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Place Attachment and Sustainable Communities

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Abstract

As cities in the developing nations are becoming urbanised at an accelerated pace and intensity, urban planners, design practitioners and policymakers conjoin efforts to satisfy the emergent needs. The design and construction of a sustainable built environment offers adaptive amelioration to the risks of climate change, which ostensibly affects the global South more than the North. Therefore, for developing cities to become sustainably urbanised and planned, socio-economic factors in addition to environmentally devised technological innovations should be comprehensively conceived, to become more consciously assimilated in urban planning and design of residential neighbourhoods in the global South. One of these social factors is place attachment, which has been gaining traction in the last three decades due to the role it plays in understanding the implications of human–place bonding on predicting behaviours, which in turn prepares communities to become resilient and sustainable in the face of possible risks, ranging from climate change displacement to environmental depletion of resources, economic constraints and social tensions. This paper explores the link between place attachment and the creation of more sustainable communities that are civically engaged and environmentally conscientious. As the dynamics of place attachment differ from one context to another, the study employs qualitative methods to mine the place attachment values of several residents of a neighbourhood in Amman, the capital city of Jordan. Through semi-structured interviews with a representative section of the residential communities and photographic documentation, the study analyses the findings from affective and cognitive perspectives, and evaluates their contribution to achieving sustainability. Based on the findings, the research proposes an agenda for future research directions in place attachment studies, providing empirical insight from the context of Jordan.

Keywords: place attachment theory; Jordan; sustainable communities' PPP framework; Harra initiative

Introduction

As climate change affects the global South, undergoing a rapid rate of urbanization, adaptation and mitigation responses require the implementation of an operable model of sustainability, which makes decisions by accounting for well-balanced assessment of environmental, social, cultural and economic factors. Too often, many of the projects in the built environment proclaiming sustainability dilute the incorporation of social and cultural aspects and focus on more predictable and tangible proof-seeking results, which can be more easily demonstrated via economic and environmental indicators. One of these social factors that deserves consideration is place attachment, which has been gaining traction in the last three decades due to the role it plays in understanding the implications of human-place bonding on predicting behaviours. In turn, it prepares communities to become resilient and sustainable in the face of possible risks, ranging from climate change displacement to environmental depletion of resources, economic constraints and social tensions.

This paper explores the link between place attachment and the creation of more sustainable communities that are civically engaged and environmentally conscientious. As the dynamics of place attachment differ from one context to another, the study employs qualitative methods to mine the place attachment values of several residents of a neighborhood in Amman, the capital city of Jordan. Through semi-structured interviews with a representative section of the local communities and photographic documentation, the study analyses the findings from affective and cognitive perspectives, and evaluates their contribution to achieving sustainability. Based on the findings, the research proposes an agenda for future research directions in place attachment studies.

What Makes a Sustainable Community?

It is argued that sustainable urban planning and design aim to break down the dichotomous nature of the physical and the political to equip communities to become environmentally sustainable, socially equitable and economically prosperous, and thus better positioned to respond adaptively to natural and social changes. In the last few decades, many neighbourhood revitalisation projects, and planning scholars, have depreciated centralised planning approaches – a planned community – and propounded a more decentralised planning – a planning community.[1] In community development, the perception of a community as a subject 'decision maker', compared to its framing as an object 'decision recipient', operationalises sustainability and empowers the community.[2] It is more sustainable for communities to grow social capital and adopt a community-based governance structure, recognised by many planners to be more effective. For instance, the Effective Community Governance Model (ECGM) recognises that a community's success 'should be based on citizens' goals for their community, not externally imposed goals'.[3]

The criteria towards developing sustainable communities have been formulated in different ways by various scholars, but all of them revolve around achieving a community's contextually nuanced interests of the core pillars of sustainability; environment, society and economy. Several frameworks include guiding principles to appraise the sustainability of communities, such as the Egan wheel[4] and the Community Capital Model,[5] which is shown in Figure 1. The latter is selected to explicate this paper's findings through the employment of place attachment theory. The analysis ultimately aims to highlight the benefits of contextually nuanced strategies for Jordan to achieve Sustainable Development Goal 11: 'Sustainable Cities and Communities'.[6]
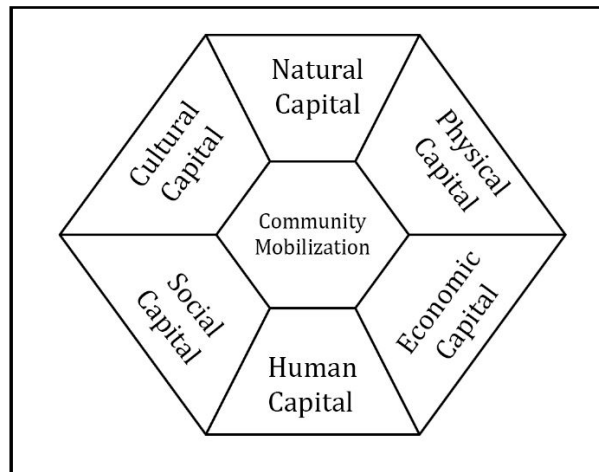
Figure 1   Roseland's Community Capital Model: A framework for sustainable community development (Source: Roseland, 2012, 19).

The Scope of Applications of Place Attachment

The theory of place attachment is concerned with recognising the influence of emotional bonds that form between people and the places with which they interact. According to Scannell and Gifford, place attachment is a bond between an individual or group and a place, which can vary in terms of spatial level, degree of specificity, and the social or physical features of the place, and is manifested through affective, cognitive and behavioural psychological processes.[7] The functions that place attachment aims to achieve include: survival and security, goal support and self-regulation, continuity of memories from past through present, and physical qualities that enhance identity and bolster self-esteem. Ultimately, place attachment contributes to increasing the well-being and quality of life for communities.

Place attachment research has produced many divergent strands of exploration since its initial theoretical conception by Low and Altman in 1992,[8] evolving in theory, methods and applications. The applications of place attachment have been explored in many fields, such as natural resource management by Kruger et al. in 2000, Kyle et al. in 2005, and Williams and Patterson in 1996; alternative energy sources by Devine-Wright in 2011 and Devine-Wright and Howes in 2010; pro-environmental behaviour by Hernandez et al. in 2010 and Scannell and Gifford in 2010; social housing and displacement by Manzo in 2008; and socially responsive community design by Sanoff in 2000.[9]

From a phenomenological perspective, David Seamon[10] identifies the six place processes that ultimately activate and sustain a positive place bonding when these processes are in constant dynamic interplay: place interaction, place identity, place release, place realisation, place creation and place intensification. All these processes seem to tap into the psychological realm of exploring place attachments values among residents from affective, cognitive and behavioural stances. Applying these processes synergistically, Seamon describes 'a spectrum of emotional engagement that ranges from appreciation, pleasure, and fondness to concern, respect, responsibility, care, and deep love of place'.[11]

The methodology of defining place attachments has been explored in many aspects, ranging from measuring such connections quantitatively (in studies conducted by Williams and Roggenbuck in 1989, Williams and Vaske in 2003, and Jorgensen and Stedman in 2001), and those explored qualitatively (by Gustafson in 2001, Manzo in 2005, and Mazumdar and Mazumdar in 2004).[12] The methodological approach of recognising place attachment can utilise both quantitative and qualitative means, but many experts expound the value of qualitative approaches, especially when residents' narratives are expressed in this type of exploration. Clare Rishbeth, for example, argues that narratives call for 'a richer and more responsive research environment specifically appropriate to researching place attachment'.[13] Richard C. Stedman et al. highlight the method of using photography as a visual means, whereby participants become more engaged and responsive to the research intention.[14] Other researchers mention the benefits of other means of exploration, such as video narratives by participants without the physical

presence of researchers, which ultimately produces results devoid of the power dynamics that arise between the researcher and the interviewee.

In summary, place attachment can be an indicator of a community's social cohesiveness, civic engagement and pro-environmental attitudes. The literature on the subject favours the inclusion of more qualitative methods of enquiry, acknowledges the lack of longitudinal studies on place attachment, and recognises the need to explore applications of the theory, such as asking: how can architects and planners use place attachment theory to design places that forge place bonding?

Place Attachment and Geographical Scales

Many issues affect place attachment, such as territorial scale and a community's social capital. For example, in 2010 Lewicka found that physical conditions mattered most to residential dwellings, while social factors had strong influences on attachment on the scale of cities, neighbourhoods and buildings.[15] Consequently, mobility was found to weaken place bonds, while length of residence increased them.[16] As many place attachment studies focus on the emotional bonds created by individuals, the potential of its application in communities can act as 'a catalyst for development of local social capital and community mobilization and citizen participation in response to perceived threats to place'.[17]

Fried's classic study in 1963 of neighbourhood attachment showed that despite poor physical conditions of the area, the residents were strongly attached to it because it afforded social interactions with others.[18] Hidalgo and Hernandez also showed that the strength of the attachment varies according to spatial level.[19] Socially-based place attachment was stronger than the physically based place attachment for the home and neighbourhood levels, but physically-based place attachment was stronger at the city level, as illustrated in Figure 2. It becomes clearer as this research progresses that place attachment is a complex relationship that manifests unique place–person interactions temporally and geographically.
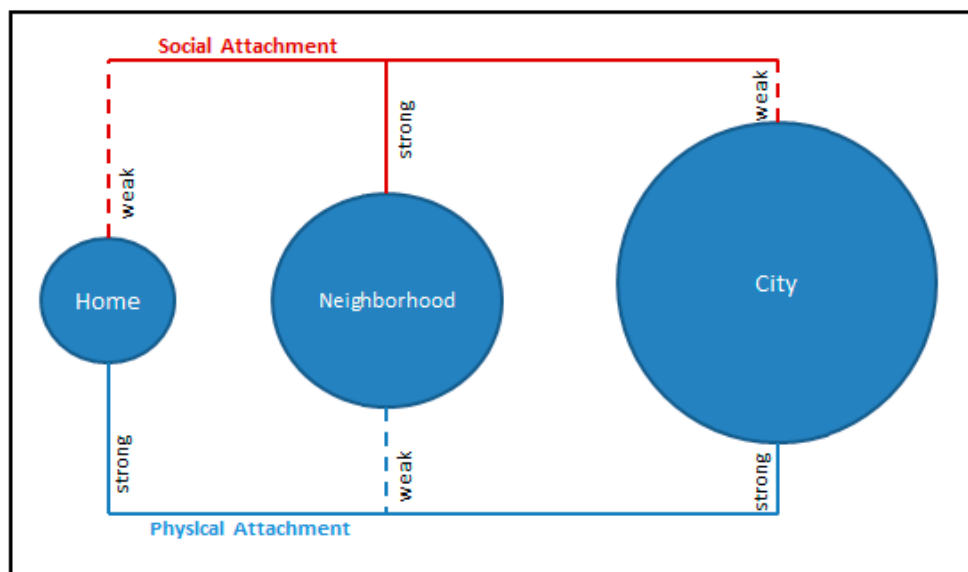

Figure 2   Place attachment strength in different geographical scales (Illustration by author).

The Multidimensionality of Place Attachment

The tripartite model of place attachment developed by Scannell and Gifford in 2010 connects the different types of bonds and includes most definitions of place attachment in an integrative and inclusive multidimensional framework.[20] It is based on a review of place attachment literature and studies that encompasses the three dimensions of place attachment: person, psychological process and place (PPP). The PPP framework is illustrated in Figure 3, as it poses questions to identify the types of relationships in each of its constituent dimensions, which can either overlap or be separate. The dimensions guide the researcher to formulate questions, especially helpful in interviews and qualitative methods, to classify types

of place attachment as they tackle the first dimension: who is attached and to what degree is the attachment held individually or collectively? The second dimension aims to uncover the psychological process by answering the question: how are affect, cognition and behaviour demonstrated in the attachment? Finally, the third dimension recognises that the object of attachment can be either social or physical by answering the question: what is the attachment directed at this place?
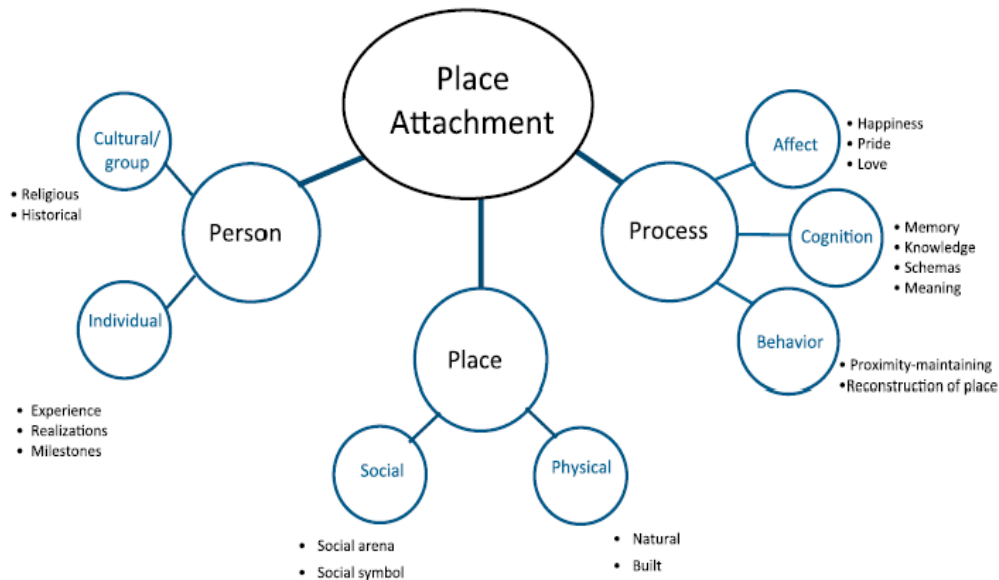

Figure 3   The tripartite model of place attachment: the person, process and place framework (Source: Scannell and Gifford).

Research Methodology

Since this research aims to explore qualitatively the types of place attachments of residents in a neighbourhood in Amman, semi-structured interviews[21] were conducted with a representative sample. The chosen neighbourhood is located in the eastern part of Amman in a district called Ashrafiyya, which has undergone several revitalisation projects, two of which will be compared in this study: one neighbourhood rehabilitation was led by a grass-roots initiative named 'Harra', and the other was the pedestrianised public space at Abu Darwish Plaza, led by the Greater Amman Municipality (GAM). The questions were designed, and the answers categorised according to the PPP framework as they detected different place attachment values about the two projects in question. All interviews were conducted in February of 2018. Eight residents from the Ashrafiyya district were interviewed in their neighbourhood, aged between 40 and 50 years, one of whom is the founder of the Harra initiative, one who is a woman resident, and one who works at an adjacent shop to the Abu Darwish Plaza. The neighbourhood and plaza were observed and documented by photographs. The lead architect of the rehabilitated Abu Darwish Plaza was also interviewed to elaborate on the findings from the residents' answers. The interviewees' names are anonymised and coded with non-representative alphabetical letters.

Context

Creating a sustainable city requires contextual planning strategies that respond to the diverse socio-economic realities of the city. Every city is characterised by its diverse societal mosaic of human capital that is reflected in the morphology of its physical capital. In Amman, the demographic differences reveal a disparity that is particularly evident in the city's eastern and western parts.

The urban morphology, housing types, population density and socio-economic aspects exhibit obvious differences in the disadvantaged central and eastern parts and the well-off western and northern parts, as illustrated in Figure 4. Ababsa remarks that:

after thirty years of urban renewal, Amman is still characterized by strong contrasts between poor, highly populated neighborhoods where unemployment rates are high, and neighborhoods primarily located in the west but also in the north-west and south-west, where the active population is greater, the level of education better and buildings and infrastructure more developed.[22]
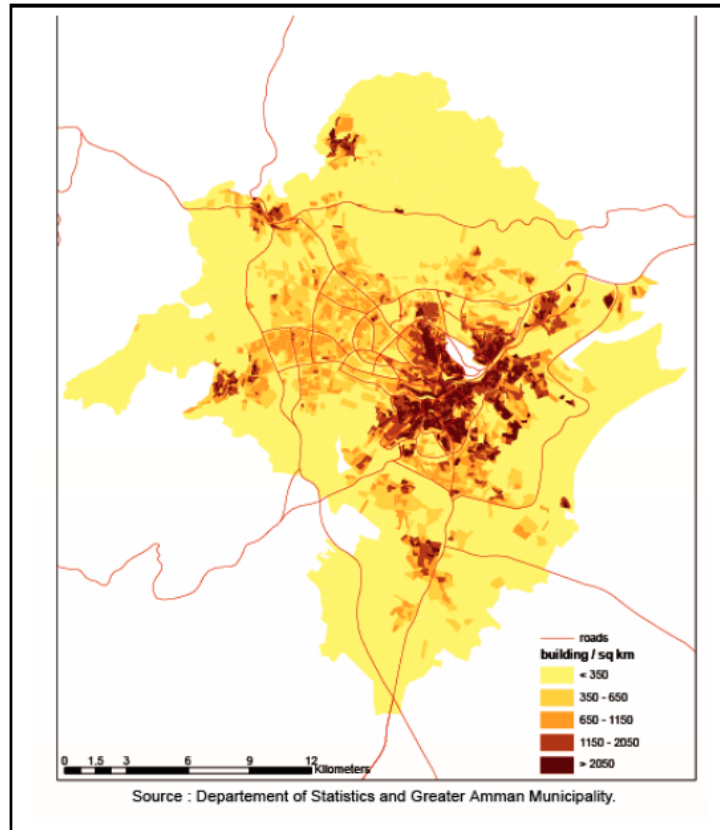

Figure 4   Building density in Amman in 2004 (Illustration from Atlas of Jordan, 389).

Figure 5 attests to the contrast, with varying types of building categories legislated in Amman, allowing more spaciousness and larger land plot setbacks in the western part than its counterpart.

Figure 5   East Amman on the left and West Amman on the right (Source: author).

In the last decade, GAM revisited its role as a service and road infrastructure provider, and ventured into becoming a patron of culture and design, greenlighting projects that elicit Ammani identity in line with

the motto of the 2008 Amman Masterplan: 'Amman: A city with a soul'. Even though GAM is commended for initiating a plethora of urban revitalisation projects and infusing the city with much-needed public spaces in the last decade, some projects were not as successful when finally implemented. One example is Abu Darwish Plaza, located in Ashrafiyya district, which was the only urban pedestrian plaza project to have been implemented in the eastern part of Amman. The current state of the project prompted negative place attachments from nearby residents that are further explored in this study.

Findings

Abu Darwish Plaza: Pedestrianization for Whom?

The district of Ashrafiyya has a significant history of early settlement of Ammanis from various ethnicities, such as Armenians, Circassians and immigrants from neighbouring Mesopotamian countries, in addition to refugees residing in informal settlements. In addition to being characterised for its traditional houses and dense urban fabric, Ashrafiyya hosts an important historic and religious landmark: Abu Darwish Mosque. Before the mosque was erected, the Ashrafiyya area was sparsely populated. The mosque, shown in Figure 6, was built in 1961 on land owned by Abu Darwish (Mustafa Hassan) and financed by him. In addition to its history, the mosque's significant architectural design and stone cladding mean that it is included as a cultural tourist attraction landmark in GAM's city plans. The lead architect (AB), who was responsible for designing and implementing the Abu Darwish Plaza elaborated when interviewed that:

> at the time of the project there was a GAM committee that had a vision for Amman. And the Danish architect Jan Gehl was contracted, and they had a positive intention to actually start with eastern Amman that is usually neglected from development projects. Our office was selected, and the pedestrian plaza in front of Abu Darwish was to be designed. The committee and architects wanted to have public spaces in Amman, and the idea was to create panoramic lookouts from this high plateau of the Abu Darwish mosque as a touristic attraction.

Figure 6   Abu Darwish Mosque in Ashrafiyya (Photo by author, 2018).

Gehl's strategy for the Abu Darwish Plaza was communicated to GAM as seen in the proposal images in Figure 7, which guided AB to propose a more contextually accommodating design, as shown in

Figure 8. Some elements of Gehl's design were kept, such as the conversion of the street into a pedestrian plaza and the redesign of the commercial block to form an enclosure and define an enclaved plaza in line with GAM's vision, so as to increase public and pedestrian spaces. Some of Gehl's proposed features were excluded, such as the residential block with balconies overlooking the mosque, which was deemed incompatible with the cultural context and replaced with a commercial complex and the Ashrafiyya community centre. In fact, Figure 9 illustrates that AB's proposal went through multiple revisions whereby five commercial buildings that were planned for demolition were kept in place eventually in response to protests from shop owners, but nonetheless the curved block shown in Figure 10 was removed. During construction, the local residents of Ashrafiyya protested, mostly about the pedestrianisation of the square (see Figure 11), which caused traffic jams due to the removal of a road that used to cut across the square. Nevertheless, the completed design offered a new space for the local community, with shops and a community centre as shown in the 'after' image in Figure 12.[23] Two years after the plaza's completion, local residents sent numerous petitions to GAM requesting the reopening of the closed street, partly to reduce the traffic jam created by the pedestrianised plaza, and partly to introduce moving vehicles to limit the antisocial behaviour that had started taking over the place. Figure 13 illustrates the location of the new street that was implemented by GAM in response.
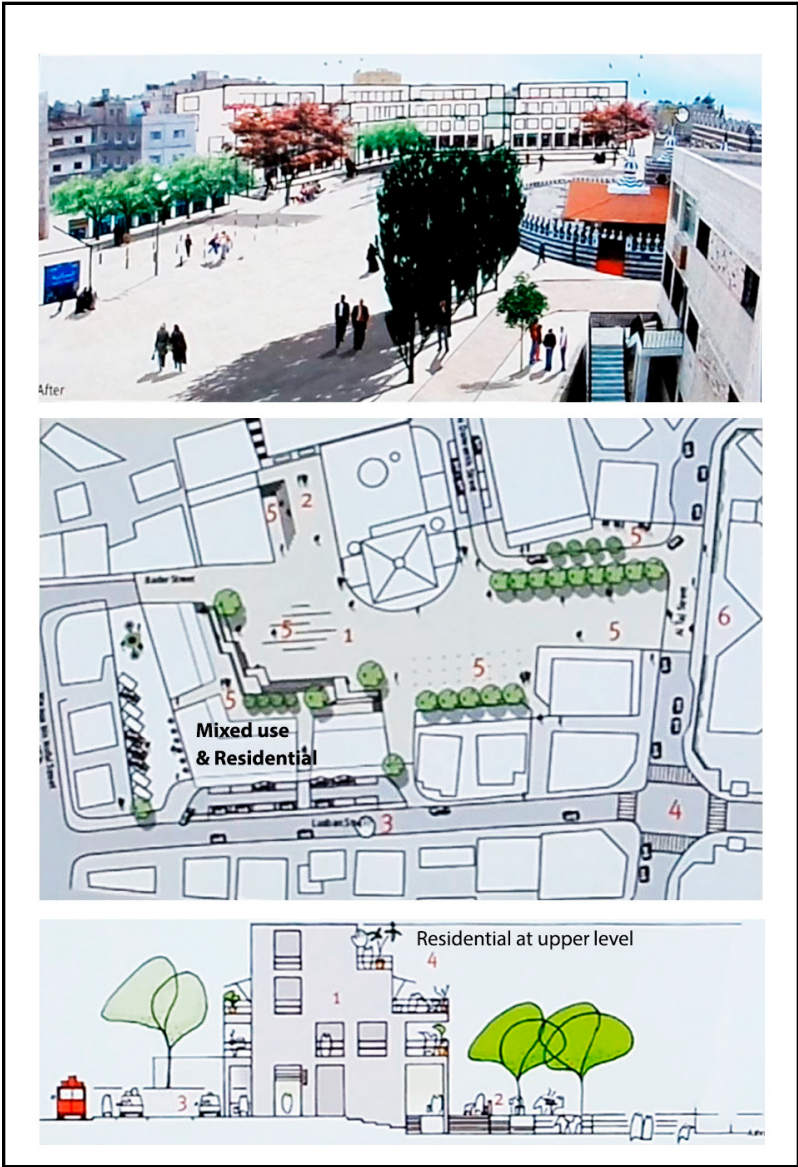

Figure 7 Gehl's proposed vision for Abu Darwish Plaza (Source: AB Archive).

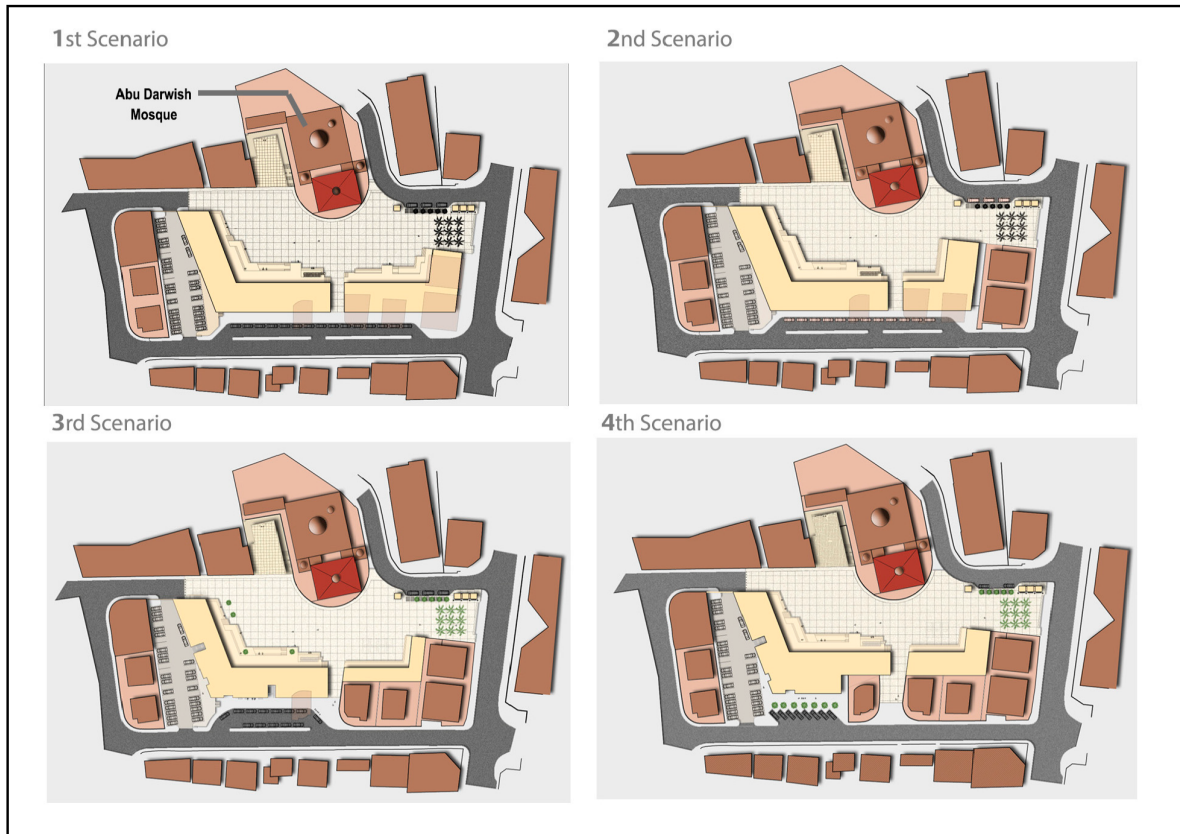**Figure 8**　AB's proposed design for Abu Darwish Plaza (Source: AB Archive).

Figure 9　AB's revised design scenarios for Abu Darwish Plaza, finally settling on the fourth option with more existing buildings kept. (Source: AB Archive).

Figure 10 Aerial view of Abu Darwish square before pedestrianisation, showing the curved commercial block that was later removed (Source: AB Archive).

Figure 11 View of Abu Darwish Plaza under construction (Photograph by author, 2009).

Figure 12 Views of Abu Darwish Plaza before and after development (Source: AB Archive).
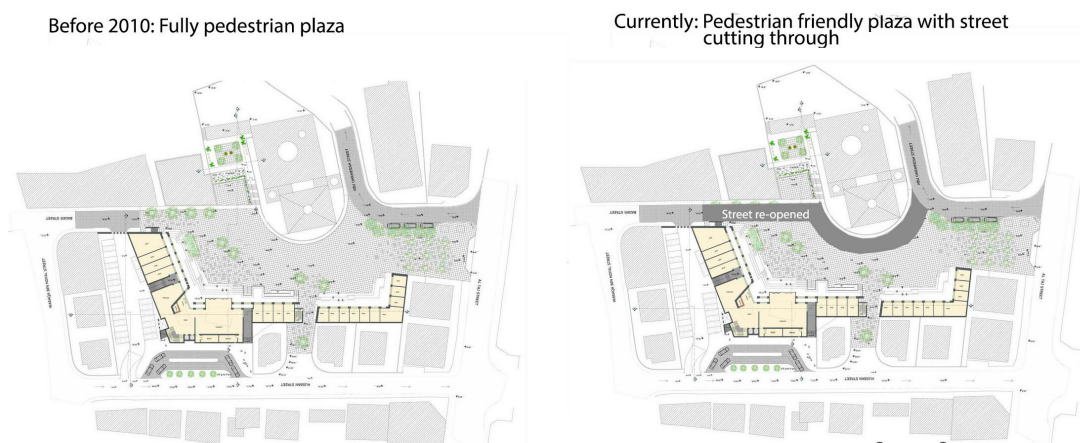

Figure 13 Plan of the project showing the newly opened street on the right of the figure (Source: AB Archive).

When interviewed during the research, one of the shop owners complained of the rundown condition of the plaza, vandalism, antisocial behaviour, long-term vacant shops, lack of security presence, and criminal behaviour as shown in Figure 14. In order for him to maintain the operation of his shop without the intrusion of threatening groups, he had to create a buffer zone, as shown in Figure 15. He elaborated: 'I put planters in front of my shop, as I call them "natural obstacles", in order to give my shop more privacy to distance intruders and violent people.' He reasoned that:

when the plaza was made pedestrian, it started to attract perverse acts and exceedingly so. The police left the place and it is now well known for its negative reputation. The project is really great and commendable, but it needed a few modifications. The plaza needed a street to cut through it, to create movement and the sense of supervision and safety. The complete pedestrianisation created an abandoned place, decreasing security.

Figure 14   Threatening behaviour currently taking place in the plaza, with antisocial behaviour including vandalism, violence and drug use (Photographs by author, 2018).

Figure 15   The shop owner improvised solutions to reduce harassment by greening the terrace in front of his shop (Photographs by author, 2018).

This point of view was also shared by another Abu Darwish resident, who declared:

the police are no longer there, and they do not want to get into conflicts with them. There is a problem with the cleanliness, the trees are not irrigated. We would have benefited more with half the cost. The expensive benches and trash bins are ruined now. The place of the project is not suitable because people's behaviours are negative. The public toilets are closed because of the lack of supervision by GAM, and they use the mosque's toilets instead. It is a loss to spend money at this plaza.

It becomes clear that Abu Darwish Plaza in its current condition prompted ambivalent place attachments for the residents, because they were not involved in the planning of the project from the beginning. This layered confusion about the place is expressed by many residents, such as the shop owner saying: 'I love Ashrafiyya for its old historic value. This positive project transformed into a negative one because it gathered negative people.' One of the residents, BC, when asked what place he liked the most in the district, declared that Ashrafiyya residents bear negative attachments to the project stating:

I love Abu Darwish Mosque, and I like the roof of my house. I would not move out of this Harra [neighbourhood] to west Amman if I was given the choice, because I love my house. However, I resent the new project of the Abu Darwish Plaza. Unfortunately, it is known nowadays for perverse acts and drug use, in all times of day and night. This takes place especially in the arcades and the back of the buildings. Currently, most of the shops are closed with no economic activity. The only thing this project created is more hard work for the city workers to clean after the plaza visitors who come with their own food and throw onsite. I would never go there, and I can tell you that no resident of Ashrafiyya goes to this plaza. If I learn that my son went to the plaza, I will punish him.

The conflicted emotions towards the project indicate a mix of place attachment manifestations according to the PPP model. Figure 16 shows the complexity of interactions between person, place and process, with overwhelmingly negative attachments exhibited to the current project. If one could learn a lesson from such classification, it would be how space production can start off with the best of intentions but can go awry when the local community is not consulted, and the main question not answered: who is this space for? It is then that the produced place becomes a chameleon of multiple meanings, and may be negatively tinged when overtaken by a fringe group.
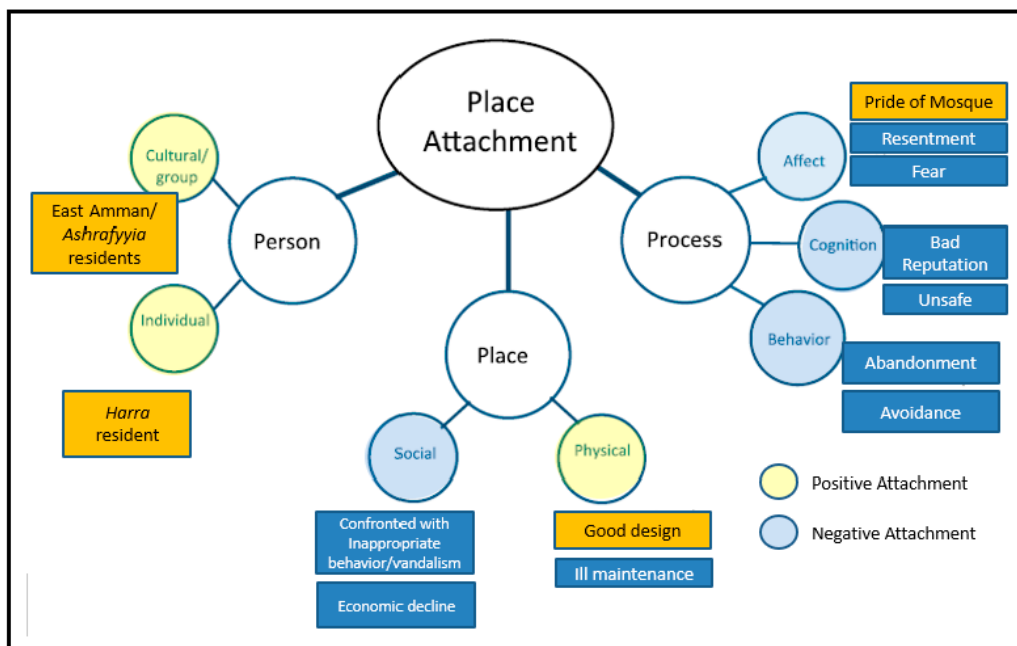

Figure 16   The PPP framework classifying positive and negative place attachments to Abu Darwish Plaza (Source: adapted by author from Scanell and Gifford, 2010).

The following section explores the place attachments of the residents of the same district to their neighbourhood that underwent a grass-roots community revitalisation project with Harra initiative.

Harra Initiative: A Community Mobilised

Harra, the Arabic word for 'neighbourhood', started in 2003, upgrading some neighbourhoods in eastern Amman. According to its founder, the objective of the initiative is to work with the disadvantaged communities to revitalise their neighborhoods, because:

> people are already frustrated from their daily life, and that is why they need a clear path to follow. That is why Harra initiative is a very slow and clear strategy; we are a turtle and ant strategy. An ant perspective is that we look and assess matters from the ground, slow and realistic size, unlike a sharp eagle's eye.

The initiative operates independently, relies on volunteers from various sectors, and is individually and communally funded within economic means. It set out by organising a meeting with the residents to assess their needs, and then progressed to proposed solutions by the design team (see Figure 17), modification of the proposed design by a community participatory approach, training of the residents as they implemented the design (see Figure 18), and establishing a local community committee to govern the neighbourhood's affairs. Other capacity-building programmes are also implemented that respond to the community's needs, varying from educational and environmental to economic and social.

Figure 17   Harra volunteering design team proposing solutions for neighbourhoods (Source: Harra Archive).

The process takes years, increasing the social capital of the community and enhancing the physical capital simultaneously. Figure 19 illustrates that transformation of spaces as they are maintained, repainted and greened is not only an act of physical beautification, but also an act of social cohesion – a process that runs deeper than pretty facades, with one of the residents, BD, stating: 'the neighbourhood is its people not its walls'. This strong social attachment among neighbours was the product of an empowered community to mend their neighbourhood with their own hands. Another resident, BE, elaborates positively: 'That

period of working together was great. We worked on the pavement, and we were helped by a GAM board member who is part of our committee and facilitated the installation of the pavement. We planted a tree on the pavement called "Majnouneh"'. The continuity of the social capital resonates with Roseland's 'community capital', which is vital for sustainable development, and which is exemplified in BF's description of his neighbourhood:

> the residents of this Harra have been here for at least 60 years. Before working on the Harra, we used to know each other as neighbours superficially and greet each other. After Harra, the impact was positive, the participatory approach of mending the fence and the neighbourhood, we got to know each other and be protective. Now I know all the people, and social relations started developing, so in the evening time at 6:00 pm, after I get back from work, my neighbours call me, and around eleven of us meet up, chat and sometimes play cards until 12:00 am.

Figure 18　Harra residents actively rehabilitating their neighbourhood (Source: Harra Archive).

Furthermore, it is this social dimension that is reflexively attached to the physical dimension of place meaning for BF when he states: 'The most place I feel attached to is the fence that we worked on collectively, because we really worked hard on it, because it was tiring. Of course, there was no resentment for some who did not work on it, and excuses are accepted.' The public space of the neighbourhood forges a gathering area for kids and adults, and is represented by its alleys, courts and stairs, as shown in Figure 20, which when socially activated deepens this overlap between the social and physical dimensions, as expressed by BC: 'We meet in the alleys, the road and alley is our communal space of meeting. At the evening time, every day, the youth meet at the court beside the stairs.'

Figure 19   Images of Harra neighbourhoods before (on the left) and after rehabilitation (on the right) (Source: Harra Archive).

Figure 20   Children playing in Harra alleys (Source: Harra Archive).

The improvements made to the place nurtured positive affective, cognitive and behavioural manifestations from its residents, and accomplished many of the functions of place attachments, such as safety, self-regulation, continuity, and identity and self-esteem. Figure 21 maps out the diverse place attachment interactions with their neighbourhood that were unearthed by interviewing the residents. Affectively, pride replaced shame as narrated by BG when she commented: 'I felt so ashamed when my daughter got engaged and her fiancé's parents passed through the alley at its previous state with falling fences and trash everywhere. We are proud of this neighbourhood now, especially that this area is older than most of the other zones in Amman!' The emotion was replicated by BF when he told the story:

Ten years ago, when my brother came back from Hajj, a friend of mine wanted to visit us here in this Harra, this friend lives in a mansion in Abdoun (West Amman) and he is highly educated, so the moment I realised he would come and visit us here, I panicked because this place is a dump compared to where he lives. I felt ashamed then when he stepped down from his car and walked through an alley filled with trash and falling fence. Now I feel proud inviting anyone to visit us here.
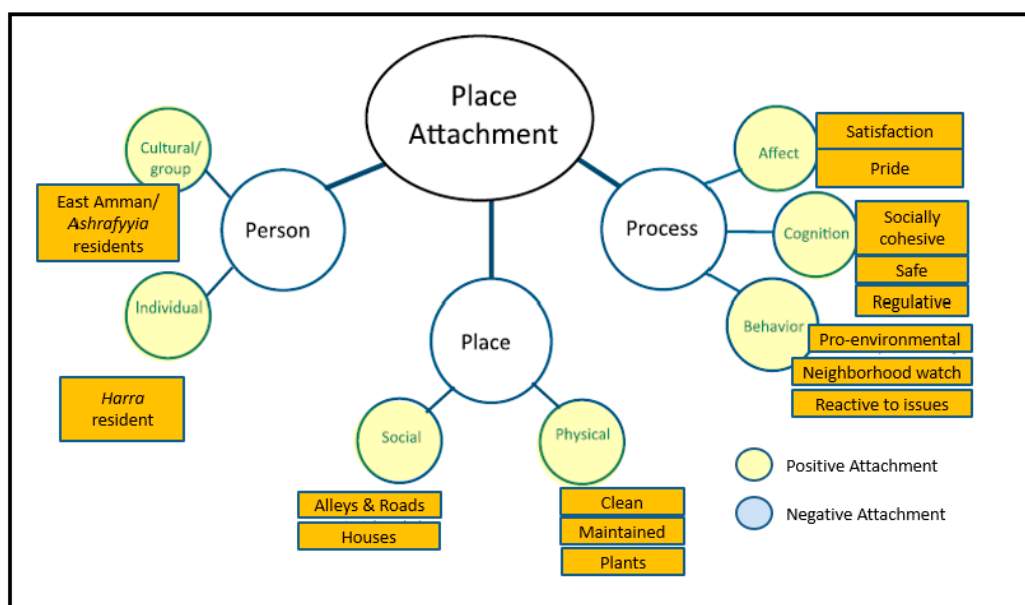

Figure 21 The PPP framework classifying positive and negative place attachments to neighbourhoods that underwent rehabilitation by Harra (Source: adapted by author from Scanell and Gifford, 2010).

Cognitively, the neighbourhood became safe and self-governed. BF indicated that there is a neighbourhood watch in place, and his sister is no longer afraid to go out on her own. BC mentions that:

Before Harra, we used to have a funeral and a wedding without us knowing. Any problem that happened would escalate to violence due to mediocre reasons, such as kids fighting to the point of calling the police. Right now, we have a committee inside our Harra to maintain issues needed. It took us years just to solve very simple problems like reducing violence and solving parking problems in our Harra.

The community has a committee that, according to BF:

started delegating tasks in our Harra. So those who have a muscular build are the guards of the Harra, those who have managerial experience manage the Harra affairs; we have all the phone numbers of the Harra residents and their sons. We rented a vacant building to become the headquarters of the Harra where the residents meet and even the youth who usually have no place to go to. We rented it after familiarity with the people was established . . . If you come after one year, you will also see changes as we are planning to install metal arches at the alley adorned by plants. We have a vision for this Harra and we continue to meet, plan and maintain our work.

In addition to social gatherings and assignment of a neighbourhood watch, pro-environmental behaviours were exhibited in the form of collecting rubbish, abandoning the bystander attitude and leading by example and establishing positive norms. BF elaborates that:

> it extends to the fact that even if I see two trash bags on the road, I carry them with me as I go to work and throw them in the nearest trash container. Also, when I see something wrong I instruct, so the other day I saw the son of my neighbour leaving a trash bag in the alley, I went to him and told him this is not appropriate as we really cleaned and washed this alley the other day, and if he wouldn't mind to throw it in its proper place or give it to me to throw it myself. He immediately apologised and disposed of it properly. It is important to be a role model in your own neighbourhood and bear a public responsibility.

From the satisfaction gained at preserving the cleanliness and beauty of the neighbourhood, BF commented that a neighbour of his was motivated to transform his neglected roof terrace into a roof garden.

The cultural capital of the neighbourhood is strengthened as it maintains traditions and values of residents, further illustrated by Figure 22, showing a communal Iftar (breaking of fast) during Ramadan. With Harra, the community learned conflict resolution skills, included the usually marginalised groups of the community and celebrated traditions collectively, which BC highlighted, saying:

> There is dialogue and we got educated behaviourally, so if I see a car that is parked and blocking an alley, the neighbour will remove it easily. It is trust that was built over the years. Women are active as well, and we get together for communal Iftar in Ramadan, everyone bringing their own dish, all the neighbours – men and women and kids. This was not culturally acceptable before, now everyone is one family. ... Also, if there was a funeral, every young person takes a broom and cleans all of the alleys, and when the contractor who installed the tent canopy for the deceased family's condolences, the youth participated in instructing the contractor on the best way to install the tent. Everything is participatory.

Figure 22   A communal Iftar at a Harra-developed neighbourhood alley (Source: Harra Archive).

Reflections

During fieldwork and conducting interviews, it became clear that the concept of neighbourhood itself is problematic, both in terms of its meaning in spatial terms and in terms of residents' constructions of their significant communities and places. So, when interviewees were asked what is a place that they feel attached to, the answers transitioned from one's home, to a communally constructed fence,

a planted tree, an alley where social gatherings take place and the famous Ashrafiyya district monument, the Abu Darwish Mosque. These answers indicate the wide spectrum of geographical scales of place attachments, which corroborates Hidalgo and Hernandez's[24] findings in an enhanced social attachment at neighbourhood level, compared to physical attachment at city level. Another scale is introduced by this study, that is 'district' level – like the case of Ashrafiyya, which produced powerful attachments from residents in both physical and social dimensions. Additionally, each scale is not static in its influence, and can create a ripple of positive or negative place attachments sliding along the ends of the spectrum from microscale homes to macroscale cities, which was evident when a resident beautified his home and roof terrace to fit with the beautified neighbourhood. Figure 23 shows the varying scales and their interactions.
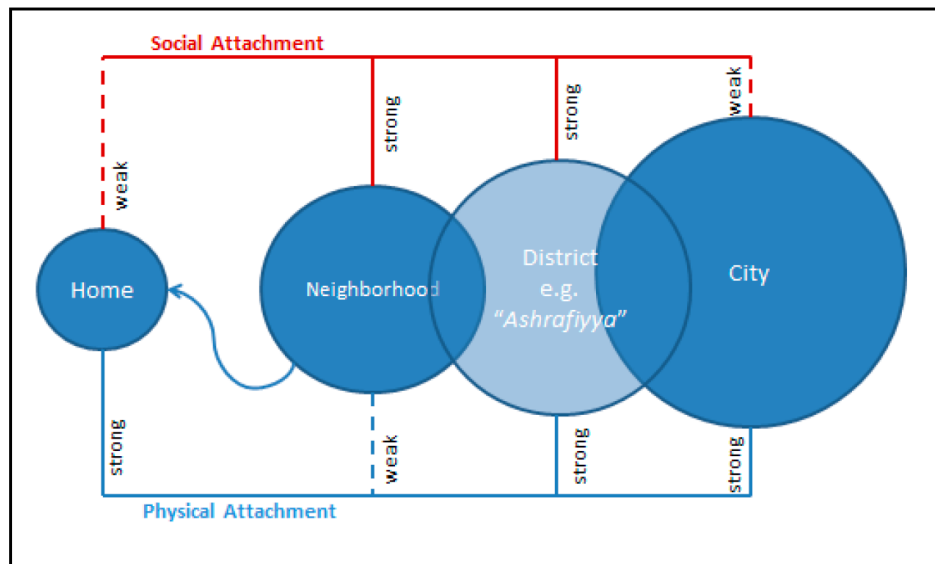

Figure 23 Place attachment strength in different geographical scales, including a new scale: 'district' (Illustration by author).

Findings unearth place attachment to be a powerful indicator of the sustainability of a community, in its heuristic operationlisation of the PPP framework, to gauge the community's capital. Figure 24 abstractly shows the capital of the two cases of the study, Harra neighbourhood and Abu Darwish Plaza, based on the place attachments extracted from the residents of the same district. Both places suffer from low natural and economic capital, and both achieve relatively moderate physical capital. The humbly resident-maintained physical capital of Harra neighbourhoods seems to compete with the plaza designed by a distinguished lead architect, regardless of its current deteriorated state, because the community was involved, and the social capital accrued. Human and cultural capitals of Harra, led by community committee, and Abu Darwish Plaza, led by the Ahsrafiyya community centre, aggregate similar stances due to the programmes run to enhance the education and capacity building of residents. However, the social capital of both projects elicits the most difference.

At the core of Harra's operation is 'bridging' social capital,[25] which acts as a generator of identities and reciprocity among the community and greatly enhances the social network and a community's economic potential. Putnam addresses the economic benefit where 'among the disadvantaged, "bridging" social capital may be the most lucrative form. All told, people in economically disadvantaged areas appear to suffer doubly. They lack the material resources to get ahead, and they lack the social resources that might enable them to amass these material resources'.[26] Nevertheless, for over ten years, Harra ran on the energy of its residents to maintain what was accomplished and plan future projects without relying on external funding, which is a double-edged sword. In the early projects of Harra, some neighbourhoods reverted to their deleterious previous state due to over-ambitious and unfulfilled goals and the slow response of GAM in maintaining the infrastructure, which ultimately deflated the community's momentum for change. Had there been funds set out to accomplish these goals, the social capital would maintain trust among

the community members. On the other hand, the Harra process continues to be refined, with a wealth of learned lessons to be replicated, especially in the disenfranchised communities. In his book *How to Thrive in the Next Economy*, John Thackara highlights that 'people who are poor in material terms are highly accomplished at the creation of value in ways that do not destroy natural and human assets. DIY-urbanism, in other words, is second nature for people who cannot depend on the high-entropy support systems of the industrial world'.[27] Thus, it is essential to realise the role of multilayered community capitals in empowering communities and steering them towards sustainability.
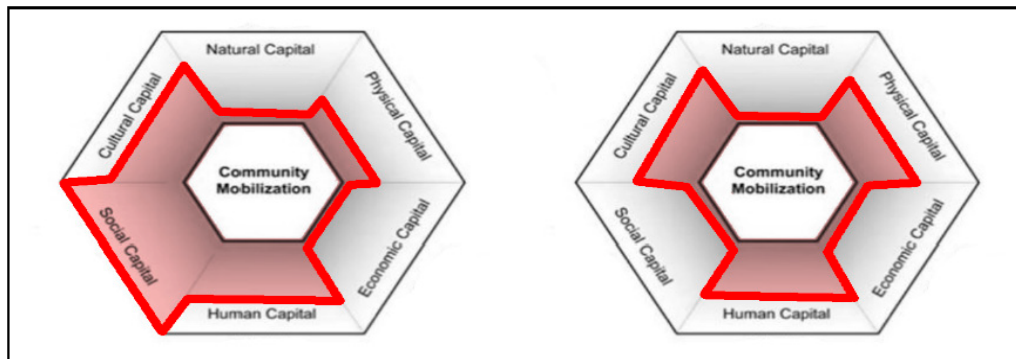

Figure 24   On the left is an abstract representation of Harra's community capital. On the right is Abu Darwish Plaza's capital. Both are based on the mined place attachments of residents (Illustration by author).

The symptoms of Abu Darwish Plaza's lack of social capital are the presence of vandalism and antisocial behaviour, which drive away local residents. Negative place attachments to the plaza are exhibited through avoidance and vandalism by those who visit it, wherein 'the presence of vandalism gives rise to concern that more of the same will follow',[28] perpetuated by the lack of municipal maintenance. When interviewed, the architect AB touched upon the relation between a citizen and the state by saying:

> The citizen suffers from the lack of development projects, the presence of corruption, and the lack of societal justice, which leads the citizen to revenge. He avenges the public property and it is deeper than designing the physical environment, which is only superficial in creating the sense of belonging to a place or a city. In one of my travels to Europe, I got close to a flower to smell it and a visitor lady reprimanded me who thought I will pick the flower, which I was not doing. But I felt this act of citizenship is formidable there, and hard to achieve in our society because they already have all their rights and lead a luxurious life compared to ours. There is a responsibility that should be upheld by the state in our country, in addition to increasing the level of education of our citizens to lead a positive behavioural change in our society. It is a deeper issue than planning and architectural design, we only have a limited role as designers. For example, one of the lightbulbs of the plaza was broken and it was not replaced, so it became darker there and so safety is decreased. So, who is responsible then?

Local residents of Ashrafiyya clearly attached meaningful understandings of their local environment that would assist urban designers in accommodating them in the design process. The espoused efforts of the architect to listen to the immediate community of the shop owners inferred a contextually respectful design, but the larger adjacent community was not consulted or engaged by GAM in design deliberations. According to Barthel,[29] when a decision-making process in urban planning is based on a proposed design in its final form, projects become finished products and exclude the participatory dimension of engaging the community in question. The image wins over the dynamic dialogue, which 'serve[s] to screen, minimize, or hide unresolved issues in terms of metropolitan strategy, including organizational "design" and urban governance'. Consequently, the drawbacks of excluding the local community from key decisions about the function and use of the plaza heeds the incorporation of recruitment and public engagement strategies, which Harra successfully accomplished at neighbourhood level by creating an

overwhelmingly positive attachment to the place. 'Hence, social sustainability is understood not simply as a requirement upon central government to change its mode of operation, but as a general injunction to incorporate a wider range of stakeholders in the delivery of urban processes.'[30] In the end, the two cases discussed in this study not only present the tension of the dichotomous discussion in planning that asks the question: 'which is preferable, and why: planned communities as an object, or planning communities as a subject?' They also offer a means of enquiry into the correlation between sustainability and place attachment, which by 'capitaliz[ing] on the attachment that people feel to particular places [can] provide a foundation for stewardship strategies'.[31]

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Declarations and Conflict of Interests

The author declares no conflict of interests with this work.

Notes

[1] Handler, *Law and the Search for Community*.

[2] Freire, *The Politics of Education*.

[3] Epstein et al., *Results that Matter*, xvii.

[4] Egan, *Skills for Sustainable Communities*.

[5] Roseland, *Toward Sustainable Communities*, 19.

[6] Sustainable Development Knowledge Platform, *Sustainable Development Goal 11*.

[7] Scannell and Gifford, 'Defining Place Attachment'.

[8] Low and Altman, 'Place Attachment'.

[9] Kruger et al., 'Getting to Know Ourselves'; Kyle et al., 'Testing the Dimensionality of Place Attachment'; Williams and Patterson, 'Environmental Meaning and Ecosystem Management'; Devine-Wright, 'Place Attachment'; Devine-Wright and Howes, 'Disruption to Place Attachment'; Hernandez et al. 'Role of Place Identity'; Scannell and Gifford, 'Relations Between Natural and Civic'; Manzo, 'Experience of Displacement'; Sanoff, *Community Participation Methods*.

[10] Seamon, 'Place Attachment and Phenomenology', 16.

[11] Seamon, 'Place Attachment and Phenomenology', 20.

[12] Williams and Roggenbuck, 'Measuring Place Attachment'; Williams and Vaske, 'The Measurement of Place Attachment'; Jorgensen and Stedman, 'Sense of Place as an Attitude'; Gustafson, 'Meanings of Place'; Manzo, 'For Better or Worse'; Mazumdar and Mazumdar, 'Religion and Place Attachment'.

[13] Rishbeth, 'Articulating Transnational Attachments', 100.

[14] Stedman et al., 'Photo-Based Methods', 112.

[15] Lewicka, 'What Makes Neighborhood Different'.

[16] Lewicka, 'On the Varieties of People's Relationships with Places'.

[17] Mihaylov and Perkins, 'Community Place Attachment', 71.

[18] Fried, 'Grieving for a Lost Home'.

[19] Hidalgo and Hernandez, 'Place Attachment'.

[20] Scannell and Gifford, 'Defining Place Attachment'.

[21] The interview with Mr Abu Amireh, the founder of Harra, took place on 24 December 2017 from 15:30 till 17:30. The interview with Ashrafiyya residents took place on 19 February 2018 from 11:00 till 15:00, and another interview was conducted with the local architect on 11 March 2018 from 10:00 till 12:00.

[22] Ababsa, *Atlas of Jordan*, 384–400

[23] Anderson-Oliver, 'Cities for People'.

24 Hidalgo and Hernandez, 'Place Attachment'.

25 According to Robert D. Putnam, credit for coining these labels belongs to Gittell and Vidal, *Community Organizing*, 8.

26 Putnam, *Bowling Alone*, 349.

27 Thackara, *How to Thrive in The Next Economy*, 66.

28 Goldstein, *The Psychology of Vandalism*, 13.

29 Barthel, 'Arab Mega-Projects', 11.

30 Manzi et al., 'Understanding Social Sustainability', 15.

31 Chapin et al., 'Design Principles for Social-Ecological Transformation'.

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