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Reading local streets through an analysis of overlapping public-private interfaces

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Abstract

The street is a living organism where strangers feel "socially distant yet physically close", according to Bauman.¹ It is a shared space wherein private entities plug into the public realm at a defining edge. Private and public spaces form an in-between realm, due to overlapping interests and functions. The resulting interface is a micro-assemblage formed by subtle demarcations and revealing a deeper narrative of how people live in the city. The impact of the interface on public space depends on the degree of vulnerability and overlapping between realms. The edge of the street exhibits patterns of human flow, which projects onto the urbanity of the collective street. An interface may take different physical and social forms and a framework of interface typologies is created.

This paper investigates the micro-urban analysis of two streets in Malta, an island which is facing rapid urban development. The streets portray vernacular traces and must address the needs of a contemporary demographic. Everyday transformations of the interface are observed to draw out an understanding of the street. The socio-spatial results redefine the multiple possibilities of interface typologies. The paper discusses the dynamics extracted from such observations, revealing the way people perceive, appropriate and traverse streets. It concludes by indicating the utility of interface approach in planning and design policymaking.

1 Bauman, Zygmunt. Postmodern Ethics. Malden, Mass: Blackwell, 2009, p.153.

Keywords

Public-private dynamics, interface typology, overlapping realms, Malta.

City and street

Buildings and streets comprise the basic DNA of the city and urban space is often a direct reflection of its inhabitants and their interests. Streets are defined by programmes, the built fabric and the movement of users. The city is characterised by this 'assemblage' of forces which is felt at the intensity of the street scale.¹ Streets further reflect the key changes in a city, the evolution of which may be read through the metamorphosis of built form and open space. In this paper, we look at change through the interface created between the built façade and the 'street-room'.

The immediate human impression of the city is best captured at the ground floor interface where there is an intense mix of people, establishments, entangled and in coexistence (Fig.01). The edge of public space reflects the city's dual nature, where public and private are opposite counterparts. This paper considers the politics of public space, at the public-private edge. Through micro-assemblage thinking, everyday space is studied, in terms of the spontaneous, physical and infrastructural, individual variables in the 'unconscious' in-between space, formed by public and private systems. In line with the principles of New Urbanism, we consider the public-private interface as an important feature in the value of living in cities.

The paper is set in the context of the young island-state, Malta, wherein streets are undergoing major and rapid changes in response to increasing population and economic interests.

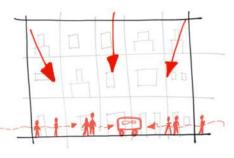
Interface structure and porosity

The street, in-between and the everyday

Bobić (2004) contends that streets are social spaces, or 'outdoor rooms'. Depending on height-to-width ratio, the street may feel intimate, when individual entities are close to the public realm and wherein the street edge is marked with items spilling out from homes informally (Fig.02). In contrast, if the street does not maintain a sense of enclosure, it may feel weakly defined and its public nature may relate poorly to its surroundings.²

The connection between building frontage and public space is referred to as public-private interface, which can define the urban landscape and, thus, street character. This in-between space is framed







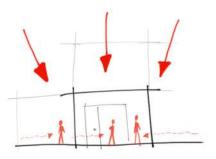


Fig.1 - Capturing the ground floor interface - a study of intensity in the city, featuring Galleria Vittorio Emanuele II in Milan - Photo credit: Alexandra Abela, 2019

by physical devices and demarcations. The interface comprises a series of dualities, separating domains while allowing connection. Daily interactions occur between people and space to form a dynamic interface³, described by Bobić as a composition of "objects, gestures, day-to-day words [...] in a real but fragmented way".⁴

There is a tension between the public and private realms, which depends on building height and mass, street width, the length of the street block, frontage widths and if volumes project outwards or set back from the building line. These public-private proportions relate to our perception of the street, reflecting in how fast we walk through the street, whether we linger therein, if we encounter people and so forth.⁵ Architectural interventions may mediate conflict; in contrast, private space may create an element of control towards the public edge. Ultimately, the interface relationship comes down to the degree of porosity, socio-spatial variables, and the socio-economic context of the place, all working in concert.

Interface porosity and overlapping _

This paper aspires to gain a deeper understanding of the overlapping private and public domains which may either allow for human attachment to urban space to develop or otherwise.

A building front onto a pavement has a direct and pedestrian interface. Permanent physical devices, such as setbacks or steps, may help transition from the intimate to the public realm. Trees, awnings, or overhanging elements like balconies, create an enclosure and overlap private onto public. Beyond such elements, interface thinking refers also to the architecture of temporal objects which are motivated by human adaptation.

Interface determination

There are three main aspects which pertain to interface determination – the physical structure between domains; the degree of visual connection or accessibility between domains; and human adaptation of the interface, which is ultimately the human interaction with objects and personal belongings across the threshold. These aspects create the interface porosity which defines spatial contractions and overlapping of claims.





Fig.2 - Appropriation and the need for public life and participation. (Left) A typical street lined with plants softening the private edge and mediating between the private residences and street. (Right) The *antiporta* is a device taking this further to create a rich layering and relationship between private and public - Photo credit: Alexandra Abela, 2021)

Interface thinking is based on the nuanced behaviour and physical devices across the threshold, which create degrees of division, overlapping or gradual transition. In the older Mediterranean building context, vernacular homes create numerous blank interfaces with high windows and gates and a feeling of private life being oriented inwards. Other archetypes, such as the Maltese historical domestic threshold defined by the *antiporta* (Fig.02), display a rich spectrum of public-private layering. The *antiporta* is a transition space where people entering a home may wait or stop to chat with the inhabitants; alternatively, inhabitants may spend time here while people-watching from the threshold.⁶

Psychological cues and behaviour

There is a sense of conflict in this in-between zone, since the interface is an avenue into how people share and manoeuvre through the street and across the threshold of an intimate and public space. In the words of Lefebvre et al. people transition from one domain to another on a "biological, physiological and economic level". Users move from public to private and vice-versa, via the interface – the neutral vacuum between the confronting realms.

Furthermore, if a street is furnished with architectural devices at a human scale, they are enabled to participate, as if the street were their room. People seek edges⁸ as neutral spaces in the public realm, to recollect, view the street or connect with people. The edge provides a sense of security on the street, as the interface becomes a safe buffer zone, enhancing privacy within the built form.⁹

Users become authors of their spaces, mentally adapting and relating to space through activity and use. The threshold has social potential, in terms of people lingering, meeting, consuming, chatting or passing by. Indeed, the social life of the street edge is possible with the emotional, psychological, social attachment to space. Psychological cues are born out of physical nuances which govern our public behaviour. The *antiporta*'s outer gate relates perceptually to public space and defines semi-private extents. If there is a degree of permeability that exposes the private quarters, the *antiporta* is read as part of the private realm, which strangers may feel less comfortable interacting with. The interface thus plays a role in psychologically separating the domains.

The interface realm, constantly changing in spatial definition, is









Fig.3 - (top, left) Infill redevelopment alongside 2-storey residential dwellings; (right) Awkward street interface created as a result of semi-basement policy interpretation; (bottom) A varying streetscape reality comprising two- and three-storey residences, 3+semi-basement, four-storey and higher residential developments as well as numerous garage and communal parking entrances - Photo credit: Lisa Attard 2022

thus a living form. In this way we may grasp the interface's potential power and its impact in street dynamics.

Introducing Malta

Zammit and Abela¹⁰ provide a historical overview of the public-private interface in the Maltese Islands, from the older inner cores with a morphology defined by a dense urban grain of inward-looking residences and high solidity of boundary walls and façades, to the newer outer edges of towns and villages characterised by varying realities. Within the former contexts one encounters the *antiporta*, with inhabitants further spilling out onto the immediate pavement space. In turn, the newer, largely vehicular-oriented, streets¹¹ experience a limited residential street culture, mostly within two-storey streets and especially those having a positive interface strengthened by well-land-scaped front gardens.

The year 2006 was an important turning point in local policymaking, with the widespread allowance of two-storey redevelopments into higher communal residential blocks. The interface was primarily disrupted through the introduction of the semi-basement. This created awkward and badly proportioned interfaces that compromised the relationship with the rest of the street, further necessitating long flights of stairs to the entry of the raised units, creating issues both when placed externally and internally. On the ground, the streetscape is a mix of undeveloped 2-storey dwellings sitting alongside '3-floorsplus-semi-basement' developments and more recent developments based on 4 full floors (or higher) and a corresponding higher presence of dead frontages with street-level garage entries (Fig.03). Within this diverse street context, the interface is relegated to a weak and inconsistent element that subsequently results in a poor street culture. Where semi-private front gardens are present, these have been demoted to communal access points for residents and vehicles, with the 'garden' element kept to a minimum.12

A similar inconsistency of interface may be observed within social housing estates.¹³ Open spaces are largely unarticulated leftover spaces, which are hardly used by residents, often due to inappropriateness of location, lack of visibility, low quality infrastructure and amenities and weak edge definition.¹⁴ Given the low public uptake, they are often



Fig.4 - Two realities of spatial appropriation, social housing estates (left) and OCAs in Valletta - Source: Authors 2022)

appropriated by the estate's residents, adding to the spaces' ambiguity as they are perceived as semi-private rather than public (or semi-public), resulting in a lower pedestrian footfall that leads to further spatial appropriation (Fig.04). Other examples of spatial appropriation, both informally and formally, abound throughout the Island, with formal instances established through the concession of public land, often for commercial purposes; specifically, to set up outdoor catering areas (OCAs). The demand for such spaces has been high particularly in the capital city of Valletta (Fig.04) and in waterfront localities such as Gzira.

The localities of Gzira and Hamrun, discussed below, offer several interesting insights. Located within the island's central conurbation, the chosen streets comprise linear commercial spines, in Hamrun's case (Fig.05) as a primary town centre that connects to Valletta and in the case of Gzira's seafront (Fig.06), tying into the important neighbouring centres of Msida and Sliema within the North Harbours zone. Their existence results from growth along commercial routes that became more established in time combined with specific property development. Over the past decades, these axes have been reinforced through infrastructure, becoming prominent movement corridors at the macro scale of the conurbation, as well as through planning policy that has designated their primarily commercial use.

Gżira's urban context is steadily transforming into a business and entertainment one, supported by ancillary uses, notably catering and entertainment. In turn, the context surrounding Hamrun's main road is replete with diverse commercial uses – ethnic and local eateries, bars, grocer and furniture shops and supply stores, with differing degrees of porosity.

Indeed, the interest of both case studies lies in their rich spatial complexity and an urbanity that is undergoing rapid change. This has enabled the development of a strong public interface throughout their extents. As a result, the case study areas exhibit various interface suspensions and extensions of various private entities. In addition, both streets are intense with pedestrian and vehicular activity, often in conflict with one another and both affecting the interface's nature.

Methodology

The adopted methodology in these streets is micro-spatial-behav-

ioural analysis,¹⁷ comprising philosophical input, physical exploration, and performance enquiry.¹⁸ Busy urban streets were observed on different occasions and diverse physical, social and spatial qualities were noted to understand how physical elements are used in space and how people move and react within the street. The researcher was positioned within the public space across from selected street stretches. Their choice was based on the varying interface nature, to ensure that different functions, structure, human occupancy, and material makeup would be analysed.

The interfaces were observed on different days and times. Photographs were taken regularly, and different city life actors were approached to discuss their experiences. The solid-to-void makeup was first marked on the photographed built faces to understand degrees of visibility. Objects spilling out from the private realms and others relating to public infrastructure were then highlighted. Several photos were collected to highlight individuals and their behaviour around the respective interfaces.

Following the photographic analysis, a typology framework was used to classify individual interfaces in terms of connection or separation of individual entities and the public network, based on adaptations and human activity. This framework, also a research outcome, was structured using the knowledge derived from urban analysis sources, particularly work done by Dovey & Wood (2015) and Bobić (2004).

The results are illustrated in the form of photographic streetscapes, mapped according to four observed typologies (Fig.07) as discussed hereunder, and based on three criteria:

Constant interface quality

Temporal, physical and spatial adaptation of interface

Temporal and everyday human interaction

Defining a typology framework

The key outcome of this research is the extraction of the four typologies that may be defined as follows, each differing in the degree or nature of overlapping (Fig.08):

Type 1 - Public realm penetrates the private entity. Here the edge is linked to the public realm and this relation continues beyond the property boundary into the individual realm. The imaginary street domain is broadened, with private life oriented towards the public. In Gzira this

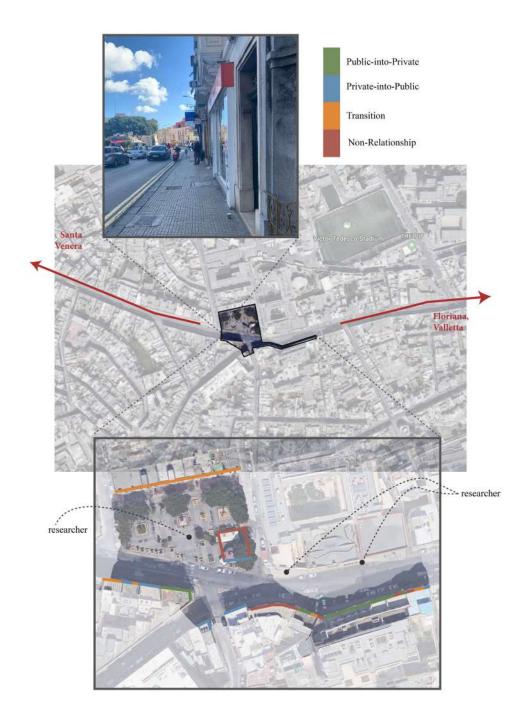


Fig.5 - Contextualising Hamrun, the case study area and interface typologies - Source: Authors 2022)

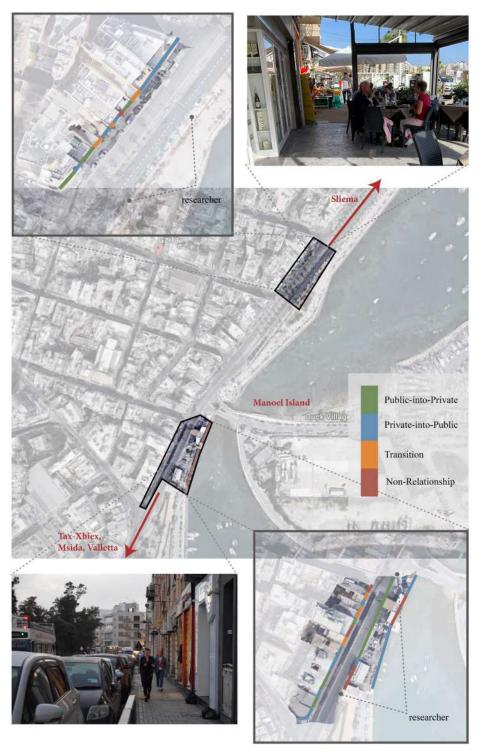


Fig.6 - Contextualising Gzira, the case study area and interface typologies - Source: Authors 2022)

is observed within open doors and permeable glass façades, allowing full visibility and vulnerability of the private realm and creating a strong connection with the public realm.

Type 2 - Private entity overlaps onto the public realm. Private interests may overlap onto the public space, through demarcation achieved by placement of objects or architectural elements. Evidence of such overlapping may also be seen through the programme adopted in the public space and people's use of it. In this sense, there is a degree of appropriation or control on the public realm by individual interests. In Gzira this is evidenced by the use for outdoor catering of the pavement adjacent to the bars and restaurants.

Type 3 - Public and private realms relate to each other, a sense of transition. An in-between space is created which is neither fully private nor public; there are elements relating to the public space and the private realm, and a buffer space evolves based on the relationship between the two. In both Gzira and Hamrun, there are several traditional interfaces featuring gates or steps at the entrances of residences. These serve as neutral spaces, belonging to the private realm, where one may view the street from a comfortable enclosure.

Type 4 - Public and private realms are separated and not overlapping. When there is a lack of spatial or visual permeability, the connection between realms is weak and functions are separated. There is a low degree of in-between space, which may be created using different physical elements. In Gzira and Hamrun, this is observed with blank walls, façade shutters and elements such as higher planters covering up the private realm and preventing visual connection.

The occurrence of these four interface types is given spatial and geographical relevance on plan in both localities (Fig.05 and Fig.06), enabling the researcher to visualise the entire streetscape, and punctures therein, in terms of interface porosity, human interaction and adaptations.

Re-theory - reinterpreting local observations

The activity within individual realms may extend outwards in subtle or bold ways. Such extensions may mature into formal appropriation by way of physical and/or social means. These two types of extensions each feature more strongly in Hamrun's and Gzira's streets respectively.

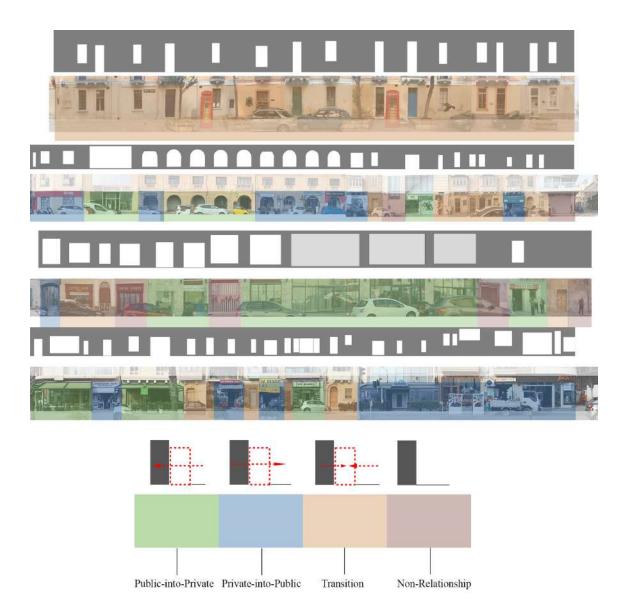


Fig.7 - Interface mapping - a sample of streets in Gzira and Hamrun are featured and colour-coded according to the typology pertaining to the socio-spatial observations - Source: Authors 2022)

The subtle extension – social demographics and street perception

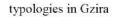
This extension is particularly typified by the established interfaces of so-called *kazini* (social clubs), wherein (primarily) men gather, chat, and consume drinks, inside the building and at its threshold. They spill out, overloading the narrow pavement running along the busy, vehicular spine and gather at the closest street corner. Such spaces have become hotspots; indeed, in Hamrun, traffic barriers were installed along the pavement edge to avoid pedestrians getting injured, many of whom are forced to walk on the road due to the high volumes of individuals. These individuals are the objects which are extending outwards, marking the space as their own.

Social activity continues onto the pavement and the neighbouring doorsteps and street users use both public and private furniture to sit, chat and agglomerate (Fig.09). Experienced and frequent users claimed that these areas represent broader phenomena occurring within the rest of the urban environment. Furthermore, several women stated that they could perceive men's stronger claims on these spaces, despite a mix of street users. Indeed, in Hamrun, unlike Gzira, it was observed that individual demographic groups separately territorialise different public space edges.

The bold extension and formal claims on space: public-private trade off

The private realm may embrace or reject the public based on degrees of visibility and extensions, creating a trade-off between opposing domains. At the line of demarcation, the private realm is vulnerable to the public realm, which may penetrate the private space and have a stake in its function. In some cases, there is full visibility of the private realm where the street is used as an attractive element and blurs into the private.

Several types of commercial relationships with the public realm were observed, featuring informal and formal modes of overlapping. In Gzira, the latter were more evident. Awnings completely covered the pavement from edge to edge as tables were placed outside, leaving a public 'corridor space' for passers-by to commute. Some establishments eliminated barriers from pedestrians with fully open façades, creating a blurred public-private area extending both inwards and out-









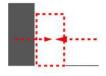
Public-into-Private



Private-into-Public







Transition



Non-Relationship

Fig.8 - Interface typology - four relationships between public and private - Source: Authors 2022)







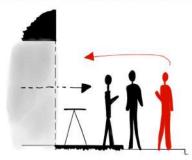








Fig.9 - (top) The social edge - photographs and sketches illustrate how people and objects interact within a recess (left) and spill out from the building front (right); (bottom) The fine line between the commercial and the public - Source: Authors 2022

wards. Other catering areas were excessive, as umbrellas, tables, chairs, signs, and people sprawled on the pavements, public squares and parking areas (Fig.09).

Both towns are developing in a piecemeal manner, with commercial permits issued on a case-by-case basis and in the absence of a strategic vision or masterplan. Therefore, there are informal infrastructure boundaries that in turn create awkward spaces which are appropriated by either vehicles (the road space) or consumers (the pavement space and space previously occupied by on-street parking bays), leaving little to no space for street users to manoeuvre, let alone to use the space equitably for social purposes. There is indeed a fine line between the (positive) activation of space, with the opening of the private realm, and (negative) excessive claims on space, which in turn creates an imbalance in the 'contents' of the public space, in terms of area for pedestrians, cyclists, OCAs and road infrastructure.

In this sense, we observe an appropriation game which is furthermore desired from a policy perspective, given that it is also a powerful tool in revitalising public space. This argument is heightened in an island-city which has to date depended economically on tourism, evidenced by central government-initiated policy objectives that emphasise tourism potential and consumption rather than longer-term objectives such as liveability.

Conclusion - towards an interface approach

This paper studies physical elements and human interaction at the street edge, from which themes relating to familiarity, the imbalance between infrastructure and pedestrian space and public-private trade off through visibility and encroachment arise. Observations evidence several types of public flows in public space, reminding us of the different interests that have a stake in the interface. The utility of interface analysis, as part of more comprehensive urban analysis, is in the ability to understand public space as a layering of different degrees of 'publicness' and 'privateness'.

The interface approach re-examines the role of the edge vis-à-vis public space. In Malta, an interface context may be unearthed with many vernacular houses and commercial outlets, portraying the ability of reciprocity between realms, and an understanding that public and private life may intersect in creative ways. Snippets of intimacy from

private life may interact with public networks and commercial units may incentivise the activation of public space if interface parameters are studied and sensitively designed. The case studies illustrate the potential of the edges of the public network; a point of encounter for different demographics of street users resulting in an emergence of social flows positively contributing to street culture. These are easier to resolve in the subtle extensions, although the limitations of physical infrastructure may hamper the experience of these interfaces and create safety concerns when conflicting with significant vehicular presence.

The same cannot be said of many new residential developments, which negate the street and develop an individual language wherein the interface is relegated to a functional asset as opposed to a potentially meaningful social space that may provide an added richness to the street context. The ground floor interface is rarely activated and features bare front yards, access stairs, garages and harsh edges due to blank walls that are incompatible with the human scale. Planning policy is primarily a quantitative concern, with most developers interested in obtaining maximum floor area with a modular construction, removing the ability for architects and urban designers to create solutions for neighbourhood liveability.

In this vein, there is ample scope to potentially reinforce street culture, particularly focusing on the local street network. More appropriate street-level guidance, geared at the neighbourhood scale, is required that addresses both spatial considerations of streets (for instance, in terms of rethinking spatial allocation to various street users) and urban form, paying attention to building frontage and/or the front garden's definition (where present). In this junction, a newfound understanding and appreciation of the role of the interface within street analysis becomes critical; one that must feed into policymaking, to ensure the production of a spatial relationship that prioritises democratic practices – creating space for people, integrating green infrastructure and balancing out urban vitality (and commercial opportunities) with longer-term liveability targets. In the short term it may already be possible to pilot some initiatives within areas such as social housing estates, which offer a spatial canvas that demands rethinking.

On the other end of the spectrum, interface results also speak to the

use of commercial development in activating urban space. Again, the solution is very much policy based. Current generic OCA policies should be replaced by specific, context-based policies that address the entire extent of physical infrastructure and seek to resolve the imbalance currently skewed in favour of individual commercial interests at the expense of public concerns and green infrastructure.

The solutions to urban vitality stem from treating street and building in symbiosis – and creating a living space for all street users, enriched through different layers of visibility. Allowing for individual objects to be placed thoughtfully may allow for human interaction and flexible street use. As seen in Hamrun, streets may be rethought as linear progressions of small public pockets that provide for such flexibility (Fig.10). In tandem, their role as mono–functional traffic conduits needs to be requestioned, particularly as it remains a high priority on the agendas of infrastructural agencies and transport authorities. The recent Slow Streets Malta project attempts to reclaim space back for pedestrians and cyclists and prioritises safe and secure mobility for street users, rethinking street sections to achieve a better spatial balance and using tactical urbanism to pilot solutions with the local communities.¹⁹

As the needs of a changing demographic, in socio-economic and socio-cultural terms, are revalued and restructured, the interface may constitute the missing policy and design tool that may help architects, designers and planning assessors alike in ensuring that newer developments are better suited to their existing street contexts and help in creating stronger communities and enriching neighbourhoods.

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Fig.10 - Rethinking streets as linear progressions of small public pockets - Source: Authors 2022

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