Accessibility in Urban Spaces: The Potential and Limits of Jugaad

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Abstract

Sustainability in the urban context, besides the planning and environmental aspects, also includes making it equitable to people with differences that extend to class, colour, race, caste, gender, disability. Truly sustainable spaces are also accessible spaces. Urban resilience which, by definition, encompasses sustainability is an opportunity to include the agenda of accessibility. If the concept of 'jugaad' understood as indigenous innovation fits in with urban resilience in the context of Indian habitats, it needs to, by extension, be examined with respect to accessibility. The essay delves into the perceptions and conditions of accessibility in Indian cities and examines where jugaad figures when urbanism is viewed through the lens of accessibility, and the potential and limits of jugaad in this context. It examines the possibility that jugaad is a negotiation of everyday living in the city, as is accessibility, and it is here that the jugaad mindset can be an ally to accessibility. It is an open-ended enquiry into the subject, and attempts to weave different strands of sustainability, resilience, jugaad and accessibility.

Introduction

Sustainability in the urban context means much more than environmental and planning efficiency. To make cities sustainable is also to make it equitable to people with differences, and to maintain and foster rich cultural connections and relationships. The differences extend to class, color, race, caste, gender, disability. Truly sustainable spaces are also accessible spaces. Urban resilience which, by definition, encompasses sustainability is an opportunity to include the agenda of accessibility. This is more so in the Indian context where urban development is more often than not inconsistent in adopting accessibility; accessible spaces are thus patchy and disconnected.



Fig. 1: Person in Wheelchair helped by friends, Marina Beach, Chennai Source: Geraint Rowland Photography

If the concept of jugaad as indigenous innovation fits in with urban resilience in the context of Indian habitats, it needs to, by extension, be examined with respect to sustainable and accessible environments.

This essay examines the question: where does jugaad feature when urbanism is viewed through the lens of accessibility? What are the potential and limits of jugaad in this context? We attempt to weave different strands of sustainability, resilience, jugaad and accessibility into this essay, whilst leaving some untied, so as to remain an openended enquiry into the subject.

Disability and the question of Accessibility

Disability is a significant subset of the diversity group in any habitat, along with other forms of Otherness such as race, color, caste, class, immigration status, and gender. It is probably not the first issue that comes to mind when we talk about diversity. However, language so often gives cues that nudge us to think in certain ways: the term "differently abled" to describe people with disabilities itself calls out its Otherness.

In India, an estimated 2.2% of the population is deemed to have some form of disability, with the percentages broadly the same in urban and rural areas (The Economic Times, 2019). There are some estimates which put the figure at 60 million, or over 5% of the population. When accounting for temporary disabilities, it is a good bet that most of us will experience some form of disability in our lifetimes.

In Indian cities, people with disabilities have historically been relegated to interiors - be they of homes or institutions. Social orders that privilege the regular and the normal have conferred a stigma on people with disabilities that is difficult to shed. Even within the subsets of Otherness, disability is at the lower rung of the hierarchy -This is even more pronounced in rural areas. Moreover, being portrayed patronizingly or unflatteringly in popular cinema as figures of ridicule does not help with the stigma (Film Matters Magazine, 2019). Combined with a lack of opportunity in education, employment and social interaction, the life of a person with disabilities is lived out in smaller, darker spaces with an interiority defining them.

However, this has been gradually changing over the past couple of decades, when urbanization and economic progress support an egalitarian ideal that flattens social hierarchies ever so gradually, and reduces the gap with Otherness. More realistic and empathetic portrayals of special needs in cinema, and schools opening up to special education have softened perceptions of disability, which has in turn translated into policy. In 1995 with the Persons with Disabilities Act, and in 2016, the Rights of Persons with Disabilities Act were passed. Implementation has been a work in progress, but a framework has been established.



Fig. 2: Implementation of the Persons with Disabilities Act is a work in progress, but a framework has been established. Source: Martin Heng

There is a need in the disability world for visibility: the main aspect of "normalcy" that people with disabilities cherish, as many express, is being visible in the public space, *a shift away from interiority to exteriority*. While social behavior is gradually changed with time and by policy, the challenge that remains however is the accessibility of public spaces in cities. Accessibility, as the UN defines, "is a precondition for persons with disabilities to live independently and participate fully and equally in society" (The Inclusion Imperative, 2016, p. 6). The definition firmly places equity as the prime driver of making communities and cities accessible, hence truly sustainable.

Jugaad vis-a-vis Accessibility

How does jugaad, defined as "an innovative fix, an improvised solution born from ingenuity and cleverness" (Ekistics, 2019), fare as an approach to creating accessibility in Indian cities? Jugaad is a local, ad hoc response to a perennial lack of resources in everyday urban living. It is a sort of hacking a nameless "system" - which is a placeholder for any combination of political, state, institutional or legal framework - which does not work in the here and now, both in perception and in reality. Accessibility codes which ought to provide a minimum standard of safety for people with disabilities are a product of the "system". There is an element of subversiveness in jugaad which can be employed in a limited manner to creatively interpreting the code, which is a standard, but on no account to compromise on safety. The areas of health and safety - both at individual and community levels - are where jugaad gets a bad rap from detractors, and with good reason (Joseph, 2018). The jugaad mindset constantly compromises, sometimes at the expense of health and



Fig. 3: The jugaad mindset constantly compromises, sometimes at the expense of health and safety, which cannot be compromised in the case of accessibility. Source: Shankar S

safety. There are any number of products and processes that are creative often awe-inspiring hacks; however, health and safety may not be a high priority. Sometimes there is a class element that tinges our perception of jugaad: we enthuse in elevating the ordinary, the eking out of efficiency through enterprise, but may not use it ourselves – what is good for them (or the Other) may not be right for us.

But the compromise of jugaad is a sort of negotiation of everyday living in the city that consists of a million adjustments: negotiations which are sometimes small acts of jugaad that remind us of our interdependence in dense communities and cities. Accessibility is also a negotiation of the literal and figurative terrain of the city. Accessibility requires more space than may be available or planned in the built environment. While the code is supposed to ensure a certain minimum standard, it is itself the result of compromises between the various interests that shape it. Sometimes this leaves gaps that may either take a either a long time or sometimes never to get filled. People with disabilities constantly negotiate these gaps in everyday life; in a sense, then, jugaad is also the bridging and repairing of the gaps and holes to form a patchwork that stands-in for the whole.

In the recovery of Indian communities and cities after a natural disaster such as floods and earthquakes, jugaad is a sort of first responder. It is here that the full dimensions of jugaad - ingenuity using little resources - sparkle brightest. However, it aids in resilience in a reactive way, and hence its influence is restricted. Resiliency is proactive, "the ability to prepare for anticipated hazards, adapt to changing conditions, withstand and recover from disruptions" (NIST, 2015, p. 9), as defined in the context of cities. Cities experience chronic stresses such as water shortages and strained infrastructure, and unless communities are resilient enough to these chronic stresses, the shock from a disaster can undermine their recovery. But any recovery - long or short term - also hinges on the resiliency of the spirit, which this prosaic definition excludes. Indeed, it is the can-do mindset of jugaad that lifts communities during those times. It is also the spirit of resilience that that defines the journey of disabled people from interiority to exteriority, from invisibility to visibility, when spaces are made accessible.

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Fig. 4: Like jugaad is a sort of negotiation of everyday living in the city, so is accessibility, which is also the negotiation of the literal and figurative terrain of the city. Source: Martin Heng

It is intriguing to explore jugaad as bricolage, in Claude Levi-Strauss' dichotomy of the bricoleur and the scientist or engineer. The bricoleur improvises out of random materials, "is adept at performing a large number of diverse tasks; but unlike the engineer, he does not subordinate each of them to the availability of raw materials and tools conceived and procured for the purpose of the project...the rules of his game are always to make do with 'whatever is at hand'..." (Levi-Strauss, 1966, p. 17) The engineer-planner-scientist works with a few central principles (which may be uncompromising) to articulate a vision. The realm of codes and standards that address accessibility (and mandate health and safety) fall within the "central principle" of the planner, not of the bricoleur. The architect-artist arguably employs both modes of thought depending on the specifics and politics of projects (Rowe and Koetter, 1978).

Modern Indian cities, or the newer parts of old cities, are mostly based on Kevin Lynch's model of the "practical" city - the simplicity and functionality of the grid that does not conform to an overriding guiding principle (Rybczynski, 1996). It is tempting to think that the pragmatic, perhaps mechanistic nature of the grid is akin to the pragmatism of the jugaad mindset, but ideally equipped with standards. The uncomplicated gridded layouts are the least resistive to a working accessibility standard, as compared to Lynch's model of "organic" cities that describe older parts of Indian cities. The space that accessibility needs is largely not possible; the gradual accretion of spaces and elements mostly by ad hoc methods resembling jugaad that became permanent gives short shrift to accessibility. Arguably, the sense of community that organic neighborhoods traditionally foster is a source of succor and support for people with disabilities, while still limiting accessibility and exteriority. A truly equitable and sustainable community provides both.

In the final analysis, jugaad cannot and should not substitute the standard of accessibility in communities and cities. The temporariness and ad hoc nature of jugaad to deal with the present unfortunately achieves varying degrees of permanence as a future permanent intervention may not come, and compromises in safety become solidified. However, beyond the basic infrastructure that ensures minimum safety for people with disabilities to engage with the city, it is in the incremental 'spreading out' and everyday negotiations with the city that the jugaad mindset can be their ally.

Epilogue

The poet Ashok Vajpeyi's poem (written for the artist J. Swaminathan) 'Bird Still On A Soaring Rock' (Bahuvachan, 1988) can be read as an allegory in the context of this discussion:

> The rock wants to fly/ like the bird/ In the sky/ across the valley/ and see and frolic/ and touch the world/ over there.

But the bird doesn't want/ to change places/ with the rock and/ stay still for centuries/ gazing at the blue sky/ and other rocks.

And yet the bird is/ still/ like the rock.

The rock is soaring/ like the bird.

A bird in flight/ is and is not/ sitting still/ on the rock.

Rock and bird, disability and ability, us and the Other, are different and yet, in more ways than we can imagine, similar. It is in truly sustainable and equitable communities and cities that intertwining and codependence, the simultaneous condition of uniqueness and similarity exist.

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Keywords

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