

Economics of Sustainability

Does/could architecture stimulate value in growth analysis?

This paper aims to acknowledge and decipher the discourse between two very different languages for purposes of a mutual understanding, bridging spatial terms between economists and architects (and similar urban design and planning professions). In addition the driving factors of economic growth of human activities through risk awareness and mitigation enables a framework that promotes spatial implications. It appears to facilitate the architectural role of form-finding and boundary-making undertakings. This paper will focus on emerging market, developing countries.

Defining roles of urban design, urban planning and economic growth:

Urban planning makes decisions with little sense of how to shape environments. The aim of planners is to produce a report or re-zoning of an area, thus they think in terms of floor area ratios. On the other hand, urban designers are informed by history and historical vision of a city. They attempt to organize the built environment to honor and reflect the history and that vision, building and modifying based on the aesthetic used. Allegedly the relationship between urban design and urban planning, uses economics to shape the possibilities of architectural design practice; and vice-versa.

Economic outlook is displayed through numbers and charts that most (or some) architects cannot grasp. They look into the past and map out past developments and trends, as well as make predictions and forecasts based on such trends. Thus it appears that economic growth behaves in a cyclical manner, re-starting itself once it has reached the end.

Graphs are representational tools for depicting past, present and future trends in the economic world. These quantitative trends paint pictures of individual and collective life stories of people around the world. People start the day feeding and nourishing their bodies, in order to stimulate their mental capabilities through a myriad of activities, that not only enriches but

sustains their lives. In other words, describing economics through daily patterns and rituals of growth may provide a (spatial) framework that (architects) non-economists can relate to. At the same time cities demand a far richer vocabulary than that afforded by dualisms, global versus local; city versus suburb; form versus process; presentation versus invention; or private versus public, to name but a few.

Economic growth terms (with notes on architectural added value):

Common terms to the economic profession are words such as risk, opportunities and vulnerabilities; they embody development and management practices. They add balance to extreme situations, engaging in a more fruitful environment not only for governing bodies, but more importantly for human comfort and stable progression.

Situations that involve exposure to danger, also known as risks are observed. They are qualified as scarcity, opportunity cost, value and rationality. Scarcity is a measure of supply, and if supply is low then demand is high. The overuse of a material that possesses many benefits to human activity, poses as a threat to the nature and development of human advancement.

Opportunity is another term that forces individuals to think effectively regarding the use of material efficiency. In the case of a scarce material, one considers alternatives to that material choice so that particular material is not exhausted. In addition scientific studies have shown that the chemical and biological imbalance of certain chemicals have grave repercussions to the local and global environment that humans co-exist in.

Rationality is a behavioral trait and it depends on particular details of conflict or of a situation, as well as the nature of an individual or collective group (in charge). One has incentives to do what they want because it is better according to their judgement, such as the ability of an individual to make stern decisions with no human indifference and disregard for moral costs. (We have witnessed this in the wars that dictators like Hitler, Mussolini and Stalin.) This is where the notion of risk management should be oriented towards social welfare, perhaps by involving a larger body of diverse professionals in developmental policy making, in addition to allowing the public to manifest their opinions more openly.

Lastly, although the value of an artifact may be quantified as a price, its essence needs to be developed and understood with regard to human use and consumption. The value of an object such as a Rolex watch is about workmanship: detailing, manufacture and assembling (which in turn, an estimate price is placed on it). Drawing from the watch example, people are important to the value of a proposal through the frequent use of a place, the importance of the place to their lifestyle, contributions of diverse specialists to create a meaningful and useful project, and ultimately it is related to how much people may enjoy doing a particular activity.

Trends in economic growth (space for human development and activity in the emerging market):

Addressing the economic growth trends is thus crucial to determine the commercial, and or industrial activities. They pin point areas of scarce resources, outlining places for flourishing and burgeoning economies. The current economic climate in most emerging market and developing economies growth is projected to be supported by the waning of temporary setbacks to domestic demand and production. Resultantly policy support issues to demand the gradual lifting of structural impediments to growth, as well as strengthening external demand from advanced economies. Therefore the architectural community is in a position to see the declining activities that consumers and occupants require the most.

Overall emerging market economies growth will increase from second quarter of 2014 into 2015, as well as a recovery in external demand. If countries, or cities or rural towns can supply enough to support a given number of people, people will demand more of the resource enabling frequent exchange. However the risk of a particular resource must allow for alternatives, to ensure a constant stock of items that can be supplied.

In China authorities deployed policy measures to support activity, including tax relief for small and medium enterprises, accelerated fiscal and infrastructure spending, and targeted cuts in required reserve ratios. This means stronger exports increase and turns to a more sustainable path, slowing down residential investment.

The case in India is not different, exports and investment continue to pick up, helped in part by favorable financial conditions and broadly accommodative policies. Robust domestic

demand in Poland and private consumption in Hungary are strengthening the growth in these areas. In Sub-saharan Africa growth is projected to remain strong in this region, for example in Nigeria activity has been resilient despite the poor security conditions and decline in oil production earlier in 2014. This information implies that there are alternative resources that help mitigate risk. In a similar note South Africa's growth has been dragged down by industrial tensions and delays in fixing infrastructure gaps. Even if the growth facts are not positive, but knowledge of the economic climate fuels the problem solving nature that is drawn upon in architecture and urban design.

Mitigating, and managing risk, and opportunity:

Risk and opportunity go hand in hand in most decisions and actions taken by countries, enterprises, and families as they seek to improve their fate. Opportunities or possibilities arise through the process of problem solving and managing risks. In architectural discourse locale is a term used for finding opportunities in a place that has qualities that promotes desirability, but is not yet prepared to inhabit in.

Locale is a place found in natural (or urban) realities as they are possibilities or opportunities. These are unspecified qualities of a promising nature that is within the scope of an architect to design and develop. The motivation in economics is the quest for improvement and the fact that favorable outcomes are rarely guaranteed. The discipline of architecture can lend its creative tools to promote (new) spatial typologies for creating places, for people to partake in their daily activities.

Risk management can build capacity to reduce losses and improve the benefits that people may experience while conducting their lives and pursuing development opportunities. Individuals optimize the expected utility, or subjective welfare of possible outcomes.

Incentive constraints should be considered as important as resource constraints in understanding decision making in the presence of uncertainty, at the macroeconomic policy and conceptual stages of economics and architecture respectively. Limitations allow individuals to see the contents within a box, seeing the risks in order to either manage them within the box, or fixing solutions to optimize patterns of development and growth. It is vital when developing the

best ways to coordinate the collective action of any group. Professionals analysts and policy makers are forced to see beyond aggregate resources and question what informs and motivates the actions of people (and organizations).

In the same way, people who support and advocate theories of globalization and localization in urban design, each raise genuine important issues that stimulate further questions on urbanity. However they are forced to find ways outside of form, and ideologies and visions of the city to address the demands of the productivity and interactivity of contemporary cities.

According to *Managing Risk for Development*, a World Bank report issued in 2013 a few guidelines provided an analytical framework for risk management. These were the ability for crisis situations to bounce back from adverse effects; understanding the environment in which risks and opportunities take place; defining mechanisms that cope with positive and negative events; understanding the obstacles that individuals and societies face when managing risks; and lastly the potential roles of groups and collective actions at different levels of society to aid in overcoming risk obstacles. As opposed to numerical values, these descriptive qualities illustrated (may) help trigger the employment of architectural vision, and its spatial layouts. Through observation and meticulous experiments of thriving environments the architect provides his (or her) spatial discourse to the nature of planning and macroeconomic policy making.

Furthermore to create an enabling environment for continuing human development advancements in the decades to come, is to regard vulnerabilities. Vulnerability is used to describe exposure to risk and risk management.

Risk exposed:

It is no coincidence that the poor are amongst the world's structurally vulnerable, lacking in seasonable employment, low wages, low productivity and vulnerability to weather changes in the environment. Thus types of investments and interventions can reduce vulnerability, highlighting the relationship between diminishing it and the advancement of human development.

An example of this is Project Legacy Hospital. A building designed to withstand flood disasters in New Orleans by Doug Paris, a partner at NBBJ and lead designer at Project Legacy. During Hurricane Katrina dozens of patients died at sixteen of N.O's hospitals, and seven of them had been out of commission for two years. This project is an example demonstrating the added value of architecture by addressing natural disasters, using techniques and employment of materials in an area where natural disasters are frequent, increasing the project's value.

A couple of leading businessmen conclude that marketing is a fundamental component of establishing value in design. Marketing in itself is a people driven activity that deals with promoting services for consumption. Diego Rodriguez from IDEO states that the design central process incorporates marketing, research and ideas. The worth of this statement is that research relates to the economic facts and figures, ideas revolving around opportunities and solutions to reduce risk in people's lives, and marketing is the force that will engage the public to voice their opinions (and doubts).

Ravi Sawney and Deepa Prahalad from RKS Design are advocates that design can also create value through understanding the consumer, mitigating risk, boosting marketing and branding, and driving sustainable business practices.

A more radical opinion is given by David McClure, stating that design and marketing are way more important than engineering, regarding the firms that he has worked with in the past.

When architecture designs and develops projects that address risk it provides an added value to land, and eases societal concerns. In addition environments that engage the connection of nature and people through existing resources present on the terrain can (will) contribute to a sustained environment.

Moreover a particular area's geophysical characteristics combined with the environment could (would) potentially present solutions that shape typologies local to particular regions. Thus it appears that the framework of economic growth can provide spatial insights, adding economic value to design proposals.

The importance of stimulating research, capturing resources and inflating the role of urban design in macroeconomics and policy making is a vital one. It informs the changes that need to be made in current tendencies, thus the of the human factor and risks of human activities need to be outlined and managed. The demands of the city is a result of this, where architectural value is placed on the environment in order to accompany the current economic trends. In essence, avoiding economic failure implies fewer risks in architecture to be taken.