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Art, Architecture, and Design: A Commentary

Although interest in Soviet art, architecture, and design has grown appreciably in recent years among Western historians of art, architecture, and culture, the results of the knowledge thus obtained do not appear as yet to have been sufficiently absorbed into the work of Western economists, sociologists, and political scientists. Dr. Hutchings's work on Soviet design thus clearly stands apart from the mainstream of recent studies by Western Sovietologists in asserting the importance of design for examining and assessing Soviet affairs.

In an article discussing the weakening of ideological influences upon Soviet design, published a decade ago in the *Slavic Review,* Hutchings first suggested the strategic importance of Soviet design as an essential, albeit at times inept, component of Soviet technical progress.[1] His subsequent book, published in 1976, expanded that theme by arguing that there exists an interaction and convergence among Soviet science, technology, and design and suggesting that Soviet design influences the requirements set before Soviet technology, which in turn influence those set before Soviet science.[2] The present article is the latest installment in Hutchings's continuing work on, and apparent fascination with, Soviet design. Like the author's book, this article continues the argument that these three elements are interconnected and that their proportional inputs can differ with a given production process.

That Hutchings has undertaken the task of focusing the attention of Soviet specialists on a long neglected but intrinsically interesting area of Soviet life is to be applauded. Yet, despite such commendable intentions, it is difficult for this writer to agree with his assertion on page 569 that this article, although relying partly on his earlier work, "adopts a different framework and posits more plainly expressed conclusions." In fact, it seems essentially a rehashing of earlier arguments and material, with a resulting perpetuation of certain shortcomings found in the earlier publications.

Dr. Hutchings's approach is essentially that of an economist with considerable experience in the Soviet Union, partly as member of the staff at the British embassy in Moscow. Although his discussion is thus enhanced by knowledge of the socioeconomic and cultural causes and effects operating in the Soviet system, it suffers from too much reliance on personal observations and intriguing odds and ends of Soviet life, and from too little systematic analysis of documented case studies. The narrative is likewise impaired by apparent gaps in the author's knowledge of the design process in general, and of the specific aims, principles, and practices of Soviet design in particular. As a result, despite a number of

1. Raymond Hutchings, "The Weakening of Ideological Influences upon Soviet Design," *Slavic Review,* 27, no. 1 (March 1968): 71–84.

2. Raymond Hutchings, *Soviet Science, Technology, Design: Interaction and Convergence* (London, 1976); cf. Raymond Hutchings, "World-Wide View: USSR," *Design,* January 1976, pp. 48–49, for a brief but interesting glimpse into the workings of the All-Union Scientific-Research Institute of Technical Aesthetics (VNIITE).

stimulating ideas about and insights into the world of Soviet design, the reader is sometimes left with numerous factual and analytical loose ends.

The definitions of design advanced in Hutchings's article are rather vague and misleading. The relationship of design to general principles on the one hand, and to specific objects on the other, cannot, as the author suggests in his introduction, constitute two separate meanings of design. Nor can external appearance be regarded as yet another separate meaning of the term. All of these aspects, together with others to be discussed below, are fundamental to the complete meaning of design, insofar as they interact successively and in differing degrees in the conception and execution of the design *process*. At the same time, the author's passing contention that the term "design" may even be broadened to refer to deliberate biological creations and that, accordingly, Lysenko's "claim to be able to effect certain transformations in plants . . . amounted to an encroachment of science upon design" smacks of sophistry. The design to which the thrust of the author's article clearly addresses itself is, generically, *industrial design*, or the design of wares produced by large-scale industry for mass distribution. This process of design corresponds only in the most intellectually abstract way to the conception of design applied by the author to the Lysenko affair.

Industrial design, then, is generally taken to constitute a particular approach to the design of manufactured products. Designing such products involves, first, planning their structure, operation, and appearance and, second, planning these to fit efficient production, distribution, and consumption patterns.[3] The term "industrial design" was adopted in 1959 by the first general assembly of the International Council of Societies for Industrial Design (ICSID) as a basic international term because its meaning was held to be more descriptive than that of other terms. The Soviet Union, which is a member of this worldwide grouping of professional design societies and government-sponsored design councils, has adapted this term on a level of everyday professional parlance, often abbreviating it simply to design (*dizain*) while also using it interchangeably with the term "artistic form rendering" (*khudozhestvennoe konstruirovanie*). As regards more formal nomenclature, however, the Soviets have adopted the term "technical aesthetics" (*tekhnicheskaia estetika*) to designate those activities that are regarded as encompassing industrial design. This term, which is incorporated in the name of the All-Union Scientific-Research Institute of Technical Aesthetics (VNIITE), the national center of industrial design founded in 1962, is roughly analogous to the one employed by the French—*esthetique industrielle*.

Given his concern for assessing the role played by design in promoting Soviet technical progress, the author should have provided the reader with the Soviet definition of design and understanding of the design process. Probably the best and most authoritative definition of Soviet industrial design, or technical aesthetics, is the one published in the latest edition of the *Great Soviet Encyclopedia* by Iurii B. Solov'ev, director of VNIITE:

> TECHNICAL AESTHETICS [is] a scientific discipline that studies the sociocultural, technological, and aesthetic problems of designing a harmoni-

3. Among the most illuminating treatments of industrial design are Henry Dreyfuss, *Designing for People* (New York, 1955); Arthur Drexler and Greta Daniel, *Introduction to Twentieth-Century Design* (New York, 1959); Michael Farr, *Design Management* (London, 1966); and George Nelson, *Problems of Design* (New York, 1957).

> ous environment of objects [*predmetnaia sreda*]. Comprising the theoretical basis of *design*, technical aesthetics examines its social nature and principles of development, the principles and methods of *artistic form rendering*, and the problems of the professional creativity and mastery of the artist-constructor (designer).[4]

Technical aesthetics, Solov'ev continues, consists of two basic categories: (1) the general theory of design and (2) the theory of artistic form rendering.

The first category is divided into two parts: The first is concerned essentially with aesthetic theory, including the interdependence of design, art, and technology. The second concentrates on the role that technical aesthetics is expected to play in industrial production. That role encompasses the development of "methods for a complex evaluation and forecasting of the technical and aesthetic quality indexes for industrial production," as well as of "principles for designing an optimum assortment of goods that respond to the problems of creating a harmonious world of objects [*predmetnyi mir*]."[5]

The second category of technical aesthetics is concerned with "establishing a place for artistic form rendering in the general scheme of the industrial design process," and with "examining the validity of the designer's artistic concepts."[6] It is also concerned with assuring the functional viability of industrial design. "The laws of form rendering reveal the relationship between the forms of a product and its construction, material, manufacturing technology and function," Solov'ev explains, "They also reveal the historical tendencies with respect to changes in the form and style of a product."[7]

While Solov'ev's definition is a reasonable summary of the general principles by which industrial design has been conceived and promoted in the Soviet Union since the founding of VNIITE in 1962, it does not illuminate any of the divergences between Soviet theory and practice with which Hutchings's article and earlier writings are concerned. Nor does it vary appreciably from those employed elsewhere for industrial design, except in the implicit priority accorded to capital over consumer goods that is symptomatic of the Soviet system.

At the same time, few of the principles outlined in Solov'ev's definition of "technical aesthetics" will be new to those familiar with the Higher Artistic-Technical Studios (*Vysshie khudozhestvenno-tekhnicheskie masterskie,* or VKhUTEMAS), founded in 1920 by a special decree of the Council of People's Commissars for the purpose of "training master artists of the highest qualification for industry." Consisting of faculties in painting, sculpture, architecture, graphics, textiles, ceramics, woodworking, and metalworking, the school set out to revamp design by seeking a unity of art and technology, as well as to anticipate and fulfill the emerging demands of the socialist epoch. Thus, VKhUTEMAS

4. Iurii B. Solov'ev, "Tekhnicheskaia estetika," *Bol'shaia sovetskaia entsiklopediia,* 3rd ed., vol. 25, ed. A. M. Prokhorov (Moscow, 1976), pp. 527–28. A number of publications issued by VNIITE sought earlier to illuminate the emerging Soviet conception of technical aesthetics. Among the most informative are the journal *Voprosy tekhnicheskoi estetiki* (Moscow, 1968–70) and the subsequent compendium *Osnovy tekhnicheskoi estetiki: Rasshirennye tezisy* (Moscow, 1970). More general but informative discussions of recent Soviet design can be found in K. M. Kantor, *Krasota i pol'za* (Moscow, 1967), and V. L. Glozychev, *O dizaine* (Moscow, 1970).

5. Solov'ev, "Tekhnicheskaia estetika," pp. 527–28.

6. Ibid.

7. Ibid.

was an art school of considerable scope and substance and not, as Dr. Hutchings vaguely suggests, some "avant-garde group."

From the inception of the VKhUTEMAS and the work there of the "Productivists" (Aleksei Gan, Alexander Rodchenko, Barbara Stepanova, Alexander Vesnin, and others), the means of art and technology were fused into a singular aesthetic concept. The Productivists argued that the artist now had to become a technician as well, and that he had to learn to use the materials and tools of modern industrial technology in order to apply his artistic talents toward the creation of objects of direct benefit to the new socialist society. The previous "easel" and "museum" art of the elite, they asserted, had now to give way to the artistic creation of attractive but *useful* products for the masses (utensils, furniture, clothing, shelter, and so forth). Such a program envisioned a truly mass production that was to be facilitated by direct collaboration between artists and the country's manufacturing enterprises.[8] Despite the well-known limitations of the latter as a result of the crumbling economy and severely depleted industrial base after the Revolution and civil war, the considerable design achievements of the Productivists and other avant-garde artists in the 1920s constituted a major contribution to both the theoretical and the practical experiences of Soviet industrial design. Thus, even though industrial design today tends to be more highly regarded in the Soviet Union for the contribution it can make to the production of capital rather than consumer goods, its basic aspiration and methods are strikingly in accord with—although conspicuously lacking the idealistic rhetoric of—those espoused by Soviet artists and designers in the 1920s.

What, then, of the circumstances that determine the particular nature of Soviet industrial design, a matter that is of justifiable concern to Dr. Hutchings? In the Soviet Union, the viability of industrial design has tended to be determined by the priority of production assigned to a given enterprise or product by annual and long-term plans for economic and industrial development that specify the allocation of resources, production plans, and the distribution of products. As a result, industrial design tends to be production-oriented, to stress the production of capital rather than consumer goods, and to place a premium on quantity (the fulfillment of quotas specified in a given plan) rather than on quality.

Several factors may account for the de facto emphasis on quantitative output. The problems revolving around the need to alleviate real shortages of capital goods are too well known to warrant discussion here. A more subtle factor, perhaps, has been the tendency to regard industrial design, sanctioned in the wake of Khrushchev's reforms, as an ambition to be urgently fulfilled as a mark of progress and development commensurate with that of the West.

8. Perhaps the most descriptive formulation of the Productivist program, which became the cornerstone of Constructivist aesthetics in Soviet art, is found in Aleksei Gan, *Konstruktivizm* (Tver', 1922). One of the earliest discussions of the synthesis of art and industrial production is the compendium issued by the Artistic-Industrial Council of the People's Commissariat of Enlightenment entitled *Iskusstvo v proizvodstve* (Moscow, 1921). For information on the VKhUTEMAS, see, among others, L. Zhadova, "Vkhutemas-Vkhutein (stranitsy istorii)," *Dekorativnoe iskusstvo SSSR*, 1970, no. 11, pp. 36–43; and L. Marts, "Propedevticheskii kurs Vkhutemasa-Vkhuteina (osnovnoe otdelenie)," *Tekhnicheskaia estetika*, 1968, no. 2, pp. 31–34; 1968, no. 4, pp. 27–29; and 1968, no. 12, pp. 25–27. This episode is also discussed in Anatole Senkevitch, Jr., "Trends in Soviet Architectural Thought, 1917–1932: The Growth and Decline of the Constructivist and Rationalist Movements" (Ph.D. diss., Cornell University, 1974).

This offers an interesting context for viewing the increasingly overt and intense adaptation of Western models in recent years, one bearing certain similarities to the competitive interest with which industries—and indeed countries—in the West scrutinize one another's products in the perpetual quest for a superior product. In fact, the enlarged scope of foreign trade facilitated by détente may well have had the unanticipated effect of impelling the Soviets to improve the quality of their manufactured goods. Although the aim of such improvements admittedly has been to satisfy domestic consumer preferences, the likelihood of a corresponding desire to impress and seek acceptance by the growing number of Western businessmen and tourists in the Soviet Union should not be overlooked.[9]

The problematic tempo of economic and technological development in the Soviet Union in the post-Khrushchev period appears to have brought about growing recognition of the need for increasing flexibility in industrial management.[10] This points the way toward Soviet industry's becoming directed toward function and process as well as to product orientation. For Soviet design to become rejuvenated, however, the ultimate need is still for discipline, efficiency, and common sense in the midst of the national propensity for uniform solutions to basic problems. It is necessary to latch on to quality, whether of conception or material or structure. A manufactured product, in the final analysis, must be well suited to the situation and purpose for which it has been designed. Recognition of these needs and of the corresponding need to reverse the habitual preemption of qualitative standards and controls by perennial physical output targets is evident in the current Tenth Five-Year Plan. Known popularly as the "Plan of Quality," it places unprecedented priority on the attainment of high-quality workmanship and productivity in every facet and level of the Soviet national economy—a fact recognized in Hutchings's aforementioned 1976 article in *Design.*

The fact is that, Solov'ev's authoritative definition of "technical aesthetics" notwithstanding, Soviet design has indeed experienced subordinate status, as Dr. Hutchings rightly observes. The reasons for this turn of events generally have stemmed from a considerable gap that has often appeared between intention and implementation. Yet the author's explanation of this development—which is limited to an enumeration of seven "difficulties" that he regards as having obtained as a result of such subordination—offers interesting but sometimes questionable insights. The first of these, that "stylistic development was interrupted and distorted . . . [i]n many visual respects" is somewhat misleading. It seems to deny the conscious intentions of the Stalinist apparatus—however

9. Perhaps the most illuminating studies of Soviet consumerism are those by Philip Hanson: his initial *The Consumer in the Soviet Economy* (Evanston, Ill., 1968), is a systematic effort to measure and compare Soviet consumption with that in other countries, especially the United Kingdom. This study has been updated and given a rather insightful cast in respect to current Soviet consumer trends in Philip Hanson, *Advertising and Socialism: The Nature and Extent of Consumer Advertising in the Soviet Union, Poland, Hungary, and Yugoslavia* (White Plains, N.Y., 1974).

10. Among the more illuminating treatments of this development are those provided in William J. Conyngham, *Industrial Management in the Soviet Union* (Stanford, 1973); Paul R. Gregory and Robert C. Stuart, *Soviet Economic Structure and Performance* (New York, 1974), part 4; and Christopher E. Stowell et al., *Soviet Industrial Import Priorities* (New York, 1975).

artistically inept—to infuse into every realm of design the standards of socialist realism which aimed at a synthesis of traditional styles and national themes as readily recognizable iconographic symbols for asserting a monumental new image of the Soviet state.

Thus, while there is little disagreement that the *quality* of design during the Stalinist era was generally inferior and that it did indeed represent a radical—and intentional—departure from the achievements of the twenties, it would be a mistake to conclude that there was no coherent—even if crude—set of design principles operating in that period.

Definitions of good design, although generally predicated on a belief in permanent universal values, are actually least subject to rational analysis, owing to the subjective nature of aesthetic preferences and taste. They tend ultimately to be geared to different time scales, and must therefore depend upon their contexts for an assessment of design significance, if not quality. Recent serious reassessments of postwar skyscrapers in Moscow (the so-called Stalinist "wedding cakes") offer an interesting case in point. They have led numerous architectural historians (including this writer) to an awareness that, here too, the spirit of the age must be considered. Out of this reassessment, for example, has come recognition of an important but often slighted historical phenomenon: that a design may be valid at a particular time for a particular purpose to a particular group of people in a particular set of circumstances, but that outside of those shifting limits it may not be valid at all. In assessing something as precarious as the fate of Soviet design during the Stalinist era, therefore, it may be instructive to refrain from absolutes and to keep in mind this larger picture of complex and often contradictory causes and effects.[11]

Dr. Hutchings's point about foreign decisions having been copied too servilely is well taken. Unfortunately, it is discussed too briefly and superficially to offer any conclusive explanation of the subordinate status of Soviet design. As regards his fourth point, that "neglect of artistic aspects of design contributed to the overemphasis on production of capital goods by comparison with consumer goods," again, more detailed discussion would have helped the reader follow the author's particular argument more closely. Two general observations seem in order, however. The first has to do with doubt that the neglect of design has

11. The shift from extolling to repudiating the design validity of the Stalinist skyscrapers came in short order with Khrushchev's denunciation of the decorative excesses in recent Soviet architecture in a speech to the All-Union Conference of Builders and Architects on December 7, 1954. Proclaiming that Soviet building had urgently to adopt industrialized mass construction techniques in order to erect greater numbers of more economical and functional housing, Khrushchev denounced the Moscow skyscrapers for epitomizing the trend of individualized rather than standardized design, with its emphasis on excessive ornamentation and on complex silhouettes with spires incongruously recalling medieval Moscow churches (a resemblance encouraged by Stalin). It was the excessive cost of constructing these elaborate buildings, rather than their artistic content per se, that proved the central focus of Khrushchev's campaign. Still, his remarks bore unmistakable traces of aesthetic preferences and implications with the suggestion that such an approach revealed "the absence of taste on the part of certain architects" (Nikita S. Khrushchev, *O shirokom vnedrenii industrial'nykh metodov, uluchshenii kachestva i snizhenii stoimosti stroitel'stva* [Moscow, 1955], p. 20). Dismissing out of hand the notion that these buildings could seriously be regarded as beautiful, he declared: "In our opinion, it is better to criticize their shortcomings, because, if we don't do so now, then the imitation of these tall buildings will continue to spread . . ." (ibid., p. 21).

been a significant cause for emphasizing capital goods over production goods. One suspects that there is a more fundamental and obvious economic explanation for this phenomenon. The second observation has to do with questioning, again, whether the artistic aspects were *neglected*, as the author maintains, or rather *redefined*. The point is a subtle one, yet its clarification is central to reaching an adequate understanding of the role and nature of Soviet design.

The remaining effects of the subordination of Soviet design outlined in items 5–7 are too vaguely stated to be fully comprehensible, much less persuasive. It seems safe to say that poor design, even in Soviet circumstances, imposes a negative impact on the production of both capital and consumer goods. But the intriguing proposition advanced by Hutchings, that it is possible to measure the extent of disruption by poor design of the fulfillment of economic plans, remains at best unexplained in his brief references to it on pages 575 and 580.

The central thesis of Hutchings's article is that the so-called "threefold approach" of looking through a triangular prism combining science, technology, and design can help solve certain problems in the analysis of Soviet performance. This proposition, first suggested in the author's earlier book on the subject, generally seems to have much merit. Unfortunately, the descriptions of the proposed method for applying this approach and the explanations of those kinds of problems most susceptible to such analysis are impaired by the absence of a fuller discussion and by the inadequate integration of key evidence. Treatment of the author's assertion that "areas of material production where the USSR is backward typically have been and are those where the necessary input from design is large relative to the necessary inputs from science and technology" provides a case in point.

According to this assertion, computers, small chemicals, automobiles, textiles, clothing, and handicrafts are all products which require relatively large inputs from design, and in which the USSR has been notably retarded in comparison with the most advanced Western countries. It is curious, however, to find included in this scheme such a category as "handicrafts," which ordinarily is not considered to fall into the category of industrial manufactured goods; moreover, the Soviet Union has become rather more competitive in handicrafts than before. In addition, it might be well to give due recognition to the measurable improvement recently in the design and manufacture of textiles and clothing. Computers and automobiles seem most squarely to belong to this proposed category, in respect both to the rather low level of design and to the heavy reliance on foreign models, which could profitably have been explored here. The comment that "design is critical in miniature objects" and therefore evidently accounts for Soviet backwardness in computers seems, paradoxically, to overlook the fact that the collaborative input of science and technology is even more crucial for the development of needed miniaturized circuitry, which then has to be synthesized (and not *created*) by the design process into an effective finished product. The causes for the weakness of design in Soviet computers may be sought elsewhere, more likely in the relative isolation of the *organizing discipline* of design from the formative stages of the production process.

The discussion that follows on the areas of low design input, though intriguing, is even more problematic. It may perhaps be possible to envision some form of design input in ferrous metallurgy. However, it strains credulity to speak vaguely of design input in respect to coal, oil, or electrical power, except in the

specific context of its application to the production of equipment needed either to produce these raw materials or to be operated by them. The object of design is generally regarded to be the creation of a *finished product* (such as machines), not the production of *raw materials* per se. Unfortunately, Dr. Hutchings appears to have departed from that conventional understanding of design, without supplying the reader with his own, especially as it may be seen to apply here. The object of design, after all, is the *finished product*, not *raw materials*. Even more ambiguous is the subsequent discussion in the same paragraph which refers to the *independence* of Soviet coal mining, oil, building materials, and agriculture on the one hand, and the *dependence* of chemicals, computers, shipping, the motor industry, timber, paper and pulp, and light industry on the other. Remarkably, the question never answered in the narrative is independence from or dependence on *what*? The footnote reference here suggests that Hutchings probably has in mind the transfer of technology from the West to the Soviet Union. Such disjointed presentation does little to illuminate, or even to make comprehensible, the interesting propositions contained in the present article.

The author is clearly in his element when discussing the interaction of the three proposed analytic categories on the production of Soviet military hardware. His argument that Soviet practice emphasizes the interchangeability of civilian and military products is the most persuasive in the article. Yet here, too, the presentation would have been greatly strengthened by a less topical and more analytic approach.

Given the author's novel and compelling proposal for the "threefold approach," it is regrettable that his article is so haphazard in its presentation of basic evidence and so casual in its treatment of salient issues. As a result, the case for that approach is neither definitive nor persuasive.