The Sedimentation of Cultural Space: Stratification Patterns of Mumbai and Bangalore

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Modernizing processes in cities are shaped by past events which produce very different cultural spaces. Using the sedimentation theory of cultural space, the modernization of two cities in India, Mumbai and Bangalore, is examined here. The authors argue that the cultural past of the two cities makes them culturally different entities.

Within national cultures, not all cities are modernized in the same way. There are different forces from the past that interact with the processes of modernization to create very different cultural spaces. For example, in India the modern city of Mumbai (formerly Bombay) has undergone similar processes of modernization as the city of Bangalore (currently being renamed as Bengaluru), but they remain culturally different entities and these differences can be attributed to the differences in their cultural past. This is because the cultural present is embedded in the cultural past, and the present forces of modernization must not only be embedded in the cultural spaces of the past but they must also be integrated into its archeological strata. To explain this phenomenon, a different model of cultural space has been proposed. The *sedimentation theory of cultural space* is such a model (St. Clair, 2007). It is based on the metaphor of the "Archeology of Knowledge" in which Foucault (1969) envisions knowledge as layers of human activity deposited in a cultural space over time. A modification and expansion of this metaphor can be found in the sedimentation theory of cultural space, which not only envisions time as the accumulation of social practices layered in cultural space, but also provides epistemological mechanisms that explain how reality is socially reconstructed within a cultural space.

The theory argues that the present is embedded in the cultural past. The dynamics of change in a cultural space occurs in the *co-present*, a place where the reconstructed past is linked with the present. It is in this co-present space that the social construction of cultural space takes place. Some events are retained and defined as belonging to the past and are designated as the *new-past*; other events are modified, redefined, or restructured in the present and function as the *new-present*. It is this social and cultural *habitus* (Bourdieu, 1977, 1984) that explains how meanings are contextualized and interpreted within the co-present. Rather than viewing culture as a super-organic entity, a collective consciousness, existing outside of human experience, culture is considered to be a set of practices, habits, and recipes for daily interaction. It is by using the past to make sense of the present that the social construction of culture comes into existence (Mehan & Wood, 1975). Such practices are internalized through daily interaction in the form of social scripts (St. Clair, Thomé-Williams, & Su, 2005) and other forms of structuration (Giddens, 1984). Cultural change involves the retaining of some cultural practices along with the modification, revision, and re-invention of events in the co-present.

<div align="center">The Dynamics of Cultural Change</div>

Culture is a complex phenomenon. It includes the religious practices of a region, the kinds of architectural developments embraced by modern cities, recurring ethnic practices, language loyalty, and other aspects of the milieu of social practices that constitute culture.

Culture is a constantly changing phenomenon. Globalization has not only affected world cultures but also the world economic system with nation-states increasingly becoming influenced by a capitalist world-economic system (Wallerstein, 1974, 1980, 1989). Globalization and cultural exchanges have resulted in complex forms of cultural hybridity (Pieterse, 2004).   While modernism has to do with the belief in steady-states that are either in equilibrium or near equilibrium, the postmodern world does not address the nature of steady-state systems. It is concerned with the dynamics of change and the nature of this change is closer to the behavior of non-linear systems. It is about change in a cultural flux. The late Ilya Prigogine (1983) and colleagues (Prigogine & Stenger, 1983, 1997) addressed these kinds of concerns in their work on "dissipative structures." They noted that from one perspective such structures contained order and structure and from another perspective they were unordered and in chaos. Their concern was in how a steady-state or a system in equilibrium dissipated and then reorganized itself into a new steady-state. How does order emerge out of chaos? When the old system began to break up, the process was irreversible. It appeared as though there was no order when this dissipation occurred. However, there was order in the flux of change and it emerged as a new system in equilibrium. It can be argued that postmodernism is the quest for a new order within a state of dissipation. Postmodernists are trying to make sense of the chaos. They are beginning to see the signs of the new system and this is what they are writing about. Because of the novelty of change, such systems are difficult to express. This difficulty has been interpreted by some as a kind of nihilism, but it is not. The sedimentation theory of cultural space is presented within this context. It is a theory of cultural change that is trying to find a new order in the flux of cultural change. For a detailed discussion of the sedimentation theory of cultural space see St. Clair and Williams (2008).

<div align="center">The Postmodern Approach to Cultural Change</div>

MIT researchers have examined how modern communication systems function without central control and move intelligence to the end user (e.g., Lippman & Pentland, 2003). They studied these networks in terms of their "viral architecture." The term "viral" was adapted from biology for use in marketing, computer technology, and the social sciences. Just as a virus in a biological environment can replicate and become diffused within a system, it is argued that informational objects and processes can also expand within communication networks. Lippman and Pentland (2004) considered viral communication to be a consequence of economic, social, and technical forces within communication networks. Lippman and his colleagues have noted that such systems create the potential to embed communications into the sociology of everyday life. They have discussed the fact that this phenomenon has expanded greatly within modern society. They have also argued that these new forms of connectivity facilitate the formation of new social behaviors

In a series of insightful articles, Miller and Bruenger (2005, 2006) have discussed similar views of cultural change under the rubric of viral culture. They have expanded their research on viral communication theory beyond the work of Lippman and his colleagues (Lippman & Reed, 2003; Lippman & Pentland, 2004). In a postmodern society, the use of viral communications has shifted. What Miller and Bruenger (2005, 2006) have done is to expand social aspects of how viral communication systems operate with a postmodern society. For example, the role of agency has shifted from one of vertical control to the horizontal transmission of information of the same generation. With the advent of these new forms of computer-mediated technology, they have also become producers of knowledge within the new viral culture. In essence, societies bend technology to their own uses. These new mediated networks are no longer locally restricted and participate in various forms of global communication. Most importantly, viral communication is no longer associated with what people buy. It is what people do. It has become the way in which people experience life. There is a new kind of social and cultural habitus associated with this new virtual culture. The forms of social and cultural capital have changed. As Bourdieu (1984) has noted, capital takes time to accumulate and reproduce itself. However, such is not the case with viral capital. Miller and Bruenger (2005) have noted, "within viral networks viral capital accumulates and reproduces very quickly" (p. 8). It is an infectious cultural process.

The Cultural Landscape of Mumbai, India

The city of Bombay (currently, Mumbai) was not one united land mass. It consisted of seven islands and formed a part of the kingdom of Ashoka. The ownership of these islands was under Hindu rulers prior to its control under the Mohammedians of Guhjerat, a period that lasted for two centuries. The mosque of Mahim is a visible reminder of that era. In 1534, the Portuguese took hold of this archipelago by force and began to build many Roman Catholic churches there. The most notable is the St. Andrews church at Bandra. When the Portuguese arrived, they referred to the area as "*bom bahia*" (good bay). Over a century later, this area was given to the British as part of a dowry between Portuguese royalty (Princess Catherine of Braganza) and King Charles II of England. By this time "*bom bahia*" became "*bom baia*" and it was further corrupted by the British to "*Bombay*." To the locals, however, the area was called "*mumba*" after the Hindu deity "*Mumbadevi*."

What changed Bombay into a united land mass was the reclamation project known as the Hornby Vellard. Governor Hornby began a second reclamation project in 1772 to fill in the shallows between the islands of Parel, Worli, Bombay, Mahim, and Mazagon. The projects were completed in 1784. By uniting these islands, many significant changes followed. Causeways were built to the mainland and railways and roads were built. The first railway (21 miles long) in India was built in 1853 between Bombay and Thana. What do these transformations mean? What was once a group of islands was united into an archipelago. New layers of soil were placed on the sandy marshes. The old-past was not retained as the new-past but replaced by the new-present. The landscape was transformed. With the advent of a modern transit system, these changes were enhanced.

There were several major lakes in the region of Bombay and these supplied water to the city. Water was piped in from Tulsi, Vehar, and Tansa lakes. The infrastructural changes to Bombay made it a commendable maritime culture. After the Suez Canal was opened in 1869,

it became the major seaport in the Arabian Sea. The Stock Exchange was established there in 1875, a good sign of economic progress. During the Second World War, it was the home of the Indian Navy. Hence, it is not surprising that Bombay became the seat of government. In 1947, the British left the region, and the larger area known as Bombay was split in 1960 into the states of Maharashtra and Gujarat. The city of Bombay became the capital of Maharashtra. What does this mean for a sedimentation theory of cultural space? It means that the past was not renewed as the new-past, but was redefined and even reinvented into new political and social networks.

What does it mean to say that Bombay is a maritime culture? It means, in essence, that it is a conduit for diasporic activity as large masses of people passed through its ports. It means that it is an economic center that not only receives goods from outside of India, but also transports products from this subcontinent to all parts of the world. Being a maritime culture also means that the geography is rich and diverse with diverse wildlife, both aquatic and aviary.

Finally, in 1995, the Shiv Sena led government changed the name of the city to Mumbai. This is an interesting situation within the cultural space of this city. The cultural past of colonialism was redefined. This is the equivalent of placing cement over the top soil so that nothing associated with the past will continue to grow. For example, Victoria Terminus is no longer associated with British rule. It is now called Chhatrapati Shivaji Terminus after the legendary Marathi king. The international airport bears the same name. The imposition of this new layer of the mythical past over its colonial layers of cultural space means that the new patterns of sedimentation form the new-original. They become the foundation for the current generation of inhabitants in Mumbai. The intent is to obliterate the colonial past. One of the ways in which the mythical past is renewed is through Bollywood, one of the largest and most successful film industries in the world; it is housed in Mumbai.

The Cultural Landscape of Bangalore, India

Bangalore is not near the ocean. It does not even have a major river running through the city. It is, however, a city that has many parks and gardens and is conscious of the beauty of its buildings and public places. For this reason, it is called the Garden City of India. Bangalore is the capital of the Indian state of Karnataka. It has a population of 6 million inhabitants (the third largest city in India). Bangalore is a manufacturing city. It is involved with heavy industries, aerospace, and defense. Bangalore is the Silicon Valley of India and it accounts for 35 percent of all exports. Thus the economy of Bangalore differs from the maritime economy of Mumbai.

In 2005, the people of Bangalore asked to have the name of the city changed to Bengaluru. The rationale for this change is similar to that given by the inhabitants of Mumbai. They wanted to create a national identity that reflected their mythical past. They did not like the anglicized version of the name. In Kannada, it is called Bengalooru. It is a name that goes back to the 9th century AD. The old Kannada name was "Bengaval-uru" or "the City of the Guards." The resolution for this name change passed the regional government and it is now being reviewed by the national body of the country. Once again, the past has been either redefined or reinvented. The older name in Kannada may not have been known to the populace and so one could argue that it was re-invented; it has become the new-original.

The question of regional identity became a problem in 1996 when the Miss World Contest was held in Bangalore. Those who were for redefining the past in a new way of life, the new-present, spoke highly of that international coverage. Those who wanted to retain the old ways and associate with the old-past reacted vehemently to the internationally staged event. They attacked all things international. One of the targets of attack by local farmers was a local KFC franchise. They argued that Western food is not needed in Bangalore. Ultimately, however, those who welcome the future (and/or favored Western influences) won.

The soil of Bangalore consists of red laterite and red, fine, loamy soil and even red clay soil. Since architecture reflects the natural building materials of a province, it is not surprising to find many beautiful red buildings marking the landscape of Bangalore.

It should be noted that unlike Mumbai, which rests on a major seismic zone, Bangalore is not affected by major seismic activity. It is a place where many high-rise buildings could be constructed.

Bangalore is one of the major economic centers in India. It is the fourth largest market and the fastest growing market in Asia. It has the highest per capita income for any Indian city. The reason for this is because Bangalore is the headquarters for several major industries, These industries range from giant land movers to the aeronautic industry. As noted earlier, Bangalore is the Silicon Valley of India. This city is also connected internationally with direct flights to the major cities of the Middle East and Europe. Bangalore is also well connected to the rest of the country by its modern railways. It has the third largest population in India (Bombay has the first) and the 27th largest in the world. Most of Bangalore's population is Hindu (79.37%). Muslims comprise 13.37% of the population. Christians and Jains make up 5.79%.

Bangalore commands the largest mass media markets in India. It has many national newspapers. It also has numerous AM radio stations. The FM stations are government run. It is not surprising that Bangalore is the second most literate city in India, after Mumbai. A large number of the software engineers in India live in Bangalore, and there exists a booming internet industry. It is a modern-minded city. In terms of the proposed model of the sedimentation of cultural space, Bangalore is a city that dwells in the new-present and the new-originals.

Modernization and the Differences in Cultural Space

It has been argued that the present is embedded in the past. In a world in which modernization and globalization reflects the present, one cannot help but notice that many of the major international cities differ in significant ways from each other regardless of the fact that they share the same influences. Given the model of the sedimentation theory of cultural space, one can equate these changes to a major flood of new information that overtakes these cities. In a flood, new materials are brought into the region and deposited. When the water recedes, these materials are deposited. They form the new-present. However, many areas of the city are cleansed to once again renew the past. When this happens the new-past competes with the new-present. This is what gives these international cities their unique cultural spaces.

There is another kind of change, however, that has to do with urban renewal. When international cities build cement highways between cities, they are changing the landscape forever. When international cities construct high rise sky scrapers, they are burying the past in

order to promote the future. This is the equivalent of creating layers of thick cement over the native soil of the past. It prevents the past from ever re-emerging. These layers create a new social construction of reality, the new-original. This can be done by constructing modern facilities or by developing new symbolic worlds that will obliterate those of the past. The name changes associated with Mumbai and Bengaluru are examples of these kinds of symbolic change. They are used as a political weapon that redefines the past and creates a new-present. Those that promote such change argue, and rightfully so, that their own past was obliterated by the colonial forces of England, the Near East, and Portugal. What they are doing, in essence, is returning to their former identities and for this reason they call on the gods and goddesses of the mythical past as avatars who symbolize their new-world. They re-invent the past and make it their new-original. Regardless of what forces of modernization may impact on a city-state, the past never dies. It is revised, redefined, modified, or re-invented.

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