Sabarmati Riverfront Development: An Exercise in 'High-Modernism'?

A la reconquête des berges du fleuve Sabarmati : un exercice de "haut-modernisme" ?

Krishnachandran Balakrishnan

Indian Institute for Human Settlements, Bangalore, India (kbalakrishnan@iihs.co.in)

RÉSUMÉ

En utilisant l'exemple de l'aménagement des berges du fleuve Sabarmati (Sabarmati Riverfront Development Project - SRDP) à Ahmedabad, cet article illustre comment la catégorie conceptuelle de berge, déjà présente plus particulièrement à Londres et Paris, a inspiré l'imagination de ce que devrait être une rivière urbaine en Inde. Cet article s'attache à revoir l'étendue du projet pour conformer une rivière alimentée par la mousson à la catégorie conceptuelle prédéfinie de berge. L'argumentaire développé dans l'article est que le SRDP peut être vu comme une illustration de haut-modernisme comme l'indique James Scott – à la fois en termes d'ordre visuel qu'il s'efforce de créer et en termes de recours au concept simpliste d'écologie et d'hydrologie des rivières. Cet article conclut avec une discussion sur l'utilité des professionnels de la conception architecturale, urbaine et paysagère de comprendre les spécificités locales des écosystèmes et sociétés et d'utiliser le design comme un processus capable d'aller au-delà des catégories spatiales et conceptuelles simplistes.

ABSTRACT

Using the case of the Sabarmati Riverfront Development Project (SRDP) in Ahmedabad, this paper illustrates how the conceptual category of the 'riverfront', as seen in London and Paris in particular, has shaped the imagination of what an urban river 'should' be in India. The paper examines the lengths to which the project goes to fit a monsoon fed river-scape into this predefined conceptual category of a 'riverfront'. The paper argues that the SRDP can be understood as a manifestation of 'high-modernism' as discussed by James Scott—both in terms of the visual order it strives to create and in terms of the reliance on simplistic conceptions of the ecology and hydrology of rivers. The paper concludes with a discussion on the need for urban and landscape design professionals to understand specificities of local ecosystems and societies and to use design as a process of going beyond simplistic spatial and conceptual categories.

KEYWORDS

Cities and rivers, high-modernism, riverfront development, urban design

1 SABARMATI RIVERFRONT

1.1 The Sabarmati River

The Sabarmati River is a monsoon fed river in the relatively arid north-western part of India. The largest city located on the river is Ahmedabad—the former capital of the state of Gujarat. The river meanders through the center of Ahmedabad for a distance of approximately 11 km, with the channel width ranging from 340 to 600m. The discharge in the river varies widely and depends primarily on the amount of rainfall in its catchment and on the volume of water released from the Dharoi dam which is situated more than 100km upstream of Ahmedabad. Since the construction of this dam, the discharge in summer months has considerably reduced, with almost no water in the channel in the drier years. But in years with plentiful rains, the Sabarmati frequently overflows and floods the city of Ahmedabad.

1.2 Sabarmati Riverfront Proposals

Starting with a proposal by the French architect Bernard Kohn in the early 1960s, there were several attempts to create a 'riverfront' along the Sabarmati in Ahmedabad. Eventually, a proposal—named the Sabarmati Riverfront Development Project (SRDP)—initiated in the late 1990's, backed primarily by the architect-planner Bimal Patel, found enough political and financial support to be implemented. By 2012, the first stretches of the new 'riverfront' was completed.

The central feature of the proposal is the construction of concrete embankments within the existing flood plain such that the channel width is reduced to a uniform dimension of 275m throughout the 11km stretch where the river flows through Ahmedabad city. The flood plains between the existing banks and the new embankments on either side of the river are then filled in to create a new 'public riverfront'. While roughly 20% of the reclaimed land is proposed to be sold to private developers to finance the project, the rest of the land is supposed to have a range of public buildings and open parks and promenades.

1.3 Controversies and debates around the project

The implementation of the SRDP has been controversial for multiple reasons. In particular the relocation of informal settlements which were located within the flood plains had come in for severe criticism—partly due to the exclusionary policies and forced evictions and partly due to the locational and other inadequacies of the new housing which was provided. But relatively less discussion has happened about the simplistic ecological conceptions that guide the project and the visual and aesthetic order that the project seeks to impose on the river. This paper will focus on these less explored aspects of the Sabarmati project.

2 ANALOGIES, CONCEPTUAL CATEGORIES AND SIMPLIFICATIONS

The proponents draw on a range of precedents, analogies, conceptual categories and simplifications to build support for and dispel skepticism about the project. In terms of precedents, the SRDP explicitly draws on existing riverfront projects, mostly from western countries. In particular it uses the examples of the Thames in London to illustrate how large scale engineering and embankment construction can create a public riverfront. In all the images the proponents of the project use in their presentations, the overall emphasis is on showing channelized rivers where promenades on top of embankments overlook a river brimming with water. This particular set of components appears to constitute the conceptual category of 'riverfront' for the project proponents.

But given the ecological setting of the monsoon fed Sabarmati and its highly variable discharge, the one component which is in short supply in this region is the water. To overcome this shortcoming, the project draws water from an irrigation canal constructed as part of an inter-basin water transfer project which transfers water from the neighboring Narmada basin to parts of Gujarat. To ensure the newly channelized stretch of the river within Ahmedabad city remains full of water round the year, a barrage just downstream of the city is used to regulate the outflow of water. In effect what this creates is something closer to an artificial lake, or a water reservoir. Rather than go beyond the existing conceptual category of the 'riverfront' and explore what it could become in the context of a monsoon fed river in an arid region, the project strives to fit the Sabarmati into the existing conceptual categories—even if it means creating a lake between two concrete embankments.

To dispel skepticism about whether the channelization of the river will increase flood risk, the project proponents draw an analogy between the channelized river and a squeezed garden hose—to make

the claim that the total capacity of the original flood plain will remain unaltered, since water will move faster after channelization. Somewhat quaint phrases like 'pinching the river' and 'training the river' are used to describe the transformation of the flood plain. The project documents also claim that the embankments have been designed for a 100 year return period flood, while an examination of data from the Central Water Commission shows that hydrological monitoring of the Sabarmati started only in 1978. Clearly there is scant empirical basis for computing a 100 year flood, especially as we move into periods of increasing climate variability.

Besides the imperfect analogies and simplifications the project proposal makes, the one central point which the publications and presentations by the project proponents fail to mention is that a 'river' is an ecological system in itself and not just a channel with water. The visual aesthetic the project proposes is also one which removes any traces of a riverine ecosystem and instead emphasizes stark modernist exposed concrete embankments, manicured lawns and shrubs and regimented plantation of trees.

Through an exploration of the analogies, conceptual categories and simplifications that the project proponents use, this paper argues that the SRDP can be understood as an example of 'high-modernism'—as discussed by James Scott (Scott, 1998)—attempting to fit a river into a pre-existing conceptual category of a 'riverfront' which has been imported from a completely different ecological setting. Scott describes 'high-modernism' as an ideology that draws legitimacy from scientific and technological progress to impose visual and geometric order on society and nature, while at the same time working with radically abstracted and simplistic notions of society and nature.

3 THE ROLE OF 'DESIGN' IN GOING BEYOND EASY CATEGORIES

Despite the controversies and its expression of 'high-modernist' ideology, the SRDP has led to some much needed discussion about the need for designed public spaces in Indian cities. But unfortunately much of the emphasis appears to be on replicating similar 'riverfront' projects in other Indian cities. At present there are 'riverfront' projects which are at various stages of proposal or implementation in at least seven other Indian cities, including one on the Brahmaputra River. The paper will therefore conclude with a discussion on 'design' as a process of going beyond simplistic spatial and conceptual categories, especially in the context of urban and landscape design which needs to draw on specificities of local ecological and social settings.

LIST OF REFERENCES

- Environmental Planning Collaborative (1998), Proposal for Sabarmati Riverfront Development Ahmedabad. Accessed on 13 November 2017 from: <u>http://sabarmatiriverfront.com/UserFiles/File/srfd-feasibility-report-epc.pdf</u>.
- Sabarmati River Front Development Corporation Limited and HCP Design & Project Management Pvt. Ltd. (2011), Sabarmati Riverfront Development: Integrated Environmental Improvement and Urban Revitalization. Presentation at *India Urban Conference*, Mysore, November 2011. Accessed on 20 November 2017 from: http://iuc2011.in/sites/default/files/presentations/Sabarmati-Riverfront-Development comp.pdf.
- Scott, J. C. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. Yale University Press.