# Garden Streetscapes: Front Yards as Territorial Configurations

KRIS SCHEERLINCK AND YVES SCHOONJANS

Too often, we assume great streets are defined by great buildings. Yet many streetscapes distinguish themselves by the presence of flower or vegetable gardens, front yards or backyards, allotment gardens, community playing fields or parks.

Gardens, as a substantial element of low-density (and even high-density) neighbourhoods, articulate a highly qualitative relationship between private and public properties, between shared spaces and those used individually and between domestic spaces that can be separated or joined. As a consequence, streetscapes need to be considered as spaces delimited not only by building façades but also by configurations of garden walls, fences, strips of grass, tree lines, muddy roads or concrete slabs for parking: these are the territorial borders that indicate how and to what extent collective spaces can be interpreted and appropriated by their users.

This paper presents a theoretical framework that studies gardens as structural elements of streetscapes and it discusses a case study in Williamsburg, New York, that is part of the international Streetscape Territories Research Project being conducted by the Department of Architecture of the University of Leuven on different cases of streetscapes in New York, Barcelona, Ghent, Brussels, Havana, Addis Ababa and so on (see also www.streetscapeterritories.wordpress.com). Additional international references to recent uses of space in different socio-cultural contexts are provided to broaden the perspective of the research. The paper deals with the following research question: Can we describe the structural role of gardens in the making and use of contemporary streetscapes?

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## Streetscapes

It is well known that streetscapes are places of social cohesion (Goffman, 1959), even if their position in the urban fabric and the density of the environment and intensity of use might lead to different levels of togetherness. In any case, streetscapes define streetlife (Ford, 2000; Mehta, 2007). They are places of encounter for families, neighbours and strangers, where a delicate but essential relationship is established between private and public properties (Dovey and Wood, 2015), between the intimate and the exposed, between the individually and the collectively used and between levels of privacy and community (Chermayeff and Alexander, 1963).

Many architects, urban designers, planners and social activists in the 1960s and 1970s emphasised the importance of the way streets were planned, designed and used as a guarantee for social cohesion and urban integration: from Stanford Anderson's *transactional spaces* (Anderson, 1978) to Allan Jacobs's *great streets* (Jacobs, 1993), from Jane Jacobs's *eyes on the street* (Jacobs, 1961) to Gordon Cullen's *sequence planning* (Cullen, 1961). These authors studied the permeability of façades, the social control of sidewalks, the rhythm of property lines and the way

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open space was organised or specialised and they proved that these parameters were important for designing socially sustainable environments at a small scale. However, streets were often considered as spaces between building façades, and the selection of exemplary cases was restricted to, rather consolidated by, building blocks or other types of streets defined by a continuous street wall, focusing on morphological aspects and the permeability of the façades.

The studies above seem to refer to the architectural artefacts defining the streetscape, considering buildings as the starting point of analysis. More recently, streetscape approaches have been updated, and discourses about interfaces have been proposed (Bijlsma and Groenland, 2008; Bobic, 2004; Dovey and Wood, 2015; Gehl, 1987; Gehl and Gemzoe, 1996), introducing a broader approach to streetscapes that focuses on the voids or gaps within the streetscape, like flower or vegetable gardens, front yards or backyards, allotment gardens (figure 1), community playing fields or parks. Nevertheless, in these approaches, public space remains a hierarchically dominant element in street configurations: open spaces stay as additions to something more important than the constituent public space, defined by buildings. Gardens, however, as one particular category of open space, play an essential role in the way streetscapes are experienced. These spaces, whether they are front yards or backyards or in-between spaces, embody a structural position in streetscapes.

This paper considers the following research question: Can we describe the structural role of gardens in the making and use of contemporary streetscapes?

It also discusses whether the elements that define the role and meaning of these in-between spaces in streetscapes can be described and how they contribute to a cultural identity for the neighbourhood.

## Streetscape territories and depth

From Aldo Van Eyck's attention to *thresholds* (Strauven, 2007), the idea of *urban interfaces* from Milos Bobic, Jan Schreurs and Kim Dovey (Bobic, 2004; Dovey, 2008; Schreurs, 2008), Thomas Sieverts's *Zwischenstadt* (Sieverts, 1997), to Gordon Matta-Clark's *sliced territories* (Matta-Clark, 2006) or Peter Rowe's *middle landscape* (Rowe, 1991), in-between spaces have been an important topic

*Figure 1: Green Thumbs allotment garden, Coney Island, New York. (Photo: Kris Scheerlinck, 2014.)*

in architectural or urban debates. In many cases, however, intermediate spaces are presented as *de facto* interesting spaces, as if they automatically guarantee urban qualities, without the reasons for this being unveiled. In other instances, they are considered *blurry* intermittent spaces, grey zones (the semi-public, semi-private approach) and as *unsharp* areas sandwiched between more important or more easily definable spaces. Apart from the possible qualities in-between spaces may obtain, the main focus should be on the way they are defined – that is, by seeing them as part of a larger system of adjacent spaces, programmes and use.

This focus can be provided by considering streetscapes as configurations of depth and overlap. The notion of space as a configuration was explored by various researchers (Hanson, 1998; Hillier, 1996) and further developed (Anderson and McFarlane, 2011; DeLanda, 2006; Farias and Bender, 2010) until the notion of *assemblage* was reached.

> As a verb assemblage focuses attention on processes of connecting – connecting people or firms to each other, producers to consumers, people to buildings. As a noun the assemblage is a cluster of interconnections rather than a 'thing'. It is akin to a 'place' in the sense that it is a socio-spatial territory with some identity, however fluid (Dovey, 2010, p 15).

The Streetscape Territories Research Project[1] is working to further develop this idea of configurations, by analysing a series of urban projects and their constituent in-between spaces. The research examines the way architectural artefacts, open space and property structure (and its inherent accessibility and permeability) configure streetscapes and how inhabitants can give meaning to these elements.

This project analyses models of proximity within a street, neighbourhood or region. It starts from the assumption that urban space, from the domestic to city scale, can be understood as a discontinuous collective space (de Solà-Morales, 1997), containing different levels of shared use that are defined by multiple physical, cultural or territorial boundaries (Scheerlinck, 2013). How do people and buildings relate to each other, and how does this relationship contribute to the local identity of the built and social environment? The intermediate scale – that is, the scale between the architectural intervention and the urbanistic plan – defines its main research domain. Within this research project, collective spaces that are characterised by a *between–among* space condition are read, mapped or designed. Not only systems of streets, squares, gardens and parks, but also patios, porches, enclaves, covered or portico spaces, courtyards and all other interstitial areas are the subject of this research.

The research involves the systematic and comparative analysis of existing neighbourhoods, streetscapes, public spaces, urban landscapes and complex buildings in different locations, based on research by design. It includes multiple approaches from different disciplinary fields and considers research and design simultaneously with the integrated processes of developing urban projects. A group of designers and doctoral and postdoctoral researchers with international expertise in architecture and landscape at an urban scale are involved in the research analysis. Instead of having a programmatic or formal approach, this group focuses on the qualities or potential of the urban landscape, taking into account the socio-cultural impact of an intervention.

The main conceptual and theoretical reference in the research approach is the notion of *territorial depth*: the relationship between private and public spaces is defined by sequences with different lengths and intensities and various ways of reading them. According to Habraken (1998, p 137), the built environment is defined by a territorial organisation and is founded on the principle of inclusion within other territories: 'Territorial depth is measured by the number of boundary crossings ... needed to move from the outer space to the innermost territory' (figure 2).

As a result, territorial depth increases when collective spaces (like shared vestibules, common gardens, courtyards and so on) are introduced within multiple sequences. However, territorial depth is not a static parameter: within a certain framework, after the intervention of various urban agents, depth can increase or decrease with time, according to the specific characteristics and dynamics of the built environment. In other words, increasing depth is directly related to the creation of collective or shared spaces at different levels within the territorial hierarchy. Shared spaces can be common courtyards or vestibules, gardens, storage or parking spaces, common playgrounds, corridors or passages. Some parts of the home can be seen as collective spaces as well, because the inhabitants agree to collectively appropriate those spaces. We could add that territorial depth is strongly related to the property structure within the hierarchy but is not exclusively dependent on it.

## In-between

The spaces discussed above, which add depth to an urban or domestic sequence, are in-between spaces; however, they should not be considered margin or buffer spaces but as having a structural role in streetscapes.

In his paper 'Territory without a Model', de Solà-Morales (1997) describes an alternative approach to the meaning of places, next to the traditional concept of *genius loci*: he refers to 'the expected sensation of voids and the indifference of their constructions' (p 24). According to de Solà-Morales, the organising principles of contemporary urban fabric, especially those defining its periphery, are no more tactics of composition, repetition and differences but 'systems of relative distances' (p 24), and he notes that the dialogue between a building and its surroundings becomes more singular but at the same time obtains a more abstract dimension. One could state that in-between distances belong to an increasingly complex matrix, an urban system of distances that can be understood as a non-absolute configuration. These spaces function like communicating vessels, where one intervention implies immediate consequences for other parts of that same

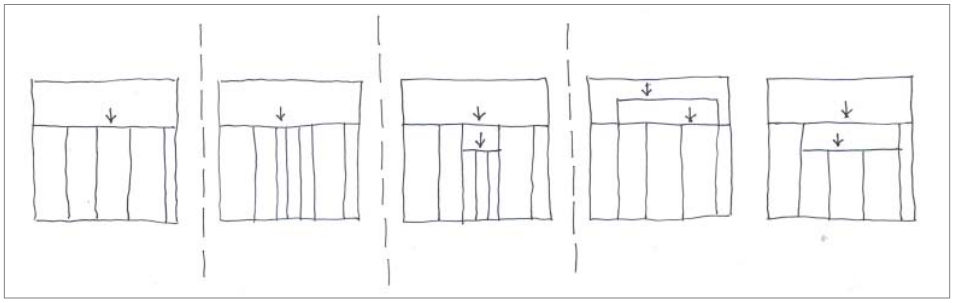

*Figure 2: Increase in territorial depth; this considers the strip indicated in the top part of the diagram as public space and the bottom part as private space. (Source: figure 12.8, Habraken, 1998, p 215.)*

configuration. In addition, de Solà-Morales (1997) argues that the distance between areas or autonomous packages defines the way the built environment is constructed or transformed: our daily experiences are increasingly defined by sets of minimum or maximum distances.

More important than the property itself, however, is the distance between properties, between properties and natural resources, between properties and infrastructures and between properties and high employment areas. Instead of zoning or defining density, sets of rules for relative distances are configured, which might differ in suburban conditions, for example, from those in downtown areas. In a way, time and distance are defined and measured systematically within the contemporary landscape, allowing a comparison with other spatial configurations. As noted by Secchi (1993, p 116):

> The space in between things, between objects and subjects next to one another, between my house and my neighbour's, between their office and mine, is traversed by many strangers, and it is not a meeting place; it has become empty because it plays no recognisable role; this space is only required to be permeable, and should be traversed with as little friction as possible.

Similarly, Secchi (1993) detected a change in the nature of the built environment: continuity, together with centrality or urban equilibrium, is now obtained by recognising urban fragments and the spaces in between. He refers to the *inverse-city*, where the traditional centre occupies the periphery and vice versa, where big-scale depth sequences might be turned inside out (p 93).

Rowe (1991) agrees and, in *Making the Middle Landscape*, describes, at a slightly bigger scale, the characteristics of contemporary landscape:

> The most disconcerting physical characteristic of the middle landscape is the desolate and inhospitable space left between many buildings and building complexes. Commercial strips extend out in the surrounding countryside without any suggestion of a centre or of termination. Bland residential subdivisions and office parks leapfrog over one another, leaving vacant land and unfinished developments in their wake. Many buildings have a temporary quality, suggesting that they might be here today and gone tomorrow. The surrounding landscape is pervaded by parking lots that offer little definition of their primary function, let alone an inviting environment. Entirely absent are characteristics of traditional city streets that graciously provide for public life (p 249).

Although he recognises the appearance of voids and gaps within the middle landscape as a problematic but characterising element, he misses the continuous, overlap-based, complex urban set-ups that 'graciously provided' real public life (Rowe, 1991, p 31). Voids, gaps or in-between spaces, which are seen as structural elements within processes of spatial and social specialisation and segregation in this middle landscape, seem to have gained importance within urban theories and practices during the past decades. There has been a growing need to consider and value in-between spaces as a main structural element in the way we build homes, streets, neighbourhoods or regions. How we define these territorial distances, however, is the major concern (figure 3).

An interesting paradox appears when we consider the way territories are delimited in contemporary contexts. By being part of this abstract, indifferent,

*Figure 3: Suburbia in Bratislava, an example of shallow-depth configuration in housing typology and its effect on the streetscape. This is a copy-paste bungalow typology in which the distance between the house and property limits is too short, thereby reducing the quality of this housing typology as part of a residential streetscape. (Photos: Kris Scheerlinck, 2002.)*

generic and matrix-like field of relative distances, an increasing number of urban projects simultaneously obtain a more figurative or less abstract dimension. Analysis of recent urban projects, from the domestic to neighbourhood scale, shows an increasing explicitness of boundary delimitation and a sharper definition of these sets of distances. The more the built environment turns into a not-so-site-specific system of relative distances, the more space is produced in an explicit way that is easier to read and leaves no doubt as to how to interpret that system.

As part of the research project discussed in this paper, several case studies were analysed with a particular focus on how gardens play an important role in streetscapes as in-between spaces. The results highlight instances of configured aggregated territories, based on systematic separation through the application of deliberate gaps or intervals in the street layout. Also evident are projects that rely on spaces that have rather high integrated values within the depth configuration,[2] making use of overlap scenarios. Both implicit and explicit boundary delimitation occurs in these case studies, even if the latter phenomenon seems to be dominant. Most of the built projects seem to increasingly apply explicit boundary delimitations, avoiding a free appropriation by users and embracing a no-risk policy when referring to privacy or security. The worldwide and increasing occurrence of fencing gardens is one example: property owners and neighbours seem to have an increasing need to separate their adjacent territories. Here, besides security and privacy, the aspects of appropriation and social status play an important role.

However, not all cases point towards exclusively explicit territorial delimitation. Rather they show different ways of configuring territories and highlighting the qualities gardens can give to streetscapes

## Garden as streetscape protagonist: A case study

One case study that is part of the Streetscape Territories Research Project is in Williamsburg, New York, where the streetscapes are predominantly defined by open spaces of all kinds. All the streetscapes in this area are peculiar. When walking through the neighbourhood, one detects an interesting variation of defining boundaries; it seems as if in every street many different filtering tactics have been applied in a non-systematic way. Setbacks, front yards, small gardens, alleys and walkways become essential parts of the streetscape. North 5th Street,

running perpendicular to the East River, is an example. It looks as if each user, inhabitant or property owner was provided with the freedom to delimit the territory in their own way, unfolding the street's own territorial configuration. The lack of specific planning guidelines seems to explain the origin of these streets as territorial laboratories; gardens are laid out in different sizes and with different purposes, which generates a different identity for each property.

Observing the figure–ground map of the street and its direct surroundings, a rather irregular morphological set-up can be detected (figure 4), unlike the early nineteenth-century street grid. Besides the streets and sidewalks, many other spaces in different sizes are left open, waiting for construction, to host parking and accommodation and to provide gardens or courtyards for neighbours. Many spaces, from private front gardens to community parks, provide character to a property or building. The properties and buildings situated at the south-eastern part of the street seem to be smaller in scale. They present a much more capillary structure than the north-western part, which is dominated by industrial activities and storage facilities, even if, at the very end of the street, new housing blocks are being constructed.

The streetscape is mostly defined by aggregated territories of different scales, small at one end of the street and bigger at the other. One territory is situated next to another without any specific height or setback regulation: each single building, independent of its use or scale, seems to position itself freely within the delimited territory. Some buildings show setback of more than 10 metres, containing a private front yard, while the façade of the neighbouring house is situated strictly coinciding with the property limit. Other buildings seem to have occupied part of the sidewalk, to guarantee a higher level of privacy. Besides that variation, the section widths change and do not seem to show a regular pattern.

In considering the street as a *territorial configuration* (Scheerlinck, 2013), it is necessary to map accessibility in a coherent way. How do boundaries define the space where one can or cannot enter? In other words, what is the

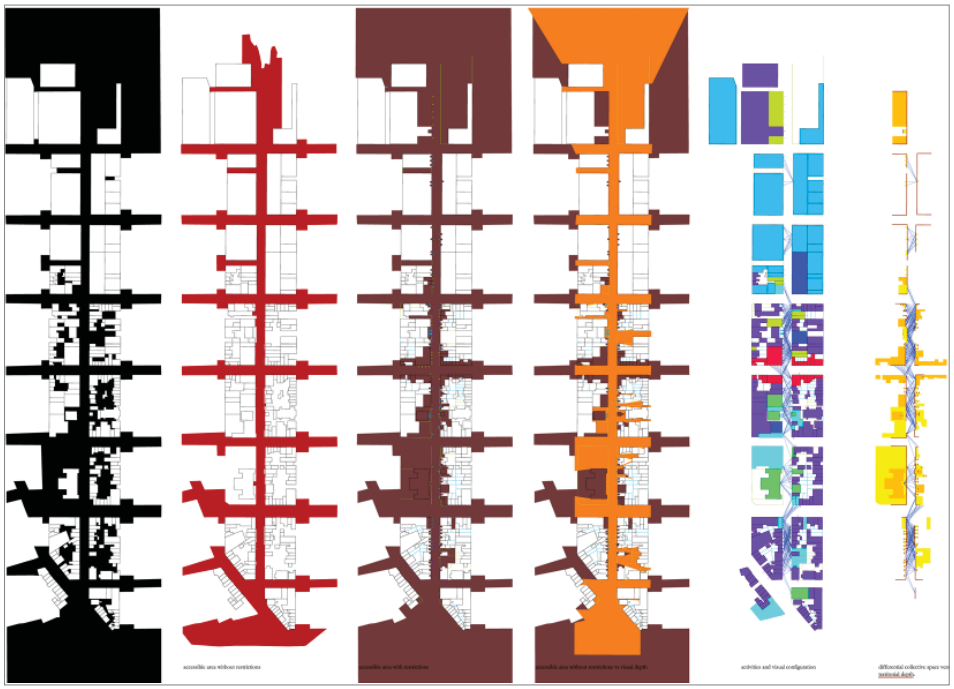

*Figure 4: Case study in Williamsburg, New York, North 5th Street. Left to right: figure–ground map showing open spaces in the area around North 5th Street; map of open space with no restricted access (coinciding with streets, sidewalks and squares of public property); map of open space with restricted access (after going through sets of territorial filters and collective space); visual overlap map; functional configuration map; and depth configuration map. (Maps and sections: Kris Scheerlinck, 2010.)*

territorial configuration of this linear cluster of aggregated, integrated (or included) and overlapped territories? How do green open spaces play a territorial role in these scenarios?

To answer this, we can draw a map of the available open space within the area where there are no restrictions of access to different territories: that map would coincide with the traditional concept of public space. The map would show a regular pattern of space production, because it is based on the nineteenth-century planned grid, which clearly defines the neighbourhood's sidewalks and traffic areas. Compared with the open space map in figure 4, we can detect more constant widths of sections as the streets define a regular rhythm of organised space. However, it seems that no one determining line regulates or describes the relationship between the area of unrestricted access and restricted access. There are many different parallel lines, producing move-forward, move-backward actions in the game of territorial configuration. Street-wall location is defined not by one line but by a set of multiple parallel lines.

A closer look at the interface configuration in figure 5 shows a variety of filter tactics that deal with individual and collective territories.

For example, cross-section 2 shows a system of physical, visual and territorial distances that define the domestic territory. The depth, as observed from the street towards the interior areas, is defined by boundaries of different kinds. A small step first indicates the difference between the street itself and the protected sidewalk, stressed by the appearance of a tree line. Next, within the sequence, a fence appears that seems to indicate the start of another territory. The fence with its gate represents a first restriction of access: only the owners of apartments within the building can enter this outdoor space (with a key) before going through the front door, which represents – besides the outdoor–indoor division – another territorial boundary. Before you reach that door, however, a set of stairs allows you to get to the level to enter the building. Once the inhabitants or visitors get inside the common hall, another restriction is made between the residents of the apartments situated on the different floors in the building.

The combination of these filter tactics defines the depth sequence: some are physical – like the steps, fence, doors and trees – while others need to be tested by their transparency or visual exposure. One can easily look over or through the fence and visually control the next territory, while in other cases this visual control is avoided explicitly. In this instance, the boundaries with territorial meaning are the fence with the gates and the internal separating door. These are the filter tactics that actually reduce the collective use of space. Each time someone crosses a territorial border, it means a reduction in accessibility, a selection of admitted or wanted users. Figure 5 shows the different distances related to open space, to no restricted access and to restricted access. The difference between the last two areas is indicated as *differential collective space*; here, it is strictly located between two territorial boundaries.

Another example of differential collective space is cross-section 4 in figure 5, where a multi-family house is visible with a large setback from the street, separated by a fence with a gate. Here, the territorial boundaries are the external fence, the exterior front door and the internal door, between the common hall and individual apartments. Physical distance plays an important role in defining depth, while


*Figure 5: Case study in Williamsburg, New York, North 5th Street, top to bottom: cross-sections 4, 6 and 2. (Photos and illustrations: Kris Scheerlinck, 2010.)*

thresholds and treelines differentiate the collective part of the sequence. The visual distance is large but no obstacles are used to guarantee higher levels of privacy. The differential collective space seems to be proportionally larger than in the previous cross-section, even if this does not increase the absolute value of territorial depth (more possibility of sharing space).

We could compare this with cross-section 6, where there is a similar physical set-up but with different territorial meaning. Here, the house is a single-family home, which reduces the depth. The territorial boundary is defined only by the outdoor fence, situated close to the street, delimiting an individually used territory. As a consequence, no differential collective space can be detected because there is no difference between the distance related to space with or without the access restriction. Another difference is the appearance of trees and lower vegetation that limit visual exposure from the street.

Similar results can be found in figure 6, cross-section 13, even if the territorial configuration here becomes multiple and more complex. At the ground-floor apartment level, a fence with a gate defines the individual territory before the entrance door is reached. The upper floors of the buildings are occupied by several families, which means that when people walk up the steps toward the door, no real restriction of access exists: the door leading to the common hall is the applied filter tactic. In other words, one morphological configuration describes two territorial scenarios. The upper floors contain an overlap scenario whereas for the ground-floor apartment the extreme visual exposure of the front garden converts that space as well in an overlap area, but in an introverted way.

In this streetscape, the complexity and multiple-access possibilities of included or aggregated territories are clear. In some cases, the perpendicular position of a multi-family building creates several territorial scenarios; most are based on territorial transition – that is, the planned sequence from few access restrictions to areas of ever-reducing collectiveness within the approach sequence. Other scenarios show minimum depth and a simple configuration, as all distances coincide, even the visual access diagram, as is the case in cross-section 17 (figure 6).

Besides the unintentionally planned combination of territorial scenarios, it is interesting to see how the more recent projects avoid the overlap scenarios and almost exclusively plan the entrance sequence on territorial transitions with explicit delimitation of boundaries. Technological devices are added to control properties, even if it is the proper configuration of space, with the help of landscaping devices that define the sequences.

The streetscape analysis for North 5th Street (figure 7) shows a range of configured collective spaces along the street, according to their appearance, structure and importance for the urban fabric, with the gardens as the main ingredient. In some cases, gardens only play the role of a separating device; in others, they become an element of overlap, inviting users to share in-between spaces.


*Figure 6: Case study in Williamsburg, New York, North 5th Street, above and below: cross-sections 13 and 17. (Photos and illustrations: Kris Scheerlinck, 2010.)*

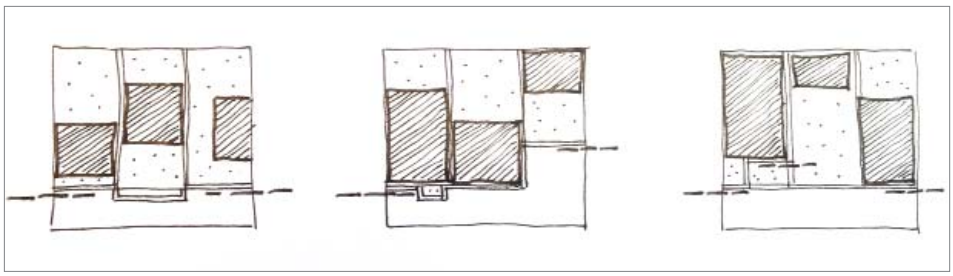

*Figure 7: Territorial streetscape variations in North 5th Street. (Illustration: Kris Scheerlinck, 2010.)*

Rather than providing insights into the detected qualities of the streetscape in figure 7, based on the multiple territorial variations in the neighbourhood, the relevance of this study lies in extrapolating these findings and linking them to other related phenomena of space production regarding garden streetscapes.

## Garden streetscapes: Case studies in residential neighbourhoods

The following case studies describe particular garden streetscapes in different residential contexts, illustrating territorial variations and their relationship with a socio-cultural dimension. These examples demonstrate the structural role of gardens in territorial configurations, as in each case they substantially contribute to the reinforcement of local identity.

The first case study describes two suburban residential neighbourhoods defined by a similar density and using similar plot sizes but in different contexts: the case of one neighbourhood in Melbourne (Australia) compared with suburbia in Miami (United States of America) (figure 8). For Melbourne, the streetscape is defined by a continuous line of front gardens, each delimited by a fence located on the boundary of the property. The way greenery is combined with different types

*Figure 8: Comparative study of the position of territorial boundaries (dashed bold lines) in suburban conditions: (left) the case of Melbourne, Australia, and (right) the case of Miami, Florida, USA. (Photos: Kris Scheerlinck, 2010.)*

of fences or low walls actually defines the character of this suburban street. The delimitation of the in-between spaces is, in this example, explicit. For Miami, the position of the territorial boundary is different because it is situated between the houses, providing a non-fenced front yard that is carefully and more implicitly defined by a system of parallel lines. This way of organising the front of a property is typical for American suburban culture. Basic comparison of the two examples shows that relative distances, especially the position of the territorial boundary (that is, the boundary that provides or denies access) as part of that system, can be coded and decoded in different ways, according to a certain culture. In each case, gardens play a structural role in the definition and use of the streetscape. The level of accessibility and permeability is different in both examples and is defined by relative distances as part of the particular building and landscaping tradition and culture.

Another example of streetscapes with gardens and alleys as defining elements, and with a similar housing density to the examples above, comes from a residential area in Coney Island, New York: Brighton Beach (figure 9). In this coastal area, an interesting repetition of single-family houses has allowed subtle changes in territorial scenarios. Even if the streets seem to be defined by the same housing module (originally vacation homes close to the beach and adjacent amusement park), a rich and wide variation is apparent in how the gardens or alleys are used: sometimes they are shared and sometimes they are used in an individual way, increasing the territorial depth scheme.

Although the footprint of the houses is similar in the neighbourhood, the way the adjacent in-between spaces are organised or configured shows the need for flexibility of use for inhabitants. The spaces in front of or next to the houses are used in various ways, for example: as parking spaces, playgrounds, front yards, vegetable gardens or walkways. It is this variation that defines the neighbourhood's identity, where the inhabitants strongly depend on all kinds of outdoor activities in the gardens that define the streetscape.

Figure 10 shows another interesting example of a garden streetscape. This is in a different context from the previous examples, being situated in Tel Aviv,

*Figure 9: Brighton Beach, Coney Island, New York, USA: gardens and alleys are part of the sets of relative distances and territorial variations. (Photos: Kris Scheerlinck, 2014.)*

*Figure 10: Repetition of in-between spaces in housing blocks in Tel Aviv, Israel: these collective spaces provide shared access to residential blocks, are used as playgrounds for the neighbourhood's children or simply provide light and air to the apartments. In some places, the alleys are closed off and in others they remain accessible to all. (Photos: Kris Scheerlinck, 2013.)*

Israel. The Bauhaus-meets-vernacular building tradition illustrates how, in many neighbourhoods in this city, inhabitants combine shared territories with privacy and especially use gardens to articulate this. When walking along one of the city's main central streets, like Allenby Street, one can see a discontinuous street wall that comprises aligned but detached multi-family housing blocks. The street wall offers an entrance corridor in between blocks that provides a sheltered, shared entrance for the inhabitants and that is slightly set back from the busy street. This way, a clear and easy-to-decode differentiation is made from the entrances to commercial activities on the ground floor of the same blocks. These in-between spaces become interesting collective territories, understood as a system of urban gardens that define the streetscape as much as the constituent building blocks. The repeated garden intervals provide a rather ambiguous reading and an informal appropriation of space and allow users to differentiate the gardens properly.

In a similar way, the housing block entrances in the central part of Tel Aviv, especially between Rothschild Boulevard and King George Street, can be seen as an urban laboratory of increasing territorial depth through their use of these gardens. Many of the housing blocks have an open floor plan at ground level, which means part of the space unfolds between columns that hold the higher floors of the apartment blocks, so a system of subtle gardens has been put in place. These covered gardens are used as entrance areas, for bicycle storage and for relaxing and are seen as both an extension of the sidewalk on one hand and the interior part of the entrance vestibule on the other (figure 11).

The result is a rich and green streetscape that lets inhabitants appropriate the spaces in an open way. The relative distance between housing blocks provides a needed openness in interpretation of the urban and domestic space.

The opposite also occurs – where the streetscape does not penetrate the private property by means of a shared garden as in the previous examples. The increasing application of fencing techniques, where existing gardens that were part of the original open streetscape become fenced gardens and obtain a sudden explicit boundary delimitation, defines many residential streetscapes around the world (figure 12). The need for a clearer identification with a property, the (perception of) insecurity, the wanted rise in social status (by differentiation and separation) and

*Figure 11: Tel Aviv covered front gardens. (Photos: Kris Scheerlinck, 2013.)*

the increased need for privacy explain this increasing tendency. This phenomenon drastically affects the understanding and use of streetscapes on a global scale and, by that means, the proper identity of the residential neighbourhood.

## Conclusions

In considering the notion of *territorial depth configuration and sets of relative distances*, a new perspective on the role and meaning of gardens in streetscapes can be gained. The quality and meaning of these spaces for inhabitants and users depend on the way different territories are configured, more than the strictly morphological issues of proportion and size or pure functional approaches. Gardens can become social and cultural spaces that express the complex interconnectedness of inhabitants and users. Although the gardens are often hardly or not accessible, they play an important part in the taking of ownership of streets. By allowing the possibility to reimagine the place, they strengthen the connection towards an embodied and anchored experience. They offer an in-depth process towards placemaking, setting complex creative patterns of use and practices that take up, and at the same time create, the local identity of a neighbourhood.

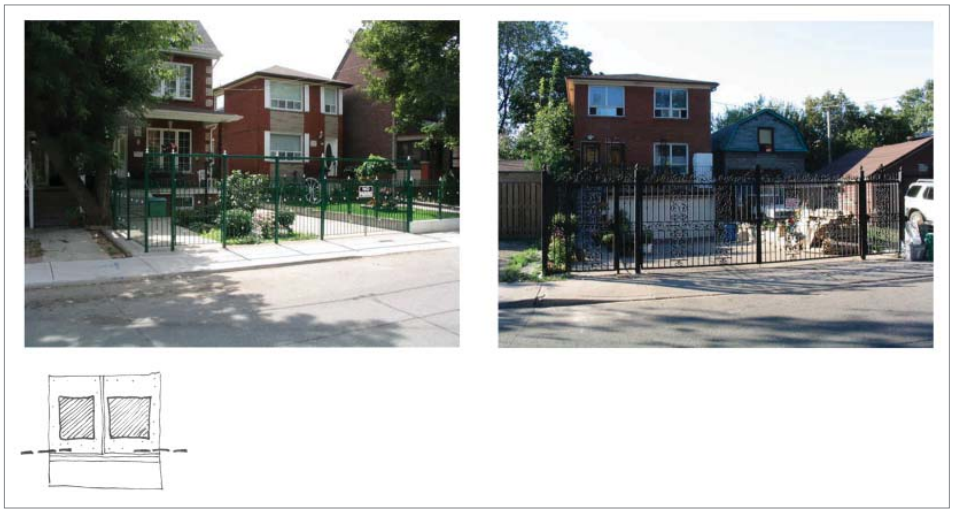

*Figure 12: The increasing phenomenon of fencing: examples in Toronto, Canada. Originally open front gardens have recently (2009) been fenced by the owners. The diagram below the photos indicates the depth structure of this streetscape, with the dashed bold line indicating the position of the territorial boundary (that is, where actual access is provided or denied). (Photos: Kris Scheerlinck, 2010.)*

A series of parameters can be detected that define these landscape configurations that are related to a cultural understanding and use of space. These parameters relate to the relative position of territorial boundaries and the in-between spaces within property configurations, the level of explicitness of boundaries, the presence of overlap scenarios, the openness of functional determination in the sequence, the amount of territorial variations (hence their multiple readings by users within one streetscape) and the subtlety in providing visual exposure. Considering these parameters, gardens are protagonists.

The role and meaning of gardens in streetscapes are not purely aesthetic, environmental or symbolic: gardens, yards, alleys and courtyards are structural elements that are part of territorial depth configurations. They provide space and time for inhabitants or users to unfold their needs and desires within a property and neighbourhood. The examples discussed in this paper, taken from different contexts and cultures, allow us to state that the way streets are laid out does not exclusively depend on the position of the buildings on plots, reducing the garden to a leftover or buffer space. It is exactly the opposite: the qualities of many of the streetscapes discussed are the result of a cultural tradition and conscious decision to use gardens as organising principles that carefully configure garden streetscapes.

## NOTES

1 *Streetscape Territories* is the name given to a research project about the transformation of the urban fabric with a focus on the constant reconfiguration of its streetscapes. The research deals with the way architectural artefacts, systems of open spaces, property structures and their inherent accessibility and permeability models configure streetscapes and how their inhabitants can read and give meaning to them. This project focuses on accessibility and models of proximity within a street, neighbourhood or region and starts from the assumption that urban space, from the domestic scale to the scale of the city, can be understood as a discontinuous collective space, containing different levels of shared use that are defined by multiple physical, cultural or territorial boundaries. See also www.streetscapeterritories.wordpress.com.

2 High integration value within a depth configuration refers to the position a space has in a depth configuration. If we count the number of spaces we must pass through to go from the space with a higher integration value to all other spaces, we find it comes to a total that is less than for any other space – that is, it has less depth than any other space in the complex. The general form of this measure is called integration, and it can be applied to any space in any configuration: the less depth from the complex as a whole, the more integrating the space and vice versa. This means every space in the different examples can be assigned an 'integration value'.

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