STATE-OF-THE-ART IN OPEN BUILDING IMPLEMENTATION

We have recognized for some time that shopping centers and office buildings exhibit the characteristics of open building. It is important to note that no theoretical or methodological work or funded research preceded their coming of age. Their first appearance and subsequent evolution progressed pragmatically, led by real estate developers and business entities of all kinds. Architects and contractors learned how to provide the needed services, sometimes producing work of exceptional quality. Product manufacturers began introducing suitable products. New fabrication and construction methods came into being, and standards and regulations were developed to match the new realities. These developments are international in scope, are well known, but have no name and have received little recognition of academic scrutiny.

Now, we begin to see that many parties – public and private - are asking for residential open building. This is evident in Finland, Japan, and the Netherlands. In these and other countries, residential open building – known by many names – is no longer unusual. We also see evidence of this in Poland, Russia, Switzerland, Germany, China and the United States. New examples of housing designed by professionals to be incrementally upgraded in a user-controlled process within some form of community infrastructure come to light constantly, whether in India, Chile, Mexico, or South Africa. These too are a form of open building.

Mainstreaming of open building is apparently taking place to relieve the pressures, conflicts and waste caused by continued adherence to rigid functionalism – that is, defining functions and designing buildings to fit them, imagining them to be finished. Open building is also a pragmatic answer to a state of technical entanglement in buildings resulting from the incremental addition, over a long period of time, of new technical systems. These pressures are forcing all parties to realign procurement and investment practices, design methods, and regulatory systems. The idea that investments should consider long-term asset value is forcing all parties to learn to make buildings that can adjust as technologies and social preferences continue to evolve.

These changes in attitude and priorities are now taking the force of law. In part this can be explained by the widespread – and parallel - adoption of a sustainability agenda. In 2008, for example, the Japanese parliament passed new laws mandating 200 year housing, accompanying the legislation with a set of enabling tools for use by local building officials. Projects approved under the new law receive a reduced rate of taxation. In Finland, one of the largest real estate companies is regularly developing open building projects for their residential portfolio. In the Netherlands, a number of companies – from product manufacturers to developers to architects – are doing open building, often by other names. In Warsaw, Poland, open building is known as the “Warsaw Standard”. In San Francisco, residential developers are building “bulk” housing, ready to be fitted out individually. Around the world, old office buildings that have retained social and economic value are converted to new occupancies, after being “gutted” to prepare them for a new life.

We also see that in many countries, under the pressure of a rapidly evolving health care sector, hospitals are moving toward open building. We see this in the United States, Switzerland, Germany, Belgium, the United Kingdom, and the Netherlands. Similar developments are undoubtedly happening elsewhere. Hospital clients can no longer afford to let short-term functional programs drive facilities procurement methods and investment decisions. They are demanding “change-ready” facilities, assessed by their accommodation capacity over time, rather than short-term functional performance. Architects are learning how to design these hospitals.

These projects, often large and complex and providing space for housing, offices, commerce, health care and other uses - are increasingly recognized as having the systemic properties of large private (or public) infrastructures. They involve many decision-making bodies and users over long time periods, often involving multiple jurisdictions and overlapping zones of control. As such, they present technical, economic, political and cultural questions that go far beyond the present architectural discourse. Generally speaking, it is safe to say, these developments toward open building are not taking place for their ideological purity but for pragmatic reasons.

Some questions that remain for open building implementation

BASE BUILDING ARCHITECTURE

Interior public space and the urban façade are two architectural issues that demand new thought. These questions are not limited to open building, but nevertheless are defining the skill sets, attitudes and knowledge needed to make high quality base buildings and lively urban tissues. Open building advocates

must take the lead by pointing out these and related developments not as random events but as signs of a new understanding of open architecture released from functional determinism.

AN INFILL INDUSTRY

A new kind of business - with a new customer value proposition - is needed to meet the demand of variable fit-out in open building projects. Research conducted in the United States in the early 1980's already showed that an increasing percentage of value added in the building sector was going to investments in "equipment" and away from "construction". Other countries have undoubtedly experienced the same shifting investment phenomenon, although little or no research exists to prove this. The customarily disjointed way of filling in the empty spaces in open building projects is no longer excusable. A mature infill industry has yet to be born, but is needed. In this arena, open building knowledge is crucial and can lead the way.

INCREMENTAL HOUSING IN DEVELOPING SOCIETIES

In developing economies, in which the informal sector is a vital part of the housing process, open building principles are evident. New housing, designed by professionals, is incrementally adjusted, added to, and modified over time by the action of each household. New forms of public/private partnerships emerge, old technologies are used in new ways, and informal settlements become stable in ways that can only be understood by long-term observation. Recognition of the role of the user in the creation of environment is alive and well, if too often forgotten as part of the future of architecture.

CHANGE-READY HOSPITALS – OPEN BUILDING IN THE HEALTH CARE SECTOR

Hospitals, like all evolving buildings that are part of dynamic societies, are never finished. In the healthcare sector, concepts of healing, medical care practice, equipment, spatial and workflow patterns continue to evolve. Evidence-based design is intended to keep our knowledge current. But since knowledge about healthcare is not static, neither should our healthcare settings be static. Yet, amidst all of the change, some things may not change so fast. The question for architecture is, which is which, on the time axis? We need a better understanding of the main characteristics of built environments subject to change; the problem of distributed responsibility in the design of change-ready facilities; and good examples of hospital procurement methods and exemplary projects suited to the demand that form accommodate changing functions.

EDUCATION FOR AN OPEN ARCHITECTURE

From the perspective of open building, a renewal of the education of architects is urgently needed. The schools need to catch up with a profession already taking part in addressing the new realities of an open architecture, and can assist in developing the knowledge, methods and the tools needed for the job.