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DESIGN AND PRODUCTION OF ARCHITECTURAL AND OTHER PRODUCTS

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I. GENERAL CHARACTERISTICS INFLUENCING PRODUCTION

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 enviroment 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.

a. SOCIAL PRODUCTION

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 standarts 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[1].

During this process a change in the socio-cultural structure of the society is inevitable[2]. 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 existswithin the socio-economic structure and is the subject of our problem).

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[3]. This charecteristics, when studied in detail, shows that before the start of industrialisation the existance 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[4]. By means of this balanced interrelationship a significant social and cultural characteristic, relevant to that society and its individuals, developes[5]. 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[6]. 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.

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 and the available resources in the best possible manner to satisfy the social and pyschological requirementsset by the needs and the characteristics of the society and the individual[7].

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 a) according to the uses these products were put to, and b) according to the

1. Although this is one of the most obvious realities of our time, because there are various efforts to undermine the reality, it becomes necessary to stress the fact through both theoretical and practical cases. P. M. Sweezy, Obstacles to Economic Development, in C.H.Feinstein(ed.), *Socialism, Capitalism and Economic Development*, Cambridge : Cambridge U.P., 1967, pp. 196-197.

2. An interesting source giving this change in a rural context is J. Myrdal, *Report From a Chinese Village*, Harmondsworth, U.K.: Penguin, 1969. In addition, for changes of socio-cultural nature due to industrialisation, in western socities see T. Burns(ed.). *Industrial Man*, Harmondsworth, U.K.: Penguin, 1969 and E. Mayo, *The Social Problems of an Industrial Civilisation*, London : Routledge and Kegan Paul, 1949. Further more J. Robinson mentions that this change is inevitable for most of the societies. J. Robinson, *Cultural Revolution in China*,Harmondsworth, U.K.: Penguin, 1970, p. 38.

3. Fitness and misfit are only related to the product's conformity to its environmental conditions."Selfconscious" and "unselfconscious" decision processes, which for C. Alexander, are the causes of fitness and misfit can have validity only if the designer is arriving at decisions in the name of the society (which will be discussed later) or if his decision process is not related to the class structure of that society.

Alexander approaches the process from the point of change and confuses the changeability of decision products or designs with the social change, which can come from within the society or from above. C. Alexander, Notes on the *Synthesis of Form*, Cambridge, Mass. : Harvard U.P., 1964, pp.46-52.

4. The trio of Man, Nature and Society would find a stability if it were free from the effects of Man. While man changes this equilibrium in a certain pattern, at the same time he also tries to understand the factors responsible for this stability and these factors, to whatever scale they belong, are converted into information.

5. Commenting on the products of the pre-capitalist social formations Marx states the fact that because division of labor was not this sharp and because emphasis was on quality and use value their products were better works of art. Whereas with capitalism since the worker has become a proletariat-by selling his labor- and alienated from his creative labor he is"indifferent to his work". On the other hand the attitude of the capitalist is also different from that of the ruling classes of slavery and feudalism due to the "accentuation of quantity and exchange value". D.D. Egbert,*Socialism and American Art*, Princeton N. J.: Princeton U.P., 1967, pp.20-21.

6. Due to a limited production capacity and the power of ruling classes the requirements and needs of the masses were satisfied by a filtration process in which every consumer durable followed a service path parallel to the hierarchical class structure of the society.

7. Although A. Rapoport neglects the causes of underdevelopment, he gives a clear description of the way these societies utilize their available resources from the point of dwellings. A. Rapoport, *House Form and Culture*. Englewood, N.J.: Prentice Hall,1969.

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[8]. In order to sustain his existance 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 honour 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)[9].

8. From here onwards 'producer' will be used for those whose labor produces the articles of common use and 'artist' will be used for the producer of 'works of art'.

9. E. Fischer, writing about the "social mission" of the artist, states that there are two missions, one "imposed by the society's ruling classes and the other "arising from... his own social consciousness", and the conflict between these two is the expression of the antagonisms in that society. In class societies these two sides and the conflict is possible only if the artist is lacking a social consciousness, otherwise there is no reason to prevent the artist to take his place among the productive classes of the society and there would be no question of a conflict between his individual and social characteristics. E. Fischer, *The Necessity of Art*, Harmondsworth, U.K.: Penguin, 1964, p.47.

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.

b. INDUSTRIAL PRODUCTION

It is seen that the main characteristics of production has changed both quantitatively and qualitatively with industrialisation. 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 maximising 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 itself 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 in particular the potentials of mass-media has increased the power of these means manyfold.

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.

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[10].

10. Sweezy, making this distinction between the "quantitative relation between products" and the qualitative "relation between producers", also states that the first cannot be investigated without attention to the second. P. M. Sweezy, *The Theory of Capitalist Development*, London : Monthly Review Press, 1968, p.25.

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 fulfillment 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[11]. "At the same time (use values) are the material expression of exchange values"[12].

11. K. Marx, Wages, Price and Profit, in *Marx-Engels Selected Works*, London : Lawrence and Wishart, 1968, p. 203.

12. K. Marx, *Kapital*,Vol.1, Bk.1, Ankara: Sol Yayınlar, 1970, p. 59.

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[13].

13. O. Sik, Socialist Market Relations and Planning, in C.H. Feinstein(ed.), *Socialism, Capitalism and Economic Growth*, Cambridge U.K.: Cambridge U.P., 1967, p.136.

In this way, products identified with exchange values,

instead of their use values, in the individualistic market relations gain a further "fetish character"[14]. 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[15].

In conclusion it can be said that this change in the character of the products is from one hand due to the realisation 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.

c.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 standarts 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[16].

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[17]. 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.

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[18]. 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[19]. There are advantages in the elimination of these antogonistic situations simply because man's existance in nature and his development is closely connected to the correct handling of contradictions. Creation of conflicts which we can not resolve and leaving them to the forces beyond our control can lead to the realisation of the least probable. Present day problems of environmental pollution, ecological unbalance are the examples of these consequences.

14. K. Marx, *Kapital*,Vol. I, Bk.1, Ankara : Sol Yayınlar, 1970, pp.107-124.

15. P. M. Sweezy, *The Theory of Capitalist Development*,London:Monthly Review Press, 1968, pp. 35-36.

16. J. Robinson, Socialist Affluence, in C. H. Feinstein(ed.), *Socialism, Capitalism and Economic Growth*, Cambridge, U.K.: Cambridge U.P.,1967, pp.176-181. In addition examples, showing insufficient service functions due to limited consumption providing limited profit, thus forcing the service sector to remain stagnant, are given in J.K. Galbraith, *The Affluent Society*, Harmondsworth, U.K.:Penguin, 1968, ch.s 9 and 10; and K. Coates and R. Silburn, *Poverty:The Forgotten Englishmen*, Harmondsworth,U.K.:Penguin, 1970,ch.8.

17. Although there is nothing new to be said about the social aspects of products, the increasing significance of consumption, in the societies with individualist market economies, expose problems of social and psychological character which are new, important and therefore worth analysis. E. Fischer, *Marx in His Own Words*, London : Allen Lane, 1970, pp. 26-28.

18. F. Engels, Part Played by Labor in Transition from Ape to Man, in *Marx-Engels Selected Works*, London : Lawrence and Wishart, 1968,pp.364-366. K. Marx, Economic and Philosophical Manuscripts, in T.B. Bottomore and Rubel(ed.s), *Karl Marx Selected Writings in Sociology and Social Philosophy*, Harmondsworth, U.K.: Penguin, 1969, p.250.

19.Lefebvre, studying the relations of Man, Products and Nature states that "within Nature, this vast complex, the world of products or total instrument, is interposed between Man and Nature; it is an object of Nature, but turned towards man" and sees the prevention of man turning into instruments only in the overcoming of the contradictions that are "within the human".H.Lefebvre, *Dialectical Materialism*,London : Jonathan Cape, 1969, pp. 129-130.

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[20]. '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[21].

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.

In the individualistic market economies a demand, reflected in any form, starts production and consumption, while forming the last step in the materialisation 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 charecteristics 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 maximisation of the profit[22]. 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, usefullness 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[23]. 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[24]. 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 realise that it is nonexisting[25]. 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 maximising 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 everyday[26].

Same problems in a socialist society gain a solution with the

20. L. Huberman, P.M.Sweezy, Lessons of Soviet Experience, *Monthly Review*, Nov.1967, pp.11-12.

21. J. Robinson, *The Cultural Revolution in China*, Harmondsworth, U.K.:Penguin, 1970, p.12. Socio-economic substructure is defined by the forces and relations of production and superstructure by the mode of production. This definiton of social substructure and superstructure of Marx, in terms of its contents, is analogous to the ideological, sociological, technological and role structures of C. Wright Mills. İ. Tekeli, Sosyal Sistemler, Sosyal Değişme ve Yerleşme Yapısı(Social Systems, Social Change and Settlement Pattern), İstanbul : İstanbul Technical U.P.(Ph.D. dissertation) 1969, pp.48-49.

22. P.M.Sweezy,*The Theory of Capitalist Development*, London : Monthly Review Press, 1968, pp.49-51.

23. Although price comparisons and price competition are also included to these factors in the books by classical economists, insufficient demand and wars to enlarge markets together with price agreements of supposedly competitive industries reveal that the truth of the effectiveness of the above factors can be relevant only to the beginning ages of capitalism. P.Baran, *The Political Economy of Growth*, London : Monthly Review Press, 1968, pp.81-82. M. Dobb, *Studies in the Development of Capitalism*, London : Routledge and Kegan Paul, 1967, p.309. " The problem of business used to be how to manufacture and produce goods; but the principal problem has become now how to market or sell goods." S.H.Britt, *Spenders*, New York, 1960, p. 52, quoted by P. Baran, *The Longer View*, London : Monthly Review Press, 1969, p.224.

24. "The most striking examples of the capacity of advertising to generate demand for worthless or even harmful products have recently been provided in the area of pharmaceuticals, cosmetic products, and the like. P. Baran, *The Longer View*, London, Monthly Review Press, 1969, p.228.

25. Galbraith, showing this characteristic between the sectors, states the fact that investments to service sector are far less than those for consumer products industries and complains that " the engines of mass communication, in their highest state of development, assail the eyes and ears of the community on behalf of more beer but not of more schools." J.K.Galbraith, *The Affluent Society*, Harmondsworth, U.K.:Penguin,1968, pp.212-214.

26. P. Baran, P. Sweezy, *Monopoly Capital*, Harmondsworth, U.K.: Penguin, 1968, pp.281-323.

unification of planning and social resources' utilization. This in a sense, is realised 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 benefits on an egalitarian basis[27]. 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 aspects of a social structure is the problem. In other words, this is the formation of social superstructure.

Beside its characteristics from the point of economic and sociologic relationships, another aspect of production evolves from its pertinence to man's activities in nature[28]. This characteristic evaluates 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[29].

d.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[30].

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[31], 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 relations[32].

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[33] without giving consideration to the social characteristics of labour, others make it explicit

27. For the role of planning and production in socialism, against the views taking this distribution aspect individually as the principal characteristic of socialist economies *and trying to define the difference* between socialism and capitalism as a formal difference, see M. Dobb, *Political Economy and Capitalism*, London: Routledge and Kegan Paul, 1968, pp.272-274.

28. Engels, defining the two aspects of human activity, states that, while "conscious organisation of social production... can elevate mankind... socially,... production in general has done this for men specifically." F. Engels, Introduction to the Dialectics of Nature, in *Marx-Engels Selected Works*, London: Lawrence and Wishart, 1968, p.354.

29. Although constructive abilities and activities are among the factors forming character and attitude patterns, they are not the only constituents. These features of the personality structure when combined with the level of consciousness and class characteristics develop various patterns of attitudes.

30. The two factors mentioned above, namely unconsciousness and lack of constructive capabilities, are the causes of frustrations, generally seen in the leisure time activities, and alienation. H.I. Wilensky, Work, Careers and Social Integration, in T. Burns (ed.), *Industrial Man*, Harmondsworth, U.K.: Penguin, 1969, p.110.

31. This Authority was provided at least for the products of personal use. Products made for exchange, on the other hand, through their use values provided the possibility of executing this authority. See notes 5 and 34.

32. K. Marx, *Economic and Philosophic Manuscripts of 1844*. D.J. Struik(ed.). London: Lawrence and Wishart, 1970, pp.106-119.

33. S.R. Parker, *et. al. The Sociology of Industry*, London: Allen and Unwin, 1969, pp.164-165.

that specialisation to the extent of "loss of public identity of the job" together with "the enforced obsolescence of skills" are the main motivators of alienation[34]. 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 cosequently results in his alienation from the prouducts, which are expected to fulfill his needs by usage or consumption. What is of significance about this point is the social characteristics of this decision process.

2. 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[35]. 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 realised within a particular social environment of relations, which is the market. As existing markets approach their saturation points, search for new markets becomes necessary[36]. 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 realised firstly by introducing a new product and then by persuading the public that it is indispensible[37], 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[38]. 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.

34. R.K.Merton, *Social Theory and Social Structure*, New York : Free Press, 1967, p.564.

Blaumer, as a result of his researches among the printers, workers of textile, automobile and chemical industrial (to represent the four types of technologies in historical perspective as the preindustrial, early industrial, mechaniaed and automated technologies), comes to the conclusion that, while at one end of this spectrum printers, provided with the opportunities of freedom of a relatively primitive industry, at the other hand, operators of an automated chemical plant, having no connection with the process of production do not feel alienated. R. Blauner, *Alienation and Freedom*, Chicago : The Univ. of Chicago Press, 1968, pp. 182-184.

At this point it should also be mentioned that alienation, at present, is mainly regarded as a problem relevant to industry and its relations with the socio-economic order are left beyond the scopes of investigation. Therefore if the above mentioned conclusions are reviewed it will be seen that although with automation the worker is freed from the monotonous, non-creative tasks he still is not equipped with the necessary power and responsibilities to define the social function of his activity. Thus, as a result of automation and the consequent increase in leisure time alienation has grown beyond the limits of the factory and has made itself a social problem. On the other hand the contention, that as a result of the elimination of social content of production all leisure time activities will be directed to social ends, has no scientific significance against social and historical reality.

35. M. Dobb, *Political Economy and Capitalism*, London : Routledge and Kegan Paul, 1968, pp.115-117.

36. Search for new markets can follow two distinct courses; while the existing consumption capacity of an existing market can be increased with various means, more effectively the consumption of foreign markets are tried to be controlled. Realisation of this necessitates an exercise of influence upon the forces affecting the market as well as the products brought to that market. Market characteristics are conserved by the consumption orientated character of the products and by the endeavors of the national ruling classes to retain the status-quo in return to the profits obtained. The consequences of these effects are seen in the cultural and socio-political structures of the market countries. P. Baran, *The Political Economy of Growth*, London : Monthly Review Press, 1968, pp. 194-218.

37. Packard in various books gives the characteristics of this process. V. Packard, *The Hidden Persuaders*, Harmondsworth, U.K.: Penguin, 1970, pp. 45-53, 80-81.

38. Although it is interesting to study the social contents of production and trace the pattern of significant factors in design in accordance with the socio-economic class structures of history and an evaluation of the present stand is necessary there is very little work on the subject. One such example is A. Hauser, *The Social History of Art*, London: Routledge and Kegan Paul, 1951.

3. 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[39]. 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[40]. 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[41]. 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.

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 utilisation of resources according to their productivities is left to the decisions of the planning organisation[42]. 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[43], in China initiative is in the hands of the workers who are also expected to conform to the goals of the central planning organisation[44].

This, explains such a difference between the two that; in the first implementation administrators of local industries, which are the extentions of the central planning organisation, 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[45].

Design activity realised in an environment of this kind has an increased performance due to two reasons. The designer,

39. Stobart states that while inventions are less concerned with market researches, "design...should be guided in detail by market research." and adds the objectives of the process as the provision of "maximum profits with maximum consumer satisfaction" which are contradictory within a capitalist mode of production. A.F.Stobart, Invention, Design and Market Research, in S.A.Gregory(ed.), *The Design Method*, London : Butterworths,1966, p.48.

40. O. Sik. Socialist Market Relations and Planning, in C.H.Feinstein(ed.), *Socialism, Capitalism and Economic Growth*, Cambridge, U.K. : Cambridge U.P., 1967, pp.134-138.

41. "In an individualist economy the law of the market forces each autnomous entrepreneur to conform to the requirements of the total situation by the pressure on him of price-movements, including movements in the prices of factors of production and intermediate goods which he buys." M.Dobb, *Political Economy and Capitalism*, London:Routledge and Kegan Paul, 1968, p. 300.

42. M. Dobb, *Political Economy and Capitalism*, London : Routledge and Kegan Paul, 1968, p. 301.

43. O. Sik, Socialist Market Relations and Planning, in C.H.Feinstein(ed.), *Socialism, Capitalism and Economic Growth*, Cambridge, U.K.: Cambridge U.P., 1967, p.155.

44. Commenting on the periods before and after the Cultural Revolution J.Robinson, clarifies the difference of Chinese experience from that of the Soviet Union. While before the Cultural Revolution decision process of the economic policy of Liu Shao-chi was directed to the profit criterion of production, during and after the revolution workers, by controlling production decisions, were able to fulfill the needs of the population as well as conforming to the goals of the national plan, instead of giving priority to the enterprise's or factory's profits. J. Robinson, *Cultural Revolution in China*, Harmondsworth,U.K.:Penguin, 1970, pp.38-39.

45. "The aim of Chinese socialism is to make use of all the technical achievements of modern industry without the dreary boredom and dehumanization of personal relationship that accompany it everywhere else. There is no point in arguing apriori about whether it is possible. They have got some way already and they do not mean to turn back." J.Robinson, *Cultural Revolution in China*, Harmondsworth,U.K.:Penguin, 1970, p. 39.

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.

4. 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[46].

Development in time is the best utilisation of all available resources defined by each stage of a society's socio-economic development. While objective conditions are inadequate to provide the minimum standarts 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[47].

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 for the betterment of the products is unable to attract 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 sources of inputs providing information to the process. Design decision processes 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 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[48].

Against all these factors even if it is assumed that the constraints within social sciences 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 to define the causes of these limitations both in socialist

46. These two can also be defined as the increase of information and the development of the methodology of utilisation of information.

47. M. Broady, *Planning for People*, London : The Bedford Square Press, 1968, pp. 42-45.

48. L. Goldmann, *The Human Sciences and Philosophy*, London : Jonathan Cape, 1969; R. Blackburn, A Brief Guide to Bourgeois Ideology, in A. Cockburn and R. Blackburn (ed.s), *Student Power*, Harmondsworth, U.K.: Penguin, 1969, pp. 171-179.

and individualistic socio-economic formations.

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 judgements of the designer to compensate for the inadequacies and shortages of the objective information[49]. 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 can not 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[50], its conclusions can only be fruitful where the subject is the whole[51]. For products which should conserve their individual characteristics, generalisation 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 standardisation 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[52].

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

49. Design methods' ability to utilize the whole of this information can be the measurement of the scientific nature of the approach to the problem. The amount and quantifiable nature of inputs define the method's potential to be systematic. Scarcity and obscurity of information forces the method to be intuitive. Therefore the scientific nature of the method cannot be determined by its being systematic or intuitive but by the way it evaluates the available information, utilizing both systematic and intuitive means.

50. P.G.Hoel, *Introduction to Mathematical Statistics*, London : John Wiley and Sons, 1966, pp.45-46.

51. What statistics can provide is meaningful (a) if the subject of design is a macro scale problem and the solution has significance with only its general characteristics, and (b) if the development of the design product depends upon the development of the general characteristics of the product then information of statistical origin can be helpful for the control and development of production technology.

52. Although it seems to imply that with the increase of variants there will be an increase in the fitness to the varying needs, in reality since the factor affecting the increase of variants are only related to the social and physical factors, they are of secondary significance for the individual factors- which are the main source of need for variations. Variations in socially and physically similar environments are either unrelated with individual needs or are due to the class structure of the society.

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'.

MİMARLIK ÜRÜNLERİ İLE DİĞERLERİNİN TASARIM VE ÜRETİMİ

ÖZET

Etkenliğini sürdürmekte olan üretim süreçleri bir yandan da bir sürü problemi ortaya koymaktadır. Genel nitelikleri ile tüm ürünler için geçerli olan bu süreçler mimarlık üretimini de etkilemektedir. Dolayısıyla diğer ürünler için apaçık ortada olan süreçsel sorunlar bir miktar üstü örtülü olmakla beraber mimarlık ürünleri için de geçerlidir. Üretimin amacının kullanım ve değişim değeri üretmekten sadece değişim değeri üretmeye dönüşmesi bir yandan kullanıcı gereksinimlerine uyumlu ürünleri azaltırken bir yandan da üretim sürecine katılanları temel toplumsal niteliklerinden yoksun bırakmıştır.

Üretimdeki değişmenin iki temel boyutu vardır ve bunlar toplumsal ve teknolojik yapılardaki(üretim ilişkilerindeki ve üretim araçlarındaki) değişmedir. Bu yapısal değişme üretim, tüketim ikilisinde de bir farklılık yaratmış ve tüketimin tüm süreç içinde belirleyiciliği kazanması ile üretim süreçleri ve onların ilk aşaması olan tasarlama süreçlerini de birer yabancılaşma süreçlerine dönüştürmüştür.

Yeni üretim ilişkileri ile üretim araçlarının yöneldiği tek hedef ise belli başlı iki problemin ortaya çıkmasına sebep olmuştur. Bunlar üretimi, gerçek hedefinden saptırarak belli gereksinmelere cevap vermeyi amaçlayan bir süreç olma niteliğinden uzaklaştırmış ve dolayısı ile hem ürünleri kullanım değeri olmayan mallara dönüştürmüş hem de onların üreticilerini içinde bulundukları toplumsal eylemden-ki bu da üretimdir- ücret olarak aldıkları paradan başka bir yarar sağlayamaz hale sokmuştur.

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