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FUTURE DIRECTIONS IN ARCHITECTURE

Looking through my notes for fifteen minutes, it struck me that what I have to say is remarkably similar to a speech that I gave when I was asked to join the Faculty at the University of Pennsylvania in 1970. I have not proven to be much of a fortune-teller, so be warned!

I am comforted by the remarks made by Isaac Asimov, the scientist and science fiction writer, shortly before his death in the 1990's. When asked about the failure of the predictions he had made in the 1960's about the changes in the world that would take place by 1990's he said that despite the fact that everybody seemed to be talking about how rapidly the world was changing, it is changing much slower than he and most prognosticators expected. So maybe I am closer to saying something useful!

In my speech, I plan to start out by making some observations about issues that have arisen in the past fifty years. Then I'd like to talk about the implications of my observations and conclude by stating my position on what we should be doing.

Observations:

The profession of architecture is in relatively good shape, in Australia, at least. I do not get a sense of depression about the future that some of the studies in the United Kingdom seem to indicate what architects have. Architecture is part of the cultural discourse more than it has been before in my professional life. That means it is of concern to a broader segment of the population than ever before. These are heartening observations.
Nevertheless:
1. Although we architects like to think of ourselves as fine artists, we are business people – some of us operate very large businesses, others small. We work within the framework of the capital web of investment processes and the invisible web of laws that guide the market and control architectural design in the name of the public interest.

2. Architectural philosophies today still represent a tussal between empiricist and rationalist thinking – between thinking based on English common law traditions and philosophies emerging from the Napoleonic code.

3. Although we think of ourselves as creative problem solvers, we tend to work from a relatively small set of design paradigms. Witness Frank Gehry's design for the Arts Centre in Seattle, his Guggenheim Museum designs for Bilbao and for Lower Manhattan, and his Walter Disney Symphony Hall in Los Angeles, now under construction.

4. Some of these paradigms are specific to individual designers although they may be imitated, successfully or not, by other architects; other paradigms have been invented as generic solutions to specific problems by architects or researchers and yet others have resulted from the operation of the market place and its development opportunities.

5. As the knowledge base for designing well increases so we architects tend to narrow the scope of our concerns rather than embracing the new knowledge.

6. I agree with Le Corbusier that the truly creative act in designing occurs in writing the brief. Major changes in architectural philosophies occur as the result of changes in the perceptions of the problems needing addressing. Failures in architecture are due to poorly worked out briefs including those from which Le Corbusier worked. My perception is that one of the major advances in the past thirty years has been in the brief designing process. They are much richer than before and performance based. What is emerging is a new functionalism in architecture in which aesthetic issues are regarded as much a function of built form as any other and are specified in brief.

7. Thirty years ago we predicted that computer-based algorithms would, by now, be playing a major role in the design of buildings. This just hasn't happened to the extent that we predicted. It has done so in areas of structural analysis and in environmental analysis but not much yet in the heart of an architect's work.

8. One of the major concerns of today is the issue whose identity is to be represented in a design – the client's, the sponsor's or the architect's.

9. We architects want to have freedom of action, but we are reluctant to embrace the responsibilities that this desire implies. This observation is particularly true for the impacts of our work on the environment. We are increasingly sensitive to the impact of the environment on the buildings we design, but much weaker in dealing with externalities of our buildings. In our defence, the science is very weak in the area.
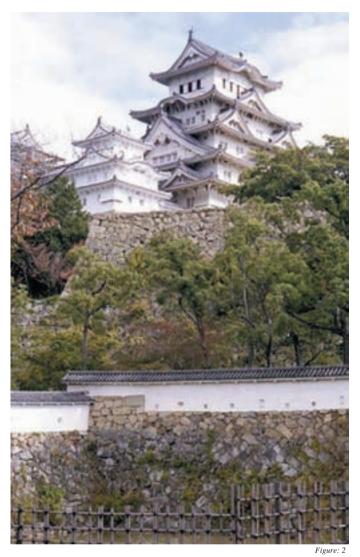
Figure: 2

Figure: 3

Figure: 2
Himeji Castle,
Medieval Japaneese architecture,
source: www.greatbuildings.com

Figure: 3
Uzungöl settlement,
North Turkey,
source: Ebru Firidin,
personal archive

10. We live in a changing world. It is not changing as rapidly as we all want to think, but it is changing. The major change seems to be in the expansion of the middle class who bring with them diverse cultural traditions, knowledge and aspirations. Another major change is that we are beginning to recognize the rights of individuals who are minorities, amongst them the disabled. We do not understand the impact of changes in information technology on ways of life.

What then are the implications of these observations?

Implications
For our self-image: If we continue to base our worldview on ourselves as artists, we will lose the entitlement to restrict the use of the title 'architect' to members of the profession. We will simply be building designers. We have to clearly establish our unique knowledge base. We have to acknowledge the contribution of the various sectors of our industry to the creation of architecture and just as importantly to the whole built environment.

Architecture is more than simply the creation of an object that conveys the aesthetic expression of the architect. We know this, but we seem to like the myth of it all.

For being part of the business world, our work is part of the investment market and some of us are deeply involved in the processes of globalisation in which a small sector of capital investment markets dictate many things, including aesthetic decisions. We need to recognize the various sectors that the market place serves, particularly in multi-cultural countries in which internationalising forces are competing with a variety of localizing forces in shaping aesthetic decisions.

For the designing process: We have to be able to talk about the designing process openly and explicitly. We architects have to be involved in the design process as full participants from brief writing to post-occupancy evaluations. I worry about the fragmentation of the process and the profession.

We have to be more knowledgeable than we are now about the built form-environment-people relationship. The information is there. We really have to abandon the simple stimulus-response model of human behaviour still implicit in much architectural thinking.

Paradigms: There are many reasons why we are paradigm driven. We do not have time to operate full problem solving processes. Many aspects of design problems are repetitive. Nevertheless, we do need more explorations in the development of design paradigms. I admire the work of Ken Yeang in seeking new paradigms for tropical architecture although I do wonder about the apparent similarities between his designs for towers in Elephant and Castle and in Kuala Lumpur! I think we in the academic world have been remiss in not fulfilling the role of paradigm developers – either procedural or substantive - better. And when we do, we do not deal with a multi-variate world. All designs involve meeting some functions of built form better than others. The paradigms have to be culture and region specific and it must be clear what problems they address and how they are addressed.

Knowledge Base: As the knowledge base required of designers increases designing becomes more complex. We still seem to embrace 'bold designs' that deal with few variables and exaggerate them more than others. The discrete designs that brought fame to Barcelona have fallen to the forces of globalisation.

We have to embrace a positive theoretical world. Rather than simply jumping from descriptions to predictions, we have to understand the functioning of the world. If we find the word positive offensive, we can use empirical theory or functional theory instead. The alternative is to narrow our scope of concern and let others deal with the complex problems. It would sadden me to see that happen.

Architectural Philosophies: We still see many individual purist modernist buildings being built but not much in the way of urban design. In some ways the continued use of modernist paradigms is a response to the architecture of globalisation and its glitziness and the architecture of post-modern flamboyance, and even the architecture of

constructional and/or structural dexterity embracing new materials and their constructional and structural possibilities. There is a considerable amount of revivalist work being built both neo-modernist and neo-traditionalist throughout the world. During the past eighty years we have seen a greater and greater concern for designing buildings that minimise the consumption of energy in both their construction and in their operation. In many countries there has also been a strong growth and maturation of community architecture movements.

Architectural externalities: If we do not embrace coming to an understanding of the impact of our work on its surroundings, others will. If we do not come to an understanding of how individual buildings affect the financial, social and psychological aspects of the people's lives and the way built forms affect the functioning of the natural environment, I think we are in trouble. We do have a major commitment to the clients that pay us but we need to be able to argue on behalf of the others concerned. The arguments have to be based on empirical evidence according rulings during the 1990s of the United States Supreme Court. My suspicion is that we will see much more legislation brought in the next fifty years on environmental protection.

So where does all this leave us?

Recommendations
Implicit in what I have said are a number of ideological positions.

First of all, we need to embrace diversity. This recommendation is easier to prescribe than to implement. We live in a highly fashion conscious world. It is difficult to embrace models of architecture that are socially deviant from what the cognoscenti accept.

Second, we need to recognize the multivariate nature of the functions of buildings: shelter, safety, identity, self-fulfilment are central. Buildings are also investments and act as catalysts for urban change as the French Government has long recognised and, as the result of Bilbao experience, every city in the world. Buildings also help their architects establish an identity and so capture segments of the market place for services.

Third, we must think in terms of a multi-cultural world and come to an understanding of different taste cultures and recognize the contributions we can make to each. We have to recognize the architecture of globalisation as being important in its own political contexts but it really does need to be tempered by local conditions: terrestrial, social and cultural. Maybe, as some argue, we need an architecture of glocality. A sense of belonging to a global culture is important to many people but so is a sense of place.

Fourth, we should be thinking of the built world as part of an intricate pattern of behaviour settings in which the milieu affords specific behaviours and not others, and aesthetic experiences: sensory, formal and symbolic.

Fifth, we need to seek architectures that are ecological in nature. I use the term in a broad sense. Buildings and the open spaces between them need to be recognized as

a functioning part of our bio-genic environments as well as socio-genic worlds. We need to worry about how buildings channel breezes, reflect light and heat, as well as consume energy. If we insist on following a largely mimetic approach to design we really do need to invent new paradigms to help us achieve this end.

We should have an expansionist model of the profession of architecture in our heads. The profession itself can be designed but I would strongly urge an empiricist approach to that rather than a rationalist one! We have to decide on the range of expertises that we wish to embrace and then whole-heartedly embrace them.

And in conclusion

Gone are the days when a professor of architecture dictates the way a school of architecture goes forward. Although I share many ideas of my colleagues, my positions are probably minority positions in the Faculty of the Built Environment and so should not be construed as a position statement of the school.

And finally, we are always designing for the future; the future is always unknown. To some extent we architects create the future but there are more powerful forces, political and economic, that shape the world. We will always have to design under uncertainty; we shall always have to stick our necks out. We must create either robust environments that are responsive to change or, alternatively, design easy-to-demolish buildings. Who really wants to do that?[1]

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