

**RESEARCH PAPER****Urban Morphology: A thorough Comparison of Modernist and Postmodernist Town Planning, Unveiling Systematic Neglect of Social and Human Factors****¹Muhammad Taimur Sarwar and ²Faiqa Khan***

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***Corresponding Author:** Faiqa.khan@umt.edu.pk**ABSTRACT**

This research paper undertakes a meticulous critique exposing the insipid simplification and impracticality inherent in modernist and postmodernist town planning. The pivotal role played by Jane Jacobs, whose theoretical contributions have significantly influenced the criticism of these approaches, is a focal point of this analysis. Jacobs's keen insights into what a city stands for, emphasizing the vitality of local communities and human-scale urbanism, serve as a cornerstone for reevaluating contemporary town planning principles. This oversight is distinctly noticeable in the paradigms of modernist and postmodernist town planning. In the aftermath of war, a fervent push to transform town planning into an applied science inadvertently resulted in the loss of integral elements, such as the city's collective memory, desires, and spirit, alongside the importance of place and art of place-making. The paper contributed to a broader understanding of urban morphology and advocates for a more inclusive and sustainable vision for the future development of cities.

KEYWORDS: Modernist, Morphology, Postmodernist, Town Planning, Urban**Introduction**

Effective From 'more' to 'bore' (Rohe, 1959) in merely four years suggests some rudimentary weaknesses in the premise suggested by the modernist masters. Holston's critique of modernism can be summed up using the ideas of Mies V. and Venturi, two prominent architects from the 20th century. When he said, "bland simplification means bland architecture" (Venturi, 1977) Venturi identified these inadequacies. The fact is that the modernist planning approaches do not accurately represent social and physical realism. As Holston argues, they over-emphasize rational forms over reasonable applications. Contrarily, Jane Jacobs (1916-2006) an urban writer and activist, proposes a vision/model of the city that is more accurate, more descriptive, a vision that is ultimately implementable in reality as opposed to Le Corbusier's Radiant City.

This essay deliberates modernist planning approaches and examines their influence on the cities developed on these planning principles. And compare the apt examples of urban planning as embodiment of Jane Jacobs' vision.

Literature Review**Modernist Planning Approaches**

Modernism had its roots in the Enlightenment period. The modernist ideas are mostly based on the work of structural functionalism or totalizing theory. Thus, the key concepts in plan are of homogeneousness, desirability of consensus and order. The

modernist believes that desire arises from "lack," and thus it is required to be "tamed" but ironically this idea of order and control also damages its original idea of free-flowing expression. Contrarily postmodernists believe, desire can "be conceived as a forward movement, a flight towards an object which always eludes our grasp, the attempt, never successful but never frustrating, to reach the unattainable by exploring the paths of the possible" (Lecercle, 1985). The triumph of postmodernism lies in embracement of ideas like; flux change, chance, orderly disorder, spontaneity, heterogeneity, diversity and toleration.

Inaccurately Represented Social Structure

"In the post-war rush to turn town planning into an applied science much was lost – the city of memory, of desire, of spirit; the importance of place and the art of place-making..." (Sandercock, 1998). A city is comprised of many layers and complex urban systems. For example, connection of the dwellers and its environment, physical or visual impact on a visitor, form, energy, density, social setup, building typologies, narrative histories and stories, economy, climate, growth and many more. Yet modernist planning over simplified the reality and gave very sterile planning solutions as evident from the 1933 CIAM charter quote; "The keys of town planning are to be found in the four functions: housing, work, recreation and traffic" (CIAM) (J. Tyrwhitt, 1933).

Perhaps the most injurious idea of modernist mindset is the fact that it believes that science is the only reality and all solutions must be found in its own premise. For them history, tradition, and culture are worthless ideals. They discard any model that would suggest retrofitting the existing city and would believe that the only solution is a complete fresh start, a clean slate. One of such examples is of Islamabad the capital city of Pakistan. The earliest dwellers of Islamabad were immediately faced with the problem of non- existence of house hold staff. Doxiadis being a true modernist disregarded the local life style and designed a city for elites without housing for the 'help', in a country where even a lower middle-class household cannot function without them. As a result, the city government had to temporarily allow a squatter settlement right in the heart of this new modern city. And now even after 40 years city government is unable to move or upgrade these settlements. Like an eye sore these settlements sit in most expensive area of Islamabad, mocking the modernist elite commercial zone right across the street. Hence perhaps justifiably postmodernists believe that modernism is like a plague that has spread across the world, annihilating the spirituality of tradition and culture wherever they were found.



Fig 1 Squatter settlement sector F-6, Islamabad

Impractical Zoning

The elementary characteristics of modernist city are single family units, dependence on car for transportation and a harsh land use separation. In Le Corbusier's Radiant City planning, the superblock idea is conceived as separating residential areas, distributing them into specific high-density zones, while keeping large distances between them. These spaces were designed to be inhabitable. Usually, these spaces were filled with a combination of green space, parking lots, roads, etc. In this model, the main consideration was given to the automobile and how it would be used for commuting between the two blocks. However, a person without an automobile was not considered in the design paradigm. For example, downtown Detroit was developed using the superblock idea. But consequently, too much land was left vacant between the buildings and too many parking lots were developed without consideration for human preferences. As a result, the moment the city started to economically decline, all of these empty spaces started giving a feeling of abandonment and emptiness.

Inversely postmodernists suggest mixed land use which enhances the vitality of a place. By encouraging public transport, walking or cycling they suggest bringing more people in public places and thus heighten the sense of security.

The causticness of the fact is that the problem at the turn of the 20th century was over crowded cities, whereas at the turn of this century we are struggling to control the low- density sprawl. In trying to build better cities modernist stumble upon issues ranging from crime ridden, inhabitable spaces, boundlessly expanding cities and above all placelessness.

Over-reliance on Optimal Theoretical Outcomes

"The search for Truth by the modernists was inevitably guided by the ideal of establishing Absolute Postulates from which all other "facts" can be explained by linear, deductive logic. Efficiency and competency in the educative process are geared toward a banking education whereby conventional master signifiers or their derivatives are stored to be capitalized" (Freire, 1985)

Le Corbusier wanted to create an ideal order by disentangling the "chaos" of the existing city fabric. In The Congrès Internationaux d'Architecture Moderne (CIAM), in which he played a significant role, no consideration was given to elements that make up a city which go beyond functionality and efficiency. City planning became "a science of codes, plot ratios, setbacks, percentages of open space, standardized road patterns" (Newman & Kenworthy, 1999). No consideration was given to things like disaster response, overpopulation, economic crises (Detroit), or other non-optimal potential outcomes. These theories did not acknowledge the variation in application and human experience. Everything seemed to be so functional and proper that no such considerations of errors or accidents were even mentioned in any of these plans and charters. Furthermore, CIAM strengthened the strict professional separation of designers and planners as an ego-driven profession, a class above others. As a result, planning practice "changed from a kind of craft based on personal knowledge of a rudimentary collection of concepts about the city, into an apparently scientific activity in which vast amounts of precise information were garnered and processed" (Hall 1988, p. 317). The concept of Fordism and Taylorism were so much embedded in them that the master plan or the city seemed to be a part of system or a machine. "City planners adopted the thought ways and the analytical methods that engineers developed for the design of public works, and they then applied them to the design of cities" (Webber, 1988)

Today, the concept of ‘efficiency’ embodied in modernism can only be considered as a contradiction, as many of these cities are examples of inefficiency even in terms of automobile traffic among many others in-competencies.

Disregard for context

“I propose one single building for all nations and climates” (Ley, 1989). With this proclamation Le Corbusier set foundations for a city where planners can apply universal solutions with only consideration to utilitarian function and disregarded boldly any vernacular place-based traditions. Thus, began an era of “form follows function” philosophy. Simple geometric forms substituted the centuries old local context, devoid of regional, cultural or historic reference. The local ways lost respect in the eyes of the city developers. They sought to enforce the designs of their ego driven imagination, instead of accustoming themselves with the place that they were working on. Gropius, Mies van der Rohe, and Le Corbusier played the main role in epitomizing this perspective. “In their rush to create something new, modernist planners and architects built ‘spaces not places’” (Ley, 1989). Modernist believed in ‘tabula rasa.’ Hence, they sought to introduce completely new environment by clearing large number of areas. For example, Le Corbusier’s plans for central Paris as described in *Radiant City* shows no conciliation towards the pre-established city. The city was designed as a visual form but the fact that its monumentality was only comprehensible when seeing from a distance, rescinds its worth. There were no contextual clues to the rich traditions, urban histories or esthetic taste of the Paris. It was in essence any other city builds in any other place in the world. “Sweeping away history and starting anew was viewed as key to the salvation of our cities” (Irving, 1993)

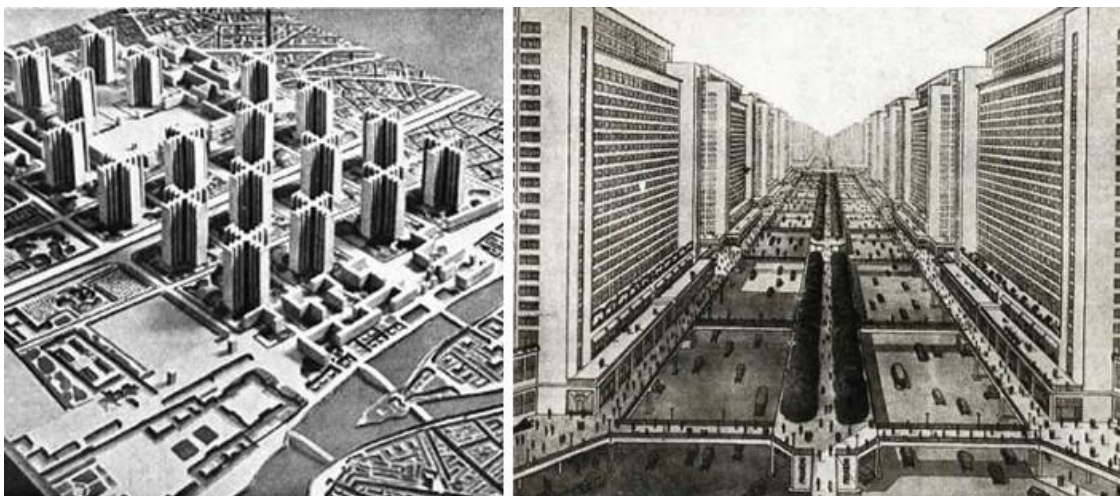


Fig 2 Le Corbusier’s proposal for Paris

However, these ideas soon started to deteriorate as evident from the Hall’s reaction to Levittown, few years after its construction. He states that “the residential streets are slightly too long and slightly too wide and slightly too straight, so The Rise of Modernism and the Decline of Place despite the variations – the overall result is monotonous and vapid” (Hall, 1988). Lewis Mumford an American historian and sociologist noted in his studies that the “pedestrian scale of the [traditional] suburb disappeared, and with it, most of its individuality and charm. The suburbs ceased to be a neighborhood unit: it became a low-density mass” (Moe & Wilkie, 1997). Similarly, in Islamabad modernist planner overlooked consideration of topography, as a result the streets and roads become ragging rivers in the rainy season of monsoon. In summers temperature reach up to 50o C and it’s impossible for pedestrians to travel between the sectors. And the worst of all is no consideration given to the natural environment of the

place. As Islamabad is built in the foot of Margalla hills, so many beautiful seasonal water streams run through the city but unfortunately due to the insensitivity of modernist towards the topography and environment a lot of city's black water is released into these streams and thus poisoning the environment and harming the local flora and fauna.

Modernist bureaucracy ultimately produced for decades an environment that was antisocial and against human natural instincts. Though some still fight for the status quo yet many urban planners are now reacting against it.

Fetishism of Automobile

Although personal car was introduced in 1890's but it became popular from 1910 onwards and by the 1920's enough cars were pouring into the city to invoke thought in planners' circles about problems arising due to this desirable beast on the unequipped city streets. So, the solution that they came up with was to combine smaller city blocks to form bigger super blocks. They removed the smaller streets running through the old block and broaden the roads between the super block. To avoid smaller streets, housing was stacked up in multi-story buildings and the space thus became available on ground was used for parking. Modernists designed cities as revolutionary utopias where automobile was seen as an emblem of modernity and advancement. Le Corbusier commented in one of his quotes "The automobile is a new development with enormous consequences for the large city. The city is not ready for it I tell you straight: a city made for speed is made for success" (Corbusier & Etchells, 1971). Here he declared his unconditional faith in the speed of automobiles. He even used his arguments to motivate industrialists of automobile to patron his new projects. The projects where people will have to rely on automobile to travel between strictly zoned areas and thus will be forced to buy cars to meet their needs. The passion for the car and mechanical world "led him to become the main supporter of both the city designed around traffic needs and architecture inspired by industrial processes." (Fernández-Galiano, 2006)

The beginning of Fordism in 20th century was additional amplification of mechanism. Three main views of the Fordist hypothesis were: The Rise of Modernism and the Decline of Place specialization, mass production and standardization (Calthorpe & Fulton, 2001). Driven by North American consumerist culture, each had a deep influence on the built environment. To facilitate the movement, streets became specific in their functions. Earlier roads were for pedestrians, community socialization, vehicles and places of children's play. But for modernists people were threat to the new found speed on the road. Intersection were undesirable for the flow of traffic. In new city designs pedestrians were separated from streets which became channels for cars not people. This concept was implemented in Clarence Perry's neighborhood unit and 1927 plan for Radburn the 'first town for the motor age' (Moe & Wilkie, 1997) But as a result land use as well as streets lost their multi- faceted nature. To put it in simpler terms highways sliced right through the center of neighborhoods, many times targeting communities cause according to the 'scientifically' deduced formulas roads had to be at least 100 feet wide even in densest of urban areas. Because of the noise and pollution, land values drop along these highways and consequently they became barriers that divided the cities into fragments. Today modernist zoning codes have established the fact that cars rule the land. Because parking requirements normally dictate all other aspects of a project the designers and planners have to surrender to the assumed primacy of the automobile.

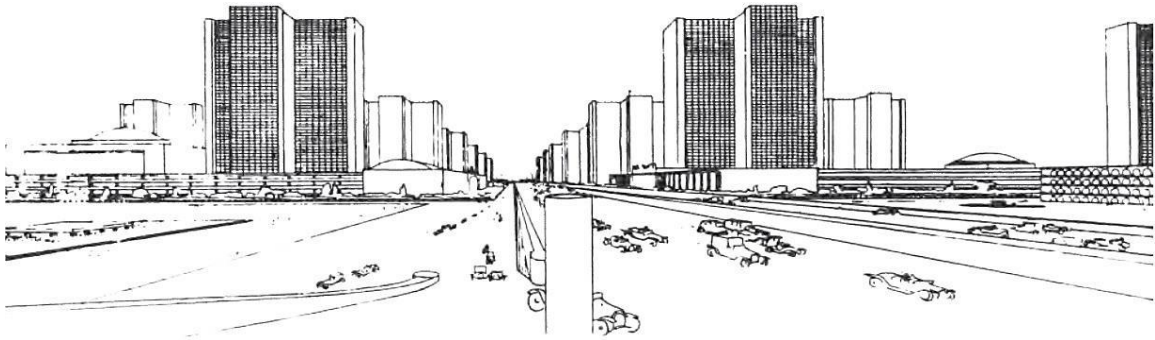


Fig 3 Le Corbusier's proposal for a modern city of three million inhabitants, with no fixed location, 1922

Jane Jacob's contrasting view of city:

"There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans." (Jane Jacob's, 1961).

Jane Jacob was a journalist and an activist living in Greenwich Village, New York. She advocated for more people centered city planning as opposed to the ideals of modernist planners of her time. She insisted for the favored bottom-up planning originating from local communities instead of top-down orchestrated plans.

Jane Jacobs' vision

Jane Jacobs looked at cities as ecosystems and living organism. She argues that over time neighborhoods buildings and streets work as dynamic living beings and they change in retort to the way citizens respond to them. In her works she describes each element such as parks, neighborhoods, governments and economy and how they play their role in this ecosystem similar to the way they work in natural ecosystems. By putting these elements in this elaborated metaphor Jacobs helped planners to understand cities better. She was a strong critique of tenets of the Athens charter. In her writings she talks about four basic things; first, as opposed to the strict separation of residential zone recommended in Athens Charter, she promoted mixed land use, small blocks as opposed to super block, concentration and aged buildings as opposed to new developments that refuse to borrow from past.

She was a major promoter of mixed land use, according to her, a blend of diverse activities makes a place livelier. In her most famous work, *The Death and Life of Great American Cities*, she responds to the modernist unjustifiable desire to create 'order' in the cities by explaining; "Intricate mingling of different uses in cities are not a form of chaos. On the contrary, they represent a complex and highly developed form of order." (Jacobs, the death and life of great American cities, 1961) Jacobs believed that cities should be full of surprises, complex and untidy. A good city is pedestrian friendly and enhances social interaction. Lanes should curve around neighborhoods and be short. They should increase biking, walking and public transportation over automobiles. Habitable neighborhoods involve mixed-use buildings like retail on ground floor and housing above. "The ballet of the good city sidewalk never repeats itself from place to place, and in any once place is always replete with new improvisations." (Jacobs, The death and life of great American cities, 1961)

A neighborhood that consists of some houses, some shops and some offices will have people on the street around the clock. She preferred corner stores, pocket parks and newsstands where public interaction can happen casually. She saw that not only does this contribute to livability but also "eyes on the street" could make neighborhoods safe as

well as supportive. Jacobs's city is like a mosaic of different architectural styles, heights and people of different ethnic, racial and income groups living in same vicinity. *"Vital cities have marvelous innate abilities for understanding, communicating, contriving, and inventing what is required to combat their difficulties... Lively, diverse, intense cities contain the seeds of their own regeneration, with energy enough to carry over for problems and needs outside themselves."* (Jane Jacobs, *The Death and Life of Great American Cities*) Jacobs strongly stress upon the "web" of sensitive relations which holds an area together. She believes that in order to maintain this "web" a process of slow "rebuilding process" should be adopted "building by building" and where ever possible "rehabilitation and replacement" should be done.

Although earlier planning theory felt that high density was blamable for filth, crime and many other problems in the city, but Jacobs proved them wrong. She demonstrated that high density is imperative for prosperity and economic growth of the city. She revealed the dissimilarity between high density and overcrowding and proved high density is key in formation of vibrant communities.

Jacobs cast new light on the characteristics of local economies. She questioned the rulebooks and developed a prototype of local economic development grounded on the ideas like, adding new work to old, small businesses, and urban entrepreneurs. By concentrating on people, Jane Jacobs narrowed down three principles that she believed should dictate urban design: mixed-use, density and permeability.

Sacchan Town as Embodiment of Jane Jacobs' vision

If one needs to find a place where original, uninfluenced urban planning is still practiced, northern areas of Pakistan might be just the place. Lying in the Himalayan Mountain range system, the area has many pockets that virtually stayed unaware of the world around them. This created a perfect environment for development of housing practices that are people centered. Here I will discuss one such town called Sacchan tucked up in a small bowl- shaped valley in lower Himalayas. Housing in this town is in the shape of a tight cluster. As this is an agricultural town, the least amount of land is used for housing. This type of planning allows the dweller to practice their existing social values to the best as these values hinge on close family ties. The clustering of one dwelling to another with abutting walls reduces heat losses and thus saves huge amount of energy cost. Similarly, being closely packed reduces the cost of sewer, public ways and electricity a lot. The cluster organically moves along the streets and pathways in such a way that it allows privacy while catering for the public interaction. Like many other towns of the area Sacchan's winding maze open up into a central courtyard type space in the middle of the town, this space act as a social hub for the entire neighborhood. The sides of this space generally comprise of back walls of the adjoining houses. These walls are adorned with traditional verandas, small shops and sitting areas build by the community. The elderly of the town spend most of their day hanging out in these verandas and thus keeping an eye on the women and children as the younger men go about to work in fields or go to nearby towns for work. This generates a constant sense of security among the people of the town.

Because of the nonexistence of 'bylaws', as we understand them, there is always space for building a house next door for the newly wedded son. This phenomenon allows people to stay in the community despite its remoteness and simple ways of life.

As tourism is one of the larger industries in the area after agriculture and cattle farming, many among the youth are now drawn towards driving off-road automobiles for the tourists. But these automobiles have not been allowed to penetrate into their homes by the community. Yet this does not create issue for the drivers as due to the tight

formation the walking distance from one's house to the automobile parked outside the cluster is always short and comfortable.

After the earthquake of 2005 most of the town was destroyed like many other in the region. This allowed many N.G. Os and experts to come to these areas, who tried to plan anew for these communities. But communities understand the tremendous benefits that they were reaping from their style of planning and therefore insisted on rebuilding in their traditional fashion and only allowing experts to intervene in structural improvements for earthquake resistance.



Fig 4 Memory sketch of Sacha Town square

The case study of Sacchan demonstrate that the urban planning as promoted by Jane Jacobs is perhaps the most instinctive way of planning for any kind of human settlement. Therefore, when Modernists tried to drift away from humanistic view, in an attempt to mimic machinery, they failed to go very far. The main agenda of modernist was to make cities efficient but in their futile attempt they lost the efficiency that was embedded in the traditional planning as evident from the case of Sacha. As showed by Jacobs as well as in this case study the traditional planning is a catalyst for more vibrant lifestyle, which enable the neighborhood to be more attractive and livable. The high density allows neighborhoods to become more secure and as a consequence more economically sound. And lastly the fact that given the opportunity the Sacha residents chose the traditional style, verify that the 'chaos' as seen by modernist in this type of planning is in fact the 'complex order', the 'ballet' of the city elements as described by Jane Jacobs.

Conclusion

The modernist planning approaches do not accurately represent social and physical realities. They over-emphasize rational forms over reasonable applications, as argued by Holston in the statement prompted for this essay. By recognizing the inaccuracies of modernist thought, one finds numerous examples of cities suffering from the repercussions of modern movement. Whereas the emergence of true intellectual like Jane Jacobs probably saved many more to end up with similar fate. The presence of communities like Sacchan substantiates validity of knowledge embedded in tradition and culture. And are excellent illustrations of how one should learn from history, as opposed to the Modernist insensitivity towards the past.

Thus, it is safe to say that Modernism encourages inferring architecture according to defined abstract principles and denies our natural instinct by promoting sterile, inhuman form. It poses a suffocating effect on cultures. While the developed world can afford to manage and adapt the modernist dogma, the poorer developing world is stuck with the faulty system provided by it and thus has suffered the most. Modernists fail to recognize the value of historic and vernacular. For them past is rather reprehensible, a reminder of errors and thus only worthy of eradication. The core error of the modernist way is that it allows one or a few elites with an agenda to define for others and if that was not enough it moreover tended to severely limit the creativity of those few designing elites too and thus 'made' rather than 'created' boxes for mechanical human beings to live, work and travel in.

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