A New Neighborhood Paradigm, Binhai Hexie New City, Tianjin, MITHUN.

Architecture for Communities

Houses can be Homes, but Housing is usually a Public Utility

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Abstract: Daniel Solomon's latest book of essays puts designing housing at the center of the design of cities; but he does not mean the banal towers which are the typical image of housing. He is advocating for communities built by carefully integrating new and old living places following a consistent street pattern and scale. China presents a test case for building such communities, and one of the most interesting parts of the book is an account of Solomon's attempt to introduce community into the Chinese housing system, by meeting all the official criteria that has created hundreds of thousands of repetitive housing towers, but turning these prescriptions in a better direction.

Daniel Solomon has devoted much of his long and productive career as an architect to the problem of creating livable places for groups of people residing in cities. He has written several books about his practice as an architect, all told in a readable personal style which mixes his own experiences with serious insights about architecture. His most recent book, *Housing and the City,* has the enigmatic subtitle: *Love versus Hope*.

Love versus Hope. We all know what these words mean, or at least we think we do, but what should we suppose they mean about architecture and city design? Let us begin with the distinction between houses and housing.

A house can be an expression of the personality of the owner, or of the personal design philosophy of the architect – or a mixture of both in varying proportions. Many well-known architects owe much of their

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fame to houses, and owners can be more famous for their houses than they are for their own lives.

Architects will risk losing money by entering design competitions for museums, educational buildings, religious buildings, corporate headquarters, or governmental structures. These commissions are opportunities to create experiences, express ideas about society, invest institutions with symbolic importance. Designing these buildings can bring recognition to architects. Designing housing tends to be the work of specialists. It has seldom been a road to fame. Architects who are already famous can lend their finishing touches to a few buildings for rich people, or some special urban projects, but designing housing restricts the imagination. Columns on multiple floors need to line up; plumbing stacks need to connect. It must be easy to get to a fire exit. Minimizing cost is always a consideration. Cost per square meter is the usual way of measuring desirability of housing. Think about the places where architects have turned housing for ordinary people into good architecture, such as Vienna or Amsterdam in the 1920s. There are not many such places.

The modernist movement in architecture correctly identified living conditions in cities as a major problem, and proposed comprehensive answers based principally on apartment buildings sited for the best sunlight and air, and separated from each other by green space. Modernist housing towers became the default development pattern all over the world. Daniel Solomon calls the areas built in this fashion the City of Hope – a generous description, as the original hopes for social betterment articulated by the Congrès Internationaux d'Architecture Modern, or by U.S. housing advocates, were soon supplanted by routine bureaucratic formulas which gave the architects very few choices. Housing, especially government-built housing, is widely understood to be a public utility like water and electricity. Safe and sanitary: at least when first completed, and not much else.

Daniel Solomon is unusual among talented architects in devoting a big part of his practice to designing groups of apartments to fit into a city, at a similar scale to the neighboring buildings, while respecting the existing streets, in order to achieve a coherent community where new and old buildings are part of the same design composition. His

work requires great ingenuity to master the technical problems of housing contained in something other than a simple box: the strict cost constraints, the safety requirements, the demands of structure and plumbing. He calls groups of dwellings built in this way the City of Love – perhaps because of the loving care that must go into their design, or because people can develop affection for where they live if it is a real community. A better description would be the City of Communities.

Of course, architects can't design communities, but they can create settings which make it easy for communities to form. People can make a community out of many situations; but most housing does not help create communities; and in some notorious cases there are housing developments that have totally destroyed any sense of community.

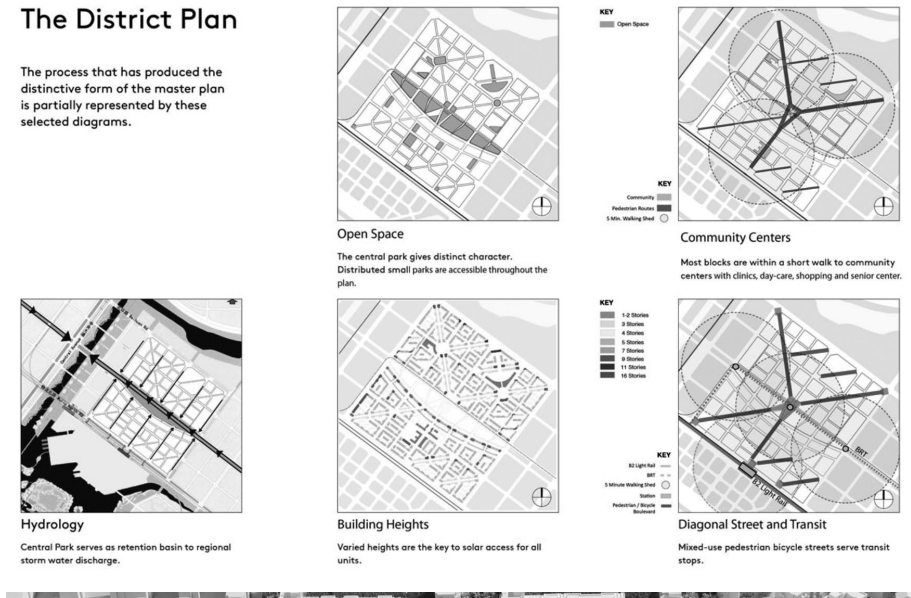
China has been extraordinarily successful in lifting hundreds of millions of people into a middle-class way of life, housing them in towers whose design is strictly controlled by national laws. One of the most powerful controls requires that every apartment must receive at least two hours of sunlight on the shortest day of the year, originally enacted to reduce heating costs, but also useful today to enable solar heating systems. All apartment buildings have their principal rooms facing south to meet this requirement, a practice reinforced by traditional *fung shui* beliefs that also make south-facing rooms the most desirable. The spacing of the south-facing towers and the widths of streets are also affected by the sunlight requirements. The result in all of China has been a cityscape of widely separated housing towers, built on large blocks, with empty lawns between the buildings, buildings which do little to shape the experience of the streets or the design of public spaces.

Recently the leadership of the Chinese government has recognized the limitations of the current housing rules and has been looking at alternatives, a process made more difficult because the entire Chinese housing industry has grown up around these requirements. Dan Solomon describes how he was asked by the planning authorities in Tianjin to design housing for a newly-developing area of the city. It was early enough in the development process that he could work with the transportation engineers on the location of station stops, giving him the opportunity to include walking to transit stations in his plans. Being able to walk to a transit station in five or ten minutes requires

more streets and a smaller block size than the standard Chinese city blocks. It is also helpful to rotate some of the blocks to enable diagonal walking trips that provide a shorter way to the station. Solomon's plan places all buildings at the perimeter of the blocks, creating both an interior open space for the residents and streets contained and shaped by the surrounding architecture. Because Chinese housing towers are so widely separated, their over-all development density is relatively low, even when the towers are twenty or thirty stories, Solomon's plans achieve the allowable density with building heights between five and twelve stories. The private courtyards for residents and the streets lined with mid-rise buildings are both known to help shape a sense of community. Children of residents can play in a protected courtyard, and the streets can have a lively mix of residents and shoppers – typical of the older parts of Chinese cities, but not possible when housing is a group of separate towers.

But Daniel Solomon's apartments still need to face south and have two hours of sunlight on December 21st; there has to be a desirable mix of apartments both small and large; and the building cost has to be competitive with usual Chinese practice. Did he succeed? He shows the drawings that lead him to believe that he has. The buildings pass computer-aided analyses for meeting the sun-light requirements. The architecture is composed as if it were a complicated, three-dimensional jig-saw puzzle in order to achieve the necessary straight plumbing runs and aligned load bearing elements needed for economical buildings. So far, unrelated events have prevented construction on the original site. The Tianjin authorities still want to try these concepts somewhere and discussions are continuing.

There are many other thoughtful and entertaining essays in this book, but the Tianjin story makes an especially important point: that an architectural theory – in this case about fostering an urban community – requires mastery of the necessary building components as well as the technology to implement them.



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