Architecture

Don't Call It Kookie

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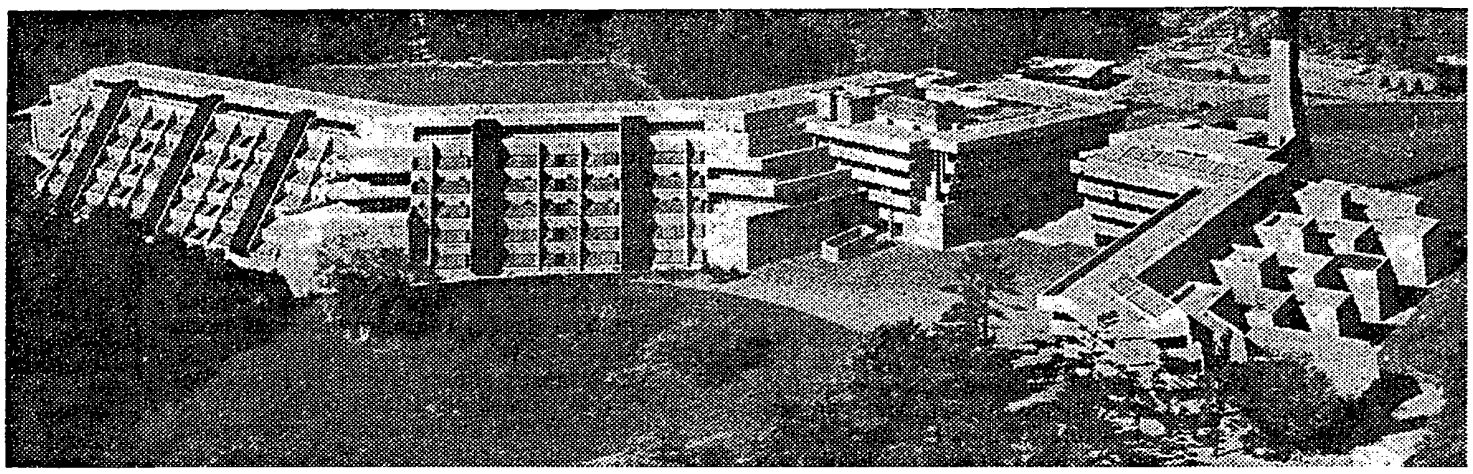

Ken Bell Photography Ltd.

Megastructure in Toronto: Scarborough College's all-in-one building for the all-purpose university
From this to "action architecture" and Plug-In Cities?

CLOSING our eyes firmly once again to environmental crisis in New York — fountains of the absurd and equally absurd meat market sites—we present this week another aspect of the larger subject of theory and design. It is time for an interim report on the progress of the hottest thing in the architectural field—Megastructure.

The theory of Megastructure, or the gathering of many components into a single unit, implying largeness or greatness, as expressed in the Greek root of the word, has been hot for five years, warming up for 10 or 15, and a source of theoretical discourse long before that. It is producing, in various modifications, some of today's most interesting work. It has been thoroughly explored by critics and intellectuals and its flashier aspects have been reduced to a kind of kicky high fashion novelty by the stylish magazines.

What Megastructure amounts to, with considerable flexibility in interpretation, is a way of meeting the frighteningly enlarged scale and needs of today's building. It is proposed that this be done by means of huge structures that are actually made up of multiple small units that can be used over and over, serially or as accretions, in varieties of modules, through repetition and ultimately mass production. These units can be hung from or slid into or connected with some form of containing framework, but the implication always is of an ever-expanding number of smaller parts hooked into a general system of services and circulation.

Megastructure has a technological and functional rationale beyond cavil and a staggering creative and esthetic potential. At its highest reaches it is violently anti-Establishment, anti-formal, open-ended and non-centric (in the sense that classically-conceived architecture is composed with a back, a front, a beginning and an end), deliberately rejecting symmetry, balance and focus and all of the time-honored conventions of architectural design. Bigger than any monument, it disclaims monumentality for a social and industrial image. It is "endless architecture," "action architecture," "anonymous architecture." It has "clip-on" parts for "plug-in" cities. Dig it? It's the scene.

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Quite seriously, it is one of the most stimulating, promising and problematic architectural developments of the 20th century. Results, in practice and on paper, range from the all-purpose university structure, having a big vogue right now, to Megastructure as the city of the future, a kind of erector-set environment with disposable parts. It goes all the way from a specific system of design being boldly explored here and abroad to the purest Utopian vision.

Perhaps the best of the flexible, expandable, university-in-one-building experiments is Scarborough College, a branch of the University of Toronto that is now an object of architectural pilgrimage. Designed by John Andrews, it combines two of architecture's most progressive trends: Megastructure and the New Brutalism. This single, stunning structure of rough concrete is a continuous circulatory system embracing classroom units and student spaces. An even more ambitious Megastructure by Candilis, Josic and Woods is going ahead for Berlin's Free University. A highly personal version of the principle has been constructed for the new arts center at the University of Illinois by Walter Netsch of Skidmore, Owings and Merrill. Others are under way.

The most notable exponents of Megastructure in its most extreme form have been a coalition of English architects in their 20's and 30's called the Archigram Group, whose theories were brought to international attention with a London exhibition in 1963, "The Living City." Interest has been whetted by occasional publication of the group's Archigram magazine.

Archigram's theories of a total Megastructure environment of expendable, industrialized components attached to a framework of circulation and services are richly buttressed by a spectacular abstract visualization of the kind of city that would be shaped by systems approaches, computerization and technology. Service-and-traffic grids fed by ducts contain rearrangeable, stacked housing and office units swung into place by cranes; the whole thing creeps across the land on giant metal legs. Awe-inspiring inhuman complexity has language to match. Peter Cook's magnificent mechanistic drawings are filled with "maximum pressure areas," "information silos" and "capsule-unit housing towers." This is Plug-In City.

Critic Reyner Banham, writing in the Walker Arts Center Design Quarterly called Archigram's "kit of interchangeable living cells and support structures the first effective image of the architecture of technology since Buckminster Fuller's Geodesic domes captivated the world." This is not, he warned, "a kookie teen-age Pop frivolity," no matter how many technological improbabilities it may contain. Utopia, after all, is Utopia. It deals in cosmic lessons, not instructions for do-it-yourself.

On a less cosmic level, Megastructure's more realistic versions offer provocative answers to large-scale building. In theory, these solution to mass produced housing or educational, commercial and cultural complexes are superbly, scientifically logical. In practice, their logic runs smack into the obscene obstacle course of tight money, artificially inflated land cost, archaic and restrictive union practices, obsolete and diverse building codes, astronomic costs of tooling for industrial production, politics, pigheadedness and the vicissitudes of public and personal taste.

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The process is being repeated, for example, for Habitat, Moshe Safdie's brainchild and beautiful obsession that was the showpiece of Montreal's Expo 67. What started there as serious Megastructure was completed, in a vastly reduced and compromised form, as something less than the inexpensive, General Motors-type housing product intended. It was a hand-crafted Cadillac, an enormously costly, non-standardized, custom-made model. While it offered a tentative demonstration of a handsome and rational design principle it was also a sad case history of production realities.

New York City and the Federal Department of Housing and Urban Development are now in the middle of Habitat studies. Attracted to the economic and technological promise of Megastructure housing, they are coming to the same economic and technological dead ends. How curious that those dead ends should be produced by the most progressive of all scientific civilizations. We can build small, sophisticated, exotic, demonstration mini-Megas only. The implicit mass-scale economics and efficiencies are unobtainable. The status quo wins hands down.

There are other objections to Megastructure. In the December issue of Architectural Design, guest-edited by Jonathan Miller on the metaphors and myths of the city, Chris Abel severely criticizes every aspect of the theory from Scarborough to Plug-In City.

Megastructure does not, he says, take into account the adaptive processes of the living community, the organic adjustments to change that must inevitably be made. It is an orderly, rigid concept. The Megastructure building or city is a "closely integrated or cohesive ordering of a system of multifarious activities" that insists on a "coherent image." Life, he says, using such currently "in" words as conurbation, homeostasis and cyclic processes, is just not like that. Megastructure ignores the "adaptive behaviour the planner cannot himself specify."

Touché. But the truth, as usual, is somewhere between the Gospel of Archigram and the Fallacy of the Esthetic Straightjacket. Megastructure is one more important and valuable architectural tool pertinent to our times and problems. But the avant garde moves on. Next week, the case for chaos.