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PEOPLE'S PRACTICES

A VERNACULAR PROCESS-BASED APPROACH TO RESETTLEMENT HOUSING DESIGN

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In most post-disaster recovery efforts, particularly in less-affluent communities, resettlement housing projects reflect the ideals of the providers (state, donors and designers), rather than the displaced. In terms of design, architects often make an effort to evoke regional vernacular imagery in the formal and visual appearance of rehousing projects. Such approaches may facilitate achieving a psychological sense of familiarity and continuity amidst chaos, as well as responding to certain cultural and climatic necessities of the place.

Such projects, however, have failed in the long run to provide the desired benefits for their residents. The reasons include an inadequate understanding of the vernacular context, the processes of vernacular building production and social meaning. Perhaps, a remedy lies not in emulating the vernacular imagery or product, but in the vernacular design process.

There are three reasons for this thesis. Firstly, vernacular environments are historical, dynamic and evolving entities that respond to a complex set of social,



political and economic forces. Thus, they represent cultural continuity, not in their architectural attributes per se, but in the ongoing processes that conjure up those attributes within a given temporal and cultural context.

Secondly, studies on post-disaster recovery suggest that community empowerment should be a critical aspect of the resettlement strategy. Providing housing should be a process that stimulates an emotional connection to one's house and community, through which one could gain hope and capacity to achieve greater recovery eventually. Rather than merely receiving a shelter, the displaced should be actively involved in making their homes.

The vernacular process is relevant here, since vernacular environments are user-built. Therefore, active engagement of the displaced in the creation of their housing and community is akin to emulating the vernacular process.

Thirdly, studies on rebuilding also point toward the importance of incremental approaches to recovery. The urgency to provide permanent housing relief seems to be misplaced and could lead to poor results. The emphasis should be on small-scale achievable objectives, where the provision of housing is incremental. This conception of rehousing as an evolving process is similar to what happens in a vernacular context.

Based on an analysis of Amos Rapoport's study of vernacular design characteristics, I would like to suggest that the vernacular

process may be understood as involving the following aspects: prominent involvement of the users in the design and construction process; the close congruence between the built environment and culture of the group; place types in a settlement following one or a few design models with variations; slow and incremental rate of change in the settlement; and the processes of transmitting technical know-how. These aspects of the vernacular process could be connected to the community building and incremental growth desired in resettlement planning, in order to derive a set of guiding principles for the design process.

The first principle is to actively engage users in the making of their homes. This doesn't mean self-help construction of the houses. It means the involvement of future residents in the entire decision-making process of recovery, which includes site selection, programming, design, construction and upkeep – not only of the housing units, but also the planning of the entire settlement. Professionals play the role of community organisers, motivators, advisors, trainers and arbitrators facilitating the community in decision-making.

The second is to consolidate the original settlement, rather than relocate the displaced. This is found to be the most beneficial strategy for resettlement and post-disaster recovery, because it preserves livelihoods, the local economy, social connections, a stable demography and ownership patterns, and maintains place

attachments. It also helps to achieve a continuation of the vernacular character of the place because it supports incremental growth.

Principle number three is to provide physical and social support structures at the community level in the public domain – settlement plan and infrastructure – that will provide a general framework to be filled in and adopted by individuals and small groups of residents. This is also based on the idea of incremental growth.

And the fourth principle is to adopt a model and variations approach to housing design. In vernacular design, a relatively small number of design types or models are adapted for various functional needs such as housing, civic buildings, places of worship and so on. A few models (in terms of spatial composition, structural systems and so on) are rigorously structured while allowing designers to make a range of design variations in peripheral attributes, choice of materials and motifs.

Rather than relying on a standardised housing design, a few design types and

their variations could be developed with the participation of the community or individual residents. This strategy produces settlements of complex visual character with an underlying harmony, order and communal identity, which is certainly desired over the cookie-cutter designs that characterise resettlement housing.

A related principle is to allow for future adaptations in designs. The housing provided should facilitate personalisation and eventual extensions. The extent to which a design makes this need possible has been identified as a measure of success in resettlement housing. Some strategies include following the 'model and variations' approach, developing house designs that could grow incrementally (core and infill, kit of parts, growth corridors) and incorporating specific attributes in house designs that would help user-initiated adaptations.

The latter includes, among others, the provision of larger plots, spacious and roofed non-habitable spaces, roof forms that allow easy extensions and a range of



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PHOTOGRAPHY Architect Kapila D. Silva

A – User-initiated extensions (a) temporary garage and (b) outdoor kitchen space in the post-tsunami resettlement project at Samadhi Gama in Tangalle, Sri Lanka. A home is not a standardised design with a couple of rooms under one roof. It has multiple indoor and outdoor settings reflecting the users' lifestyles and needs. The house units provided for the displaced should facilitate the lifestyle patterns and user-initiated adaptations. Building an outdoor kitchen is the very first user-initiated adaptation found in most post-tsunami rehousing projects in Sri Lanka. Instead of assuming the users' needs, a thorough study of their lifestyles, settings and activities is necessary during the pre-design stages.

B – User-initiated adaptation in a post-tsunami settlement project in Kirinda, Sri Lanka: (a) what the original design would have looked like and (b) the adaptations done by the user that include interior replanning, rebuilding walls with baked bricks which replace the original mud bricks, plastering and painting of the walls, building extensions to the housing unit and replacing the windows. It is a classic case of dissonance of the ideal building standards among users, designers and donors.

clues incorporated into the house design that suggest possible extensions. It is also important to develop scenarios for future extensions, along with the residents. Allowing buildings to evolve simulates the dynamic nature of vernacular environments.

The sixth principle is to adopt local construction practices with improvements, rather than introduce alternative technologies. It preserves local knowledge, strengthens social capital and enables a recovery that is culturally, economically and climatically acceptable. Introducing new technology and materials into a local building culture should be carried out with care. It should not totally negate local technology and community involvement in rebuilding.

A pertinent principle is to change perceptions on building standards. What constitutes acceptable building standards may differ among user groups, as well as users, designers and donors. Conditions that are imperfect to designers could be acceptable to users, and vice versa. Therefore, a collective dialogue is necessary on suitable building standards, materiality, technology and design attributes.

These principles are all based on one additional critical value – studying the patterns of settings and activities in the local cultural context. Most unsuccessful rehousing projects result from the

designers' and donors' lack of understanding of users' needs, lifestyles, aspirations and what constitutes their true home environment. Rather than assuming what these constitute, designers should carry out comprehensive studies of the relationship between local culture and its built environment, preferably with the participation of the community.

These guiding principles are quite intuitive, with a large body of available knowledge on the subject. However, due to some inexplicable reason, that knowledge is not directly available or satisfactorily transferred to design professionals. It could be due to issues related to architectural education, professional elitism and disciplinary isolationism.

The need of the hour is a combination of approaches such as multidisciplinary and hands-on approaches in architectural education, continuing professional education on post-crisis planning and rebuilding and developing new models of civic-minded, engaged professional practices in order to achieve the above objective.

NOTE An in-depth exploration of the points discussed above can be found in Silva, K. D. (2011) *Resettlement Housing Design: Moving Beyond Vernacular Imagery*, South Asia Journal of Culture, Special Issue on Built Space (Vol. 5/6, pp 166-135).