Infra-National Architectural Technology and Cultural Identity

by Ron Sylva



Ron Sylva University of Cincinnati Ohio, USA

Contemporary technologies for designing and building structures risk a rootless architecture of culturally sterile architectural clones. The structural fitness of physical foundations required by building codes should find a parallel in the cultural aptness of their aesthetic foundations.

Tema RUM FÖR KULTUR

E HAVE ONLY BEGUN to understand the interactive quality of our natural environment. We are just beginning to appreciate that those interactions do not occur outside of ourselves, to a great extent they *are* ourselves. We are, each, individual sets of physiological, intellectual, and emotional ecologies. It is equally true that our built environment is more than a set of shells that we occupy, move around in, or move past. Our built environment is both a reflection and a defining element of our collective identities; a shaper and an extension of who we are. Our built environment is a material manifestation of our culture.

Culture is heritage and heritage is Janus; one face to the past, and one to the future. A heritage can be cherished for what was; a repository for the past; a celebration of who we are and where

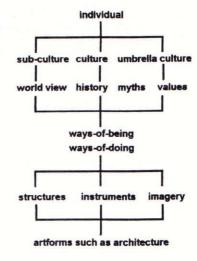


Figure 1. The individual is shaped by cultural ways-of-being that are expressed in cultural ways-of-doing, e. g., in artforms such as architecture.

we come from. And a heritage is an inheritance; a legacy for what we may become. (Fig. 1)

Heritage is an instrument to inform the present and to shape the future. A cultural heritage is different from, and more than, a political

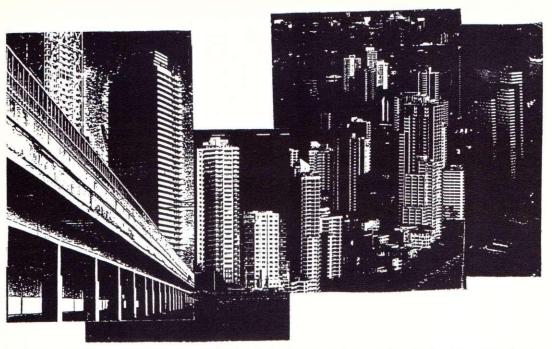


Figure 3. A montage composed of photographs of structures found [from left to right] in Barcelona, Spain, Havana, Cuba, Queensland, Australia, and Pittsburgh, USA.

nation-hood. A culture presents a world view; a way of seeking out, responding to, and initiating experience. It cultivates versions of ways-of-being and ways-of-doing. As one learns to act in and on the world, each human being is shaped in a particular ecology of human experience for ways-of-being and ways-of-doing.

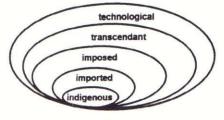
Cultural Essences

The essences of cultures are not mysterious. They are the meat of popular travel books and scholarly sociology. They are to be found in such things as the forms and patterns of the natural surround and in the scale and shapes of the spaces created by those forms and patterns. They are derived from the physical nature of a people, the pace, rhythm and density of their lives, and their arts.

There are, of course, few unalloyed architectural environments for any culture. Historical developments are accompanied by evolving environmental forms. Variety may be contributed by other cultures as better solutions, as new options, and as spice. Commerce and communication with other cultures provides deliberate in-

troductions, political impositions, or casual ruboffs.

Most cultures, and the artforms of those cultures are really nested sets of cultures and artforms. There are the *indigenous* architectural forms that have evolved naturally within a physical and cultural environment, responding to and helping to shape its qualities. There are the *imported* forms that have been adopted simply because they were persuasive. Architectural forms have been *imposed* for political or social reasons – usually by another culture. And forms from the 'world culture' have been appreciated and welcomed as *transcending* the context of any particular culture. Finally, there are those



Nested Cultures

Figure 2. Any culture is composed of a continuum of elements, from the most indigenous to the successively more international.

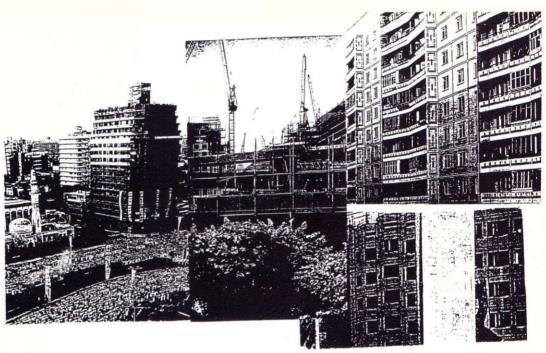


Figure 4. A montage composed of photographs of structures found [from left to right] in Cairo, Egypt, London, England, Novosibersk [former Soviet Union], and Severobaikalsk [former Soviet Union].

architectural forms whose content and aesthetic is derived primarily from *technological* systems and capabilities; forms that are more or less indifferent to the qualities of any culture. (Fig. 2)

The Cultural Traditions of Architectural Form

Historically, architectural forms were fairly straightforward expressions of a culture, or subculture, or the manifestations of some overarching culture like 'Western', 'Hispanic', or 'Islamic'. For the most part, a built environment of architectural form and style was a synthesis of purposes and requirements, cultural qualities, and the evolving technologies that had been developed, nurtured, and flavored by the culture. A culture-centered identity for architecture was based largely in an awareness and an unaffected respect for physical environments, local materials, and life-styles. Climate and terrain provided requirements and constraints for the types of structures to be built that were addressed by available natural resources, building concepts, and technologies. Subjective expectations and influences, such as the cultural purposes to which

the forms were to be put and the flavor of the indigenous artforms, influenced the character and identity of the architectural form. Parallel architectural concepts like the igloo of the Inuit and the dome of the Romanesque church originated in different cultures, but the consonance between those forms and their respective culture was clear.

Newer Technologies and Architectural Form

Newer technologies in architecture, a mixed blessing, possess indisputable potential. And, like the application of technologies to other fields, the realization of their potential has – too often – been dismal. The impressive but all too scarce architectural gems may be acknowledged. But then we must set them aside because the pervasive reality for cities around the world is a matrix of architecturally undistinguished and culturally indistinguishable structures. Skycranes and earth-movers of mythic proportions have been harnessed to stock concepts and techniques. Architectural form and style has become no more than the exercise of the most recent

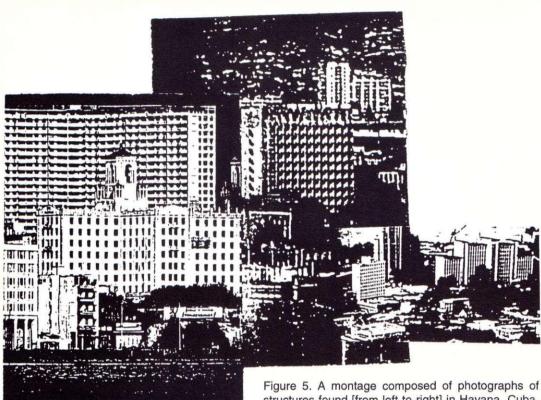


Figure 5. A montage composed of photographs of structures found [from left to right] in Havana, Cuba, Tbilsi, Georgia, and Kinshasa, Zaire.

technologies and economic strategies. The same office buildings, hotels, high-rise apartments, and housing appear all over the world as redundant approaches to cost-effective grids of concrete, steel, and glass. Limited visions of the potential of newer technologies [and the commanding position for shrewd economics] provide new meanings for 'form and significance' in architecture. The familiar 'form follows function' is replaced by 'form follows means'. Form is reduced to function in its meanest sense and at the lowest common denominator of capabilities and cost. (Fig. 3)

The bulk of professional literature in architecture honors the achievements of the past, debates the unorthodox, and celebrates the new, but these are all architectural special cases. Too little critical and influential attention is paid to the architectural actuality that is growing up around the world. The office buildings and high-rise apartment houses of Tokyo, or Lisbon are no different than those of Rio or Calcutta. And the

movement is not toward some transcendental concept of international architecture, it is a drift into a characterless environment of infra-national engineering. We are seeing the growth of city-scapes that illustrate the repetition of technology-driven construction. (Fig. 4)

In the same way that we cannot, should not, ignore cultural changes, we must appreciate newer technologies, but they require new inspiration. A culturally authentic base for the use of architectural technologies should not just reconstruct familiar forms using contemporary methods. The potential of new technologies for their more imaginative use to create culturally interpretive architectural forms does exist. What appears to be missing is the means [or the will] to assure a broader application of that enlightenment to the spaces and places in which more and more of us will live and work. (Fig. 5)

Beyond the expectation that it will remain upright, the design of an architectural form is based in a range of rationales, options, and mandates. Functional requirements based in the purpose(s) of the structure may establish rigid parameters for its design. The design may be a tour de force for a renowned architect. There may be constraints imposed by idiosyncratic demands from the client. And signature architecture, a sort of large-scale, three-dimensional, logo is becoming increasingly prevalent in an age of multi-national chain operations.

Economic constraints and motivations, a less direct but equally commanding set of factors, risk the promotion of short-sighted mind-sets for the design and construction of multiple-use, short-term, and eminently forgettable structures that can be traded like securities, or discarded like plastic containers [it is tempting to suspect that architectural planning for most new construction now includes the implosion techniques for its subsequent removal]. (Fig. 6)

The excellent architectural designs that have made use of contemporary techniques and materials are sadly outnumbered by less inspired examples. But, they do suggest a generally unrealized and un-tapped potential in newer techno-

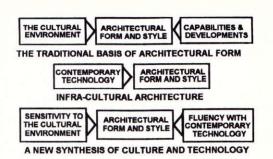


Figure 6. A comparison of the traditional basis for architectural form, the shortcircuiting of infra-cultural architechnology, and the need for a new synthesis of architectural form and meaning.

logies for their more imaginative use in architectural design and construction. They do illuminate the possibilities for a richer architectural experience that expresses and reveals the authentic content and intent of an evolving culture.

An equation for a more imaginative use of new technologies to create architectural form would assure a place for a more sensitive and authentic expression of the evolving cultural environment in which they are employed. (Fig. 7) This would require a means for identifying the

Some Cultural Dimensions

	ORIGINS
Roots	beginnings, defining factors, natural environment, ethnicity, etc.
History	episodes, events, interveniences, continuities, etc.
Evolution	time-flow, forms, rhythms, changes, etc.
	CORE QUALITIES
Psyche	internal structures, attitudes, style, etc.
Beliefs	religions, philosophies, etc.
Governance	shape, power base, exercise, etc.
	CHARACTERISTICS
Singularities	unique to the culture, etc.
Configurations	characteristic association of elements, etc.
Distinctions	what it does that is different, what it does differently, etc.
	RELATIONSHIPS
Parallels	independent development, or based in universals, etc.
Influences	influencing other cultures, influenced by other cultures, etc.
Reactions	attitudes toward other cultures, or specific culture[s], etc.
	TIME
Celebrating the Past	functional elements, ceremonial elements, etc.
Informing the Present	interpret, give meaning, advance appropriate behaviors, etc.
Conceiving the Future	participating in change; maintaining cultural integrity, etc.

Figure 7. A group of elements that individual cultures experience and express that can be the basis for architectural investigation and interpretation.

qualities of that cultural environment and a way for those qualities to become an integral part of the architectural concept. And it would require a sea-change in the way that contemporary technology participates as a part of the architectural conception so that it remains an instrument, rather than a defining factor.

While persuasive arguments may introduce an issue, the means for its resolution are harder to come by. There are, however some avenues to explore.

Architectural Research

The most straightforward option would be a movement among architectural firms [and the construction companies that realize their concepts] away from technology-driven, generic architectural design. The designers and builders of our constructed environment would embrace an environmentally and culturally sensitive concept of architecture that can be realized by a poetic fluency in the potential of contemporary technologies. It would be unrealistic to ignore the influence of costs, but the ideal of value as merit, is too often overwhelmed by the reality of value as cost. The flexible applications and economical advantages of metal rods and poured concrete can be persuasive. But the work of Nervi and others have also demonstrated the lyrical potential of cement and steel.

What is required is a commitment to developing more inspired theoretical constructs for employing contemporary technologies for the design of the general run of architectural environments – more inspired in their articulation of cultural qualities and in the level of their aesthetic qualities. And there would need to be a commitment on the part of architectural firms, business communities, local governments, and citizen groups to support that research and to assure its implementation in architectural practice. Municipal and state governments – and through them, the people – share some of the costs for new construction in a number of direct and indirect ways. That participation should provide

some leverage for the public interests in the design decisions.

Architectural Cultivation

The concept of architectural cultivation; the enhancement, preservation and - where appropriate - the modification of our existing built environment is another possibility. Programs for internships in architectural cultivation might be supported by a pool of funds contributed by architectural firms, construction companies and engineering enterprises. Internships could be made available to advanced architectural students and perhaps for the re-direction of architects already in practice. Architectural cultivation as a distinct professional alternative for private practice or within public programs could remain as an option. Architectural cultivation could go a long way toward preserving the qualities of traditional architectural forms, while developing a sensitivity to those qualities that could be incorporated in more contemporary designs but that would avoid the horns of shallow nostalgia and decorative superficiality.

Architectural Education

Architectural Education, as a significant element of environmental education and an education in art in schools, should address issues of environmental ethics and aesthetics. This should be a part of public education for all citizens who will participate in the built environment and who will provide the funds for its design and construction, in one way or another. Many years ago, in an article, by Robert Sommer, there was a quotation [I haven't been able to re-discover its source]. It went something like: 'He who pays the piper, calls the tune; but the tune, as it is played, falls on all our ears'. Beyond the concept of the citizen as tax-payer and consumer, there is the role of the citizen who participates in the shaping of the public environment by providing an informed, considered, and commanding opinion on the direction that the environment will take.

A Final Note

In assembling the illustrations for this paper, I anticipated a fairly straightforward search for examples that would provide a pattern of visual parallels, differences, and distinctions. The search was frustrating. It is difficult to obtain images of the architecture that actually makes up the newer areas of most cities. The images used in the illustrations were found in the background of images about other subjects in several issues

of the *National Geographic*. Architecture publications, travel books, slide collections, and the like present us with many images of rich cultural forms and architectural gems. The architectural clones that surround us in cities around the world, far outnumbering the gems, seem to be simply ignored in the professional literature. The celebration of the authentic and the beautiful seems to do little to educate a too ready tolerance for the superficial and the sterile.

Ron Sylva, Ph. D., Associate Professor of Art Education at the School of Art, University of Cincinnati, Ohio. Current research and essay interests: contemporary media and culture; the designed environment; perception and concept formation.

References

- Austin-Broos, Diane J. (Ed.), *Creating Culture*. Winchester, Mass. Allen & Unwin Inc. 1987.
- Burton, David, "Some Philosophical Reflections on Cognitive Psychology". *Review of Research in Visual Arts Education*. University of Illinois. 1980.
- Dissanayake, Ellen, What is Art For?. University of Washington Press. 1988.
- Gans, Eric, The End of Culture; Toward a Generative Anthropology. Berkely and Los Angeles, University of California Press. 1985.
- Hart, Lynn, "The Role of Cultural Context in Multicultural Aesthetics". Journal of Multicultural and Cross-Cultural Research in Art Education. United States Society For Education Through Art. Fall 1992–3.
- Hicks, Laurie, "Designing Nature: A Process of Cultural Interpretation". Journal of Multicultural and Cross-Cultural Research in Art Education. United States Society For Education Through Art. Fall 1992–3.

- Keifer-Boyd, Karen, "Deep-Seated Culture: Understanding Sitting". *The Journal of Social Theory in Art Education*. No. 12, 1992.
- Marantz, Kenneth, "Art is About Everything: On Educating the Teacher of Art". In Norman C. Yakel (Ed.), *The Future: Challenge of Change*. National Art Education Association. 1992.
- Margolin, Victor (Ed.), *Design Discourse; History, Theory, Criticism.* Chicago, University of Chicago Press. 1989.
- National Geographic, July 1991, August 1991,November 1991, December 1991, April 1992,May 1992, June 1992, July 1992, April 1993,May 1993.
- Seminar Proceedings. Discipline-based Art Education and Cultural Diversity. The Getty Center For Education In The Arts. 1993.
- Stuhr, Patricia L., "Multicultural Art Education and Social Reconstruction". *Studies in Art Education*, Vol. 35, Issue 3, Spring 1994.