DESIGN AND PRODUCTION OF ARCHITECTURAL FIELDS

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ABSTRACT:
In this, definitional context no emphasis is placed on the difference between products of. Architectural work and the others, for, from the point of general conditions within which they are produced, the related parties, whether they belong to physical environment or social, are no different. The process, in the pre-industrial or industrial eras, has the basic stages of: The definition of need, information gathering, mental production (design), material production and use. From the point of the social groups involved with the production, again in both eras there are workers, artists, designers, or craftsmen as against the society with its various classes and strata. Therefore at least for this investigation, our belief is that it is not the individual elements or parts that create the crucial factor for the nature of the total but the relations among these parts, whether they belong to one time or other. Furthermore it should also be mentioned that production, here is taken as one of the principal activities of man. Other than its basic nature due its relation to consumption, it has a creative and constructive aspect which is the core of all scientific and artistic work. Production, therefore, is taken with the meaning of not only producing exchangeable goods, but the meaning of both producing goods to be used physically and producing new values of social and individual nature.

KEYWORDS:
Architectural Design, Social Production, Industrial Production, Consumption.

INTRODUCTION

Industrial production is the significant aspect of a socialist society's production technology. The main feature of industrial production, that generally is the subject of study, is its quantitative features despite the qualitative ones. And the most explicit exposition of this attitude is the priority given to the quantitative increase of production in most of the developing countries; probably with the just cause of trying to take the whole of the society to the level of the minimum standards of this age. But in most of the cases it is possible to see the negligence of qualities at this stage which later on becomes the sources of greater problems. In order to achieve this goal the primary requirements of, ending external and internal exploitation and starting an industrial process that is mainly directed to the production of raw materials, energy and production tools, should be satisfied.

Social production

During this process a change in the socio-cultural structure of the society is inevitable. One of the possible ways of defining this change could come out from the change in the nature of the decision processes relevant to the pre-industrial and industrial ages (although this distinction should be made according to the socio-economic structures, here, the focus will be placed on the decision process which exists within the socio-economic structure and is the subject of our problem), [1].

From the point of the relations between a socio-cultural structure and its products, a fitness is found in the pre-industrial design decisions against a misfit in the design decisions of the period starting “with industrialisation. This characteristics, when studied in detail, shows that before the start of industrialization the existence of a small community, the defined physical and social context of this community and the close links existing between the users and-the producer, even to the extent that they were the same person in most cases enabled the formation of a balanced inter-relationship between man, society and nature. By means of this balanced interrelationship a significant social and cultural characteristic, relevant to that society and its individuals, develops. On the other hand despite these qualitative merits, a significant inferiority of quantitative characteristics attracts attention. The number of products being produced is very limited and far from satisfying the needs of the masses. This property of pre-industrial production has effects on the needs of the ruling classes and naturally even more strongly on the needs of the masses [2].

Despite these quantitative characteristics, what is of significance for our case is the qualitative characteristics of production? Technology at its present stage is capable of answering the basic requirements of the quantitative problems. Therefore the problem, from that point of view, is to get to that level of technological development. Although the implementation of the solution necessitates a social change the important issue is

the determination of the social structure whose formation will also be affected -although partly- by the related technology. Various researches conducted with the aim of solving the contradictions relevant to industrial production reveal that the products of pre-industrial folk arts were far more successful. This was achieved by utilizing the physical conditions [3].

The social and psychological requirements set by the needs and' the characteristics of the society and the individuals. It is also necessary to clarify the nature of the distinction that has always been made between works of art and objects or article of daily use. The characteristics of these products in the pre-capitalist social orders -for then the distinction was most evident-, when analysed) according to the Producers of these products, reveal that:

- The distinction has no significance from the functional point of view, for both are essential to satisfy a set of needs. Social, psychological or physiological nature of these needs place no superiority on objects of art against the others. Therefore the distinction made according to the purpose for which the product is utilized has no role in defining that product as an object of art or an object of common use.
- Secondly, the distinction between the producers of art objects and the others arises from the way they utilize the physical and social information available to them. In other words, the nature of information is the same, but its way of interpretation differs from one to the other. The basic reason behind this is the social characteristics of these individuals whose work 'produces', 'creates, 'designs', 'composes' or 'plans' a product. In order to sustain his existence the producer is bound to exchange his product for others and this restriction also defines the social nature of his product according to the social need that it fulfills. If on the other hand he is not producing for exchange but for his own use -like the production of dwellings or implements- then it is the individual need that resides as a motive force behind production (which may or may not add a social character to the product). The product of an artist, on the other hand, is a necessity for the maintenance of the power of the ruling classes. These characteristics of the product, although veiled in most cases" does exist in all class societies. Here the need for the product evolves not only from the bare functional services it provides but also from the expression of the power, status and the effectiveness of the class characteristics of the product's owner. The artist having the potentials to produce this product inevitably shows inclinations to support, develop and honor the ruling classes and the social order they represent. Due to these differences of social nature, while the producers are forced to abide the factors arising from a specific social order, in order to be able to answer the needs by exchange, the artist is able to go beyond the accepted limits of the social order (and the notion that the artists create the motive for social change can have relevance only after these conditions are made significant).

Therefore both from the point of the product and the producers the distinction is not a relevant one and every product produced with a socially significant use value deserves the right to be an object of art -if that is a superiority [4].

Industrial production

It is seen that the main characteristics of production has changed both quantitatively and qualitatively with industrialization. There is a quantitative increase, due to the increased rate of production with the introduction of Machinery, which is capable to turn out more and more products. This increase in production rate also stimulated a change in the qualitative characteristics of the product. Within the individualistic socio-economic formations while production was unifying its task of satisfying the need with the task of maximizing the profits of the capital, the social and cultural contents of the product itself were diminishing. While some products were gaining a universal character some were losing all of their bonds with the social and cultural patterns of the society. This change in the cultural contents of the product, as it is influenced by the social order of the society, changes the cultural structure of the society as well. It is wrong to take these influences to the cultural structure as only the influences created by the product. But the totality of interrelationships related with the production of that product create the forces that shape the cultural structure. At this stage of development, profits made by the consumption of more and more 'products has made the use of all means acceptable for the increase of consumption and İn particular the potentials of mass-media has increased the power of these means manifold [5].

Although it is difficult to define where the interaction of cultural structure and products starts, if the problem is investigated from the point of the value that is produced, how the mode of production and the socio-political order effects the cultural structure can be clarified. The relation is due to the fact that the economic characteristics are a reflection of the social order which on the other hand is defined by the cultural structure -as well as others- of a specific society [6].

Whatever the subject, all production activity is nothing but the production of a value. As value can have material, economic or spiritual characteristics, the end product of the process of production has these characteristics. .Since in a capitalist society production is made for exchange products turn into commodities and the problems of process of production reveal both quantitative and qualitative features [7].

If the quantitative characteristics related to the process are abstracted from the qualitative ones -or if one scientific discipline is related to the former and the other to the latter, independently- then the

explanation of the role played by production in the formation of social relations is bound to be limited.

Again from the point of value, production of each commodity has both a use value and an exchange value. Use value is created by the relation of a product and a consumer or a user and is determined by the satisfaction and the fulfilment it provides for the needs and requirements. Relations forming the use value are individual due to the fact that they evolve from the individuals' relations with the products. Therefore use value creates the individualistic aspects of production. On the other hand production is a social activity and individuals producing products are bound to exchange their products with each other. This compulsion both changes the products into commodities with exchange values and defines the social character of production. “At the same time (use values) are the material expression of exchange values”.

If to this exchange process of commodities the exchange of production means are also added, the accumulation initiative of the capital owning individuals diverts production aims to exchange rather than use. In other words individuals or organized groups wanting more use values started to produce more exchange values [8].

In this way, products identified with exchange values, instead of their use values, in the individualistic market relations gain a further "fetish character". Throughout the various stages of capitalism the fetish character of the commodities change as well and when the whole purpose of production becomes exchange and the products are embodied with only exchange value then the prevailing social pattern is that of a consumer society. It should also be mentioned that this process of change shows differences both according to different commodities and different social formations. Products designed and produced for a market have both a neglected use value and because the producers or the designers meet with the society only under market conditions, their products are also dissociated from the socio-cultural structure of the society [9].

In conclusion it can be said that this change in the character of the products is from one hand due to the realization of the aims of maximizing the profits of capital and from the other due to the loss of producer's or designer's ability to establish direct contacts with the other users. Both of these causes can be tied to the change of the purposes of production [10].

Production, consumption

Industrial production, while directed to the maximization of the individual's profit in the capitalist economy, in the socialist economies, it is aimed at the provision of basic consumer goods necessary for the contemporary standards of living in the shortest possible time. In the meantime consumption, in both social formations, had a significant role in effecting both individuals and society, due to its economic and socio-cultural nature.

Social characteristics of consumption necessitate the study of its sociological characteristics as well as economic due to its importance for societies trying to plan their productions in a socialist order. A study of this kind helps to understand the relations in nature, to define the relations between man and environment according to the dialectics of nature, to define the formation of social relations and to understand the characteristics of the relations among the classes of a society. On the other hand it is necessary to understand the constructive and productive potentials of man in both social and physical -natural-environments and to define our method in utilizing and developing these potentials [11].

Since man exists within the context of nature and since he is bound to abide to its equilibrium he has to look for the essentials of resources and methods of his production in this context. An equilibrium of this kind prevents an unbalance due to the advantages of one side and the formation of an antagonistic situation between man and nature with the elimination of exploitation. There are advantages in the elimination of these antagonistic situations simply because man's existence in nature and his development is closely connected to the correct handling of contradictions. Creation of conflicts which we cannot resolve and leaving them to the forces beyond our control can lead to the realization of the least probable. Present day problems of environmental pollution, ecological unbalance are the examples of these consequences [12].

Formation of these mutual relations between man, nature and society in production primarily necessitates the elimination of exploitation of man by man and then the contradictions of the new mode of production has to be developed, evaluated and resolved. The elimination of class contradictions is not the end of all problems, there will still be situations creating contradictions within the social relations of production.

'Revisionist' tendencies, of the societies whose economic contradictions are resolved, are due to a pattern of change that is focused only on the substructure leaving aside the change of the social superstructure. Problem of the parts related with the process, but unable to affect its decisions, create one of the typical cases exemplifying these contradictions. What is necessary for us is the rightness of the decisions made within this mode of production and the testing of these decisions. This examination should be made primarily for the social characteristics of production more than the production itself [13].

In the individualistic market economies a demand, reflected in any form, starts production and consumption, while forming the last step in the materialization of profits, is assumed to satisfy the needs. Whereas even for the needs of the ruling

classes of the richer nations the solution provided for the difference between the characteristics of a need satisfied by the market relations and the real need has the significance of a solution limited by the relevance of a factor defining only a limited aspect of the market among all the others directed to the maximization of the profit [14].

If demand is divided into two groups, defining its characteristics, and called the demand created by the real need and the artificially created demand, even the abstract proportions of them reflect the nature of the market from consumption point of view. Demand created by the real need evolves from the soundness, usefulness and the aesthetic values of the product. Whereas in the second -i.e. artificially created demand- factors like the way the products are offered, psychological cultural, class, technological, physical substructure characteristics are manipulated and made effective.

The influences created by these factors increase or decrease inversely proportional to the level of consciousness of the society. In the meantime although it seems as if the demand is created by the society, it is questionable to what extent the society can play an effective part in the process of creation of demand [15].

The characteristics of this milieu will inevitably have effects on the design of the product to be produced. A designer concerned with such unreal needs will not search for a social significance in a product produced with the only aim of consumption to increase profits and even if he searches for a social significance he is bound to realize that it is no existing.

Another example can be drawn from this production's - whether in the form of information or commodities- insufficiency to cover the gaps in the public services sector. As long as public services are not directly profit maximizing, they never are attractive for the investments of the private investor. Problems like housing, education, health are far from solutions and the problem becomes denser every day.

Same problems in a socialist society gain a solution with the unification of planning and social resources utilization. This in a sense, is realized by the social ownership of surplus value, which in individualistic economies is provided by the exploitation of labour and accumulated by the owner of capital, and the distribution of its benefit s on an egalitarian basis [16].

In socialist economies, economic exploitation among the social classes is eliminated; development of the mode of production by means of developing the new dialectical contradictions, and making this order effective for the other aspect s of a social structure is the problem. In other words, this is the formation of social superstructure. Beside it's characteristics from the point of economic and sociologic relationships, another aspect of production evolves from its pertinence to man's activities in nature [17].

This characteristic evaluate s individuals within the social totality, creates the basic motivation for the individual's and society's development. Development of the constructive traits, beginning with childhood education, both directs the individual to be beneficial to the society and also establishes the sound foundations for his attitudes towards the individual problems he will encounter.

Alienation

Production, which is the basic element of the relations within a society and the personality system, gains-significance and helps in defining the social role of the individual with the development of constructive traits. In social orders and environments where these constructive and productive capabilities are limited -which is also affected by the level of technology- , the socio-psychological problems generally defined as alienation are the most distinct examples of this.

Together with the problem of alienation it should also be mentioned that beginning with industrial production, development of technology and automation workers' relation with the product is continuously diminishing. While in the pre-industrial technologies the producer had at the same time the authority on the decision process of his product. The single dimensional technology and specialization of present has totally eliminated this relation and the chances of workers' participation with the decision process. It is most natural that the conditions creating this social structure will also have effects on the creation of the physical environment where production is made. The physical environment although on one hand provides the forces for the continuity of the established order, on the other it inevitably prepares the sources of power against the order through the long term effects of the system's interrelationships. Relations disconnected from the totality of production, continuous involvement with the same work, together with the compulsion to sell his labour has estranged the worker both from his own labour and has also degraded his social gelation [18].

Being alienated from his labour and the product of it, he begins to avoid productive activities even during his work hours. While by some sociologists this is explained with the type and the rhythm of work without giving consideration to the social characteristics of labour, others make it explicit that specialization to the extent of "loss of public identity of the job" together with "the enforced obsolescence of skills" are the main motivators of alienation [19].

The common source of all these factors is the elimination of the social aspect of production itself. The alienation of human labour from production is caused by the increased complexity of the decision process as much as the type of technology employed for production. Labourer's alienation from the decision process consequently results in his

alienation from the products, which are expected to fulfil his needs by usage or consumption-. What is of significance about this point is the social characteristics of this decision process [20].

Production for consumption

It is an obvious fact that all production activity is oriented to consumption. What is meant by consumption in this context, however, arises with the utilization of production for the provision of profits for individual interests instead of the satisfaction of a need. The process of creation of exchange value as a result of the social nature of production and the transformation of this exchange value to surplus value and the accumulation of this surplus value by the capital owning classes in the form of profits can only be realized within a particular social environment of relations, which is the market. As existing markets approach their saturation points, search for new markets becomes necessary [21].

Problem is to increase the consumption of markets, and thus the role of the designer on the side of the ruling classes gains a definition. To solve the problem there are two distinct approaches. First is to increase the consumption of the already existing products (which is done by means of various media like advertising, etc.), second is to increase the number of already existing products.

The methods employed for the first approach try to offer generally the same products in a different form and without a change in their contents and try to create a demand for these forms. On the other hand already existing products' lifespan is decreased in a planned manner. The second approach, which is to increase the number of products, is realized firstly by introducing a new product and then by persuading the public that it is indispensable, through creating symbols and images around those products. Since both of these approaches are aimed at the appropriation of surplus value and since it is not the society's requirements which is the motivating force behind production, social characteristics necessitating production are no more existing [22].

Society in this case is a means for consumption and is unable to create a conscious demand. If, at this point, the characteristics of industrial production decisions are examined it will be evident that the principal features are determined not by the side for whom the product is produced but by the owner of capital whose primary aim is to make profit.

Production for need

With the social ownership of production forces the process of production should be redirected from consumption and profiting to the satisfaction of needs. Problem of satisfying the needs is tackled differently in different socio-economic formations. In the above mentioned individualistic economies the answer is left to the outcome of attitudes changing according to the characteristics of the market. These attitudes, to a great extent, are defined by designs as well as the other commodities in the market and the productive forces which are exchangeable.

Since market is not a medium where only consumer goods are exchanged, economic forces other than consumer demands are able to affect the nature of this environment.

Class character of the society, unlike the pre-capitalist social orders where the producer was creating use values in order to exchange and obtain the use values created by other producers, helps the owner of capital to increase the surplus value which he already has begun to accumulate. Thus the classes owning a capital are not only able to satisfy their consumption requirements but are able to purchase forces of production and labour to strengthen their class power. In short, market in capitalist economies is not a place where only use values are exchanged but a place where productive forces can also be appropriated. Designer's decisions based upon the general characteristics of this environment do not mean that his decisions are based only on use values, in other words on the real requirements and needs of the users and consumers [23].

The problem of the nature of production decisions in socialist economies generally gains significance as their development process takes them from an economy of scarcity to a level of prosperity at which the qualitative characteristics gain importance. While the question is stated as planning alternatives, manner of utilization of resources according to their productivities is left to the decisions of the planning organisation.

With these economic decisions, user needs for the determination of design decisions, while in Eastern Europe and USSR are left to a market mechanism where only the use values are valid.

In China initiative is in the hands of the workers who are also expected to conform to the goals of the central planning organisation.

This, explains such a difference between the two that; in' the first implementation administrators of local industries, which are the extensions of the central planning organization, unavoidably give priorities to that industry or sector's economic contribution from the point of the economic targets of the national plan. As a result of this attitude they can ignore their relations with the society and possibly not by evaluating the contradictions of these relations they can change development into a single directional process -which is the negligence of the social aspects of development. Whereas in the Chinese experience workers' local implementation decisions, after the acceptance of national targets, show that social and psychological characteristics of production are as significant as the economic factors in the creation of social consciousness [24].

Design activity relieved in an environment of this kind has an increased performance due to two

reasons. The designer, being relieved from the pressures due to the ruling classes, is at a greater liberty and on the other hand the product of design activity gains an increased potential to answer the real needs.

Production targets and design

It is necessary to divide the process of satisfying production targets into some stages. These stages gain definition both by evaluating the development in time sequence and by developing the decision making process at a specific time. Development in time is the best utilization of all available resources defined by each stage of a society's socio-economic development. While objective conditions are inadequate to provide the minimum standards to the majority, allocating vast resources for the interests of a minority is no different than giving priority to the minority interests in production decisions, and is relevant to the developed countries with individualistic market economies as well as the underdeveloped ones. On the other hand, even if a decision making process is able to come to the most rational conclusions by utilizing various scientific methods, it is still essential to check the social significance of the inputs used by the process [25].

At this point we encounter the previously mentioned misfit between the qualitative characteristics of the industrially produced product and the user's need. The conflict arises both from the importance given to the development of the product and from a mode of production within which a demand attention, for the whole activity is directed to consumption. Development is determined by the improvement of the processes of decision making as well as the nature of source of inputs providing information to the process. Design decision process related with production continuously develop with the resources provided by the abundance of quantifiable information of engineering design situations and by the socio-economic efficiencies of macro-scale planning problems. These methods (especially engineering design methods) are concerned with the way their information is utilized rather than with the significance and relevance of that information. As a result of this a conformity proportional to the clarity of the aims of design is obtained between the targets and the inputs of the design, provided that the targets do not include a change of social order. Another factor affecting the improvement is the development of sciences and possibilities of quantification and measurement. While in the fields related with physical sciences great contributions are made, limitations in the social science spheres are due to their relation with the social orders of most western societies [25].

Against all these factors even if it is assumes that the constraints within social science are avoided, still the advantages provided by the design methods are bound to be limited by the present form of industrial production. After the analysis of socio-economic and political factors it is also necessary to investigate the practical nature of the decision process related to this mode of production in order of define the causes of these limitation both in socialist and individualistic socio-economic formation.

At present, the basic characteristic of products of industrial production can be defined as the products designed by a decision maker other than the user of that product and making decisions in the name of those users. Within this process on one hand there is the objective information about the user, the society and the physical factors, on the other is the subjective judgments of the designer to compensate for the inadequacies and shortages of the objective information [26].

Unification of this information with a method can be defined as the capability to solve the problems of professional nature. After having gone through a process of this kind, a design by going through an industrial process becomes a product. The product is a finished object and the user or consumer will try to satisfy his needs and requirements with it. In the meantime, since the product is finished and cannot be affected by the new information there is nothing that can be done to overcome the drawbacks of the product which are due to the accepted subjective values to compensate the limitations of the party responsible for its design. At this point, before investigating the possibilities of defining the product by the user's needs, it is necessary to examine to what extent the information used by the designer is potentially able to solve the problem and could the designer have sufficient information at any time to solve the problem. Otherwise as stated above, if limitations of the design methods are eliminated, problem can have a solution.

First stage or production comprises the decision for the subject of production to satisfy a need. If this decision considers creation of use value then it is essential to define the need correctly. For this purpose the only dependable discipline which will do the evaluation of information is statistics. Yet, since statistics, especially inductive statistics, which is used to a greater extent for design information, is a discipline making predictions about the whole from the parts belonging to it, its conclusions can only be fruitful where the subject is the whole [27].

For products which should conserve their individual characteristics, generalization of individual characteristics can only be meaningful for the satisfaction of the conditions of industrial production. In short, these conditions are within the production of the same element in the largest possible number. Otherwise in the stages of use and satisfaction of a need the same product will be the cause of discontent. With standardization and approach to a single type, finished product this situation comprises the fundamental contradiction. Contrary to this is the generally accepted alternative of increased variations and the supposition that each of the variants will fit to a different need.

Differentiated and finished products create an impossible situation from two basic points of view. However they are differentiated it is impossible to have as many variations as the users. It is impossible both from the point of present mode of industrial production and from the point of the impossibility of acquiring information relevant to each individual user and arriving at decisions satisfying each one of these sources. Secondly, even if it is assumed that this information is collected then a finished product becomes totally unresponsive to changes in time. Length of time of satisfying a need is inversely proportional to the rate of change of need. On the other hand, a product open to changes is not infinitely adaptable. What can be done is to increase this time span relative to the rate of change.

Since these aspects of the targets of design and production will be investigated in greater detail, for the moment we can define our goals, in the light of above discussed:

- social and personal structures
- design methods
- the characteristics of the mode of industrial production as arriving at a synthesis, which will develop the abilities of individuals and societies using the opportunities of design methods, the practical advantages of industrial production and the resources of individuals, societies and nature in a more rational manner, by utilizing our potentials not from the point of what 'is' but from the point of what 'ought to be.

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