

From Abstract to Concrete: Subjective Reading of Urban Space

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ABSTRACT *Urban designers, perceiving the city mainly as a morphological phenomenon, are primarily concerned with the sensory, and particularly with the visual, qualities of urban space. This view of the city as a spatial physical structure requires abstraction, to enable comprehension of the complexity and continuity of the urban space, its transparency and its indeterminacy. However, this abstraction often fails to take into account the properties of the city as a place of habitation, ignoring the sociocultural specificities of its different users. The paper attempts to take urban design beyond this abstraction, which is so indifferent to the human element, towards a more concrete and specific approach. It calls for a shift in the rather theoretical postmodern interest in the urban space, important though it is in its morphological inclusiveness, to embody a pluralistic subjective perception of the space and its use, bearing in mind fundamental relationships between space and social processes.*

Introduction

Challenging the modernist architectural conception of the city, postmodern urban design discourse centres on the problematic effect of negative urban space, the outcome of the ideologies of the 20th-century avant-garde (Colquhoun, 1991). Analysis of the "erosion of urban space in 20th century town planning" (Krier, 1979, p. 64) is a major theme in this discourse—a rather normative and prescriptive discourse (Moudon, 1992)—frequently accompanied by remedies for the repair of the postindustrial city. These remedies (see, for example, Krier *et al.*, 1978; Perez d'Arce, 1978) focus on the urban experience as derived from the spatial comprehension of the city, connecting the urban phenomenon to the notion of (positive) urban space. Accordingly, the city is spatially re-formed in well defined open spaces, such as streets and squares, which re-establish the sensual and visual qualities of the urban environment.

Krier (1979, p. 15) defines urban space as comprising "all types of spaces between buildings in towns and other localities". This emphasis shifts the traditional preoccupation of the architect from the solids (buildings) to the voids (spaces). However, it is interesting to note that, although the essence of postmodern urban design is to regain spatial human experience, the conception of space is abstracted to enable discussion of the nature of the space rather than its uses. A

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most important concept is 'type', which attempts to interpret and thus to restructure urban elements which recall and transcend culture and history (Rossi, 1982). Krier's (1979) investigation of urban space types is just such an attempt to understand the spatial elements composing the city. It is based on a formal-morphological approach, and, although drawing upon real places, it fails to account for their properties as "fundamental types of habitat" (Delevoy, 1978, p. 20), thus ignoring their utilitarian aspects, as well as their sociocultural contexts. Associated with the neo-rationalists, who sought to achieve urbanism by reconceiving the architectural object (Ellin, 1996), this kind of investigation tries to build an autonomous architectural discourse of the urban space, separated from social, political or economic discussion. Denying the modernist association between form and function (Vidler, 1978; Colquhoun, 1991), this investigation of the city is based solely on its architecture (Rossi, 1982). It is thus concerned with the physical aspects of the urban environment, focusing on its abstract morphological qualities. These qualities are perceived as being detached from urban use and appropriation as they would be discussed, for example, by Jacobs (1961), Alexander (1966), Newman (1972) and Coleman (1985), who regard the city primarily as a place of human habitation.¹

As pointed out by McLeod (1996), this kind of architectural discourse seldom considers the way the space is *actually* used, by ignoring its everyday reality. It has often preferred "the seduction and power of the work of Foucault and Derrida",² leaving unexplored the links between space and power, as suggested for example by the notion of the 'everyday life' developed by Lefebvre (1971) and de Certeau (1984).³ Needless to say, concentrating on the abstract concept of the spatial experience rather than on concrete day-to-day life has ignored the users and their functional, social and emotional needs. Thus, although the city is examined and designed on the implicit premise of human experience, this experience is never discussed or considered specifically enough to make a difference. We seldom know who the people populating the space are, why they are there and what they are doing. We never see their faces or hear their voices. As a result of working under the assumption that the user of the urban space is ungendered, ageless and declassified, the urban space produced is often undifferentiated and neutral.

The paper attempts to go beyond this abstract notion of the urban space and its *objective* reading,⁴ which is so indifferent to human circumstances, towards a more concrete and specific *subjective* reading, rendered in relation to the everyday life of real people. It calls for a shift in the rather theoretical postmodern urban design interest in the urban space, important as it is in its morphological inclusiveness, to encompass a pluralistic and subjective perception of the space and its use, expressing the fundamental relationships between space and socio-cultural processes. This *concrete* approach, which attempts to assimilate actual everyday experience with the *abstract* approach to the urban space, refocuses attention on sociocultural specificities of different users, on their life-cycle stages, ethnic distinctions, gender and income differences. Although not easy, this integration is necessary in order to make urban design relevant in current urban environments designed for today's societies.

Understanding the limitation of the *objective* reading of the urban space, this paper suggests the integration of *objective* and *subjective* readings. This is seen as the first step towards bridging the *abstract* and the *concrete* approaches to urban design. An exercise is used to illustrate this integration, in which a *subjective*

reading of the public urban space is made via a series of structured interviews with town dwellers. The information derived from this (social science-based) investigation is then analysed and presented graphically. The exercise, though fairly limited in scope, allows the demonstration of an integrated approach to urban design that relates to the experience of real people in the public urban space, while at the same time conceptualizing the complexity and continuity of the urban space. By translating subjective data into means of representing urban design, the exercise illustrates the contribution of subjective reading to the objective understanding of the urban space. The goal of the exercise is to promote discussion of the urban space and its nature, both as an architectural phenomenon, considering its morphological qualities as a spatial system, and as an everyday urban reality, a place of life and activity.

The exercise focuses on women in the city and investigates their experience as users of the urban space. It allows further elaboration of the *concrete* approach, as related to women's encounters with the urban space, and also, the development from this of a new understanding of the urban space itself. Due to the nature of the urban space, individual experiences are not considered in isolation, but are comprehended within the larger urban spatial system. Furthermore, the social potential of the urban environment inherent in its continuous spatial system is also contingent on its social processes, in which the space is considered "a container of social power" (Harvey, 1980, p. 255). Thus, inherent in the integration of the *abstract* and *concrete* approaches to urban design is the understanding that "the reorganization of space is always a reorganization of the framework through which social power is expressed" (Harvey, 1980, p. 255). The integration between *objective* and *subjective* reading of the urban space therefore provides understanding of the spatial order of the city as a social power system.

The Manipulation of Urban Space

Many disciplines, among them geography, planning, landscape design and architecture, are concerned with urban space as the public realm of the city. However, while other disciplines are concerned with the relationship between structure and use, urban design, especially that associated with postmodern urban criticism, as advanced by the work of Rossi (1982), the Krier brothers (Krier, 1978; Krier, 1979), Rowe & Kotter (1978), Colquhoun (1991) and others, has refocused architectural attention on the built space as independent of function and use.⁵ However, the concept of urban space, as incorporated into urban design discourse in the last 30 years, suggests the undefined nature of the discipline (Gosling & Maitland, 1984; Broadbent, 1990; Moudon, 1992; Ellin, 1996; George, 1997; Schurch, 1999), as well as the multilevel meaning of the concept itself (Madanipour, 1997). The most common use of this concept in postmodern urbanism is related to the notion of 'architectural space', which, as pointed out by Colquhoun (1991), is relatively new in its phenomenological and psychological approach. This view emphasizes the urban built space itself, its morphology and the way it is perceived, as its object. The 'architectural space' differs from the 'social space', which is "the spatial implications of social institutions ... [to which] the physical characteristics of the built environment tend to be epiphenomenal" (Colquhoun, 1991, p. 223). In urban terms the main difference between the two approaches is in the treatment of the city as a spatial

urban fabric in which the forms are independent of functions, as opposed to seeing the city's form as determined by those functions.

Urban designers see space as the most important means for the creation of urban environments (Krier, 1979; Peterson, 1979; Trancik, 1986). They consider the space as a positive actuality of volumetric form, a 'figural void' (Graves, 1979), maintaining an integrated relationship with the surrounding solids. As indicated by Peterson (1979, p. 76), the space is "the prerequisite medium from which the whole fabric of urbanism emerges". The Nolli map of Rome from 1748 best illustrates this phenomenon (see Figure 1).⁶ It epitomizes this basic condition of urbanism by highlighting the urban space as a positive volume in which the human activities of the city take place (see Figure 2). The city is represented as a structure of interwoven spaces, allowing continuous passage from public external enclosures to public rooms inside buildings, incorporating the entire range of sequences connecting the public and semi-public to the private. The urban space, as it is presented in the Nolli plan, is thus a particular and specific place, a positive entity having an integrated relationship with its surrounding buildings. The urban experience is derived from this spatial comprehension of the city, connecting the urban phenomenon to the concept of (positive) urban space, so that the city becomes a spatial formation of open spaces, such as streets, squares and public buildings, creating a total spatial fabric. Graves (1979) refers to the ambiguities of the Nolli map, as it not only relates to the plan-surface relationship, but also suggests the quality of movement in the city, which expresses Nolli's interest in urban participation. Nolli is not drawing the city as if looking down from the top of a building, but is taking a section through the ground floor. Thus, he captures "the relationships of piazza to threshold to internal public room with a sense of *marche* or promenade that would be unimaginable using other graphic assumptions" (Graves, 1979, p. 4). This visual representation of Rome is forcing us to assess the spatial consequences of Rome in the way Nolli is seeing the city.

This view of the city as a spatial physical structure requires abstraction, to enable us to comprehend the complexity and the continuity of the urban space, its transparency and its lack of definition. It emphasizes the morphological attributes of the urban space by reference to categories of tectonic forms and surfaces, but often disregards the humanistic aspect, especially in relation to people (users) and their encounter with the urban space. The user's association with the function of the city is often considered by urban designers to be a deviation from their main occupation, which is more specifically the study of the built space itself, as independent of its function. However, in order to design cities one needs to understand them, how they operate and what they mean to people. This requires people-derived, specific and substantive information. Nevertheless, this type of information, often derived from social science methodology, rarely convinces the urban designer. It is often too specific, referring to particular urban situations, or to distinct urban places. It tends to treat the urban environment as made up of intermittent and incremental phenomena, focusing on urban details in a way that does not fit the urban designer's perception of the urban spatial system's complexity and continuity.

Moudon (1992) points out the dilemma of the urban design discipline, the dichotomy between its normative-prescriptive nature and its substantive-descriptive nature, which she further explains by asserting that "understanding the city ... and designing it are two different things" (Moudon, 1992, p. 332).

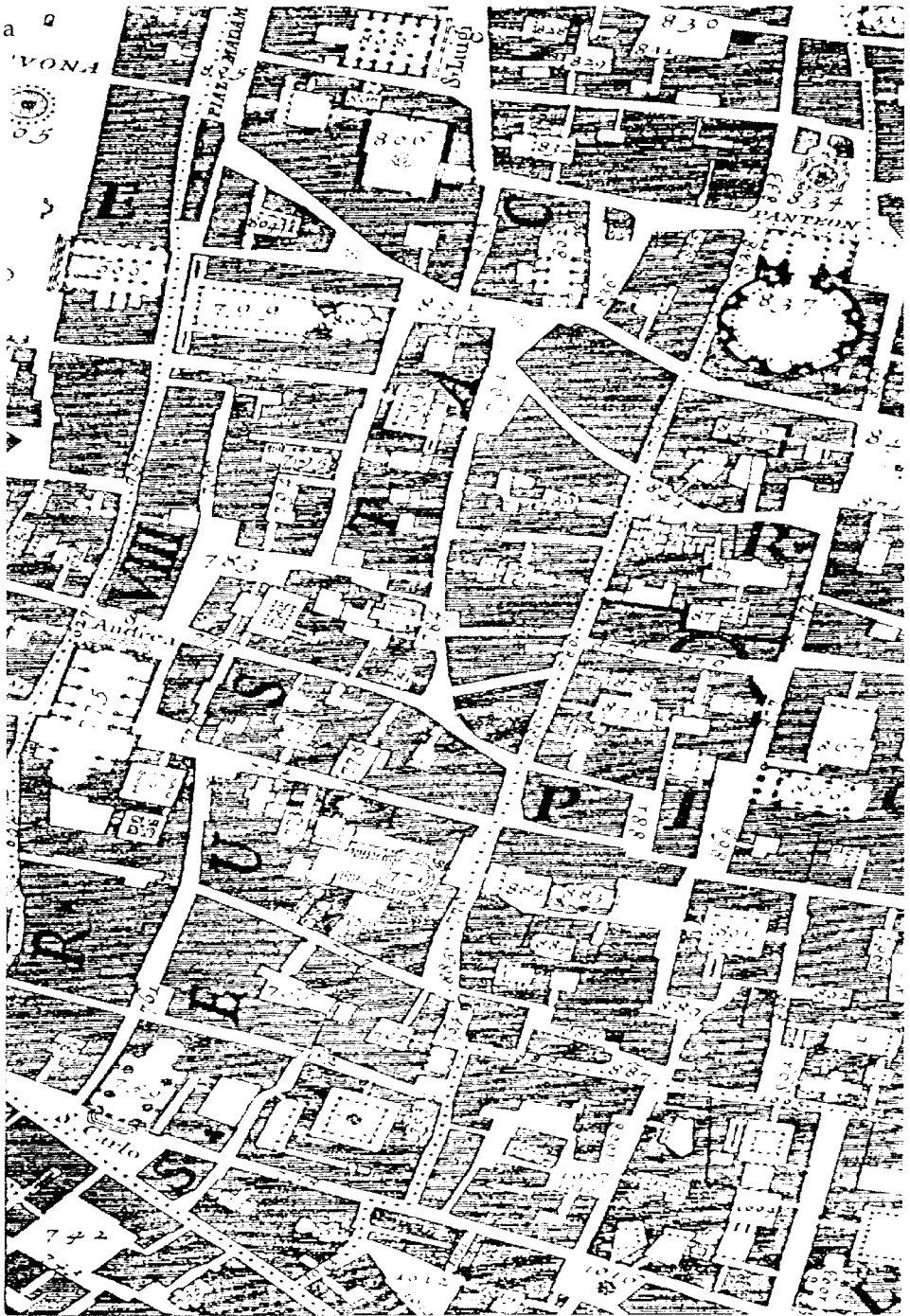


Figure 1. Partial map of Rome, by Giambattista Nolli, 1748.

However, as she says, the descriptive and prescriptive approaches may be at opposing conceptual poles, but they also represent a continuum. Thus, urban design—the making of cities—is related to urbanism—the study of the culture of

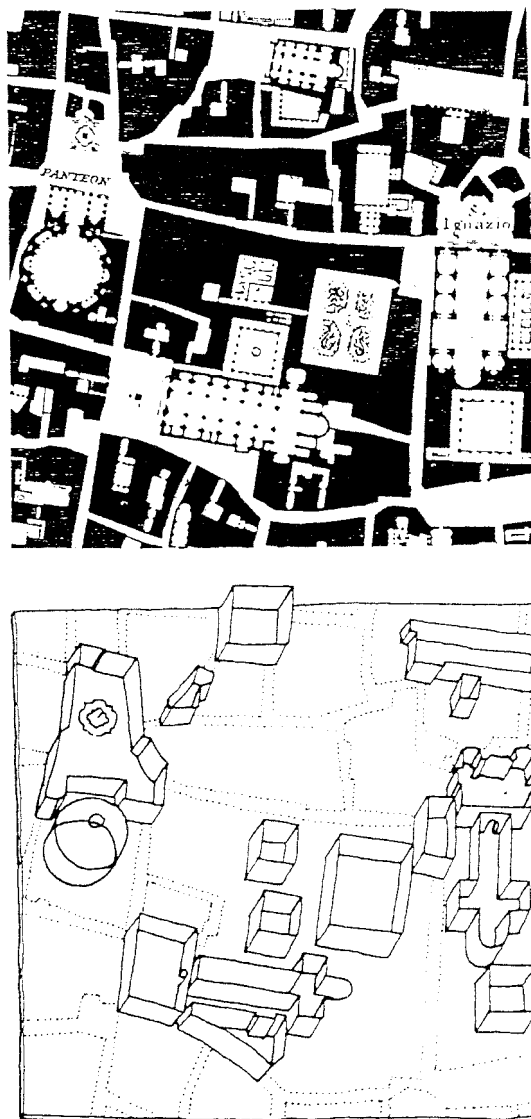


Figure 2. The positive qualities of the urban space as illustrated by Peterson (1979).

cities—and to urban science—the study of how cities are made. Nevertheless, urban designers often take a normative stand, using research only to justify or to substantiate their preconceived position. Using their professionally subjective approach, urban designers tend to abstract urban situations and to see them as unrelated to human circumstance, which enables them theoretically to distinguish wholeness, complexity and continuity of the urban space from the partial, fragmented (and often subjective) real urban events.

The subjective approach to urban space has been formulated mainly by Lynch's (1960) work on the image of the city, and by social science-oriented research introduced into architecture by environment-behaviour studies since the 1960s (Rapoport, 1977). This approach looks at the way people see and understand cities, and how they perceive, use and interact with the urban

space.⁸ There is no doubt that the attention thus drawn towards the social and psychological attributes of the urban environment has enriched architectural discourse, both theoretically and professionally. However, social science-oriented research still fails to reach the deep core of urban design discourse. User studies and environmental design research, although valuable, have little relevance to the prevailing ideas of urban design, because the information derived from environment-behaviour research is often fragmented, isolated and relating to independent physical elements, circumstances and situations. Thus, conclusions drawn from these studies tend to overlook the continuity of the urban space and the way it creates an uninterrupted spatial urban fabric. In addition, the complexity of relationships between human behaviour and the physical environment, and the attempt to design the urban space according to the 'users' real needs' (difficult in themselves to define), are perceived as abrogating the design intention to create an experience that goes beyond those needs.

The formal-morphological approach to urban design, on the other hand, is distinguished by its inclination to abstraction and the tendency to differentiate urban space as an architectural space from its modernist conception as a social space (Colquhoun, 1991). This makes little concession to the people using the space. Although it accepts culture and history as meaningful forces, social and psychological issues are obscured in the formal-morphological discourse. It represents the urban space as an object treated through formal manipulations of physical volumetric entities, making little attempt to relate them to real life, needs and requirements. Thus, although the notion of 'architectural space' conceives of the city as a human spatial adventure, it is often vague and rather abstract. Also, as argued by George (1997), the topics raised by urban designers are often too generalized and somewhat obscure, especially since they relate to the sensory, particularly the visual, qualities of urban places. This is noticeable especially with reference to human urban experience—usually the experience of the designer and not that of the user. So, despite Colquhoun's (1991) claim that postmodern space, as compared with modern space, is loaded with virtuous meanings, and Peterson's (1979) allegation of its distinctive positive entity, postmodern urbanists see space as a theoretical entity rarely connected with function. Furthermore, the abstraction of the urban space ignores its potential as a framework of social power. The fundamental relationship between space and social process is inevitably pushed aside when the position of the users is diminished and space is viewed strictly morphologically. Thus, the social construction of space is obscured by a socially neutral formal design.

However, the abstract (and objective) forms of representation permit for the urban designer the examination of the space as a three-dimensional complex system embodying the spatial urban experience. Although they do not directly convey the human element, these forms of representation are valid theoretical expressions of the spatial embodiment of the urban space and its potential use. The visual-graphic tools often employed by urban designers (such as the Nolli plan, figure ground plans, perspective drawings and isometrics) are by no means a substitute for the real experience of the urban space. However, they often succeed in conveying, as words do, and sometimes better than words do, the idea of the urban space and the basic sensations of its users. That is because, in the same way as an encounter is made with the urban space, they relate to the spatial complexities of the urban experience as a single, continuous entity,

without breaking it down into separate components. Doing that, they can transfer, in an imaginative way, the experience of 'walking in the city' as suggested by de Certeau (1993). Like the notion of the 'walk', urban design representations attempt to transfer the perception of the space, and thus its subjective reality. Hence, if used inclusively, they can become an expression of the dream-like quality of de Certeau's (1993) 'walk'.⁹

Perhaps, therefore it is also worth applying these forms of representation, usually applied in formal-morphological studies, to a socioculturally sensitive urban analysis. The three-dimensional analysis of daily urban life, assuming the total experience of the space in which this life takes place, can be used to represent not only the designer's understanding of the urban space, but also the understanding of the users. Hopefully, this will maintain, referring again to de Certeau's (1993) notion of walking in the city, the experience of the urban space, as walked in and, at the same time, looked at, with a dream-like quality, which is often necessary in order to obtain a real awareness.

The following is an examination of urban space, based on the experience of its users, but using urban design methods of representations. Thereby, concrete information, derived from real users, of a specific urban space is represented conceptually, in order to illustrate theoretically the subjective notion of the urban space. This is not an indefinite representation of urban space and thus does not assume the existence of objective space. Rather, the subjectivity of the urban space, as a specific locale, appropriated by a specific population, is acknowledged. For that reason, the paper identifies and investigates a concrete urban space as it is available for a particular group in the city, in this case women. Consequently, this is not a general review of urban space, but of that section of it which is the provenance of women. The questions asked here are: how much urban space is available to women, and how is it serving them?

Subjective and Objective Reading of Urban Space

The exercise that follows¹⁰ attempts to understand the urban space subjectively. Based on a composite presentation of individual personal accounts, it attempts to achieve two goals: first, to refer to the urban experience of the space as a continuous entity and to see the urban spatial system not as made up of individual experiences but as a collective space; and secondly, to understand this system as it is related to the views and experiences of a specific population group in the city. Thus, the exercise introduces a subjective urban reading based upon the voices and opinions of people living in the city as related to their everyday life experience. It extends the information derived from an objective reading of the urban space to include (and represent) the perspective of actual people (non-designers) as they speak about their experiences of it. The exercise brings a subjective reading of the public urban space of women residents, based on their encounter with the space, which reflects the way they understand and thus use (or do not use) it. In order to compare the information drawn through the two approaches (the objective and the subjective), the analysis of the urban area studied emphasizes the methods of representation usually employed by urban designers. It should be stressed again that this exercise focuses on a gender perspective of the urban space, and is to be seen as an example of subjective reading which could be employed for other groups, each with its own 'voice' and its own 'portion' of urban space.

The exercise focuses on an inner city residential area's public urban spaces, i.e. the streets, squares, parks, communal gardens and public facilities, and the urban experience of the women residents of the area. The information was obtained by individual structured interviews with women living in the area, in which they were asked about their experience of the public urban space, their feeling when using it and their preferred movement patterns in the area. In addition to those general questions, each woman was asked to indicate, on a map of the area, the public spaces she used and those she avoided, and to explain why she used or did not use them. The information gathered enabled the present author to build a composite map, an accumulation of the women's reports about the streets and other public open spaces that they used at different times of the day. The composite map is a spatial representation of the women's actual public space, and thus an account of their actual public domain. It offers an indication of how the women move about in their residential area and the amount of public space they actually use, both in the daytime and after dark.

This exercise was conducted in Hadar, an inner city mixed-use residential area adjacent to Haifa's major business and commercial district (see Figure 3). The



Figure 3. Hadar's location (in square) in Haifa's urban area.

area has a lower-middle-working class population with a large percentage of new immigrants from the former Soviet Union, and a fairly large proportion of old people. It is located on the slope of Mount Carmel, facing the city harbour, with fairly steep topography. The upper section of the area is mainly residential, while the lower part, closer to the commercial and business zones, has a mixture of commercial and business activities with residences on the upper floors of the buildings. The planning of the area, by the architect Richard Kaufman in the 1920s (see Figure 4), was influenced by the Garden City concept developed by Ebenezer Howard and Patrick Geddes, and by its urban design adaptation by Raymond Unwin.¹¹ The area provides a combination of vehicular streets laid parallel to the topography (see Figure 5) and green stepped walkways for

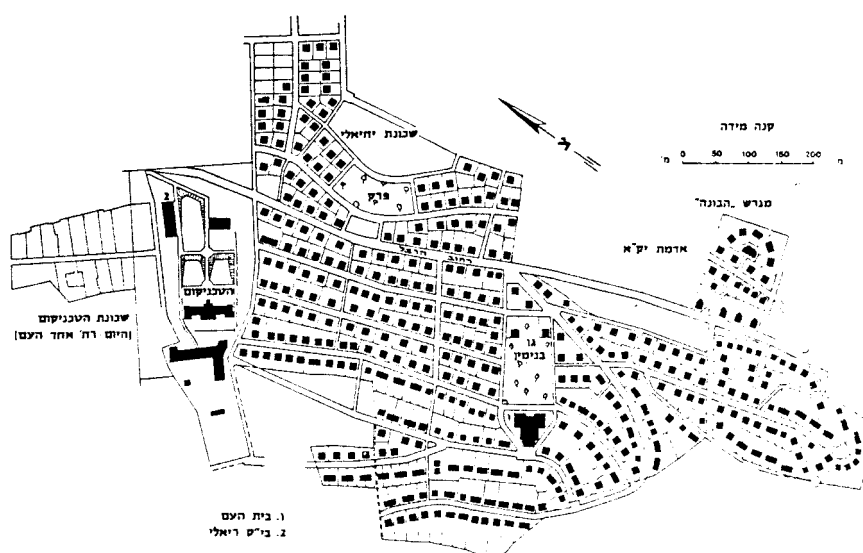


Figure 4. Original plan of Hadar based on Richard Kaufman's plan from 1923.



Figure 5. Typical residential street in Hadar.



Figure 6. Typical pedestrian stepped walkway.



Figure 7. Aerial view of Hadar.

pedestrians perpendicular to the topography (see Figure 6). There is a public open space combined with public buildings at each edge of the area, one with a museum and a school and the other with a theatre (see Figure 7). The residential buildings are freestanding three- or four-storey structures, with about six to eight apartments in each building, set about 3 m back from the street, and about 6 m away from each other. They are surrounded by semi-private open space, collectively owned by the residents of the building. Low walls, trees and shrubbery divide the freestanding buildings and their privately owned open spaces from the pavements. However, although a distinction between the street edge and the privately owned territory is clearly defined, the space stays continuous.¹²

The subjective reading of the public urban space is based on information gathered through interviews with 49 women residents of the area (see Figure 8 for the study area). A variety of ages are represented in the sample: 11% of the women are under 30, 26% are under 40, 25% are under 60 and 38% are over 60. Twenty-seven per cent of the women were born in Israel, and 73% were born abroad, of whom 66% have emigrated from the former Soviet Union since 1991. Fifty-seven per cent of the women have lived in the area for at least 5 years, of whom 61% have lived there for over 15 years. Forty-eight per cent of the women are employed, of whom 57% work in the area. Ten per cent of the women live alone, 48% live with their family and 42% live with only one family member or a roommate.

The women were interviewed at home, by female interviewers using a structured questionnaire. While giving their opinion of the area and its public



Figure 8. Hadar's built-up area (buildings in the study area in black).

space they were asked to point out their preferred walking routes during the day and at night, and to explain the reasons for their preferences, indicating hazards and obstacles that prevented them from using specific places (see Figure 9). The personal maps based on this information were incorporated into a composite map indicating the 'black spots'—the urban space where women feel unsafe (see Figure 10). This allowed the creation of a plan of the area representing the women's subjective reading of the urban space (Figure 11). Based on the technique used in the Nolli plan of Rome for representing the public urban space, this plan shows in white the public space used by the women, and the private space, with the public spaces avoided by the women in black. Another plan of the area (Figure 12) presents the information objectively. The public space (in white) includes streets, squares, parks, playgrounds and sports grounds, and buildings open to the public (in grey) such as culture and civic facilities. The private space (in black) includes residential buildings with private land around them, and all other facilities not open to the public.

Additional information is based on the women's detailed comments about the area, and the nature of its public space. This information allows us to get a better understanding of their experience in the area's public space and of their preferred or avoided places. This diverse information was aggregated in order to denote the main points raised by the women. Table 1 summarizes the main factors given by the women as influencing their use or avoidance of the public urban space. The numbers indicate the percentage of their references to the different factors one way or another.

Almost all the women interviewed, even those who had not lived there very long, showed great familiarity with the area and all could point out the areas

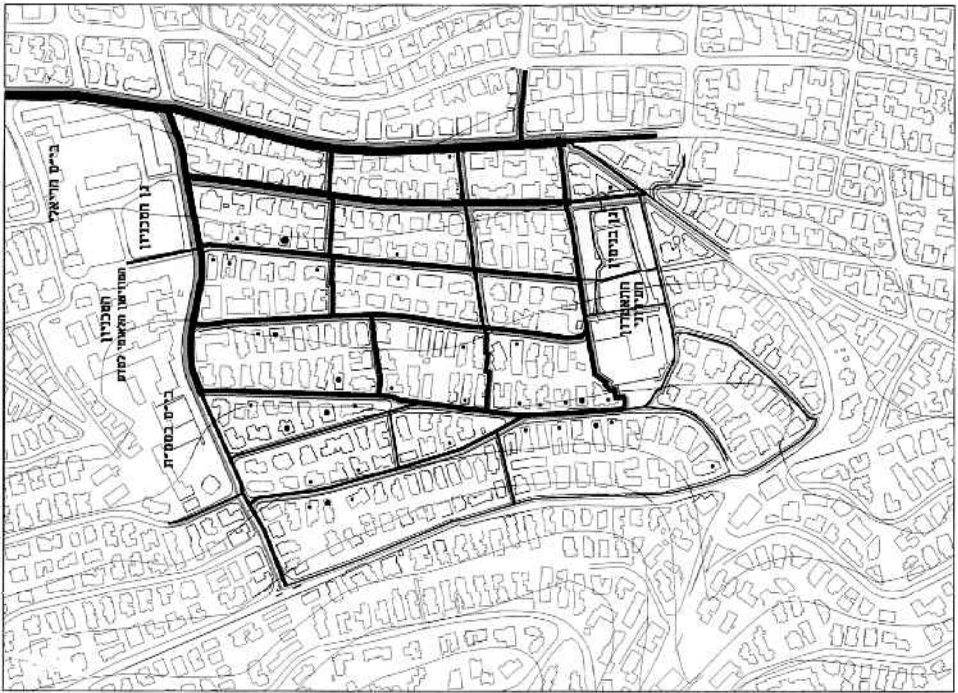


Figure 9. Women's preferred walking routes by day (in grey) and night (in black) (line thickness corresponds to number of users).

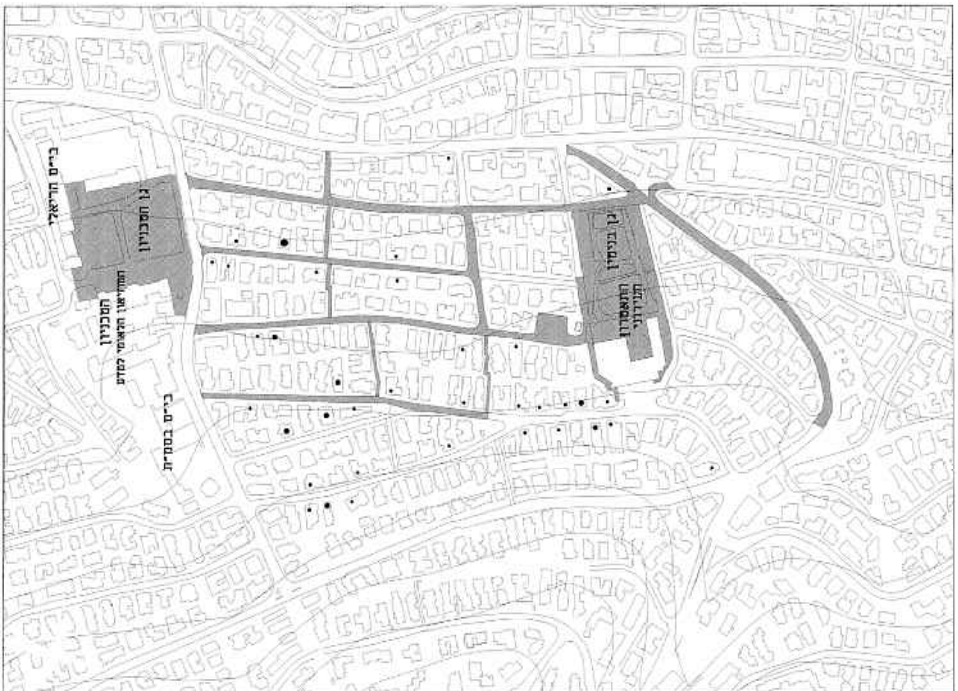


Figure 10. Urban public spaces where women feel unsafe.

where they felt uncomfortable, as opposed to those where they felt safe and at ease. They could also identify where intimidating activities took place, such as a corner café where young men gathered and verbally harassed women, or a building in which prostitutes used one of the apartments. Some of the women indicated places where assaults had occurred, and could recall the exact date and details of the incident. Some of this information was based on first-hand experience, and some on rumours or news reports. Almost all the women said that their use of the public space was restricted to places where they felt safe. Over 50% of the women indicated that they preferred not to go out alone at night, and about 25% said that they did not go out at night at all. Not surprisingly, all the women felt most at risk in the parks, in which, they said, not enough lighting was provided and suspicious activities took place, especially at night.

Subjective Considerations of the Urban Space

As indicated by the exercise and as illustrated in the graphic representations, the subjective public space in Hadar is smaller than the objective public space. Comparing the amount of white, indicating the public urban space, in Hadar's subjective plan (Figure 11), with the white in the objective plan (Figure 12), illustrates this point well. It shows that the women's subjective public urban space, as determined by their perception of the space influenced by their actual experience, is fairly restricted. Although, as can be seen in Figure 12, the public urban space is fairly extensive, for the women some of this space is, in fact, unused. This further illustrates the deceptive nature of the objective map and the

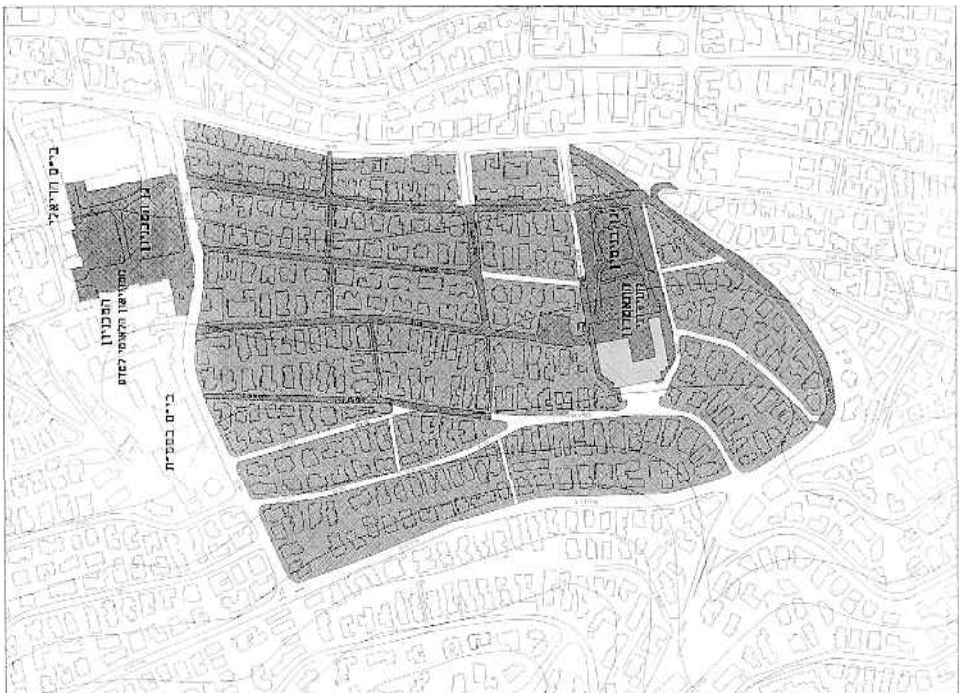


Figure 11. Subjective plan of Hadar.

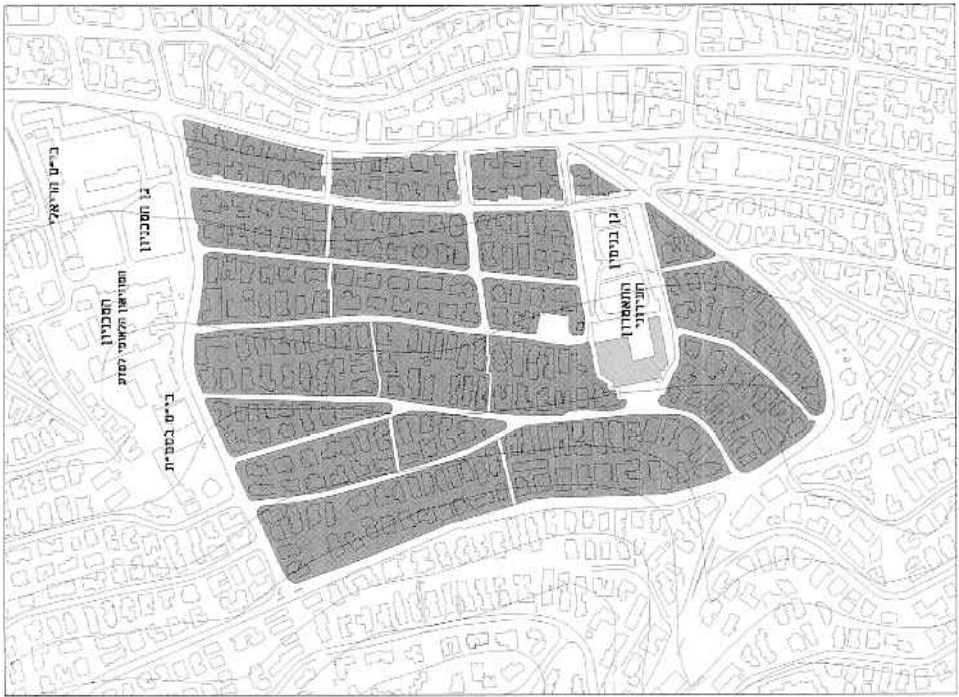


Figure 12. Objective plan of Hadar.

differences between objective reading, related to form and physical context, and subjective reading, related to the perception of the place and its sociocultural use.

The detailed accounts given by the women clearly indicate that fear of crime is a major contributor to the way they perceive, and thus use, the public space. In addition to direct reports of fear of crime based on personal experience or rumours, other factors cited by the women, such as darkness in the street and the nature of the population, are also seen, although indirectly, as related to fear of crime. They influence the women's subjective reading of the environment, warning them of danger and telling them to stay away. As some of the women said, the walking routes at night are selected according to lighting conditions, because dark places are dangerous. Women also indicated fear of areas with untrimmed vegetation, which blocked the view, for the same reason. These findings are not unique to women in Hadar and are supported by findings from fairly extensive studies of women's safety, which show that fear and insecurity are major factors influencing women's activities in and use of public urban space (Valentine, 1990; Morrell, 1996; Nasar & Jones, 1997; Keane, 1998). These studies also discuss lighting (Wekerle & Whitzman, 1995), trees and other forms of vegetation (Kue *et al.*, 1998), types of activity (Forrest & Paxson, 1979, as cited in Franck & Paxson, 1989) and forms of surveillance (Weisman, 1992) which affect women's sense of safety in the public space. This is probably true not only for women, but not enough research has been done on the way different population groups perceive and use the public urban environment and the amount of space actually available to them.

Although the present author was able to distinguish the effect of the subjective

reading of the space on its actual use, this limited exercise and its scope do not allow us to determine how this reading is done. As previously pointed out, it seems that the physical construct of the area has a considerable bearing on the way women perceive and use its public space. The women have indicated in the interviews specific attributes of their physical and social environment and have clearly indicated how they relate to the 'fearsome' and 'safe' public spaces. This connection has also been posited in literature specifically with regard to the relationship between crime and the built environment as related to building layout, land-use functions and public-private definitions (Jacobs, 1961; Newman, 1972; Coleman, 1985). However, the present study does not clarify how the specific design of the place affects the way women use it. Thus, the present study will not justify the users' subjective perception by inspecting the actual attributes present in the spaces.¹³

However, the physical characteristics and the differentiation of the public spaces do not always justify the women's account. Although many of the women indicated that they feel less safe on small streets and thus tend to avoid them, especially at night, the streets where they do feel safe are similar to the unsafe streets, both in their formal characteristics and in their land-use patterns. Also, public footpaths and pedestrian stepped walkways, which are quite secluded and removed from major street activity, tend to be used. Similarly, the green open spaces, although quite different in form, shape, size, physical design and openness to the street and related activities are all avoided by the women, especially at night. Thus, the women's subjective reading, although probably derived from specific attributes of the physical environment, for example darkness in the street (see Table 1), is also affected by social variables such as the nature of the population (see Table 1). Consequently, although the reasons are not discussed here, gender studies suggest that women's subjective reading of the public space is often socially constructed. Thus, it depends not on the physical environment alone, but also on women's position in society and their general sense of their place in it (Wekerle, 1980; Franck & Paxson, 1989). Studies further indicate that women's use of the environment, especially as influenced by fear, is related to the information they get about potential violence awaiting

Table 1. Factors indicated by the women as influencing their avoidance or use of the public spaces (the numbers indicate the percentage of women related to each factor one way or another)

Factors influencing avoidance or use of public spaces	Avoidance (percentage of answers)	Use (percentage of answers)
Personal experience or rumours of crime	74 (of which 32% elderly)	
Poor street lighting	87	
Nature of population	59 (of which 33% elderly)	18 (cited by ages 40–60 only)
Poor pavements and inadequate walking space	33 (of which 44% elderly)	
General activity in street		28 (cited by ages 40–50 only)

them, based either on personal experience or on secondary sources such as rumours, the media and parental and other warnings which set up a 'social production of fear'. Thus, it has been also suggested that fear is not always a direct response to actual violence (Koskela, 1997). As a sociopsychological construct, fear is strongly connected to urban experience (Epstein, 1998) and historically has been associated with life in the city (Wilson, 1992).

The women's sense of danger, as related to personal experience and general knowledge of the possibility of urban crime, is supported by a related finding, in which 74% of the women indicated personal experience or rumours of crime as their reasons for avoiding the public spaces. However, it is important to note that not all women felt the same. The variety of their statements is quite remarkable. It seems that age is the most relevant factor affecting women's sense of safety.¹⁴ Here, contrary to findings elsewhere (for example Markson & Hess, 1980), it was discovered that teenage girls tend to feel less secure in the public space than older women.¹⁵ While the feeling of safety is very personal, we can assume that teenage girls, especially those who do not yet drive or own a car, tend to walk or use public transportation more often than older women. This makes them more liable to harassment and assault, and might lead them to feel more insecure and afraid in public spaces. Furthermore, older women tend to spend less time outside, especially at night, and thus are probably less likely to experience incidents that would cause them to feel insecure.

It also seems that the location of Hadar in relation to other areas of the city affects the women's sense of territoriality and familiarity with the area, and thus their sense of safety inside it. This relates to Hadar's functioning as an 'open' residential area closely connected to business and commercial activities and thus less formalized as a specific defined neighbourhood. The women indicated the significant number of strangers in the public space, especially in the two parks, and its effect on their preferred routes. It was felt that the area's closedness (as a residential district) has been broken open, allowing the presence of too many 'dubious types' and intimidating activities.¹⁶ In view of the current growing call for integrated land-use patterns, in which restrictive zoning is to be replaced by a better union of home, work and services, these issues and their consequences should be seriously considered. The study findings indicate the need to provide for balanced environments in which the provision of diverse urban opportunities, and the convenient accessibility of work and services, do not replace safe residential environments. Since it has been suggested that women are the major beneficiaries of integrated land-use environments (Roberts, 1998), safety considerations are to be included in any attempt to design these environments on their behalf.

Contrary to the indication of fear of strangers moving in the area by some of the women, it is important to note that others have indicated that the presence of people on the streets makes them feel secure, supporting Jacobs's (1961) famous notion of 'eyes on the street'.¹⁷ Others, especially some older women, suggested the advantages of the area as a place where they can comfortably sit and see other people and talk to them. This notion of diversity in relation to the 'other' alludes to heterogeneity as a positive cultural-political value. It should be seen in the framework of postmodern urban culture (Harvey, 1980) and is of special relevance within the socially, culturally and politically complex Israeli context.¹⁸ However, it is to be seen also in relation to the freedom women everywhere can gain by access to safe public spaces, which offers them an

opportunity for information, connectedness, involvement and action, granted by their participation in the public sphere.

Finally, probably the most important information acquired from the subjective reading of Hadar is that its urban space is an unequal and inequitable public resource. As indicated by the exercise, women's use of the public urban space in Hadar is fairly restricted. This increases the segregation of the public and private spheres, forcing women to stay at home, especially at night. Not unlike the case of the Victorian city, when the public sphere presented a risk for women, this situation also suggests that some of the urban public space is still off limits for women.¹⁹ It fails to acknowledge the importance of mobility and accessibility in everyday life, ignoring the fact that for many people the public space offers opportunities for freedom, enjoyment and diversity not available in the private space. Even the commodification of public space for the purposes of consumption, which has been singled out as a negative force (for example by Loukaitou-Sideris, 1993), does not exclude its being an arena of freedom, choice, creativity and invention. As has been pointed out by different scholars, the relegation of women to the private space of the individual home has acutely affected their power position (Hayden, 1980; Wekerle, 1980; Wright, 1980). The use of public space allows women to develop not only communication networks and political skills, but also access to information and learning.

Thus, apart from being a physical volumetric entity, urban space is also a major public resource. It is through urban space that a complex range of transitions and connections between locations and activities occurs, making it a mediator between urban situations. As such, public urban space must be open and accessible to all. In fact, it is its accessibility which makes it active and vital. Moreover, as has been demonstrated by many (for example Jacobs, 1961; Coleman, 1985; Jacobs, 1993; Montgomery, 1998), a successful urban environment is based on the various ways in which activity occurs in its public space. Limited use of the public urban space by women does not affect women alone, but the city at large, which will suffer from the exclusion of a large portion of its population from its public affairs.

Conclusion

Madanipour (1997, p. 370) has pointed out that urban design, as 'spatial management', is only a tool for achieving ends. Thus, it could be used "to maximize use value ... for only some sections of the urban society" or it could be "at the service of all citizens". In this connection Madanipour (1997) suggests using the terms 'innovative' rather than 'fashionable', and 'spatial' rather than 'visual', to discuss urban design. However, in order to be truly innovative, urban design must consider space as habitable territory in which life-supporting activities take place. This view of the urban space means that its essence is more than a still-life volumetric entity. Urban design 'tactics' (Peterson, 1979) should be more than a series of abstract spatial volumetric manipulations, and should include meaningful reference to human behaviour as related to the needs of real people and their everyday lives. As argued by McLeod (1996), the main emphasis of everyday life is its focus on the populist rather than on the avant-garde; that is, the experience and enrichment of urban design should be available to many and not just to those few "who have the textual or architectural sophistication to comprehend that a new formal break has been initiated" (McLeod, 1996, p. 23).

The understanding of the public urban space suggested by this paper goes beyond the objective reading of the space towards a more subjective reading, related to people and their perspective of the urban environment. The idea is that a subjective reading, one that relates to real people living in the city and their circumstances, will lead to the 'writing' of a better city. This subjective reading does not offer an urban understanding that is 'good for all'. Experience with shortsighted modernist attempts indicates that what is ostensibly good for all is in fact good for no one. The subjective reading is concrete, and therefore offers an urban understanding that is cognizant of the real-life circumstances of specific population groups, hoping to lead towards urban design that is able to create pluralistic urban spaces.

The gendered urban reading presented here serves only as an illustration of the concrete approach that postmodern urban design should adopt if it is to acquire any social relevance in the multicultural postmodern urban environment. The exercise presented here should be regarded only as the 'opening round' in a debate concerning the equipment and facilities needed to design postmodern urban space. It calls for planning frameworks that recognize the complexity of the spatial urban system, but at the same time take into account and are adaptable to the requirements of particular groups of residents, in different urban locales. These frameworks should account for the nature of the urban design process, starting as an abstraction of the urban space but always relating to real concrete places as inhabited by real people.

Notes

1. For further discussion of the ideas connected to the controversy of urban realities, see Broadbent (1990).
2. As pointed out by McLeod (1996), Foucault stands apart from Derrida in that he acknowledges that power is not simply an issue of language but is related to place and time. However, as asserted by McLeod (1996), Foucault has an unconscious disdain for sites of everyday life such as the home, the public park and the department store, thus displaying disregard for the actuality of day-to-day life.
3. Lefebvre's (1984) approach to the everyday life in the modern city is dialectic, stressing on the one hand the relentless homogenization caused by automatization and systemization, and on the other hand the power of what he calls 'spontaneous conscience', which stands against the oppressions of daily existence. De Certeau (1984), on the other hand, largely ignores the monotonies and tyrannies of daily life, stressing the individual's capacity to manipulate situations and create realms of autonomous action—what he calls a 'network of antidiscipline'. This point is further discussed in McLeod (1997).
4. Urban environment is seen here metaphorically as a text. 'Reading' the city implies knowing it and thus understanding it. This metaphor is often used in postmodern urban design discourse (see, for example, Gandelsonas, 1972), and therefore is seen to be appropriate here.
5. For further discussion of postmodern urbanism, see Broadbent (1990) and Ellin (1996).
6. The Nolli map of Rome from 1748 is a figure ground plan, which was reintroduced by postmodern urbanists in the 1970s. It has been used as a didactic tool to revive interest in the relationship between built and open space and as a mean to demonstrate the importance of buildings as background and not merely as isolated objects.
7. As an example of this type of information, see Cooper Marcus & Francis (1998).
8. For a list of leading works in the fields of image and environment-behaviour studies, see Moudon (1992, p. 333).
9. In his seminal essay de Certeau (1993) analyses an aspect of daily urban life based on his ideal theory of the city. Against the theories of urban planners and bureaucrats, he does not look down at the city as from a high-rise building, but walks in it. Walking in the city allows the walker to individuate the city and make ambiguous the order given to it by planners.

According to de Certeau (1993), this is similar to the way waking life is equivocally treated in dreams.

10. The exercise presented here is partially based on data derived from a study of women's safety in urban public space (Churchman & Kallus, 1999). The study compared two residential areas in Haifa, Hadar and Kiryat Eliezer, and was conducted during the spring of 1996 by the author, in collaboration with Arza Churchman, at the Faculty of Architecture and Town Planning in the Technion, Haifa. The study was funded by the Haifa Municipality, whose support is gratefully acknowledged.
11. Although the Hadar plan—allowing for ample green spaces in the form of public parks and footpaths, and the division of the built-up area into lots fit for detached houses—promotes the garden neighbourhood idea, the housing type, advanced by a later building phase, has greatly altered the basic spirit of the plan. As in the case of the development of the Tel Aviv housing type (see Kallus, 1997), the Hadar housing type is shaped by private developers operating in the free market, responding to the housing demands and availability of private capital of immigrants escaping Nazi Europe. This uncontrolled free-market development has produced a discrepancy between a garden neighbourhood plan, promoting a clear distinction between public (collective) space and private (individual) territories, and the realization of an environment having unclear boundaries between public and private domains.
12. For further discussion of the housing type and its development, see Kallus (1997). It is interesting to note that, despite the apparent difference in physical context between Hadar and the central part of Tel Aviv, derived mainly from topographical and geographical differences, we find in these two areas, planned and developed during the same period, a surprisingly similar housing type. This phenomenon supports the assumption that this housing type is a product of architectural practices and social, economic and political realities and that it does not correlate with the specific physical context.
13. In the study from which partial data for this exercise are derived (Churchman & Kallus, 1999), a professional survey of the public space was carried on, parallel to the interviews. Its findings strongly support the findings of the interviews with the women, indicating insufficient illumination (caused by an insufficient number of light fixtures, by the low intensity of existing fixtures or by existent but damaged fixtures), elements obstructing pavements (such as parked cars and overgrown vegetation) and little street activity.
14. This is further supported by conclusions from the extended study of the two residential areas, in which the data were based on a much larger sample which included young women under the age of 17.
15. Forty-nine per cent of the women interviewed in Kiryat Eliezer said that they feel unsafe in the area. Notably, 76% of the women aged 30–39 reported that they feel safe in the neighbourhood. Among older women, constituting about 30% of the population sample, very few reported feelings of insecurity.
16. These findings are more remarkable when compared with the reports given by the women interviewed in the more defined residential area, which indicate considerable satisfaction with the environment in terms of safety in the public space as related to the physical character of the area.
17. It should be noted that, in contradiction to the positive notion of street activity, in Israel crowded urban spaces, being a potential locus for terrorist attacks, might become a cause for anxiety.
18. The structure of Israeli cities has been set up alongside a history of national and ethnic minority conflicts related to the country's political and social formation. National government planning policies and housing administration procedures were usually designed to increase Jewish territorial holdings on the one hand, and to support Ashkenazi Jews' hegemony on the other. It has shaped the spatial environment of urban centres and rural areas in a way that supports to this day national and ethnic separation and segregation (for further discussion of these issues, see Law-Yone & Kallus (forthcoming)).
19. Separation of spheres is a major theme in feminist studies, reflecting the domesticity of women as related to the urban public space traditionally associated with male activity (Sennett, 1974; Habermas, 1989). According to these accounts, women were excluded from the 18th century's public reality of cafés, restaurants, clubs and pedestrian parks, which were often defined as immoral and too risky for the 'weaker sex'. Women's presence in the public sphere would provoke anger and violence, or mark their position within the society negatively. Identified with the family, respectable women were confined to their home, to experience feminine domesticity in a sharp separation from the public. However, alternative histories, which engage

critically with this idea of the public sphere, argue that there never was, and never should be, just one public sphere but rather a number of public spheres (Fraser, 1993). Critical feminist thinking about the city has shown the potential of the urban experience for liberation and emancipation, suggesting that, along with its form of oppression, urban experience also presents women as active producers of space. As illustrated by Wilson (1992), throughout history 'public women' were associated with non-respectable behaviour. The promiscuity associated with the urban space, its lack of boundaries and its freedom for all to use, typified by Victorian norms, segregated 'women of the street' from respectable women of the home. This view, instrumental in the development of theories of the modern city, led to an anti-urban approach, which in fact had a severe and oppressive bearing on women's circumstances.

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