PRACTICE

Design Challenges in Present Day Housing: Learnings from Tara Apartments

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ABSTRACT

This essay addresses social aspects of housing which are examined concerning a Master architect's work. Tara Apartments, designed by Charles Correa is one of the path-breaking designs that combine modern living with India's traditional social lifestyle. The housing project was actualized forty years ago and still its design functions admirably in the present-day scenario. This essay explores via graphical analysis the social aspects of housing in regards to Tara Apartment which are essential in current housing buildings. This essay also presents the observations of architectural housing and design challenges in the current situation. In conclusion, it prescribes how Tara apartments design is suitable in the present scenario provided modern day demand of living standards is met. This essay recommends design elements need to be focused on housing for social community, interactivity, security, and vantage.



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Introduction

Architectural Design is unavoidably social. Today's high rise housing in urban areas is facing social issues in terms of interaction, loneliness, a healthy social environment, security, etc. Social issues presented in this essay are based on the observations of several projects in Pune on-site as well as from web sources such as developers' websites and three housing projects published in IIA journal Dec 2014 issue namely, Ujjas the Condoville, Kolkata, Fortune Township, Barasat, Kolkata, Panchavati, Agra, Uttar Pradesh. Against the backdrop of problems of urbanization, Tara apartments seem to be a more appropriate design solution for housing complexes.

Charles Correa looked back and incorporated various historical elements to continue the social aspects of Tara housing. This essay tries to identify the relevance of Tara in the present scenario. In this essay constraints of Tara in the changing time have been also put forth. What design elements and considerations need to be learned from Tara Apartment have been prescribed in this essay. This essay does not covey the imitation or reproduction of Tara Apartment but attempts to take in hand lessons from Tara Apartment focusing on social aspects of design.

Housing in the Current Scenario

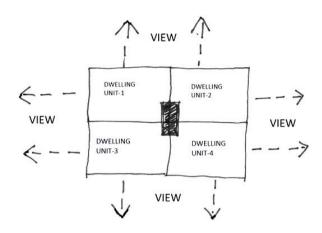
Based on current housing studies conducted it has been observed that the apartments built nowadays have typical plans focused on the economy of services. The central core of staircases and lifts and other services and dwelling units are placed at all around the core. This results in dwelling units looking away from each other, which has been referred to as conventional apartments hereafter.

There is ample privacy for units in such type of designs. The design takes no consideration of directions for climate comfort. In conventional apartment buildings, the apartments are sold to anyone having funds to buy. Many strangers have become neighbors. Apartments are society's response to urbanization. Urban crimes increase with urbanization (Venkatesham, 2015). The family size has also reduced. There is an emergence of nuclear families as can also be seen from recent surveys. (Pradhan, 2011). People staying in such dwelling units have a feeling of loneliness. There are security issues also.

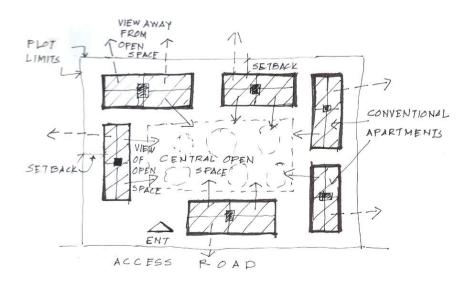
The new market-oriented conventional apartments have seemed to recognize this problem of people not getting together and not interactive. Many builders and architects are now coming up with plans with central open space. Research is going on as to the location of open space. But the privacy is given more weightage.

Many apartment complexes are coming up with large central open space. These spaces are acting as a garden. But not all the apartments or dwelling units can face this central open space. Dwelling units facing away from open space do not get any aesthetic or social benefit of the central open space. The open space is too large to cause any meaningful interaction characteristic of traditional Indian society. The open space is out of scale with

the human being. The family size nowadays has become smaller. From large joint families, we have moved to nuclear families, in which the responsibilities on parents for social and moral wellbeing of younger ones have increased. Parents are mostly working leaving kids more exposed to outside social elements.



Typical floor Plan of a conventional apartment block in the present time



Layout Plan of a conventional Apartment Complex

Tara Apartments in Delhi

In the present-day social situation mentioned above, the Tara apartment complex performs well. Tara Group housing was designed by master architect Charles Correa and was built during the period 1975-78. It has 160 housing units that come to housing density of 125 units per hectare which is reasonably in line with the density at which other housing projects were built in that period. The apartments have been designed 4 stories high. The design is such that there is a central courtyard or rather a community space onto which all apartments overlook. The accesses to all dwelling units are from the central Courtyard by open staircases.

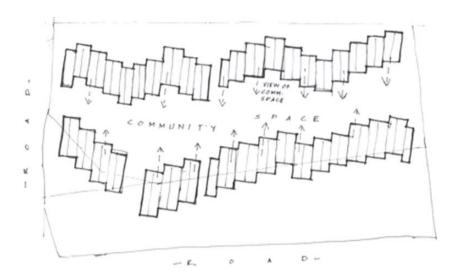
The middle community space has the same character a typical Indian street has. The architect staggered the units in section to create terraces on the outer periphery and thereby cleverly achieved shading of internal courtyards which is a common thermal comfort strategy historically adopted in old Indian cities. The architect had used a water body to humidify the central community space for thermal comfort. The central open space acts doubly as a community space. Sittings and gathering areas are designed in this space to create interest. Tara apartments are climatically also a better solution to inclement Delhi weather. The architect has used the time-tested method of mutual shading in the design. Shadows are cast by building on another part of the building and central open space.

The dwellings mostly are duplex and span the entire width of built space in such a way that all units are exposed to the internal courtyard as well as exterior. To achieve this, the architect had to keep the width of each dwelling unit minimal. Parking was provided according to the requirements of that period. The staggering of dwelling units created mutual shading and also reduced the monumentality of the long building face making the building suit human scale. The use of open railing to staircases instead of concrete Pardi gives the staircases more openness.

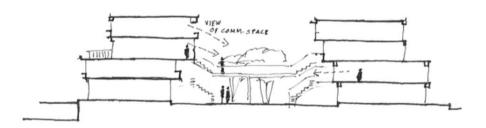
Because of its peculiar design, the central open space in Tara Apartments has become very lively and vibrant. Kids can play in the central open space observed by elders generates a good social environment. It is mutually beneficial for kids and elders too. The central open space in Tara apartments is perfectly human in scale.



View of Tara Apartments Image Source: http://www.sosbrutalism.org/cms/ 15974767



Layout Plan of Tara Apartments



Section of Tara Apartments

Challenges in Continuation of Design Like Tara Apartment

About changing time some design parameters which affect building design in comparison to Tara Apartment namely Economy of services; Increased FSI; Service areas; Parking requirements; which architects should consider. But we need to take lessons from Charles Correa's project while attaining the challenges of design in the present situation.

Economy of Services

With increased living standards, more and more services are getting into buildings, namely elevators (passenger, goods, and stretcher), firefighting systems, garbage chute and disposal, piped gas supply, intelligent building systems. All these named services cannot be economically provided in Tara apartments because of its peculiar design. But the openness in the design of the central core needs to be considered like Tara's apartment where one can easily see who has arrived in the complex and who is going where. In Tara's apartment, the open staircase has made people interact with each other more openly and the security achieved. The residents of Tara Housing seem satisfied and proud of the housing design.

Increased Floor Space Index

In Tara Housing Correa designed low rise housing with high density because he believes that high rise leads to loneliness. It has been designed with 1.0 FSI in mind. Architect Charles Correa wanted the design to be low rise, for which he had developed a tube-dwelling unit concept. (Correa, 2013). The Building Rules of Delhi did not allow more ground coverage than 33%. So the architect had to go to 4 stories. The situation nowadays is different. FSI in most of the Indian cities has increased, but the ground coverage is kept the same. This results in tall buildings, which again need more services. Correa has always emphasized dwelling units on the ground and was an advocate of residents getting some bit of ground. But nowadays this can be accomplished by incorporating open terraces in apartments like Tara Apartment.

Service Areas

With the ever-increasing population, urbanization is on the rise. The land is restricted and its supply can not be increased. This has resulted in high land prices. Developers, therefore, are trying to exploit all the development potential the land offers. Architects have been putting efforts into maximizing the carpet area. This has led architects to have thinner walls and less area for services like staircases and passages. The building cores are becoming more and more compact. The developers are interested in having more and more carpet area inside the dwelling units as the selling rate of dwelling units are based on the carpet area of the unit and not in common areas. The staircases, passages, and footbridges in Tara apartments are very lively. Like Tara apartments, staircases and passages are not mere service areas but also community areas.

Parking Requirements

Parking spaces in Tara apartments are much short of present-day demand. With increasing lifestyle, the car or private vehicle ownership is on rising. This has led to an increased demand for parking spaces. Local development Rules also demand more spaces for parking. Many conventional buildings have one or more basements and podiums.

Conclusions

Based on a comparative study of present housing designs and Tara Apartment designed by Charles Correa, it can be concluded that against the setting of issues of urbanization in the present scenario, Tara Apartment appears to be proper model answer for housing. Despite the changed scenario, lessons from Tara need to be continued while designing housing. Social aspects in terms of public interaction, security, physical comfort, community space, and view which have been considered in Tara Apartments has relevance in today's housing, which needs to be continued. Elements from Tara such as human scale multi-functional community space (Neither gigantic nor small), staircase and passages with openness, terraces in vertical apartments, the orientation of each unit in regards to view, and climatic comfort provides social interaction allowing privacy and security. These all elements providing social interaction in Tara need be incorporated concerning site and context such as economy of services, floor space index, service areas, and parking requirements.

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