

## FROM FUNCTIONALISM TO POSTMODERNISM: TRANSFORMATION OF THE PARADIGM OF DESIGN CULTURE

E. N. Koveshnikova\*, N. A. Koveshnikova, V. N. Pravdyuk

Architectural Engineering Institute, Department of Design, Orel State University named after I.S. Turgenev,  
Orel, Russian Federation

\*[l.hovanskaja@yandex.ru](mailto:l.hovanskaja@yandex.ru)

### ABSTRACT

The period of 1960 – 1970s has always caused a rise in interest among design historians. During these years the rapid expansion of the scope of design activity could be seen, as well as the growing role of designers in the development and commercial distribution of mass industrial products manufactured by large firms. Philosophical, scientific and methodological design issues are developed, professional and social status of designers increases in various fields of economic, cultural and social life. The study of different design concepts of this period is of particular interest. The comparison of subjective and sometimes highly contradictory positions and statements of various practitioners and theorists of design helps to understand better the nature and characteristics of the professional world of designers, working in conditions of changing the paradigm of design culture, to reveal the degree of divergence and coincidence between the theory and the actual practice of design. We start our analysis with the design culture of classical functionalism of the 1950s, on the formation of which the theory of "intelligent design" had a significant impact, and then we consider the concept of "Die gute Form" by Max Bill and Ulm model "design without the artist". Next, we identify the various factors of functionalism crisis which began in the mid-1960s. The formation of a "consumer society" takes the most important place among them. By studying the nature of this phenomenon, we refer to the works of D. Galbraith, Z. Bauman, J. Baudrillard, A. Mole. As a striking symptom of the changes taking place in the design practice, we consider "pop design" in Britain and "radical" design in Italy. These directions had their heyday in the mid-1970s, but their experience was not in vain: critical analysis of the social and cultural role of design contributed to the rise of the creative potential within the profession and the change of the paradigm of design culture.

**KEY WORDS:** design culture, functionalism, postmodernism, "Die gute Form", Ulm model, pop design, radical design.

## FONKSİYONALİZM'DEN POSTMODERNİZM'E DÖNEM: TASARIM KÜLTÜR PARADİGMASININ DÖNÜŞÜMÜ

### ÖZ

1960-1970 dönemi, tasarım tarihçileri arasında her zaman bir artışa neden olmuştur. Bu yıllarda, tasarım faaliyetlerinin kapsamının hızla genişlemesi yanında, tasarımcıların büyük firmalar tarafından üretilen seri endüstriyel ürünlerin ticaret dağıtımında gittikçe artan rolü de görülebilir. Felsefe, bilimsel ve metodolojik tasarım konuları geliştirilirken, tasarımcıların mesleki ve sosyal statüleri, ekonomik, kültürel ve sosyal hayatın çeşitli alanlarında artar. Bu dönemin farklı tasarım konseptlerinin incelenmesi özellikle önemlidir. Çeşitli pratisyenlerin ve tasarım kuramlarının öznel ve bazen çok çelişkili konum ve ifadelerinin karşılaştırılması, tasarımcıların profesyonel dünyasının özelliklerini ve özelliklerini daha iyi anlamak, tasarım kültürü paradigmasını değiştirme koşullarında çalışmak, farklılık derecesini ortaya çıkarmak için yardımcı olur Teori ve gerçek tasarım uygulaması arasındaki tesadüf. Analizimize, "akıllı tasarım" teorisinin önemli bir etkiye sahip olduğu 1950'lerin klasik işlevselciliğinin tasarım kültürüyle başladık ve sonra Max Bill ve Ulm modeli ile "Die gute Form" kavramını değerlendirdik "Sanatçı olmadan tasarım". Sonra, 1960'lı yılların ortalarında başlayan işlevsellik krizinin çeşitli faktörlerini tespit ediyoruz. Aralarında bir "tüketici toplumu" oluşturulması en önemli yer tutmaktadır. Bu olsunun doğasını inceleyerek, D. Galbraith, Z. Bauman, J. Baudrillard, A. Mole'un eserlerine atıfta bulunuruz. Tasarım uygulamasında gelen değişikliklerin çarpıcı bir belirtisi olarak, Britanya'da "pop tasarım"ı ve İtalya'da "radikal" tasarım düşünüyoruz. Bu öneriler 1970'lerin ortalarından günümüze kadar geldiler ancak deneyimleri boşuna değildi: tasarımın sosyal ve kültürel rolünün eleştirel analizi, meslegen içinde yaratıcı potansiyelin yükselmesine ve tasarım kültürü paradigmasının değişimine katkıda bulundu.

**ANAHTAR SÖZCÜKLER:** tasarım kültürü, işlevcilik, postmodernizm, "Die gute Form", Ulm modeli, pop tasarımını, radikal tasarım.

## INTRODUCTION

The relevance of this study is due to the increased interest in the phenomenon of design culture. Hence there is the need to clarify the meaning and significance of the concept in its connection with the professional design sphere. The specifics of the design as a special phenomenon, associated with both the artistic and material culture, has already been recognized very clearly, however, science has not formed enough reasonable ideas about design relationship with the spiritual values and cultural traditions of the society yet, as well as its potential in the sphere of formation of a way of life and objective environment. In this context, the study of the concept "design culture" is very important and up-to-date. Giving a categorical status to this concept will provide theoretical and methodological basis for the cultural approach to the study of design and determine its place in the system of culture and its relationship to other areas of culture.

## THE THEORY OF "INTELLIGENT DESIGN"

Design culture of classical functionalism has dominated design for decades, since the mid-1950s. The theory of "intelligent design", very popular at that time, had significant influence on the formation of the concept of functionalism in design. According to some supporters of this concept, any creative activity is identical to engineering design, mathematical calculation, whether it is machinery, construction, poetry or presentation of the world in visual forms. Operations, done by an artist, a sculptor or an expert on the tectonics of industrial forms, can be performed with computers and machinery for solid modeling and technical drawing. The most important achievement, according to this theory, is the elimination of manual labor, mechanization and unification of the design process, which in general could achieve such a degree of performance excellence that "unarmed" eyes and hands are not able to do.

The lessons of the industrial revolution were considered as the historical background of this theory. The engineering constructions (silos, mills, railway stations, electric power plants, boiler rooms, etc.) taught the modern architecture the new attitude to the function, materials and methods for their processing. Machines and mechanisms, established by the inventors and engineers in accordance with the strict kinetic calculation, are still unsurpassed examples of clarity and rationality of forms (the first electric motors, sewing machines, etc.). Conversely, when painters and sculptors interfered in the process of engineering design, the shape got worse immediately – there were false details, unnecessary ornaments, etc. To confirm the idea of high quality and beauty of engineering forms the creators of this concept refer to the largest research of architects and theoreticians of art in the first half of XX century: Peter Behrens, Adolf Loos, Le Corbusier. (Bauman, 1998)

Moreover, the concept of "design without the artist" never rejected the aesthetic issues and was closely associated with research in so-called fine aesthetics, the largest representative of which was Max Bense, a philosopher and an esthetician. His works became a theoretical platform for the development of training programs for the intelligent design, for the translation of advances in aesthetics into the language of engineering. He also put forward the idea of speeding normalization, affecting all areas of art and culture, including the objective shaping. M. Bense acted as the successor of a very long tradition in the history of European science and philosophy, mainly German, going back to the formal aesthetics of Johann Friedrich Herbart, and the so-called structural psychology of "the father of experimental aesthetics" Gustav Theodor Fechner. Fechner believed that aesthetics is further development of empirical knowledge. Its purpose is to clarify the concepts that combine aesthetic facts and relationships and understanding the laws to which they are subject. Like any content of consciousness, the essence of aesthetic experience can be understood, setting up an experiment. Fechner G.T. began to explore the aesthetic perception on simple geometric shapes – line combinations, correct angles, ellipses, offering the testee to correct and modify the proposed composition. It is noteworthy that almost immediately after opening of the School of Design in Ulm M. Bense began working there as a teacher and became a major figure of the guests at the Ulm School of experts in the field of humanities. (Bense, 1954)

## MAX BILL AND THE CONCEPT "DIE GUTE FORM"

Max Bill, the head of this institution, was the author of "Die gute Form" concept (good form), in which he put his ideas about modern design, and which contained a number of important provisions. The first one

concerns the appearance of industrial products. Good shape, said Bill, should reflect both the function and manufacturing technology of the product and, at the same time, make it attractive: "Good is both nice and practical." The beauty of utilitarian objects is the result of the function reflection. It is determined by reasonable using of minimum of materials, as well as the maximum detection of design using a simple neutral form, excluding any embellishment.

The second provision of "Die gute Form" concept emerged from the first one. If "good form" is found for the design of the object there is no need in a variety of formal and stylistic variations of the same product performing the same function. Thus, Bill was against the fundamental principle of styling using modernization of form for commercial purposes.

The most significant provision of "Die gute Form" concept in terms of the ideology of design was that the notion of "good form" was not only aesthetic, but also ethical category of design activity. Mission of designers, according to Bill, was to create "beautiful things that fit our time, which are an expression of high quality of life." In this case, the design works can become true cultural heritage of modern society from the object of sale: "Today, cultural values no longer include only historical works of art. All things by which our environment is formed: phones, cars, home furnishings, structures with all their numerous components, furniture and all other commodities, which we need in life and work – this is our cultural heritage," – he wrote in 1957 in the article "Good shape".

### **ULM MODEL AND THOMAS MALDONADO**

Further development of design culture of classical functionalism is closely connected with that period in the history of the Ulm school, when it was headed by T. Maldonado. By rejecting an idealistic representation of Bill that the most important mission of design is "to build life as a piece of art," he brought to its logical conclusion the idea of "design without the artist." According to this concept, the shape of the designed product is based on the design and technological laws, rational layout and ergonomic requirements. The artistic aspect of the form, as well as concepts such as "composition", "style", "image", faded into the background, if it was not ignored.

Moving from theory to practice, it should be noted that the principles of functionalism in the design of industrial products in the post-war Europe were perceived with enthusiasm both by manufacturers and consumers. Functional furniture was suitable for small apartments; it was convenient for mass production and available in price. According to Edgar Kaufmann, a curator of the exhibition "Good Design", held at the New York Museum of Modern Art in 1950-1955, this style demonstrated "complete fusion of form and function," samples of "practical, simple, intelligent beauty". The production of the company "Brown" demonstrates clearly the application of the principles of functionalism in design. "Brown-style" originated under the influence of the Ulm school and its popularity coincided with the satiation of the streamlined style typical in the 1950s. In general, "Brown-style", was the first and most specific expression of the easily fixed style of the beginning of the 1960s. Laconic models of "Brown" became self-worth in the eyes of the consumer. Arthur Brown described his potential customers: "We imagine these people nice, intelligent and natural. These are the people whose apartments are not stage decorations, but simple, tasteful, practical and cozy. Our devices should look like them. We do not make devices for shop windows to draw attention to them with total obsession but to live with them for a long time".

### **CONSUMER SOCIETY AND THE CRISIS OF FUNCTIONALISM**

In the mid-1960s design culture of classical functionalism underwent critical re-evaluation as from the standpoint of ideology as methodology and design practice. The crisis was caused by a number of factors and some of the first causes to be mentioned are of socio-economic nature. Since the late 1950s a period of sustained economic growth began in Western Europe. Unemployment was almost completely overcome, and the salary grew faster than prices. More and more married women went to work; in the UK in 1947 only 18% of married women worked and got a salary, but in 1957 the number was 33%, and by 1961 – 50%. Many families could take large loans. The working class, as well as the post-war generation of young people, had a higher level of income than ever before. These and other economic conditions led to an increase in the welfare of Europeans, and as a result, to an increase in consumption. To characterize those societies that managed to achieve a significant improvement in the welfare of the population and to solve the problems of the shortage of goods, American economist J. Galbraith suggested the term "affluent society" in 1958, but

later the notion of “consumer society” was widespread. “Talking about the consumer society, we mean something more than the trivial thesis that all members of this society “consume” – explained Z. Bauman – everyone, in fact, all living beings have been “consuming” since ancient times <...> But at its current <...> stage the modern society <...> needs mass industrial workforce <...>; instead, it is necessary to use their members as consumers”.

Philosophers soon transferred the study of the phenomenon from political to cultural aspect. One of the features of the consumer society, according to the views of modern researchers, is man’s striving for the presentation of his image and the development of his lifestyle by purchasing various goods. People use so-called “positional goods” to demonstrate their membership in a particular social group, as well as to emphasize the individual differences between them and others (Baudrillard, 1970). J. Baudrillard, when studying the semiotics of things in modern consumer society as “signs”, wrote: “Appeal, purchase, sale, assignment of various goods and things (signs) make up now our language, code, according to which the whole society communicates and talks”.

In 1967 Abraham Moles, who taught information theory in Ulm, stated that functionalism was in crisis. “Functionalism in Western culture entered a critical period because of the growth of “affluent society”. <...> Functionalism is inevitably contrary to the doctrine of “affluent society”, which is forced to produce and sell constantly. Finally, functionalism, as a rule, tends to reduce the number of objects and implement the optimum ratio between the products and the needs for them, while industrial production in the affluent society goes in the opposite direction. It creates a system of new kitsch by the accumulation of objects in the human environment. At the moment, the crisis of functionalism is evident. It is torn between the new kitsch of the supermarket, on the one hand, and the ascetic performance of the function, on the other hand.

Functionalism, according to A.Moles, approves of the rational essence of things and objects, where everything is considered only as an instrument of an act. In this case, a person purchases goods for his use. The concept of beauty depends on a functional purpose. Kitsch is the aesthetic kind of relationship to reality: “It is more human relation to things than the thing itself, more adjective than noun,” – he wrote in the work “Kitsch: the art of happiness”. Moles believed the supermarket to be “the supreme manifestation of kitsch art”, because the customer can meet those needs there, which create “civilization of consumption and leisure”. (Bill, 1957)

## POP DESIGN IN GREAT BRITAIN

An important symptom of the formation of “consumer society” was the trend towards product differentiation and market decentralization of production at the turn of 1950-1960s, which in some cases tends to focus on small series of production and a narrow segment of the market. In this regard, design, along with new advertising and marketing methods, was used as a tool that allows to satisfy the needs of different consumer groups. For example, in the mid-1960s in London clothing stores, such as «Biba» and «Mary Quant», appeared to target the younger generation of Britain. The store “HABITAT” had the same purposeful policy offering customers a variety of household products. There was a huge selection of attractive, not expensive furniture and other interior items in the store, designed for consumers of 20-30 who were full of ideas about furnishing their first apartment, but who had not much money. Terence Conran, founder of “Habitat”, defined the key aspect of the design of that era: “In the mid-sixties, there was the time when people no longer needed and wanted to change <...>. The designers became more important in the production of food for “soul”, rather than for “needs”. This radical change meant that design did not have only functionality, efficiency, reliability and durability, and it equally combined impact, certainty and elegance. It became an object that hypnotized the audience with its increasing revenues, unlimited free time, high expectations, and endless thirst for novelty and excitement.

Young British designers worked with enthusiasm in line with becoming popular pop design. Many of them gave up the idea to create durable furniture; the producers could see the undoubted benefits in the fact that pieces of furniture had a limited life time – such furniture was easier to produce and sell. “Disposable” furniture became very popular, as well as furniture of flashy colors. As Noel Riley shows, the most striking examples of disposable fashion furniture in 1960s were so-called “paper” chairs. To make them they usually combined three layers of paper to create a five-layer laminate covered with varnish. This chair could serve from three to six months. Chairs were stamped like pieces of cardboard, which were covered with drawings in the style of pop art. The most popular paper chair was designed by British designer Peter Murdoch.

Aimed at young people, pop design offered cheap, bright and often useless products. They demonstrated the exact opposite of "good design" as "rationality embodied in a visible form", which for many years was promoted among consumers by Council of Industrial Design. In one of the policy documents of this authoritative organization it was stressed that Britain should not imitate American styling, focused mostly on the external effect of product design. In the selection of the best samples of British design the experts of Council were guided by the following criteria: product features, expressive appearance, clarity of design, quality of materials and decoration, ease of use, maintenance and technology, economy. The questions of typology of consumer demands and preferences have not been included in the circle of professional interests of British designers for a long time. Their works are a kind of "thing in itself", closed, chilly in detail-spatial composition, mostly with character of technicism. The change in market conditions itself, of course, could not discredit the concept of "good design" completely, but in the mid-1960s crisis of functionalism as a leading model of design culture turned out to be the subject of discussion within the professional community. The revision of the program of functionalism generally had critical focus. One of the main points was the rejection of the functional and rational approach to design. In theoretical studies and critical articles in the end of 1960s the crisis and later the end of the era of functionalism were admitted, and, moreover, its technical achievements were attributed almost inhuman character.

It should be pointed out that in this sense design was behind the similar processes in the field of architecture. When designers still called for the introduction of uniform methods of designing and planning methods using network diagrams, in architecture some problems were being discussed concerning the creation of the most favorable and individualized environment for human life, ranging from urban planning to home interior. In England, the heyday of functionalism in design coincided with the time when New Brutalism appeared in the architectural circles of England.

In the 1950s New Brutalism was presented by the buildings of Peter and Alison Smithson. Following them British architects, opposing the orthodox functionalist concept, tried to contrast simplicity and even rudeness of "natural" materials – brick, wood, stone, considering them more expressive and "humane", to the color and texture of sophistication of new technical materials. The representatives of New Brutalism wanted to assert the idea of expressive architectural image, contrasting with the standard industrial environment and creating unique areas of "humanized" space in it. At the same time the architects based their work on the detailed socio-cultural studies of different population groups.

In this atmosphere in the design area the idea of giving up the principles of functionalism began to develop. Design professionals had a common point of view that the laws of functionalism greatly reflect the laws of production, as an autonomous rational process; however, to realize these laws engineering skills are enough, and the role of the artist becomes more uncertain. In other words, design, built on "scientific methods" and giving the artist the role of a performer, who has a known set of skills, is inadequate to laws of the designer profession, creative by definition. Theodor Adorno, speaking in 1965 at a meeting of the German Werkbund with the report "functionalism today", criticized the Puritan principles of functionalism: "Hardly a form that was not a symbol in addition to its fitness for utility" - he claimed. In 1968, architect Wolfgang Nehis stated with energy: "The sacred cows of functionalism - ... be sacrificed". Thus, by the end of 1960s functionalism design culture became a target for criticism from two opposing positions. On the one hand, the rationalist design, in the spirit of orthodox functionalism, did not fit into the realities of the market system of production and consumption. On the other hand, the failure of its principles to justify the need of existence of design as an independent creative profession became evident.

## RADICAL DESIGN IN ITALY

In fact, it was typical for design of 1960 - 1970-s to have not stylistic unity, but increasing difference of styles and shapes. It seems to us, it was the reaction to utopian attempts to reduce all the material and substantive human environment to a single style within the project culture of functionalism. For example, in British design circles, it resulted in increased attention to the ordinary regional centers, where there are old buildings rebuilt according to modern life requirements, and to the design works which sometimes get into a very eclectic living environment where there are some items of different periods and different styles. Chaos of real detail-spatial environment, with which T. Maldonado offered to fight, is now regarded as a natural living environment where designers have to work. The national exhibition "British Design" showed it

clearly, which was opened in Paris in summer in 1972. The main theme of it was not rationalism of design decisions, but the inclusion of modern design products in the context of material and objective forms inherited from the past. (Fossati, 1972)

Also in 1972, a grand exhibition called "Italy: The New Domestic Landscape" opened in the Museum of Modern Art in New York. In this exhibition, Italian design appeared in its entire splendor as an original, independent and certain phenomenon. This triumph not only turned the phrase "Italian line" in the full term in the vocabulary of the world of design, but also brought it to the leading position. The exhibits were presented in two categories: "Objects" and "Environments". The category "Environments" was divided into three groups: "Design as a postulate", "Design as a comment" and "Counter-design".

In the context of our research the third group is of greatest interest. In this section, the works of the leaders of Italian "radical" design were demonstrated. The heyday of this direction, represented in the work groups "Superstudio", "Archizoom", "Gruppo Strum", "9999", took place in the late 1960s - early 1970s. At the core of design concepts of representatives of the "radical" design was disappointment in the ideals of functionalism, which, in their opinion, entered a phase of intellectual stagnation at the end of 1960. The concept of "radical" design was as follows. It is necessary to empty the dwelling to form an empty space in which "you can live and work outside specially conceived structure". "Radical" design did not accept any strict methodological principles of "good design", or the practice of commercial styling that led to littering subject environment with products of "prestigious consumption". The leader of the group "Superstudio" A. Natalini wrote: "If design is the only motivation to consume, then we must reject the design; if architecture is the only way to legitimize bourgeois model of ownership and society, then we must reject the architecture; if architecture and urban development are just official framework of today's unjust social stratification, we must reject the urban development, with its cities <...> until the entire project activity is focused on basic needs. Until then design may disappear. We can live without architecture <...>".

Representatives of the "radical" design such as Andrea Branzi, Paolo Deganello, Ugo La Pietra, Adolfo Natalini, Enzo Mari and others were less engaged in the design of concrete objects, and if they were, they did it with an ironic and provocative subtext. So, the forms were borrowed from pop art and minimal art, and a way of showing – from the conceptual art of the 1960s, such as happening, performance, etc. The attention was paid to utopian projects which did not involve actual implementation, and were presented, as a rule, in sketches, photomontages and installations. It should be noted, however, that some samples of "radical" design are successfully produced by industrial firms such as "Kvaderna" – a series of wooden furniture decorated with white laminate, developed by members of the group "Superstudio", or an armchair-bag – the creation of Piero Gatti, Cesare Paolini and Franco Teodoro. Thus, "radical" design, or as it is also called, anti-design, did not mean ignorance of the laws of design. It did not want to enforce them declaratively.

"Real" industrial design has approved the universality of professional design techniques closely related to the requirements and possibilities of the industry for decades. In its "radical" version design has been incorporated into a wide range of social problems. According to its supporters, the task of the designer is programming, design and implementation of what "contributes to the progress of society, using the industry as a tool". As a result of the expansion of the range of professional tasks, the concept of design has gained the status of not a philosophical, but socio-cultural category by "radical" design leaders. If in the traditional design search was directly associated with the production and should be carried out with the expectation of immediate implementation, but in the "radical" design search was supposed to be "independent of the product cycle in order to avoid its fragmentation into individual products when taking care of the individual result darkens and distorts the overall need to find".

The turn of 1960-1970s was a period of "storm and stress" of the principles of design culture classical functionalism that seemed to be constant. By the mid-1970s "radical" design experienced its peak, and still its experience was not in vain: a critical analysis of the socio-cultural essence of design, attempts to find an effective regulator of design activity contributed to the increase of the creative potential within the profession and the change of art-design paradigm in design.

## REFERENCES

Baudrillard J. (1970) *La société de consommation, ses mythes, ses structures*. Paris: Denoël.

Bauman Z. (1998) Globalization: The Human Consequences. Cambridge. Polity Press.

Bense M. (1954) Aesthetica. Metaphysische Beobachtungen am Schönen. Stuttgart: Deutsche Verlags-Anstalt.

Bill M. (1957) Die gute Form (Das) Werk, vol. 44, p. 138 – 140.

Fossati P. (1972) Il design in Italia. 1954 – 1972. Torino: Einaudi Editore.