

The Need for Architectural Economists: A Proposal for a New Subspecialty in Architecture

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NEW PROBLEMS FOR OLD

Due in part to the enormous complexity of the forces that combine to form our built environment, our society has often inadvertently created major new problems as it solves existing ones. For example, in the 1960's housing which was intended to provide a better home for low-income families regularly created worse slums than the ones they were trying to replace. Similarly, in the 1990's, municipalities are struggling to deal with the complex environmental consequences of previous transport, solid waste, and energy policies, and in trying to make sense of a sprawling national infrastructure. Architects have usually been slow to take any responsibility for these environmental predicaments, claiming instead that they are more the result of poor social policy, legislative restrictions, or economic structures. Though there is some justification for that viewpoint, the naive enthusiasm of early modern architectural notions about housing and urban space certainly contributed to the deficiencies in many cases.

However, prompted partly by Oscar Newman's and Jane Jacobs' observations, some architects began to address the profession's earlier failings, and for a brief period in the early 70's social consciousness was fashionable in the architectural world, after which, according to Sharon Sutton:

"... trapped in the role of artisan, architects discovered that social and environmental justice could not be remediated solely through building design, and therefore abandoned their short-lived affair with social responsibility."(1)

For those who persisted in valuing socially-oriented design into the "go-go eighties" and beyond however, there was moderate success in learning from the mistakes of the past. A recent article in *Progressive Architecture* highlighted some of the advances in low-income housing policy since the 1960's, but concluded gloomily that despite the apparent success of two schemes profiled in that issue:

"... it is hard to take much comfort in [the success of this] work, because of the conditions that demand it in the first place - the existence of a permanent underclass,

of homeless families and crime-ridden neighborhoods. Until that is addressed, no amount of successful housing can compensate for our larger failures." (2)

The temptation is great for our profession to continue to view these 'larger failures' of housing policy as residing permanently outside of the realm of architectural consideration, as they arguably do now, and thus to believe that they cannot be significantly influenced by architects. If they remain so, then we should also ask ourselves how these difficulties ever will be satisfactorily remedied for the benefit of the architectural profession and, by extension, for the environment we create? Granted these problems are extremely complex, but they do not merely lie on the periphery of architecture as we might choose to believe; more frequently they underpin our work's very existence and success. If we continue to shun our role in social and economic processes, or allow them to be resolved by those outside of the profession of architecture without our input, (as we have done with other issues in the past), then once again our profession will have forfeited a vital opportunity to adopt a leadership role in society.

MISUNDERSTOOD OR MISGUIDED?

A flurry of recent literature, predicting a new expanded role for the future of our profession envisages the architect as "*the best person to solve the messy, seemingly intractable problems that now plague our society.*"(3)

Dealing with some of these complex problems however, might require some changes in the current prevailing emphasis of our profession. In fact there are many areas of knowledge which the profession would need to absorb and include within our existing curricula in order to adopt its full potential role in today's society. One vital component of this new knowledge that underpins difficult architectural problems is a sound training and passion for a social technology called 'economics'.

Though architects are ultimately the final agents in the creation of buildings, we are largely unversed in many of the complex forces that guide their design, such as economics or

legislation, and frequently disdain any serious study of these forces. Architects who would preoccupy themselves with these important topics are rarely seen or heard in the majority of architectural periodicals, and in the minds of many architects and educators, they constitute a kind of quasi-architect.

The roots of this conviction lie in our education system, and in the enduring image of the architect - untainted by economic concerns - that persists into the early years of practice. According to Dana Cuff:

“Some offices prize quality design and peer recognition above all other stakes. The professional model is the innovative young firm, with numerous outstanding projects and awards but no capital, pursuing aesthetic goals that outweigh business interests.” (4)

While real-world practice often modifies those early goals, architectural folklore continues to advance the notion that we as a profession are misunderstood, though it might be more accurate to admit that we are more often simply misguided in our continuing preoccupation with aesthetics and space to the virtual exclusion of many other, equally important considerations. The patron of Le Corbusier's Pessac housing commented on his working relationship with the architect:

“... I understood him only too well, because we both wanted to build economically, but he did not understand me! It was in vain that I asked him to put himself in the eyes of the future purchasers, whose eyes are unaccustomed to decorative effects...”(5)

Architects' single-mindedness means they have resisted or surrendered opportunities to quantify their professional work, to generate what Sharon Sutton calls “*a reservoir of knowledge about the built environment.*” (6) and as a result we have suffered “*an apparent decline in the public's perception of the architect's value.*” (7)

In addition, our continued retreat from these other issues means that the reality of current architectural practice is that we are allowed to put final shape, and only final shape, to a whole host of *a priori* ‘design’ strategies, such as financing or zoning decisions. We appear to be more comfortable with this unfortunate notion than we ought to be, often regarding such a schism as inevitable and beyond our influence. As a profession we resign ourselves to lament the situation rather than engage the subject matter at issue. In hindsight therefore, the turning point in this profession's short-lived “affair with social responsibility” in the early seventies might be that it chose not to acquire the additional skills necessary to pursue architectural arguments into the realm of economics or social policy where, for example, much of the blame for the failure of housing policy has been placed.

ECONOMICS AS A DESIGN ISSUE:

In reality of course, important economic decisions pertinent

to architecture are made by financiers, who lend money for construction loans and mortgages, and by planners who create infrastructure policy based on economic theory. These decisions - often far more profound design decisions than any we can hope to make on our drawing boards - create or destroy not only our built environment, but also the market for architectural services. In addition, our lack of fluency with economics has contributed to the decline of the architect's role on the job site, where we have lost ground in construction administration to Project Managers who often possess a superior command of economic processes. Those architects who have acquired economic skills as a necessity of architectural practice, or as a matter of bitter experience, have some straightforward advice for their colleagues:

“If we as a profession are ever going to find our way to a seat of power, even the most design-driven architect must realize that construction, financing, marketing - all these things - directly or indirectly affect form, and the sooner one comes to understand these subjects the more control one will exercise.”(8)

In schools and offices young graduates learn only the most simple economic practices, like Life-Cycle Costing, which allows them to produce economic figures for say, the proposed energy costs of insulating their client's home. However, it is a sporadic, bumbling sort of learning, and not a major concern of our education system; nor does it prepare us well for the complex economic trade-offs that we will increasingly face in the next century. If we would choose to become familiar with economic analyses, then we might be able to understand not only the beauty of design, but also the delight possible through economics in creating a sound basis for a healthy neighborhood.

For example, the architects of Highbridge Heights in the Bronx, one of the housing scheme profiled in *Progressive Architecture*, commented on that project:

“The development ... has helped turn the neighborhood around; there has been an infusion of people into the community, helping the retail owners and encouraging the upgrading of privately owned housing in the area.” (9)

In this project, as in many others, the benefits to the housing environment from a thriving economy and vice versa, are inter-related and, though it often goes unnoticed, one would not happen easily without the other. The symbiosis between good design and good economic development would provide a valuable arena for architectural consideration.

ARCHITECTURAL ECONOMICS: AREEVALUATIONOFTRADITIONALECONOMICS”

While the architect's deficiency in economic theory is somewhat easier to remedy at relatively small scales of construction, it is at the macroeconomic or societal scale that we especially need to embrace current thinking because it is

here that poor economic decisions can do most harm. However, in preparing for the next century, it may not be sufficient for architects to adopt the existing paradigm of conventional economics, which is itself in need of input in solving the more complex interwoven problems of the '90's. The design of the built environment involves large sums of money, not just in construction, but in operating costs and later in social costs. Traditional economics has tended to look at the first two but has avoided any consideration of the last, probably because of the complexity in understanding and putting value on these more intangible costs. The pitfalls of this conventional approach to urban economics were apparent to Jane Jacobs 30 years ago.

"The economics of city rebuilding do not rest soundly on reasoned investment of public tax subsidies, as urban renewal theory proclaims, but also on vast, involuntary subsidies wrung out of helpless [displaced] site victims. And the increased tax returns from such sites, accruing to the cities as a result of this "investment" are a mirage, a pitiful gesture against the ever increasing sums of public money needed to combat disintegration and instability that results from the cruelly shaken-up city." (10)

Not much has changed it appears in the 30 years since, but our continued reliance on numbers and things easily measurable has lead us into the situation in which we now find ourselves, where for example on a daily basis we allow the trade-off between tourism revenue and development tax dollars to be the ultimate determinant in the destruction or preservation of natural habitats.

Thus the increasing complexity in creating the built environment manifests itself as complexities of economics and financing. Architects and social scientists continue to criticize the environment created by our preoccupation with economic concerns, such as the "mall of America", but have been slow to help redirect that process, or to propose alternatives based on other economic models that we might prefer.

Economics needs guidance, particularly where it is applied to the built environment. Architects could help influence this process, as they are still one of the major agents of creation in the built environment. We could propose the argument that while the design of healthy environments requires monetary subsidies, a lack of initial investment in the creation of our environment may prove even more expensive as a result of social ills such as vandalism, unemployment, and alienation of certain minority populations.

Though it may be difficult to substantiate this argument at present, to even begin implies we would become fluent in the language of economists. Like doctors trying to prove a link between smoking and lung disease 60 years ago, we could begin to quantify our environment in a way that would add weight to our environmental arguments.

COMPLEX ISSUES:

In the 1990's there are two major issues that highlight the shortcomings of conventional economics when applied to the built environment: a) environmentalism, and b) elderly care. In the area of environmentalism, for example, recycled products tend to cost more than products that use virgin resources. This situation, results from our underestimation of certain natural resources, such as arable land, water, clean air, and countryside, compounded by a similar disregard for the value of lifestyle quality. The future condition of the planet has no easy place in current economic theory - until it becomes a threat to the present, at which time the ill effects can now be measured and it enters the equation too late. "Smog Over East Asia: An Ominous Symbol Of Rapid Development", trumpets a recent front-page headline from the *International Herald Tribune*, one which amply illustrates the myopic approach, where lifestyle issues begin to succumb to economic development. The article begins, "A pall of smog ... is the latest sign of a spreading epidemic of pollution that is eroding the quality of life in many parts of East Asia even faster than incomes and material living standards rise.." (11)

Similarly flawed environmental economic theories occur closer to home everyday, like Wal-Mart's recent decision to build an "environmentally conscious superstore", in Lawrence, Kansas. The economic model that measures environmental consciousness in this case did not include in it's calculations the economic cost to small local businesses, nor the environmentally unsustainable reliance on the automobile in getting to these superstores, which are always in remote areas.

The second situation which suggests the need for a rethinking of economic theory is the growth of social problems, and their ultimately high price, resulting from a poorly-designed transportation infrastructure, particularly in creating environments for the elderly. The consequence of our society's tacit acceptance to live in an environment where the automobile is a basic tool inflicts a high price on this population. (Another population group affected by this policy are young people, whose disillusionment with the environment is often cited as one of the major influences in problems such as graffiti and youth boredom.) In the case of the elderly, the alienation can be even more severe because when they are deemed unfit to drive they are then encumbered in caring for themselves on an everyday basis. For many senior citizens this is often the first step towards expensive aid services, or a nursing home environment which means a complete disruption of their lives, and the depletion of their financial resources.

This is a serious price to pay for poor environmental planning, and in effect environmental costs are not saved, but are ultimately transferred to the health care system. The health care debate, which particularly affects the elderly population, should prompt us to measure these social costs, much as the 'green' movement spurred us to look at the costs of environmental policy.

ARCHITECTURAL ECONOMISTS

As socio-economic problems of crime, homelessness, and social alienation related to architecture continue to compound and worsen, architects could lead in making arguments about how trade-offs in the built environment can be integrated through better design. No other profession is really providing leadership in the area of environmental quality as we could. However, in order to adopt this role as a profession we would need to see it as an area which should be part of our basic education, as well as one which could produce 'architectural economists' as part of a growing array of architectural specialties. An architectural approach to the economics of the built environment could provide a paradigm for all economics for the next century if we choose to engage this challenge, and to create part of the knowledge base that Sharon Sutton, for example, claims: "*would have seen the energy crisis coming and would have provided leadership in reducing the country's dependency on fuel.*" (12)

The education of architectural economists, and other architectural specialists deserves broad discussion, but one of the first concerns would address how they would be trained and where they would work. Architectural economists would be trained as architecture students, but may not have the same design emphasis as "design students", (who themselves might become a subspecialty of architecture). Their last several semesters in school might allow them to concentrate on the economic aspects behind design projects as a worthwhile architectural endeavor. Ideally these new specialists would work for local governments helping form environmental policy. However, if the "Green" movement results in it's expected complex resource questions, architectural economists would also function as consultants to architects and developers in order to get projects built in an efficient and sustainable way. Their special value would be that they can negotiate the range of concerns between economics and architecture to create a deeply fulfilling environment.

ARCHITECT OR ECONOMIST?

It may be argued that a new discipline of architectural economists is an unnecessary creation, and that the goal of adding economics to the architects' already crowded curriculum is unrealistic. In the first case city planners already deal with many of the issues identified, and secondly architecture is an already complex subject, with multiple considerations being integrated in a single project. The architectural profession however has some advantages over planners or economists both in the breadth of their exposure to the built environment, and in the perspective afforded by architectural problems. Architects deal with the process of creating our environment 'from the trenches', even though they often do so without a full understanding of the larger forces that underlie it. This street exposure could be enormously valuable if brought to bear on macro-economic thinking. In addition, the key advantage of an architectural education is that :

"[Architects] really learn how to assimilate large amounts of disparate information and find ways to order it and apply it to particular settings."(13)

It is unlikely that economists will not gain an appreciation for the quality of the built environment as easily as we could increase our knowledge of economic theory. In addition, we have sloughed off constituent areas of architectural technology at a steady rate in the last 100 years, and as a result have paid a substantial price regarding control of the built environment. Rather than contemplate a similar fate for economic issues we could therefore expand our notion of the role of the architect, and help both our own profession the environment in which we all live.

"Just as there are architects now trying to solve problems such as affordable housing or homeless shelters, there might, in the future, be architecturally trained people leading teams of specialists trying to reduce crime or improve transportation systems or direct urban growth." (14)

The challenges posed by the built environment will require a whole host of "architecturally trained people", whose first love will be architecture and the creation of high-quality environments, and assuredly more than one new specialty will be required. However, just as certainly, architectural economics will be a necessary knowledge base if we wish to adopt such a role, and could become a paradigm for many professions in the 21st century, one that acknowledges holistic thinking, and blends sound economic theory with careful architectural vision, replacing the profit motive with stewardship of the environment.

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