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DEFINING DOMESTIC BOUNDARIES IN A GLOBALISED ERA: A CASE STUDY OF BARPAK, A HIMALAYAN VILLAGE OF NEPAL

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This *The domestic life in the Himalayan village of Barpak, Nepal, once with borderless experience was primarily ruptured by the aftermath of the 2015 Gorkha Earthquake. The residents of this traditional homogenous village once experienced and lived their domestic life without boundaries. However, it was socially and culturally constructed of fluid relationships between spatial, temporal, actions and actors. The outcome of a massive reconstruction effort is defining the boundaries and actions of domestic life due to an extreme and rapid shift in the making and living of this new built environment. This shift in combination with the impact of globalisation and transculturalism has changed the dynamics of socio-spatial practices of this traditional village. The residents are now experiencing ambivalence in their domestic life in accepting and practising the paired modernity and tradition. This was initially brought by new architecture and infrastructure, followed by the impact of globalisation and transculturalism on people's approach and understanding of their world. Hence, through the mode of boundaries and dynamism, this study aims to engage with the transactions and entanglements of domestic life of the residents of this village and identify newly developed boundaries and dynamism of peoples' approach and interaction shaping a new contemporary village. Drawing upon architectural-anthropological fieldwork and creative visual expression, this study in participation with the residents first maps the fluidity of domestic life before reconstruction and then new boundaries (physical or symbolic or conceptual) of domestic life post-reconstruction. It then traces the relationship and negotiation of these domestic boundaries as layers on these maps through observation, narratives and participatory drawings in order to comprehend the impact of such dynamic socio-spatial practices and people's approach to reshape this traditional village. This paper addresses two larger questions, firstly, how do boundaries emphasise the ways in which spaces reflect and reinforce social and cultural structures and relationships? Secondly, how does a traditional society with conservative social structures and values respond to the dynamism of this globalised era? This will provide architectural and anthropological perspectives on domestic life, boundaries and the dynamism of globalisation, all very crucial to realise the living traditions and future of such contemporary villages.*

1. INTRODUCTION

The 21st century global landscape is a theatre of accelerated transformations, traversing the continuum from international geopolitics down to the microcosms of individual communities. This entangled schema of change becomes more intriguing when it is overlaid onto the rustic background of traditional societies, where the dialectics of modernity and tradition engage in negotiations. Situated within this intricate matrix, the concept of *gharelu jiwan* (domestic life) holds particular intrigue, especially when it becomes the locus of focus under extraordinary circumstances such as natural calamities and is further complicated by inevitable forces of modernity and globalisation especially in the wake of reconstruction. An exemplary case manifests in the Himalayan locale of Barpak, a site drastically altered by the 2015 Gorkha earthquake and subsequent rehabilitation initiative and rebuilding activities. It offers an invaluable case study to explore how traditional societies traverse through the dynamism engendered by globalisation and transculturalism, especially at the domestic echelon.

Barpak, predominantly populated by Gurung and Ghale community, has historically been relatively isolated due to its geographical location. Antecedent to the earthquake, the domestic milieu in Barpak was infused with an intrinsic spatial ontology, which was primarily based on cultural mores, tradition, rituals, social relations and shared history rather than rigid architectural definitions. These traditional domiciles, built from locally sourced materials such as stone, timber and mud were not just enclosed dwelling spaces but a part of expansive symbiotic network and relationships which involved, day-to-day domestic, occupational, social, cultural and religious activities, epitomising an integrative ethos towards communal existence[1]. Prior to the earthquake, domestic life in Barpak was characterised by a notable absence of pronounced boundaries, either intra-household or inter-household. Activities that many in more urbanised or western settings consider private are instead executed openly and some collectively practiced or experienced among members of the community. This communal and boundaryless experience of domestic life resonates with anthropologist Clifford Geertz's construct of "local knowledge"[2] and extend it to practice, expressing on particular cultural and social practice defining individual communities. The paradigm of spatial demarcations has evolved from its traditional malleability to greater rigidity, echoing larger shifts in the sociocultural fabric of the Himalayan villages of Nepal, particularly Barpak.

Photo 1. Aerial view of traditional Barpak - a homogenous settlement, prior to earthquake, 2012. (Source, Pin Ghale, 2012). Photo 2. Streetscape of Barpak prior to earthquake. (Source: Manash Shrestha, 2009).

The seismic cataclysm of 2015 dramatically altered this idyllic picturesque village. Beyond sheer physical devastation, the earthquake led to a cascade of complex rebuilding process, both physical and social which were influenced by new architectural ideas and construction methods and new livelihood[3]. The reconstruction and rebuilding phase catalysed a reconceptualisation of domestic spaces, and ipso facto, the very essence of domestic life and existence, which raises questions on the notion/idea of home? Here, Mary Douglas's seminal oeuvre, "The idea of home: A kind of space", becomes pertinent, emplacing domestic realm not simply as physical compartments but as structured relational configuration of actions, actors and space[4]. This encourages to question how these new boundaries or compartments, physical or notional are defining

domestic spaces and by extension, domestic life itself? Further complicating this situation is the advent of globalisation. Long considered a village ensconced in tradition, Barpak has not remained impermeable to the forces of globalisation and transcultural influences omnipresent globally. An ascendant populace has become and more becoming attuned to modernity, international trends, ideologies, urban practices and avenues for transnational employment[5]. While the inhabitants of Barpak have experienced these for an extended period, the burgeoning cosmopolitan awareness after earthquake introduces a unique form of dynamism into domestic life, engendering a bifurcation – a tension between traditional and modern, both coalescing and competing within the same domestic space[6]. Consequently, what were once fluid domestic boundaries have metamorphosed into sites of negotiation and even contestation.

Photo 3. Altered landscape of Barpak after earthquake and post reconstruction, transforming the domestic setting physically, socially and symbolically, 2020. (Source, Author, 2020).

The constitution, deconstruction and reconfiguration of these physical and metaphorical boundaries in the face of catastrophic change and global reverberations is the focal point of this study. Guided by dual foundational queries – how do these boundaries function as both reflection and reinforcement of societal norms and architectures, and how does a community immersed in tradition navigates the complexities ushered by a globalised era? To investigate these, this study employed multidisciplinary methodological framework encompassing architectural-anthropological fieldwork, spatial analytic methodologies, interviews and creative visual expressions techniques like photography and participatory drawing, in order to elucidate both the erstwhile fluidity and the current complexities in domestic life in Barpak. This exploration and

investigation aimed to contribute to scholarly dialogue across academic discourse of architecture, anthropology and sociology by elucidating how domestic spaces serve as both a mirror and a mechanism for larger social changes and dynamism.

2. THE FLUIDITY OF DOMESTIC LIFE PRE-RECONSTRUCTION

The concept of boundaries, encompassing spatial, relational, social and cognitive dimensions, has been a focal point of multidisciplinary intellectual interest, including but not limited to anthropology, geography, sociology, and architecture[7] [8]. However, as scholars such as Homi Bhabha argue, these boundaries are not rigid enclosures but malleable constructs, constantly negotiated and re-negotiated, shaped by dynamic socio-cultural, economic and political exchanges[9]. Especially boundaries in traditional villages often operate by a complex assemblage of social and cultural mores and collective affiliations that circumscribe not only the structural domain but also the symbolically constructed social space sculpted through ongoing human interactions[10] [11]. These boundaries serve to organise social relations, dictate gender roles, and express the allocation of activities, labour and resources[12]. Nevertheless, these structural or symbolic boundaries are not static and subject to modifications activated by various life events such as nuptials, mortality or seasonal activities can cause shifts and fluctuations in these boundaries, necessitating a constant reconfiguration of domestic space and familial roles[13].

External influences like globalisation, human migration, and technological advances also add to the flux in the nature of these boundaries[14]. Such impetuses introduce new cultural elements and economic avenues that can perturb the pre-existing social order and spatial configurations[15]. Consequently, the landscape of boundaries within these villages results in a complex layering of traditional and contemporary boundaries, constantly in a state of dynamism, reflecting a continual process of ongoing negotiation between stasis and transformation[16]. Drawing from interdisciplinary theories such as Mary Douglas's "Cultural Theory"[17], Pierre Bourdieu's notion of "habitus"[18], Michel de Certeau's "Practice of everyday life"[19], and Henri Lefebvre's "The production of space"[20] offers critical understanding of the dynamism inherent in boundary formation and re-formation within domestic life of traditional villages. The pre-2015 domestic environment in Barpak and its analogues in Nepal's Himalayan villages, epitomised a fluid and complex confluence of spatial, temporal, and relational dynamics that defied simplistic categorisation. From Inglod[21] and Low[22] on boundaries, "fluidity" here must be understood not merely as a function of changeability, but as an intricate adaptive system operating at diverse levels, influenced by a myriad of factors ranging between everything from local geography to shared cultural mores.

The spatial fluidity in the design of domestic architecture of homes in Barpak was far from merely an aesthetic exercise; as Bourdieu discusses this spatial fluidity is an incarnate form of lived social norms and cultural ideas[23]. The architectural configuration of homes, featuring no boundary walls and opening directly to street and a sitting raised platforms *(pirim)* on the façade for instance was a manifestation of a more expansive understanding of space as not just a physical entity but as a sociocultural locus serving manifold roles within community framework (see Interpreted Drawing 1). This pliability of spatial demarcation represented a socio-cultural symbiosis where the makeup of domestic realms both contributed to and was contingent upon cultural practices and societal interactions. Temporal fluidity, as discussed by Fisher, existed in a state of reciprocity rather than solitary[24]. It was interwoven with both spatial configurations and human relationships and was inherently reactive to agricultural and climatic cycles, familial changes (nuptials, mortality, childbirth), cosmological and astrological periods, among others. This dynamism of temporality in the domestic space translated into a responsive adaptation of domestic spaces and activities.
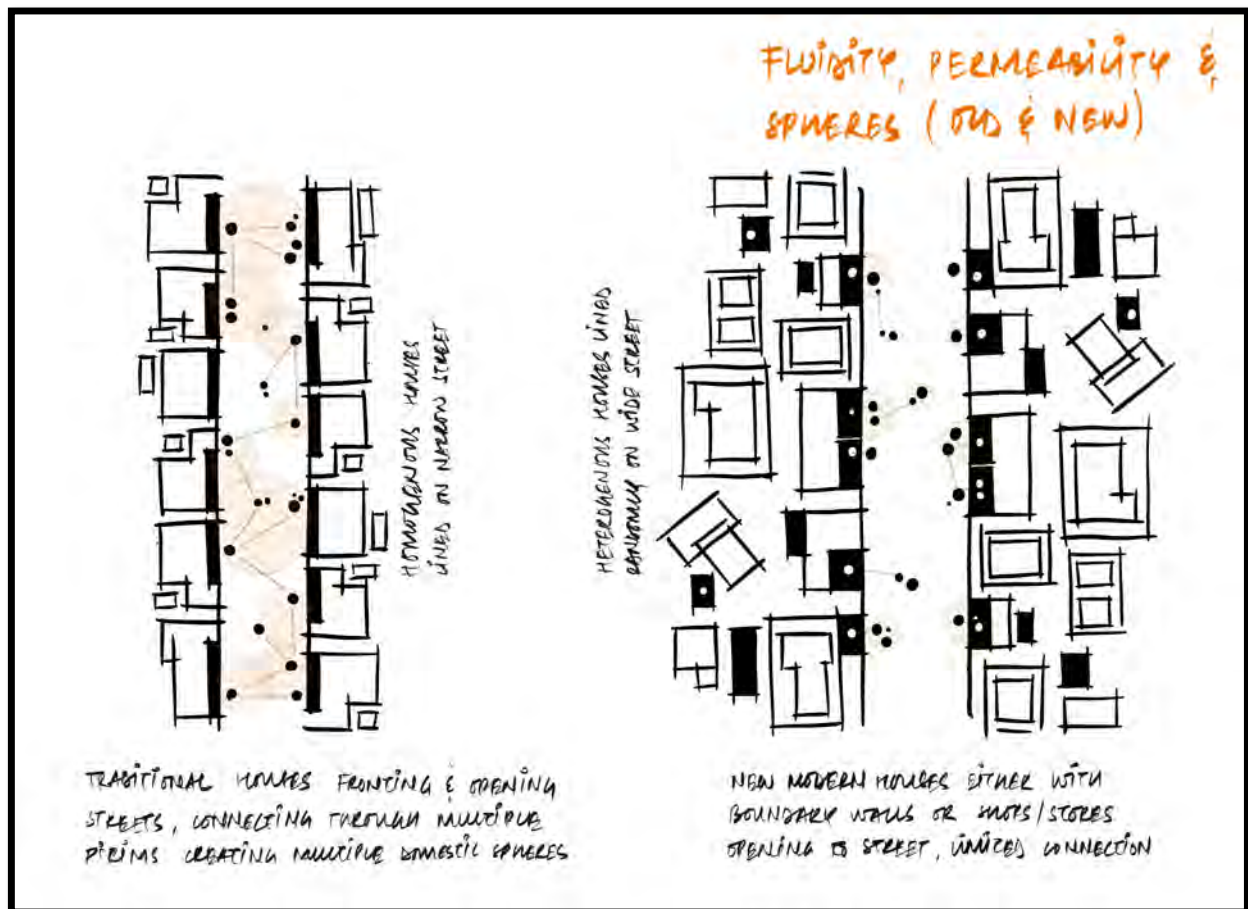
Interpreted Drawing 1 Fluidity, permeability, interaction and domestic spheres of traditional and modern setting of the village. (Source: Author, 2023)

While spatial and temporal fluidities offer understandings of the physical and chronological dimensions, it is the relational fluidity that offers a more critical and nuanced indulgence into the domestic life of Barpak. The spatial-temporal dynamics were situated within an expansive framework of relational dynamics that was governed by concentric porous social boundaries. Rather than acting as restrictive barriers, these boundaries functioned more as permeable interfaces that fostered cultural and social exchanges and at times economic too. Consequently, the domestic units of Barpak were not insular entities rather constantly engaged in dialogic interactions and negotiation with extended families, neighbours and even the broader community. This was because of spatial arrangement of the house itself and houses in the community, in addition to the social and cultural norms they practiced.

Here in Barpak, the domestic activities frequently transgress the proximate perimeters of the residence, thus complicating the notion of domesticity as confined by architectural boundaries. Actions as varied as laundering garments, procuring water, taking bath from communal water source *(dhunge dhara)*, are significant domestic activities that occur beyond the accustomed borders of residential structures. These activities not only fulfil utilitarian objectives but also encourage socialisation, information exchange and sometimes even conflict resolution, as delineated by Douglas in "Purity and Danger"[25]. Such praxes underscored the porosity of domestic frontiers and accentuated the permeability of domestic boundaries of Barpak, allowing for an intricate experience of domestic life that goes beyond mere residential enclosure. It aligns with what Appadurai characterises as "locality" which is less about the physical space and geographical dimension but more about the social relationships and shared norms nurtured through these interactive exchanges[26].

Photo 4. An occasional glimpse of domestic sphere extending to *dhunge dhara* in contemporary times, representing similar setting of traditional Barpak (except for architectural advances post-earthquake). (Source: Author, 2020.)

Moreover, the chore of fetching water from *dhunge dhara* (see photo 4.) transcends its apparent domestic utility to capture complex social exchanges, through the paradigm set by Strathern in "The Gender of the Gift"[27]. In Barpak, this act was not merely a woman or a group of women and kids going to *dhunge dhara* to fetch water, take shower or wash clothes but was a social ritual where different layers of village society interacted and stretched the spatial confines of home towards the water source itself.

In a parallel vein, the act of collective eating or cooking at one's home or communal spaces, often during societal festivals or communal rituals or during construction or cleaning grains/agricultural produce among many other events/activities surpass the limitations of the private domain, creating a communal domestic sphere on a regular basis. In line with Turner's concept of "communitas", these occasions and activities function as temporal mechanisms for social levelling, effectively dismantling hierarchical structures[28]. Here, these spaces temporarily override idiosyncratic residential boundaries, creating a communal domestic sphere marked by both spatial and social fluidity. This communal facet of domestic life in Barpak exemplified how domesticity wasn't confined to the household but was a shared social practice that frequented into public arena. Furthermore, activities from weaving or knitting clothes to cleaning grains to even combing/grooming hair collectively in spaces within or outside residential boundaries articulate the seamless intertwinement of quotidian domestic tasks with broader social implications. Inglod's "The perception of the environment" exemplifies how such ostensibly mundane chores become the canvas upon which complex social relationships are painted[29].

Extending the discussion on the fluidity of domestic boundaries in Barpak, it is imperative to recognise the quotidian genesis of ephemeral "domestic spheres", that although temporal but frequent, significantly impact the understanding and experience of boundaries, fluidity and action. An, illustrative instance (see photo 5 & 6) of this is the habitual practice of parents taking their young children to agricultural lands for farming activities. This seemingly routine activity opens a fascinating dimension of fluidity, temporality and domesticity, as children generate transient "domestic spheres" within the broader non-domestic realm of agrarian landscape. Invoking Lefebvre's concept of "lived space"[30],these farming landscapes get transformed into terrains of recreation, learning, and social engagement for the younger population, thereby temporarily domesticating a space primarily designated for laborious and productive activities. By extending the domestic boundaries or creating new domestic spheres, parents inadvertently partake in what Bachelard's "topoanalysis" proposes, the psychological implications of intimate spaces[31]. For children these farming lands transmute into extensions of their home, imbied with a sense of familiarity and comfort, which they carry into their stable domestic environments.

Photo 5 & 6. Family creating domestic spheres away from home on agricultural land, 2021. (Source: Author, 2021)

In this complex milieu of spatial, temporal and relational fluidities, traditional conceptions of 'boundaries' are ineluctably altered. This flexibility engenders a socio-cultural spatial schema of Barpak that is not built or fixed but is continuously 'being built' through the lived experiences of its inhabitants. This dynamism and multi-layered juxtapositions – ranging from domestic activities in communal spaces, to transitory domestic spheres in agricultural expanses, and the everyday negotiations sculpting these spheres – created a composite tableau of domestic life in Barpak that defied singular definitions of fixed boundaries. The pre-seismic traditional domestic landscape of Barpak posed a counternarrative to the frequent dialogues concerning domestic boundaries. However, given the dynamism of tradition and profound transformations induced by both environmental cataclysms and global modernity presents a transitioning. Moving from the intricate landscape of domestic life in Barpak prior to reconstruction underscored by the complex choreography of spatial, temporal and relational fluidities; the paper now pivots to a temporally delineated and contextually significant epoch: the post-reconstruction phase. This defining juncture acts as an ontological discontinuity, prompting a reconceptualisation of domestic boundaries within the specific cultural context of this Himalayan community.

3. REDEFINING BOUNDARIES POST-RECONSTRUCTION

The domestic topography of Barpak prior to reconstruction constituted a variegated assemblage of dynamically negotiated boundaries, functioning with a continuum of fluid spatial relations. Nonetheless, external perturbations such as natural calamities, coupled with the omnipresent and increasingly intensified forces of globalisation, have instigated alterations in the existing system of boundaries. One is thus impelled to inquire how such momentous shifts exerted an influence on, or interacted with, established socio-spatial structures? Moreover, to what extent the architectural and relational remapping, catalysed by reconstruction activities, engendered a paradigmatic shift in the ontology of 'domestic' and 'domestic boundaries'? In the

aftermath of the seismic catastrophe, the built environment of Barpak was rendered into a tabula rasa condition, where the majority of the dwellings were either obliterated or severely undermined. Remarkably, a minuscule subset of houses constructed with reinforced cement concrete (RCC) managed to endure the calamity. This cataclysm effectively nullified the existing spatial demarcations, fluidities, and socio-spatial spheres that had hitherto characterised Barpak's communal and domestic ecology.

Drawing additionally upon the work of Gaston Bachelard in "The poetics of space", the earthquake can be interpreted as an antithetical spatial phenomenon, one that collapsed not only the physicality of dwellings but also the ontological enclosures that constituted both the private and public realms[32]. As Bachelard underscores, the home is more than a physical entity; it serves as existential signifiers contributing to one's ontological anchoring. Therefore, the widespread ruination led to an existential dislocation for the residents of Barpak. Furthermore, the sudden transformation of Barpak into a 'blank canvas' holds beyond mere architectural devastation. The erasure of these architectural and social boundaries and spheres, prompted a radical re-evaluation of spatial ethics, compelling the community to confront and redefine what constitutes the moral and social imperatives that would guide their subsequent phase of reconstruction. The advent of contemporary RCC houses, characterised by distinct architectural features in the traditional context, serves as an illustrative point of departure. In contrast to the erstwhile, more permeable homes that typified Barpak's topography, these new dwellings are often circumscribed by perimeter walls. These physical demarcations are dualistic in nature: they are both reflective and constitutive of social hierarchies. Such physical enclosures engender not only spatial but also socio-economic and psychological boundaries, which curtailed erstwhile neighbourly engagements. Prior to earthquake, Barpak exhibited a striking homogeneity in its architectural milieu – traditional houses that not only manifested a uniform architectural language but also engendered communal cohesion. The post-reconstruction architectural landscape, in contrast, exhibits an eclectic amalgamation of diverse housing typology – most notably, residents made house of RCC, other incorporating a hybrid of RCC, stone, corrugated iron sheets, and few still occupying transitional habitational units. This architectural plurality is interpreted and also can be experienced as 'semiotic landscape' from seminal work of Gieryn's, "What buildings do", where he invokes architecture and spatial design function as 'cultural strategies' that conveys meanings beyond its material aspects for defining and redefining social categories and boundaries[33] (see Interpreted Drawing 2).
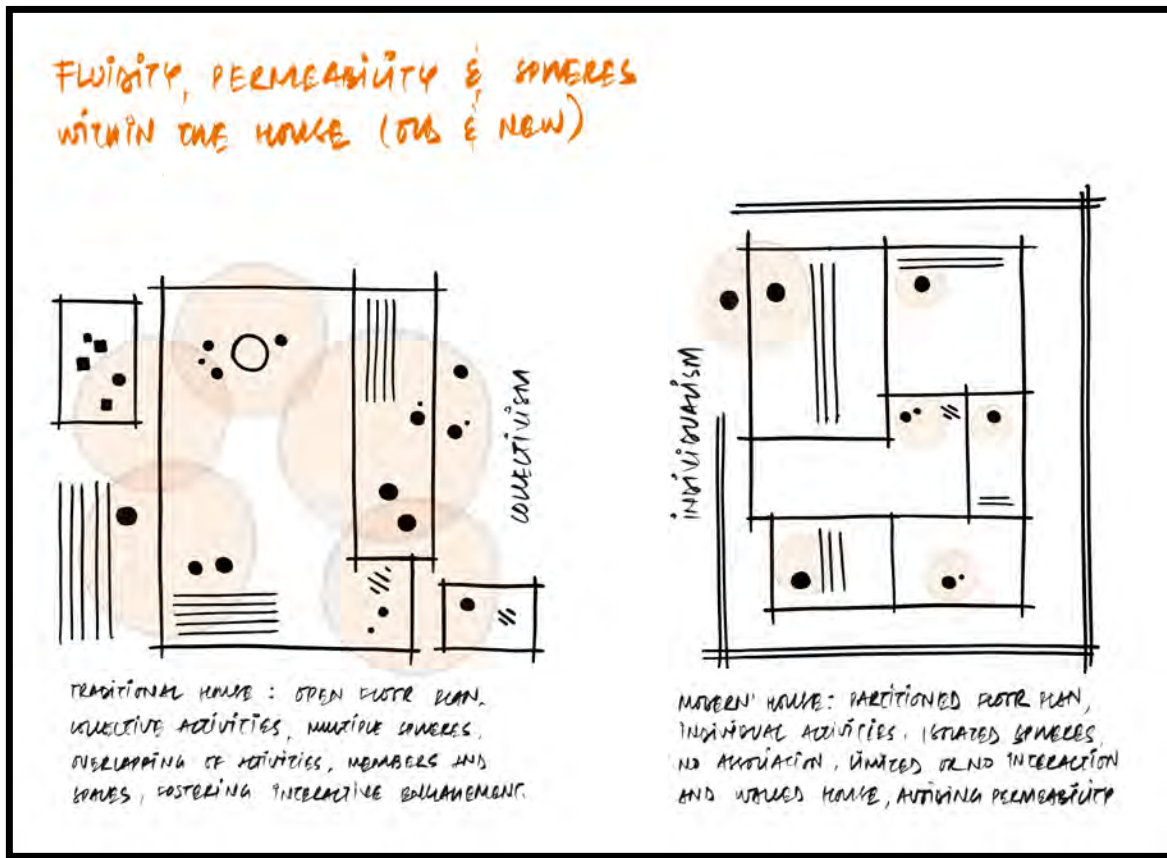
Interpreted Drawing 2. Defining and redefining physical and social boundaries of house in Barpak and its fluidity, permeability and spheres. Source: Author, 2023).

Barpak emerges as an intriguing microcosm for scrutinising multidimensional recalibration of boundaries – physically through architecture, symbolically via changing social practices and conceptually through shift in community self-perception. The architectural innovations that have been instigated during post-reconstruction necessitated a reconfiguration of both domestic and communal spaces which are part of their domestic sphere. The advent of boundary walls, perhaps earlier deemed as unnecessary or symbolic of societal estrangement, now delineate individual properties with explicit demarcation lines. While the corporeal demarcation has undergone change, it necessitated inquiry into whether these new architectural novelties function merely as tangible separator or if they also become a new 'cultural strategy' for social division and cohesion. In Barpak's dynamically transforming topography post reconstruction, the advent of boundary walls serves as a salient manifestation of how physical structures both reflect and inform complex socio-cultural changes. While the particular impetuses for the construction of these boundary walls may differ among residents, thereby resisting simplistic classification. What remains incontrovertible is that these edifices have substantively affected the permeability of domestic spheres. The absence of direct access to residences for occupants, proximate neighbours, and the broader community signifies a departure from the previous

architectural paradigm that allowed direct ingress from the street. Given the change in design of modern houses the elimination of the traditional *pirim*, erstwhile loci for family and community activity such as conversations, grain cleaning, weaving, collective recreations among others, represents a diminishment of collective spaces and fluidity of spaces.

The escalated dimension of the boundary walls serves as overt symbols of socio-economic status, amplifying social stratification. This disparity starkly contrasts with the antecedent homogeneous built environment, resonating with Bourdieu's construct of 'habitus' and its relation to social differentiation[34]. While the installations of these walls have certainly augmented individual and household-level privacy and security, it simultaneously diluted the prospect of visibility and social interactions with neighbours and community. In a similar analytical trajectory, the advent of internal partition walls and the demarcation into individual rooms in new construction – contrasted with the erstwhile open-plan layouts of traditional homes, induces the formation of micro-level boundaries within the household environment. This architectural reconfiguration not only amplified the complexity of spatial relationships but also triggered alterations in interpersonal dynamics among the inhabitants.

Photo 7. Boundary walls and house typology providing privacy and security along with fulfilment of their aspirations, and in the mean tie amplifying social stratification, 2023. (Source, Author, 2023).

Similar to boundary walls, the demarcation of separate rooms introduced a new layer of privacy and autonomy, enabling the potential for individual retreat and solitude even within the confines of the family unit. The residents convey discernible reduction in collective familial practices, encompassing shared cooking and meal times, night time verbal communications, collective activities – recreation or household chores. While acknowledging the undeniable value and enjoyment from augmented privacy; the residents stressed it is incumbent to note that such internal bifurcations have also engendered sentiments of familial detachment or delineating members along lines of age or gender, disrupting family dynamics engendered by these newly established boundaries. This duality presents 'cultural ambivalence' for the residents of Barpak as Bhabha discusses, where new social structures yield both gains and loss and an array of divergent responses oscillating between admiration and resentment[35].

Photo 8. Establishment of a communal space for elders of the village post-earthquake, leading to an informal institutionalisation of communal space. (Source: Author, 2019).

Intriguingly, the advent of dedicated communal spaces in Barpak ostensibly sought to attenuate the divisive repercussions of the newly integrated boundaries – boundary and internal partition walls. However, these spaces paradoxically institute their own set of 'soft boundaries'. The informal institutionalisation of such communal spaces is frequented by codification of particular social norms – such as particular gender, age or

social group (see photo 8). While these communal spaces have ostensibly enhanced domestic life, it inadvertently marginalises those community members who cherished the spontaneous and informal nature of social interaction in their traditional way. The impromptu conversations of quotidian life, singing songs, sharing happiness and sorrows centred around tasks such as grain cleaning or textile weaving or washing clothes, which once served as focal points for community engagement find no corollary in the current setting. The post-seismic reconstruction of Barpak's built environment and socio-cultural norms provides a compelling analytical aperture to probe the dynamism of boundaries. Amidst the social dislocation and material disruption triggered by the reconstruction process, the notion of 'boundary' itself enters a phase of 'liminality'[36], transitioning from a state of a static condition to one characterised by reconfiguration and negotiation.

4. IMPACT OF GLOBASLISATION AND MODERNISATION

The transformation of domestic life in Barpak is intriguing not just because of its temporal demarcation catalysed by a geological catastrophe, but also for the profound tectonic socio-cultural shifts spurred by intricate synergy of globalising forces and modernising trends. Prior to earthquake, Barpak dominantly functioned as a mosaics of fluid domestic spheres. This fluidity was, however, already under subtle change due to incipient impacts of globalisation by – transnational familial labour, imported goods, communication technologies, tourism and the infiltration of external ideologies from varied sources, that began to perforate Barpak's traditional culture encapsulation. The most evident manifestation of these extensive influences is prominently evident across the village landscape and through activities in its determined by its architectural, occupational, infrastructural and technological evolution (see Interpreted Drawing 3).
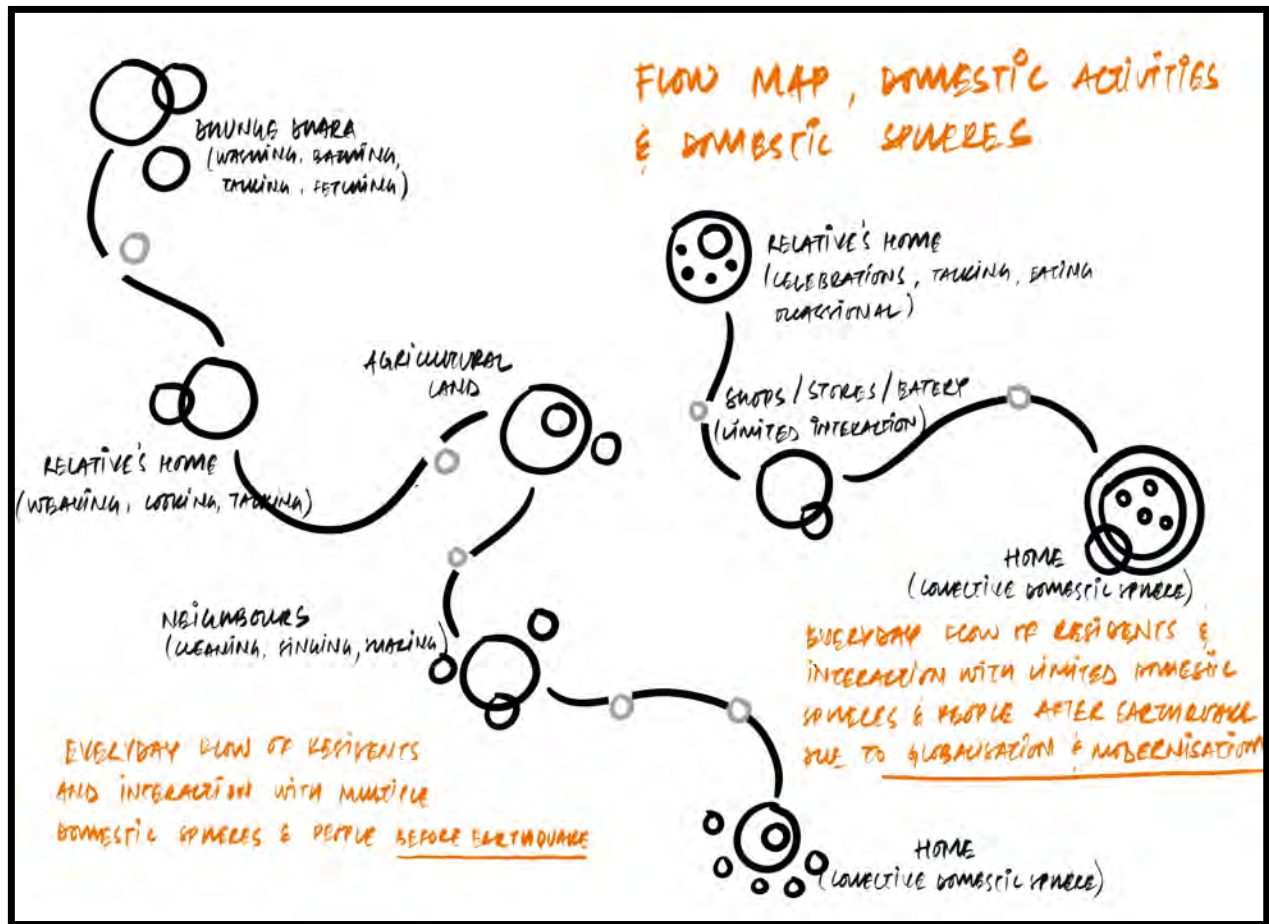
Interpreted Drawing 3. Change in village landscape and the quotidian flow after earthquake due to the impact of globalisation and modernisation. Source: Author, 2023).

The motivation for adoption of Reinforced Cement Concrete in the modern dwellings of Barpak post-earthquake transcends beyond the pursuit of structural fortitude; it is deeply entwined with the local denizen's ambitions and aspirations borne from an increasingly globalised context. The transition to nondescript cubic structures, demarcated by clean geometric lines, wrought iron grilles, tiled flooring, contemporary kitchen designs, and partitioned rooms, mirrors the pervasive influence of globalisation. These architectural developments have instigated a significant shift in the patterns of connectivity, the fluidity of social engagement, and the dynamics of domestic interaction both with the confines of the home and in the broader communal network.

The occupational landscape of Barpak was another noteworthy axis through which the influences of globalisation and modernisation was meticulously analysed. Historically, for the residents residing in the village, the occupational infrastructure was predominantly agrarian. Agriculture served not merely as a

mechanism for livelihood but also a communal activity that had a defining role in shaping domestic boundaries. The strenuous yet community-oriented facets of agrarian labour frequently extended into household realms, which rendered and often erased the demarcations between 'work' and 'home'. Monetary transactions had less gravitational pull in quotidian engagements, replaced instead by a system of reciprocal assistance and barter, which tacitly shaped the spatial and social structures of traditional Barpaki households. The narrative has undergone substantial recalibration in the face of globalisation and modernisation. Farming as the sole means of livelihood has been displaced by a pluralistic vocational milieu. Residents are now increasingly exploring entrepreneurial endeavours, service-based occupations and diverse other forms of income generating activities. This vocational diversification has been substantially augmented by the global flows of information and capital, shaping new aspirations and opportunities for the Barpaki population. This transformation resonates with Saskia Sassen's theoretical construct of the "Global City", wherein even remote locations are integrated into global networks of production and exchange, consequently altering indigenous economic matrices[37].

Moreover, for many Barpaki, the home itself starts to transform, both in tangible and symbolic terms, metamorphosing from a residential expanse into a residential and economic entity. The domestic space now accommodates not just habitation quarters but also workspaces and sometime even storage for business commodities. Traditionally agrarian-related activities were intrinsically integrated into domestic life of Barpak's residents; however, they were seldom conceptualised as economic undertakings by the local populace. Conversely, contemporary circumstances display a notable alteration: the facades of numerous residences new feature an array of commercial operations, ranging from grocery stores to mixed retail shop, local eatery joints to restaurants and pharmacies to saloons. This emergent commercial landscape engenders a distinct set of spatial delineations and socio-cultural affiliations, which are substantially different from traditional configuration.

Photo 9. Shift in domestic spheres denoted by the impact of modernisation and globalisation. Transforming Barpak. (Source: Author, 2023).

This shift denotes a profound reorientation in the perception and functional utility of domestic spaces within Barpak catalysed by globalisation and modernisation. One could interpret the transformation from agrarian to commercially oriented activities within Barpak's domestic sphere merely as a functional reassignment. However, for the residents of Barpak the sociocultural implications differ substantially between these two paradigms. Although, the integration of commercial operations is acknowledged to offer specific advantages, as articulated by local residents, the operational modalities of these new activities deviate substantially from traditional agrarian practices. Characterised by monetary transactions, abbreviated verbal communication, or at ties even a complete absence of interpersonal exchanges altogether, the emergent commercial activities signify a departure from their agrarian tasks that inherently fostered collective participation and strong domestic association. Thus, the changing occupational system, actuated by the dynamics of globalisation and modernisation, has had a rippling effect on domestic boundaries in Barpak. The conception of 'home' and 'domestic sphere' is in a dialectical tension – on one hand, it is in an intimate, kinship-oriented domain, and on other, it becomes an economic entity where its imperatives subtly modulate interpersonal associations very different from traditional system changing the domestic boundaries.

In Barpak, the trajectories of globalisation and modernisation are not merely architectural and economic; they are profoundly technological and infrastructural as well. The advent of contemporary amenities such as electricity, internet, piped water services, gas stoves and roads among many other advances has redefine both the pragmatic and symbolic boundaries within the domestic sphere. Antecedent to these developments, household tasks like cooking and heating were collective affairs, often centred around earthen stoves (centred in the open plan of ground floor) which also doubled as thermal sources, a necessity in the Himalayan village. These loci were characterised by fluidity and permeability, reflecting an integrated approach to domestic chores and family bonding. Functions like cooking or heating were not merely pragmatic operations; rather they were imbued with social and emotional significance, facilitating intimate family interactions, recreations and sometime just being. These practices resonate with what Henri Lefebvre refers to as 'social space', in which spatial configurations are intrinsically correlated with social interrelations[38].

Photo 10 & 11. Modern kitchen of a house in Barpak, reflecting architectural, technological and services advancement as opposed to a traditional kitchen. Redefining physical, social and symbolic changes. Source: (Author, 2019 & 2023).

The shift to modern amenities and services, such as gas stoves and access to direct water supply and electricity, has changed this fluid continuum. While these conveniences have undeniably increased efficiency and comfort, they have also individualised domestic activities and limited the domestic sphere. Cooking is no longer necessarily a collective activity but a functional one, often confined to select family members. The elimination of the requirement to collect water from a communal source *(dhunge dhara)*, represents more than just an infrastructural advance; it also reconfigures the domestic spatial paradigm that extends beyond the home's physical boundary. Services like electricity also played a powerful role. Prior to their ubiquitous prevalence in Barpak, diurnal activities were predominantly regulated by natural light, reinforcing a collective lifestyle where family unit would rise, rite, labour, dine and retire in synchrony. The availability of electricity extends temporal boundaries of the day, allowing different schedules among family members, mode of work

and now even type of work further individuating each resident's quotidian regimen. These transformations effectively attenuate the traditionally vital opportunities for social engagement both within the family unit and the wider community, thereby creating a more circumscribed domestic milieu within the home and outside home.

Media and technology further drastically amplify these transformative dynamics. The advent of mobile phones and especially internet in the village has democratised access to globalised modalities of entertainment and information dissemination, even in remote areas like Barpak. However, this accessibility incurs specific socio-cultural expenditures. Family members, young to old, are finding themselves more engrossed in individualised digital realms in their individual rooms, thereby diluting the collective experience of 'family time' that was previously facilitated by inherent spatial arrangement of domestic architecture and functional system. Marshal McLuhan's concept of the 'global village' becomes palpable here, where technology paradoxically expands yet contracts social arenas[39]. As residents of Barpak are now connected global information and cultural web, the intimate localise feeling of their traditional community is dissolving with the eruption of individual boundaries created within the domestic sphere from the web of internet and its subsequent. Taken together these architectural, occupational, infrastructural and technological shifts influenced by globalisation and modernisation, function dually as reflectors and accelerators, mirroring and incrementally reshaping the contours of domestic boundaries in Barpak. While these changes are often welcomed for the comfort, aspiration and efficiencies, they have complex consequences for the dynamic fluidity and intimate connectivity of domestic life, nuances that are vital to consider as Barpak traverses the evolving terrains of global modernity.

5. CONCLUSION

The transformations occurring in the Himalayan village of Barpak, offer an insightful paradigm for critically investigating the intricate nature of domestic boundaries in a globalised era. This paper explored these complexities, probing the reciprocal relationship between spatial configurations, quotidian experiences and societal dynamics, as well as investigating the village's responses to the globalising and modernising forces affecting its cultural essence. Within Barpak's milieu, the changing nature of domestic boundaries proves instrumental in gauging the societal shifts that are affecting the community's functioning and also its social and cultural texture.

The architectural and occupational landscape of Barpak have undergone substantial metamorphoses, signifying the broader influences of globalisation and modernisation. Traditionally, the domestic architecture of Barpaki homes functioned beyond mere habitation' they constituted a social nexus, guiding interpersonal

dynamics within the family and the community. The architectural features were aligned with the community's agricultural orientation - being communal, inclusive and devoid of rigid separations. The boundaries, therefore, were fluid and permeable, encapsulating the openness and collective ethos of Barpak's populace. It enabled an ecosystem where the demarcation between 'home' and 'work', 'private' and 'public' were porous, often dissolving into each other.

In contemporary times, however, Barpak's residential designs, epitomised by Reinforced Cement Concrete structures, spells out a change that transcend mere infrastructural fortification. These newly erected boundaries within homes – either physical partitions or demarcated spaces are more than just architectural elements; they emerge as emblems of evolving societal realities. These signify a transition towards a greater emphasis on individual autonomy, thereby reducing the reach of collective spheres and reinforcing the structures of modern and perhaps global, individualism over traditional collectivism. Although the architectural transformation provides the amenities and convenience of contemporary living, it has also come under scrutiny for transforming the social and emotional interdependencies that formerly unified the community. The evolution of these boundaries within domestic spheres thus becomes a silent storyteller of the subtle and drastic shifts in sociocultural frameworks that are insidiously reshaping the collective consciousness of Barpaki populace.

The cultural and social shifts within Barpak are components of a broader mosaic influenced by the multifaceted forces of globalisation and modernisation. This is apparent in the village's occupational landscape, which is shifting from agricultural activities to a spectrum of commercial endeavours, altering domestic boundary dynamics in unprecedented manner. From grocery stores and local eatery places to mixed retail shops lining up in front of houses in replacement to traditional *pirims* (a sitting platform at the front of traditional house) to families shifting their agricultural storage or livestock shelter into commercial storage, the globalised world is unmistakable. Traditional Barpak society, distinguished by its traditional social structures, face the formidable task of negotiating its established norms within this dynamically altered landscape. However, one could argue that the societal shifts are less a complete erasure of traditional constructs bur rather a nuanced reconfiguration. While globalisation has undeniably expanded occupational diversity and transformed domestic boundaries, it hasn't erased the foundational aspects of Barpaki culture. Instead, they have introduced an added layer of intricate complexities, one that compels the Barpaki society to rethink and, in many instances, reconfigure its established cultural norms to adapt the opportunities and challenges of a globalised reality. Yet, it's also worth identifying that this 'layer of complexity' often emerges as a frictional interface between traditional customs and modern exigencies, a tension that Barpak is navigating further integrating into the global fabric. In its struggle to navigate between the dual forces of

tradition and modernity, Barpak reveals the intricate and paradoxical dynamics of domestic existence in this globalised era.

NOTES AND REFERENCES

1 Bernard, H. Russell, and Clarence C. Gravele. *Methods in Anthropology.* Rowman & Littlefield, 2015.

2 Geertz, Clifford. *Local Knowledge: Further Essays in Interpretive Anthropology.* Basic Books, 2008.

3 Pandey, Chandra Lal. "The 2015 Nepal Earthquake: From Rescue to Reconstruction". *Recovering from Catastrophic Disaster in Asia* 18, (2017), p.161-176.

4 Douglas, Mary. "The Idea of Home: A Kind of Space." *Social Research* 58, no.1 (1991), p.287-307.

5 Levitt, Peggy. *The Transnational Villagers.* University of California Press, 2001.

6 Appadurai, Arjun. *Modernity at Large: Cultural Dimensions of Globalisation.* University of Minnesota Press, 1996.

7 Tuan, Yi-Fu. *Space and Place: The Perspective of Experience.* University of Minnesota Press, 1977.

8 Giddens, Anthony. The Constitution of Society: Outline of the Theory of Structuration. Polity Press, 1984.

9 Bhabha, Homi K. *The Location of Culture.* Routledge, 1994.

10 Bourdieu, Pierre. *Outline of a Theory of Practice.* Cambridge University Press, 1977.

11 Geertz, Clifford. *Local Knowledge: Further Essays in Interpretive Anthropology.* Basic Books, 2008.

12 Douglas, Mary. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo.* Routledge & Kegan Paul, 1996.

13 Moore, Henrietta L. *Space, Text and Gender: An Anthropological Study of the Marakwet of Kenya.* Cambridge University Press, 1996.

14 Appadurai, *Modernity at Large: Cultural Dimensions of Globalisation.*

15 Massey, Doreen. *Space, Place and Gender.* Polity Press, 1994.

16 Lefebvre, Henry. *The Production of Space.* Blackwell, 1991.

17 Douglas, Mary. *Natural Symbols.* Penguin Books, 1970.

18 Bourdieu, *Outline of a Theory of Practice.*

19 Certeau, Michel de. *The Practice of Everyday Life.* University of California Press, 1984.

20 Lefebvre, *The Production of Space.*

21 Inglod, Tim. *Being alive: Essays on Movement, Knowledge and Description.* Routledge, 2011.

22 Low, Setha M. Towards an Anthropological Theory of Space and Place. *Semiotica,* 175 no.1-4 (2009), p.21-37

23 Bourdieu, *Outline of a Theory of Practice.*

24 Fisher, James F. *Trans-Himalayan Traders: Economy, Society and Culture in Northwest Nepal.* University of California Press, 1987

25 Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo.*

26 Appadurai, *Modernity at Large: Cultural Dimensions of Globalisation.*

[27] Strathern, Marilyn. *The Gender of the Gift: Problems with Women and Problems with Society in Melanesia.* University of California Press, 1988.

[28] Turner, Victor. *The Ritual Process: Structure and Anti-structure.* Aldine Transaction, 1969.

[29] Inglod, Tim. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill.* Routledge, 2000.

[30] Lefebvre, *The Production of Space.*

[31] Bachelard, Gaston. *The Poetics of Space.* Trans. Maria Jolas. Beacon Press, 1969.

[32] Ibid

[33] Gieryn, Thomas F. "What Buildings Do". *Theory and Society* 31, no.1 (2002), p. 35-74.

[34] Bourdieu, Pierre. *Distinction: A Social Critique of the Judgement of Taste.* Trans. Richard Nice. Harvard University Press, 1984.

[35] Bhabha, *The Location of Culture.*

[36] Turner, *The Ritual Process: Structure and Anti-structure.*

[37] Sassen, Saskia. *The Global City.* Princeton University Press, 2001.

[38] Lefebvre, *The Production of Space.*

[39] McLuhan, Marshall. And Bruce R. Powers. *The Global Village: Transformations in World Life and Media in the 21st Century.* Oxford University Press, 2007.

ASHUUSAR: A MENTALLY RESILIENT COMMUNITY IN THE NORTH OF PAKISTAN

Noshaba Shah

ASHUUSAR: A MENTALLY RESILIENT COMMUNITY IN THE NORTH OF PAKISTAN

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The research delves into the impact of architectural shifts on the mental well-being of residents in northern Pakistan, specifically exploring the transition from traditional vernacular structures to modern buildings. Utilizing the Mental Well-being Scale, the study assesses residents' emotional responses to these changes.

Traditional dwellings, exemplified by Desi HAA or Chid, hold immense cultural and spiritual significance in the northern regions. These structures intricately blend historical, religious, and environmental elements, fostering a profound connection between inhabitants and their environment. Previous research emphasizes their role in mitigating harsh weather conditions while enhancing social cohesion and community bonds.

The study employs the Affordance theory and the PERMA Happiness Model to analyze how architectural elements evoke positive emotions, engagement, relationships, meaning, and accomplishment in individuals. Government-derived design standards are evaluated to comprehend their impact on mental health. The research employs the Building Wellbeing Scale, revealing that 24.4% of participants express negative sentiments about their living spaces. Modern architectural interventions often lack elements crucial for residents' well-being, contributing to mental health challenges. In contrast, vernacular architecture integrates features like solar access, visual privacy, communal spaces, and symbolic significance, enhancing residents' mental well-being.

Key Words: Vernacular Architecture, Mental Well-being, Affordance, PERMA Happiness Model, Community Cohesion, Wellbeing Scale

1. INTRODUCTION

In the wake of rapid globalization and technological advancement, the architectural landscape in developing nations, particularly in the northern regions of Pakistan, has undergone a transformative shift. Traditional vernacular architecture, deeply rooted in local culture and harmoniously attuned to nature, has faced a decline amid the influx of modern architectural practices. This transition has sparked concerns about its impact on the mental well-being of the residents as the year of the emergence of modernism in architecture is correlating with the year of increasing mental health issues.

This research delves into the intricate interplay between architectural designs and mental well-being, specifically focusing on the northern areas of Pakistan. The study critically examines the emotional responses and psychological experiences of residents toward modern buildings in contrast to their traditional vernacular counterparts. To assess these emotional dimensions, the research employs the Mental Well-being Scale developed by Kelly Watson (Watson), a robust framework designed to gauge residents' sentiments in the context of their new living spaces.

One striking revelation from the preliminary analysis of the Mental Well-being Scale data is the emergence of a concerning trend. A significant portion of the surveyed residents, amounting to 24% of the sample, reported negative emotions and sentiments in relation to their experiences with modern buildings. This

finding highlights a pervasive dissatisfaction and discomfort among a substantial portion of the population regarding contemporary architectural interventions in their communities.

As we delve deeper into this research, we aim to unravel the underlying factors contributing to this dissatisfaction. By meticulously analyzing the architectural elements, emotional responses, and cultural contexts, this study seeks to provide valuable insights into the reasons behind this negative sentiment. Moreover, the research endeavors to explore the potential solutions, drawing from both traditional wisdom and innovative design interventions, to bridge the gap between modern architectural practices with vernacular architecture in a way that fosters residents' emotional well-being.

In the pages that follow, we will navigate the intricate relationship between architectural designs and human emotions, shedding light on the profound impact that both vernacular and new building environment exerts on the mental well-being of communities in the northern areas of Pakistan. Through this exploration, we endeavor to pave the way for informed architectural interventions that prioritize the holistic flourishing of the residents, fostering environments where emotional, cultural, and environmental factors converge harmoniously for the well-being of all.

2. VERNACULAR ARCHITECTURE

Haa, Goat or Chid is a common space in vernacular houses that has cultural significance for the community of Northern areas of Pakistan, Tajikistan and Wakhi. The Chid is divided into different stages, each representing a particular kingdom in nature, and its pillars symbolize various religious and philosophical concepts.

In the realm of vernacular architecture prevalent in the Northern areas of Pakistan, particularly in the culturally rich Pamiri community, the Desi HAA, also known as Desi Got, stands as an emblematic representation of traditional dwelling structures. This architectural marvel embodies a profound historical legacy, echoing the deeply rooted customs and beliefs of the Pamiri people. At its core, the Desi HAA is defined by a central living area, meticulously crafted within a square dimension of 5.5 x 5.5 meters, where the tapestry of daily life unfolds. (Sedky, 2001)

Interestingly, this distinctive architectural style transcends geographical boundaries and finds its resonance in the architectural tapestry of the Wakhi, Kyrziq, and mountainous regions of Tajikistan. (Hossein Medi a, (2021))Referred to as 'Chid,' this vernacular design not only serves as a testament to the cultural heritage of the Pamiri people but also unveils a fascinating fusion of Aryan religion, Zoroastrianism, and the

transformative influence of Islam in the construction methodologies. (Khorog Urban culture tour: – Tourism.tj)

The significance of the Chid within these vernacular houses extends far beyond mere structural nuances; it represents a sacred space deeply intertwined with the spiritual fabric of the community. Within the Chid, the Pamiri people have ingeniously encapsulated their intricate relationship with nature and their profound reverence for the divine essence. The Chid is not merely a physical space; rather, it embodies a philosophical journey, elegantly divided into stages that symbolize distinct kingdoms in nature. Each pillar within the Chid is laden with profound religious and philosophical connotations, enriching the spatial experience with layers of meaning.

In the broader context of architectural symbolism, the Chid stands as a poignant embodiment of the Pamiri worldview, reflecting the interconnectedness of human existence with the natural world. This sacred space serves as a visual testament to the Pamiri people's unwavering belief in the sanctity of nature, mirroring their harmonious coexistence with the environment.

chid , PAMIRI HOUSE. Image from Khorog Urban culture tour: – Tourism.t

Desi Ghot or Haa. Image from Harji Images

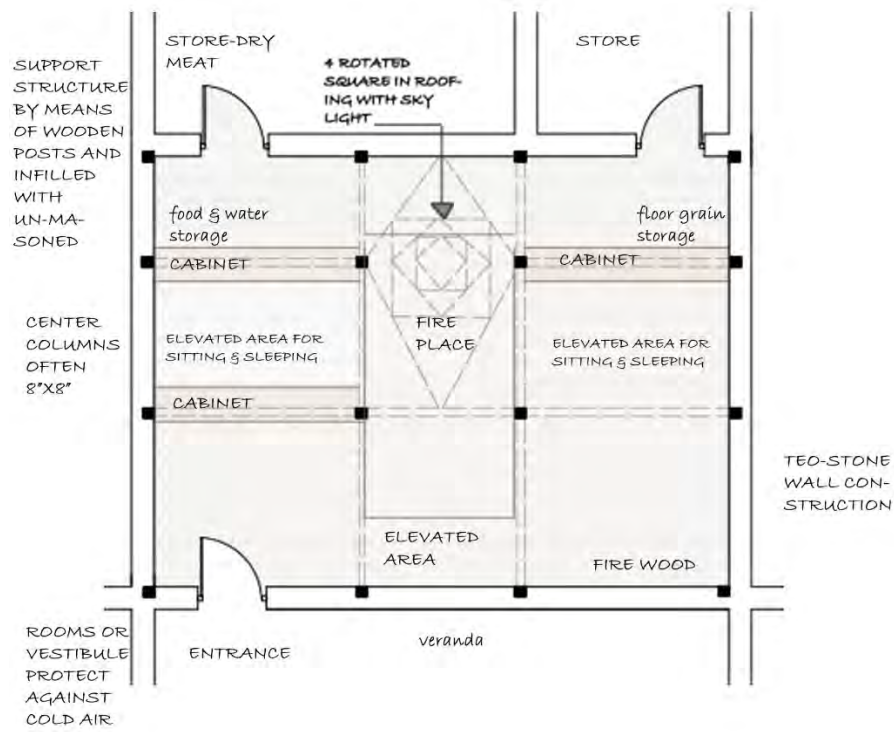Fig. 1. Images DESI Haa/ Ghot/ Chid
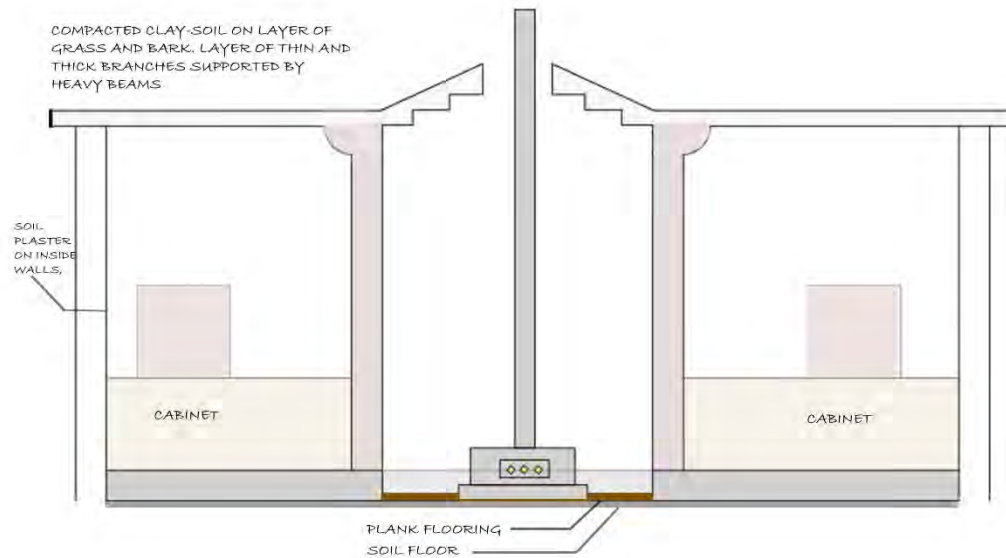
Fig. 2. Typical Plan of DESI Haa/ Ghot/ Chid

Fig. 3. Typical Section of DESI Haa/ Ghot/ Chid

Previous research (Hossein Medi a, 2021)suggest the significance of the Desi HAA or Desi Got, particularly in cold mountainous regions, extends beyond its architectural marvel to encompass its vital role in addressing the challenging climatic conditions of the area. One of its distinctive features lies in the meticulous selection of materials capable of withstanding drastic indoor-outdoor temperature differences. Local communities draw upon the resources readily available in their surroundings, opting for indigenous materials that harmonize with the environment. Stone buildings, specifically designed for wintering, serve as repositories of thermal mass, effectively retaining heat and enhancing the dwellers' comfort.

Intricately woven into the architectural framework is the thoughtful arrangement of spaces, radiating outward from a central heat source. This deliberate layout optimizes heat distribution, ensuring that each space benefits from the warmth generated. Additionally, the strategic orientation of the building entrance towards the sun, while shielded from the cold, showcases the meticulous attention to environmental factors, enhancing energy efficiency and comfort within the living spaces.

Beyond its functional aspects, the architecture encapsulates the rich tapestry of cultural and symbolic beliefs held dear by the communities. Nature's symbols and ancient rituals find their embodiment within the very structure of these dwellings, fostering a profound connection between the inhabitants and their surroundings. This intricate fusion of cultural symbolism and architectural design serves as a testament to the deep-rooted heritage and beliefs of the community.

Building upon previous studies, such as "Distinctive Aspects of Vernacular Architecture of Wakhan Valley in Afghanistan," the research underscores the profound impact of this architectural style on social dynamics and community cohesion. The introverted nature of these houses, shielding residents from the harsh climate and cold winds, simultaneously fosters a sense of unity and togetherness. The communal heat source, strategically positioned at the heart of these dwellings, becomes the nucleus of daily activities and communal gatherings. This shared space not only encourages social interaction but also strengthens interpersonal relationships, fostering a sense of community and interconnectedness.

Furthermore, the incorporation of symbols and spiritual values derived from neighboring civilizations and their beliefs imbues the architecture with a deep sense of belonging and cultural identity. The collaborative effort involved in constructing these houses, where neighbors and relatives actively participate, emphasizes the importance of community involvement and cooperation. This collective endeavor not only enriches the architectural fabric but also reinforces the social fabric, creating a stable and closely-knit community where social cohesion, tribal ties, and social security thrive, establishing a resilient and interconnected society.

3. METHODS

A mixed-method approach is used to see if there is a significant relationship between architecture and mental health. The methods of the study are an examination of primary and secondary sources, survey, and case study to identify the impact of existent architectural practices in northern areas on the vernacular architectural approach.

The mental health is measured using Watson's Building Wellbeing Scale with 22 questions on a five-point Likert scale.

 The goal was to collect 90 responses from those who have been exposed to modern architecture in this region and those who are still following the vernacular style in northern areas of Pakistan through simple random sampling both virtually and in-person.

3.1. Measuring With the Perma Happiness Model

On the basis of the idea of Affordance, (Maier, 2009)1 architectural elements can evoke these five emotions, in a human being. To see whether this model does exist in vernacular architecture or desi Haa, an analysis of the program and daily activities has been done. In the realm of architectural theory, the concept of Affordance, as introduced by Gerona Gibson (M. Gibson, 2011), sheds light on the intrinsic relationship between spatial design and human behavior, elucidating how built environments influence sensory experiences and actions. Concurrently, the PERMA happiness model, a pioneering theory in positive psychology formulated by Martin Seligman, delineates the quintessential elements constituting human well-being: Positive Emotions, Engagement, Relationships, Meaning, and Accomplishment. These elements intricately weave the tapestry of emotional fulfillment and psychological wellness, forming the foundation of holistic human flourishing.

Delving into the intersection of these theories, our research explores the potential of architectural elements, particularly within vernacular contexts like the Desi HAA, to evoke the five dimensions of well-being articulated in the PERMA model. In this innovative analysis, we scrutinize how vernacular architectural affordances can serve as catalysts, engendering positive emotions, stimulating engagement, nurturing relationships, instilling a sense of meaning, and fostering accomplishment within individuals.
By dissecting the programmatic aspects and daily activities within vernacular architectures like the Desi HAA, our research endeavors to unravel the subtle nuances and intentional design choices that evoke these fundamental emotions and experiences. This in-depth analysis delves into the spatial arrangements, material

choices, and sensory stimuli embedded within these architectural marvels, exploring how they resonate with the core elements of the PERMA model.

3.2. Measuring Design Requirements

Government policies aimed at enhancing positive health and well-being have been systematically evaluated. Specifically, regulations such as SEPP65 in New South Wales, SPP7.3 in Western Australia, and BADS in Victoria were scrutinized for their design criteria, which could potentially influence positive health and well-being outcomes. The analysis focused on eight key design themes: (1) solar and daylight access; (2) natural ventilation; (3) acoustic privacy; (4) outlook and visual privacy; (5) indoor space; (6) private outdoor space; (7) communal outdoor space; and (8) circulation spaces, encompassing corridors and foyers. These design parameters were derived from extensive prior research (Paula Hooper, 2023) (S. Foster, 2011) that aimed to identify the combination of design requirements that were optimally supportive of positive mental health. These design recrements are further tailored by adding extra elements including proximity to fields or gardens to identify the impact of Spring SAD wellbeing.

3.3. Building Selection

In the process of documentation, a meticulous selection was made, encompassing twenty distinct residential structures. Among these, ten houses were identified as possessing a fusion of traditional architectural elements, specifically the desi Ha, albeit with modern extensions. Concurrently, the remaining ten residences were purposefully chosen as exemplars of entirely newly constructed structures.

This deliberate division allowed for a comprehensive comparative analysis between the traditional vernacular design, represented by the desi Ha with contemporary extensions, and the contemporary approach manifested in the newly constructed houses.

3.3. Mental Wellbeing Scale

In order to assess the influence of architectural elements on the mental well-being of residents, a comprehensive research methodology was employed. A questionnaire survey, utilizing the Likert scale and drawing upon the Building Wellbeing scale developed by Kelly J. Watson, was meticulously administered scale (Watson, 2018). The Building Wellbeing scale, in its current iteration, served as a robust framework for evaluating residents' mental health in the context of their built environment.

Additionally, an innovative approach was incorporated into the survey design. A specific query related to pollen allergies was strategically included. This addition aimed to investigate the potential correlation between pollen allergies and Seasonal Affective Disorder (SAD) during the spring season. By exploring this nuanced aspect, the research sought to discern the existence of spring SAD triggered by pollen count, thereby enriching the scope of the study and offering valuable insights into the intersection of environmental factors, mental health, and architectural design.

4. THE EXAMINATION OF VERNACULAR ARCHITECTURE

The examination of vernacular architecture, specifically Desi Ha, was conducted utilizing a structured design requirement table by (Paula Hooper, 2023)4. enabling a systematic evaluation of its key components:

1. **Solar and Daylight Access:** The incorporation of skylights in Desi Ha facilitates adequate solar and daylight access, ensuring a well-lit interior environment.

2. **Natural Ventilation:** While natural ventilation is somewhat limited, the architectural design takes into account specific restrictions to optimize airflow within the space.

3. **Visual Privacy:** Despite being a shared space, Desi Ha offers commendable visual privacy through the strategic implementation of cabinet partitions, ensuring a sense of seclusion and individuality within the communal setting.

4. **Indoor Space:** Desi Ha interiors are characterized by spaciousness, with distinct activity zones demarcated by variations in floor levels. This division enhances functionality and accommodates various domestic activities effectively.

5. **Private Outdoor Space:** The presence of private outdoor spaces is a noteworthy aspect, providing residents with areas for personal use and outdoor engagement.

6. **Communal Outdoor Space:** The analysis of Gilgit's older settlements reveals the existence of common outdoor spaces, known as Jataq, emphasizing the community-centric design approach prevalent in the region.

7. **Circulation Spaces:** Circulation within Desi Ha follows a simple and centralized layout, ensuring ease of movement and connectivity between different areas of the dwelling.

Further the analysis of the vernacular house extends to the lens of the PERMA Happiness model (Maier, 2009)5, encompassing the following dimensions:

8. **Positive Emotions:** The architectural layout of the common living area is meticulously crafted to foster social interaction and evoke positive emotions among its occupants. Central to this design is the fireplace, serving as a focal point that unites family members. Additionally, the expansive nature of the space coupled with the infusion of direct sunlight through the skylight further amplifies the positive emotional experiences within the environment.

9. **Engagement:** The living area is ingeniously partitioned into distinct activity zones, instilling a sense of hierarchy and purpose. Each zone is purposefully tailored to cater to specific activities such as gaming, culinary pursuits, or relaxation, encouraging residents to immerse themselves in activities they enjoy and facilitating connections with other family members.

10. **Relationships:** Functioning as a communal shared space, the living area serves as a nexus for diverse family activities, nurturing opportunities for residents to spend quality time together and fortify their interpersonal bonds. The environment becomes a catalyst for strengthening relationships within the family unit.

11. **Meaning:** The incorporation of sacred numbers and symbols within the living space resonates deeply with the religious beliefs of the residents, establishing a profound connection with their intrinsic meaning and purpose in life. These symbolic elements imbue the space with cultural and spiritual significance, enriching the inhabitants' sense of purpose.

12. **Accomplishment:** The inclusivity of the living area is manifested through varied seating options and diverse floor levels, ensuring accessibility to all residents. This inclusive design empowers individuals to utilize the space in accordance with their unique requirements, fostering a sense of accomplishment and agency among the occupants.

In summation, the design of the common living area is meticulously tailored to align with the principles of the PERMA model, thereby promoting overall well-being among its residents. By cultivating an environment that nurtures positive emotions, engagement, relationships, meaning, and accomplishment, the space becomes a cornerstone for the holistic flourishing of its inhabitants.

5. THE EXAMINATION OF NEW CONSTRUCTIONS

Building Form	Ventilation	Lighting	Common Space	Distance To Field, garden	Distance From community center	Privacy	Circulation	Air quality	Green spaces	Neighborhood	Orientation	Shading Devices	Openings	Walls	Roofing
Vernacular styled construction, one common space (HAA) With newly constructed room and washroom. Compacted except the common space.	poor	poor	Vernacular Common Space	Very close Proximity	Close proximity	Average	Poor	Poor	Close Proximity	Close Proximity	Façade facing east, longer wall facing east and west, shorter walls, north and south.	No	Open skylight in the common room, windows in the room.	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood Type 2:-SSMR
Vernacular styles common room and kitchen, with new construction (kitchen and rooms)	Good	Good	Vernacular Common Space, New Kitchen	close Proximity	close Proximity	High	Very Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West.	No	Open skylight in the common room, windows in the room.	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old):- common room & store. Extension:- Room washroom and veranda.	Good	Average	Vernacular Common Space	close Proximity	Close proximity	Bad	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	Semi-covered space in front of room, shading over the room and one side of the common room	Open skylight in the common room, windows in the room.	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old):- common room & store. Extension:-	Poor	Poor	Vernacular Common Space	close Proximity	Close proximity	Average	Poor	Bad	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	Open skylight in the common room, windows in the room.	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old):- common room & store. Extension:- Two Rooms, Two Washrooms	Good	Average	Vernacular Common Space	close Proximity	close Proximity	Good	Poor	Average	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	Semi-covered space in front of room, shading over the room and one side of the common room	Open skylight in the common room, windows in the room.	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old), Reconstructed/Conserved:- common room & store. Extension: - Rooms. Washrooms.	Good	Good	Vernacular Common Space	close Proximity	close Proximity	Good	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	Open skylight in the common room, windows in the room	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old), Extension Under Process	Good	Average	Vernacular Common Space	close Proximity	close Proximity	Poor	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	yes	Open skylight in the common room, windows	stone	Wood
Vernacular Style(old):- common room & store. Extension:-	Poor	Average	Vernacular Common Space, Kitchen	close Proximity	close Proximity	Good	Poor	Bad	At a good distance	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	no	Open skylight in the common room, windows	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
Vernacular Style(old):- common room & store. Extension:-	Good	Good	Vernacular Common Space	close Proximity	close Proximity	Good	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	Semi-covered space in front of room, shading over the room and one side of the common room	Open skylight in the common room, windows	Type 1:- stone Type 2:- Concrete Blocks	Type 1:- Wood corrugated metal roofing
New Construction	Bad	Poor	Kitchen	close Proximity	close Proximity	Good	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	no	windows	Concrete Blocks	corrugated metal roofing
New Construction	Bad	Poor	Kitchen	close Proximity	close Proximity	Good	Poor	Average	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	no	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Average	Kitchen	close Proximity	close Proximity	Good	Good	Average	Close Proximity	Close Proximity	longer wall facing East and west, shorter walls north-south	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Good	Kitchen	close Proximity	close Proximity	Good	Good	Good	Close Proximity	Close Proximity	longer wall facing East and west, shorter walls north-south	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Good	Kitchen	close Proximity	close Proximity	Good	Poor	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Good	Kitchen	close Proximity	close Proximity	Good	Poor	Good	Close Proximity	Close Proximity	longer wall facing East and west, shorter walls north-south	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Bad	Kitchen	close Proximity	close Proximity	Good	Good	Good	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Bad	Bad	Kitchen	close Proximity	close Proximity	Good	Good	Bad	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Good	Good	Kitchen	close Proximity	close Proximity	Good	Good	Good	Close Proximity	Close Proximity	longer wall facing East and west, shorter walls north-south	No	windows	Concrete Blocks	corrugated metal roofing
New Construction	Bad	Bad	Kitchen	close Proximity	close Proximity	Good	Good	Bad	Close Proximity	Close Proximity	Façade facing south, longer wall facing North-south, shorter walls, East, West	No	windows	Concrete Blocks	corrugated metal roofing

6. RESULT OF WELL-BEING SCALE SURVEY

In alignment with the Wellbeing Scale developed by Kelly Watson, a comprehensive survey was conducted involving 250 participants, with an initial target of 90 respondents. Out of this sample, 45 individuals provided responses, offering valuable insights into their mental well-being. The survey results revealed a concerning trend: 24.4% of participants reported negative sentiments, while 74% exhibited positive responses, and 2.2% remained neutral.

I feel optimistic when I'm in this building .	I have purpose when I am in this building	I feel rewarded when I am in this building	I feel at ease when I am in this building	I feel interested in other people in this building	I can be myself when I âm in this building	I feel worthwhile when I am in this building	I deal with problems well when I am in this building	I feel empowered when I am in this building	I think clearly when I am in this building	I feel inspired when I'm in this building	I feel useful when I am in this building	I feel close to other people when I'm in this building	I feel fulfilled when I am in this building	I can make up my own mind about things when I'm in this building	I feel valued when I'm in this building	I can apply myself to what I'm doing when I'm in this building	I feel joyful when I am in this building	I feel in control of my own decisions when I'm in this building	I feel energised when I'm in this building	I feel at my best when I'm in this building	Results
1	0	-1	1	0	2	0	-1	1	0	0	0	1	0	1	1	1	2	-1	1	2	10
1	-1	0	-1	0	1	-1	0	1	0	1	0	1	1	1	0	11	1	1	1	1	9
1	1	1	1	0	0	0	1	1	1	1	1	1	-1	0	1	1	1	0	0	0	11
-1	-1	-1	0	0	1	-1	0	1	-2	-1	0	0	0	0	0	1	1	1	0	0	-2
-1	1	0	-1	1	1	1	-1	-1	1	-1	1	1	-1	1	1	1	1	1	1	1	9
0	1	-1	2	0	0	1	-1	0	1	0	0	-1	1	1	1	1	1	1	0	1	9
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
0	1	0	0	1	2	2	1	2	-2	2	1	2	1	1	1	1	1	1	1	1	20
0	1	-1	-1	-1	-1	0	0	0	1	0	-1	0	0	-1	0	0	0	1	0	-4
0	2	2	2	0	2	1	1	1	0	1	1	0	1	1	0	1	1	-1	1	1	18
-2	1	1	2	0	0	1	1	1	1	0	1	0	0	1	0	0	1	1	0	0	12
2	2	2	2	-2	2	-1	2	2	2	2	2	1	2	0	2	2	2	2	-2	-1	25
1	0	-1	0	0	0	-2	-2	0	-1	-1	-1	0	0	0	-1	0	0	-1	0	0	-9
-1	-1	-1	1	-2	1	-1	1	-1	1	-2	-1	-1	-1	1	-1	1	-1	-1	1	-1	-1
2	-2	2	2	-2	2	-2	2	2	2	1	2	2	2	2	2	2	-2	2	-2	2	21
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0	0	0	0	1	1	1	-1	-1	-1	-1	-1	-1	-1	-2	-1	0	-2	0	-1	-1	-9
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0	0	0	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	0	13
1	1	2	1	-1	1	0	1	1	1	1	1	0	0	0	1	1	1	1	0	0	14
1	1	1	0	0	1	0	0	0	1	0	1	1	0	0	1	0	1	0	0	0	9
0	0	0	0	1	1	-2	-1	-1	-1	-1	-1	1	0	1	0	1	1	0	0	0	-1
0	1	0	0	-1	1	1	-1	0	-1	0	1	0	1	0	-1	1	1	0	0	0	2
0	-1	-1	-1	-1	-2	-2	0	-2	0	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-25
-1	-1	1	-1	0	2	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	13
1	1	1	-1	-1	1	-1	0	0	1	1	1	0	0	1	0	0	0	1	0	0	10
0	0	0	0	-1	0	-1	-1	0	0	1	1	0	0	-1	-1	-1	0	0	0	0	-4
1	1	0	-1	1	1	1	0	1	1	0	1	2	1	1	1	1	-2	1	1	1	14
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
1	-1	-1	1	0	-1	0	0	-1	0	-1	0	-1	-1	0	0	0	0	0	0	-1	-5
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0	0	0	0	2	0	1	1	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-3
0	-1	-1	0	-2	1	0	2	1	0	0	0	0	0	2	0	1	0	0	0	0	3
0	1	1	-1	0	1	-1	1	1	1	0	1	1	1	0	1	0	1	1	1	0	11
1	0	1	-1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	15
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1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	18
1	2	1	0	0	0	1	1	0	1	-1	1	1	1	1	1	1	0	0	-1	-1	10
1	1	1	-2	1	1	1	1	1	1	0	1	2	1	1	1	1	2	2	-2	2	20
1	1	1	2	1	1	2	-2	1	1	0	1	0	0	0	0	1	1	1	1	1	13
2	1	2	1	1	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	12

7. COMPARATIVE ANALYSIS OF VERNACULAR ARCHITECTURE AND NEW CONSTRUCTIONS (RESIDENTIAL BUILDINGS)

Elements	Vernacular Architecture	Need Imrovment	New Constructions
Ventilation	open hole in the centre of the roof is only source of ventilation	●	Some are well ventilated but most of them are not.
Lighting	open hole in the centre of the roof is often the only source of light	●	Some are well lit but most of them are not.
Common Space	Desi Haa/ Chid is central living area consisting of a square of 5.5 x 5.5 metres where the majority of domestic activities take place.		Kitchen as a common sapace.
Proximity to Green zones	Feilds and gardens use to be at longer distance from settelments		Very close
Privacy	The central living room creates different zones through cabinet partition and creates an appropriate sense of privacy. The central living area is also surrounded by vestibules or rooms.		Indivual rooms, highly isolated
Circulation	Simple and centralized. Wooden stairs(externally) to wards roof		Complex
Air Quality	Can be improved	●	Can be improved
Orientation	Oriented towards the sun and away from the cold.		South or East
Openings	Sky light/ Saggam is the only opening		Windows
Walls	18", stone walls. mud plaster		Concrete Blocks, cement plaster
Roofing	Compacted clay soil on a layer of grass and bark. A layer of thick and thin branches supported by heavy beams		corrugated metal roofing
Thermal Comfort	Highly comfortable.		Very poor
Positive Emotions	The fireplace in the center acts as a focal point, bringing family members together. The architecture of the space, with its spaciousness and direct sunlight from the skylight, also contributes to a positive emotional experience.		Lack of thermal comfort, ventilation, and natural light doesn't trigger any positive emotions
Engagment	The area is divided into different activity zones, providing residents with a sense of hierarchy and engagement. Each zone is designed for a specific activity, such as playing games, cookig, or relaxing. This encourages residents to engage in activities that they enjoy and to connect with others family members		Female spend most of the time in kitchen, other family members usually spend time in indiviual rooms.
Relationship	As a common shared space, the living area brings family members together for a variety of activities. This provides opportunities for residents to spend time with each other and strengthen their relationships		Dinning is the only time family spends together in kitchen
Meaning	The sacred numbers and symbols in the space reflect the religious beliefs of the residents. This connects them with their deeper meaning and purpose in life		No signs of religius belives in architecure.
Accomplishment	The living area is welcoming and inclusive, providing a variety of seating options and different floor levels. This makes the space accessible to all residents and allows them to use the space in a way that meets their individual needs. This can give residents a sense of accomplishment and empowerment.		No space that can evoke a sense of accomplishment, exept the isolated rooms

8. CONCLUSION

The conducted survey, involving 250 participants and anticipating 90 responses, yielded valuable insights from 45 individuals. Upon analysis, the responses revealed a concerning 24.4% reporting negative sentiments, while 74% expressed positive feelings, and 2.2% remained neutral. These findings are indeed alarming, indicating that nearly every fourth individual in the surveyed area faces mental challenges attributed to their built environment. This underscores the pressing need for architectural interventions specifically crafted to enhance mental well-being and highlights the urgency of addressing these concerns within the realm of architectural design.

The documentation results and examination of the documented houses explain how the new structure is missing the architectural design elements that can contribute to the wellbeing of residents, also there are no design elements found that can evoke any of the five elements from the PERMA Happiness models. This indicates that modern designs not only clash with natural surroundings but also fail to contribute positively, and in some cases, even have detrimental effects on the mental well-being of residents. Moreover, the proximity of fields and gardens to settlements emerges as a significant trigger for pollen allergies, a condition linked to internal inflammation and depression, as corroborated by prior research. (I. Bell)

On the other hand examination of vernacular architecture (Desi Haa/Chid) reflects the presence of the design elements that can foster well-being, which include: - 1. Solar and Daylight Access, Visual Privacy, Indoor Space, Communal Outdoor Space, and Circulation. Besides this, we can also find Design Elements and strategies that can evoke five elements of the PERMA Happiness model.

The vernacular architectural style, rooted in a rich historical legacy spanning millennia, presents inherent elements conducive to fostering well-being. Features such as Desi Haa or Chid, strategic use of materials, central placement of heating sources, orientation techniques, incorporation of sacred numbers, pillars, and rotated squares, as well as thoughtful distribution of activities and central skylights, demonstrate the potential to enhance residents' quality of life.

But there are still some existing challenges in vernacular construction as well which can be improved with.

BASIP interventions can enhance ventilation, lighting, and air quality. Thermal comfort and fuel usage can be optimized through the incorporation of innovative techniques, including:

1. Wall Insulation: Two-stoned walls measuring 18" (66cm) thick with a cavity, plastic, wattle panel, and ¾" soil-cement plaster on the inside, or two-stone walls of similar dimensions with a cavity, plastic, and ¾" soil-cement plaster on the inside, prove effective in improving thermal insulation.

2. Roof Hatch Window: Positioning the roof hatch window above the skylight featuring four rotated squares not only enhances natural light levels within the house but also boasts heat conservation properties, contributing to energy efficiency and residents' comfort.

3. Double-Glazed Windows: Integrating double-glazed windows in the design enhances sunlight intake while conserving heat, thereby reducing the reliance on firewood and promoting sustainable practices.

Incorporating these interventions aligns with the preservation of vernacular architectural wisdom while embracing innovative solutions, ensuring a harmonious blend of tradition and modernity for the well-being of residents.

This research clearly explains the importance of our vernacular architecture on the well-being of the community. The policies should be made to preserve these aspects of architecture, also architects can further explore the new ways of incorporating desi Haa into modern design while preserving the recommended architectural aspects to foster well-being in mountainous regions. To make a mentally resilient community and to enhance wellbeing it is crucial to take certain policy measures. Architectural guidelines should be developed to encourage the incorporation of traditional elements like skylights, rotated squares, and communal spaces in modern building designs. Also, allocating funds for the documentation and research of traditional architectural styles like Desi HAA and Chid and launching public awareness campaigns to educate residents about the importance of vernacular architecture, encouraging them to preserve their heritage.

NOTES AND REFERENCES

Hossein Medi a, *. S. ((2021)). Distinctive Aspects of Vernacular Architecture of Wakhan Valley in. *Space Ontology International Journal,*.

Hossein Medi a, *. S. (2021). Distinctive Aspects of Vernacular Architecture of Wakhan Valley in. *Space Ontology International Journal,*.

I. Bell, M. L. (n.d.). Depression and allergies: survey of a nonclinical population. *Psychotherapy and Psychosomatics.*

Khorog Urban culture tour: – Tourism.tj. (n.d.).

M. Gibson, M. P. (2011). Housing and health inequalities: a synthesis of systematic reviews of interventions aimed at different pathways linking housing and health. *Health Place.*

Maier, J. R. (2009). An affordance-based approach to architectural theory, design, and practice. *Design Studies,*.

Paula Hooper, A. K. (2023). The architecture of mental health: identifying the combination of apartment building design requirements for positive mental health outcomes,. *The Lancet Regional Health - Western Pacific.*

S. Foster, P. H.-C. (2011). Grand designs for design policy: associations between apartment policy standards, perceptions of good design and mental wellbeing. *SSM - Population Health*.

Sedky, N. (2001). *The Impact of BACIP Interventions on Health and Housing in Northern Areas, Pakistan.* AKHS,P & BACIP.

Watson, K. (2018). Establishing psychological wellbeing metrics for the built environment. *Building Services Engineering Research and Technology*.

Watson, K. (n.d.). Establishing psychological wellbeing metrics for the built environment . *Building Services Engineering Research and Technology*.

REINVENTING TRADITIONAL INFORMALITY: EXPLORING THE HYBRID SPACE OF AL-HARAZAT IN JEDDAH'S INFORMAL HOUSING

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REINVENTING TRADITIONAL INFORMALITY: EXPLORING THE HYBRID SPACE OF AL-HARAZAT IN JEDDAH'S INFORMAL HOUSING

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This paper investigates the emergence of informal housing in Jeddah, shaped by the traditional practices of rural migrants. It examines how religious beliefs and social norms led to a bottom-up development of these settlements. However, under Saudi Arabia's modernization agenda, informal areas faced pressures of eradication, highlighting tensions between traditional and formal planning approaches. The case study of Al-Harazat demonstrates how an informal settlement evolved by blending traditional and modern elements. Despite its origins in traditional practices, Al-Harazat's unique mix of informal and formal features allowed it to avoid eradication, underscoring the nuances and adaptability of informality in Jeddah.

1. INTRODUCTION

Informal housing in Jeddah represents an example of how local communities shape their physical surroundings. These surroundings materialize from a complex blend of cultural influences, encompassing religious principles, societal norms, and established legal structures. Taken together, these elements reflect the society's core values and beliefs. As such, the built environment is not merely a physical construct but a tangible outcome of the interactions between these cultural components. Here, religious and social norms lay the foundation for traditional practices, leading to a 'bottom-up' approach to urban development. In contrast, the legal system provides a framework for official regulations, encouraging a more top-down approach. As a result, spatial outcomes become physical manifestations of the social processes embedded within our societies.[1]

In the context of Jeddah, this paper investigates informal housing as a product of bottom-up traditional practices, primarily influenced by religious beliefs and social norms. Under the modernization project of Saudi Arabia, these areas are perceived as undesirable hindrances to Jeddah's development, and thus, warranting eradication. Consequently, a conflict arises between traditional practices and the evolving formal system. Recognizing that traditions are dynamic rather than static, informal actors adapt their traditional practices to ensure compatibility with emerging formal regulations. This phenomenon is exemplified by Al-Harazat, an informal area that incorporates several formal elements such as wide roads, extensive housing units, and low density. This contrasts with the majority of Jeddah's informal areas, which are characterized by narrow roads, small housing units, and high density, among other features. Despite its classification as an informal area, Al-Harazat's unique characteristics grant it special consideration in Jeddah's extensive regeneration project. In contrast to other informal areas that have been eradicated, Al-Harazat remains largely untouched by the state's intervention.

To explore these themes, the paper utilizes interviews, secondary sources, and observation to examine the relationship between urban informality and tradition in Jeddah, Saudi Arabia. First, it introduces the concept of urban informality and how it connects to tradition, highlighting their interplay and implications. A contextual review then discusses the historical and sociocultural factors that have contributed to the growth of informal settlements in Jeddah, demonstrating how traditional practices have shaped these settlements' physical forms and social dynamics. This section also explores the tensions between traditional practices and formal urban planning policies, along with the challenges informal settlements face amidst pressures of redevelopment and gentrification. Finally, the paper focuses on the case study of Al-Harazat, an informal settlement in Jeddah that blends traditional and modern elements, providing a nuanced perspective on informality in the city.

2. URBAN INFORMALITY AND TRADITIONAL PRACTICES

Urban informality encompasses the array of unregulated and informal activities that pervade city life. These activities include, but are not limited to, informal housing or slum dwellings, street vendors and hawkers, and other informal economic activities that operate outside the formal regulatory framework. This concept is often recognized as a pervasive mode of urbanization, particularly prevalent in developing nations.[2] This form of urbanization emerges as a consequence of rural-to-urban migration, a common phenomenon in many developing countries.[3] In search of better economic prospects and opportunities, people from rural areas migrate to the cities, contributing to the growth and dynamism of urban informality. This trend is often catalyzed by various economic transformations, such as industrialization or service-sector growth, which draw people toward urban areas.[4] Government policies and actions can sometimes inadvertently encourage this kind of migration. For instance, in some cases, states may encourage newcomers to settle in cities as part of efforts to accelerate urban development or mitigate rural poverty. However, this can lead to challenges in urban planning and management, especially when the influx of migrants outpaces the capacity of the city to provide basic services and infrastructure.

A distinct characteristic of informal areas is their bottom-up construction and development, driven largely by the individuals and communities residing there, rather than formal planning and governance mechanisms. This often results in inadequate or substandard infrastructure, particularly in the provision of essential services such as water and sanitation. As these areas are built from the ground up by residents, the implementation of basic infrastructure and services often lags behind, leading to conditions that can pose serious health and environmental risks. This lack of basic services is often compounded by issues such as poverty, unemployment, and social inequality, adding to the complexity of these areas. The interplay of these conditions—the organic, unregulated nature of informal urban development, the deficiency of adequate

infrastructure, and complicated socio-economic circumstances—has led many governments to resort primarily to eradication as a strategy for managing informal settlements. Eradication typically involves the clearance or removal of informal settlements, frequently accompanied by the displacement of their residents. It is seen by some governments as a way to regain control over urban land use, enforce building and planning regulations, and eliminate what they perceive as "eyesores" or "problem areas" within the cityscape. This approach eradicates not just the physical aspect of urban informality but also the rich culture of these places.

There is a strong link between urban informality and tradition. Since the former is a result of waves of rural migrants to cities, migrants rely mainly on traditional practices that stem from their norms, religious beliefs, and values. These sets of dispositions and practices are known by Bourdieu as habitus which is the unconscious part of an individual's way of perceiving, thinking, and acting in the world.[5] The new arrivals to the city construct their settlements based on their habitus, effectively reproducing their traditions, norms, and values in an urban context. This sometimes lead to the emergence of informal settlements that often reflect the social, cultural, and economic characteristics of the communities from which these migrants originate.[6] Hence, cities are understood as "assemblages" that accumulate through the everyday practices of its residents and adaptation carried out by diverse groups.[7] The informal city develops slowly out of the combination of long-standing customs and the pressing needs of city living.

However, this process can result in conflict between these traditional practices and the formal system, as the latter often operates based on standardized regulations, codes, and norms that may not align with the diverse cultural backgrounds and informal ways of living of the migrant communities. This tension between informal traditions and formal institutions can lead to issues such as spatial segregation, social exclusion, and marginalization, as well as resistance and contestation by those affected, as they strive to preserve their identity and autonomy within the urban fabric. Roy examines this issue of conflict through the lens of power, asserting that states play a decisive role in the categorization of traditional practices as either informal or formal. [2] This categorization is accomplished through the establishment of legitimacy and illegitimacy, effectively illustrating that the concepts of 'formality' and 'informality' are not rigid, unchanging entities. Rather, they are constructs molded by the shifting dynamics of power. The state, as the supreme wielder of power, is in a position to dictate what is considered legitimate or illegitimate, formal or informal. It sets these boundaries chiefly in accordance with its own norms and regulations. Consequently, these delineations engender a discontinuity between contemporary planning methodologies and traditional construction methods.

The traditional ways, as a result, are often relegated to an inferior position, treated as a departure from the norm instead of being recognized as a distinct yet equally valid approach to urban development. This sense of

inferiority is perpetuated and amplified through systematic policies and practices that prioritize formal, standardized methods, which are predominantly constructed upon the foundations of Western knowledge and reasoning. The imposition of the Western mode of thought upon the built environment of non-Western societies often occurs through mechanisms of colonization or globalization. Expanding on the theme of power, Brenda Yeoh provides an illustrative example.[6] She details how, towards the end of the 1880s in Malaysia, colonial institutions were successful in establishing Western practices as the normative standard that should be adhered to. This process led to the traditional practices of Asian communities being deemed undesirable and out of sync with modern needs and circumstances.

In the Gulf cities, the impact of Western influence is exerted through the agency of consultancies. These consultancies, often staffed with Western-educated professionals, serve as advisors to urban development strategies and planning. As a result, Western architectural styles, planning principles, and development methods become the norm, often overshadowing or replacing traditional practices. This pattern is evident in Jeddah where Robert Mathew and Sert Jackson were deployed[8], Riyadh with the involvement of Dioxides[9], and Doha under the guidance of Llewelyn Davis.[10] Consequently, the local, indigenous knowledge and practices that have evolved over centuries to suit the specific cultural, environmental, and societal needs of these regions, may find themselves marginalized or even dismissed as irrelevant. This process mirrors the one Brenda Yeoh details in her work, revealing a pattern of Western domination in urban development across different parts of the world. Informal settlements, which operate "outside the legal framework", mirror many traditional practices providing a counterpoint to the imported culture dominating the formal areas.

While the literature extensively covers various aspects of urban informality such as its emergence, characteristics, and relationship to tradition, there remains a gap in understanding how informal settlements adapt to new policies and norms imported from Western practices. Many studies examine the tensions that arise between informal traditions and formal institutions. However, few explore whether informal actors reinvent their traditional ways in accordance with the new environment or rely on them despite formal pressures toward standardization. It remains unclear how informal settlements respond over the long term - do they find ways to preserve aspects of their identity and autonomy, or do Western influences ultimately reshape informal areas? This paper will try to bridge this gap by investigating the adaptive strategies employed by informal settlements in response to formal policies and norms.

3. JEDDAH'S INFORMAL HOUSING

Jeddah, in the 1960s and 1970s, faced a rapid wave of urbanization that outpaced the city's capability to manage it systematically. In response to national goals, many rural migrants were encouraged by the state to

reside in Jeddah to make it a metropolitan city. During this time, when the new arrivals came to Jeddah, they imposed their culture on the built environment. Below are descriptions of these practices that shaped what became informal areas of Jeddah.

The Islamic concept of *Ihya Mouate*, which translates to "reviving dead lands," outlines the practice of occupying underused lands to render them beneficial. There are numerous conditions attached to such occupancy, but the primary condition is that it must align with the interests of neighboring landowners. The occupant, or "squatter," is given the discretion to determine the usage of the occupied land, be it for residential construction or agricultural purposes. If the land is employed for building a house, the number of floors and architectural specifics are dictated by common knowledge and the availability of local building materials. Given the prevalence of wood, mud, and stone as primary construction materials, buildings rarely exceeded two to three floors in height. Jeddah's informal housing was mainly constructed using the concept of *Ihya*. When rural immigrants moved to Jeddah in the 1960s, they took lands that appeared to them as unused. Despite the existence of a system for land purchase, these newcomers bypassed it, adhering instead to their traditional practices. This explains why most informal areas in Jeddah are located in the middle of the city (Fig. 1), at the time when urban policies were still in development.
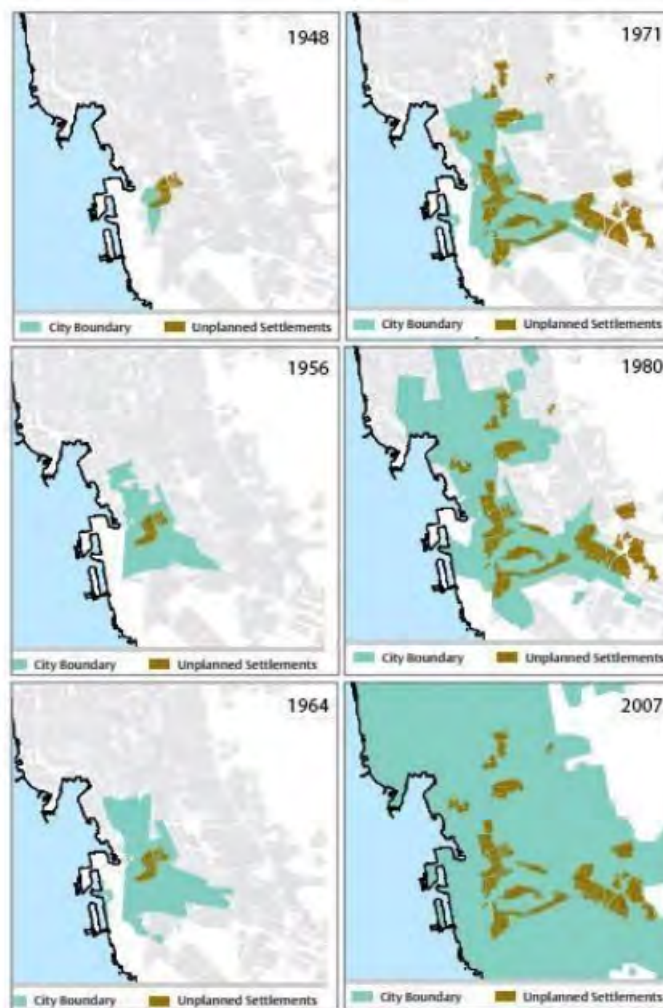
Fig. 1: The distribution of informal settlements through time (Source: JCUD, assembled by the author)

When squatters claim land, they often build their communities in a way that reflects their lifestyle and needs. This can be seen in Jeddah, where the typical grid pattern of streets is uncommon. Instead, streets follow a more natural layout that mirrors the local people's needs and values. The city is situated in a dry climate where hot weather is the norm. Therefore, the design of the streets needed to provide shade. This is why the streets are narrow and winding: the walls of the buildings can cast shadows during the warmest parts of the day. This design also slows down the wind, which helps reduce the amount of sand and dust that can get into the buildings. However, the design of these streets is not just about coping with the climate., it also considers privacy and security.[11] The winding streets can make it hard for strangers to navigate, which helps increase safety. People who live here would feel more at ease walking in these streets. As for privacy, the winding streets ensure that houses are not directly opposite each other. This makes it harder for people passing by to

look into the houses. This kind of natural, winding street layout is a common feature in all informal settlements in Jeddah (Fig. 2).
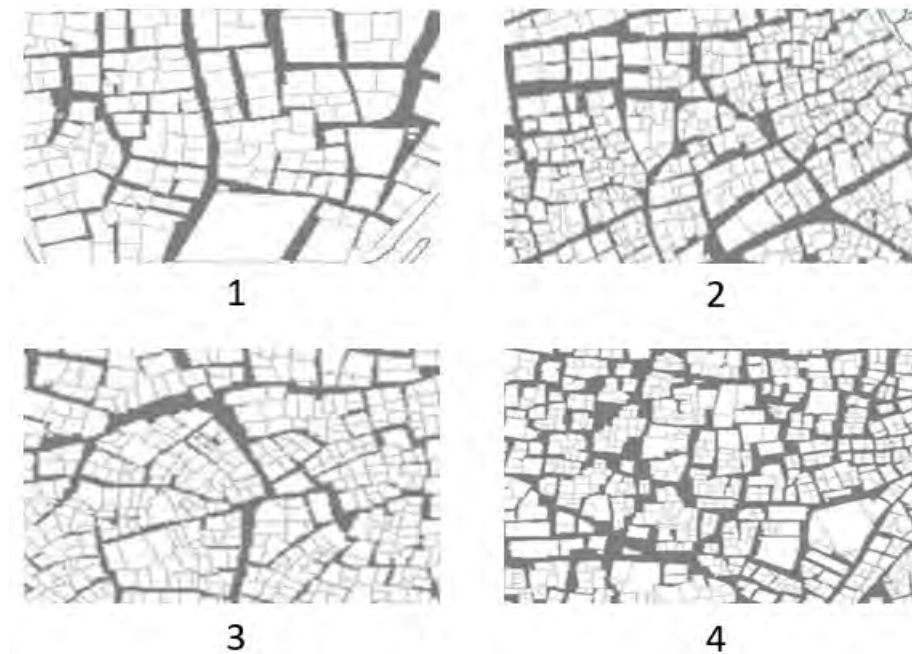

Fig. 2: Street layouts in a number of informal settlements in Jeddah. 1: Quarayyat, 2: Kandarah, 3: Hindawyyah, 4: Al-Nuzla (Source: Zuhair Faiyez consultant, assembled by the author)

Another cultural tradition among these migrants was the naming of their residential areas after their respective tribes, reflecting the central role of tribal affiliation in their social identification. This practice resulted in numerous locations named after tribes, a phenomenon that extends beyond Jeddah.[12] For instance, the Asir region, a large geographical area in the southwestern part of the country, owes its name to the Asir tribe, from which it derives its cultural and historical identity. Similarly, Hotat Bani Tamim, a modest town in proximity to the bustling city of Riyadh, is named after the Bani Tamim tribe, demonstrating the breadth of this practice. This traditional naming convention offers a compelling explanation for the naming of Jeddah itself. It is widely believed that the city's name stems from the ancient Qodaha tribe, indicating the deep-seated tribal roots of this major urban center. The practice of naming locations after tribes was carried over by the migrants who flocked to the city, leading to the emergence of numerous tribal areas within Jeddah's informal settlements. A prime example of this phenomenon is the Al-Jameaah District, an informal settlement that was subsequently eliminated in a city-wide redevelopment project. The district was a mosaic of tribal areas, often taking the form of "haras." Haras are small, cohesive spaces typically composed of a cluster of nearby buildings, functioning as microcosms of tribal life within the broader, urban context. In Al-Jameaah, there were haras for the Harb tribe, Sulaim tribe, Ghamid and Zahran, and many others.[13]

These tribal quarters were also designed with the principle of "proximity" in mind, with the residents' daily needs being catered for within walking distance. Local amenities like bakeries, grocery stores, cafeterias, and other food-oriented establishments were conveniently situated within the residential quarters. Mosques and recreational areas were also nestled close to the residents' homes, eliminating the need for vehicles. Consequently, these quarters evolved into naturally occurring, organically developed mixed-use spaces, seamlessly blending residential and commercial zones. This integration of different functions within the same space not only optimized land use but also created a vibrant, dynamic community environment. The design encouraged interaction and fostered a strong sense of community among the residents, enhancing their social cohesion and collective identity. Moreover, the proximity of services and facilities promoted a more sustainable lifestyle, reducing the need for long-distance travel and minimizing the community's carbon footprint.

Informal settlements in Jeddah are also characterized by the presence of communal gathering spaces, often referred to as "Mirkaz." These spaces are essential social hubs, providing a platform for community interaction and social activities. Constructed from used materials such as chairs, tables, and sunshade materials, Mirkaz serves as a testament to the resourcefulness and resilience of the community. These gathering places are the heart of local life, hosting the community's "secrets," serving as a platform for gossip and news exchange, and shaping the social dynamics of the community. Each "hara" or residential quarter would typically have its own Mirkaz, usually located in public, easily visible places, reinforcing their role as community focal points. This unique aspect of the social-spatial fabric of Jeddah's informal settlements is deeply rooted in local history and is an integral part of the local people's "habitus" or lifestyle. The "squatters" or residents of these informal settlements have continued this tradition, incorporating it into the design of their quarters. As such, the Mirkaz has become an indispensable part of their daily life, contributing to the unique character and vibrancy of these communities.

However, with Jeddah's development hitting a high point in the 1970s, the influence of traditional practices on the built environment started to wane. This shift was largely due to the city's urbanization processes increasingly relying on Western expertise. In 1973, the task of planning the city's growth and shaping its urban policies was handed over to the British planner, Robert Mathew. Five years later, in 1978, another British planner, Sert Jackson, assumed responsibility for Jeddah's development. Both planners advocated for the implementation of a gridiron pattern for the city's streets—a stark departure from the organic layout that the city was accustomed to. This recommended shift toward a more structured, Westernized layout was indicative of the changing perspectives on urban planning and reflected the global influences and changing paradigms of urban development during that period.

Fueled by public investment in the form of interest-free loans, a significant number of urban dwellers chose to embrace the emerging structural transformations advocating for a more organized cityscape. As a result, dozens of formal neighborhoods were established in the city's northern region. These neighborhoods came to life through the careful planning of professional urban planners from local municipalities. They adhered to predefined land usage guidelines and design specifications, all subject to strict building codes and regulations. Crucial elements such as building height, density, land subdivision, and more were dictated by zoning laws set by the municipality. In a similar vein, detailed design requirements for buildings were explicitly outlined, and property owners were mandated to comply with these specifications. The spontaneous and informal construction methods previously employed by residents, guided by their traditional habitus, were no longer deemed acceptable. Thus, with their interest-free loans in hand, the former squatters conformed to this top-down approach, leading to the creation of distinctly different built environments compared to those resulting from their traditional practices.

By the late 1980s, a stark contrast had emerged between the northern and southern regions of Jeddah (Fig. 3). Southern neighborhoods were characterized by bottom-up development influenced by local and traditional practices. In contrast, northern neighborhoods were a product of top-down strategies, rooted in international urban planning practices. This geographical divide also echoed socio-economic distinctions. The northern region attracted high to medium income families, while the southern region was predominantly inhabited by low-income families and lower-wage international immigrants.[14] This resulted in a mental map of Jeddah, with the south identified as a hub of "informal settlements," and the north recognized as the "formal" side, exemplifying model development.

Fig. 3: Urban fabric of northern neighborhoods (left) and southern ones (right). Source: Google Earth

This segregation of the city, however, did not come without its consequences. While the northern neighborhoods flourished under their carefully planned structures and privileged residents, the southern region, densely populated by lower-income families and immigrants, struggled to keep up. The lack of sufficient infrastructure and planning in these "informal settlements" led to substandard living conditions that only exacerbated the existing socio-economic disparities. For example, the rate of unemployment in these areas reached 16% while the national average is approximately 6%.[15] The average household income is SR 4000 per month while it is around SR12,000 nationally. Additionally, they were stigmatized in the local media as problematic and pictured as a "cancer" in the body of the city.[16] In response to the growing concerns and negative media portrayals, the government announced a massive redevelopment project in 2008, aiming to completely eradicate these areas. However, the project was met with significant resistance from the local population, who were deeply attached to their communities and the existing social fabric. The widespread resistance prompted a reconsideration of the project's approach where local residents were given more options to participate in the project apart from eradications.[17]

From 2015 to 2019, the redevelopment project in Jeddah embarked on a complex journey, characterized by a series of on-again, off-again progress. The city's vision of transforming the informal areas into formal, regulated ones was met with persistent resistance from local residents. This resistance, deeply rooted in the desire to maintain community ties and traditional practices, was compounded by various administrative and logistical obstacles. As a result, the pace of the project was significantly slowed, causing the timeline to stretch considerably. Nevertheless, the government's commitment to its urban transformation vision never wavered. Despite the intermittent progress and the myriad challenges, the authorities remained determined in their goal to eradicate the city's informal areas. The persistence finally paid off in late 2020, after almost a decade and a half of sporadic efforts. The execution phase of the project resulted in the complete eradication of more than 29 informal areas, a significant accomplishment that marked a major milestone in the city's urban planning history. This large-scale transformation cleared approximately a third of Jeddah's land area, leaving vast swaths of land empty and ready for future development (Fig. 4).

Fig. 4: Large amounts of vacant lands after eradication of informal areas were executed. Source: Sami Alghamdi

Interestingly, the eradication process, which had initially been met with resistance, proceeded smoothly when it finally took place. The local residents, perhaps recognizing the inevitability of the changes, complied with the city's plans. Most of them relocated to public housing projects. This transition was facilitated by substantial public support, in the form of a range of measures designed to ease the relocation process. These measures included rental assistance, which provided financial support to the residents to cover their housing costs in the new formal settlements. This assistance was particularly crucial for the lower-income families who might have otherwise struggled with the cost of relocation and the potentially higher rents in the new formal settlements. In addition to rental assistance, the support measures also included compensation payments for the residents affected by the eradication of the informal settlements. These payments were set above the prevailing market rates, providing a financial buffer to the residents during the transition phase.

In the context of the widespread transformation of informal settlements, the neighborhood of Al-Harazat emerges as a distinctive case. Unlike others, Al-Harazat has not been chosen for removal, which has made its residents worry during the city-wide clean-up project. The uncertainty of their situation, set against the significant changes happening around them, has created a feeling of worry and stress. While Al-Harazat is shaped by traditional practices, similar to other informal settlements, it distinguishes itself through its unique amalgamation of traditional and modern elements. The next section delves into describing the realities of this area and explores how it is different from its counterparts.

4. AL-HARAZAT: THE HYPERED SPACE

The Al-Harazat neighborhood is situated at the eastern edge of Jeddah, nestled against the mountains (Fig. 5). It falls under the administrative jurisdiction of the Um Alsalam sub-municipality. The neighborhood is home to about 67,000 people, the majority of whom are Saudi nationals. In terms of its geographical area, it spans an expansive 18,000 hectares. The neighborhood's proximity to the mountain range results in several wadis (dry riverbeds), specifically Wadi Ashir and Wadi Muraikh, trailing through it. This topography makes Al-Harazat susceptible to flooding. Despite these geographical features, the area lacks a formal development plan, leading it to being categorized as an informal urban area. An unpublished report from the Jeddah Municipality provides further insight into the land use within Al-Harazat. It reveals that a significant 71% of the plots in the neighborhood are vacant lots, which have been fenced off. Conversely, only 29% of the area has been developed into residential properties. This translates into around 3,100 houses erected within the 18,000-hectare neighborhood.[18]

Fig. 5: The location of Al-Harazat (the red circle) within Jeddah. Source: Google Earth with editing by the author

In the historical context of the 1980s, what is now known as the Al-Harazat neighborhood was predominantly farmland. The land was used by a sub-tribe known as Harazat, which is part of the well-known Al-Ashraf tribe. The manner in which the Harazat tribe occupied this land was in line with the traditional practice of "Ihya" which involves the revitalization of unused lands. The members of the Harazat tribe viewed these unutilized lands as an opportunity for rejuvenation. They began to construct temporary buildings adjacent to their newly established farms which served as residences and shelters for their animals. One of their primary agricultural pursuits was the cultivation of watermelons, as the local soil conditions were

particularly conducive to this type of crop. During this period, Jeddah was in the process of urbanization. However, due to weak law enforcement at the time, the Harazat tribe was able to expand their occupation of the land. As the first settlers in the area, they were given the privilege of naming the place, resulting in the now known Al-Harazat neighborhood. Despite the lack of formal title deeds to the land, the Harazat people were generally accepted as the landowners. This acceptance was in line with the traditional practices prevalent at the time, which recognized land ownership based on occupation and use, rather than formal legal documentation.

Following their successful establishment in the area, the people of Al-Harazat began selling pieces of land starting from the early 1990s. This practice was not unique to Al-Harazat but was also observed in other informal settlements. Initial settlers would typically secure enough land to meet their own needs first, then capitalize on the remaining land by selling it to newcomers or developers. During the 1990s, Jeddah experienced a significant demographic shift. There was a massive influx of people migrating from rural areas and an increase in the number of international laborers. These factors, combined with the city's aspirations to become a metropolitan area, led to a substantial rise in its population. In fact, between 1990 and 1993, the population growth rate in Jeddah was as high as 7.4%, a considerable rate by any standard. This population boom had a significant impact on the real estate market in Jeddah, particularly in terms of rental prices, which started to spike due to increased demand. As a result, the Al-Harazat neighborhood gained prominence as an affordable alternative to the increasingly expensive city housing market.

Recognizing the potential of the area, informal real estate developers were among the first to take an interest in Al-Harazat. They approached the locals with offers to buy undeveloped, or "raw," land. According to local settlers, they sold approximately half of their remaining raw lands while choosing to hold on to the rest for potential future opportunities or needs. This strategy allowed them to maintain some control over the future development of their community while also benefiting from the rising interest in the area. These informal real estate developers, armed with their previous experience in developing informal settlements, employed innovative strategies to develop the newly acquired raw land. They were aware of the city's dissatisfaction with the physical conditions of informal areas in Jeddah. The city had issues with the organic development of these areas, as the winding roads and unplanned growth had led to significant safety and accessibility concerns. In response to these challenges, the developers chose not to merely sell the raw land without any planning. Instead, they subdivided these lands into smaller plots, modeling their layout on the more formally organized areas of the city.

In order to effectively execute this task, the developers engaged the services of engineering firms that had a background in developing formal areas. These firms, with their extensive knowledge of urban planning, were

able to infuse a measure of order and structure into the development process that had previously been lacking. By doing so, the developers were able to create a more organized and controlled development that was more in line with the city's standards and expectations. The streets were laid out more efficiently, the plots were designated in a more systematic manner, and the overall plan was more coherent and easily navigable (Fig. 6). However, one area that remained flexible was the height of the buildings. There were no specific design requirements imposed for this aspect, leaving it largely up to the discretion of the individual property owners. This gave owners the freedom to construct buildings of varying heights according to their preferences and needs. These informal-formal processes were not observed in other informal areas in Jeddah and could be said to be unique to this context.
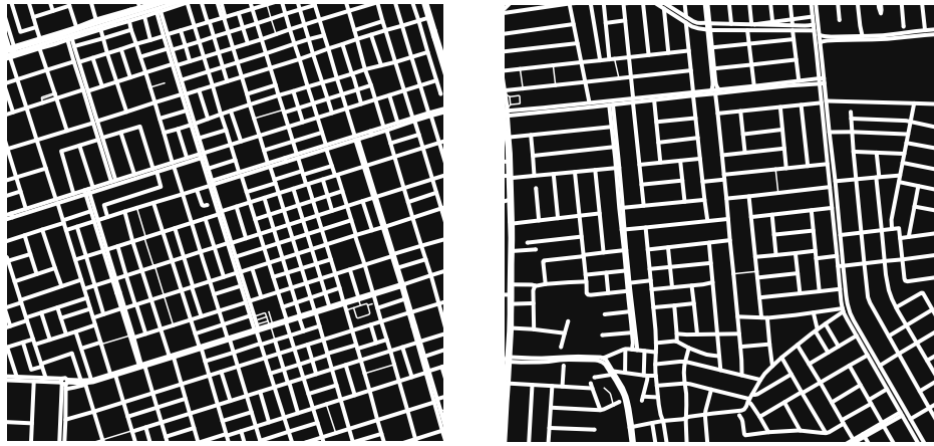

Fig. 6: A figure-ground diagram for Al-Harazat (right) in comparison to the formal area Al-Rowdah (left). Source: The author

In Al-Harazat, the social dynamics are deeply intertwined with its physical layout, which is more reminiscent of formal areas rather than informal ones. The social-physical concept of "haras" is absent, highlighting the distinct structure of this community. The residents of Al-Harazat are a diverse mix of individuals, not bound by a shared tribal identity as one might expect in more traditional settings. Instead, this community encompasses people from various tribal backgrounds, creating a heterogenous society where residents form relationships not based on tribal affiliations but based on other aspects of social identity, such as their professions or familial connections. Moreover, Al-Harazat diverges from the norm found in informal areas in terms of community gathering places. While "Mirkaz" is the usual social hub in these areas, Al-Harazat does not feature such a communal space. Instead, its residents tend to gather in more private settings, again mirroring the social practices of formal areas. One popular gathering spot that has emerged in Al-Harazat is the local "*Maktab Aqar*," or real estate offices. These spaces have become social magnets, where locals come

to chat, enjoy a cup of coffee, and foster a sense of community. These offices serve a dual purpose in the community. On one hand, they function as formal business establishments where owners broker property deals, renting out apartments or selling land on behalf of others for a fee. On the other hand, they have evolved into informal social hubs, where neighbors can meet, converse, and strengthen their community bonds.

Another notable aspect of Al-Harazat's physical character, which it shares with formal areas, pertains to the distribution of commercial spaces. In informal areas, commercial and residential spaces are often mixed together, adhering to the modern concept of mixed-use developments. This type of development generally assigns commercial uses to the ground floors of buildings, reserving the upper floors for residential purposes. This arrangement makes daily facilities, such as bakeries and grocery stores, easily accessible to residents. They can usually reach these facilities within their residential quarters on foot, contributing to a walkable and convenient neighborhood. However, this feature, characteristic of informal areas, is absent in Al-Harazat. Instead, commercial spaces in Al-Harazat are located along the main traffic arteries (Fig.7). This arrangement separates commercial and residential zones, making it less likely for residents to walk to nearby facilities. Consequently, this type of development relies more heavily on automotive transport, a trait common in formal areas in Jeddah.

Fig. 7: Commercial uses are located along one of Al-Harazat's traffic arteries. (Source: The author)

The prevalence of car-dependent development in formal areas has led to the creation of designated "walkways". These walkways, designed and implemented by the Jeddah Municipality, are an effort to offset the lack of walkability within these neighborhoods. They often have a linear layout, and feature high-quality urban design elements, including comfortable walking surfaces, seating areas, and food trucks. These walkways serve as recreational spaces where residents can enjoy leisurely walks. However, ironically, residents

typically need to use their cars to reach these walkways. Al-Harazat follows this trend and is currently constructing its own walkway (Fig.8). This walkway, situated in the middle of a main road, measures 14 meters in width and 1100 meters in length. It is designed to be a community hub, complete with a children's playground, green spaces, an outdoor gym, and bike lanes. In contrast, such walkways are not a common sight in the informal areas of Jeddah where walkability is viewed more as a mode of transportation rather than a recreational activity.
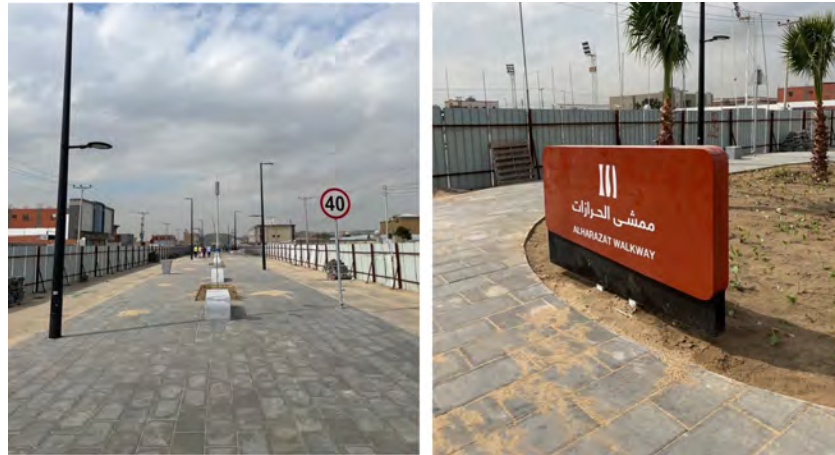

Fig. 8: Al-Harazat walkway which is under construction. (Source: Jeddah Muncipility).

In summary, the Al-Harazat neighborhood represents a unique case study of an informal settlement in Jeddah that exhibits both informal and formal urban qualities (Table 1). Its origins as agricultural land settled by the Harazat tribe using the concept of *Ihya* in the 1980s represent traditional informal practices. However, the area underwent a transformation in the 1990s and 2000s when real estate developers imposed more structure and organization on it. Unlike other informal neighborhoods in Jeddah, Al-Harazat does not have public community gathering spaces, but rather a more private social dynamic reminiscent of formal neighborhoods. In addition, the separation of residential and commercial areas depends more on automobile traffic, another formal feature. While Al-Harazat remains an informal area from a legal perspective, its mix of informal origins and formal urban design features demonstrates that informal settlements can evolve in nuanced ways over time through socio-spatial processes.

Al-Harazat characteristics	Formal (modern) practice	Informal (traditional) practice
Land squatting based on the *Ihya* concept		✔
Selling lands based on being first to reside in the area		✔

Tribal names imposed on the built environment		✓
Ordered layout for streets and plots	✓	
Places for social gathering using private spaces	✓	
Commercial uses located along traffic arteries	✓	

Table 1: Al-Harazat characteristics between formal and informal practices

5. CONCLUSION

This paper has explored the nuanced relationship between urban informality and traditional practices in the city of Jeddah, Saudi Arabia. It examined how informal settlements emerged organically from the customary habits and lifestyles of rural migrants, resulting in neighborhoods shaped by traditions like land squatting, tribal social structures, and vernacular architecture and urban design. However, over time these informal areas faced pressures from the modernization and formalization of Jeddah under Western urban planning influences. Al-Harazat provided insights into how one informal settlement adapted in response to these changing formal policies and pressures for standardization. While retaining aspects of its informal origins through land occupation by *Ihya*, naming places after tribes, and the right of first occupiers to sell land, Al-Harazat underwent a transformation where real estate developers imposed a more organized layout and separated residential and commercial spaces. This hybrid model allowed Al-Harazat to blend traditional ways with modern elements, distinguishing it from other informal areas targeted for clearance.

This local case study from Jeddah demonstrated many similarities in the literature. It mimics those informal areas that grew on agricultural lands as a result of rapid urbanization.[3] The study also draws attention to the influence of Western experts in formulating public policies and their subsequent impact on the balance of power between traditional informal practices and state institutions when establishing legitimacy.[2,6] This, in turn, illustrates how public policies relating to urban design in Saudi Arabia are more a consequence of globalization and imported norms, rather than being rooted in local culture. Additionally, the widely accepted theoretical framework, habitus, conceived by Bourdieu, serves as an effective tool in illustrating the crucial role of the accumulated knowledge of local residents in shaping their built environment.[5] This knowledge contributed to a city-wide divide eventually triggered urban regeneration. What sets Al-Harazat apart is its adaptability to changing circumstances and the agility of local stakeholders in pragmatically reshaping the built setting in ways that ensured its longevity during citywide renewal.

Finally, Al-Harazat demonstrates the fluid, dynamic relationship between informality and formality in urban contexts. Rather than rigid categories, these concepts exist on a continuum, with spaces reinventing themselves over time. Informal settlements are not static but can evolve innovative solutions reflecting both cultural roots and emerging regulations. A nuanced approach is required to understand and support such hybrid models, recognizing the agency of communities to shape their environments in culturally resonant ways. The resilience of traditions is evidenced not in clinging to fixed forms but in their ability to creatively adapt to new circumstances.

NOTES AND REFERENCES

1. Lombard M. Constructing ordinary places: Place-making in urban informal settlements in Mexico. Progress in Planning 2014;94:1–53.

2. Roy A. Urban informality: Toward an epistemology of planning. Journal of the American Planning Association 2005;71(2):147–158.

3. Davis M. Planet of Slums. Blackwell Publishing Ltd, 2006.

4. AlSayyad N. Urban informality as a "new" way of life. In Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia. Lanham, MD: Lexington Books 2004; 7–30.

5. Bourdieu P. Structures, habitus, practices. In The Logic of Practice. Cambridge: Polity 1990;52–65.

6. Yeoh B. Contesting space: Power relations and the urban built environment in colonial Singapore. NUS Press 1996.

7. McFarlane C. The city as assemblage: Dwelling and urban space. Environ Plan D 2011;29(4):649–671.

8. Abu-Sulaiman AM. Learning to plan: Jeddah (1959-87). University of Pennsylvania 1996.

9. Al-Hathloul S. Riyadh development plans in the past fifty years (1967-2016). Current Urban Studies 2017;05(01):97–120.

10. Wiedmann F, Salama A, Thierstein A. Urban evolution of the city of Doha: An investigation into the impact of economic transformations on urban structures. METU Journal of the Faculty of Architecture 2012;29(2):35–61.

11. Eben Saleh MA. The transformation of residential neighborhood: The emergence of new urbanism in Saudi Arabian culture. Building and Environment 2002;37(5):515–529.

12. Abdullah Eben Saleh M. The Impact of Islamic and Customary Laws on Urban form Development in Southwestern Saudi Arabia. Habitat International 1998;22(4):537–556.

13. Difalla A. Towards a relational-processual understanding of informal settlements in Saudi Arabia: informality, collectives, and urbanization. PhD thesis, University of Sheffield 2021.

14. Daghistani A-MI. A case study in planning implementation: Jeddah, Saudi Arabia. University of Newcastle upon Tyne, Department of Town and Country Planning 1993;(5):1–28.

15. Abdulaal WA. Public-private partnership in regenerating unplanned settlements in Jeddah. International Journal of Sustainable Development and Planning 2001;6(2) 181-194.

16. Alawai I. Slums - an octopus in the absence of title deeds. Okaz. 2008.

17. Alroqi M. Jeddah after stumbling for 3 years. A new plan for the Ruwais slum neighborhood. Al-Eqtsadiya. 2015.

18. Municipality J. The methodology of developing Al-Harazat. 2009.

BACK TO THE FUTURE: UPSCALING THE HERITAGE TOWARD SUSTAINABLE SMART CITIES

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BACK TO THE FUTURE: UPSCALING THE HERITAGE TOWARD SUSTAINABLE SMART CITIES

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Mainstream literature on Smart Cities focuses on smart technologies, instead of relating these to the essence of cities as a socially built environment where the public space is a generator of social interaction. The public space is the platform where social interaction and data exchange is possible, so smart cities need to generate and maintain a welcoming, healthy, livable, vibrant public space as the interface where technologies provide smart data collection and delivery to offer their inhabitants a better quality of life. This paper offers an approach to sustainable and smart cities based on holistic methods through learning from ancient urbanisms as sustainable and resilient models. Ancient cities were sustainable communities based on collective effort and intelligence. Their model survived centuries of socioeconomic, political, and cultural changes, responding to the changes with an efficient and robust structure. Decoding this DNA of best practices could give contemporary times a deeper understanding of designing an effective and resilient spatial network, achieving what we call "inclusivity" or social and economic resilience today. The starting point for traditional planning was always the gathering space, the small-scale clustering of a few families, creating a sort of neighborhood unit, bigger or smaller, depending on the social structure of the family and the community. All the ancient villages were generated as sub-units around a space or a focal point. Moreover, indigenous architecture and urbanism show an understanding of shared values while "responding to the preexisting local place", in direct opposition to imposing order from the outside, ensuring that space responds to the surrounding context and is designed for people to use and reveals a deep knowledge of social, economic, and environmental livability. Indigenous societies all had embedded very simple and recurring urban principles, arising into a level of universality, and mainly based on the relationship between humans (microcosm) and the environment (macrocosm), along with its laws and institutions, to be incorporated into a holistic urban and building processes. Tracking back to long-lived urbanism, which demonstrated resilience over thousands of years, makes evident the common approaches by different ancient cultures worldwide regarding placemaking, social interaction, and sustainability. Pieces of information are all around and embedded in our ancient cities and the laws of nature within and around us. Informed design, decision-making, and implementation can now span a much wider multi-criteria evaluation thanks to traditional and digital technologies, data collection and management, and the interexchange of information within a worldwide network. Going back and forward from past to future means having at the core integrity and unity of man and the environment in terms of organic interaction, resources, generation, and quality of space.

KEYWORDS: cities, resilience, sustainability, law of nature, ancient knowledge, holistic design, complexity management

1. CITIES ARE BUILT ON PEOPLE, PLACES AND ENVIRONMENTS

Cities are built on people, places and environments creating a unique network that often turns out to be called genius loci or the gene of this place. Ancient Latins saw it as the guardian of the place, while the most accredited reference to it in contemporary theory of architecture is from C. Norberg-Schulz defining it as an "existential space" or "live experiential space". A stratified archive allowing us to understand the doing over time of its citizens, who contribute directly or indirectly through power, knowledge and social presence as city-builders.

Cities constantly update and reinvent themselves in a renewed expression of the same language and architectural syntax, time by time, with contemporary spatial conceptions under the principle that "Art has

always been contemporary" (Nannucci, 2009). Cities are the most complex of artifacts implementing physical and philosophical concepts through long-lasting social, economic, and environmental complexity, responding to the changing needs of millions of people. Cities are complex systems spanning over just density; are logistic facilitators through infrastructures and opportunities, are an interconnected network of multiple actors, are part of reticular projects responding to a social demand that is not indifferent to the location but, on the contrary, includes exploring the future while constructing "scenarios" by questioning and verifying alternative situations throughout the project (Viganò et al. 2010).

The modern world lives in a technological surplus. It is guided by more general and abstract criteria of rationality while abandoning many precautions of traditional urbanism regarding sustainability, materials, constructive techniques, social structure, a.o. (Secchi 2013). Cities are built for the people, to offer them safety, and ease in social and economic relationships while sharing identity, memories, and resources. The rational approach to architecture failed in urban planning and caused social management issues due to economic inequalities, distinction, and exclusion. Excesses in cities' expansion have disconnected man from nature, and forgotten the original scope of their existence. Starting from the 80ties a reversing process is happening, however targeting partial solutions instead of deep ecology and so missing the key that man is ultimately part of nature, and our origin from one common source. This way, the connection with traditional urbanism, the awareness of being One with Nature, couldn't be restored till now despite several attempts.

Looking at the traditional settlements, the same structure of medieval European villages can be spotted in the traditional settlements worldwide, a.o. in Slavic, Chinese, Indian, Native American, Hinuit, Zulu, and Arab, settlements. The starting point for traditional planning was always the gathering space, the small-scale clustering of a few families, creating a sort of neighborhood unit, bigger or smaller depending on the social structure of the family and the community. All the ancient villages were generated as sub-units around a space or a focal point. (Petrucci,2023). The public space was the center and starting point of community building, what we today call place-making, and citizens were the co-creators of its narrative, a multi-stakeholder narrative that is now being re-created through Participatory Public-Private Processes (PPPP). Moreover, traditional urbanism was nature-based and built on a circular economy system for prosperity as the output of complex short-medium-long term synergies. Their circularity included the seasonality of nature-based rhythms and communities, the kind where no anonymity is allowed, and mutual contribution is required. Cities were connected to a regional network, serving as catalysts and attractors on a larger scale; we can think about the naval network of the Maritime Republics in Italy, and the Hanseatic League in Germany, as the nomadic settlements in the Arabic Peninsula covering the commerce across the globe.

2. LOOKING UP TO THE FUTURE, THE NEED FOR UPSCALING

Today's cities are rapidly growing, with their high levels of demand for services and needs, large number of buildings and extensive infrastructure. Urban growth is forced into a faster track and is no longer following a natural path, generating greed of upscaling instead of following the natural times or fitting the well-being of their inhabitants. Cities did not have the time to build up through time and to grow organically; instead, intensive real estate took over in most cases, the planning while neglecting shared social goals. Layered use of space requires a more complex and sophisticated design approach and language, a more fluid form-based urban code and planning system, which does not consider these static normative images. Still, it is an ongoing process to be detailed and reduced over time and space. It requires the same comprehensively integrated multidisciplinary approach from the past, to design a community rather than just the material enclosures for living and its upscaling and enhancement in terms of technology, comfort, and spatial requirements. The answer might be found in observing ancient architectural codes, and their ability to move from micro to macro, from object design into cosmology, and bringing any aspect of the city to a higher sense of unity. Looking at the spatial organizational principles, the traditional urban cultures ensured that the design of physical spaces responded to the people's cultural values and way of life, and these are still up-to-date. Many large cities and metropolises in recent years have returned to the urban project trying to contribute to their reduction by putting a new focus on environmental and mobility issues as appropriate and relevant ways to search for social justice and environmental problems, all topics requiring practical answers. In the process of returning to the traditional urban form, cities have rediscovered the importance of isotropy, porosity, permeability, connectivity, and accessibility, and the physical and social barriers created for the city's full use. If we want, the 15-minute city, the slow city, is an answer to the radical change in the physiognomy of demand (Secchi, 1999).

Looking at traditional architecture we can find actual features and physical manifestations listed today among the best practices of design for smart and sustainable living known as human-centered design.

2.1. Empty Space and Clustering, Social Catalysts of Livability

The concept of void was common to all cultures and was later re-established in medieval villages as a civic center. Space always came first. Traditional Arab towns were designed and built around the space, a starting point for further volumetric addition around it. Depending on the geographical location, these are called comunanze, zadruga, or kraal, and always express the same principle of a shared community of life, work, and goods. The community is organized around a void; the void makes the family first and -on a bigger scale- the community. (Pad et al. 2015) In ancient China, Feng Shui was the wind flowing; cosmic currents or energy that improves wealth, and longevity. The Void (as an urban space, so as an inner courtyard) was always the focal point in collecting and directing the divine energy. If the courtyard is the polarity of private space, the mosque

represents in Arab cities, the main social urban space followed by Barakat, small district-level squares, and outdoor courtyards for private use. In European medieval cities, the main piazza, usually hosting the municipality and the cathedral, was coupled with a secondary smaller public space, la Piazzetta. The space developed from the empty spaces both indoor and outdoors and merges with them, adding complementary functions and allowing the city to grow while keeping human scale and proportions both of buildings and streets. The clustering system generates community by belonging to a family, a tribe, or to a professional corporation, generating mixed-use community-based cities responding to principles of Quality of Life. On an urban scale, the public space emerges a social collective ownership, a platform for data exchange, and the hardware for smart city offering, livability, green, and walkability, thanks to the porous structure of the city. In Hamburg, the system of the Passagen (commercial indoor-outdoor streets) has been brought up today thanks to the urban regeneration that happened in the 80ies. A subsystem of accessibility across the big urban blocks through commercial galleries, making a fully permeable active ground floor. On a global scale, the clustering principle generates a Multi-layered Complexity and urban multipolar matrix system based on fluid considerations on mobility and urban accessibility and inducing today toward urban re-destination as a tool to increase the speed of urban transformation.

2.2. Nature-based Solutions and Sustainability

The Indian discipline of planning, the Vastu Shastra, is a compendium of literary text on architecture that dwells on urban design, building typology, materials, measurement systems, orientation, and building components. Its principles aim to achieve equilibrium between functionality, bioclimatic design, and the beliefs of religion and culture by scale from micro to macro. It integrates with other sciences, such as astrology and medical Ayurveda, within a comprehensive content that makes it part of an integral worldview. In ancient China, Feng Shui was practiced by the noble cast of Mandarins, priests before architects, who had the knowledge to read, interpret, and implement the astronomical, astrological, architectural, cosmological, geographical, and topographical dimensions to generate the most prosperous site specific residences and cities. Roman cities' foundation always followed the rituals of the aruspex, testing the internal organs of the locally based animals to ensure the healthy livability of the future inhabitants. Cities were traditionally built on the safest areas and resources: water, green, and building materials. Cities and buildings are built on environmental sustainability principles that today we would call biomimicry and passive environmental solutions. Cities targeted the well-being of the inhabitants, assuring resources to self-sufficiency plus the opportunities of networking on a regional level. From a socioeconomic perspective, ancient urban systems encourage an autarkic mode of production, prudent consumption, and a strong self-resumable function concerning the local ecological system so that the balance is achieved between production, goods consumption, and exploitation of Nature. (Al-Sadkhan 2018). Arab cities, surely among the most resilient and sustainable settlements within extremely difficult environmental

conditions must be trusted as an incredible potential of traditional environmental construction strategies and implemented through the most modern technologies. Circular economy, integrated natural environment, multi-layered indoor-outdoor exchange, cross ventilation, water management systems, use of natural materials, and building features such as double skins, wind towers, solar chimneys, environmental courtyards, thermal mass, and earth pipes are all sustainable solutions first developed in the traditional Arab cities.

2.3. Holistic approach and comprehensive multidisciplinary design

Indigenous societies all had embedded very simple and recurring urban principles, arising into a level of universality, and mainly based on the relationship between humans (microcosm) and the environment (macrocosm), along with its laws and institutions, to be incorporated into the urban design and building processes. A holistic planning process was the key to ancient knowledge, where the city-makers (the inhabitants) were guided by spiritual and well-educated leaders in finding the best solution for a harmonious and prosperous life. Architects were also spiritual leaders. They were skilled in integrating different disciplines and able to master a wide multi-factor complexity; they were priests, astronomers, doctors, and psychologists along with their being architects. A wide range of knowledge allowed the management of a full-spectrum holistic approach, where the interaction between the three essential phenomena of Existence, Space, and Time was also considered. The planning and building process was deeply rooted in the way of life and the moral values of the community and connected with universal forces and laws. In ancient China, Feng Shui was practiced by the noble cast of Mandarins, and priests before architects, having the knowledge to read, interpret, and implement the astronomical, astrological, architectural, cosmological, geographical, and topographical dimensions to generate the most prosperous site specific residences and cities.

2.4. The Time factor and the value of learning by doing

Several of the traditional principles are applied today under different labeling. The involvement of local know-how, for example, is defined today as participatory- or co-design, or placemaking. It is how the community can benefit from the projects even before it starts while manifesting their collective intelligence into adaptable and inclusive visions; site-specific, dynamic, and trans-disciplinary solutions, and activate activating collaborative scenario focusing on creating destinations and the best path connecting those. (Petrucci 2022). A natural growth of cities generated a "patina of time" showing the memory of the passing of time, letting certain elements unchanged or that something has a certain maturity or charm due to age. It creates complexity through natural growth as the single factors come together, enrich the offer and the interaction, offer a wider platform for good exchanges and a scalar economy. The process is a good practice in cultural and professional training: knowledge was shared among generations with a sense of proportions and sustainable building construction and economy. It is crucial to activate a culture of continuous learning based on the experience of the past and the

transgenerational transmission of values and wisdom toward social and political changes. These models survived centuries of socioeconomic, political, and cultural changes, responding to the changes with an efficient and robust structure. In the modern age, ancient disciplines were never incorporated into the curriculum of architecture schools, and the entire infrastructure – the planning authorities, design and building processes, and the provision of materials – caters to an industry that is entirely separate from traditional practice. Nevertheless, the traditionally related micro and macro spaces do not fit dimensionally anymore; how to replay the sense of narrow urban streets within a six-lane urban highway? The urban planning regulations are not laid down with traditional design typologies. Designing a house on a standard rectangular plot within a modern city development does not allow the incorporation of a traditional central courtyard. Moreover, restrictive zoning and land use do not allow open spaces to adjust for multiple mixed uses as was happening in the past. (Sachdev 2011).

3. CONCLUSIONS: BUILDING THROUGH COLLECTIVE INTELLIGENCE

In the Roman Empire the Pontifex Maximus; in the Ancient Chinese Empire the Mandarins; in the Arab tribal system the Sheikhs were spiritual and mundane leaders who could download and share both philosophical and technical wisdom during the city foundation. The Industrial Revolution labeling and specializing, and the following rational approach to urbanism, based on fast and practical solutions instead of long-lasting solutions, cut off traditional knowledge. Decoding the ancient DNA of best practices could potentially give contemporary times a deeper understanding of designing an effective and resilient spatial network, achieving social and economic resilience. Civilization is a collective effort of culture, knowledge, intelligence, and sensitivity acting together for the common good. It brings a fundamental morality into urban planning: when it betrays or neglects its social purpose in some way, it is doomed to failure. Contemporary cities are demonstrating how, when just interests or aestheticizing, technologies, or economies prevail on the fundamental respect for the social structure, the result cannot be other than a setback. The same happens when the planning is just a theoretical supra-structure and does not engage in solving the complex essence of the site on a physical, social, and economic level. (Petrucci, 2023)

So, how to bring back urban planning to the locally established civilization path to make cities more resilient, sustainable, and smart? Starting from Space and moving forward through the laws of Nature.

Following the ITC metaphor, the interface "public space" needs hardware to get manifested, which is the physical design of the space; and to allow citizens into the experience of the public realm. Short-term, community-based projects became a powerful and adaptable new tool for urban activists, planners, and policy-makers seeking to drive lasting improvements in their cities and beyond. These quick, often low-cost, and

creative projects are the essence of tactical urbanism (Lydon et al., 2015) and offer bottom-up support to traditional top-down decision-making. The key, here, is a simultaneous multidisciplinary layering and comprehensive vision of the public space and the whole urban structure by integrating urban design, landscape design, transport and sustainability strategies, and architecture to analyze and engage the layers of place, where different scales of interventions get analyzed and compared by a constant up- and down-scaling. This process would simulate and compress in time the collective work in building cities in the past, engaging people as city makers.

Building and managing a sustainable and smart city requires the individual and political will to be beneficial to the whole community as a healthy, and wealthy organism, facilitating its growth and constant innovation. It requires holistic and comprehensive knowledge; the same kind of wide experience in practice and philosophical thinking, and the same deep knowledge of communities and their genius loci. Must apply technology to the awareness of ancient builders, and the skills to reinforce those within an integrated sustainability plan, social, economic, and environmental. Pieces of information are all around and embedded in our ancient cities and the laws of nature within and around us. Informed design, decision-making, and implementation can now span a much wider multi-criteria evaluation thanks to traditional and digital technologies, data collection and management, and the interexchange of information within a worldwide network. Going back and forward from past to future means having at the core integrity and unity of man and the environment in terms of organic interaction, resources, generation, and quality of space.

NOTES AND REFERENCES

Acharya, P.K. Manasara series on Vastusashtra and Silpasashtras, 1981

Al-Sadkhan, A.The application of FengShui in the design of contemporary architecture and its environment, Iraqi Journal of Architecture and Planning 9(1) Nov 2018

Astengo, G. I nuclei sociali e l'urbanistica, lectures series at IUAV, 1966

Curti,F. et al. Gerarchie e reti di città: tendenze e politiche, Franco Angeli 1992

Das P., Rampuria P., Thinking spatial networks today: The "Vastu Shastra' Shastra' way, Proceedings of the 10th International Space Syntax Symposium, Bartlett School of Architecture, London 2015

Ellery, P.J. et al. Toward a Theoretical Understanding of Placemaking, International Journal of Community Well-Being volume 4, pages55–76 Springer 2021

Lydon, J., & Rizvi, U. Z. Introduction: Postcolonialism and Archaeology. In J. Lydon, & U. Z. Rizvi (Eds.), Handbook of Postcolonial Archaeology (pp. 17-33) Left Coast Press 2010

Nannucci M., ALL ART HAS BEEN CONTEMPORARY, Art Installation, Uffizi Firenze,2009

Norberg-Schulz, C. Existence, Space and Architecture Paperback, 1971

Petrucci, A.L. Policy Report No 41. 21-09-26 How can cultural heritage serve human-centered smart cities in the GCC, Konrad Adenauer Stiftung 2021

Petrucci, A.L. Policy Report No 61 - Collective intelligence and cities' cities' smart growth in GCC, Konrad Adenauer Stiftung 2022

Petrucci, A.L. et al. Policy Report No 57 - Resilience, growth, and GCC smart cities, Konrad Adenauer Stiftung 2022

Rasa Čepaitienė, Lithuania Genius Loci as a "Nameless Value" of Natural and Built Heritage

Sachdev, V. Paradigms for Design: The Vastu Vidya Codes of India. Urban Coding and Planning, ed. Stephen Marshall, Routledge, 2011

Soja, E.W. Seeking Spatial Justice, Paperback 2010

Secchi B., First urban planning lesson, Laterza, 2011

Secchi, B. La citta' dei ricchi, la citta' dei poveri, Laterza 2013

Trancik, R. Finding Lost Space; Theories of Urban Design. Van Nostrand Reinhold Company, New York 1986

T20 Italy 2021, https://www.t20italy.org/

Vigano', P. et al. Extreme City 2010

AN INITIATION ON THE CULTURAL
RESILIENCE OF HISTORICAL BUILT
ENVIRONMENT: AN ACADEMIA-NGO-
GOVERNMENT APPROACH

Cheng An-Yu, Wu Ping-Sheng, Yen Shih-Hua

AN INITIATION ON THE CULTURAL RESILIENCE OF HISTORICAL BUILT ENVIRONMENT: AN ACADEMIA-NGO-GOVERNMENT APPROACH

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In 2024, Tainan City in Taiwan will be greeting its so-called 400th anniversary. To draw citizens' attention to the future-orienting historical roots of this city, the core advocacy concept of 'cultural resilience' and following action proposals are proposed by the third sector. This paper mainly illuminates the hybrid approach the third sector applies.

This approach has three main parts: NGO, academia, and city government. First, the academics, mainly professors from the built environment discipline, establish the core concept of cultural resilience as the basis of advanced actions. Reflecting on the experience of the Covid-19 pandemic, this concept is coined not only for interpreting histories and understanding contemporary issues but facing the future inevitably with disease and illness to meet. Here academia also plays another vital role in ensuring the credibility of information provided to the public through decades of architectural and urban histories research.

Second is the primary promotive agent, the nonprofit organisations. NGOs play the role of connecting the academia, the citizen, and the city government. For example, the Foundation of Historic City Conservation and Preservation preliminarily turns cultural resilience into actual projects, especially projects about spatial interventions such as pedestrian improvement, historic routes and areas establishment, heritage reusing design, and an image of the City. In Tainan City, the city wall and gates, a national cultural heritage site built 300 years ago, will be the primary objects for spatial interventions. Spatial intervention could be a relatively effective way to strengthen the cultural resilience of citizen's everyday life.

Finally, spatial interventions are necessary to access support from and cooperation with the City government. In this approach, the role government plays primarily a platform. In Tainan City, government, academia, and NGOs are in relatively close cooperation, particularly on the cultural affair. Among the interactions with other sectors, the government, with its authority, has the most effective position to form long-term policies at a higher administrative level. To sum up, this academia-NGO-government approach is proposed to integrate all civil society sectors to strengthen its resilience.

Keywords: Sustainable Development Goals, Third Sector, Socio-spatial Practice, Everyday Life

1. INTRODUCTION: THE CONFUSION BETWEEN THE 2024'S 400TH ANNIVERSARY AND 2025'S 300TH ANNIVERSARY OF TAINAN CITY

There is an instant and direct confusion of many people when they hear the advocacy of 2025's 300th anniversary of the wall and gates of Tainan City published by the NGO, Foundation of Historic City Conservation and Regeneration (FHCCR). Indeed, there will be two back-to-back anniversary in 2024 and 2025. The 2024 one is the 400th anniversary dated since V.O.C. (Dutch East India Company) landed Taiwan in 1624. And it is an event primarily established by local government. The 2025 one, called 'WHAT IF' project is the 300th anniversary of the wall and gates of Tainan City built in 1725, promoted mainly by FHCCR.

When questions and confusion arise among the general public, finding a simple way to explain the histories and contexts is not easy. In fact, in 2005, FHCCR and other NGOs had celebrated the 280th anniversary of Tainan's wall and gates. The main goal of this event in 2005 was to enhance citizens' interests and their

identification with the city's culture, histories, and arts. Furthermore, in the 2025 event, FHCCR primarily focuses on proposing a blueprint for Tainan City, envisioning the future generation by grounding it in the historic past. This, to some extent, differentiates FHCCR's advocacy from the local government's festival.

Cultural resilience is proposed as the core issue of the 2025 advocacy. Not only to find the substantial content of this concept in citizens' everyday life, but also aim to strengthen it via some spatial practices (Fig. 1). Following, literatures about cultural resilience are reviewed to point out that we care more about the possible forms of the commoner's resilience in everyday life earning than the resilience in the context of disadvantaged groups issues and the supporting function public facilities provide.

Researching context

Resilient country
Cultural sustainability
Settlement study

**Historic city
Cultural resilience**

**Academia-NGO-government
approach as mechanism**

Fig. 1: The conceptual framework

2. LITERATURE REVIEW AND RESEARCHING METHOD: CULTURAL RESILIENCE AND COVID-19

The COVID-19 pandemic brought unprecedented challenges to people worldwide. Researchers conducted several studies to explore the impact of culture and heritage on well-being and adaptability during these trying times. In this article, four kind of literature are reviewed: the index establishment, the function of public cultural facilities, the cases of Taiwan's indigenous people, and the study about cultural heritage and historic site.

2-1. Index Establishment

We summarize the key findings from four studies by Annie Tubadji[1], Sherry Shaw and Mark A. Halley[2], Krešimir Jurlin, and Barbara Minguez Garcia. Annie Tubadji[3] examined how culture and the arts influenced happiness during the pandemic. The study collected data through an online questionnaire that included personal and family information. It focused on several main areas. First, culture's effect on pandemic happiness. In this part explored how cultural consumption, including lifestyle and cultural heritage, affected happiness during the pandemic. Second, changes in happiness before and during COVID-19, the study

looked at the differences in happiness levels from before the pandemic to during it. Third, public and individual contributions, it examined how culture influenced people's happiness during the pandemic.

Sherry Shaw and Mark A. Halley focused on undergraduate and graduate students, particularly those studying ASL/English interpreting, during the pandemic. It aimed to understand how students adapted and collaborated with the deaf community during this challenging period. The research categorized the students' service learning experiences into several parts. First, preparation and methods of participation. These are what students did before participation and how they got involved. Second, contributions and focus areas. the study examined what the students contributed and where their focus lay. And third, locus of Control, it explored the students' sense of control over their actions.

Krešimir Jurlin looked into the impact of the COVID-19 pandemic on the tourism industry across 20 European countries over a 20-month period. It used statistical analysis to understand how culture and heritage influenced the industry's resilience. The study included factors like travel distance, cultural heritage, and cultural activities. The findings matched previous studies on the pandemic's effect on tourism resilience.

Barbara Minguez Garcia[4] explored how culture and heritage helped people recover during the pandemic. It also reflected on how culture itself recovered during this challenging time. The study followed the 'Culture in Urban Recovery and Resilience' (CURE) framework, emphasizing culture's role in urban development.

In summary, these studies show that culture and heritage play a significant role during the COVID-19 pandemic. They impact happiness, adaptability, resilience, and recovery. These insights can be valuable for individuals, communities, and policymakers as they face future challenges and crises.

2-2. Public Cultural Facilities

During the COVID-19 pandemic, museums had to adapt their interactions with the public in response to the constraints of the outbreak and the advancements in digital technology. Tula Giannini and Jonathan P. Bowen[5] presents an overview and narrative of this evolving situation, highlighting the digitization of exhibitions. The researchers employed an interdisciplinary approach, primarily utilizing online data sources, including digital literature, digital resources (such as the internet and blogs), relevant experiences, and search engines for observation and synthesis.

In response to the COVID-19 pandemic, many public venues in Italy, including museums, were closed. L Varriale, T Volpe, and V Noviello[6] examines the development and implementation of digital technologies in museums in the Campania Region of Southern Italy during the pandemic. Qualitative methods were used to carefully select museum cases, and an iterative logic methodology was applied, involving repeated review and

testing, to analyze data sources and categorize strategies for enhancing the digital experience of cultural content.

The study by Maria Vayanou, Angeliki Chrysanthi, Akrivi Katifori, and Angeliki Antoniou[7] primarily focuses on the response of cultural institutions, such as museums, during the COVID-19 pandemic. It centers on how these institutions adapted by enhancing their digital capabilities, offering online exhibitions, and engaging with the public through virtual activities. The research discusses the practices employed by cultural institutions during the pandemic and the challenges they faced as the pandemic evolved.

2-3. Taiwan's Indigenous

In Taiwan, there has been initial research on the relationship between cultural resilience and the relatively disadvantaged indigenous communities. Yang drawing on the framework established by American scholars William E. Cross Jr., Thomas A. Parham, and Enrique W. Neblett Jr. in their theory of African American identity, this study utilizes semi-structured life story interviews, which encompass life chapters, significant events, challenges and beliefs, as well as retrospectives and future considerations. The research also employs the Psycho-Social Ethnography of the Commonplace data analysis method, which is rooted in feminist standpoint theory, institutional ethnography, and cognitive schema theory. The study primarily focuses on the analysis of everyday moments.

2-4. Cultural Heritage and Historic Site

Researchers have been exploring the intersection of cultural heritage and resilience. Cornelius Holtorf[8] challenges the traditional view that preserving cultural heritage is the only path to resilience, particularly in the context of armed conflicts. Holtorf argues that alongside heritage preservation, it's crucial to enhance cultural heritage's ability to recover after disasters, prepare for risks, and foster mutual understanding among people.

Holtorf's research not only offers valuable insights but also provides a research framework for future work. His approach involves analyzing existing literature and presenting his own viewpoints. He emphasizes that boosting resilience to cultural heritage change or loss empowers individuals to face life's challenges. Cultural heritage, beyond its inherent value, plays a role in helping people adapt to change.

Federica Fava[9] explores the resilience of heritage organizations during the COVID-19 pandemic. Focusing on the period from January to May 2021, Fava investigates how the 'Cooperative Heritage Labs' in Europe responded to the pandemic and its effects on urban and cultural resilience.

Fava's research is guided by Judith Rodin's framework, which identifies five resilience characteristics: awareness, diversity, integration, self-regulation, and adaptability. These traits provide a lens through which Fava examines how the 'Cooperative Heritage Labs' impacted cities during and after the pandemic.

These study highlights how these heritage initiatives, through adaptability and innovative approaches, played a crucial role in upholding urban and cultural resilience in challenging times. It underscores that cultural organizations, by being proactive and adapting to changing circumstances, can be pillars of strength during crises. In summary, Holtorf and Fava's research stresses the significance of cultural resilience in our ever-changing world. It underscores the need to not only safeguard our cultural heritage but also to embrace transformation and uncertainty. These studies suggest that adaptability, mutual understanding, and preparedness are key to ensuring the endurance of culture in the face of adversity.

2-5. Researching Method: Interview and Participatory Observation

Contrast to the literatures mentioned above, we relatively focus on the dimension of the un-institutionized mess. Take the cultural heritage and historic site literatures for example, we emphasize on how a wide historic environment of the city supports the habitants facing adversity. To investigate the mess, Manal Ginzarly and F. Jordan Srour[10] sets out to explore the role of hashtags in fostering global dialogue and strengthening the protection of cultural heritage during the pandemic and beyond. In the wake of the COVID-19 outbreak, governments worldwide implemented stringent stay-at-home measures, causing a temporary closure of most public venues, including cultural institutions. To fill the void left by these closures, many institutions turned to online platforms and virtual exhibitions. Simultaneously, international initiatives related to cultural heritage gained momentum. In this article, we delve into a study that analyzes the impact of two UNESCO-promoted Instagram hashtags, #ShareOurHeritage and #ShareCulture, during the global pandemic. The study employs data analysis techniques, particularly Latent Dirichlet Allocation (LDA), to ensure objectivity and reduce subjective bias. The selection criteria for these hashtags are underpinned by three pivotal factors:

1. International Governmental Promotion: These hashtags are actively promoted by international governmental organizations with the primary objective of safeguarding and celebrating cultural heritage on a global scale.
2. Inclusive Social Discourse: The chosen hashtags encompass the entire spectrum of social media users, making them a platform for global and inclusive discussions about cultural heritage.
3. Enduring Relevance: Importantly, these activities are designed to persist even after the pandemic ends, underlining the enduring significance of cultural heritage in our ever-evolving world.

It sheds light on their importance as tools for connecting and engaging individuals worldwide in the collective effort to preserve our diverse cultural legacies. As institutions and communities adapt to the new normal, these hashtags have played a crucial role in highlighting the value of cultural heritage and ensuring its continuity in the face of unprecedented challenges.

In the following cases, taking Hongkonger for example, we initially recognize the significance of identity as influenced by the internet. However, in this paper, we primarily employ two research methods: interviews and participatory observation. The former method is predominantly used to engage with the general population and residents as citizens. We conducted interviews with three distinct groups: the shops and stores affected by the 'Delighting Old House Movement,' traditional industries, and Hongkongers. The latter approach involves our engagement as a non-governmental organization (NGO) with the local government, other NGOs, and the public. Through this interaction, we gradually developed our approach to the execution of the 2025 event project, known as the 'WHAT IF' project, which places emphasis on future perspectives.[1]

3. PRELIMINARY PARTICIPATARY OBSERVATIONS AND DISCUSSION

With the end of the COVID-19 pandemic, the Tainan City government has commenced preparations for the 400th anniversary celebration in 2024. Simultaneously, NGOs are following their own trajectory and pace. The FHCCR is concentrating on developing a future blueprint for the city in 2025, which marks the 300th anniversary of the city's gates and walls, the 'WHAT IF' project. Beyond the initiatives and actions of the government and NGOs, academia plays a crucial role in offering professional expertise and conceptual insight.

This section comprises two parts. The first part delves into the concept of cultural resilience among ordinary people in their everyday lives, with a particular focus on the economic dimension. This concept was introduced by academia and forms the conceptual foundation of FHCCR's advocacy. The second part sheds light on the roles and approaches of the city government, FHCCR, and academia. Here, an academia-NGO-government approach is explored as a potential means to collaborate effectively and achieve common goals.

3-1. Cultural Resilience of Everyday Life

Cheng An-Yu and Wu Ping-Sheng[11] proposed that the subsistence dimension of settlement deserves attention. Traditionally, Taiwan's urban studies have primarily adopted a political-economic approach, concentrating on the strategies and policies of colonizers or the government. However, there is a growing

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[1] The pronunciation of 'IF' is similar to 'first capital' in Mandarin since Tainan is the first Han settlement and was once the capital of Taiwan for hundreds of years.

need to introduce a socio-economic history perspective that centers on the common people and their daily lives. This approach allows us to refocus on the fundamental aspects of settlement, specifically, the intersection of living and earning. Consequently, a new path for interpreting the subsistence production of everyday life is being paved.

In this paper, three kind of groups are preliminarily observed and interviewed, the 'Delighting Old House Movement' stores and shops, the traditional industries, and the HongKonger. We can place these three groups on a spectrum of urban migration. Traditional industries predominantly revolve around livelihoods, with businesses operated in Tainan for a significant duration, enduring economic fluctuations. The 'Delighting Old House Movement' shops, however, began moving to Tainan around 2008, and the Hong Kong ethnic group witnessed a noticeable wave of migration after 2019.

3-1.1. 'Delighting Old House Movement' Store and Shop

The 'Delighting Old House Movement' was introduced by the FHCCR in 2008 to promote creative and innovative reuses of old houses. In Taiwan, the legislation for preserving cultural heritage, known as 'The Cultural Heritage Preservation Act,' was put into practice in 1982. Initially, the focus of preservation was primarily on individual buildings and architecture. However, the realization of the significance of preserving the entire historic built environment soon followed. In Tainan City, during the late 1990s, a significant project called the 'Confucius Temple Cultural Park' was initiated through collaboration between the city government, academia, industry, and the local communities. This project expanded its goals beyond legally recognized cultural heritage to encompass the broader historical and cultural environment, embracing the concept of an 'Eco-museum.' This endeavor played a vital role in establishing a historic district within the city's downtown area.

In contrast to government-led initiatives, in 2008, FHCCR launched the 'Delighting Old House' movement. This movement aimed to promote the well-planned and thoughtful conservation and repurposing of old houses, especially those without legal protection. As a result, it dramatically transformed the status of old houses. The houses nestled in the narrow lanes deep within city blocks were now seen as unique places representing the local spirit of this historic city. Subsequently, the commercial reuse of old houses became a prevailing trend in this historic city. Shortly after the movement, these cases of adaptive reuse undeniably evolved into a resource and niche within the tourist industry. Simultaneously, they formed a local and immersive realm that seamlessly intertwined contemporary life with the historic essence of the city.

In these cases of adaptive reuse, there are primarily two types of industries involved: the catering industry and guesthouses. Guesthouses were originally not allowed in urban areas, such as Tainan City. However, the drive

for profitability was challenging to suppress. In 2015, the penalties for illegal guesthouses in the central-west area, the primary location of the historic district, increased to 1,440,000 NTD, ranking the highest among all administrative districts. It was difficult to track the exact number of illegal guesthouses, but overall trends could be observed from prosecution and penalty statistics. Therefore, in 2016, Tainan City established the first 'tourism area' in Taiwan. As a result, these guesthouses were able to obtain a legal pathway to operate.

Statistical data indicates that there is a significant business opportunity for the reuse of old houses following the 'Delighting Old House Movement.' Apart from guesthouses, the catering industry is another major form of adaptive reuse. In one particular interview related to the tea industry, we spoke with a matcha tea shop located within the Confucius Temple Cultural Park (Fig. 2, Fig. 3). The owner mentioned that, since most of their customers were regulars who trusted each other, the impact of COVID-19 was not significant. However, the ability to operate in this manner is largely attributed to the location within the Confucius Temple Cultural Park. The presence of numerous old houses in the area contributes to the unique ambiance of the district, gradually building a stable customer base.
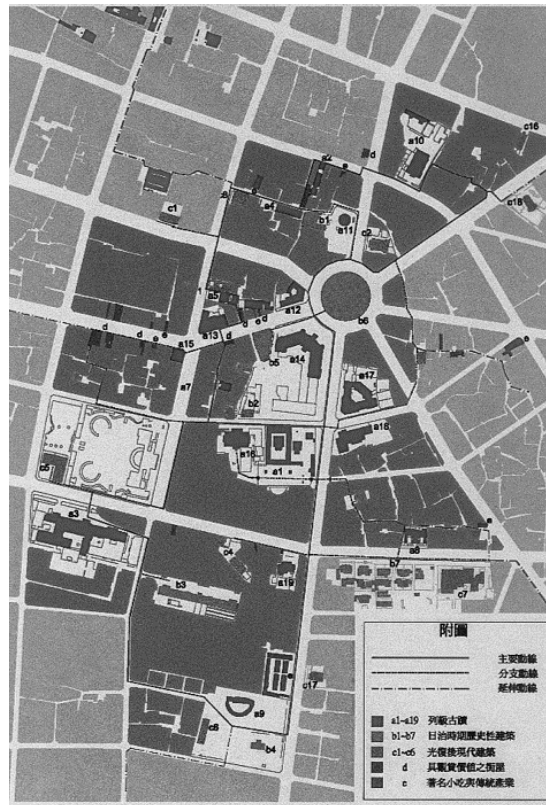

Fig. 2: The Confucius Temple Cultural Park: Reused heritages, delighting old houses, historic lanes and avenues in this area

Fig. 3: The color point shows the 'delighting old house movement' stores and shops around downtown, the historic area.

3-1.2.   Traditional Industry

The interview of matcha tea shop is belong to an investigation project called 'Tainan Survey' operated by FHCCR. This project commenced in 2015, selecting a traditional industry for survey approximately every one to two years. At its core, the project's concept and concern revolve around the livelihoods of ordinary people, emphasizing an essential social and economic aspect in the urban 'economic-space' dimension. This approach complements the conventional political-economic model. The project aims to shed light on the current state of traditional industries in the city after undergoing processes of modernization.

To date, the Tainan Survey has investigated rice shops and rice-based cuisine, Chinese and Western pharmacies, textiles, and the tea industry. Many of these traditional industries face concerns about being considered 'sunset industries.' Simultaneously, they are witnessing innovative attempts by the new generation. However, during interviews related to the tea industry, we encountered significantly different perspectives.

During a conversation with the owner of a tea shop, when discussing COVID-19 and more extended economic fluctuations, the owner expressed the perspective that crises can be opportunities. The customer base with tea-drinking habits tends to be relatively stable. As long as they can weather each economic

fluctuation, they can gain a more resilient customer base, given the reduction in competitors. Moreover, this owner actively expands public understanding and acceptance of tea culture by teaching relevant courses. In contrast to the many century-old tea shops in the historic city of Tainan, this tea shop owner measures economic fluctuations from a personal life scale and the resilience developed through it. This perspective better reflects the cultural support for people's lives in this city.

3-1.3.   Hongkong Immigrant

In Tainan City, a new group of immigrants from Hong Kong, particularly those who arrived in or after 2019, are referred to as 'Hongkongers.' They have adopted the symbol of 'Li,' a traditional local administrative unit, as a slogan to invoke the traditional moral spirit of mutual assistance, especially during the COVID-19 pandemic in 2021 (Cheng and Wu, 2022). These immigrants have established a network called the 'Li Community Centre Mutual Aid Box,' which blends new forms of business, such as online shopping, group buying, delivery and takeout, mobile apps, and cross-store loyalty cards. This network not only represents their innovative approaches to business but also reflects the cultural resilience of the city within the historical and sociocultural context.

In general, there have been three primary waves of Hong Kong-to-Taiwan immigrants: overseas students in the 1950s, practitioners and employees of Hong Kong restaurants in the 1970s, and immigrants arriving in or after 2019. The context of these waves is closely tied to the political and economic situations in Taiwan, Hong Kong, and China. The third wave, in particular, has been significantly influenced by the complex political situation in Hong Kong. The third-wave immigrants have grown in numbers over the last few years and have a strong motivation and demand for identity. They seek to identify as both 'Hongkongers' and citizens of Tainan City, making them an 'ethnic' group with relatively clear boundaries.

On the one hand, identifying as a 'Hongkonger' is a natural response for immigrants moving to a new society, especially when their reasons for leaving Hong Kong were largely political. On the other hand, identifying as a local citizen is not always a top priority for immigrants. However, this group of Hongkongers has shown a positive inclination to assert their local identity within Tainan City during the pandemic.

Concerning the 'Li Community Centre Mutual Aid Box' network, some shops and restaurants have adopted the slogan 'One Island, One Life,' emphasizing their shared circumstances living in the same society. Additionally, some have embraced a stronger local identity with the slogan 'You Are What You Eat.' While this slogan originally signified the connection between humans and the natural environment, in the context of Taiwan, it highlights the sense of belonging and identification. In essence, your choices in what you eat and where you live reflect your identity.

So, why did these Hongkongers choose to live in Tainan City, which isn't even one of the three largest cities in Taiwan? One interviewee from Hong Kong mentioned that they would have chosen Taipei if they were solely looking to make money and lead a life similar to Hong Kong. Some Hongkongers appreciate the higher quality of life that Tainan City offers. The 'Delighting Old House' movement is seen as a significant contributor to the improved quality of life in Tainan City. History is considered a valuable resource for establishing contemporary identity, both for long-time residents and immigrants. For some Hongkongers, the choice to immigrate to Tainan City represents a decision about what kind of 'Taiwanese' they want to become. Their appeal to historical context and lifestyle is how they aim to maintain a connection to their hometown on a micro and practical level in their everyday lives.

3-2. An Initiation on The Academia- Ngo-Government Approach

Tainan, as the first settlement in Taiwan, makes it unsurprising that the 400th anniversary festival will involve a collaborative effort across various government bureaus and offices. Among all these bureaus and offices, the Cultural Affairs Bureau has taken a leading role and is endeavoring to collaborate with NGOs in the '400 Years of Culture' project with the aim of producing an action plan for the 2024 festival.

However, NGOs have their own path and schedules, particularly those that frequently adopt positions contrary to the government on issues they initiate. This is especially true for organizations like FHCCR. FHCCR has been committed to advocating for the preservation of Taiwan's cultural heritage, historical environment, and social resilience since 1999. In 2025, the foundation aims to enhance awareness and interest in the urban historic environment by commemorating the 300th anniversary of the city gates and walls, 'WHAT IF' project.

The role of the academia in practical endeavors might not always be conspicuous, but it is undeniably a crucial force. In Tainan City, the implementation of cultural policies and the operations of FHCCR are both built upon the foundation of academic expertise. Changes in academic perspectives often influence the direction of government policies and NGO initiatives. The concept of cultural resilience, as a core theme, is an idea that originated from the academic community.

3-2.1.   City Government: The 2024 400th Anniversary of Tainan

In terms of the role of the city government, the collaboration between the city government and NGOs in Taiwan can be viewed from two models: 'commission' and 'cooperation.' First, in the 'commission' model, the government in Taiwan is an institution with relatively abundant resources and public credibility. As a result, most civic activities receive funding from the public sector and are executed by the private sector or

third-party organizations. In such cases, civic activities inevitably have elements of cooperation with policy promotion.

In the case of the cross-bureau activities for 2024, the Cultural Affairs Bureau has adopted this flexible approach. Using a project-based format, the bureau invited various communities, including architects, curators, photographers, calligraphers, cultural heritage experts, social movement groups, and community development organizations, to engage in discussions and contribute to what's referred to '400 Years of Culture' project. This project aims to ensure that the actions planned for 2024, beyond the anniversary celebrations, can serve as the starting point for longer-term policy initiatives. This represents a relatively progressive approach but still involves navigating bureaucratic procedures and adhering to policy guidance from government departments.

The '400 Years of Culture' project structured as a project led primarily by NGOs, still retains a significant level of autonomy due to the consensus with the Cultural Affairs Bureau. This autonomy is evident in the choice of meeting locations, meeting formats, meeting topics, and even the presentation of outcomes. The Cultural Affairs Bureau has shown great respect and provided ample space for the participants to fulfill their roles within civil society as active contributors rather than mere commissioned entities.

However, friction exists between NGOs and the public sector. An obvious example is the payment of fees. Due to the differing roles and identities of participants, the accounting department naturally oversees the related reimbursements. While the costs are not high, they are monitored as part of their duties. This process may not pose problems within the public sector, but it has highlighted to NGOs that even for a project-based commission, the public sector still has unavoidable legal procedures that impact the practical effectiveness of the operation. Among the participants invited to the '400 Years of Culture' project, it's primarily the younger generation of Tainan residents who actively participate in civic society activities. Through their long-term interactions with government departments, participants have gained an understanding of the necessity of administrative processes but have been open in identifying the challenges associated with this situation.

Faced with this situation, the predominantly NGO-driven participants eventually decided to take a self-funded and self-organized approach by holding a civil forum. Since the city government's theme is centered on '400 years,' this forum was named '400 AND THEN' aiming to raise questions from civil society (Fig. 4) The Cultural Affairs Bureau maintained a friendly and positive attitude throughout this event. The organizers of the civil forum did not shy away from the fact that it originated from a government-commissioned project. In '400 AND THEN,' an expanded range of speakers from various fields, including high school teachers, Academia Sinica researching fellow, and university professors, were invited, and the event was open to the public to discuss the ideas and action plans proposed by the forum.

In summary, from the '400 Years of Culture' project to the '400 AND THEN' forum, it can be said that this interaction between civil society organizations and cultural units was a successful one. Furthermore, it helped establish preliminary horizontal links between NGOs, providing them with opportunities to exchange ideas. FHCCR played a significant role in facilitating this exchange.

Fig. 4: The '400 AND THEN' symposium

3-2.2.   NGO: FHCCR'S 2025 300ᵀᴴ Anniversary 'What If' Project

Since its establishment in 1999, FHCCR has had a close collaboration with the public sector in the field of cultural heritage. The 'Delighting Old House Movement' in 2008 played a pivotal role in changing how Taiwanese people perceive old houses and contributed to reevaluating the historical environment in Tainan and its potential cultural resilience. However, when facing the 2024 government event commemorating 400 years and the 2025 FHCCR 'WHAT IF' project celebrating 300 years of city establishment, FHCCR had to engage in prolonged internal discussions.

These internal discussions primarily focused on strategy. Given the differences in resources and public credibility between civil organizations and the public sector, it was essential to avoid confrontations with the government. Nevertheless, FHCCR maintained a critical stance towards the common practice of the government in organizing temporary celebratory events.

The discussions also involved a reevaluation of historical narratives. While the initial focus was on the establishment of Han settlement around 400 years ago when the VOC landed in Taiwan, it shifts in narrative acknowledged how Taiwan was integrated into the world trade system during the Age of Exploration and highlighted the development of a mature immigrant society over the following century.

Compared to its relationship with the public sector, the execution of the '400 Years of Culture' project and the '400 AND THEN' forum allowed FHCCR to establish formal horizontal connections with other NGO communities. This shift marked a significant change for FHCCR, which had a long history of working in the cultural heritage field but limited interaction with other social initiatives. Following this, FHCCR continued to engage with other communities through various activities and projects. This was deemed essential for mobilization in 2025 and building a strong community foundation.

FHCCR, which had traditionally focused on cultural heritage, had limited interactions with other communities and had a relatively weak presence in public outreach efforts. This weakness was partly attributed to the growing trend of reusing old houses in Taiwan. However, the activities planned for 2025 presented an opportunity to expand FHCCR's engagement with the public (Fig. 5). The intention was to raise public awareness about the city walls and use that awareness to influence urban planning from a holistic historical context. Therefore, enhancing interaction and connection with the general public became necessary.

With the city walls as the central theme, FHCCR initiated a series of diverse small-scale events starting in 2022, accompanied by the expansion of relevant professional personnel. This transformation was critical for FHCCR, as it raised the question of whether, as a third-party organization, hould transform its expertise into more accessible content for the general public. It also implied a greater civic responsibility when venturing outside the realm of expertise.
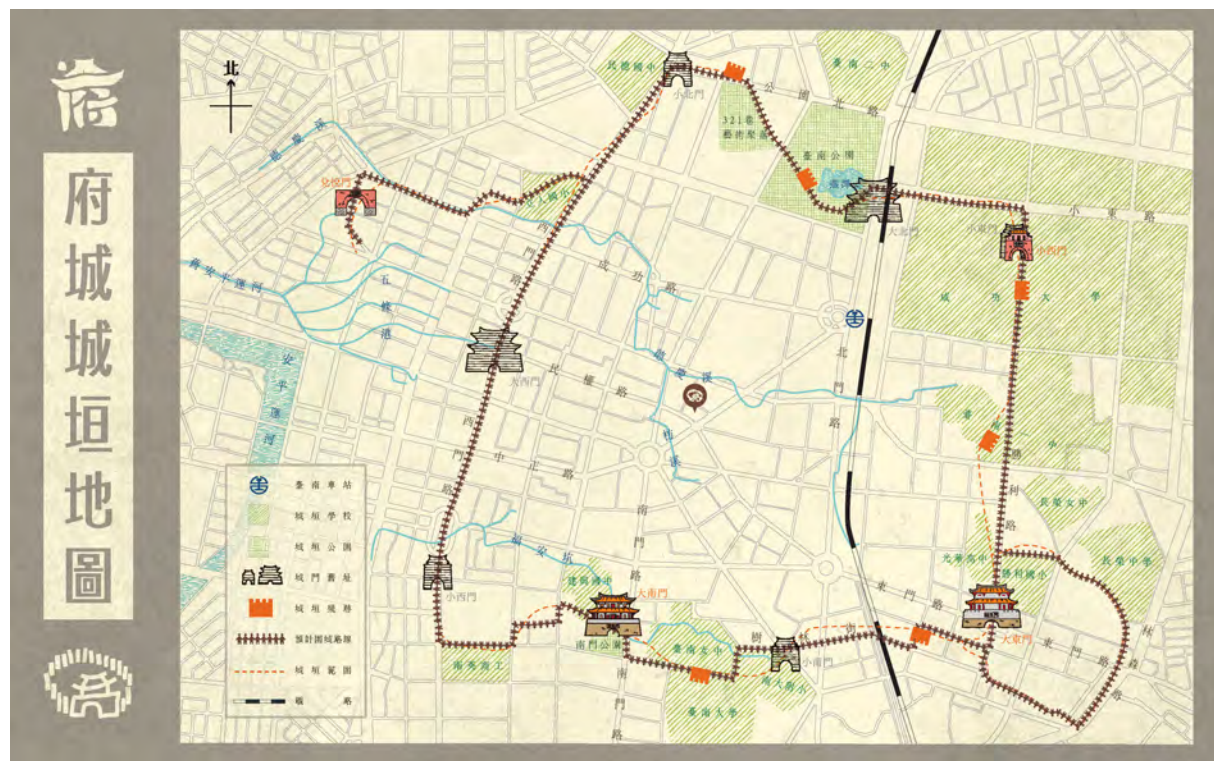
Fig. 5: A walk tour map around the city wall for 'WHAT IF' project

3-2.3. Academia: Professional Practice and Core Concept

The role of academia is often implicit but crucial, especially in the field of cultural heritage and architecture, which this article emphasizes in terms of how the historical environment provides richer possibilities for cultural resilience. Firstly, in the long term, participants in projects like the "400 Years of Culture' project including organizations like FHCCR, are all professionals in their respective fields. Taking FHCCR as an example, its ability to engage in long-term collaborations with the public sector in the cultural heritage field relies on the cultivation of professional expertise supported by academia.

Secondly, core conceptual frameworks often originate in academia, and they are developed based on research findings. After years of research and investigation, the specific sites of the Tainan City Walls, previously designated separately due to most of them being demolished, were officially re-designated as a unified historical site in 2023. This legal reclassification served as a vital material foundation for FHCCR's efforts to reacquaint the public with the holistic significance of this city. Furthermore, the Tainan City Walls, primarily constructed by the community in 1725, highlight the historical fact of 'unity in the face of adversity.' This

historical fact is transformed into the concept of 'cultural resilience' in the 2025 event, reflecting the participation of civil society.

4. DISCUSSION AND CONCLUSION

The literature mentions that the indicators of so-called cultural resilience actually reflect the actions and content of a city's residents. This article, through interviews and observations of NGO participation, initially highlights the potential content of cultural resilience and advocacy pathways for nurturing cultural resilience from a perspective of engaging with the public and participating in civil society. In this pathway, NGOs, local governments, and academia each play different roles, contributing to the operation of civil society. It's worth noting that this collaborative model relies on long-term interaction and trust and cannot be achieved in a single action or event.

In the 2025 'WHAT IF' project, FHCCR particularly emphasizes the importance of historical environments in the urban context. Through spatial planning and design, it is sufficient to accommodate various aspects of civic activities such as education, arts, research, markets, and more. This article, as a preliminary observation, proposes an approach with academia-NGO-government as the core. These actions are still pending implementation, and there are certainly shortcomings in the discourse, such as the presence of indigenous peoples and the archaeological scales of time.

NOTES AND REFERENCES

[1] Annie Tubadji. "Culture and mental health resilience in times of COVID-19" Swansea University, Bay Campus, Swansea, SA1 8EN, UK, 2021.

[2] Sherry Shaw，Mark A. Halley. "Service Learning during the COVID-19 Pandemic: A Model of Temporal, Spatial, and Cultural Adaptability", University of North Florida, 2021.

[3] Krešimir Jurlin. "Were Culture and Heritage Important for the Resilience of Tourism in the COVID-19 Pandemic?", Journal of Risk and Financial Management, 2022.

[4] Barbara Minguez Garcia "Integrating culture in post-crisis urban recovery: Reflections on the power of cultural heritage to deal with crisis", World Bank/GFDRR, 2021.

[5] Tula Giannini, and Jonathan P. Bowen, " Museums and Digital Culture: From Reality to Digitality in the Age of COVID-19" Heritage （2022）, 5, 192–214.

[6] L Varriale, T Volpe and V Noviello "Enhancing Cultural Heritage at the Time of the COVID-19 Outbreak: An Overview of the ICT Strategies Adopted by Museums in the Campania Region of Italy" ,Tourism Destination Management in a Post-Pandemic Context, （2021）, 201–218.

[7] Maria Vayanou, Angeliki Chrysanthi, Akrivi Katifori, Angeliki Antoniou, "Cultural Heritage and Social Experiences in the Times of COVID 19", Island of Ischia, Italy, 2020

[8] Cornelius Holtorf, "Embracing change: how cultural resilience is increased through cultural heritage ", World Archaeology, 50:4, 639-650, 2018.

[9] Federica Fava, "Ongoing adaptive reuse: patterns of heritage resilience before and after COVID-19 ", Department of Architecture, ROMA TRE University, Rome, Italy, 2022

[10] Manal Ginzarly a, F. Jordan Srour b, "Cultural heritage through the lens of COVID-19", Poetics 92, 2022.

[11] Cheng An-Yu, Wu Ping-Sheng, "An Emerging Urban Network during the Covid-19 Pandemic-Hongkong Immigrants in A Historic City of Taiwan", The International Association for the Study of Traditional Environments (IASTE) 19th Conference, Singapore, 2022

MODERNITY, VERNACULAR AND VIRTUALITY

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