detailed road mappings, the different housing developments, shops, garages and other collective services Chombart de Lauwe depicted an urban quarter as a complex and varied urban tissue. (fig.IV.60-63) Besides this, the French sociologist confronted his contemporary analysis with historical maps and data in order to illustrate that the urban realm is not a static artefact, but a structural mesh with the capacity to evolve and change. In his studies the urban fabric appears as an

organization characterized by a strong commonality between its composing parts and by its capacity to transform, adapt and modify. Chombart de Lauwe analyzed the urban tissue as the simultaneous figure of continuity and renewal, of permanence and variation.

A similar understanding of the urban tissue guided the design work of Candilis-Josic-Woods from the middle of the 1950s. The general attention they paid to the overall urban composition that still characterized early urban designs such as that for Bagnols-sur-Cèze, was exchanged for a specific attention to a generative urban tissue:

La composition architecturale cède la place à la recherche d'un tissu générateur du développement, de la mobilité, de la métamorphose et de la croissance.<sup>90</sup>

Not the final creation of an architectural composition, but the installation of a generative tissue was formulated here by Candilis as the task of urban design. The partnership also considered its consideration of the urban tissue as a critique of the theoretical premises that the CIAM Athens Charter had brought to the fore. Numerous verses of the Athens Charter opened, directly or indirectly, a negative perspective on the urban tissue, such as verse number 27 illustrates: 'L'alignement des habitations au long des voies de communications doit être interdit.'<sup>91</sup> Though the actual urban designs of modern movement architects often demonstrate different tendencies, theoretically the Athens Charter represented a plea for the disentanglement of the urban tissue, for the loss of cohesion between its elements and for the autonomy of building and road.<sup>92</sup> From this perspective the strong involvement of Candilis-Josic-Woods and other Team X members with the urban tissue appears as an attempt to counter and re-think this unravelling of the traditional urban tissue into separate elements.

### **Mesh and Infill: Sèvres (1962) and Geneva (1962)**

A strategy for re-conceptualizing the urban tissue metaphor is illustrated in the projects for Sèvres and Geneva of 1962. In both projects Candilis-Josic-Woods proposed to regard the urban tissue as a matter of 'mesh and infill'. If the concept of Stem was aimed at defining a minimal basic spine around which the different urban functions could aggregate, then the projects for Geneva and Sèvres were attempts to contemplate change and growth from a different angle. The historical European urban fabric with its quality to accommodate changing and varying programmes throughout time, functioned as an example here. The way that existing building typologies of European cities have proven to accommodate various and differing programmes throughout time, is taken here as the point of departure from which to contemplate change and growth. In other words, the urban tissue was conceived here as a combination of cells that form a receptive structure that can house changing and altering programmes. Both the Geneva and Sèvres projects were investigations into the possibility to design such a receptive urban structure, into its character and its degree of definition or articulation:

In our opinion it is preferable to avoid the over-articulation of the specific nature of a given building, or the specific functions within a building.<sup>93</sup>

The particular character and the degree of articulation of urban space and how to provide it with a certain margin of freedom and change, is investigated in both projects – both in structural and material terms. Though in Sèvres the programme encompassed the construction of workshops and studios for artists and in Geneva the brief demanded the housing of classrooms and collective areas for a French primary school, the strategy in both projects was rather similar. It encompassed a combination of elements that were minimally defined, yet allowed for large differentiation of in- and outdoor spaces, and of spatial transitions. In both cases the partnership's point of departure was a square structural grid projected onto the site. On this grid a vocabulary of *in situ* concrete elements was developed. The result is a landscape of *béton brut*; a rough structural outline of spaces that can be appropriated, left and re-appropriated.

The project for Sèvres encompassed the design of workshops and studios for about twenty artists from different disciplines. (fig.IV.70-73) The point of departure was a grid folded according to the form and exigencies of the site. On this grid a vocabulary of concrete columns, beams and infill panels generated a rudimentary building mass of three floors. This building mass consists of workshops at the lower levels and of artists studios with large outdoor rooms at the top level. The project brief foresaw that the artists that occupied the spaces would often change and that different artists would work together in various formations at certain moments in time. Against the background of these demands Candilis, Josic and Woods deliberately kept the spatial definitions of the concrete building mass to a minimum. Only vertical circulation and sanitary cores punctuate the concrete landscape. This minimally defined structure, consisting of rough concrete spaces of various size and character, was thought to invite appropriation and re-appropriation. Moreover, the partnership believed that this conception of the urban tissue as a minimal and pre-given structural landscape could accommodate varying and different functions throughout time and thus secure the projects sustainability.

In the project for the Geneva Primary School the minimal definition was not achieved through a logic of posts, beams and infill, but rather through the juxtaposition of similar volumes or receptacles. (fig.IV.74,76) In this project for a small school of six classes, concrete boxes with no specific function were welded into a dense mass of open and closed spaces. These are self-bearing units and thus have no supporting walls or columns within their envelope. The only definitive elements are the vertical and horizontal limits of the boxes. The overall outlook of the project recalls earlier experiments by Dutch architect Herman Hertzberger that were published in the architectural periodical *Forum* with the title 'Threshold and Encounter: The Shape of Transition' in 1959.<sup>94</sup> (fig.IV.75) By stacking match-boxes Hertzberger showed how rows of houses could be given a greater wealth of spatial transitions by shifting their relation to each other and by placing them at an angle. The Geneva project strongly resembles the experiments by Hertzberger and Hardy. It offers a

large differentiation of transitional spaces. On the ground and upper level of the school the spaces in between the boxes with classrooms defines the collective areas. On top of several of the volumes there are 'open-air' extensions to the classrooms or to the playground. At one occasion a cantilevered volume offers a sheltered place for playing and an extension of the interior collective area. (fig. IV.77-78) The result is indeed a diversity of transitional areas, resulting in a rich variety of spatial experiences. The Candilis-Josic-Woods project also radically differs from the Dutch experiments in that it relates the transitional areas to the structurally and semantically empty character of boxes. In the Geneva project the transitional areas are part of a larger understanding of the urban tissue as 'mesh and infill'. Within this logic the transitional areas are valued for their quality to invite appropriation. They are constantly the subject of negotiation. The in-between character of transitional spaces allows them to become part, to connect or to be separate from the adjacent spaces. From this perspective the transitional spaces not only add a certain spatial quality to the project, but also introduce an additional degree of freedom that allows for change, growth and adaptation to different programmes. Candilis-Josic-Woods regarded the in-between space of the Geneva project as a margin that allowed for modification and change.

### **The Web**

Following the configurative experiments and the 'mesh and infill' approach, Shadrach Woods published an important article in 1962 in the avant-garde periodical *Le Carré Bleu* that introduced the partnerships most encompassing structuring concept for the urban realm: the Web. The point of departure for the Web concept was again the investigation of an alternative for the traditional urban tissue. This time, however, this alternative was based on an understanding of the urban realm as a matter of spatial practices. Hence the Web article starts-off as:

Architecture and planning, which are each part of the other, are concerned with the organisation of places and ways for the carrying out of man's activities. The architectural process begins with a way of thinking about organisation in a given place-time, then establishes a system of relationships and, finally, achieves plastic expression.<sup>95</sup>

According to Woods, the activities or spatial practices that define the urban realm had radically changed since the post-war period. Especially the way that spatial practices unfold in space was subject to a major change:

As long as societies were evolving within the limits of perceivable human groupings (villages and towns, classes, castes and sects) so long could architecture operate within the limits of purely visual disciplines. With the breakdown of these limits and as man evolves towards a universal society, the need is felt to discover a clear framework for planning and architecture.<sup>96</sup>

Post-war society amended the very character of the urban realm, according to Shadrach Woods. Especially the definition of centrality within the urban realm altered drastically during the post-war period. If historical city centres were perennial markers of centrality, then in the post-war urban realm centrality became subject to rapid modification and change. Hence the instruments of urban planning for defining centrality had to be revised:

When we predetermine points of maximum intensity – centers – it means that we are freezing a present or projected state of activity and relationship. We perpetuate an environment where some things are central and others are not, without however, any competence for determining which things belong to which category. The future is thus compromised.<sup>97</sup>

The rhythms and practices of post-war society demanded a reframing of the attitudes of urban planning according to Woods. He recognized that in the post-war urban realm, issues such as centrality, which were clearly defined in the historical city, were subject to forces that reach beyond the realm of architecture and urbanism. Instead of preconceiving and clearly delineating zones of centrality and marginality, Woods proposed ‘to set up systems (intellectual frames) that can relate activities’.<sup>98</sup> These systems must additionally have:

The purpose of any putting-together, to create a whole which is greater than the sum of the parts, is only possible if we can guarantee a whole – a total synthetic order of all the functions.<sup>99</sup>

Candilis-Josic-Woods’ concept of the Web was an investigation into the possibility of designing a system that allows for relating different practices and programmes into a continuous patch of urban tissue:

The proposals we have developed are characterized by the fact that the site is occupied in such a way that the various activities of the public and private domains are housed in what amounts to a continuous building.<sup>100</sup>

The linear organization of the Stem was left here in favour of a continuous basis on which the urban can develop:

Point = concentric (static, fixed)  
Line = linear centric (a measure of liberty)  
Web = non-centric initially, poly-centric through use (a fuller measure)<sup>101</sup>

The Web was thought to be a more homogeneous system than the Stem, permitting limitless development of an area and organizing it by a network of circulation and support systems that would unify diverse activities. The Web was intended to provide flexibility in planning for a range of functions over time, thus assuring its own longevity; its very realization is spread out and subject to revision over time.

### **Frankfurt-Römerberg Competition, Frankfurt (Germany, 1963)**

The full span of the Web concept became clear in the competition entry for the reconstruction of Frankfurt-Römerberg in Germany (1963). The project site was an entirely devastated area situated between the Römer (city hall) and the Dom (cathedral) in the city centre of Frankfurt beside the river Main. (fig.IV.83-84) In Frankfurt-Römerberg the brief consisted mainly of the reconstruction of the centre of a historical city centre. However, the programme entailed not only the re-installation of the public and dwelling functions that were part of the site before its destruction, but also the introduction of new functions such as parking garages and large shopping facilities that corresponded to post-war urban realities and aspirations.

For the Candilis-Josic-Woods partnership the Frankfurt-Römerberg project added an extra aspect to their *recherche de la structure urbaine*. In this assignment the problem not only encompassed the structuring of new urban development. It also encompassed an investigation of ways to reconstruct a piece of historical urban tissue and this from the perspective of the new urban realities and practices characteristic of the post-war period. These new realities encompassed both the new time rhythms of mass retail that had entered the urban realm and the infestation of the traditional historical fabric by new spaces – evoked for instance by automotive mobility. Candilis-Josic-Woods' proposal for the historical city centre of Frankfurt was not a clear return to the traditional urban fabric, nor a plea for a radically different type of urban form:

Du centre de Francfort, il ne faut pas faire un musée. Il faut découvrir un système qui permette aux citadins de créer leur milieu physique avec un maximum de facilités et de le faire évoluer au fur et à mesure des besoins.<sup>102</sup>

The competition entry can be generally described as the search for an approach that can grasp the dense urban qualities of the traditional European city, but at the same time take into account the new rhythms and functions characteristic of the post-war period:

Ici, entre ces monuments . . . il convient d'éviter une effusion de formes qui ne peuvent jurer avec leur voisinage. Il ne s'agit pas non plus de dévaluer ce qui existe en l'imitant. Mais il faut loger une telle diversité d'activités que, si chacune devait être considérée séparément, le résultat serait le chaos. Il faut faire de ces divers éléments un tout, un organisme unique.<sup>103</sup>

This janus-faced search was again architecturally condensed into the metaphor of the Web. In Frankfurt the Web is conceptually composed of three elements: decks, *tracés* and open spaces. A five-storey layering of decks is folded in between the Dom, the Römer and other adjacent historical buildings. (fig.IV.85-88) The decks are large structural surfaces that can accommodate buildings and are supported by a coordinate column grid with an



interval of 9 m. As the scale model of the project demonstrates, by situating only three levels of decks above ground-level, the Frankfurt Web is a rather modest building in terms of its height. The decks conform largely to the building height of the adjacent urban tissue. (fig.IV.87) Within its confines the project presents itself as a dense piece of urban fabric that results from the juxtaposition of decks. At regular distances the decks are punctuated by vertical circulation elements (escalators and elevators). The surface of the decks is structured by pedestrian *tracés* or *ways of rights*. These are pronounced through a deviating bay of 4 m in the structural grid of columns that support the decks (following a grid of 36 x 36 m). As a sectional model illustrates, the *tracés* are conceived in this project as true streets. They are not only pathways, but define – just as the traditional street pattern – a grid of technical supplies and services for the project. As in the traditional urban fabric, private buildings can be positioned along the street and connected to these supplies.

To the resulting maze a third element is added: large rectangular incisions that create open spaces that run alternatively over a single or multiple levels. (fig.IV.89) These incisions create differentiation within the grid. They introduce a certain measure within the grid and are as such decisive for the positioning of certain functions at particular places on the decks. Occasionally a whole maze of the grid is preserved so that large functions can be located there. At other places the incisions turn the decks into a denticulate foundation that can only accommodate small scale functions such as housing and workshops. (fig.IV.90-93) Above all, the incisions connect the different levels spatially. They allow for spatial relations and perspectives and turn the decks into a multi-layered landscape. As the wire model of the project illustrates, the overlay of decks, traces and incisions results in an urban landscape that can accommodate the developing urbanity, its changes and growth. As Woods underlined:

This system enabled us to organize the multitude of activities called for, in the program, into a clear comprehensible, adaptable order.<sup>104</sup>

The ground plans illustrate how the Frankfurt Web accommodates a large variety of functions within its confines. The subterranean decks are uninterrupted floors that house parking spaces, delivery roads and quays. In between – and at times even throughout – the other decks a large variety of functions can develop, change and re-develop. The Frankfurt Web accommodates housing, workshops, markets, offices, a cinema, multiple auditoria, a library, a youth centre and several restaurants. The rigid structure of the Web seems to possess the capacity to house a large typological variety of buildings. On the east side of the project modest workshops with housing have a view over the river Main, while on the west side large top-lit halls offer the *Historischen Museum* the necessary exhibition space. (fig.IV.90-91)

The Frankfurt Web was not only meant to accommodate growth and change within its confines, but also to allow for a certain adaptation to the context. Especially the con-



ception of the ground floor illustrates this. (fig.IV.95) A comparative drawing of the project site before destruction and of the proposed development demonstrates that the scale, grain and traces of the medieval urban fabric, present before destruction, are re-interpreted on the ground-level. Woods considered this an attempt: 'to reestablish the same human scale in this place.'<sup>105</sup> However, the re-interpretation of the medieval urban fabric within the confines of the grid not only grants a specific scale to the urban spaces, it also allows for connections from the Frankfurt Web to the neighbouring urban tissue. Sometimes this consists of a moderate re-installation of historical pathways between Römer and Dom on the ground-level of the site, at other places the relation to the context is elaborated as a direct connection.

This is the case with the extension of the existing Saalhof-building at the south-west corner of the project into a large complex for the 'Historisches Museum'. (fig.IV.90-91) In a third instance the Web is used to re-create a context. This is the case with the south extension of the Web towards the river Main. At this south edge of the project, two of the decks bridge the road that runs parallel with the river Main and extend the walkways of the Web onto the quays along the river. As such the relation between the project site and the river is re-installed.<sup>106</sup>

### **Free University Berlin, Berlin (Germany, 1963)**

The structuring concept of the Web was further developed in the design for the Free University Berlin. In 1963 a competition was organized for the design of new buildings for the Freie Universität Berlin located in the suburb of Dahlem. In this area, which largely consisted of detached houses, a building was required for approximately 3.600 students.

For Candilis-Josic-Woods this assignment was a true experiment. On several occasions the partnership had underlined that a university could be considered as a little city and thus as a laboratory for what was at stake in the wider post-war urban realm. In the writings of Candilis-Josic-Woods the separation of the different scientific disciplines within the university is considered as a *pars-pro-toto* of the disconnection or 'atomization' of different spheres of life that was going on within post-war society and urban space. The sketches on the introductory panels for the Berlin Free University competition illustrate this understanding. (fig.IV.96) They underline Candilis-Josic-Woods' conviction that the post-war university and urban realm need a careful re-installation and re-weaving of the different disentangled spheres of life. However, according to the partners this re-entanglement or re-weaving is not sufficient:

The removal of built barriers and the mixing of disciplines is not enough. The group is meaningless when there is no place for the individual. The relationship of group and individual must also be considered.<sup>107</sup>

In the view of Candilis-Josic-Woods the post-war urban realm not only needed a re-weaving of different urban functions, but also a careful reconsideration of the relation between the

private and the public realm. The partnership pointed with this stance to the changing relation between privacy and publicity in the post-war period. French sociologists such as Henri Lefebvre and Edgar Morin had described this new relation with the term *privatization*.<sup>108</sup> Both authors denoted with this term a growing tendency of private retreat or *repliement* that became visible in the post-war period. Hence, for Candilis-Josic-Woods the design of a city or a university was not solely a matter of the design of collective space, but rather of the installation of a basis that can accommodate varied and nuanced relationships between the individual and the collective realm. A university or a city consists of

places for individual – places for group, tranquillity and activity, isolation and exchange.<sup>109</sup>

The compulsory basis for diversified and nuanced relationships between the private and the collective realm could, according to Candilis-Josic-Woods, be summarized in the metaphor of the Web. However, the partnership remained rather cryptic about the actual meaning of the Web metaphor. To fully understand it, it is instructive to look at the 1974 retrospective article by Alison Smithson 'How to recognize and read *MAT-BUILDING*. Mainstream architecture as it developed towards the *mat*-building'. In her text Smithson connects the Web metaphor of the Berlin Free University to a particular conception of urban design that she coins Web-building or *Mat-building*. Smithson wrote:

Mat-building can be said to epitomise the anonymous collective; where the functions come to enrich the fabric, and the individual gains new freedoms of action through a new and shuffled order, based on interconnection, close-knit patterns of association, and possibilities for growth, diminution, and change.<sup>110</sup>

Hence, the Web is an urban planning instrument that allows for the structuring of an urban environment. Alison Smithson made it clear that it is in the first place a matter of weaving a 'fabric' from threads or yarn in which different programmatic elements can evolve. In the design for the Berlin Free University these threads resulted from the overlay of two figures. (fig.IV.98-100) Each of these figures was based on a structuring element of the traditional European urban fabric. The first figure encompasses the *tracés* or ways. This figure is composed of four main parallel pedestrian ways, interconnected by perpendicular secondary ways. (fig.IV.98) The principal ways correspond to the course of the main building services. Several of these grids are juxtaposed and connected and all resulting levels are connected by ramps and escalators. A second figure consists of an outline of open spaces or *espaces ouverts*. This outline takes the form of a whimsical figure of interrelated open spaces, courts and patios that runs throughout the entire project. (fig.IV.99) Candilis-Josic-Woods define as such a continuous figure of in- and outdoor public spaces. According to the partnership the basics of the project are defined once both figures of *tracés* and *espaces ouvertes* have been installed. The overlay of these two figures delineates a basic structure. (fig.IV.100). As an axonometric perspective illustrates, between the threads that are de-

finned by both figures, the different programmatic elements can be woven.(fig.IV.101) In other words, the in-between spaces of both figures are the confines for the spatial practices of dwelling and building. Georges Candilis wrote about the Free University:

Ce tissu provoque l'unité spatiale, les dimensions et les positions des divers champs pédagogiques et clarifie les rapports entre toutes les activités universitaires.<sup>111</sup>

Candilis-Josic-Woods did not consider this approach as specific to the Berlin University but rather as a more general approach:

This scheme is an attempt to discover structuring principles which might be applicable to the organisation of the physical environment.<sup>112</sup>

Besides this first mesh of *tracés* and *open spaces* into which programmatic elements can be woven, the metaphor of the Web refers also to another property of the traditional European urban realm: *density*. As Alison Smithson pointed out, the Free University Berlin belongs to a tradition of post-war projects that attempted to recapture the spatial and functional density of the traditional European city. Smithson tracked back a whole range of post-war building projects that can be said to illustrate this attitude. She named among others Aldo van Eyck's *Pastoor van Ars Church* (1970-73), the *Venice Hospital* project (1964) by Le Corbusier and the Smithsons own project for the *Langside competition* (1958). (fig. IV.102) From this perspective a second paramount meaning of the Web metaphor appears. The Web represents an attempt to think the city beyond a collection of building blocks. It denotes an architectural practice that abandons the model of the city as a compilation of individual buildings and replaces it with a conception of the urban as *mats* that do not present themselves morphologically as free-standing monumental building masses:

They are not the sum of length, height and largeness but rather a two-dimensional dense fabric, where men walks and lives in.<sup>113</sup>

The Web is thus a function of architectural density, which is not, however, understood as a matter of building height or floor-pro-area ratio. With his Web metaphor Woods criticized the vertical density of the urban model of the slab-block and the limited points of connection between the different floors and programmes.<sup>114</sup> For the partnership density, understood as vertical stacking, was yet another example of the modern disentanglement of the urban tissue. Hence, the competition panels for the Free University Berlin depict the model of the skyscraper as the juxtaposition of several 'planes of isolation'.(fig.IV.103) The work of Candilis-Josic-Woods attempts to bring to the fore an alternative that regards density not as a discriminative and numeric characteristic, but rather as a quality of the urban realm. This alternative for vertical density is coined 'a groundscraper' and elaborated in the project for the Free University.<sup>115</sup> In the model of density that Candilis-Josic-Woods strove for with

their Web metaphor density is considered here to be the inextricable weaving of diverse built and functional entities at different scale levels, as it can be perceived in the urban tissue of traditional European cities. It is understood as the capacity to interlace the different architectural and urban elements into a close-knit urban fabric. Alison Smithson recognized this attitude in the *Pastoor van Ars Church* (1970-73) by Aldo van Eyck. (fig.IV.102) Within a traditional closed architectural volume several urban figures are juxtaposed: chapels, sloping street ('via sacra') and meeting place ('crypt')<sup>116</sup> are united in the church's austere architectonic form. Smithson held that the interrelation and weaving of urban figures results in the building's capacity to invite different forms of appropriation and thus different practices. Precisely this 'overlay of patterns of use: the disintegration of rigidity through this meshing . . . make this a nugget of *mat*-architecture'<sup>117</sup> wrote Smithson.

Likewise, the Free University Berlin is a meshing of urban and architectural figures. The superimposition of the layer of *tracès* and the layer of *espaces ouverts* results in an orthogonal tissue. Interior streets, squares and bridges are interlaced with gallery spaces, outdoor patios, terraces and ramps. A primary weave or fabric of infrastructural elements is the result. In between the threads of this primary fabric, a large variety of architectural and programmatic entities can be woven. Auditoria, offices, laboratories and seminar rooms are nested among the primary infrastructural threads. (fig.IV.105-106) The ensuing product is a dense, two-dimensional patch of urban fabric, that stands midway between an architectural building and an urban project.

In her 1974 article Alison Smithson pointed out that this dense overlay of urban and architectural figures is an essential characteristic of the Web concept. According to the English architect the concept epitomizes two apparently different tendencies: one being the move of architecture in the direction of urbanism, the other the increasing importance of the architectural interior. The resulting Mats are hybrids that embody characteristics of both architecture and town planning. Candilis described the strategy that was applied for the Free University Berlin as follows:

Le critère recherché est la qualité de l'ambiance créée bien plus que la valeur en soi des éléments composants. L'essence même de l'idée est la recherche d'une Architecture Urbaine.<sup>118</sup>

With the term *architecture urbaine* Candilis summarized the partnership's search for an approach that regards the urban realm as frame, substance and goal for architecture. He argued that architecture is not a matter of single building projects, but rather that each architectural project should be concerned with delivering a contribution to the collective urban realm.

A last meaning that Candilis-Josic-Woods assigned to the Web metaphor is its character to invite appropriation. This meaning can be clarified through a historical parallel.<sup>119</sup> The definition of architecture through the figure of the Mat is reminiscent of a cardinal text in modern architectural theory: Gottfried Semper's 1860 essay 'Style in the Technical

and Tectonic Arts or Practical Aesthetics'.<sup>120</sup> In this essay Semper stated that building originates with the use of woven fabrics to define social space. For Semper the essential characteristic of these woven fabrics, or Mats, is not the fact that they are placed in space as such, but rather the fact that they 'are the production of space itself, launching the very idea of occupation'.<sup>121</sup> The texture of the woven fabrics, their sensuous play, opens up a space of exchange. The weave produces the very idea of a family that might occupy it.

Candilis-Josic-Woods' metaphor of the Web seems to point to a similar relation between architectural form and appropriation. In Semper's definition of architecture the texture, the weave, of the fabric has a primordial role in the creation of social space because it produces the very idea of a family that might occupy it. The two-dimensional dense fabric of the Web was given a similar paramount role in the theory of Candilis-Josic-Woods. The Web was thought to be an intricate juxtaposition of everyday urban (streets, squares, bridges) and architectural elements, that is: 'lifting the everyday to a poetic level'.<sup>122</sup> The resulting dense 'groundscraper' with its 'close-knit patterns'<sup>123</sup> is thought to produce – as in Semper's example of the woven fabric – a built fabric that invites relentless appropriation and re-appropriation. This faculty to invite appropriation is a crucial theme within the theory of Candilis-Josic-Woods. During the post-war period, when the built environment became in Western Europe increasingly subject to the control of the welfare state and the consumer society, the active participation of inhabitants in their environment was considered of prime importance. As Alison Smithson underlined, dense Webs were not only considered as 'the right living pattern for our way of life, and the equipment that serves it, but also . . . the right symbols to satisfy our present cultural aspirations'.<sup>124</sup> The Web does not symbolize this faculty of appropriation and identification through linguistic preconditions or through the adoption of a certain kind of style, but rather through its very materiality. It is the tissue of the Web, its material of clustered and interrelated spaces that symbolizes the possibility of appropriation. The Web turns out to be a design strategy aimed, through the introduction of density, at establishing a more cultured relationship between modern man and physical space. Candilis, Josic and Woods' conception of the Web as an urban tissue that invites appropriation, illustrates once more the partnership's understanding of built space as a platform for, and the result of, spatial practices.<sup>125</sup> The property to invite appropriation is, with the concept of Web, turned into the main objective of architecture.

In the project for the Free University Berlin this understanding of architecture as accommodator for spatial practices was given extra structural amplitude through the partnership's collaboration with Jean Prouvé. The renowned French engineer elaborated the concept of appropriation further, by conceiving the Free University as a patch of urban tissue that could be constantly re-appropriated. Prouvé therefore installed three prefabricated systems, all finely attuned to one another. The first system is situated at the level of the rough construction of the building. The complete Berlin university project was conceived of as a system of prefabricated elements (limited reinforced concrete floor slabs, steel beams and composite steel columns) that allows for easy replacement and addi-

tion. (fig.IV.109) This first system of prefabricated concrete elements defines the horizontal planes (floors and ceilings) of the project. To this horizontal definition a second system of self-supportive cortens steel elements, so-called 'core-ten' panels, which can be combined to form the façade, is added. (fig.IV.110) Finally, the last system of steel sandwich panels was added to complete the interior vertical definitions of the project. (fig.IV.108).

The introduction of this threefold system of prefabricated elements was strongly related to an idea of appropriation of the university environments by students and professors alike. In the opinion of the architects this project would, just as a traditional piece of urban tissue, constantly be the subject of alteration, destruction and redefinition. The students were seen as the involved public and modern science as the ideal rapidly changing programme, which would propel such a dynamic concept of urban design. This belief in the human involvement with spatial issues turned out to be simultaneously one of the most challenging and most fragile premises of the project. The use of the building turned out slightly different, as main collaborator Manfred Schiedhelm recalled:

During the first two years of the buildings use parts of the main structure, such as the facades and the partitions were extensively altered. Since that time only internal subdivisions have been changed.<sup>126</sup>

Nevertheless, the Free University Berlin stands today as an interesting exercise in re-conceiving a part of the urban tissue through the concept of the Web. In 1974 Candilis summarized the partnership's intentions with the Web in the design for in the Free University Berlin literally as the creation of a 'tissu urbain':

Ce tissu provoque l'unité spatiale, les dimensions et les positions des divers champs pédagogiques et clarifie les rapports entre toutes les activités universitaires. Cette conception crée une Université ouverte dont la structure urbaine doit s'articuler avec son environnement :

- soit pour s'inscrire dans le tissu urbain pré-existant ou le prolonger
- soit pour amorcer le tissu urbain d'un nouvel environnement.

Ce tissu urbain détermine également le réseau des circulations de l'Université en différenciant les circuits publics des circuits internes. Il définit aussi une trame sanitaire pour rationaliser le système de distribution des canalisations d'alimentation et d'évacuation de l'énergie et des télécommunications.<sup>127</sup>

As Alison Smithson pointed out in 1974, Candilis-Josic-Woods considered the Web's capacity to accommodate dissimilar urban entities to be a quality in becoming part of the existing environment:

Part of the patterns of human association, the patterns of use, the patterns of stillness, quiet, noise . . . and the patterns of form.<sup>128</sup>

Hence, the Berlin Mat was considered to be a fraction of the existing urban tissue that introduces large infrastructural platforms as a modern 'carrying order' and simultaneously attempts to reflect the morphological and associational patterns of the existing urban realm. The Web appears thus not as a language of recognisable form, but rather a way of situating oneself in relation to the reality and context of the project. It is an attitude with which to structure the given factors of a project in accordance to the existing patterns.

In the neighbourhood of Berlin Dahlem the integration into the existing context seems, at first sight, to be rather absent. The aerial collage of the project in its context demonstrates a strange body in a suburban environment. (fig.IV.97) Confronted with a suburban environment the Web appears as the antinomy of the existing. However, the initial competition drawings suggest a different reading. They illustrate how the Web of the Berlin Free University relates to the existing structure of roads within the suburban environment, thus reflecting the partnership's attempt to introduce the suburban practices into the confines of the university. However, the most important aspect of the competition panel is the sketch that illustrates how the partnership imagined the Web to extend towards and beyond the suburban neighbourhood of Berlin Dahlem. Candilis-Josic-Woods believed that the suburban development would disappear in the long run and make place for the urban fabric of the Web. From this perspective the harsh projection of the university Web onto the neighbourhood of Berlin Dahlem appears as a critique. The invasion of the two-dimensional dense urban tissue of the Web is the radical alternative for

the traditional detached-building development, inherited from the shameless speculation dating from the industrial revolution at the end of the nineteenth century which caused the urban sprawl at the beginning of our own.<sup>129</sup>



<sup>1</sup> Smithson, Peter, 'The Slow Growth of Another Sensibility: Architecture as Townbuilding', in: Gowan, James (ed.), *A Continuing Experiment. Learning and Teaching at the Architectural Association*, Architectural Press, London, January, 1973, p. 56.

<sup>2</sup> Candilis, Georges, Josic, Alexis and Woods, Shadrach, 'Recherches d'architecture', *L'Architecture d'Aujourd'hui*, no. 115, 1964, p. 14.

<sup>3</sup> The development of social housing had started in the nineteenth century as a response to demographic developments. In the first half of the twentieth century the growth of social housing in France was almost non-existing due to a low-rent policy on the already existing housing stock. For more than two decades the social housing production remained at an extremely poor level. After the Second World War the combination of war-destruction and decades of low-level production forced the state to make up its arrears in the realm of social housing. Housing development became part of a large state-led planning programme aimed at realizing the long-fostered French dream of a fundamental renewal of the social and economical dimensions of society (*Premier Plan de Modernisation et d'Équipement*, Plan Monet, 1946).

<sup>4</sup> See Vayssière, Bruno, *Reconstruction - Déconstruction*, Paris, Picard éditeur, 1988.

<sup>5</sup> For an introduction to this new understanding see: Mengin, Christine, 'La solution des grands ensembles', *Vingtième siècle. Revue d'histoire*, no. 64, October-December 1999, p. 105-111 and 'Le grand ensemble, histoire et devenir', a special issue of *Urbanisme*, no. 322, January-February 2002, pp. 35-80.

<sup>6</sup> Candilis, Georges, 'L'esprit du Plan de masse de l'habitat', *L'Architecture d'Aujourd'hui*, no. 57, December 1954, p. 1.

<sup>7</sup> Cornu, Marcel, *Libérer la ville*, Brussels, Casterman, 1977, p. 60.

<sup>8</sup> Candilis, Georges, 'L'esprit du Plan de masse de l'habitat', *L'Architecture d'Aujourd'hui*, no. 57, December 1954, p. 1.

<sup>9</sup> The interest of the social sciences in the urban condition, its physical characteris-

tics, history and culture coincided with other cultural modes of urban investigation. Since the end of the 1950s, French cinema had worked on new visions of French cities (Paris, Marseille). One of the main characteristics of the *Nouvelle Vague* movies was that they left the aseptic film studios to find the fresh air of the city. In movies by François Truffaut (*Les 400 Coups*, 1958), Agnès Varda (*Cléo de 5 à 7*, 1962) and Jean-Luc Godard (*A Bout de souffle*, 1959) the city and its spaces are explicitly appropriated. The *Nouvelle Vague* movies represented a new sensibility that was among others based on a re-appreciation of the culture of the street. See Higgins, Lynn A., *New Novel, New Wave, New Politics: Fiction and the Representation of History in Post-war France*, Lincoln, University of Nebraska Press, 1996, pp. 4-9, 152-153, 204-205 and Frodon, Jean-Michel, *L'Age moderne du cinéma français: De la Nouvelle Vague à nos jours*, Paris, Flammarion, 1995.

<sup>10</sup> Chombart de Lauwe, Paul-Henry, *Paris et l'agglomération parisienne - Tome I : l'espace social dans une grande cité*, Paris, PUF, 1952, p. 261.

<sup>11</sup> In the tradition of social Catholicism of the periodical *Economie et humanisme*, Chombart de Lauwe and his team became the mouthpiece of the popular urban classes. He described their living conditions and the social and spatial mutations that they experienced. See: Pedrazzini Yves, 'La sociologie urbaine de Paul-Henry Chombart de Lauwe: une pensée en action dans le Sud', *Espaces et Sociétés*, no. 103, 2001, pp. 97-111 and Hayot, Alain, 'Des sciences sociales pour faire la ville', *Les cahiers de la recherche architecturale*, no. 32/33, 1993, pp. 111-122.

<sup>12</sup> Chombart de Lauwe, Paul-Henry *Paris et l'agglomération parisienne- Tome II, Méthodes de recherches pour l'étude d'une grande cité (écologie, statistique, expression graphique)*, *Études comparatives des unités résidentielles*, Paris, PUF, 1952, p. 63.

<sup>13</sup> For their inspiration Chombart de Lauwe and his team turned towards the English *civic survey* movement and the urban anthropology of the Chicago School. In France in the 1950s these approaches to



the urban realm were relatively unknown. See Frey, Jean-Pierre, 'Paul Henry Chombart de Lauwe: la sociologie urbaine entre morphologies et structures', *Espaces et Sociétés*, no. 103, 2001, p. 35.

<sup>14</sup> In this respect Chombart de Lauwe recalled and rehearsed the work of Gaston Bardet who, in 1938, introduced the concept of *morphologie urbaine* in: Bardet, Gaston, 'Un Problème moderne: l'urbanisme', *O.S.B.*, no. 1-5, 1938, pp. 131-138. Before the Second World War Bardet had already proposed detailed and original readings of the social morphology of cities. He brought to the fore psychological and sociological profiles of neighbourhoods, as well as meticulous readings of the distribution of different activities within the urban tissue. See: Frey, Jean Pierre, 'Gaston Bardet: L'espace Sociale d'une pensée urbanistique', *Les Etudes Sociales*, no. 130, 1999, pp. 57-82.

<sup>15</sup> Chombart de Lauwe, Paul-Henry *Paris et l'agglomération parisienne- Tome II, Méthodes de recherches pour l'étude d'une grande cité (écologie, statistique, expression graphique)*, *Etudes comparatives des unités résidentielles*, Paris, PUF, 1952, p. 55.

<sup>16</sup> *Ibid.*, p. 67.

<sup>17</sup> *Ibid.*, p. 67.

<sup>18</sup> *Ibid.*, p. 68.

<sup>19</sup> Frampton, Kenneth, 'Introduction', in: Mumford, Eric, *The CIAM Discourse on Urbanism 1928-1960*, Cambridge (Mass.), MIT Press, 2000, pp. 1-9.

<sup>20</sup> Solà-Morales de, Manuel, 'Another Modern Tradition. From the break of 1930 to the modern urban project', *Lotus*, no. 64, 1989, pp. 6-31.

<sup>21</sup> Candilis, Georges, 'Urbanisme: Repenser le problème', unpublished text, in: Candilis/IFA, (236IFA318/03), pp. 5-6.

<sup>22</sup> *Ibid.*, p. 2.

<sup>23</sup> Sitte, Camillo, *L'art de bâtir les villes, notes et réflexions d'un architecte*, Paris, Renouard, 1918. This is the French translation of Sitte, Camillo, *Der Städtebau nach seinen künstlerischen Grundsätzen*, Vienna, 1889.

<sup>24</sup> Candilis, Georges, 'L'esprit du Plan de masse de l'habitat', *L'Architecture d'Aujourd'hui*, no. 57, December 1954, p. 1.

<sup>25</sup> *Ibid.*

<sup>26</sup> Candilis, Georges, 'L'Urbanisme', unpublished manuscript, in: *Candilis/IFA*, (236IFA318/03), s.d., pp. 1-5.

<sup>27</sup> Choay further defined the culturalist model of urbanism as a practice in which 'La *totalité* (l'agglomération urbaine) l'emporte sur les parties (les individus), et le concept *culturel* de cité sur la notion matérielle de la ville'. See: Choay, Françoise, *L'Urbanisme, utopies et réalités*, Paris, Seuil, 1965, pp. 41-46. A shortened and revised English version can be found in: Choay, Françoise, *The Modern City: Planning in the 19th century*, New York, Georg Braziller, 1969, pp. 102-106.

<sup>28</sup> Choay, Françoise, *L'Urbanisme, utopies et réalités*, Paris, Seuil, 1965, p. 42.

<sup>29</sup> 'Aussi l'espace du modèle culturaliste s'oppose-t-il point par point à celui du modèle progressiste.' Choay, Françoise, *L'Urbanisme, utopies et réalités*, Paris, Seuil, 1965, p. 42.

<sup>30</sup> Choay, Françoise, *L'Urbanisme, utopies et réalités*, Paris, Seuil, 1965, p. 15.

<sup>31</sup> Candilis designated this particular approach of the urban realm as 'une autre tradition moderne'. See Candilis, Georges, 'L'Urbanisme', unpublished manuscript, in: *Candilis/IFA*, (236IFA318/03), s.d., p. 5.

<sup>32</sup> Candilis, Georges, 'L'esprit du Plan de masse de l'habitat', *L'Architecture d'Aujourd'hui*, no. 57, December 1954, p. 5.

<sup>33</sup> Candilis, Georges, 'Les Critères', *L'Architecture d'Aujourd'hui*, no. 73, 1957, p. 12.

<sup>34</sup> Candilis, Georges, 'Urbanisme: Repenser le problème', unpublished text, in: *Candilis/IFA*, (236IFA318/03), p. 2.

<sup>35</sup> Candilis, Georges, 'L'Urbanisme', unpublished text, in: *Candilis/IFA*, (236 IFA 318/08), 1969, p. 1.

<sup>36</sup> In his article 'Problèmes d'Urbanisme' Candilis bases his historical research on the publication of Morini, Mario, *Atlante di Storia dell'Urbanistica*, Milano, Editore Ulrico Hoepli, 1963.

<sup>37</sup> Candilis, Georges, 'L'Urbanisme', unpublished text, in: *Candilis/IFA*, (236 IFA 318/08), 1969, p. 2.

<sup>38</sup> Candillis, Georges, 'Problèmes d'urbanisme, Journée d'étude du mecredi 26 février 1969', minutes of meeting, in: *Candilis/IFA*, (236 IFA 304/01), February

1969, p. 3.

<sup>39</sup> Bakema, Jacob, 'An Emperor's House at Split became a town for 3000 People', *Forum*, no. 2, 1962, pp. 45-78.

<sup>40</sup> In the fifth paragraph of this paper I will return to the concept of the *stem*.

<sup>41</sup> Woods, Shadrach, *The Man in the Street. A Polemic on Urbanism*, Penguin Books, Harmondsworth, 1975, p. 89.

<sup>42</sup> Smithson, Peter, manuscript in: Baker, John (ed.), 'A Smithson File', *Arena. The Architectural Association Journal*, February 1966, p. 21. My italics.

<sup>43</sup> Schimmerling, André, 'Entretiens sur L'Architecture à Royaumont', *Le Carré Bleu*, no. 4, 1962, p. 3.

<sup>44</sup> Scott Brown, Denise, 'Team 10, Perspecta 10, and the Present State of Architectural Theory', *Journal of the American Institute of Planners*, January 1967, pp. 42-50.

<sup>45</sup> Fortier, Bruno, 'The City Without Agglomeration', *Casabella*, no. 599, 1993, p. 69.

<sup>46</sup> See in this respect especially Manfredo Tafuri's analysis of the plan for Algiers by Le Corbusier. Tafuri stresses the separation of the Kasbah and the existing modern city as one of the main characteristics of the project. Tafuri, Manfredo, 'Machine et Mémoire', in: Lucan, Jacques, *Le Corbusier: Une Encyclopédie*, Paris, Centre Georges Pompidou, pp. 460-469.

<sup>47</sup> Candilis, Georges, 'Problèmes d'urbanisme', *L'Architecture d'Aujourd'hui*, no. 118, 1965, p. 1.

<sup>48</sup> Rogers developed these ideas in several articles written during the 1950s. See: Rogers, Ernesto Nathan, 'Il CIAM al museo', *Casabella-Continuità*, no. 232, 1959; Rogers, Ernesto Nathan, 'Continuità', *Casabella-Continuità*, no. 199, 1953, p. 54; Rogers, Ernesto Nathan, 'La responsabilità verso la tradizione', *Casabella-Continuità*, no. 202, 1954.

<sup>49</sup> Gregotti, Vittorio, 'Ernesto Rogers 1909-1969', *Casabella*, no. 557, 1989, p. 2-3, 63.

<sup>50</sup> Landau, Royston, 'The End of CIAM and the Role of the British', *Rassegna*, no. 52, 1992, pp. 40-47.

<sup>51</sup> Newman, Oscar, *CIAM '59 in Otterlo*, New York, Universe Books, 1961, p. 68.

<sup>52</sup> Woods, Shadrach, *The Man in the Street. A Polemic on Urbanism*, Penguin Books, Harmondsworth, 1975, p. 85.

<sup>53</sup> Josic, Alexis, 'Recherche de systèmes urbains', in: *Technique et Architecture*, no. 306, pp. 1-5.

<sup>54</sup> Woods, Shadrach, *The Man in the Street. A Polemic on Urbanism*, Penguin Books, Harmondsworth, 1975, p. 107.

<sup>55</sup> Woods, Shadrach, 'Stem', *Architectural Design*, no. 5, 1960, p. 181.

<sup>56</sup> Woods, Shadrach, 'Words and Pictures-The Planners Dilemma', conference paper for the Akademischer Architektenverein an der Technischen Hochschule Darmstadt, in: *Woods/RISD*, (Box 4), December 1964, pp. 1-11.

<sup>57</sup> Smithson, Peter, 'The Slow Growth of Another Sensibility: Architecture as Townbuilding', in: Gowan, James (ed.), *A Continuing Experiment. Learning and Teaching at the Architectural Association*, London, Architectural Press, January 1973, p. 58.

<sup>58</sup> Candilis, Georges, 'Bangnols sur Cèze', *Architectural Design*, May 1960, p. 182.

<sup>59</sup> Woods, Shadrach, *The Man in the Street. A Polemic on Urbanism*, Penguin Books, Harmondsworth, 1975, p. 78.

<sup>60</sup> Kenneth Frampton placed this search for an alternative 'generic street' by Alison and Peter Smithson and by Candilis-Josic-Woods within the matrix of similar efforts by Maki and Othaka (Prototypical shopping enclaves for Tokyo, 1962) and José Luis Sert (Holyoke Center in Cambridge (Mass.), 1963). See Frampton, Kenneth, 'The Generic Street as a Continuous Built Form', in: Anderson, Stanford, (ed.), *On Streets*, Cambridge (Mass.), MIT Press, 1978, pp. 308-317.

<sup>61</sup> Le Corbusier, 'La Rue', *l'Intransigent*, May 1929. Op cit. Frampton, Kenneth, 'The Generic Street as a Continuous Built Form', in: Anderson, Stanford, (ed.), *On Streets*, Cambridge (Mass.), MIT Press, 1978, p. 309.

<sup>62</sup> Candilis, Georges, 'A la recherche d'une structure urbaine', *L'Architecture d'Aujourd'hui*, no. 101, 1962, p. 51.

<sup>63</sup> Browne, Kenneth (et al.), 'Outrage', *The Architectural Review*, June 1955. Browne, Kenneth (et al.), 'Counterattack', *The Architectural Review*, December 1956.

<sup>64</sup> Lynch, Kevin, *The Image of the City*, Cambridge (Mass.), MIT Press, 1960. Appleyard, Donald, Lynch, Kevin and Myer, John R., *The View From the Road*, Cambridge (Mass.), MIT Press, 1960.

Stem and Web: A different Way of Analysing, Understanding and Conceiving the City in the Work of Candilis Josic Woods

Anderson, Stanford, (ed.), *On Streets*, Cambridge (Mass.), MIT Press, 1978.

<sup>65</sup> This mutual relation between spatial practice and architectural form was discussed earlier as one of the key perspectives to approach the environment in the practice of Candilis-Josic-Woods.

<sup>66</sup> Chombart de Lauwe, Paul-Henry, *Paris et l'agglomération parisienne, Tome II, Méthodes de recherches pour l'étude d'une grande cité (écologie, statistique, expression graphique)*, *Etudes comparatives des unités résidentielles*, Paris, PUF, 1952.

<sup>67</sup> Candilis, Georges, 'A la recherche d'une structure urbaine', *L'Architecture d'Aujourd'hui*, no. 101, 1962, p. 51.

<sup>68</sup> Woods, Shadrach, 'Stem', *Architectural Design*, May, 1960, p. 181. A year later an almost identical version appeared in the avant-garde periodical *Le Carré Bleu*.

<sup>69</sup> Woods, Shadrach, 'Stem', *Architectural Design*, May, 1960, p. 181.

<sup>70</sup> Fortier, Bruno, 'The City Without Agglomeration', *Casabella*, no. 599, 1993, p. 69.

<sup>71</sup> Woods, Shadrach and Pfeufer, Joachim, *Urbanism is Everybody's Business*, Stuttgart, K. Kramer, 1968, s.p.

<sup>72</sup> Woods, Shadrach, 'Stem', *Architectural Design*, May, 1960, p. 181.

<sup>73</sup> Letter from E.A.Gutkind to MARS group, in: C.I.A.M., gta/ETH, (42-JT-13-347), s.d.

<sup>74</sup> Woods, Shadrach, unpublished description of Caen project, in: *Woods/RISD*, (Box 3), s.d., s.p.

<sup>75</sup> Woods, Shadrach, 'Stem', *Architectural Design*, May, 1960, p. 181.

<sup>76</sup> Woods, Shadrach, 'The Stem', unpublished text, in: *Woods/RISD*, (Box 4), s.d., s.p.

<sup>77</sup> Special issue 'Team 10/CIAM 10', *L'Architecture d'Aujourd'hui*, no. 177, January/February 1975, p. 45.

<sup>78</sup> Woods, Shadrach and Pfeufer, Joachim, *Urbanism is Everybody's Business*, Stuttgart, K. Kramer, 1968, s.p.

<sup>79</sup> Woods, Shadrach, unpublished description of Caen project, in: *Woods/RISD*, (Box 3), s.d., s.p.

<sup>80</sup> Joedicke, Jurgen, *Candilis, Josic, Woods. A Decade of Architecture and Urban Design*, Stuttgart, Karl Krämer, 1968, p. 178.

<sup>81</sup> Ibid.

<sup>82</sup> Ibid.

<sup>83</sup> The city was founded as Fort-Lamy by the French in 1900, named after the French commander-in-chief François Joseph Lamy. During a period of civil war in the 1960s the town was occupied by Libyan forces. Its name was changed to Ndjamena in 1973.

<sup>84</sup> Candilis, Georges, Woods Shadrach and Josic, Alexis, 'Fort Lamy', *Le Carré Bleu*, no. 1, 1965, s.p.

<sup>85</sup> 'Bebauung des Stadtzentrums von Fort Lamy (Tschad): Architekten G. Candilis, A. Josic, S. Woods, P. Dony 1962', *Baumeister*, no. 2, 1965, pp. 154-156.

<sup>86</sup> Candilis, Georges, Woods Shadrach and Josic, Alexis, 'Fort Lamy', *Le Carré Bleu*, no. 1, 1965, s.p.

<sup>87</sup> 'Bebauung des Stadtzentrums von Fort Lamy (Tschad): Architekten G.Candilis, A. Josic, S. Woods, P. Dony 1962', *Baumeister*, no. 2, 1965, p. 156.

<sup>88</sup> Candilis, Georges, Woods, Shadrach and Josic, Alexis, 'Fort Lamy', *Le Carré Bleu*, January 1965, s.p.

<sup>89</sup> Chombart de Lauwe, Paul-Henry, *Paris et l'agglomération parisienne -Tome 1 : l'espace social dans une grande cité*, Paris, PUF, 1952, p. 261.

<sup>90</sup> Candilis, Georges, 'Université "Lieu urbain"', unpublished text, 1964, in: *Candilis/IFA*, (318/08), p. 1.

<sup>91</sup> Le Corbusier, *La Charte d'Athènes*, Paris, Editions de Minuit, (1943) 1958.

<sup>92</sup> An interesting study of the urban concepts of the modern movement situated within a larger historical perspective can be found in Castex, Jean, Depaule, Jean-Charles and Panerai, Philippe, *Formes urbaines, de l'îlot à la barre*, Paris, Dunod, 1978.

<sup>93</sup> Ibid.

<sup>94</sup> Hardy, Joop and Hertzberger, Herman, 'Drempel en ontmoeting: de gestalte van het tussen', *Forum*, no. 8, 1959, pp. 249-278.

<sup>95</sup> Woods, Shadrach, 'Web', *Le Carré Bleu*, no. 3, 1962, s.p.

<sup>96</sup> Ibid.

<sup>97</sup> Ibid.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Special issue 'Team 10/CIAM 10', *L'Architecture d'Aujourd'hui*, no. 177, January/February 1975, p. 45.

<sup>101</sup> Woods, Shadrach, 'Web', *Le Carré*

*Bleu*, 1962, s.p.

<sup>102</sup> Candilis, Georges, Josic, Alexis and Woods, Shadrach, 'Recherches d'Architecture', *L'Architecture d'Aujourd'hui*, no. 115, 1964, p. 16

<sup>103</sup> Ibid.

<sup>104</sup> Woods, Shadrach, 'The man in the street. Lectures given in Scandinavia', unpublished text, in: *Woods/RISD*, (box 6), February 1966, pp. 1-24.

<sup>105</sup> Ibid.

<sup>106</sup> All roof terraces are meant to be accessible either to the public or, in the case of dwellings, to the inhabitants. In order to re-establish the link with the river bank, nondescript post-war apartments would be removed. These are replaced by dwellings in the upper levels of the new scheme.

<sup>107</sup> Joedicke, Jurgen, *Candilis, Josic, Woods. A Decade of Architecture and Urban Design*, Stuttgart, Karl Krämer, 1968, p. 208.

<sup>108</sup> Ross, Kristin, *Fast Cars, Clean Bodies. Decolonization and the Reordering of French Culture*, Cambridge (Mass.), MIT Press, 1996.

<sup>109</sup> Joedicke, Jurgen, *Candilis, Josic, Woods. A Decade of Architecture and Urban Design*, Stuttgart, Karl Krämer, 1968, p. 208.

<sup>110</sup> Smithson, Alison, 'How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the *mat*-building', *Architectural Design*, no. 9, 1974, pp. 573-590.

<sup>111</sup> Candilis, Georges, 'Université "lieu urbain"', unpublished text, in: *Candilis/IFA*, (236 IFA 318/08), January 1974, pp. 1-2.

<sup>112</sup> Candilis, Georges, Josic, Alexis and Woods, Shadrach, 'Berlin Free University', *Le Carré Bleu*, no. 1, 1964, p. 2.

<sup>113</sup> Smithson, Alison, 'How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the *mat*-building', *Architectural Design*, no. 9, 1974, p. 576.

<sup>114</sup> It is instructive to note that only a decade later Rem Koolhaas – in his turn – would glorify the vertical density of the skyscraper. Especially the Down Town Athletic Club, with its different floors and programs that are connected by an elevator, is celebrated as a 'fantastic juxtaposition of activities'. Koolhaas, Rem,

*Delirious New York*, Rotterdam, 010 Publishers, 1978, p. 157.

<sup>115</sup> Joedicke, Jurgen, *Candilis, Josic, Woods. A Decade of Architecture and Urban Design*, Stuttgart, Karl Krämer, 1968, p. 208.

<sup>116</sup> See Strauven, Francis, *Aldo Van Eyck. The Shape of Relativity*, Amsterdam, Architectura & Natura Press, 1998.

<sup>117</sup> Alison Smithson, 'How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the *mat*-building', *Architectural Design*, no. 9, 1974, p. 575.

<sup>118</sup> Candilis, Georges, 'Université "Lieu urbain"', unpublished text, in: *Candilis/IFA*, (IFA 318/08), 1974, p. 1.

<sup>119</sup> The Smithsons themselves placed their own work on several occasions in line with several of their historical predecessors. See for instance: Smithson, Peter, 'Three Generations', *Oase*, no. 51, 1999, pp. 82-93.

<sup>120</sup> Semper, Gottfried, 'Style in the Technical and Tectonic Arts or Practical Aesthetics' in: Semper, Gottfried, *The Four Elements of Architecture and Other Writings*, (translated by H.F. Mallgrave and W. Herrmann), New York, Cambridge University Press, 1989, pp. 215-231.

<sup>121</sup> Wigley, Mark, *White Walls Designer Dresses. The Fashioning of Modern Architecture*, Cambridge (Mass.), MIT Press, 1997, p. 11.

<sup>122</sup> Alison Smithson, 'How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the *mat*-building', *Architectural Design*, no. 9, 1974, p. 584.

<sup>123</sup> Ibid, p. 573.

<sup>124</sup> Smithson, Alison and Smithson, Peter, *Ordinariness and Light. Urban theories 1952-1960 and their application in a building project 1963-1970*, Cambridge (Mass.), MIT Press, 1970, p. 161.

<sup>125</sup> I explained this thesis at large in my PhD. Dissertation: Tom Avermaete, *Acculturating the Modern: Candilis-Josic-Woods and the Epistemological Shift in Post-war Architecture and Urbanism*, Leuven, Catholic University Leuven, 2004.

<sup>126</sup> Feld, Gabriel (et al.), *Free University Berlin. Candilis, Josic, Woods, Schiedhelm*, London, AA Publications, 1999, p. 98.

**Stem and Web: A different Way of Analysing, Understanding and Conceiving the City in the Work of Candilis Josic Woods**

<sup>127</sup> Candilis, Georges, 'Université "lieu urbain"', unpublished text, in: *Candilis/IFA*, (236 IFA 318/08), January 1974, pp. 1-2.

<sup>128</sup> Alison Smithson, 'How to recognize and read MAT-BUILDING. Mainstream architecture as it developed towards the *mat*-building', *Architectural Design*, no. 9, 1974, p. 580.

<sup>129</sup> Candilis, Georges, *Planning and Design for Leisure*, Stuttgart, Karl Krämer, 1972, p. 13.



**OVER HET ALLEDAAGSE**

**Vorm en betekenis van enkele naoorlogse stedenbouwkundige ensembles**

Endry van Velzen



'De tegenwoordige mensch wil werkelijkheid, ook wanneer zij lelijk is.'  
Cornelis van Eesteren<sup>1</sup>

'De Schoonheid. Evenmin als het leven sterft de schoonheid. De zeewind waait door onze lelijke kustplaatsen. Het zachte licht koestert onze ontluisterde landschappen. Ochtenden en avondhemel gloren achter de rommelige silhouetten onzer steden en dorpen. Wolken- en sterrenluchten koepelen boven draden, palen, antennes en hekken. Het weidegroen, de voor- en najaarstinten en de glans van het water, zij zijn dezelfde als in de dagen toen Holland zijn grootste schoonheden schiep. (...) Wanneer zal het schone werk onzer handen en hoofden weer als vroeger de schakel zijn tussen ons en al die pracht? Wanneer zal Nederland - ontworsteld aan eigen lelijkheid - zichzelf in innerlijke vrijheid en schoonheid hervinden? Zou ons aller liefde voor wat geweest is zo groot zijn, wanneer wij er niet de zekerheid in zagen, dat het verlorenen in nieuwe gedaante kan worden herwonnen?' Van Tijen & Maaskant, Brinkman & Van den Broek<sup>2</sup>

Onlangs is er een prachtig fotoboek over Amsterdam verschenen, Aarsman's Amsterdam.<sup>3</sup> De stadsbeelden van de fotograaf Hans Aarsman onderscheiden zich nadrukkelijk van de rethorische architectuurfotografie, die momenteel zo in zwang is. Zijn foto's zijn geen sfeervolle schemeropnames waarin de donkere nacht de projectie van duistere verlangens mogelijk maakt, noch delicate detailopnames waarin met behulp van zwart-wit fotografie een hermetisch universum wordt geconstrueerd. De foto's van Aarsman doen in eerste instantie aan als een reeks terloopse indrukken, vergelijkbaar met de beelden die men zelf haast ongemerkt opdoet als men zich willekeurig door de stad beweegt: beelden die niet direct in het oog springen, waarover je niet direct een mening hebt, maar die wel de feitelijkheid van de hedendaagse stad uitmaken. Daarbij is het gehele 'stadslandschap', zowel centrum als periferie, evenwaardig in beeld gebracht. Natuurlijk heeft Aarsman zijn foto's nauwkeurig gecomponeerd. Dankbaar maakt hij bijvoorbeeld gebruik van de grijze Hollandse luchten, die het gehele beeld onderdampelen in een egaliserende belichting. Zijn foto's zijn panoramisch, zonder een picturale anecdote of dominant waaraan het oog zich zou kunnen hechten. Daarmee maakt hij de blik van de beschouwer vrij om zijn alledaagse indrukken opnieuw onder ogen te zien: onverschillig, onrustbarend en met een eigen schoonheid.

Een van de foto's, 'Bullewijk', toont een provisorische parkeerplaats op een verlaten vlakte aan de rand van de stad. De parkeerplaats is half vol. Uit de plaats van de auto's en de her en der neergelegde bielzen is de ratio van de parkeerplaats afleesbaar: de maten, de capaciteit en de richting van de voornaamste bestemmingen, ergens onder het beeldvlak van de foto. Deze foto vertoont frappante overeenkomsten met een beeld van een voetbalveld op een lege zandvlakte dat Cornelis van Eesteren in de twintiger jaren gebruikte tijdens zijn lezingen over stedenbouw. Van Eesteren's commentaar bij het voetbalveld luidde: 'Een der elementen van het moderne stadsplan die volledig begrepen moeten zijn om juist te kunnen worden gesitueerd.'<sup>4</sup> In zekere zin vormt dit citaat de kern van het stedenbouwkundig denken van Van Eesteren. De stad bestaat uit min of meer functioneel bepaalde elementen, die

naar hun aard een eigen vorm hebben. Bedrijfsterreinen hebben immers een andere ratio dan bijvoorbeeld spoorwegen of begraafplaatsen. In het stadsplan zijn deze elementen, als waren het 'ready-mades', bijeengebracht in een compositie, die niet is onderworpen aan een vooropgezette beeldregie. De elementen spreken voor zich. Althans, dat was het idee.

Dit artikel gaat over 'vanzelfsprekendheid' en de wijze waarop die notie doorwerkt in een aantal naoorlogse stedenbouwkundige ensembles, die nadrukkelijk tot de vaak zo verguisde traditie van de moderne stedenbouw behoren: Nagele, Pendrecht, Buikslotermeer, Bijlmermeer en Ommoord. Al deze ensembles hebben met elkaar gemeen dat zij, onder de condities van de wederopbouw en een gecentraliseerd volkshuisvestingsbeleid, min of meer uit één hand en als één project zijn ontworpen, waarbij stedenbouwkundig plan, architectonische uitwerking en beplanting nauw met elkaar samenhangen. De wijze waarop dat gebeurde is echter niet terug te voeren op die condities alleen, noch op de schaalvergroting die gedurende deze periode in het bouwbedrijf optrad. Minstens zo interessant is de ontwikkeling van denkbeelden en modellen voor deze ensembles, waarbij met name twee kwesties van belang zijn: de status van de open ruimte en de 'beeldloze' architectuur.<sup>5</sup> In dat opzicht zijn de ensembles internationaal gezien uniek.

#### **Status van de open ruimte**

Rietveld vat in een toelichting op het plan voor Nagele (1948-53) de bedoeling van de ontwerpers kort maar krachtig samen als hij stelt: 'Getracht is het mechaniek van een dorp beeldend te gebruiken en bewust te maken hoe een dorp in elkaar zit.'<sup>6</sup> In het plan is de hand van Van Eesteren duidelijk te herkennen. Uit het programma voor het kleine landarbeidersdorp is een keur aan stedenbouwkundige elementen afgeleid, die in een nauwkeurige compositie bijeen gebracht zijn. De compositie reguleert de betrekkingen tussen de elementen en verankert het dorp in de structuur van de polder. Een betekenisvol moment is de kruising tussen de doorgaande weg en de lange poldersloot, waar vrijwel alle elementen samenkomen en waar bovendien het verenigingsgebouw is gesitueerd. Terzijde van dit punt ligt een grote open ruimte met daar om heen de woningen. Deze twee elementen, het centrum en het woongebied, bleken tijdens de planvorming het minst 'vanzelfsprekend' te zijn, getuige de verschillende varianten.<sup>7</sup> Dat is niet zo verwonderlijk. Een woongebied en zeker zo iets als een centrum zijn 'weke' functies vergeleken met bijvoorbeeld een autoweg. De ratio van deze elementen is veel moeilijker op voorhand te herleiden tot een eenduidige vorm. Hooguit is er iets te zeggen over de ingrediënten, die min of meer typologisch bepaald kunnen zijn: een rij eengezinswoningen, een kerk, een school. Maar als de hoedanigheid van de ingrediënten ook nog op losse schroeven wordt gezet, dan verdwijnt ieder houvast. Zover zijn we voorlopig echter nog niet.

De kiem van het gebrek aan 'vanzelfsprekendheid' ligt in de emancipatie van de massawoningbouw als zelfstandige architectonische opgave. Door de institutionalisering van de condities waaronder grote hoeveelheden kleine en goedkope woningen tot stand kwamen (stichting van woningbouwverenigingen, wetgeving, subsidieregelingen enzovoorts),

werd een bom gelegd onder de scheiding tussen stedbouw en architectuur die in de negentiende eeuw gangbaar was.<sup>8</sup> De springstof was de status van de open ruimte, die deel uitmaakt van de verzameling woningen. Strikt genomen behoort die open ruimte tot het project, zoals een hof bij een gebouw, en zou dus privaat zijn. Ingewikkeld wordt het echter als de private partij ten dele samenvalt met het openbare lichaam door de overlap van de institutionele kaders. Wat ontstond was een architectonische stedbouw, een stedbouwkundige architectuur, bijvoorbeeld Berlage's Amsterdam-Zuid of de tuindorpen aan de andere kant van het IJ.<sup>9</sup> In beide gevallen vond een kolonialisatie van de open ruimte plaats. Zowel het onbestemde binnenterrein als de anonieme straat uit de negentiende eeuwse speculatie-bouw werden geactiveerd ten dienste van het wonen en een verondersteld gemeenschappelijk leven, een soort centrum. De prijs daarvoor was het verlies van 'vanzelfsprekendheid' van juist die traditionele stedbouwkundige ruimten als straat, binnenterrein, plein enzovoorts!

Bernardo Secchi legt de vinger op de tere plek, als hij voorstelt om de Moderne Beweging te herinterpreteren als een nauwgezette exploratie van een nieuw ruimtegebruik en te begrijpen: 'hoe de ruimte "tussen de dingen" is ontworpen, gevuld met functies, rolpatronen en betekenissen; hoe, sinds het negentiende eeuwse idee van stedelijke continuïteit had afgedaan, er een idee ontstond van relaties: tussen herhaling en verschil en hun betekenis, tussen interieur en exterieur, tussen gesloten en open, tussen publiek en privaat, tussen individu en collectief en hun respectievelijke rollen. Dit alles bracht een nieuw vocabulair, grammatica en syntaxis voor ruimten in woongebieden voort; hier werd getracht een nieuw idee van het sociale te ontwikkelen.'<sup>10</sup>

De vorm en betekenis van het wonen en het centrum, niet voor niets zijn dit de vragen die voortdurend terug komen en bijvoorbeeld ook de naoorlogse congressen van de CIAM beheersen. In zekere zin zijn de voornaamste hypothesen voor een nieuw ruimtegebruik in het interbellum ontwikkeld. Het wonen, dat wil zeggen het woningtype en de verkavelingsvorm, wordt geïdentificeerd met het sociale, het leven van alledag dat een plaats moeten hebben. Zo is bijvoorbeeld de compositie van Westhausen (Frankfurt, 1929) gestructureerd door een mathematiek van privé-tuinen, toegangspaden, droogrekken, vuilnisverzamelplaatsen, zandbakken enzovoorts. Ten aanzien van het centrum vindt een verbinding plaats tussen collectieve voorzieningen op het vlak van educatie en gemeenschapsvorming en die op het vlak van recreatie en ontspanning. Zo zijn bijvoorbeeld de scholen in Westhausen, Praunheim en Römerstadt (Frankfurt, 1925-31) aan of in het Nidda-dal gesitueerd, een grote open ruimte die gedacht was als een 'volkspark' met natuurgebieden, strandbaden, sportterreinen, volkstuinten en tuinderijen. De verbinding tussen collectieve en recreatieve voorzieningen is van eminent belang, omdat daarmee de centra in de periferie een eigen gestalte krijgen ten opzichte van de historische kern. De wijken rond het Nidda-dal hebben dan ook geen 'pleinen' als concentratiepunten van het openbare leven en centrum van de compositie. Er vindt als het ware een schaalvergroting plaats waarin het gehele woongebied de begrenzing vormt van een nieuw soort plein, het volkspark.

Ook in het Algemeen Uitbreidingsplan van Amsterdam (1935) werd uitgegaan van een dergelijk ruimtegebruik, waarin het wonen de rand is van grote groene centra.<sup>11</sup>

Het ruimtegebruik is nauw verbonden met de grondexploitatie. Dit is de achilleshiel van de moderne stedenbouw. De eis om tot een sluitende grondexploitatie te komen is van grote invloed op de te realiseren woningdichtheid en daarmee op de aard van het wonen: 'hoog' of 'laag'. Het verschil in ruimtegebruik bij laagbouw, grondgebonden woningen - meestal eengezinswoningen, of hoogbouw, gestapelde bouw tot vier lagen, is evident en ingrijpend. Bij laagbouw is het ruimtegebruik over het algemeen geprivatiseerd middels tuinen grenzend aan de woningen. Bij gestapelde bouw ligt dat veel minder voor de hand en komt de vraag naar de status van de open ruimte pregnant naar voren. Hoewel bij stadsuitbreiding eengezinswoningen vrijwel altijd de voorkeur genoten, was vaak toch een flinke hoeveelheid gestapelde bouw noodzakelijk om de begroting rond te krijgen. De term 'gemengde bebouwing' deed zijn intrede.<sup>12</sup>

#### Veld

Een belangrijke stap in de gedachtenvorming over de wijze waarop de gemengde bebouwing tot stand kon komen, werd gezet met de studie Woonmogelijkheden in het Nieuwe Rotterdam (1941). De auteurs, W. van Tijen en J.H. van den Broek met hun compagnons, presenteerden hun studie nadrukkelijk als een onderzoek naar 'woonverkaveling' en 'woningvormen': 'Zij (de studie) houdt zich als zodanig met twee onderwerpen bezig: a. situatie, b. woningtypes. Een situatie heeft een zekere algemene geldigheid. Zij kan worden verwezenlijkt met elke uitvoering van de geprojecteerde bebouwingswijzen. Zij is op zichzelf geheel onafhankelijk van de te benutten woningtypes. Woningtypes op zichzelf zijn omgekeerd geheel onafhankelijk van de situatie, waarin zij kunnen worden gerealiseerd. Het enige, wat men van situatie en types gezamenlijk kan zeggen, is dat zij het meest harmonieuze geheel zullen vormen, wanneer zij uit één gedachtengang zijn voortgekomen. Van de gedachtengang, die uitgangspunt geweest is bij deze studie, kunnen enkele punten naar voren worden gebracht. Het besef van diepgaande verschillen tussen de bewoners, verschillen in leeftijd, behoeften, wensen, voorkeur en verlangens en in sociaal en cultureel peil is een dezer punten geweest. Een woonwijk behoort hiér geschikt te zijn voor arbeiders, dáár voor de kleine burger en intellectueel, hiér voor het gezin, dáár voor de alleenwonende; zij moet plaats bieden zowel voor het kind als voor de bejaarde en voor de volwassene. (...) Op deze wijze kan de natuurlijke innerlijke levendigheid van het gegeven tot uiting worden gebracht, wat een rijkdom betekent, die tot dusver maar al te vaak door de eenvormigheid der woonvoorzieningen werd verstikt. (...) Verscheidenheid in wezen veroorzake verscheidenheid in vorm, verscheidenheid in bouwhoogte. (...) Voorgestaan wordt hier een oplossing, waarbij de woningverschillen, die hun oorzaak in de gezinsvorm vinden, tot een zo levendig mogelijk geheel dooreengevlochten zijn. (...) Eerst door het tot uitdrukking brengen van de veelzijdigheid der behoeften ontstaat die levendigheid, die een menselijker basis is voor een schoon stadsbeeld dan een bedachte monumentaliteit.'<sup>13</sup>

In het bovenstaande citaat komen twee gedachten terug, die eerder besproken zijn: de wens om woning en verkaveling in één hand te ontwikkelen en de mogelijkheid om juist de verscheidenheid van het sociale te laten spreken in een gemengde bebouwing als nieuw en 'waarachtig' stadsbeeld. In de studie werd de open bebouwingswijze uit het interbellum echter genuanceerd benaderd. Men waardeerde, omwille van een stedelijke woonwijk, de geslotenheid van het bouwblok en de sociale betekenis van de straat.<sup>14</sup> Voor de volkswoningbouw werd een verkavelingsfiguur voorgesteld, die het midden houdt tussen strokenbouw en een gesloten bouwblok. In die verkavelingsfiguur zijn twee rijen etagewoningen, een rij bejaardenwoningen en enkele garages zodanig samengebracht, dat er een min of meer gesloten randbebouwing ontstaat. Dit nieuwe 'bouwblok' is om twee redenen een gouden greep: het biedt een vorm om de verschillende elementen structureel in een gemengde bebouwing op te nemen en kan bovendien dienen als beginterm voor de compositie van een groter geheel.

De grote compositorische waarde van de nieuwe verkavelingsfiguur, ook wel 'wooneenheid' of 'stempel' genoemd, blijkt uit de plannen voor Pendrecht (1948-53). Opvallend zijn de onnavolgbare verschillen in de schijnbaar willekeurig opeenvolgende verkavelingsvarianten die door Stam-Beese en anderen zijn getekend.<sup>15</sup> Dat veranderde echter volledig, zodra de wooneenheid in de schetsen opdook. De 'weke' compositie van de wijk kreeg opeens een ongekeerde stevigheid door de wijze waarop de wooneenheid als vormmotief is herhaald. Op zich zijn zowel het vormmotief als de wijze van herhaling arbitrair, maar eenmaal aangenomen en consequent toegepast, brengen zij een ordening met een eigen logica voort. In compositorisch opzicht ontstaat een continu veld, vergelijkbaar met de doorgeweven motieven van een perzisch tapijt. Door de vorm van de herhaling verliest de wooneenheid bovendien haar objectmatig karakter en komt de nadruk te liggen op de verschillende open ruimten die door spiegeling en ritmering ontstaan. Deze open ruimten zijn gelijkmatig over het veld verdeeld en verbonden met verschillende aspecten van het alledaagse leven: een verkeersstraat, een speelstraat, een binnenterrein met gemeenschappelijke tuin, een singel met winkels enzovoorts.

Stam-Beese verwoordde de verbinding van het sociale en de vorm, en de esthetische consequenties daarvan, als volgt: 'In eerste instantie werd niet naar een incidentele esthetische oplossing gestreefd, maar de structuur van een maatschappelijke constellatie zelf als vormgevend element gebruikt. (...) Willens en wetens is er dus van afgezien om een zinledige wisselvalligheid naar uiterlijke vorm tot stand te brengen, er op vertrouwend dat een innerlijke sociale verscheidenheid der woongroepen voldoende sterk naar voren zal komen en zich zal manifesteren in het gebruik van de woningen en de gemeenschappelijke tuin, in de activiteiten der bewoners en hun onderlinge verhoudingen, zodat hierdoor de ogenschijnlijke gelijkheid en monotonie te niet gedaan zal worden. Sterker en bewuster dan bij een tot nu toe gehanteerde verkaveling is in het plan Pendrecht de nadruk gelegd op de samenhang tussen bebouwde en onbebouwde ruimte, tussen woning en gemeenschappelijk of openbaar groen, tussen woning en straatruimte.'<sup>16</sup>

Architecten hadden altijd al oog voor de esthetische eigenschappen van massawoningbouw. De repetitie van gelijke elementen werd gezien als een stijlvormende kracht voor een nieuw stadsbeeld, dat de pluriformiteit in de verschijningsvorm van de negentiende eeuwse stad zou kunnen overstijgen. Uit het aangehaalde citaat van Stam-Beese spreekt eveneens een dergelijk esthetisch bewustzijn, maar eerder dan de 'positieve', representatieve mogelijkheden te benadrukken, worden 'negatieve' kenmerken als gelijkheid en monotonie genoemd. De herhaling dient er niet toe om een monumentaal stadsbeeld te construeren, maar juist om dat stadsbeeld te neutraliseren in een soort 'negatieve' stijl. De taal van het beeld was besmet, en bovendien te vaak gebruikt om de werkelijkheid te verhullen.<sup>17</sup> Als esthetisch procédé is dat vergelijkbaar met bijvoorbeeld het werk van Andy Warhol, waarin de picturale en anecdotische kwaliteit van het enkele beeld door strenge herhaling vervaagt tot een nieuw, 'voorstellingsloos' beeld.<sup>18</sup> Ook was er affiniteit met de concrete kunst van bijvoorbeeld R.P. Lohse, waarin de picturale elementen geen representatieve betekenis hebben, maar een rol spelen in de structurele ordening van het beeld.<sup>19</sup> De concrete, 'beeldloze' architectuur van Pendrecht, maar ook die van Nagele, Buikslotermeer, Bijlmermeer of Ommoord, is niets meer dan het zinnebeeld van zich zelf. De 'taal' van deze architectuur wordt ervaren in het dagelijks gebruik, met name dat van de open ruimte. De verscheidenheid ontstaat als het ware vanzelf door het verglijden van de dag, de wolkenluchten en sterrenhemels, de wisseling van de seizoenen. Vanuit dit perspectief is ook de positieve houding ten aanzien van de grootschalige, geïndustrialiseerde bouw van Ommoord of de Bijlmer te begrijpen. De bouwvoor, inhaerent aan deze producten, levert automatisch een neutrale esthetiek op.<sup>20</sup>

Centrum

Hoe zit het nu met het centrum? In Nagele is dit een grote open ruimte, omringd door een woongebied. Deze centrale ruimte, die al in de eerste schetsen opdook, was aanvankelijk gevuld met gebouwen voor voorzieningen, sportterreinen, boomgroepen enzovoorts. In de laatste voorstellen is de ruimte leeg. Niet alleen was een deel van de voorzieningen inmiddels elders gesitueerd, ook de overgebleven scholen en kerken zijn nu dicht tegen de ringweg geplaatst. Enkele bomenrijen aan de rand begrenzen een uitgestrekt grasveld, vergelijkbaar met de 'greens' in sommige Engelse steden. In die enorme leegte ligt de bajonet-vormige verspringing van de poldersloot, waardoor in compositorisch opzicht de centrale ruimte van het dorp benadrukt en ingeschreven werd in de polder. Met de immer aanwezige hemelkoepel zijn dit de ingrediënten van het centrum: grasveld, poldersloot en wolkenlucht. Doodgewone elementen, die door hun 'setting' een haast metafysische betekenis krijgen, een soort transcendentie van het alledaagse - maar natuurlijk uiterst kwetsbaar.<sup>21</sup>

Hoewel Pendrecht in vele opzichten onvergelijkbaar is met Nagele, zijn er ten aanzien van de relatie tussen het wonen en het centrum en de aard van dat centrum opmerkelijke overeenkomsten. Ook in Pendrecht is het wonen als het ware om het centrum heen geplooid en bestaat het centrum uit alledaagse elementen als sloten, wegen, groenstroken en een wijdlopieg plein die met enkele hoge woongebouwen in een nauwkeurige compositie zijn



samengebracht. Opvallend in die compositie is dat de T van ontsluitingswegen verschoven ligt ten opzichte van het kruis van sloten en dat het plein daar precies tussen ligt. Het plein ligt ook precies tussen de twee groenstroken. De noordelijke groenstrook met voorzieningen legt de verbinding met de stad; de zuidelijke, die aanvankelijk open was gedacht, laat het idee van het 'ongerepte' landschap tot diep in de wijk binnendringen. Het plein is dus het brandpunt van de compositie, een soort condensatiepunt waar de stad overgaat in het landschap: voor het plein de stedse drukte van verkeer en voorzieningen, achter het plein de landelijke rust van de singels. In die zin is het architectonisch motief van de compositie van het centrum zonder meer klassiek te noemen. In een stadsas ligt een grote open ruimte in relatie tot het landschap. De verbreding van het plein langs het water versterkt slechts het karakter van een 'balkon op het landschap'. Hoewel een dergelijk architectonisch motief een lange traditie kent, is de vormgeving daarvan in Pendrecht geenszins monumentaal. Eerder ligt het motief besloten in de structuur van de onderlinge betrekkingen van de samenstellende elementen. Daardoor is de betekenis ervan misschien in eerste instantie minder zichtbaar; zoals de naam van het plein, Plein 53, pas in tweede instantie (als men zich realiseert dat alle andere straatnamen verwijzen naar dorpen in Zeeland) herinnert aan de verschrikkingen van de Watersnoodramp.<sup>22</sup>

Zowel het wijdlopige plein in Pendrecht als het lege grasveld in Nagele zijn programmaloos. Van Eesteren stelde dat het grasveld de mogelijkheid bood 'om rond te slenteren, met de handen in de zakken, en te doen wat men wil.' Stam-Beese schreef dat 'de ruime afmeting van het plein een gebruik voor alle mogelijke doeleinden waarborgt.'<sup>23</sup> De vraag naar de betekenis van het centrum kwam uitvoerig aan de orde op het achtste CIAM congres (1951), dat de veelzeggende titel kreeg: 'The Heart of the City'. Ernesto Rogers, een van de redacteuren van de congrespublicatie, bracht het idee van het centrum als volgt onder woorden. 'Het Hart kan niet het zaken centrum zijn, zoals in kapitalistische organisaties, noch de fabriek, symbool van een proletarische samenleving. Het Hart van de stad moet het centrum zijn van meer extensieve menselijke relaties: conversatie, discussie, het winkelen, flirten, flaneren, en het onbetaalbare "dolce far niente" in zijn beste betekenis.'<sup>24</sup> De globaliteit van de ongeprogrammeerde 'vrije tijd' staat in opmerkelijk contrast met de programmatische bepaaldheid van de volksparken in Frankfurt of de groengebieden in het AUP.<sup>25</sup> Wat echter constant blijft in de gedachtenvorming over het centrum, is de associatie met het landschap. 'Het landschap van het centrum ("core") is in essentie een openbaar ("civic") landschap. Het is een plaats waar de uitdrukking van de burgerlijke openbaarheid zijn hoogtepunt vindt. Dit openbare landschap is een voortbrengsel van de mens en als zodanig tegengesteld aan het natuurlijke landschap. In sommige gevallen kunnen natuurlijke elementen, zelfs bomen, misplaatst zijn.' Dat 'openbare landschap' zou autovrij en een 'helder en scherp omlijnd ruimtelijk ontwerp' moeten zijn.<sup>26</sup>

Men ziet het achtste CIAM congres vaak als omslagpunt in de denkbeelden over de rol van het sociale. In vele voordrachten maakte een deductieve betoogtrant plaats voor een inductieve. Het lege centrum was bij uitstek een veld voor projectie. De toeschouwer zou



tot participatie moeten worden gestimuleerd, om zo in de (spontane) actie zijn eigen identiteit én die van de gemeenschap te verwerkelijken. Soortgelijke ideeën werden ook door kunstenaarsgroepen als de Lettristische Internationale, de Internationale Beweging voor een Imaginistisch Bauhaus en de Internationaal Situationisten ontwikkeld, en zijn elders uitvoerig beschreven.<sup>27</sup> Los van alle bevlogen rethoriek is de kwestie in architectonisch opzicht eigenlijk pijnlijk eenvoudig. In de moderne, democratische welvaartsstaat bleek het sociale zo moeilijk algemeen gesteld te kunnen worden, dat het slechts in zeer globale termen te verbinden is met een (stede)bouwkundige structuur. De grondslag voor een betekenisvolle ordening werd daarmee gereduceerd tot de extreme polariteit privaat - collectief. En toch moest er gebouwd worden.

#### Veld én centrum

In de loop der vijftiger jaren groeide het onbehagen over de gemengde bebouwing en met name over de obligate portiek-etagewoningen in blokken van drie of vier bouwlagen. Zowel de verkavelingsvorm als het woningtype zelf werden radicaal ter discussie gesteld. Van belang was het rapport van de Commissie Hoogbouw-Laagbouw, Laag of hoog bouwen en wonen? De keuze van de woonvorm naar het aantal bouwlagen (1961).<sup>28</sup> Mede onder invloed van een strenge overdenking van de eerder genoemde polariteit privaat - collectief, achtte men 'halfslachtige' oplossingen, zoals het meergezinshuis, ongepast. Goed geoutilleerde hoogbouw met ruime woningen, onbelemmerd uitzicht en gemeenschappelijke voorzieningen of patio-woningen met optimale privacy leken meer recht te doen aan de eigentijdse omstandigheden en genoten dan ook warme belangstelling. Daarnaast waren juist de condities van het meergezinshuis - een behoorlijke dichtheid en een concrete spanning tussen individu en collectief - voor jonge architecten zoals bijvoorbeeld Piet Blom aanleiding tot talloze experimenten naar 'nieuwe woonvormen'. In de resultaten van deze experimenten, zoals bijvoorbeeld de clusters van Piet Blom, zijn woning en verkaveling zo onlosmakelijk samengebracht, dat iedere typologische bepaling als het ware overstegen is. Deze experimenten hadden echter nauwelijks effect op de plannen voor Buikslotermeer, de Bijlmer of Ommoord. Veeleer speelden zij een rol in de reactie daarop.<sup>29</sup>

Experiment was ook nadrukkelijk de bedoeling bij de studieopdracht voor de woonwijk Buikslotermeer (1963), die in meerdere opzichten gezien kan worden als opmaat voor de Bijlmer.<sup>30</sup> Naast het inmiddels bekende pleidooi voor de samenhang tussen architectuur en stedenbouw, was de Buikslotermeer-studie vooral gericht op de integratie van de verschillende aspecten van het wonen: de privacy van de woning, de ontsluitingsvorm en de verscheidenheid van de 'woonsoorten'. De afzonderlijke uitdrukking van de verschillende woningtypen is als het ware geneutraliseerd door ze allemaal op te nemen in één bebouwingsvorm. Voor de ontsluiting zijn doorlopende 'galerijstraten' per drie verdiepingen bedacht, die eveneens in de bebouwingsvorm zijn opgenomen en die de verschillende bouwdelen tot één groot complex samenbinden. Dat complex is een regelmatige 'stedenbouwkundige' structuur van hofachtige ruimten.

De term 'galerijstraat' is doelbewust gekozen. Terwijl bij de woningen een optimale privacy voorop stond, werd aan de collectieve ontsluitingsstructuur een openbare betekenis toegekend, namelijk die van een straat. Als voorbeeld van een dergelijke ontsluitingsstructuur werd het blok van Brinkman in Spangen (1919-21) aangehaald, maar eigenlijk zou een verwijzing naar Engelse voorbeelden, zoals de op het negende CIAM congres gepresenteerde Golden Lane studies van de Smithsons (1951-52) of het toen juist gereedgekomen Park Hill complex in Sheffield (1957-65), meer voor de hand hebben gelegen. De structuur van deze projecten is gebaseerd op een soort 'genetische manipulatie' van traditionele typologieën en stedelijke modellen. Op dit procédé zijn ook een aantal karakteristieken van het ontwerp voor de Bijlmer gebaseerd. Zo gaven de supervisors aan dat 'de "tertiaire autoweg" is omgevormd tot parkeergarage; het troittoir langs de tertiaire autoweg is daarvan losgekoppeld en zal een nieuwe gestalte dienen te krijgen in de inrichtingen voor het huisvesten (afgekort voorlopig I.H.V.)'. Naast de 'inrichtingen voor het huisvesten' onderscheidde men 'inrichtingen voor het collectief gebruik (afgekort voorlopig I.C.G.)'. Met die afkortingen werd iedere typologische bepaling ten aanzien van het wonen en het centrum op losse schroeven gezet.<sup>31</sup>

Evenals in de aangehaalde Engelse voorbeelden vloeien in het plan voor Buikslotermeer woning en verkaveling in feite samen tot een enkel gebouw. Met het wegvallen van de 'bemiddelende' rol van de verkaveling tussen woning en open ruimte, krijgt de relatie van dat gebouw tot zijn omgeving een uiterst globaal karakter, vergelijkbaar met de manier waarop een klooster of een kasteel ongenaakbaar in het landschap is gesitueerd. Daarmee verandert de status van de open ruimte. Die is niet langer direct verbonden met het wonen, maar kan meer globale betekenissen opnemen. De open ruimte in Buikslotermeer is ingericht met parkeerplaatsen, gazons en voorzieningen; elementen die voorheen min of meer tot het centrum behoorden. 'Centrum in beperkte zin verdwenen', schreef Van Eyck op een van zijn schetsen, en op een andere schets is te zien hoe het centrum als het ware uitgesmeerd is over het gehele grondvlak van de wijk.<sup>32</sup>

Als antwoord op de gewijzigde inzichten voltrokken zich in de zestiger jaren dus twee ingrijpende transformaties ten aanzien van het wonen en het centrum: de neutralisering van het wonen en de versmelting van het wonen met het centrum. Het resultaat van deze transformaties blijft echter binnen het hypothetisch frame, dat aan het begin van het artikel is gesuggereerd: de identificatie van het wonen met het sociale en de associatie van het centrum met collectieve en recreatieve voorzieningen. De veranderingen in de opvatting daarvan - van gedifferentieerd naar 'vrij', van specifiek naar globaal - zijn weliswaar van grote invloed op het uiteindelijke resultaat, maar in compositorisch opzicht zijn de voorgestelde modellen opmerkelijk constant ten opzichte van de voorgaande periode. De composities blijven gebaseerd op de contrasten in de ruimtelijke karakteristiek van de verschillende woonvormen. Zowel in Ommoord als in de Bijlmer vormt een textuur van laagbouw de rand van een duidelijk bepaald, groen en autovrij middengebied, waarin de hoogbouw is gesitueerd. Dat middengebied is een openbaar landschap; echter niet de verstilde sublimatie van het

alledaagse zoals in Nagele, maar een somtijds ruige wildernis waarin de werkelijkheid zich in al zijn gedaantes kan manifesteren.<sup>33</sup>

Dat middengebied is een openbaar landschap; echter niet de verstilde sublimatie van het alledaagse zoals in Nagele, maar een ruige wildernis waarin de werkelijkheid zich in ook zijn lelijke gedaante kan manifesteren. Of, zoals Constant Nieuwenhuys, schepper van het utopische project Nieuw Babylon, in 1965 al opmerkte: 'Ik zie straks in die Bijlmermeer, met zijn gebrek aan gezelligheidsknooppunten, een intensief nozemdom ontstaan, waar ik overigens geen enkel bezwaar tegen heb, als creatief verschijnsel dan.'<sup>34</sup>

<sup>1</sup> Cornelis van Eesteren, 'Städtebau', i10 nr. 21-22 1929, p. 169.

<sup>2</sup> W. van Tijen & H.A. Maaskant en J.A. Brinkman & J.H. van den Broek, Woonmogelijkheden in het Nieuwe Rotterdam, Rotterdam 1941, p. 16.

<sup>3</sup> Hans Aarsman, Aarsman's Amsterdam, Amsterdam 1993.

<sup>4</sup> Ik verlaat mij hier op de fraaie studie over Van Eesteren van Vincent van Rossem. Van Rossem beschrijft uitvoerig een lezing voor de leden van De Opbouw. Vincent van Rossem, Het Algemeen Uitbreidingsplan van Amsterdam, geschiedenis en ontwerp, Rotterdam 1993 (proefschrift Universiteit van Amsterdam 1991), pp. 168-175. De genoemde foto is afgedrukt op p. 172, het citaat is afkomstig van Van Eesteren p. 173.

<sup>5</sup> De ervaringen van de verschillende projecten werden direct op elkaar betrokken door de bemoeienis van een kleine groep ontwerpers. Van Eesteren, Gerrit Rietveld en Aldo van Eyck waren bijvoorbeeld als leden van 'De 8' betrokken bij Nagele, later kwamen daar Jaap Bakema en Lotte Stam-Beese bij. De laatste twee verrichtten met anderen van 'De Opbouw' een reeks studies naar Pendrecht en Alexanderpolder. Stam-Beese werkte in de gemeente aan Pendrecht en ontwierp later ook Ommoord. Bakema, van Eyck en Frans van Gool (die jaren op het bureau Van den Broek en Bakema had gewerkt) maakten plannen voor Buikslotermeer. Van Gool realiseerde zijn plan en was als een van de supervisors bij de Bijlmermeer betrokken. Over deze periode en projecten zijn vele (deel)studies verschenen, o.m. Umberto Barbieri (red.), Architectuur en Planning, Nederland 1940-1980, Rotterdam 1983. Van belang voor dit artikel was ook de lezing van Yorgos Simeoforidis, 'On landscape and public/open spaces', Delft 1993.

<sup>6</sup> De 8, 'Een plan voor het dorp Nagele', Forum 1952, nr. 6/7, p. 176.

<sup>7</sup> De verschillende varianten zijn opgenomen in Zef Hemel, Vincent van Rossem, Nagele, een collectief ontwerp 1947-1957, Amsterdam 1984.

<sup>8</sup> Henk Engel, Endry van Velzen, 'De vorm van de stad: Nederland na 1945', elders in dit nummer.

<sup>9</sup> Dit wellicht subtiele onderscheid valt in de twintiger jaren in Amsterdam samen met het verschil in bouwheer, dienst Stedebouw versus dienst Volkshuisvesting, en het verschil in hoog- en laagbouw.

<sup>10</sup> Bernardo Secchi, 'For a townplanning of open spaces', Casabella 597/598 1993, p. 116.

<sup>11</sup> De stadsuitbreidingen van Frankfurt waren in Nederland wel bekend door persoonlijke betrokkenheid, studiereizen, het tweede CIAM-congres en diverse publicaties. In het preadvies Organische woonwijk in open bebouwing dat in 1932 door 'De 8' en 'Opbouw' aan het Nederlands Instituut voor Volkshuisvesting en Stedebouw is uitgebracht, wordt bijvoorbeeld direct aan de ervaringen van Frankfurt gerefereerd. Het vijfde CIAM congres, met als titel 'Logis et Loisirs' (Parijs 1937), had eveneens het wonen en de ontspanning als onderwerp.

<sup>12</sup> Deze term wordt in de toelichting op het AUP geïntroduceerd om de bebouwingsvorm van de nieuwe woongebieden te omschrijven. 'Het is echter wel mogelijk, door het toepassen van zg. "gemende bebouwing" de voordeelen van laagbouw voor een groot deel der woningen te behouden en de nadeelen van de te groote uitgestrektheid en te hooge terreinkosten te ontgaan.' Algemeen Uitbreidingsplan van Amsterdam, nota van toelichting, Amsterdam 1935, p. 84. De dominantie van de grondexploitatie blijkt bijvoorbeeld uit de uitvoering van het AUP. Aanvankelijk ging men uit van 50-60% eengezinswoningen in de westelijke tuinsteden en Buitenveldert. Uiteindelijk is dit aantal gezakt tot 13-28%.

<sup>13</sup> W. van Tijen & H.A. Maaskant en J.A. Brinkman & J.H. van den Broek, a.w., pp. 18, 19. Van Tijen en Van den Broek, volkshuisvesters van het eerste uur, waren ook betrokken bij het opstellen van het eerder genoemde Preadvies en de prijsvraag Goedkope Arbeiderswoningen (Amsterdam, 1936), waarin eveneens de vraag naar nieuwe bebouwingsvormen voor de volkswoningbouw centraal stond.

<sup>14</sup> Over stedelijkheid en bouwblok: 'Verder is er van uitgegaan, dat de stedelijke woonwijken hun stadskarakter niet mogen verbloemen. (...) De geprojecteerde

verhouding tussen openheid en geslotenheid zij daarmee in overeenstemming. (...) De geslotenheid van het bouwblok kan dichter worden benaderd dan in veel moderne stadsplannen, waarbij alleen van het principe ener goede oriëntering is uitgegaan.' Over de straat: 'Op straat leert het kind de maatschappij kennen: het gevaar (de grote hond, de plagende jongen) en de wreedheid (de visvrouw) maar ook de kameraadschap, het avontuur en het sociale medelijden (de bedelaar). Hoezeer het gezin ook altijd het eerste en de straat het tweede element in het kinderleven zal behoren te zijn, het kind, dat de "straat" niet kent of niet aankan, groeit op tot onmaatschappelijkheid.' W. van Tijen & H.A. Maaskant en J.A. Brinkman & J.H. van den Broek, a.w., p. 18 resp. 22.

<sup>15</sup> De verschillende varianten zijn o.m. opgenomen in Hélène Damen, Anne-Mie Devolder, Lotte Stam-Beese 1903-1988, Rotterdam 1993.

<sup>16</sup> Lotte Stam-Beese, 'Aantekening bij het uitbreidingsplan Pendrecht', Tijdschrift voor Volkshuisvesting en Stedebouw 1953 nr. 10, p. 122.

<sup>17</sup> De ervaring van de oorlog versterkte het besef dat de moderne architectuur tot dan toe nog geen antwoord had gegeven op de behoefte aan beelden of symbolen van een open, democratische samenleving. Monumentale representatie werd afgewezen, de dingen moesten zelf direct tot beelding worden gebracht. Overigens laat deze 'negatieve' stijl evenmin als de Berlagiaanse stadsesthetiek pluriformiteit in de verschijningsvorm toe. Ook de realisatie van Pendrecht werd geregisseerd door middel van een permanente 'commissie Pendrecht', bestaande uit vertegenwoordigers van de betrokken diensten (waaronder Welstandstoezicht), opdrachtgevers en architecten.

<sup>18</sup> De door Jan de Heer beschreven situatieloze studies van Rietveld zijn voor mij de meest krachtige voorbeelden van een dergelijk 'neutraal' stadsbeeld. Jan de Heer, 'Het rad van Rietveld', Ko Jacobs, Lutger Smit (red.), De ideale stad. ideaalplannen voor de stad Utrecht 1664-1988, Utrecht 1988, pp. 115-134, en OASE nr. 23 1989, pp. 10-21.

<sup>19</sup> Aldo van Eyck plaatste bijvoorbeeld het werk van Lohse naast de studies van De Opbouw: 'Op zoek naar de verdere grondbeginselen van een nieuwe vormtaal heeft Lohse de beeldende betekenis van het aantal ontdekt.' Forum 1952 nr. 6/7, p. 186. Lohse zag eerder, bij het CIAM congres in Bergamo (1949), al verwantschappen met het werk van Opbouw. Voor een nadere beschouwing van de notie 'concreet', zie de dissertatie van Hans Frei, Konkrete Architektur. Über Max Bill als Architekt, Baden 1991.

<sup>20</sup> Vrgl. F.J. van Gool, ir. E.J. Jelles en D. Slebos, 'Grondslagen voor een coördinerende supervisie bij de realisering van de Zuidoostelijke stadsuitbreiding van Amsterdam' (1965), opgenomen in de dissertatie van Maarten Mentzel, Bijlmermeer als grensverleggend ideaal, Delft 1989. In dit boek staat ook de volgende opmerking van Rietveld aangaande geïndustrialiseerde hoogbouw: 'Wie maakt nou die combinaties van tienduizend woningen. Geen gemeente doet het. En denk maar niet dat het eentonig zou worden, al die eendere huizen. Juist door de regelmaat zou het heel mooi zijn.' p. 118.

<sup>21</sup> De lege ruimte werd al snel gevuld. Tijdens de uitvoering zijn de gebouwen midden op het grasveld gesitueerd en in de loop der tijd is er een wildgroei van beplanting ontstaan. Daarnaast is ook geprobeerd om de mentale leegte te vullen, o.m. door de plaatsing van een soort hunnebed. Bovendien was men er als de kippen bij om, door middel van een vergelijking met de Dam en de markt van Delft, aannemelijk te maken, dat de ruimte 'te groot' was (uiteraard, zou ik zeggen). Soortgelijke grasvelden, hoewel heel anders van schaal, tref je aan in de hoven van de 'colleges' in Oxford en Cambridge. Deze grasvelden, vaak iets opgetild en altijd perfect onderhouden, hebben voor mij dezelfde kwaliteit van tere, mentale openheid.

<sup>22</sup> Ook in Pendrecht bleek het centrum - dat wil zeggen de ruimte - kwetsbaar. Door de bebouwing van de zuidelijke groenstrook, maar met name door de inrichting van het plein en de situering van een wijkgebouw midden op het 'balkon' is de compositie van het centrum vrijwel om zeep geholpen. De voorgenomen

reconstructie van het plein zal slechts de genadeklap toedienen. Op basis van winkeltechnische overwegingen is o.m. voorgesteld om het plein te versmallen. Daarmee is het laatste restje 'nutteloze' ruimte geëlimineerd...

<sup>23</sup> C. van Eesteren, 'The Core of the Village, Nagele', J. Tyrwhitt, J.L. Sert, E.N. Rogers (red.), *The Heart of the City: towards the humanisation of urban life*, Londen 1952, Nendeln 1979, p. 109. L. Stam-Beese, Pendrecht - Rotterdam, een stedenbouwkundige beschouwing, *Bouw* 1960, p. 87.

<sup>24</sup> E.N. Rogers, 'The Heart: Human Problems of Cities', J. Tyrwhitt, J.L. Sert, E.N. Rogers (red.), a.w., p. 73. Op het congres werd het plan voor Nagele en de tweede Opbouw studie naar Pendrecht gepresenteerd. Opvallend is dat na dit congres het centrum in Nagele pas echt leeg raakt - althans in de plannen.

<sup>25</sup> De programmatische bepaling maakt de open ruimte minder kwetsbaar. Toch is de 'sterkste' open ruimte in het AUP niet programmatisch bepaald, maar gewoon ontoegankelijk: de sloterplas. Daarmee is het gehele probleem van ruimtegebruik, onderhoud en beheer onder controle gebracht. Een pikant, maar niet onbelangrijk detail is overigens dat de centra van de in dit artikel behandelde ensembles in het midden liggen - en niet aan de rand, zoals in Frankfurt het geval is. De open ruimten tussen de wijken zijn dan meestal onbestemd en worden momenteel vaak als problematisch ervaren.

<sup>26</sup> J.L. Sert, 'Discussions on Italian Piazzas' en S. Giedion, 'The Heart of the City - a summing up', J. Tyrwhitt, J.L. Sert, E.N. Rogers (red.), a.w., p. 77 resp. pp. 159-163.

<sup>27</sup> Erik Terlouw, 'Le musée imaginaire', OASE 26/27 1990, pp. 6-25.

<sup>28</sup> De Commissie Hoogbouw-Laagbouw werd op aandrang van de minister van Wederopbouw en Volkshuisvesting door het Nederlands Instituut voor Volkshuisvesting en Stedebouw in 1956 ingesteld en bestond uit 33 prominente deskundigen. Mentzel bespreekt dit rapport in relatie tot de wordingsgeschiedenis van de Bijlmermeer. Maarten Mentzel, a.w., pp. 93-101.

<sup>29</sup> Het werk van Blom werd door de nieuwe redactie van Forum als veelbelovende stap na de Opbouw studies gepresenteerd. 'Het "voorverkavelen" door de "stedebouwer" is hier overwonnen, ook het plattegrondje van de architect. Zodra de onderlinge woonelementen binnen de wooneenheden sterker in elkaar overgaan, (...) dan wordt de vervanging van zowel de "architectuur" als de "stedebouw" door een beide omvattende discipline als creatieve voorwaarde noodzakelijk.' Aldo van Eyck, 'Het verhaal van een andere gedachte', *Forum* 1959 nr. 7, p.243.

<sup>30</sup> De studieopdracht, verstrekt aan Bakema, Van Eyck en Van Gool, had als expliciete doelstelling 'de verstarring in de evolutie van de woningbouw (te) doorbreken.' *Bouw* 1963 nr. 36, pp. 1162-1164. Het plan van Van Gool is gerealiseerd. Voor een beschrijving van de gang van zaken rond de studieopdracht en de relaties daarvan met de ontwikkeling van de Bijlmermeer, zie Wouter Bolte, Johan Meijer, *Van Berlage tot Bijlmer*, Nijmegen 1981, pp. 202-217.

<sup>31</sup> F.J. van Gool, ir. E.J. Jelles en D. Slebos, 'Grondslagen voor een coördinerende supervisie bij de realisering van de Zuidoostelijke stadsuitbreiding van Amsterdam' (1965), Maarten Mentzel, a.w., p. 255. De manipulatie van traditionele typologieën en stedelijke modellen is - zoals alle genetische manipulatie - niet zonder risico's. In de architectuur is de reeks 'collectiviteit', 'enclave', 'openbaarheid', 'stad' een verhoogde risicofactor. Dat hangt direct samen met ruimtegebruik, onderhoud en beheer. Het blok van Brinkman was bijvoorbeeld aanvankelijk een collectieve enclave in een openbare stad, maar zodra de collectiviteit verdween, sloegen ook daar de beheersproblemen genadeloos toe.

<sup>32</sup> Vgrl. Endry van Velzen, 'De parallele stad, aspecten van het stedenbouwkundig werk van Aldo van Eyck', OASE nr. 26/27 1990, pp. 46-63. De vermenging van het wonen en het centrum is nauw verbonden met het begrip 'habitat', dat stond voor de totale activering van het wonen. De woekering van 'habitat' op het negende en tiende CIAM congres maakte

## Over het alledaagse. Vorm en betekenis van enkele naoorlogse stedenbouwkundige ensembles

deze organisatie uiteindelijk onbewoonbaar.

<sup>33</sup> Overigens zijn er verschillen tussen het ruimtegebruik in Ommoord en dat in de Bijlmer, die ten dele de verschillen in beheersproblematiek uitmaken. In Ommoord is het maaiveld ingericht met voorzieningen, parkeerplaatsen, grasvelden en een parkachtige beplanting. In de Bijlmer hebben deze elementen een andere plaats gekregen (parkeren in parkeergarages, verhoogde wegen met daaronder voorzieningen), waardoor het maaiveld volledig 'vrij' is.

<sup>34</sup> Constant Nieuwenhuys in de Haagse Post 12.6.65, geciteerd uit Maarten Mentzel, a.w., p. 220. Overigens zijn er verschillen tussen het ruimtegebruik in Ommoord en dat in de Bijlmer, die ten dele de verschillen in beheersproblematiek uitmaken. In Ommoord is het maaiveld ingericht met voorzieningen, parkeerplaatsen, grasvelden en een parkachtige beplanting. In de Bijlmer heeft een aantal van deze elementen een bewerking ondergaan (parkeren in parkeergarages, verhoogde wegen met daaronder voorzieningen), waardoor het maaiveld volledig 'vrij' is.





About the Speakers

**Tom Avermaete**

is head of Archives, Flemisch Architecture Institute, Antwerp. His Ph.D is on a Dissertation 'Acculturation of the Modern: The Re-conceptualization of Architecture and Urbanism by Candilis-Josic-Woods' (defence September 2003). He is co-editor of *Flanders Architectural Yearbook* (edition 2002-2003). He is an editor of *OASE Architectural Journal*.

**Paola Di Biagi**

Graduated from the University of Architecture of Venice (IUAV) with a degree in Town Planning in 1980. Since October 2000 she is a full professor in Town Planning at the University of Architecture of Trieste. The general research field of her studies refers to the relations between the construction of modern town planning and the project of the contemporary city. She was an editor of the periodical *Urbanistica* (1985-1990) and since 1998 she has been a member of the national editorial staff of the periodical *Urbanistica Informazioni*. Her publications include: *The Charter of Athens. Manifesto or Fragment of Modern Planning?*, 1998; *Sequences of Urban Landscapes. Guido Guidi's photographic Itinerary Among Ina-Casa Residential Districts*, 1999; and *The Classics of Modern Town Planning*, 2002;

**Catherine Blain**

is a research fellow at the School of Architecture of Versailles (Ecole d'architecture de Versailles). Her research investigates the history of French Architecture after 1945. She wrote her thesis on l'Atelier de Montrouge (1958-1981).

**Jos Bosman**

is an architect and architectural historian. He studied architecture at the Technical University Eindhoven and worked at the Nederlands Documentatie Centrum voor de Bouwkunst (Amsterdam, 1981-1986). He did research on Le Corbusier, Sigfried Giedion, Mart Stam, CIAM and Team 10 at the Institut für Geschichte und Theorie der Architektur of the ETH Zürich (1986 -1994). He taught architectural theory and history at the Staedelschule (Frankfurt, 1993), Yale University (New Haven, 1994), Columbia University (New York, 1994/95 and 1996/97) and the University of Kassel (1999-2001). Currently he is associate professor for architectural design at the Technical University Eindhoven.

## About the Speakers

### Christine Boyer

is Professor of the School of Architecture at Princeton University in 1991. She is an urban historian whose interests include the history of the American city, city planning, preservation planning, and computer science. Before coming to the school, Boyer was professor and chair of the City and Regional Planning Program at Pratt Institute. She has written extensively about American urbanism. Her publications include *Dreaming the Rational City: The Myth of American City Planning 1890-1945* (Cambridge: MIT Press, 1983), *Manhattan Manners: Architecture and Style 1850-1900* (New York, Rizzoli, 1985), and *The City of Collective Memory* (Cambridge: MIT Press, 1994). Her book *Cyber Cities* was published by Princeton Architectural Press in 1996.

### Nicholas Bullock

teaches at Cambridge and the Architectural Association. He has written widely on modernism, housing and the city. He has just finished a study of developments in Britain in the decade after the Second World War, 'Building the Post-War World, Modern Architecture and Reconstruction in Britain', and is currently working on the development of Paris 1950-2000.

### Zeynep Çelik

is Professor at the School of Architecture at the New Jersey Institute of Technology. She is the author of *Urban Forms and Colonial Confrontations: Algiers under French Rule* published by the University of California Press, Berkeley, 1997. In February 2003 she published the article 'Learning From the Bidonville: CIAM Looks at Algiers' in the *Harvard Design Magazine*. She was the editor of the *Journal of the Society of Architectural Historians* from 2000 till 2003.

### Deborah Hauptmann

is Assistant Professor of Architecture Theory and Master Course Coordinator with the Faculty of Architecture, Delft University of Technology. She comes from an American academic background and holds a Master in Design/Theory from the University of Pennsylvania and is currently completing her Ph.D. She has practiced as an architect in America, Switzerland and Spain. She has edited several books on architecture and theory, including *Cities in Transition*, Rotterdam: 010 Publishers, 2000). In *Notations of Herman Hertzberger*, (Rotterdam: NAI publishers, 1998) she examines Hertzberger's sketchbooks as a 'chronoscopic' analysis of the creative process.

**Dirk van den Heuvel**

is a research fellow at the Faculty of Architecture, Delft University of Technology. He is co-author of *Lessons: Tupker/Risselada, A Double Portrait of Dutch Architectural Education 1953-2000* (Amsterdam: SUN, 2003) and *Alison and Peter Smithson. From the House of the Future to a house of today* (010 publishers). He has published articles in various magazines, among them: *de Architect*, *Architecture d'Aujourd'hui*, *AA Files*, *Daidalos* and *Archis*. He was an editor of *OASE Architectural Journal*.

**Hilde Heynen**

is Professor of architectural theory at the Katholieke Universiteit Leuven, Belgium. She has published in various articles in architectural periodicals such as *Assemblage*, *Archis*, *Harvard Design Magazine* or the *Journal of Architecture*. In 1999 her book *Architecture and Modernity. A Critique* was published by MIT Press. With André Loeckx, Lieven De Cauter and Karina Van Herck as co-editors, she published an anthology in Dutch of major twentieth century texts on architecture (Rotterdam: 010 publishers, 2001). With Huber-Jan Henket she edited *Back from Utopia. The Challenges of the Modern Movement* (Rotterdam: 010 publishers, 2002).

**Ben Highmore**

is a Senior Lecturer at the School of Cultural Studies, University of the West of England, Bristol. He studied Fine Arts at the Sheffield Hallam University and did his PhD in Birkbeck College at the University of London. In 2002 he published *Everyday Life and Cultural Theory: An Introduction*, (London and New York: Routledge, 2002). At present he is involved in research on urbanism as an imaginary and spectacular realm. Initially this will culminate in a book provisionally titled *Urban Cultures*, to be published in 2004. He is also continuing his research in a monograph on the French theorist Michel de Certeau, to be published in 2005.

**Liane Lefavre**

is Chair of Architectural History and Theory at the University for Applied Arts in Vienna. Her most recent publication is *The Emergence of Modern Architecture* (Routledge, Fall 2003), co-authored with Alex Tzonis. She has also curated two exhibitions in the past year. One at the Stedelijk Museum in Amsterdam: *Aldo van Eyck, The Playgrounds and the City* (NAi, 2002); and one at the Kunsthistorisches Museum in Vienna: *Santiago Calatrava; Like a Bird* (Skira, 2003). Her other books include *Leon Battista Alberti's Hypnerotomachia Poliphili* (MIT Press, 1996).

## About the Speakers

### Anne Massey

is Visiting Professor at the Southampton Institute.  
From 2001 till 2003 she was the Director of the School of Design at The Arts Institute at Bournemouth. She is the author of *The Independent Group: Modernism and Mass Culture in Britain, 1945-59*, published by the Manchester University Press, 1995.

### Luca Molinari

is assistant professor at the Faculty of Architecture Polytechnic of Milan. He's a Ph.D promovendus in the DKS-ADDA course at the Faculty of Architecture, TU Delft, with a research project on Ernesto Nathan Rogers and the post-war architectural culture. Since 1995 he has been the architectural editor of Skira Publishers. In 2001 he was appointed curator for architecture and urbanism of the Triennale of Milan, where he edited and designed many exhibitions, the most relevant being: *Santiago Calatrava. Work in Progress* (Triennale, Milan, 1998), *Stalker* (Opos, Milan, 1997), *Sentimenti del 2000. Arte e fotografia dal 1960 ad oggi* (Triennale, Milan, 1999).

His publications include: *Ernesto Nathan Rogers, Esperienza dell'architettura* (Milan-Genoa, 1996) and *Arquitectura Italiana del posguerra/ Post-War Italian Architecture* (with Paolo Scrivano, 2G, n.15, Barcelona 2000).

### Stanislaus von Moos

is Professor of Modern Art at the University of Zurich. He is an art historian, has published monographs on Le Corbusier (1968ff.), Italian Renaissance Architecture (*Turm und Bollwerk*, 1976), the Architecture of Venturi, Scott Brown & Associates (1<sup>st</sup> Volume 1987; 2<sup>nd</sup> Volume 1999) and the history of industrial design in Switzerland (*Industrieästhetiek*, ARS HELVETICA, Vol. XI, 1992). More recently his publications include *Le Corbusier. Album La Roche* (ed. 1998). He was the founder and first editor of the Swiss architectural magazine *Archithese* (1971-1980) and has taught at Harvard University, the University of Berne, Delft University of Technology, et. al.

### **Max Risselada**

is Professor of Architecture, TU Delft. He has edited and realised numerous exhibitions and catalogues, including *Raumplan versus Plan Libre* in 1987 (New York: Rizzoli, 1989), *Functionalismus -Scharoun versus OPBOUW* in 1997 (Zurich: Niggli, 1999). He is co-author of *Alison and Peter Smithson. From the House of the Future to a house of today* (O10 publishers) and curated the exhibition *Alison and Peter Smithson 1948-2000* for the Design Museum in London (December 2003).

### **Clelia Tuscano**

studied architecture in Genoa, joined I.L.A.U.D. (International Laboratory of Architecture and Urban Design) in 1983, and took her degree in Architecture with Giancarlo De Carlo in 1984. She was an assistant to De Carlo's courses in the Genova Faculty of Architecture, plus one for a special group of lessons about 'City and territory'. Tuscano has worked as an architect since 1984: after a short period in Milan in a group directed by De Carlo, she worked in Genova associated with other architects; she founded her own office in Bogliasco in 1994. She's been working on Team 10 since the beginning of the nineties, collecting information from De Carlo's archives and directly interviewing Candilis, Alison Smithson, Erskine, van Eyck, Peter Smithson, De Carlo and Hertzberger and Doshi.

### **Bruno Vayssière**

is director of the Braillard Foundation in Geneva and professor at the Universités Aménagement in Chambéry. He has curated several exhibitions, including 'Figures et Images de la Terre', 'les Réalismes', and 'les Années Cinquante', all for the Centre Pompidou. He is the author of *Reconstruction - Deconstruction, le hard french ou l'architecture française des trente glorieuses*, published in 1988. He has published articles on a broad range of subjects, such as tourism, the city, architecture and art history in the following periodicals: *Urbanisme, Paysages, AMC, A.A, T&A, Traverse, Libération, Skyline* and *Lotus*.

### **Endry van Velzen**

is one of the directors of De Nijl Architecten. He works on architectural and urban design projects mainly concerning the restructuring of post-war areas. He is professor of Urban Housing at the Hogeschool Rotterdam. He has published several studies on Dutch post-war housing, among them 'Over het alledaagse, vorm en betekenis van enkele naoorlogse stedenbouwkundige ensembles' (*OASE* nr. 37/38, 1994), 'About matter-of-



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factness, Van Gool's 1138 in Amsterdam-North' (*OASE* nr. 49/50, 1998) and *De naoorlogse stad, een hedendaagse ontwerpopgave* (NAi-uitgevers, 2001).

### Jean Louis Violeau

is a sociologist connected to the Centre National de Recherche Scientifique (CNRS) in Paris. He is the Author of *Quel enseignement pour l'architecture?*, published in 1999. He has written numerous articles, which have been published in *Moniteur Architecture - AMC* and other journals.

### Piet Vollaard

is an architect, the director of ArchiNed, ([www.archined.nl](http://www.archined.nl)), a founding member of Smart Architecture Foundation, ([www.smartarch.nl](http://www.smartarch.nl)) and CIA (Center for Informal Architecture). He is the author of: *Herman Haan, architect* (Rotterdam, 1995), *Cepazed architects* (Rotterdam, 1993), *Guide to Modern Architecture in the Netherlands* (Rotterdam, 1987, 1992, 1998) and a monograph on the architect Frank van Klingeren (2004, 010 publishers).

### Cor Wagenaar

The subject of his Ph.D thesis was the post-war reconstruction of Rotterdam. For five years he did research for the Royal Netherlands Academy of Arts and Sciences on the genesis of modernism according to the writings of J.J.P. Oud, culminating in an exhibition in the Netherlands Architecture Institute and the publication J.J.P. Oud, *Poetic Functionalist, 1890-1963/ The complete works* (NAi Publishers, 2001). Since the beginning of 2003 he is a member of the Department of History and Theory at the Faculty of Architecture at the TU Delft.

### Volker Welter

is Associate Professor at the Department of History of Art and Architecture at the University of California, Santa Barbara. He is the author of *Biopolis – Patrick Geddes and the City of Life*, published by MIT Press in 2002. Also he is the co-editor of 'The Papers of Sir Patrick Geddes', co-edited with James McGrath and Samantha Searle (Glasgow: Strathclyde University Archives, 1999) and of 'The City after Patrick Geddes', co-edited with James Lawson (Bern: Peter Lang Europäischer Verlag der Wissenschaften, 2000).