BEYOND A NEW ARCHITECTURE TOWARD A STILL NEWER ARCHITECTURE [1]

J. Bonta

Institute of History and Theory of Architecture, Technical University, H-1521 Budapest

Received October 6, 1987

Abstract

In disagreement with others, the Author sees no temporal crisis between modernism and postmodernism. On the contrary, there is a normal development, in course of which modern gets tired, aged, its inherent contradictions sharpen, bias get disclosed. Wobbling of modern dogmas clears the way for — sometimes extreme — experiments likely to introduce a new stage in the development of architecture.

Economical, social, ideological changes will be outlined, from which postmodern approach has germinated. Recognition of the limits of increase, of hazards of a technicized environment, disbelief in the computability and controllability of the world, — in general, in the omnipotence of technics, — all these urge to develop a traditionalist, environment-conscious architectural language, that fits the organic development process, informally addresses man and society. These, rather than certain extreme experiments, are the endeavours representing the spirit of postmodernism.

Is modern architecture dead?

According to Charles Jencks, greatest theoretician of Postmodernism, modern architecture has died. He also knows when, to the minute: on July 15th, 1972, at 15 h 32. It was then that the stroke of grace was given by blasting some high-rise houses in the Pruitt Igoe residential estate in St Louis (Missouri, USA) — designed by Minoru Yamasaki and having earned distinction by the American Institute of Architects [2] — previously dilapidated by its coloured residents. The event related somewhat priggishly is not worth to be taken seriously, Jencks himself deems it of symbolic importance. For us, it only confirms our belief: the built environment may forward or hamper the arise of social conflicts but it cannot solve them in itself (although no doubt, partisans of new architecture did indulge such illusions) [3].

What after modern?

In opposition to Jencks, I dare to state — even at the cost to become uninteresting — that in the development of architecture of this age, neither disheartening, tragic momentums nor those inducing to jubilation (gloating over) are encountered. Observations are concomitant to normal development within the architecture: new architecture becomes tired, grows old, its inherent contradictions, opposition to surroundings sharpen, one-sidedness, biasing gradually come to light. All these are vehemently criticized, inducing to experiments sometimes tending to irrational, leading to new recognitions, new sensitivities. Actually, passions go decaying all over the world. The economical boom causes USA architects — of them many exercised creativity at graphic exhibitions alone — to face the risk of having their designs built. Building necessarily makes use of recent technology, although in service of new sensitivity, a richer and more expressive moulding. And behold, newer architecture, alloying perennial lessons of new architecture with new recognitions — not to be named either modern or postmodern — the unavoidable new stage of development of world architecture starts to develop.

Is modern architecture modern?

Because of appreciating the situation like that, I am not willing to apply terms "modern" and "postmodern", not only since they are inexact but since adopting them would risk to get enticed into the ideological trap of "new architecture". Namely, avantgarde architecture of the '20s, '30s considerednamed-boasted itself as new, modern, and confronted itself to the multimillennial history of architecture. As if there were ever an architecture other than new compared to its antecedents, other than to follow goals, to serve demands of its age. But it went still further. It absolutized its modernness. It believed itself in possession of principles, recognitions, method and approach valid forever, enabling itself to continuous renewal, granting it the fate of eternal youth, everlasting modernness. Thus, understandably, arise of a new trend coping with recent conditions is inimaginable for it. Events contrary to expectations and defying its resistance are considered as a life after death, a ghost life. Paradoxically, however, the keenest opponents of modern - including Charles Jencks — as captives of old terminology, speak of the death of modernism, and some life after modern, evolution of postmodernism. All these are to dramatize the development process, to be avoided in the following.

Little is needed to refute views tending to absolutize modernness of modern architecture. New architecture of the '20s, '30s, like every trend (or better, style) to now, was a product of its age, and decayed with it. "What... it started was a cathartic process of architecture returning to its reason of existence." [4]

In this course, architecture is reduced to its elementary components, of a conscious social vocation involving useful and efficient tests to apply new technology. The cubist, constructivist wealth of forms of that age suggestively representing the actual world concept is, however, just therefore perfectly unfit to interpret our changed world, public feeling, mode of viewing.

Postmodern architecture or newer architecture?

With the prevalence of new conditions, approach and public feeling, modern architecture of the '20s, '30s is followed by the development of a newer architecture responding to them. This is not identical to the after-life of "new architecture", its manierist degeneration — called somewhat righteously "postmodern". No doubt, this is also existent, but only peripherally, servicing an oversatiated layer desirous of unique tastes. Rather than to discuss this architecture, that one utilizing perennial recognitions of modernism, and lessons of postmodern experiments, but deeply rooted in trends of the period will be spoken of. Its recognition, understanding needs to be absorbed in essential problems of this age.

Clearly, naming is a matter of convention. Denominations of architectural styles were originally nicknames or superficial generalizations of some formal, usually inessential stylistical mark. After this theoretical elucidation, the denomination "postmodern" will be applied — in lack of a better one. Although no doubt, it is in harmony with the widely applied attribute "postindustrial", and also related to it: problematics and atmosphere of the postindustrial period are the background for postmodern artistic endeavours.

Changes of the "postindustrial age"

Irrespective of terminological fastidiousness, these terms are in fact only signals. Considering them as such, let us see real problems hidden behind new architectural trends affected by one or the other term. To answer by entries: radical changes in sciences, technology, environmentalism, world concept, mode of viewing, public feeling. Let us see those determinant to architecture.

Periodization

Timely orientation is helped by the following division likely to fit history of developed countries.

1939—1945 years of war
1944—1955 reconstruction
1955—1968 years of welfare
1968—1973 critical threshold (point of inflection)
1973— post-critical years.

Years of reconstruction and welfare

Up to the inflection point somewhere in years 1968 to 1973, development appears in form of continuous quantitative accumulation. National income, output of industry and agriculture, consumption, foreign trade, productivity grow from year to year. But so do the number of cars, the length of motorways, the area asphalted, the number of electric machines per household, drug consumption, agricultural chemization, etc. Cities grow and multiply. Settlements by the hundreds coalesce into boundless agglomerations, conurbations. (Urbanization in underdeveloped countries, due to quite different causes, will be left out of consideration.)

Up to the mentioned critical period, this growth seemed self-intended, natural, and infinitely continuable in the future, positively affecting human welfare, quality of life, hence desirable. The prevailing public feeling simply evaded eventual bounds of growth, inconvenients of its negative effects.

Sinistrous signs

Meanwhile uncontrolled growth approaches its objective bounds, as warned also by e.g. the Roman Club; 1968 to 1972, the Club, under the guidance of Aurelio Peccei, elaborates the model quantifying the "bounds of growth". Correctness of starting data, of assumptions simulating future development, and last but not least, of the conclusion, the suggested "zero growth", is questionable. What is not is the problematic disclosed to the public opinion that cannot be omitted any more.

Objective bounds of quantitative development

Rightness of tendencies outlined in the report by the Roman Club seems to be confirmed by the first oil crisis in 1973, revealing unstable foundations of economy in several industrial countries. Limits of quantitative development become obvious: the quantity of exploitable, raw fuels is limited. But the increase of production has other limits, too: atmospheric, soil, water pollution, poisoning approaching a degree risking biosphere disequilibrium. Also conurbations grow to their limits. Some cities "... unexpectedly behave like a vessel filled with fluid and tilted, so that enormous costs and efforts are needed to manage them!" [6] Densification, congestion of industrial, traffic and administrative systems are of a degree "... that at last, a new system of indissolubly interlaced effects arises". [7] This system, by orders more complex than its components, is unstable enough to tilt over and collapse upon the slightest mistake, omission, lack of discipline. Namely, opposite to self-controlling force systems of nature, large, centralized systems of technical civilization are incredibly vulnerable: their sensitivity, instability increases upon adding every new subsystem of a wider range, affecting more people. Man is not the least to add to the unstability of technical systems he manages — with the vulnerability of his health, nervous system, mind.

Man and technicized environment

Man has an incredible although not infinite adaptability. He cannot fit any environment without damage to his physique or nervous system, and above all, not as fast as required by abrupt technical changes in this age of ours. Even acknowledging new conditions, he cannot always emotionally assimilate them.

Technicized environment, ever new machines sharing our way of living impose inintermittant attention. Remind only the constant danger luring in urban streets, mechanically transmitted stimuli, noise, information overflowing man, exceeding his power of comprehension, maintaining a state of stress, chasing, depressing him. Man separated from natural environment for most of his time, "saved" from physical effort and its nervous strain outlet effect but exposed to continuous nerve-racking stimuli has his muscles atrophied, his joints calcified, nerves racked. Somatic and psychic capacities of man inline with technical systems are near to boundaries.

The microelectronic revolution

Besides of universal problems of scientific and technical development affecting survival of mankind, special attention is paid to the effect of microelectrotechnical revolution penetrating organization of the social production and even all the way of living on the mode of viewing. There is an abrupt development. Computer capacities increase by an order of magnitude each 3 to 5 years. [8] As a result, an ever increasing ratio of mechanical-type physical and mental work will be done by computers and robots controlled by them, and an increasing percentage of people will take part in production with their intelligence, by controlling and developing computers and automata.

Accessibility of the world to computation and control

Advent of high-capacity computers has revived an old, almost extinct illusion, namely that important phenomena of the world become understandable, controllable and organizable thanks to the computer. For instance, gigantic economical systems can be computer controlled from a center, dissolving stresses, avoiding errors. This illusion relies on the misunderstanding of the nature of reality.

Dialectics teaching irreproducibility of motion, eternal change, infinite manyfacedness of reality has long recognized the impossibility of full recognition. In recent decades, limits of recognition have been demonstrated in mathematics and physics. [9] The naive belief in the computability and controllability of large systems could not be confirmed by the computer. Namely the computer can only work with an exact model that is, however, a more or less fair abstraction of reality. The process of modelling necessarily involves also subjective elements. Not less of care and methodology problem is to relocate the model into the living medium of reality. According to available knowledge and commonsense, complex, large systems will not be computable and centrally controllable even for the greatest computers to come; [10] enforcing central control would inevitably produce chaotic conditions, Systems theory suggests instead cooperative systems with elements other than in subordination or in superposition, in free, autotelic cooperation in a given period, for given goals, and to disengage, rearrange upon new conditions. Archetypes of these systems is the market. But such are also economical and social organizations with the conscious, self-active adherence of people, therefore inoperative in a centralized, mechanical system. The sparse mesh of the theoretically cleared system of cooperation is filled out by the everyday activities of people.

Political dimensions of global problems

To now, perspectives and limits of the scientific and technical development have been outlined, irregarding demographic, social, political conditions of the world. In the following — omitting details — also political dimensions will be spotlighted.

As a contribution to the scope of wasting raw materials and energy: an average USA citizen utilizes 55 times the energy utilized by a third-world citizen. [11] As a rough estimation, population of technically developed countries, making up about one fourth of that of the Earth, consume about ten times the energy consumed by the underdeveloped. Predictable further shifting of demographic proportions and further areal concentration of production will induce serious empoverishment of an important percentage of mankind. To now, no signs of improvement emerge. Latest results of science and technology, an important percentage of available funds are spent on producing mass-destructive weapons. Accordingly, the underdeveloped three quarters of mankind are deemed to lasting misery or even starvation. Moreover, all of us live under the menace of nuclear death since effective use of nuclear weapons would exterminate mankind as a whole.

Automation and society

Microelectronic revolution, production systems much more productive than the actual ones, prognosticate material and energy saving mass production suiting to supply all the mankind. Further quantitative increase of production might, however, accelerate biosphere pollution undermining living conditions. Man not using his muscles in production any more but only grey matter of the brain is still more exposed to degeneration. Further areal and timely concentration of production may accumulate unpredictable politicalsocial inflammatory matter. Defencelessness of the third world or even of the medium developed contries increases with the superfluousness of an important percentage of their manual labour. Also developed countries suffer an increasing unemployment. Social-human consequences of this increase of leisure time are hard to predict. Mankind can only be saved by the ability to organize man to man relation, global distribution of goods - solving social inequalities — at a high level similar to that of production; to create a balance between material alterations due to automated production, and natural environment, biosphere; to return exploited materials, wastes into the universal circulation of nature; to develop a healthy way of living; to a balanced, creative utilization of physical and mental coactivities.

Else — as earned by sinistrous signs — automation would prepare fulfilment of the fate of mankind rather than advent of a new golden age.

Man in an unfriendly world

All these — or, in terms of entries: limitations of available raw materials and of energy, continuous biospheric pollution, strains of the human nervous system, inherent perspectives-dangers-recognitions of the electronic revolution, and their political projections, growing empoverishment of the third world, the armaments drive, the foreshadow of nuclear death — fundamentally alter the feelings of man to his natural environment, nature transformational activity, sciences and technique.

Childish confidence in the computability, organizability of the behaviour of world reducible to some fundamental laws hence predictable — long peculiar to public feeling — omnipotence of science and technique, panacea to every ill of mankind — also to the most serious ones: social inequality, misery — is off. "Nice forms bathing in sunshine" of avantgarde architecture (Le Corbusier), its snow-white, abstract cubes are architectural symbols of illimited confidence in the lucidity of reason, of the will urging to world saving, and of the resulting exaltation and prophetic attitudes.

This sincere, deeply rooted optimism is, unfortunately, away. Experience and recognitions made in the meanwhile induce to a more adult look at the world, the up-to-date technique, that does not seem unambiguously philantropic any more, but rather a toy bringing welfare to all the mankind under proper social conditions but likely to blast in our hands if not cared for.

Survival conditions

These recognitions are cutting the euphory of growth; rather than quantitative increase, the goal is improvement of the quality of life; instead of defeating nature, protection of the biosphere, creation of a balanced, selfregulating system of artificial and natural environment. It is not invariably the highest developed technique that is the most economical, most advisable — not even for the rich. For medium developed or underdeveloped countries it may be disastrous. Under extreme climates, for instance, it is inadvisable to surround the inner spaces by a thin sheet and then to produce the human comfort by wasting excessive energy. It has to be re-learned from civilizations at a lower degree of technical facilities that what is for them the condition of survival: reasonable management of natural resources, modes of joining the eternal circulation of nature. Modes of development, insulation methods matured under local climatic conditions during centuries or millennia had to have recourse to.

Survival of mankind is conditioned by finding an alternative to the present — material wasting, environment polluting technical development, detrimental to health and nervous system — by integrating artificial and natural environment in a single, balanced, self-regulating system.

Panel and tulip. Ambivalence of Hungarian public opinion

Hungary is affected by problems both of excessively industrialized and of underdeveloped countries. Atmospheric and water pollution in Budapest and in some industrial regions are at the developed level. Consumption habits corresponding to medium development have formed, together with a mentality typical of consumer societies, complemented with a feeling of being in delay, an obsessional overtaking. There is a frantic quest for symbols of prosperousness: car, weekend home, hifi tower. Architectural rewards of the winner include multistorey "chalets" in excess of real needs, elaborate fence, marble crypt. These goods are unreasonably appreciated since to acquire them needs not only assiduous, strenous work but also particular inventiveness and organizing abilities (relations), often even renounce of progeny. Manifestations of consumers' mentality are especially repugnant since the greatest part of population are far from overconsumption of anything but food. For Hungarian economy it is a question of vital importance if the supertechnology of microelectronics can be mastered or not, entraining return to backwardness. Successful solution of this problem is the only possibility to keep on level, and in this light, "postmodern" disillusion with technique and craving back to a pre-industrialized age seem somewhat untimely. Symptoms and atmosphere of the post-industrial age are, nevertheless, discernible also in this country, quite understandably, since great problems of this age - biosphere pollution, nuclear threat — are global. Besides, national public opinion is made to oppose Technology with majuscule by desolateness and boredom of residential estates built by mammoth building enterprises, especially since puritane residential estates are counterpointed by much envied symbols of eager and offensive consumption - multistorey "Alpine" chalets.



Fig. 1. Charles Moore: Piazza d'Italia (New Orleans, the seventies)



Fig. 2. Ricardo Bofill: Palacio (Marne La Vallée, the eightics)



Fig. 3. Arata Isozaki: H-house (Japan, the seventies)



Fig. 4. Stanley Tigerman: Holiday home (region of Chicago, the eighties)



Fig. 5. Kohn, Pedersen Fox: Office building (Chicago, the eighties)



Fig. 6. Murphy/Jahn: Office building (Chicago, the eighties)



Fig. 7. Imre Makovecz: House of Culture (Sárospatak, the eighties)

Sensitivity of architecture to social impacts

Architecture is sensitive to changes of public opinion, public feeling, public taste, slow, hardly conceivable reorganization of the world concept. Architecture is a two-fold-unique phenomenon. Its creations are industrialtechnological products and at the same time aesthetic objects arising feelings, atmosphere, transmitting information. Because of all of these, the function to humanize environment by technical means is incumbent on them. The humanized environment displays the relation of man to nature, to actual science, to technique, in a manner directly perceivable to anyone. Architecture needs the intermediation of technique to make felt its other important meaning, including its relation to social powers of its age. Its aesthetic peculiarity and sensitivity to changes of science and technique and to their social impacts prevent it to remain indifferent to scientific and technical revolutions of its age, to their dangers against the survival of mankind, to their effects exciting social crises, and to continue to blow triumphal marches on the sill of the post-industrial era. Facts show it not to do so. But then - to keep at the metaphore — what instruments does it play, in what a key?

Architectural changes

With the loss of faith in illimited possibilities and rule over nature of science and technology, the order of values of architecture changes, its constructive-moulding methods are transformed. Instead of white, abstract geometrical configurations of modernism, opposed to nature, symbolizing lucidity of human logic and intelligence, postmoderns gladly construct buildings of traditional materials, by traditional means, in balanced relation to the natural environment, often concealed in nature. Insulating constructions, builtups developed under local climatic conditions are preferred to mechanical heating or cooling. So-called soft technologies are appreciated again, even rediscovered, utilizing energy from sun, wind, biogases. Illimited optimism, fanfare are replaced by cautiousness, and by a considerate, economy-minded technique taking local conditions into consideration.

Changed relation to the artificial environment

Illimited optimism induced moderns to consider disposal of the old, "outdated" environment. They were self-assertive enough to raise abstract monuments to the deity of Technique but these remained isolated in the environment organically developed in history. Residential estates in outskirts chattered with old towers. I feel it the most important, most remanent recognition of postmodernism that a single building is numb in itself, transmitting at most a limited meaning. Its meaning becomes a readable sentence only together with its surrounding. So the architect's most delicate problem is how to fit the new building into its environment, how to connect it into the crosstalk among historically developed townscape features. Fitting requires correctly, with self-restraint chosen scale, mass and skyline, as well as to apply signs making the building to represent both its age and the historical continuity.

Recognition of the active function of form

Modernism considered form as a final result deducible from materialtechnical conditions, from requirements of building functions, and denied its (relatively) independent social importance. On the other hand, postmodernism considers forms as a means, a language transmitting meaning, function, message, world concept to society. For its intermediary function, the form has to be visually meaningful for people in the given cultural sphere. This is why postmodernism applies symbols developed, conventionalized or even traditionalized in history. Namely, in conformity with informatics, usual hence easily decodable signs help to understand actual, novel contents of the information. Absolutely new signs, irrelevant to survived, understood, habitual things, cannot be decoded by the public. While fully conventional signs, with nothing of new to say, raise disinterest, indifference. The exclusive application of abstract geometric forms by the avantgarde did not satisfy the want of an easily recognizable, identifiable, expressive, reminiscent environment felt as their own. The human heart is only open to forms to be grasped by senses, that surprise with novelty, freshness, that are felt up-to-date, and at the same time integer with precedences, cultural heritage - recent varieties of historical development under recent conditions.

Changed relation to society

The postmodern architect is not concerned with world-saving ideas, problems of symbiose, cohabitation as did moderns, even without commission. American postmoderns refrain even from the scale of residential estates, towns. Among Europeans, the Frier brothers are interested in the composition of urban streets and squares as sceneries of public events rather than as organizations of cohabitation-symbiosis. In the years of economical recession and crisis, commissions receded. Most of postmodernists could only sharpen their lion's paws on family houses and minor buildings — sometimes only on graphics for exhibitions. To my best knowledge, postmodern housing estates were only built in France. It is only recently, and only in the USA, that this situation changed somewhat. To be concise, major commissions seem to have put an end to self-contained forming exercises.

This autotelism, withdrawal to professional problems never characterized Hungarian "postmoderns". "... their architecture is not an architectural game for the design cognoscenti to amuse themselves at incestuous conferences, drinking parties, and in the pages of fashion magazines... but an architecture of social purpose and quiet contemplation." [12]

Changed relation to the public

Avantgarde castigated "incompetent", laic public — the consumer, the client — with prophetical anger. The architect was deemed to be alone to know and specify for people in what built environment, and how to live. Postmoderns know that concepts of people of their home, direct surrounding have to be respected, and that the purchaser's home has to be developed in cooperation with him. People have to be engaged in a dialog, convinced if they are wrong but their fancies accepted if they are right. In past decades the specialists often proved to handle the problem in an excessively sterile way, and who to whom it might cost "his skin" was more realistic — at least from his viewpoint.

Conclusion

The arise of postmodernism is not considered as a tragedy but as an unavoidable event of development.

While creating, the architect feels himself free to act — forms arise from his and his colleagues' hands. In reality, however, it is the spirit of the age that guides their hands; style arises from necessities of that age. And this spirit of the age cannot be re-embottled — neither by mocking nor by reprimanding. The only thing likely to moderate excesses present at beginnings of any movement is commonsense, concrete criticism understanding essentials of the development process, objectively tuned, taking both up-to-date function and technique, and social-human conditions of the age into consideration, like the newer architecture developing beyond new architecture.

References

- 1. Referring to "Vers une Architecture" by Le Corbusier, 1923, foreshadowing modern architecture.
- 2. JENCKS, Ch.: The Language of Post-Modern Architecture. Academy Editions, London, 1978.
- 3. See Chapter "Architecture or Revolution" in (1).
- 4. SZENTKIRÁLYI, Z.: World History of Architecture. (In Hungarian). Képzőművészeti Alap K. Budapest, 1980.
- 5. VOGT, A. M.-JEHLE, U.-STRATHAUS, S.-REICHLIN, B.: Architektur 1940-1980. Propylaen 1980, Ullstein Verlag.
- 6-7. VESTER, F.: Ballungsgebiete in der Krise. Stuttgart, 1976.
- 8. VÁMOS, T.: Our Country and the Technical Development. (In Hungarian). General report at the 141th general meeting of the Hungarian Academy of Sciences, 1981. Published in series "Gyorsuló Idő". Magvető K. Budapest, 1984.
- 9. Referring to the physical theorem "Heisenberg's Indeterminateness", to the Gődel theorem of mathematics, that in any system of axioms there is necessarily a statement not to be proved inside the system.
- 10. VÁMOS, T.: Cooperative Systems, New Perspectives of Development. (In Hungarian). Valóság, No. 4, 1983.
- 11. POLÓNYI, K.: Climate-Energy-Built Environment. (In Hungarian). ÉTK, Budapest, 1983.
- 12. GLANCEY, J.: Pécs-csoport. Architectural Review, Dec. 1981.

Dr János Bonta H-1521 Budapest