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Rethinking ‘Spaces of Exchange’ for Future Cities

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"Spaces of exchange present multiple opportunities for community-based initiatives to help maintain and rehabilitate neighbourhood spaces for recovering communities."

the October 2019 revolution, the COVID-19 outbreak, and the port explosion on 4 August 2020 (Bolin & Kurtz, 2018). This chapter looks at the neighbourhood of Mar Mikhael in Beirut, an area affected by real estate pressures and the financialization of housing before these crises, and then heavily damaged during the Beirut blast (Krijnen, 2018; Pietrostefani et al., 2022b). The pronounced spatial pressures on urban settings have led to spaces of exchange being re-invented and developed by neighbourhood residents for many reasons, reshaping the neighbourhoods' landscapes. The research finds that the creation and use of spaces of exchange is ranked as one of the most important coping mechanisms to deal with multiple crises.

A mixed methods strategy was applied to develop a comprehensive understanding through urban analytics, mapping, and text analysis. Data from two original household surveys was used to identify socio-spatial patterns using descriptive statistics and comparing indicators between 2018 and 2021.[1] The surveys were administered across six areas within the larger Mar Mikhael neighbourhood: Hkmeh, Mustashfa el Roum, Qobayat, Jeitaoui, Mar Mikhael and Khodr. A consultation workshop on mapping spaces of exchange took place on 20 April 2021 to reflect with citizen scientists on the subjective representations of the neighbourhood and how residents and other users experience it. This participatory method was designed and deployed to ensure the utmost sensitivity to this vulnerable setting and reflect the realities of the lives people are living there. The research also incorporated a diversity lens to explore intra-community inequalities (Dabaj et al., 2020). This lens was based on Catalytic Action's c0-design approach and the RELIEF centre's Prosperity Index research, in which the concept of prosperity is explored as a lived experience in a context of large-scale displacement and multiple crises (Jallad et al., 2021).

URBAN THRESHOLDS

Considerable advances have been made in urban open-space research, influenced by a growing concern for the quality of urban environments and the importance of the role of open spaces in achieving sustainable neighbourhoods (Al-Hagla, 2008; Francis, 1987). This has been pronounced since the COVID-19 lockdowns restricted the use of public spaces and imposed social distancing, forcing people to stay at home. This unprecedented global restriction has led many to question the impact of COVID-19 on our relationship with public space and on designing the city more broadly (Honey-Rosés et al., 2020). In Beirut, the widespread privatization, securitization, and mismanagement of public spaces, the COVID-19 lockdowns, and the rethinking of city spaces following the Beirut blast have resulted in the re-adoption of many ad hoc spaces (Ghandour & Fawaz, 2010; Seidman, 2009). Not just parks and squares, but pavements, the edges of buildings, empty lots, and staircases become spaces of exchange: thresholds 'where the world and life intertwine, mingle, twist in a constant resistance – awkward and fragile' (Boano, 2022). They offer a productive alternative of space and recovery beyond the temporal and a socio-spatial arena that embraces the relational nature and dynamism of complex social processes such as disaster events and responses to special crises.

The triple crisis in Lebanon has taken a significant toll on the mental health and psychosocial well-being of individuals from all levels of society (Fouad et al., 2021). The triple crisis manifests in the country's entrenched socio-political dysfunctionality, but more evidently in the everyday life of residents, which has become a daily struggle in which trauma and violence intertwine: a battle for life itself and its space. Spaces of exchange are scenarios in accelerated transformation where forms of 'coexistence without relationships' are determined and at the same time resist abandonment and carelessness, allowing mediums and

1
The quantitative findings are based on two survey datasets. The first was collected by Dr. Elisabetta Pietrostefani between March and June 2018 within the project Geospatial analysis of housing insecurity and resident value of neighbourhood amenities in Beirut, Lebanon, supported by the Royal Geographical Society with the Institute of British Geographers. The second was collected between March and April 2021 for the project Assessing Vulnerabilities for urban recovery solutions in Beirut post-explosion, supported by UKRI GCRF and the RELIEF Centre. The 2018 and 2021 household surveys were both conducted for representative samples of the comprehensive population count of Mar Mikhael proportionally stratified by nationality (Lebanese and non-Lebanese).

relations that settle in to make some form of life possible, some movement acceptable, and some relief thinkable. To consider these re-conceptions of space, we explore the changes in how residents value the social street life through questions about neighbourhood belonging, self-reported well-being, and life satisfaction in local neighbourhoods. In crises, space becomes a means to support different ways of living in extremes.

NEIGHBOURHOOD BELONGING AND WELL-BEING

A WEAKER SENSE OF NEIGHBOURHOOD BELONGING DESPITE A VALUED SOCIAL STREET LIFE

We start by exploring neighbourhood belonging to uncover partial meanings of spaces of exchange in Mar Mikhael. Neighbourhood relationships are a significant aspect of everyday life, and they represent how connected residents feel to their immediate surroundings and their local community. The degree to which residents feel a sense of belonging to their neighbourhood often reflects the strength of the local social networks and the emotional bond to the place (Pietrostefani, 2022; Young et al., 2004). These are important components of everyday life associated with a sense of community identity and well-being (Finney & Jivraj, 2013).

When asked what they preferred about their neighbourhood, Mar Mikhael residents most often mentioned 'memories', 'social streets', and their 'neighbours'. Mar Mikhael was characterized as a neighbourhood valued for its social street life. Indeed, most households reported social life (57.6 per cent) as being the main reason they chose to stay following the Beirut blast. In both 2018 and 2021 surveys, respondents were asked a set of questions regarding various ties and interactions they have within their neighbourhood. The neighbourhood belonging variables captured diverse forms of social connections such as friendships and associations, seeking advice, borrowing things, planning to remain a resident, regularly stopping and talking to people, willingness to help neighbours, and trust in neighbours.[2] We have aggregated the scores of these variables, hereafter referred to as the neighbourhood belonging score.

Findings reveal a significantly lower neighbourhood belonging score in 2021 than in 2018. With the highest differences present in Mustashfa el Roum and Qobayat areas whose scores went from 3.5 and 3.4 to 3.0 and 2.9 respectively. Of course, we cannot pinpoint which crisis may have affected this reduction the most, but we clearly identify a weaker sense of local belonging despite the area's valued social street life. Temporalities are experienced differently as spaces are continuously rewritten. The fear of and restrictions on going out and socializing during a pandemic may have also affected the relationship people have with their public spaces, especially for the elderly population, who represent 27.2 per cent of the survey participants. Reporting lower levels of attachment to the neighbourhood may also reflect weaker local social networks or heightened insecurity about the future of these relationships amid the post-explosion recovery of local communities. Displacement after the blast was also noted as contributing to this changed perception of neighbourhood belonging. Forms of urbanism are often generated by displacement, spatial processes that imply a continuous shaping of the urban, revealing its agency. Such urbanism is constituted of acts that create friction within an existing system of oppression and opportunities (Dabaj et al., 2022).

To further investigate the relationship between neighbourhood and well-being, respondents were asked to rate how happy, stressed, and safe they felt in their neighbourhood. Respondents' levels of happiness in their neighbourhood were higher in 2018 than in 2021: 73.1 per cent reported a high level of happiness in 2018 compared to 54.4 per cent in 2021. Resident responses to the question 'How safe do you find your local neighbourhood?' also disclosed significant differences, suggesting a

2
Respondents were presented with a total of eight statements, to which they were asked to respond to what extent they agreed or disagreed on a 5-point Likert scale. The statements were the following: I feel like I belong to this neighbourhood; The friendships and associations I have with other people in my neighbourhood mean a lot to me; If I needed advice about something I could go to someone in my neighbourhood; I borrow things and exchange favours with my neighbours; I plan to remain a resident of this neighbourhood for a number of years; I regularly stop and talk with people in my neighbourhood; People around here are willing to help their neighbour; and People in this neighbourhood can be trusted.

Figure 1 ▸ p. 215

decrease in inhabitants' sense of safety in their neighbourhood. About half of the respondents thought that their neighbourhood was safer before the multiple crises, both during the day (48.4 per cent) and during the night (51.6 per cent). Similarly, residents surveyed in 2018 revealed higher stress levels than those in 2021: 78.6 per cent reported a low level of stress in 2018 compared to 71.3 per cent of the respondents in 2021. Our findings suggest clear alternations in respondents' perceptions of space and sense of well-being in their local areas following the financial crisis, COVID-19, and the blast.

FINDING COPING MECHANISMS IN THE NEIGHBOURHOOD

To identify socio-spatial recovery solutions that are meaningful to the residents of the area, we explored how people tend to deal with issues that affect local well-being and addressed the coping mechanisms that residents adopt or are more likely to use. Survey respondents were asked to indicate to what extent they use or have used certain coping mechanisms to deal with the stress, depression, or trauma they faced following the pandemic lockdowns and the blast. In general, findings suggest that people tend to cope with these issues mostly through self-support, support from family and friends and by engaging in outdoor recreation or sport activities. Although more than two out of three respondents (68.4 per cent) appear to rely on self-support and one in two (50.2 per cent) reported finding support from family and/or friends (Figure 1), encounters through outside activities were the third most frequent coping mechanism. No evidence emerged that these tendencies differ according to income, education levels, or other socioeconomic variables.

As shown in table 1, most self-support was found in the neighbourhood. Approximately half of surveyed residents (51.6 per cent) who choose to engage in outdoor recreation, sports activities, or other encounters tend to partake in such activities in their local areas. These responses highlight the role of the support that residents can find in their immediate environment and the importance of local social networks for coping with pandemic and post-blast effects on community recovery. These spaces are especially important as almost 50 per cent (45.9) of respondents had not visited a green space outside the city in the last year. In fact, reflecting the lack of traditional open or green spaces, the most visited places for recreational use were street and alleyways (28.19 per cent) or sidewalks (19.52 per cent). Streets were also the spaces in which most respondents said their children play when not at home (14.52 per cent). The elderly also reported using pavements (54.4 per cent) for recreational use, more than local parks (36.39 per cent) and vacant lots (9.47 per cent). These statistical findings set the stage for a qualitative understanding of spaces of exchange as the thresholds that enable social activities, acts of care, movement of bodies, and encounters.

CITIZEN SCIENTIST MAPPING

Citizen social science is based on a commitment to collaborative research in which residents who live in or around the sites of inquiry become members of the research team and are involved in all phases of the research process. As part of their research activities, we conducted a consultation with this project's citizen scientists to map and further understand the neighbourhood's spaces of exchange (Pietrostefani et al., 2022a). These spaces were defined as thresholds between private and public space, where social and economic activities happen and where people give and receive care and where people express themselves. Spaces of exchange were also identified as general spaces where people experience the city, cope with their issues, develop their skills, or simply exist.

Citizen scientists shared their observations of places where they saw people drinking coffee, and meeting their neighbours: on the building staircase and on balconies. They also noticed how some

public spaces lost their original purposes, such as the Jesuit Garden, which was no longer used by its residents because of the NGO staff presence after the port explosion.

Spaces were grouped into four main categories:

1 Spaces of dialogue: spaces where we find chairs, people sitting, a table, a narghile, a bottle of water, a teapot, or pumpkin seeds shells on the floor.
2 Spaces of informal economic transaction: spaces that have small trolleys selling coffee, flowers, or water.
3 Spaces of care: places where residents water the flowers in front of their homes, feed stray animals, or keep an empty welcoming chair at a street gathering.
4 Spaces of expression: places where people have expressed their feelings and ideas on a mural, spaces where children have placed their drawings, or where they simply play.

Proximity and familiarity were recurring themes in the analysis of these spaces: children playing under their houses so their parents could watch them from the balconies; people drying their laundry on the Vendome stairs in front of their homes; elderly women watering their flowers on the balconies and using this moment to initiate conversations with passers-by. All these outside activities contribute to people's well-being. Care and maintenance were also a recurring theme. Citizen scientists observed residents cleaning the front of their houses as an act of care for the neighbourhood or caring for stray cats as part of their routine. Mutual support mechanisms between residents were clearly noticed throughout observations.

With rehabilitation works still underway, new spaces of dialogue had also appeared, such as spaces where workers meet for a break to eat and chat and where residents thank them for their hard work. Streets have also become places to linger and discuss the progress of rehabilitation work. The public stairs were mentioned as clear landmark spaces in Mar Mikhael, reflecting the history of the neighbourhood. Citizen scientists noted that although the activities on the stairs may have changed over time, they would always remain a landmark of the social infrastructure, where the neighbourhood meets and mingles.

RECOVERY: A MATTER NOT JUST OF TIME BUT OF SPACE BELONGING

Spaces of exchange in Mar Mikhael present multiple opportunities for community-based initiatives to help maintain and rehabilitate neighbourhood spaces for recovering communities. Recovery is a matter not just of time but of space belonging. The triple crisis in Lebanon has not only taken a significant toll in the city but has left neighbourhoods and their spaces at the forefront of imagining and practicing recovery. Although crises have left urban life and urban spaces exhausted, micro practices shaping life have created modes and mechanisms of coping in space that allow encounters and shape well-being.

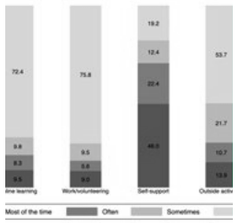

Figure 2 ▸ p. 214

	Online	In the neighbourhood
y	10.6%	54.2%
s	9.4%	51.6%

Table 1 ▸ p. 215

Note
Parts of the chapter are based on the authors' earlier publications Pietrostefani (2019) and Pietrostefani et al. (2022).

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Figure 2
Mapping spaces of exchange (photographs by the authors).

Figure 2
Coping mechanisms to deal with the effects of the blast (graph by the authors).

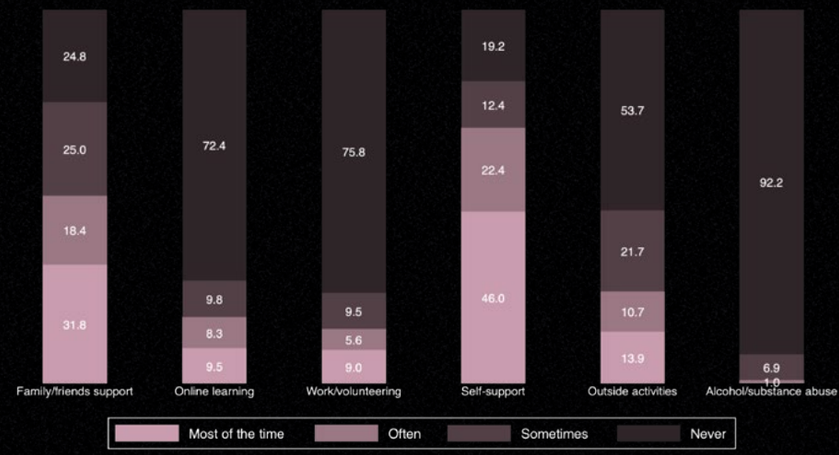

Table 1
Tendencies in self-support location (table by the authors).

	Online	In the neigh-bourhood	In Beirut (not neigh-bourhood)	Outside Beirut	Other
Support from family and friends	**10.6%**	**54.2%**	**15.5%**	**17.0%**	**20.3%**
Outside activities	**9.4%**	**51.6%**	**17.9%**	**16.8%**	**13.2%**