

Interview with Rahul Mehrotra*

***Conducted and/or edited by the Volume Editors.**

Volume Editors: What is the status of your engagement in regard to cultural heritage and urbanization?

Rahul Mehrotra: I'm beginning to situate my own thinking, work and research in a very strong belief that we need to engage simultaneously with these issues across many scales. We tend to get locked into a particular scale to try to solve a problem. So, whether it's the question of equity, heritage conservation or urbanization more broadly unless you look at it through all scales, you don't even begin discern the problem. And I think that has to do with questions of sustainability and climate change, in the broadest sense. So, for example, in Mumbai, in October 2019, the biggest and most upsetting news was a New York Times report that pulled the projections about sea rise in Mumbai (rising oceans taking over land mass), resulting from climate change—ahead by 25 years. So, what people thought would happen in 100 years may now happen by 2040 or 2050. In response, the experts are taking the conversation to issues of resilience, how hard surfaces can be reduced to facilitate water absorption, how open spaces should work as holding ponds, etc. Viewing this conversation from a distance, one can't help but think this is a myopic view. Because the harder question we should be really asking ourselves is, how do we go to higher land? Animals do that by following their natural instinct! So, naturally, what we should be discussing in a place like Mumbai is the metropolitan scale of how we can disperse development; how we can make a transition between the densest areas and new areas that we can open up for viable living and settlements—how we can come up with a completely new metropolitan imagination that is premised on an anticipated disaster and not solely driven by natural growth. This becomes an opportunity to do that, but here the scalar jump becomes critical. Most responses happen accepting the in-situ condition, like a frog in the well, and that's why, for me, examples that come out of New York are ridiculous—that you're going to build a barrier and a wall, etc., a desperate and myopic attempt to protect real estate value at best. Essentially, we seem to lock ourselves in a particular scale when we try to address some of these questions, and I think what's going to be critical for our thinking across these kinds of domains and problems is going to be our ability as professionals and as human beings to simultaneously think about differing scales in a reiterative process. I think that has become a very central part of work right now.

The second question is how we would differentiate between transitional and absolute solutions. The world today is locked in thinking about absolute solutions. I think New York's response to ocean rising and building the barricade is an absolute solution. A transitional solution would involve zooming out in scales. To give an example of what I mean by transitions versus absolutes, India's energy policy is based on going from fossil fuels to renewables, but if you try to make that jump, our economy will collapse, so that's why India has gone nuclear. We've gone in a completely direction to come back to renewables. I think in the imagination of cities, how can we now begin to move away from absolute solutions to more transitional solutions? We need as a profession and as pedagogues to frame this better. With that in mind, my work related to the 'ephemeral'—to the 'elastic'—is related to this question of transitions versus absolutes, because we must also equip ourselves as design thinkers about how we deal with questions of reversibility. What is the implication of the life cycle of materials? How can you make things that actually move in response to the flux that we're engaged with on our planet? Flux, both in terms of the flux of demography, but also the flux of climate, weather and the natural forces that are making us think of how we 'rest' on the planet differently. Therefore, I think at the theoretical level, what becomes very interesting—and that's why I frame it provocatively as a question—is, 'does permanence matter?' In fact, permanence itself, as a word, is relative. Permanent for how long and in relation to what? But does permanence matter, is an important question for us as practitioners to ask, because even through our teaching and our imagination, we take permanence as a default condition! We, therefore, often don't design for transitional conditions. We design in absolute terms, whether it's a little weekend house—which is ridiculous, because weekend houses often grow out of their relevance as soon as family conditions change—so perhaps architectural programs like that or even the buildings we do for the Olympic games should be all reversible? This reversibility has profound design implications.

In summary, in response to your question, I'm linking a few thoughts: one is the notion of how we must have the ability to move across scales, because different problems will be solved at different scales. We can't solve all the problems at the same scale. Second, we need to think in transitional terms regarding design, rather than only in absolute terms as we currently tend to do. Finally, this is related to the notion of reversibility, and, therefore, how we question what we mean by permanent, and what is a permanent solution, and what is a transitional solution. How do we make reversibility an instrument of design?

VEs: Do you see that there's a dichotomy on a paradigm of urbanization that you witness, in the context of India, that suggests a completely different idea of urban and rural?

RM: Absolutely. The thesis that I would propose—and it's something we are currently researching—is that India is approximately 60% urban for six months of the year, and 40% urban for the other six months of the year. Which means that if you take the roughly 20% in terms of the population of India, it's 300 million people, which is roughly the population of the United States. If you can imagine everyone in the USA just moving back and forth between the urban and rural, then what is the urban and what is the rural? What is emerging in India is the notion of urban flux, which should be a very useful condition to observe for us globally, even for countries with smaller populations and with more stable urban populations, because other forces like climate change are going to force us as human beings into a state of flux. Migration mobility is somewhat at a high level right now, because of politics, because of climate-change-related phenomena, because of aspirational needs—people are moving between continents. How do we, as designers, then deal with the question of flux? How do we, as human beings, make that a productive category in order to address the question of sustainability? In a strange way, it is like a circle ending, because we become nomadic again. Perhaps 8 billion people will be nomadic, perhaps versus 1 million 4000 years ago. Of course, there are completely different implications, but in a sense, this nomadism might not be the type we have historically known it, which involves putting your things on a mule and going to another camp or setting up a new settlement, but instead it might be looking at smaller rhythmic cycles in terms of what we mean even as settlements. It might mean, at least for the next century, rotations, and movements within metropolitan urban areas; this localized flux will be the first indication for us. I think in the case of Mumbai, if in 30 or 40 years, we're going to have severe climate crisis related water surges, for example, the rich will probably create new suburbs on the hills in the Mumbai Metropolitan region—this is something that is already happening incrementally and will get more formalized. You'll get a complete inversion of the urban diagram—you'll get what happened to Detroit for different reasons. In Detroit, the hollowing out of the center happened because of white flight. Now, the climate crisis is going to create inversions in our cities, and within Metropolitan regions, for which we are not well prepared. It might be the response to becoming more sustainable; it'll be led by the rich because they can afford it. It's worth watching out for that as an indicator about what this new formation will be. It will be a microcosmic representation, and a symbolic sample of what might happen at larger, national scale. Even within India, you'll

start having this type of flux. Kerala, for example—the whole state—will be under threat given its geography of back waters. Look at what's happening in Venice with the flooding. I think we're going to be forced into the reformulation of our cities, starting with the Metropolitan regions, and then more nationally, as terrains and territories that will get reorganized. This urban–rural blur—not the non-existence of the of the binary, but rather the coexistence of both simultaneously in the same space—will become a more global phenomena and comprise our new description of human settlement structures.

VEs: It seems we're leaving a lot of people behind in our ways of dealing with these challenges. Is our thinking inclusive enough to avoid a social conflict?

RM: One systemic problem in the case of India is that of the government is by default creating a polarity in society because of the way we are formulating the definition of 'what is urban?' To explain: In India, there are three criteria by which the government defines what is urban, what is a census town, what is a municipality (meaning that it gets facilities like clinics, hospitals, infrastructure, sewage, sanitation, etc.). The first criterion is that the settlement must have a population of 5000 people. Secondly, the settlement needs to have a density of 400 people per square kilometer. Greater Houston is roughly 240 people per square kilometer, so 400 is a very high density. If you take just that density as a criterion of what is urban, India will have the world's biggest megacity which would go from Kashmir to Kolkata and be about 200 miles wide. That's a whole different formation of what the urban imagination! The third criterion is very bizarre—perhaps an old, colonial criteria. It is that 75% of the male population must be employed in non-agricultural employment, which means that that they must be in a factory, or they must own in a shop selling provisions or groceries. If the settlement meets these three criteria, it becomes a town. By these criteria, there are approximately 7500 towns in India. Our thesis is that India actually has over 35,000 towns, which means that India has about 28,000 towns that we are not even recognizing as towns. Some of these settlements that I'm describing are of about 100,000–150,000 people, yet they are run like villages because they don't meet these criteria. So, this is a fundamental structural problem. This not only creates the disparity and polarization in society described in your question, because it essentially marginalizes huge numbers of people from the common resources and deliverables of the nation. You cannot have 75% of the male population in non-agricultural employment, because they're doing both in a very productive way. That's where we need to recognize the issue of flux. We don't need smart cities as rubrics but rather need to recognize the smart agents who are transforming our cities. So, therefore,

India is sitting on what I would call an urban time bomb, which is these unrecognized places. If the government doesn't recognize them as towns and cities, they will not have sanitation infrastructure and will pose massive public health challenges to the entire nation. That's why the work we are now doing also focuses on sanitation infrastructure—how sanitation as infrastructure becomes a way of making place and making cities. This is what I mean by the different scales. I'm recognizing the problem at the meta-urban scale of India through this research, recognizing that sanitation is a crucial component at this at the scale of the neighborhood, etc. With students, we work to find self-sufficient sanitation modes that could then be replicated in these transitioning settlements—the ones that are in actuality already towns but are not recognized as towns. These are the type of transitional solutions that I was referring to. For the government to therefore go into these towns with absolute solutions, with prefabricated housing and build a million toilets—which is what our government is doing—are solutions that don't map onto the transitioning landscape. For a transitioning landscape you also need transitioning solutions in terms of architectonics, but also in terms of urban strategy and planning.

VEs: The whole world talks about decolonization of sorts. Elsewhere in the world, there are new forms of colonization in the form of new agents. Are technological advances strengthening or hindering the democratization of resources in India?

RM: I think we're moving to a post-neoliberal phase. If you see the politics around the world, we have the state interfering more and more in aspects of life, the economy, infrastructure, etc. Right now, we're in a grey zone where a lot of things are happening; the state is interfering, but it doesn't quite know how to interfere. Sometimes, it doesn't do so in productive ways. But clearly the politics that are taking place around the world—from Turkey to India to the US—are leading to the state realizing that planning cannot be a laissez-faire, free market, or a neo-liberal endeavor. In India, the state has broadened sanitation to public health. Soon, they'll realize that, unless they get into the urban planning questions, they can't address any of those issues. They're trying to do this as absolute solutions. The government of India recently claimed that they will deliver 12 million houses, but we have to see where those houses will be built. On the peripheries of the cities with no jobs, transportation, and existing communities? If they do so, they will simply be able to tell their constituents that they built 12 million houses but they have not done anything. The Indian Government declared on 2 October 2019, that India was open-defecation free. This clearly was not true. So, right now, the way the state is getting involved in planning in this post-neo-liberal phase is through absolute

solutions, because they don't understand the transitions that are occurring on the ground, and what are the solutions you would need for that ground reality. So, for example, in the informal settlements of Mumbai, you can't have toilets in every house, if you consider that often there are not even places to sleep inside the houses, let alone place a toilet. So, you must imagine a much more robust, useful, sustainable solution in the form of a community toilet. For me, that's a transitional solution. You can't jump in your aspirations to giving everyone an individual toilet. Sometimes, you must make the transition through community toilets. That's transitional thinking. But for the government, which thinks in absolute terms, community toilets will not result in compelling political rhetoric. These conditions and challenges I am describing have an implication in pedagogy because it will be critical how we train designers in thinking about transitional thinking that would potentially lead us to more relevant solutions.

VEs: A lot of what we're discussing has been decided by elites—elites designing for elites. Then, during our time, we have had elites designing for the masses. Do you think that, now, there is a space in which the masses are taking on the task of finding the solutions for the masses?

RM: Addressing sustainability must come through co-production. The questions are—and that's our role—how do we create the frameworks for that co-production? How do we create new imaginaries of the implications of climate change? If we create dystopian imaginaries of cities that are going to get flooded, without adequately creating the imaginaries of how those transitions can happen, then we do a disservice to society. I think that's where, if we can, as designers, make a clearer framework for what might be alternate settlement patterns, I think the co-production will happen automatically. And part of the reason we don't do that is that we still think in terms of absolute solutions, and an absolute solution is never a framework for co-production. A transitional solution can be. Creating hybrid forms of infrastructure can be an example of this, because then, for example, a facility with public toilets can also be a forum or community center where things can be discussed. The toilet can be imagined as a sanitation or public health hub and extend itself into a community center, etc. You create forms of empowerment through architecture and through keeping the openness of the framework of a transitional solution. Related to that, if you think about it, more than buildings and streets, the thing that is most permanent—and this goes to the question of the elites—is the system of governance. We inherit ancient protocols in the ways that the elite control cities. That's a reason why we are not prepared for disasters in cities, because the administrative structure

is not nimble enough; it is premised on permanence; it is premised on very linear thinking in terms of extending the deficiency and life in the artefact of the city. And that's what I learned from the Kumbh Mela (mapping the ephemeral mega city), which is where I began to think about this question. What happens at the Kumbh Mela is that they have a governance system which changes every four or five months, and by the time it comes to implementation on the ground, the person that is the lowest in that governance pyramid becomes the most powerful, and only reports to two people on top of the pyramid. There, the governance structure itself is a temporal condition. The equivalent of that would be cities that set up a disaster cell, where somebody is made in charge of the disaster cell and in the case of the disaster, that person has more power than the mayor. So, how do you extend that into a more definitive imagination as part of the DNA of the governance of the city? So, if you think about it, the governance structures, the hierarchies of politics, are more permanent than the buildings and the streets, and governance is controlled by the political elite.

VEs: In an era in which many people have a mobile phone before proper sanitation, do you think that the hierarchies are changing? Does the availability of technology and media make it possible to leapfrog these institutional frameworks?

RM: In fact, what we may call the 'soft' city—the city which uses Wi-Fi, software, which uses organizational structures; social media; uses various types of networks—can be contrasted to the 'hard' city—the one with the house, the sanitation system, etc.—in that the latter has lagged a lot. And, in this contrast lies in the grey area of governance. So, if in India, that settlement is not recognized as a town, the hardware never comes, but nothing can stop the software developing, organically, incrementally or by default! This is where it becomes a responsibility for us as designers to create those new imaginaries that can help us make these transitions in terms of the hardware, because, finally, the robust cities will be those in which the hardware and the software are in resonance with each other, like in any good computer. If the hardware is medieval, and the software is cutting edge, you get a disjuncture, which is what we see in the built environment in many parts of the world and, particularly, in India.

VEs: It seems like the definition of goals suggests a more global approach. Previously, we often discussed things like the availability of services and goods, and now in our discussions we're talking about common denominators that have a lot more relevance across cities, rural areas, etc. I'm wondering—how do we teach this?

RM: I think its contingent on us how we define the problem. Any pedagogical track is dependent on the questions that you frame: you frame the wrong question; you get the wrongly trained professionals. We must be more rigorous and audacious about how we frame these questions. If you frame questions in ways that make any single discipline very uncomfortable, it will automatically become much more interdisciplinary. There will be a dependence. It will take the arrogance out of our profession. Often, if we define the problem too easily, then an arrogance will build in the student who becomes a professional, who thinks that they can solve all the problems. We almost must make them lack confidence when they graduate. In today's world, the more we lack confidence, the more we address all the real problems. If we are too confident, then we go back to the modernist agendas; modernist arrogance, the mindset that thinks, 'I've seen the future, and I know what it'll look like'. We need to have students who come out and say, 'We have no idea what the future is going to be, but let's engage together to figure it out!' We set our agendas in preconceived notions; we must erase that programming. Based on what's happening on our planet today, we must remove preconceptions, and therefore, a lack of confidence can be an asset in the condition of the world today. I would say, today if you are confused it just means you are thinking clearly!

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