RAYMOND HUTCHINGS

Reply

It is a professionally valuable experience to debate with such eminent critics. Although the focus here will be on our disagreements (because of space limitations some criticisms must go unanswered), I regard as chiefly significant our agreement that Soviet design is important, and has attracted too little attention.

David Granick's essay, complementary to mine and unlike the others from a strictly economic standpoint, calls for little rejoinder. I would merely add that if (as I concur) much Soviet design has been "surprisingly" good, this may be partly attributable to a certain autonomy of indigenous design principles, which leads back to one theme of my work.

The particularized criticisms of Kendall Bailes and Anatole Senkevitch frequently seem to be based on a misunderstanding of my text. For example, the fact that *Dekorativnoe isskustvo* is not listed in the bibliography of *Soviet Science*, *Technology*, *Design* does not mean that it was not consulted (actually, it was); the "Select Bibliography" for that book does not even include all footnoted sources. Being aware that the T-34 tank had not been simply copied from the Christie, I used in that connection the words "derived" and "developed," alluding also to special virtues of the T-34's track attachment. In my eyes, VKhUTEMAS could have been, without contradiction, both a "group" and a "school"; unquestionably it was "avant-garde," a term Senkevitch himself applies to "Productivists and other avant-garde artists." However, I accept his correction in regard to handicrafts; the traditional folk arts, at any rate, ought to have been exempted from my relatively backward category.

Central to the comments of both Bailes and Senkevitch is the matter of definition. Regrettably, my references (p. 578) to a design "headquarters" conveyed the impression that I regarded VNIITE in that light. I would agree with Bailes that VNIITE is no "coordinating body for all types of Soviet design"; rather, it is the Soviet center for propounding and propagating generalized design principles. Thus, it is an intellectual rather than an institutional headquarters, although to some extent its influence can radiate through institutional links, as was examined in chapter 7 of my book. Unfortunately, misunderstanding also dogs the critics in regard to definition; thus, I did not (as Senkevitch implies) envisage external appearance as a "separate" meaning of design: the second paragraph in my article "simply" included external appearance within the (previously defined) broader meaning. As regards Senkevitch's description of my definitions of design as "rather vague and misleading," not only do I "from the outset" (in the very first sentence) define "design" in a way that is not at all vague, but I provide numerous illustrations which—pace Senkevitch's summing up of a "haphazard" presentation—were intentionally diversified, in order to articulate the meaning further. My standpoint that design is conceptually separable from technology, although it must always be combined with it in the creation of material things, involves neither fundamental difficulty nor logical inconsistency. Somewhat analogously, the three dimensions of physical space are distinct, and yet every actual object is three-dimensional.

Reply 603

The alternative view (propounded by Bailes), linking design more closely with technology, includes improvement in both within a sequence of innovation. I contend that this approach places excessive stress on the integration of these elements in a process of development because the components of such a process are, in many cases, small steps in either design or technology (production technology, if that is clearer). My critics see an upward slope where, in reality, there is a staircase. As for changes in layout or style that require only minor adaptations in technology, they fall out of such a schema; do my critics claim that they do not occur? If it blurs any conceptual distinction, the innovation approach will fail to grasp the essence of the integrative process. That approach may suit the classic model of an industrial revolution, in which (as noted in my article) technology takes the lead; it is much less suitable in circumstances when design characteristics (for example, layout or aesthetics) assume greater importance. Hence, it is not accidental that the journal Architectural Design, when reviewing my book, did not criticize its threefold approach; nor did they assert that it should prove especially apposite to military equipment, and particularly to warships.

Bailes's alternative view actually focuses on a subcategory of the situations involving design; my approach focuses on a broader perspective of those situations. It is not accidental either that both Bailes and Senkevitch evince a disposition to narrow the permissible scope of the subject; the former noting that "even . . . buildings" are included in my exposition. In my conception, buildings are designed (while nowadays, most of their components are manufactured). Senkevitch, in full gallop after an "authoritative" definition, jumps to a conclusion that I must "clearly" be referring to industrial design—a phrase scarcely found in my article—and therefore chides me for not supplying the official definition of the equivalent Russian phrase, a gap that he seeks to fill with verbatim quotations from the *Great Soviet Encyclopedia*. Whatever the merits of Solov'ev's definition for its own purposes, its reproduction in the present context seems an intrusive, and unjustified, reflection on the validity of every other approach to the question. Since I have been interested in design for over forty years, I do not feel diffident in proposing an alternative approach.

As regards causality of relative backwardness, I would not dissent from Bailes's suggestion that the most advanced areas of Soviet industry had been allotted the highest priorities in planning and in the allocation of resources, but I thought it superfluous to repeat such an obvious proposition.

I am also alleged to have neglected various works on Soviet technology or innovation. My subject, however, was Soviet design, and literature on that subject is scanty.

I am indebted to both Bailes and Senkevitch for their discriminating comments on my hypothesis that linked relatively large design input with relative backwardness (and vice versa); but I dissent, naturally, from the "house of cards" metaphor. Although Euclidean proof of my hypothesis was neither provided nor claimed, various generalized arguments can be deployed in its support; and the critics advance no arguments in favor of a contrary relationship. But I am wholly in agreement that more systematic research into this entire field is needed; the main objective of my essay was indeed to promote that result, to which this discussion has surely contributed.