LOTHAR LEDDEROSE

*Ten Thousand Things: Module and Mass Production in Chinese Art*


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Published in 2006 on the basis of his 1998 Mellon Lectures, given at the National Gallery of Art, Washington, D.C., and the Bollingen Lectures, given at Cambridge University, Lothar Lederrose’s wide-ranging study of the mass production of art in China over four millennia is a rare attempt at a systematic general discussion of a fundamental dimension of artistic making in China. It exposes structural analogies among numerous different media and shifts attention away from the more familiar terrain of representation and expression toward the process of art making.

*Ten Thousand Things* is a well-received addition to the general and specialist literature, stimulating engagement with the author’s argument on its own terms and sparking further thinking on the neglected question of the role of systems in art. Lederrose’s book is not the first work of Chinese art history to identify a single fundamental principle operative in different media and different periods. An earlier work in the same vein is Wu Hung’s *Monumentality in Early Chinese Art and Architecture* (1992), which covers a shorter time period—only (1) a couple of millennia—but is no less ambitious in its intellectual scope. Combining the postmodernist use of heuristic concepts with a Chinese tradition of philological inquiry, Wu sought to define a specifically Chinese concept of monumentality that would provide a key to early Chinese art on an interpretative level. This approach thus emphasizes consciously constructed meaning, embodied in thematic programs. In contrast, Lederrose directs our attention to a level of meaning that is not self-consciously constructed but, rather, is embodied in the transmission of unquestioned principles of manufacture shared by a wide range of media.

Lederrose’s focus on the way objects are made has traditionally been more common among European scholars of Chinese art, so it is also instructive to note the differences between *Ten Thousand Things* and two earlier European attempts at wide-ranging synthesis, Ludwig Bachhofer’s *A Short History of Chinese Art* (1946) and William Watson’s *Style in the Arts of China* (1974). Different from the narrower, Wölflinian formalism expounded by Bachhofer is the idiosyncratic style history elaborated by Watson, for both scholars the master concept of style needed only to be specified culturally in order to reveal the deep structural patterns of Chinese art history’s development. Bachhofer identifies a deterministic succession of stylistic paradigms, Watson, reacting against this very determinism, identifies paradigms that he sees as recurrent throughout history. Lederrose, of course, has written widely elsewhere in a style of history writing, but here he turns away from style. Bringing to his argument a constant concern for the ways in which formal decisions of making are socially embedded, he proposes instead a principle from within Chinese artistic practice—modular production—as the key to a different kind of deep-structural pattern that does not so much inform the historical development as it reflects a fundamental cultural orientation. From this point of view, *Ten Thousand Things*, like Wu Hung’s *Monumentality*, can be said to participate in the anthropological turn taken by historical studies of China in the last twenty years. Yet it should be pointed out that the essentializing undertones of the argument hark back to a previous era of Sinology, just as similar undertones in *Monumentality* evoke the ghosts of Chinese Han and Later Han philology.

Like the earlier works by Bachhofer and Watson, *Ten Thousand Things* is not aimed at an academic audience alone. In its address to the interested general reader, it serves as a marvelous introduction to Chinese visual and material culture (again the anthropological turn), ranging far and wide over the range of Chinese art media and beyond. It comprises case studies of the Chinese script, ritual bronzes of the Shang and Zhou dynasties, figurative tomb sculptures of the late 3rd century B.C.E. (the well-known terracotta warriors of the First Emperor), factory-produced lacquer and porcelain utensils, wood architecture, printing, workshop-produced religious icons, and paintings by literati artists of recent centuries. These individual examples are presented as variants of a single, general practice of modular systems: “the Chinese defined production systems to assemble objects from standardized parts. These parts were prefabricated in great quality and could be put together quickly in different combinations, creating an extensive variety of units from a limited repertoire of components. These components are called modules in the present book” (p. 1).

The analysis in each case is straightforward, consisting of a description and analysis, followed by a reconstruction of “the tasks that the makers were assigned or that they set for themselves” (p. 1). This permits an assessment of achievement limits that were often quite staggering in terms of scale, variety, and efficiency. The modular system existed, it is argued, to make such achievements possible. It should be noted, however, that despite the nice ring of the book’s subtitle, not all of the case studies offered by the author concern mass production. In some of the production of a very large number of products in a concentrated period, in response to intense demand. In a number of cases, the mass was produced slowly, over many years, in response to overall low-level demand. The extreme differential of demand at the two poles—one represented by a large workforce, division of labor, and need for speed, and the other by a minimal workforce, holistic labor process, and an unhurried pace—we are dealing with entirely distinct economies of production and models of efficiency. The beauty of the module is that it could accommodate both; it is an implication of the argument not sufficiently brought out by Lederrose himself that this very feature has been partly responsible for the ongoing success of modular systems of production.

The author’s enthusiasm, the accessibility of the ideas he advances, and the erudition that is worn so lightly are all that one could want in an introduction to Chinese art and visual culture. And because the subject of the book specifically concerns the making of things, there is a concrete and accessible starting point for the author’s initiation of the reader into the understanding of deeper cultural patterns. On this level, the specialist, too, will benefit from being introduced to familiar and unfamiliar material from a fresh point of view, articulated with conviction on the basis of close observation and long experience.

Of course, *Ten Thousand Things* also develops its argument on a more technical level directed specifically toward the specialist. Here the argument is indissociable from its structure of presentation. The book opens with an extended discussion of modularity as a principle of production, for which the author proposes the Chinese writing system as the paradigm. It concludes with a consideration of the historically evolving Chinese concept of art, as revealed in two very different practices: art collecting and literati aesthetics. These opening and closing chapters frame the demonstration proper, which does not itself have an overall structure so much as a subject: that is to say, the argument is essentially the same throughout, with each chapter repeating the demonstrative. In the central chapters of the book (chapters 2 to 7), pithy summaries of key points provide the basic building blocks of Lederrose’s demonstration; these are combined with great effectiveness to build up a larger account of the production process involved in a particular medium. In some chapters two such accounts are brought together on the basis of some proposed similarity, though the historical differences in those cases are so pronounced (chapter 4, for example, combines analysis of Han dynasty [206 B.C.E.–220 C.E.] lacquer, bronzes, and silks and of 17th to 18th-century porcelain) that this reader sometimes felt they had really been brought together in order to preserve the lecture/chapter as a higher-level unit of the demonstration. Be that as it may, the six chapters combine to provide a cumulative, typologically differentiated demonstration of the argument proposed in chapter 1.

Given the structure of the presentation, both the opening and closing chapters necess
sarily carry great weight, albeit of different kinds. Effective in their appeal to the general reader is the recurring connection at the level of specialist argumentation. As Lothar von Falckenausen has pointed out, the modularity of Chinese writing is so different from that found in art and architecture that writing is less a paradigm for artistic production than a useful metaphor for modularity in general. The interplay of visual patterns at a level between the individual brushstroke and the complete individual character certainly makes the characters easier to remember and provides the writing system with possibilities of categorization that are exploited by dictionaries. But this seems to have few implications for artistic production, which depends heavily on the generation of new forms. Although the Chinese script has always had the capacity to generate new characters, a much more important reason for its success has been the relative stability of its core corpus of useful characters. Moreover, in the art historical process of writing the writer is essentially concerned with the image of each complete character. For this reason, handwritten letters often include ideographic abbreviations of characters that obscure the level of the modular elements and that are not sanctioned by the conventions of either of the two abbreviated calligraphic script types, nüshu ("running script") and cǎnshu ("grass script"). The reference to writing, on the other hand, allows the author to introduce his subject in chapter 1 through a concrete example that has more excessive cultural implications than any single artistic medium would have, and thus to underscore rhetorically his claims for modularity as a fundamental pattern of Chinese thinking. The problem remains, however, that writing—as against calligraphy—is not art; one arrives at the end of the chapter with the author’s claims simply rendered more vivid.

The concluding chapter has a similar disconnect between its ambition and its means. Ledderose here turns his attention to the very concept of art in China in its historical and social diversity. Unfortunately, the prismatic modularity has relatively little light to shed on the matter. The author contents himself with showing, first, that on a given definition of art existed, it tended to find its place within contexts of presentation that were organized along modular lines (the 1726 encyclopedia, art collections), and second, that even in the literati arts of calligraphy and painting, which take a premium on individuality and spontaneity, the normative transmission of the art form occurred through codified stylistic conventions that could be acquired and deployed in a modular fashion. This is not very illuminating, and as a conclusion to the argument, it proves disappointing. Moreover, if the book, to the author’s credit, is one of the most serious inquiries into artistic creativity in China that has been attempted, the final chapter exposes the author’s limited view of that inquiry. Concluding Ten Thousand Things with a discussion of paintings by the 18th-century "Eccentric" artist Zheng Xie, the author affirms that "for the Chinese literati painter, modular systems and individuality are but two sides of the same coin. Its name is created, and in the context contrasting the individualistic literati artist with the anonymous artisan master of modular systems leaves me uncomfortable, as it assumes that the (far from total) anonymity of artisans precluded individuality. Here one perceives the internalisation of literati thinking that is so prevalent among modern historians of Chinese art that it usually goes unnoticed." Ledderose’s account of modular systems proposes five levels of increasing complexity: element, module, unit, series, and mass. In his introductory example of the Chinese script, a single brushstroke is the element, a component of a character is the module, a single character is the unit, a coherent text exemplifies the series, and the sum of all existing characters is the mass. Although Ten Thousand Things is a work of art history, the modular system is not at all specific to artistic production but rather to production in general above a certain level. It is analyzed here in terms that could equally well be applied to nonartistic forms of visual and material culture; indeed, the book begins with the example of the writing system and elsewhere includes discussions of printing and encyclopedic organization. In consequence, the reader learns more about what art shares with other areas of social activity than about the specificity of art making as a social practice. This breadth of applicability of the modular concept is initially impressive, but soon it sparks doubt; one begins to wonder whether in reality a plurality of different kinds of modular systems was not in play. Even within the confines of the author’s presentation, how far can writing and art making be equated? Were encyclopedias really constructed so similarly to buildings? What about religious icons versus literati paintings? Despite Ledderose’s promotion of a general model for all these cases, the differences seem highly significant. In writing, for example, where individual characters are the modules that come together in series (coherent texts), the character has a certain autonomy; it can stand alone as a complete structure. But in the terra cotta army of the First Emperor, where Ledderose proposes body parts as the module and the complete figure as the series, the body part cannot stand alone; only the complete figure can. The individual cases, in other words, contradict the fixity of the template that the author proposes.

The author himself makes very pragmatic use of his theoretical model at some points. In his analysis of architecture, for example, as the discussion moves from one level of complexity to another he retains the same analytic model but slaps the same elements into different positions. Thus, for example, in the first part of chapter 5 Ledderose defines the element as the bracketing system comprising blocks, brackets, and beams, the module as the building, and the unit as the building. By implication, the series is the courtyard, and the mass, presumably, is the city block. When he comes to discuss the courtyard on p. 112, the building changes its status from unit to module, with the courtyard becoming the unit. The implication is that the courtyard comprises everything up to the level of the bay, the module is the building, the unit is the courtyard, the series is, presumably, the city block, and the mass is the city. Each component has, so to speak, moved down one level. At a later point (p. 115), the analysis shifts again so that it is city blocks that are described as working like modules. Missing from the author’s presentation of his ideas, however, is any theoretical account of this necessary flexibility in the use of the model. Among the factors that would have to be acknowledged is the observer position of the art historian as analyst. The first analysis presumes an ideal observer position within the city, the second and third a position outside the city. This difference corresponds to a second factor within the analyzed art form itself: the determining role of context—that is, the context established by the particular situation (on the model of Chinese grammar, which determines the meaning of words according to situational context). What is needed, in other words, is a more flexible conceptualization of the author’s model—one as an algebraic formula rather than a fixed (and thus geometric) template—that would more convincingly fit the fluid, situational circumstances of artistic practice. Such an approach would also bring the argument closer to the author’s perception that the modular system in China embodies a model of creativity based on the principles rather than the appearances of nature. A second place where the formal terms of the argument could usefully be modified is the author’s major theoretical claim that, for the purposes of mass production, the key level of the five-level model is that of the module. In some cases the analysis advances this claim by shortchanging the series as the next level up. In the decoration of export porcelain, for example, it is clear that the artist’s sense of the overall composition (the series level) played a role independent from any of his exploitation of the individual modules (the module level) in helping to determine the design. The attention to the overall composition shows the decorator mentally putting himself in the position of a viewer/consumer in order to anticipate the later’s needs. But the fundamental dialectic of the artistic process in which the artist oscillates between the positions of the artwork’s producer and the artwork’s first viewer gets little attention in this book, as if it were possible to account for mass production solely from the point of view of the former position: the artisan/artist as producer. Against this, one might argue that the capacity of the artisans to articulate in the artistic product a satisfactory internal coherence or overall order—the son of problem that the Vienna school scholars were so good at tackling—would have been of fundamental importance to that which Ledderose analyzes. One could formulate this in terms of a larger system of checks and balances, where the algebraic elascity of the modular system narrowly conceived is
checked by an overall ordering that "fixes" a replicable structure, be it two-dimensional like a painted design on a plate or three-dimensional like the form of a building. With this undiscovered and undoubtedly complex dimension of mass production restored to view, the author's analysis of art making in terms of modularity alone comes to appear as an oversimplification.

As a study of a particular kind of system, *Ten Thousand Things* addresses a rarely considered dimension of art in any culture. It may be useful in conclusion, therefore, to compare the art historian's approach with that of another German scholar, the sociologist Niklas Luhmann, in his 1995 book *Der Kunst der Gesellschaft*, published in English translation in 2000 under the title *Art as a Social System*. Luhmann's book elaborates at a highly abstract level a general theory of art covering the entire field of operation from the artist's natural artistic form to the final concrete or abstract definition of art by those who write about it. It is fundamentally a theory of art as a special form of communication, and its originality lies in the author's formulation of the problem in terms of systems theory. Whereas semiotic theories of communication require agency and thus some kind of psychiatric subject, systems theory approaches all types of communication in cybernetic terms, at the deep level of functional structure. Indeed, Luhmann approaches subjectivity itself as a conscious system that is functionally structured by difference. In analyzing art as a form of communication, therefore, he is able to dispense with the psychic subject as the center of the analysis. We are a long way from most art history but not, in one respect, so far from *Ten Thousand Things*, which, if it does not bear the impress of systems theory in any way, is nonetheless similarly concerned with the role in art of a system that escapes the subjectivity of its exponent. To be sure, the question of subjectivity plays a subordinate role throughout the book in the form of the particular kind of creativity that, in Ledderose's view, is made possible by the modular system. In their symbiotic relation, modular repetition and creativity articulate a humanist view of artistic production that is alien to Luhmann's bleakness, but also more rigorous, postmodernist approach.

What would be the Luhmannian view of the module system? Is it an example of what Luhmann calls an autopoietic system, that is, a system that is continuously self-generating because the recursive reusability of its operations ensures the system's connectivity and capacity for self-generation? The test lies in whether one can move away from Ledderose's nominative definition in terms of constituent levels toward a verbal definition, so to speak, in terms of its constituent operations. This brings up the issue discussed earlier of the possibility of a situational, algebraic adaptation of Ledderose's model. The difference is light on networks and "modulizing," and though in the case of Ledderose versus Luhmann it registers the distance between the art historian's ultimate attachment to the material object and the sociologist's engagement with functional behavior, there is no reason why the art historian should not also address artistic production in terms of function. Seen in functional, operative terms, modularity would be an example of a Luhmannian code. Codes are "binary schematisms that know only two values" (in Ledderose, modular fit and nonfit); they are "mobile structures that are applied differently from situation to situation" and which "must be formulated abstractly enough to inform every operation in a given system." To think of modularity in terms of coding has the advantage of its disadvantage: that is, by radically abstracting the material dimension of the physical module, it allows us to see that the influence of modularity on form has a basis that is not merely technical but is also conceptual. Even though the demonstration of this is part of Ledderose's purpose as well, the art historian's argument is less incisive, because it conceals the influence on art of the type rather than is little more than the result of pragmatic technical application of a preexisting general principle as a template.

Ledderose presents a dialectical view of artistic media, in which they provide the grounding of any modular system—its conditions of existence—but are also influenced in their development by modular practices. Similarly, artistic forms both provide the modular system with a vocabulary and, to some extent, are produced by the system, in line with its possibilities and constraints. Although this may seem simply common sense, it is the particular common sense of the art historian, who feels the need to balance the abstraction of an inferred system with the tangibility of the material object, as a particular form in a particular medium. Within Luhmann's system theory, in contrast, medium and form can never be taken as given; they are functionally produced by the system. His point allows him to see something that the art historian does not: the fact that medium and form are functionally linked through the operation of coupling of elements. A medium is defined by loose coupling, creating "an open-ended multiplicity of possible connections that are still compatible with the unity of an element." Forms, on the other hand, are created through tight coupling. While forms are stronger and more assertive than the medium, the medium is more stable, due to its arsenal of possibilities. In these terms, modularity (or modular coding) operates at the interface of medium and form and might be defined as a way of ensuring the transition between loose and tight coupling of elements. If post and beam architecture, for example, is considered to be a medium, its capacity to adapt to diverse social functions derives from the wide variety of couplings of formal elements that it allows. The specificity of architectural form, however, depends on tightly defined relations of elements. The modular system, considered as a flexible code, reconciles the opposing needs of functional adaptability and internal formal coherence.

As these two examples demonstrate, systems theory can enrich the study of modular systems of artistic production by providing greater conceptual differentiation and precision and by helping it to develop a more dynamic understanding. It also alters our understanding of the social significance of modular systems. At various points, Ledderose presents modular systems as models of, metaphors for, and reflections of a modular society. It seems fair to say that here as elsewhere, his view is a dialectical one, with the modular system not only embodying but also molding the priorities of social organization in China (order and stability above all). But to the extent that any explanation is offered or implied, it is simply that the modularity of both artistic production and social organization actualize a distinctively Chinese mindset, also seen in the writing system and the divinatory system of trigrams and hexagrams. Leaving aside the evident problem of essentialism, one is entitled to ask whether the mindset is not to be explained away. Here, Luhmann's emphasis on art as a special kind of communication system is helpful. It suggests the possibility that the modular coding of artistic production may not be simply an unconscious actualization of internalized social values but may also more actively be a way of communicating information. The key notion in this regard is rightness or, as Luhmann puts it, "doing things right," in line with a mechanism of recognition (as against cognition). "Art accomplishes both a condensation and a confirmation of form, thereby ascertainment of the hidden order of the world." Luhmann calls this the "miracle of recognizability." Coding in itself, whether modular or other, does not ensure the communication of a rightness that can be recognized. That function is fulfilled instead by programming, that is, the ascription of the correct code value. Whereas the code is stable, programming is subject to change. From this point of view, it is clear that one reason why Ledderose's argument does not come to terms with the social significance of modularity is because it is an argument that privileges coding over programming. More concretely, Ledderose is so concerned to establish the stability of modular coding over four millennia that he neglects the changes at the level of the programming of correct code values. Since it is through programming that rightness is communicated, the communication dimension of the modular code goes by the wayside, and the reader is left with vague notions of a connection between code and mind-set.

As a pioneering theory of modularity in Chinese art making, *Ten Thousand Things* has the admirable merit of opening an important discussion that is likely in the long run to leave the original theory unrecognizable. For this, and for a much-needed discussion of the history of Chinese art in its full sweep, both original and engaging, the field is in Lothar Ledderose's debt.

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NANCY J. TROY
Couture Culture: A Study in Modern Art and Fashion

In 1865, Charles Baudelaire located a set of markers for modernity in the fugitive aspects of fashion and urged the modern artist "to extract from fashion the poetry that resides in its historical envelope, to distill the eternal from the transitory."

In the same year, John Ruskin observed, "The modern artist is not a spectator but a participator in the great cathedrals of the ages." He was referring to the Gothic cathedrals and their architecture, but the idea can also be applied to the fashion world.

The fashion world is a place where artists and designers work together to create something new and unique. It is a place where the past and the present meet, and where ideas are constantly being challenged and redefined.

The work of Nancy Troy, whose book "Couture Culture: A Study in Modern Art and Fashion" explores the relationship between fashion and art, is a testament to this. Her book is a fascinating exploration of the ways in which fashion and art have influenced each other, and how they continue to do so today.

Troy's book is a must-read for anyone interested in the history of fashion and art, and it will be a valuable resource for scholars and students alike.

Notes
2. Nikolaus Luhmann, Art as a Social System, trans. Ursula Koehne (Stanford University Press, 2000). It is impossible here to do justice to Luhmann's dense and rich analysis, which has innumerable implications for art history.
3. Ibid., 186-187, 188.
4. Ibid., 102ff.
5. Ibid., 199, 186.