Notes on Education and Research around Architecture



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Twenty five years ago **docomomo** was conceived by two inspired architects residing in a tiny European country which, given its history of radicalism, unsurprisingly contributed significant impetus to the Modern Movement in the Arts, their agenda to rescue from material oblivion for perpetuity a 1926–9 poetic masterpiece conceived to serve a limited working life, the architecture already an enlightened and revolutionary conception, the task already a cultural paradox. In 2013, with sixty participating countries and the 2014 conference due in the heart of Asia, the original Eurocentric **docomomo** context has been transformed and the consequent content and direction of education and research around architecture it might promote will necessarily trespass on new territory.

Modernity is an unfinished business.

Jürgen Habermas

2

Given that the Modern Movement ideal has overtaxed its origins, the question hovers how may conservation of its works be intellectually reconciled with architecture dedicated to the future and on what basis may a docomomo qualitative base for education be contrived? In the 2002 Back from Utopia Introduction the opening paragraph moves outside the Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement box to free that remit from the protective custody of history by acknowledging that the lasting inheritance of the Modern Movement is to be found as much in the ideas generating form as the forms themselves, ideas formulated to contrive a better future, socially, technically and environmentally. Although many aspects of the Modern Movement, clarity of intention and execution to emulate rational procedures borrowed from science, social purpose, exploitation of advanced technology endure, and while conserving and recording the best models seals history and provides experiential evidence of the aspiration, aspic is no aphrodisiac. New

< Le Corbusier, sculpture of Main ouverte, Chandigarh.

horizons beckon. Architecture involves the vivid expression of ideas about social life, and although in debt to the past, the project apprehends what is imminent, the links between past and future being neither universal nor predetermining, the practice of architecture orients them within a system, in constant flux. However in AD2013, in the void left by MOMO, custom has displaced ideology, there are no flags to hoist up the pole and no inclination to salute anything anyway.

3 Ouch!

Architecture is an attitude after all.

John Habraken

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If the Modern Movement recast the purpose of architecture, as a quasi-social cultural activity, an instrument of reform, what consequences of this revolution beckon in 2013? The ongoing remit of **docomomo** is, assuredly, to recognise, espouse and encourage the tradition of progress as practised by architects. Whereas conservation and preservation have been primarily concentrated on individual MOMO buildings, a task substantially fulfilled, what looms is a global order of concern upon which future generations of architects must surely direct their unique skills and influence urbanism.

One-third of the developing world's urban population lives in slums, and the world's slum population is forecast to grow by six million a year.

U.N. Habitat

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The city, humankind's greatest invention, has emerged as a collective, ecological and environmental anachronism. Frank Lloyd-Wright described the cross section of a modern city as equivalent to that of a cancerous growth, an analogy that resonates. As physical manifestation it has become a liability—the centre is congested, the suburbs too dispersed and it cannot accommodate growth. At best the promise of urban centres as sources of inspira-

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tion and beauty, places of social, cultural and intellectual development and joy, is precarious. At worst, cities loom as ghettos of economic greed and ecological disaster, cradle of crime and shattered dreams. Capitalism, with its handmaiden commercialism, has seen off architect/planner as synthesiser resulting in the concept 'city' becoming a symbol of control, multinational business and technical innovation combining to distort humanism. Cities must, as Colin Rowe observed, aspire to "the final emancipation from the tyranny of objects." The sum of innumerable plots as private investment cannot constitute a socially unified totality. The symbolism of public and social realms must be recovered.

Ten truisms follow, to concentrate the mind:

- To build above five/seven stories expends more energy than can be recovered-the ecological skyscraper is an oxymoron as is the ecological city in its present form.
- Space is no longer available for free use but has become a commodity operating within the logic of market forces, creating densities related directly to market 'value' with consequent congestion.
- Today's urban centres consume 3/4 of the world's energy and create 3/4 of the world's pollution.
- The humane limits (area, population, density) governing the concept 'city' have not been defined—the view of the global village at the start of C21 reveals at least 600 million people living in life-threatening urban environments.
- By 2025 over 60% of the world's population, increasing by 90 million per year, will be living in cities, 60 housing over 5 million of which 44 will be in the developing world; such urban concentrations do not rationalise the conditions supporting humane living conditions.
- 30%-60% of the population in many large cities live in shantytowns.
- The urban population increases by a quarter of a million people per day.
- Cities harbour the lowest standards of living and generate the greatest incidents of crime.
- The city, a collective device of concentration, and the car, a private instrument of dispersal, are antithetical in most western cities more space is devoted to traffic than habitation.
- The world's population of seven billion plus has a current density of 50 people per square kilometre of land, 20,000 square meters per person, not a lot, and diminishing.

The paradox revealed is of cities, the cradle of our civilisation, now threatening the welfare of humanity. Clearly, the context for aspiring architects is urbanism, which the individual building serves.

Think Global, Act Local.



Future society is a knowledge society, but knowledge of the future will not be found within closed disciplines, it will be generated at intersection points between fields of knowledge, the sciences, arts, economics, ethics. Architecture is in the throes of a continuing global, technological revolution—advanced design software has invaded the industry at large providing small practices access to unimaginable resources to be harnessed in the service of dire environmental and habitation needs globally.

Life belongs not to those who know but to those who discover.

Le Corbusier

Imagination is more important than knowledge.

Albert Finstein

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Be clear, architecture is not a subject, it is an activity, acquired through learning by doing in education and practice. In design, no branch of knowledge is autonomous, each project generating its own unique need for information, the outcome of investigation and experimentation, generated by idea, by theory. To design, to build is to research. Leslie Martin, practitioner turned pedagogue, set out the attributes of education around architecture:

- One must develop a theoretical basis for work through which problems of relationship and unification can be assessed; the consideration is of total arrangements.
- It is important not just to absorb known solutions but to question them.
- The educational process should be concerned with how things relate, not with separate subjects or odd scraps of theory from other peoples specialisms.
- The learning process only has meaning when the student can identify with, and respond to, a problem he recognises as such.
- The important aspect is not the known professional habit but the discovery of processes of thought and their relevance to tasks in a changing world.

The best teacher is experience, the best teachers architects doing their qualitative, competent thing. No prescriptions.

Science now finds there is ample for all, but only if the sovereign fences are completely removed. The basic you-or-me-not-enough-for-both-ergosomeone-must-die-tenets... are extinct.

Buckminster Fuller

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To assist in establishing a qualitative basis on which to create a theoretical ambience, here is a reminder of the 1999 Beijing Charter:

- Theory is indispensable—it is how we make sense of the world.
- The obvious must be perpetually repeated, that cities exist first and foremost to satisfy the social needs of communities.
- The conduct of C20 society was predicated on perpetual growth—this is a chimera and a mental adjustment to the reality of finite resources distributed for the greatest benefit of the greatest number is the ideal to which we should aspire, in short to do more with less.
- The planning of new urban centres must recognise that the bigger communities become, the greater the loss of social coherence.
- Environmental conditions should be at the heart of decision-making at all levels, with sustainability as the ethic of modern urban design.
- Those entrusted with planning must be enablers, not gods.
- Educational programs must be adjusted to include teaching children and adults about their environment so as to equip them to participate in the process of respecting and improving their environment.
- There is a necessity to mobilise creative thinking in general, and among environmental professionals in particular.

The Charter then outlines what the coming century calls for

- A methodology that guides the architect through all aspects of the built environment.
- A fusion of architecture, landscape architecture and city planning.
- · An architectural process which views construction, op-

- eration, maintenance, renewal and conservation as a whole.
- Multiple technologies that are rooted in indigenous cultures and societies, and are extended to the realm of human feelings.
- Regional initiatives that enhance visual and psychological identities.
- Incorporation of fine art, craftsmanship and industrial design in architect's work.
- Moral conduct that treats society as the ultimate client:
- An open and continuous education program for professionals, clients and the wider public.

Instead of despair, convictions; instead of whims, reason.

Berthold Lubetkin

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No universal prescription is possible or desirable to define future urban form—local determinants will combine with those defined, and agreed internationally, as ecologically imperative. Certain universal principles for consideration and refinement might be devised as referent for architectural interventions, to be unambiguous and as few as possible. Here are ten to ponder:

- Establish the ecological limit to the height of buildings
- Define density limits which sustain social balance.
- Be aware, land is an increasingly scarce resource to be employed with maximum efficiency.
- Treat ground level as a pedestrian domain generating the morphology.
- Base distribution of dwelling, work and services within pedestrian/bicycle tolerance limits.
- Combine circulation of pedestrians and local traffic where possible.
- Create urban forms which are extendable
- Maximise the efficiency of public transport as generator of planning priorities.
- Green space, urban lungs, to be accessible within walking distance from all dwellings.
- Ensure that the urgency of resolving strategic objectives in sustainable form be resolved beyond pragmatism to the level of spirituality which distinguishes architecture from building.

For the Alchemists, not knowing that they'd never be able to transmute matter into gold was not their misfortune, but their reason for being.

Orhan Pamuk

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There exists a mine of wise texts to inform education and practice.

Alan Colquhoun offered a clarifying classification, city as Process and city as Form.

- The city as Process is noteworthy since the principles it supports can function regardless of its physical pattern it is concerned with means rather than ends—a technological utopia within which symbolic and cultural roles are not prescribed-form is independent of function
- The city as Form—the formal city—is rule-laden and subject to the 'science' of urban aesthetics; it is legible and coherent and concerned with ends rather than means; it is elementalised such that discrete parts are related to each other; the symbolic and cultural attributes are historically devised.

Helen Rosenau explored how the 'ideal' can be applied to the concept 'city'.

- The desire to attain a perfect physical environment and a more satisfying way of life is characteristic of Western Civilisation, since it possesses dynamic force and incorporates economic and social change and experiment—it presupposes emphasis on freedom, and willingness to strive for progress.
- It is characteristic of European history that the concern with merely formal matters recedes in time, and the social function of the city and its inhabitants demands growing expression.
- One has to distinguish between the solution of a particular problem in a perfect manner, and the creation of a prototype of a supranational normative character, an ideal plan.

Patrick Geddes originated urban planning as a globally responsive, humane, value-based activity.

- Treated properly, the earth is fundamentally a cooperative planet on which to live.
- It is necessary to find out how to achieve 'reasonable social conditions' and to teach people how their environment might be 'treated properly'.
- It is necessary to synthesise all the factors relevant to the case.
- The co-operative action of everyone involved must be combined in order to achieve the best result to include education, participatory citizenship and appreciation of the natural world.
- Economics is a matter of resources, not money.

Ebenezer Howard, reacted against inhumane C19 urbanism to invent the Garden City.

- Separate the utopian from the practical by rationalising those aspects of urban life which require to be collectivised from those left to private enterprise.
- Land values inevitably increase towards the city centre if privately owned, leading to over-exploitation and congestion at the centre.
- Eliminate private speculation, so the proper spacing of buildings and open space can be created.

Alvin Toffler calls attention to three basic features of planning in industrial nations.

- An obsession with economics to the exclusion of all other concerns.
- A time bias which regards five years as long range.
- An elitist character that removes decisions from the ordinary citizen and hands them to remote experts and bureaucrats.

And proposes that:

- The conventional view of problems must be expanded to include all those new ecological, technical and social factors which have not figured previously.
- Scenarios may be anticipated in which a combination of appropriate technology (such as clean energy sources and development of cheap sources of proteins) and humane programmes (creation of stable life-supporting economies in less developed areas) ensure that the emerging future is not pre-destined.
- The attempts to weaken environmental controls as a trade-off for immediate jobs, and/or profit will deepen, not solve, the crisis—one cannot mortgage the future for the sake of short-term gains.
- The idea of a quick economic 'fix' is as dangerous as the notion of a quick, neat technological 'fix'.
- Economic policies must be combined with a battery of compatible policies dealing not only with money supply, wages, prices and balance of payments but also resource use, environment, education and cultural life, transportation, communications.

Sustainability as Global Ethic

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The ongoing remit of **docomomo** must surely be to encourage the tradition of progress as practised by architects and ensure this is conveyed through educational

and professional programmes which promote a partner-ship of political ambition with the dynamism of market forces, for the greater good. The aspiration of the Modern Movement was to enable society to create conditions for the benefit of future generations generating the social realm as positive contributor to urban life; such ethical and social intentions need to be reformulated to inform a global, urban future. The Modern Movement changed perceptions of what is possible and this vision must inform the task of humanising future programmes of urbanisation, with sustainability as the global ethic.

Conventional patterns of accommodating urban growth have become obsolete; lack of basic equity is the constant force undermining attempts to harmonize society and humanize its cities.

UN report "Our Common Future"

architect worldwide might be built, denting the combined political and commercial interests which currently dominate urban projects is a one hundred year crusade, with no guarantees. Already there are green-field and brownfield precedents—Curitiba, Barcelona, Masdar Carbon Free City—and in 1997 Richard Rogers assembled Cities for a Small Planet, an informative mini-compendium. Some remote seeds have been planted, but the prospective harvest is not yet even a twinkle in the eye.

Ongoing resolution of two crucial questions must be sought in the test-beds which are our troubled urban environment:

- Can materialism and sustainability be reconciled in future urbanism?
- How may vested interests be adjusted to accommodate the preservation of personal liberty?

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No illusions. Should **docomomo** choose to endorse and promote a basis as outlined upon which the environmental education of the young, the mature and the aspiring

Allen Cunningham

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