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Mind in Matter

An Introduction to Material Culture Theory and Method

Jules David Prown

ALTHOUGH ART MUSEUMS, historical societies, museums of history and technology, historic houses, open-air museums, and museums of ethnography, science, and even natural history, have long collected, studied, and exhibited the material of what has come to be called *material culture*, no comprehensive academic philosophy or discipline for the investigation of material culture has as yet been developed. Recently, however, there has been increased scholarly interest in the subject, as witnessed by the establishment of this periodical, *Winterthur Portfolio*, devoted specifically to material culture; graduate programs in material culture at University of Delaware, University of Notre Dame, and Boston University; an experimental Center for American Art and Material Culture at Yale University; and a substantial amount of innovative scholarship, especially in such emerging academic areas as folk life and cultural geography (a selective material culture bibliography is appended below). These developments and activities have been spontaneous and largely uncoordinated responses to a perceived scholarly need and opportunity. This essay attempts to define material culture and considers the nature of the discipline. It makes no claim to be either the first or the last word on material culture, but it does seek to illuminate the subject and to provide a basis for further discussion. It also proposes a particular methodology based on the proposition that artifacts are primary data for the study of material culture, and, therefore, they can be used actively as evidence rather than passively as illustrations.¹

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¹ There are material culture studies that do not require object analysis, in part because they address questions posed by the very existence of artifacts that lead directly to the consideration of external evidence. This is particularly true of socio-

What is Material Culture?

Material culture is the study through artifacts of the beliefs—values, ideas, attitudes, and assumptions—of a particular community or society at a given time. The term *material culture* is also frequently used to refer to artifacts themselves, to the body of material available for such study. I shall restrict the term to mean the study and refer to the evidence simply as *material* or *artifacts*.

Material culture is singular as a mode of cultural investigation in its use of objects as primary data, but in its scholarly purposes it can be considered a branch of cultural history or cultural anthropology. It is a means rather than an end, a discipline rather than a field. In this, material culture differs from art history, for example, which is both a discipline (a mode of investigation) in its study of history through art and a field (a subject of investigation) in its study of the history of art itself. Material culture is comparable to art history as a discipline in its study of culture through artifacts. As such, it provides a scholarly approach to artifacts that can be utilized by investigators in a variety of fields. But the material of material culture is too diverse to constitute a single field. In practice it consists of subfields investigated by specialists—cultural geographers or historians of art, architecture, decorative arts, science, and technology.

Material culture as a study is based upon the obvious fact that the existence of a man-made object is concrete evidence of the presence of a human intelligence operating at the time of fabrication. The underlying premise is that objects made or modified by man reflect, consciously or uncon-

economic studies that deal with artifacts abstractly, often statistically, to address issues of class, patronage, patterns of usage, levels of technology, availability of materials, means of distribution, and so on.

sciously, directly or indirectly, the beliefs of individuals who made, commissioned, purchased, or used them, and by extension the beliefs of the larger society to which they belonged. The term *material culture* thus refers quite directly and efficiently, if not elegantly, both to the subject matter of the study, *material*, and to its purpose, the understanding of *culture*.

Despite its concision and aptness, the term *material culture* seems unsatisfactory, indeed, self-contradictory. *Material* is a word we associate with base and pragmatic things; *culture* is a word we associate with lofty, intellectual, abstract things. Our unease with this apparent disjunction is not superficial; it derives from a fundamental human perception of the universe as divided between earth and sky. That empirically observed opposition of lower and higher provides a powerful and pervasive metaphor for the distinctions we make between such elemental polarities as material and spiritual, concrete and abstract, finite and infinite, real and ideal. In its theological formulation this metaphor invariably locates heaven upward, above the earth, accessible not to the body but only to the mind or spirit (with mortification of the flesh [material] one way to achieve spiritual ends), and places hell in the bowels of the earth, down deep in the midst of matter. Material things are heir to all sorts of ills—they break, get dirty, smell, wear out; abstract ideas remain pristine, free from such wordly debilities.

The Western conception of history is that it has been characterized by man's increasing understanding and mastery of the physical environment, by the progressive triumph of mind over matter. The evidence of human history seems to confirm our sense that abstract, intellectual, spiritual elements are superior to material and physical things. This has led inevitably to a hierarchical ordering that informs our apprehension and judgment of human activities and experiences.² This uncon-

scious ordering makes us uncomfortable with the terminological coupling of base *material* and lofty *culture*. Nevertheless, the term *material culture*, if not ideal, has the advantage of being concise, accurate, and in general use.

Material

The word *material* in material culture refers to a broad, but not unrestricted, range of objects. It embraces the class of objects known as artifacts—objects made by man or modified by man. It excludes natural objects. Thus, the study of material culture might include a hammer, a plow, a microscope, a house, a painting, a city. It would exclude trees, rocks, fossils, skeletons. Two general observations should be made here. First, natural objects are occasionally encountered in a pattern that indicates human activity—a stone wall or a row of trees in an otherwise random forest, a concentration of chicken bones in a pit or a pile of oyster shells, topiary or a clipped poodle, a tattooed body or a prepared meal. In the broadest sense these natural materials are artifacts—objects modified by man—and are of cultural interest. Second, works of art constitute a large and special category within artifacts because their inevitable aesthetic and occasional ethical or spiritual (iconic) dimensions make them direct and often overt or intentional expressions of cultural belief. The self-consciously expressive character of this material, however, raises problems as well as opportunities; in some ways artifacts that express culture unconsciously are more useful as objective cultural indexes.³ For the moment, however, let it simply be borne in mind that all tangible works of art are part of material culture, but not all the material of material culture is art.

The range of objects that fall within the compass of material culture is so broad as to make some system of classification desirable. Sorting by physical materials does not work because of the multiplicity of substances used, even at times in a single artifact. The same is true of methods of fabrication. The most promising mode of classification is by function. The following list is arranged in a sequence of categories that progresses from the more decorative (or aesthetic) to the more utilitarian.

² For example, poetry, because more abstract, is considered loftier than prose, chess than wrestling, or the practice of law than collecting garbage. In the world of scholarship the more abstract subjects—mathematics, philosophy, literature—are more highly regarded than concrete and practical subjects such as engineering. Such ordering takes place even within the material realm of artifacts where all things are not equal. Higher value has been attached to works of art than to utilitarian craft objects since the Renaissance when a distinction was made between the arts, which require intellectual activity and creative imagination in their making, and the crafts, which require greater physical exertion and mechanical ingenuity. Even in a specific art such as painting, there has long been an ordering of genres, ranging from history painting, which springs from the painter's imagination, at the top of the scale, to still-life painting, the replication of worldly objects, at the bottom. In architecture, the mental activity of design has been considered an appropriate

pursuit for gentlemen (for example, Thomas Jefferson), while the actual physical labor of building has been carried out by laborers of the lower classes. In sculpture in the nineteenth century, the realization of the form indwelling in the marble was the work of the artist; hacking out replications was the work of stonemasons.

³ See the section on veracity below.

1. Art (paintings, drawings, prints, sculpture, photography)
2. Diversions (books, toys, games, meals, theatrical performances)
3. Adornment (jewelry, clothing, hairstyles, cosmetics, tattooing, other alterations of the body)
4. Modifications of the landscape (architecture, town planning, agriculture, mining)
5. Applied arts (furniture, furnishings, receptacles)
6. Devices (machines, vehicles, scientific instruments, musical instruments, implements)

These categories are broad; they undoubtedly require modification and refining; the list is intended simply to define the terrain and suggest the outlines of a system. Many objects straddle categories, but taxonomic shortcomings do not cause analytical problems. Classification for purposes of manageability and discussion does not affect the actual process of material culture analysis described below which applies to all artifacts. Although the range of categories suggests the potential applicability of a variety of specialized techniques and methodologies, no systematic attempt is made in this general essay to correlate categories of objects with particular analytical methods or with the production of particular kinds of cultural data. However, further consideration is given to these categories in the final section.

Why Material Culture?

Why should one bother to investigate material objects in the quest for culture, for a society's systems of belief? Surely people in all societies express and have expressed their beliefs more explicitly and openly in their words and deeds than in the things they have made. Are there aspects of mind to be discovered in objects that differ from, complement, supplement, or contradict what can be learned from more traditional literary and behavioral sources?

Inherent and Attached Value

The most obvious cultural belief associated with material objects has to do with *value*. There are different kinds of value. One, intrinsic in the fabric of an object itself, is established by the rarity of the materials used. Such value will inhere in the object for as long as the material continues to be valuable. With gold or silver or precious stones, this kind of

value is quite persistent. More transient or variable are those values that have been attached by the people who originally made or used the object, by us today, or by people at any intervening moment. A value that accrues from utility will inhere as long as an object continues to be useful and can return when an obsolete object again becomes useful (wood stoves in an oil shortage). In addition to material and utilitarian values, certain objects have aesthetic value (art), some possess spiritual value (icons, cult objects), and some express attitudes toward other human beings (a fortress, a love seat) or toward the world (using materials in their natural condition as opposed to reshaping them).

Obviously, then, objects do embody and reflect cultural beliefs. But, although such embodiments of value differ in form from verbal and behavioral modes of cultural expression, they do not necessarily differ in character or content. In the following regards, however, objects do constitute distinctive cultural expressions.

Surviving Historical Events

Objects created in the past are the only historical occurrences that continue to exist in the present. They provide an opportunity by which "we encounter the past at first hand; we have direct sensory experience of surviving historical events."⁴ Artifacts may not be important historical events, but they are, to the extent that they can be experienced and interpreted as evidence, significant.

More Representative

Henry Glassie has observed that only a small percentage of the world's population is and has been literate, and that the people who write literature or keep diaries are atypical. Objects are used by a much broader cross section of the population and are therefore potentially a more wide-ranging, more representative source of information than words.⁵ They offer the possibility of a way to understand the mind of the great majority of nonliterate people, past and present, who remain otherwise inaccessible except through impersonal records and the distorting view of a contemporary

⁴ Jules David Prown, "Style as Evidence," *Winterthur Portfolio* 15, no. 3 (Autumn 1980): 208. Peter Gay has observed that "the most undramatic work of art presents precisely the same causal puzzles as the eruption of a war, the making of a treaty, or the rise of a class" (*Art and Act: On Causes in History—Manet, Gropius, Mondrian* [New York: Harper & Row, 1976], p. 3).

⁵ Henry Glassie, "Meaningful Things and Appropriate Myths: The Artifact's Place in American Studies," in *Prospects: An Annual of American Cultural Studies*, ed. Jack Salzman, vol. 3 (New York: Burt Franklin, 1977), pp. 29–30.

literary elite. This promise perhaps explains why many of the leading early proponents, indeed pioneers, of material culture have come from the field of folklore and folk life and have studied vernacular objects. Such study has required a considerable amount of scholarly innovation. Vernacular objects pose interpretive difficulties because our scholarly traditions and experience, especially in regard to art, architecture, and the decorative arts, have focused on high style objects.

The theoretical democratic advantage of artifacts in general, and vernacular material in particular, is partially offset by the skewed nature of what in fact survives from an earlier culture. A primary factor in this is the destructive, or the preservative, effect of particular environments on particular materials. Materials from the deeper recesses of time are often buried, and recovered archaeologically. Of the material heritage of such cultures, glass and ceramics survive in relatively good condition, metal in poor to fair condition, wood in the form of voids (postholes), and clothing not at all (except for metallic threads, buttons, and an odd clasp or hook).

Inherent and attached value, discussed above, is another major element in what survives. A significant aspect of this is taste, or, more specifically, changes in taste over the years. A "degree-of-sophistication" scale, ranging from rude vernacular at one end to high style at the other, comes into play. The calibrations on this scale have obvious implications of social class. High style objects, sometimes of precious materials and fabricated with technical skill that elicits admiration, tend to be preserved; ruder objects, which for economic reasons sometimes have much less invested in them in terms of the quality of the material or the craftsmanship, simply may not last as long or, if they do, tend eventually to be discarded as junk. Objects with iconic or associational value are preserved, but when they lose that association (religious paintings in a secular society, photographs of unknown ancestors), they become disposable.

Even allowing for the distortions of survival, it remains true that objects can make accessible aspects, especially nonelite aspects, of a culture that are not always present or detectable in other modes of cultural expression.

Veracity

Certain fundamental beliefs in any society are so generally accepted that they never need to be articulated (see *Cultural Perspective* below). These basic cultural assumptions, the detection of which

is essential for cultural understanding, are consequently not perceivable in *what* a society expresses. They can, however, be detected in the *way* in which a society expresses itself, in the configuration or form of things, in *style*.⁶ Stylistic evidence can be found in all modes of cultural expression, whether verbal, behavioral, or material. But a society puts a considerable amount of cultural spin on what it consciously says and does. Cultural expression is less self-conscious, and therefore potentially more truthful, in what a society produces, especially such mundane, utilitarian objects as domestic buildings, furniture, or pots.

Cultural Perspective

Perhaps the most difficult problem to recognize and surmount in cultural studies is that of cultural stance or cultural perspective. The evidence we study is the product of a particular cultural environment. We, the interpreters, are products of a different cultural environment. We are pervaded by the beliefs of our own social groups—nation, locality, class, religion, politics, occupation, gender, age, race, ethnicity—beliefs in the form of assumptions that we make unconsciously. These are biases that we take for granted; we accept them as mindlessly as we accept the tug of gravity. Is it possible to step outside of one's own cultural givens and interpret evidence objectively in terms of the beliefs of the individuals and the society that produced that evidence? If not, if we are irredeemably biased by our own unconscious beliefs, if we are hopelessly culture bound, then the entire enterprise of cultural interpretation should be avoided since our interpretations will inevitably be distorted. It is possible to argue, as Arnold Hauser does in response to the contention of Karl Marx that we see all things from the perspective of our social interest and our view is therefore inevitably distorted, that once we become aware of the problem we can struggle against subjectivity, against individual and class interests, and can move toward greater objectivity.⁷ Awareness of the problem of one's own cultural bias is a large step in the direction of neutralizing the problem, but material culture offers a scholarly approach that is more specific and trustworthy than simple awareness. The study of systems of belief through an analysis of artifacts offers opportunities to circumvent the investigator's own cultural per-

⁶ For an extended discussion of this issue, see Prown, "Style as Evidence," esp. pp. 197–200.

⁷ Arnold Hauser, "Sociology of Art," in *Marxism and Art: Writings in Aesthetics and Criticism*, ed. Berel Lang and Forrest Williams (New York: David McKay Co., 1972), p. 272.

spective. By undertaking cultural interpretation through artifacts, we can engage the other culture in the first instance not with our minds, the seat of our cultural biases, but with our senses. "This affective mode of apprehension through the senses that allows us to put ourselves, figuratively speaking, inside the skins of individuals who commissioned, made, used, or enjoyed these objects, to see with their eyes and touch with their hands, to identify with them empathetically, is clearly a different way of engaging the past than abstractly through the written word. Instead of our minds making intellectual contact with minds of the past, our senses make affective contact with senses of the past."⁸

The methodology of material culture, with its affective approach that aspires to the objectivity of scientific method, affords a procedure for overcoming the distortions of our particular cultural stance, and, of almost equal importance, it makes visible the otherwise invisible, unconscious biases of our own cultural perspective. Awareness of what one normally takes for granted occurs only in the forced confrontation with another norm. For example, we become particularly aware of gravity as gravity when it is not there, as in our observation of astronauts working in a spacecraft. When we identify with another culture through the affective, sensory apprehension of its artifacts, we have an opportunity to accept the other culture as the norm and become aware of the differentness, the special qualities, of our own culture. The culture being studied provides a platform, a new cultural stance, for a perspective on our culture. This can be of interest for its own sake, but specifically and practically in terms of the study of material culture, increasing awareness of the biases of one's own cultural perspective helps achieve objectivity in subsequent investigations.

The fact is that cultural perspective is only a problem or liability to the extent that one is unaware or unable to adjust for it. Indeed, it is our quarry, the cultural patterns of belief, of mind, that we seek.

Final Note

A disclaimer should be entered regarding the completeness of what can be learned from material culture. In certain instances—prehistoric or preliterate societies, for example—artifacts constitute the only surviving evidence, so there is little choice but to use them as best one can to determine cultural

values as well as historical facts. But it would be a delusion to assume we acquire complete access to the belief systems of a culture through its material survival. Cultural expression is not limited to things. But the techniques of material culture should be part of the tool kit of the well-equipped cultural scholar. The obverse of this disclaimer is the argument advanced here: although the study of artifacts is only one route to the understanding of culture, it is a special, important, and qualitatively different route. An investigation that ignores material culture will be impoverished.

Theoretical Background

Culture and Society

The definition given at the beginning stated that the study of material culture can be considered a methodological branch of cultural history or cultural anthropology. Material culture is the object-based aspect of the study of culture. As with cultural history and cultural anthropology, the study of material culture touches on the allied concerns of social history and social anthropology. A society, a group of interdependent persons forming a single community, has a culture, a set of beliefs. Social history and social anthropology study the relationships between individuals or groups of individuals in a society, especially the patterns and details of the daily existence of large subgroups as defined by class, race, religion, place of residence, wealth, and so forth. Cultural history and cultural anthropology study the peculiar achievements, especially intellectual, that characterize a society, such as art, science, technology, religion. Obviously there are significant areas of overlap. Society and culture are inextricably intertwined, and their study cannot and should not be isolated except for analytical purposes.

Cultural history and cultural anthropology, with their sister subjects of social history and social anthropology, thus constitute a field-of-interest umbrella that arches over the study of material culture.⁹ The theoretical underpinnings of the study will be noted in the sections that follow but are not explored extensively in view of their complexity and the introductory nature of this essay.

⁸ Prown, "Style as Evidence," p. 208.

⁹ The location of material culture within the broader confines of cultural and social history and anthropology does not, however, preclude the utilization in the study of material culture of investigative techniques normally associated with other fields and disciplines. These techniques will be discussed later.

Structuralism and Semiotics

The fundamental purpose of the study of material culture is the quest for cultural belief systems, the patterns of belief of a particular group of people in a certain time and place. The methodology is to some extent *structuralist* in its premise that the configurations or properties of an artifact correspond to patterns in the mind of the individual producer or producers and of the society of which he or they were a part.

Modern linguistic theory has made us aware of the significance of language as the manifestation of man's capacity, indeed compulsion, to impose structure on the world and his experience of it. Man's structuring, apparent in language, is the only reality he knows. His reality is relative, endlessly changing, true only for the moment; it is the empirical shadow of a hypothetical underlying permanent universe, a world of ideas, a unified field. The reality man experiences is created by man, and language, the naming of that reality, is a manifestation and measure of the current structure of reality in any given place and time. It is therefore significant cultural evidence as the reflection of man's mental structuring. But language is not solely human. Animals communicate by arrangements of sounds and, in the case of dolphins, for example, may have languages. Perhaps more special to man than language is the capacity to make implements and, more special yet, objects for aesthetic gratification. There is a language of form as there is a language of words; a naming through making as there is a naming through saying. That man expresses his human need to structure his world through forms as well as through language is a basic premise of the structuralist approach to material culture.¹⁰

The methodology of material culture is also concerned with *semiotics* in its conviction that artifacts transmit signals which elucidate mental patterns or structures. Complementing the structuralist premise and semiotic promise of the interpretation of artifacts is the knowledge that artifacts serve as cultural releasers. Perceivers in other societies who have a different mix of cultural values, some in concert and some at variance with those of the producing society, respond positively to certain artifacts or aspects of artifacts while ne-

glecting others. This is why an object or an entire category of objects falls in and out of fashion. The object stays relatively the same, but people change and cultural values change. From the time it is created, an artifact can arouse different patterns of response according to the belief systems of the perceivers' cultural matrices. The sequence of synchronic patterns that could be triggered by an artifact resembles the sequence of frames in a motion picture; in theory, if we could retrieve all the patterns, we would have a film of history. In practice, only a few patterns are accessible, primarily those of the original fabricator and the modern perceiver. Artifacts, then, can yield evidence of the patterns of mind of the society that fabricated them, of our society as we interpret our responses (and nonresponses), and of any other society intervening in time or removed in space for which there are recorded responses.

Determinism

The fundamental attitude underlying the study of material culture is, as with most contemporary scholarship, a pervasive *determinism*. This statement may seem to belabor the obvious, but a strict determinism not only underlies the other theoretical aspects of the study of material culture but also dictates the methodological procedures outlined below whereby, through a variety of techniques, an object is unpacked. The basic premise is that every effect observable in or induced by the object has a cause. Therefore, the way to understand the cause (some aspect of culture) is the careful and imaginative study of the effect (the object). In theory, if we could perceive all of the effects we could understand all of the causes; an entire cultural universe is in the object waiting to be discovered. The theoretical approach here is modified, however, by the conviction that in practice omniperception leading to omniscience is not a real possibility. External information—that is, evidence drawn from outside of the object, including information regarding the maker's purpose or intent—plays an essential role in the process. Such an approach is inclusive, not exclusive.

Although the fundamental concern of material culture is with the artifact as the embodiment of mental structures, or patterns of belief, it is also of interest that the fabrication of the object is a manifestation of behavior, of human act. As noted above in the discussion of culture and society, belief and behavior are inextricably intertwined. The material culturalist is, therefore, necessarily interested in the motive forces that condition behavior,

¹⁰ A measure of the potency of the language of form is the role that matter—and man's experience of the physical world—plays in language. This is obviously true with poetic imagery and metaphor, where concretions vivify abstractions, and in the imagery of vernacular expressions which articulate and expose fundamental human perceptions of the realities of existence.

specifically the making, the distribution, and the use of artifacts. There is an underlying assumption that every living being acts so as to gratify his own self-interest as he determines that interest to be at any given moment. This is an inevitable by-product of the fundamental concern with cause and effect. Thus such issues as the availability of materials, the demands of patronage, channels of distribution, promotion, available technology, and means of exchange, which require the investigation of external evidence, are pertinent.

Methodology

How does one extract information about culture, about mind, from mute objects? We have been taught to retrieve information in abstract form, words and numbers, but most of us are functionally illiterate when it comes to interpreting information encoded in objects. Several academic disciplines, notably art history and archaeology, routinely work with artifacts as evidence and over the years have built up a considerable amount of theoretical and methodological expertise. Work done in these fields is often directed inward, toward the accumulation and explication of information required by the discipline itself. In the history of art this takes the form of resolving questions of stylistic and iconographic influence, of dating and authorship, of quality and authenticity. In archaeology it is the basic task of assembling, sorting, dating, and quantifying the assembled data. But art history and archaeology also have fundamental concerns with the cultures that produced the objects, and the methodologies of these two fields, to the extent that they provide means for the interpretation of culture, are essential to material culture. At present they are the two disciplines most directly relevant to the actual work of investigating material culture. But, as they are usually defined, they are not adequate to the total task. The exploration of patterns of belief and behavior, in an intellectual borderland where the interests of humanities and social sciences merge, requires an openness to other methodologies, including those of cultural and social history, cultural and social anthropology, psychohistory, sociology, cultural geography, folklore and folk life, and linguistics. But the approach to material culture set forth below dictates that these broader concerns and methodologies *not* be brought into play until the evidence of the artifact itself has been plumbed as objectively as possible. Therefore the first steps are most closely related to the basic

descriptive techniques of art history and archaeology, and in this there is more overlap with the natural than with the social sciences. The initial descriptive steps in the approach to objects resembles fieldwork in a science such as geology, and description can also involve the use of scientific equipment.

The method of object analysis proposed below progresses through three stages. To keep the distorting biases of the investigator's cultural perspective in check, these stages must be undertaken in sequence and kept as discrete as possible. The analysis proceeds from *description*, recording the internal evidence of the object itself; to *deduction*, interpreting the interaction between the object and the perceiver; to *speculation*, framing hypotheses and questions which lead out from the object to external evidence for testing and resolution.¹¹

Description

Description is restricted to what can be observed in the object itself, that is, to internal evidence. In practice, it is desirable to begin with the largest, most comprehensive observations and progress systematically to more particular details. The terminology should be as accurate as possible; technical terms are fine as long as they can be understood. The analyst must, however, continually guard against the intrusion of either subjective assumptions or conclusions derived from other experience.

This is a synchronic exercise; the physical object is read at a particular moment in time. The object is almost certainly not identical to what it was when it was fabricated; time, weather, usage will all have taken their toll. At this stage no consideration is given to condition or to other diachronic technological, iconographic, or stylistic influences.

Substantial analysis. Description begins with substantial analysis, an account of the physical dimensions, material, and articulation of the object. To determine physical dimensions, the object is mea-

¹¹ The issue of sequence undoubtedly needs further study. I am aware that the insistence upon strict adherence to a particular series of steps seems rigid and arbitrary, an uncalled-for fettering of the investigator. Yet, I have come to appreciate the virtues of sequence empirically on the basis of considerable classroom experience with artifact analysis. It simply works better. The closer the sequence suggested below is followed, especially in regard to the major stages, and the greater the care taken with each analytical step before proceeding, the more penetrating, complex, and satisfying the final interpretation. Obviously, the procedure is time-consuming, and there is a natural impatience to move along. My experience has been, however, that this should be resisted until the analysis is exhausted and the obvious next question requires advancing to the next step.

sured and perhaps weighed. The degree of precision depends on the interests of the investigator. If he will be considering a series of objects, a certain amount of precision is desirable, given the possible subsequent significance of and need for quantification. However, it is not desirable to carry decimals to the point of losing an immediate sense of dimension in a welter of numbers; real significance may lie in general measure, as with Glassie's discovery of the modal importance of spans and cubits in the vernacular architecture of Virginia.¹² Next comes a description of the materials—what they are, how extensively they are used, and the pattern of their distribution throughout the object. Finally, the ways in which the materials are put together in the fabrication of the object, the articulation, should be noted. For example, with fabrics one would look at the weave; with metals, the welding, soldering, riveting; with wood, the dovetails, dowels, miter joints, mortise-and-tenon joints, glue.

Substantial analysis is a descriptive physical inventory of the object. It is achieved with the assistance of whatever technical apparatus is appropriate and available. Simple tape measures and scales, ultraviolet lamps and infrared photographs, or complex electron microscopes and X-ray defraction machines are all basically enhancements of one's ability to perceive and take the measure of the physical properties and dimensions of the object.¹³

Content. The next step in description is analysis of content. The investigator is concerned simply with subject matter. This is usually a factor only with works of art or other decorated objects. The procedure is iconography in its simplest sense, a reading of overt representations. In the case of a painting, this may simply be what is represented, as if the work were a window on the world (or on some kind of world). Content may include deco-

orative designs or motifs, inscriptions, coats of arms, or diagrams, engraved or embossed on metal, carved or painted on wood or stone, woven in textiles, molded or etched in glass.

Formal analysis. Finally, and very important, is analysis of the object's form or configuration, its visual character. It is useful to begin by describing the two-dimensional organization—lines and areas—either on the surface of a flat object or in elevations or sections through a solid object.¹⁴ Next comes the three-dimensional organization of forms in space, whether actual in a three-dimensional object or represented in a pictorial object. Subsequently, other formal elements such as color, light, and texture should be analyzed with, as in the case of the initial description of materials, an account of their nature, extent, and pattern of distribution (rhythm) in each case. Determination of the degree of detail must be left to the discretion of the investigator; too much can be almost as bad as too little, the forest can be lost for the trees.

Deduction

The second stage of analysis moves from the object itself to the relationship between the object and the perceiver. It involves the empathetic linking of the material (actual) or represented world of the object with the perceiver's world of existence and experience. To put it another way, the analyst contemplates what it would be like to use or interact with the object, or, in the case of a representational object, to be transported empathetically into the depicted world. If conditions permit, he handles, lifts, uses, walks through, or experiments physically with the object. The paramount criterion for deductions drawn from this interaction is that they must meet the test of reasonableness and common sense; that is, most people, on the basis of their knowledge of the physical world and the evidence of their own life experience, should find the deductions to be unstrained interpretations of the evidence elicited by the description. If these deductions are not readily acceptable as reasonable, they must be considered hypothetical and deferred to the next stage.

Although the analyst in the deductive stage moves away from a concern solely with the internal evidence of the object and injects himself into the investigation, the process remains synchronic. Just as the object is only what it is at the moment of

¹² Henry Glassie, *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifacts* (Knoxville: University of Tennessee Press, 1975).

¹³ The procedures outlined here for collecting internal evidence have other significant applications. Physical analysis, including the use of scientific apparatus, can provide crucial information in regard to authenticity. Other procedures noted below, notably formal analysis, can also be exceedingly useful in determining authenticity. These applications of the methodology can take place at any time, but it is preferable for the issue of authenticity to be resolved before the analysis proceeds beyond *description*. If a material culture investigator is to arrive at cultural conclusions on the basis of material evidence, the specimen being studied *must* be an authentic product of the culture in question. The investigator must determine what aspects of the objects, if any, are not authentic products of the presumed culture. A fake may be a useful artifact in relation to the culture that produced the fake, but it is deceptive in relation to the feigned culture.

¹⁴ The procedures of formal analysis summarized briefly here will be familiar to any art historian. They are not, however, arcane, and investigators need not be specially trained. Formal analysis is a matter of articulating and recording what one sees, preferably in a systematic sequence as suggested here.

investigation, and as such may be more or less different than what it was when it was made, so too the analyst is what he is at the moment of investigation. Ten years hence he might respond differently to the object because of different interests and a different mix of life experiences near the surface of conscious awareness. The particular encounter between an object with its history and an individual with his history shapes the deductions. Neither is what they were nor what they may become. Yet the event does not occur within a vacuum. The object is at least in some ways what it was; the same, although less germane, is true of the investigator. The object may not testify with complete accuracy about its culture, but it can divulge something. It is the analyst's task to find out what it can tell and, perhaps, deduce what it can no longer tell.

Sensory engagement. The first step in deduction is sensory experience of the object. If possible, one touches it to feel its texture and lifts it to know its heft. Where appropriate, consideration should be given to the physical adjustments a user would have to make to its size, weight, configuration, and texture. The experience of architecture or a townscape would involve sensory perceptions while moving through it. If the object is not accessible, then these things must be done imaginatively and empathetically. In the case of a picture, the engagement is necessarily empathetic; the analyst projects himself into the represented world (or, in Alois Riegl's sense, considers that the pictorial space continues into the viewer's world of existence) and records what he would see, hear, smell, taste, and feel.¹⁵

Intellectual engagement. The second step is intellectual apprehension of the object. With a tool or implement this is a consideration of what it does and how it does it, and in such cases may need to precede or accompany the sensory engagement. The degree of understanding at this stage (prior to the admission of external evidence) depends on the complexity of the object and the analyst's prior knowledge and experience. It is unnecessary to ignore what one knows and feign innocence for the appearance of objectivity, but it is desirable to test

one's external knowledge to see if it can be deduced from the object itself and, if it cannot, to set that knowledge aside until the next stage.

In the case of a pictorial object, there are a number of questions that may be addressed to and answered by the object itself, especially if it is representational. What is the time of day? What is the season of the year? What is the effect on what is depicted of natural forces such as heat and cold or the pull of gravity? In the relation between the depicted world and our world, where are we positioned, what might we be doing, and what role, if any, might we play? How would we enter pictorial space? What transpired prior to the depicted moment? What may happen next?

Emotional response. Finally, there is the matter of the viewer's emotional response to the object. Reactions vary in kind, intensity, and specificity, but it is not uncommon to discover that what one considered a subjective response is in fact widely shared. A particular object may trigger joy, fright, awe, perturbation, revulsion, indifference, curiosity, or other responses that can be quite subtly distinguished. These subjective reactions, difficult but by no means impossible to articulate, tend to be significant to the extent that they are generally shared. They point the way to specific insights when the analyst identifies the elements noted in the descriptive stage that have precipitated them.

I have stressed the importance of attempting to maintain rigorous discreteness and sequence in the stages of object analysis. In fact, this is difficult if not impossible to achieve. Deductions almost invariably creep into the initial description. These slips, usually unnoted by the investigator, are undesirable since they undercut objectivity. But in practice, while striving to achieve objectivity and to maintain the scientific method as an ideal, the investigator should not be so rigorous and doctrinaire in the application of methodological rigor as to inhibit the process. Vigilance, not martial law, is the appropriate attitude. Often an individual's subjective assumptions are not recognized as such until considerably later. In fact, it is instructive in regard to understanding one's own cultural biases, one's own cultural perspective, to mark those assumptions that remain undetected the longest in the descriptive stage. These are often the most deeply rooted cultural assumptions.

Speculation

Having progressed from the object itself in description to the interaction between object and perceiver in deduction, the analysis now moves com-

¹⁵ See Sheldon Nodelman, "Structural Analysis in Art and Anthropology," in *Structuralism*, ed. Jacques Ehrmann (Garden City, N.Y.: Anchor Books/Doubleday, 1970), p. 87. This splendid article sets forth succinctly the basis for contemporary structural analysis in the early art historical work of the German school of *Strukturforschung*, especially as initiated by Riegl and developed by Guido von Kaschnitz-Weinberg, and the *anthropologie structurale* of Claude Lévi-Strauss.

pletely to the mind of the perceiver, to *speculation*. There are few rules or proscriptions at this stage. What is desired is as much creative imagining as possible, the free association of ideas and perceptions tempered only, and then not too quickly, by the analyst's common sense and judgment as to what is even vaguely plausible.

Theories and hypotheses. The first step in speculation is to review the information developed in the descriptive and deductive stages and to formulate hypotheses. This is the time of summing up what has been learned from the internal evidence of the object itself, turning those data over in one's mind, developing theories that might explain the various effects observed and felt. Speculation takes place in the mind of the investigator, and his cultural stance now becomes a major factor. However, since the objective and deductive evidence is already in hand, this cultural bias has little distorting effect. Indeed, it is an asset rather than a liability; it fuels the creative work that now must take place. Because of cultural perspective, it is impossible to respond to and interpret the object in exactly the same way as did the fabricating society, or any other society that may have been exposed to and reacted to the object during its history and perigrinations. Where there is a common response, it provides an affective insight into the cultural values of another society. Where there is divergence, the distinctive cultural perspective of our society can illuminate unseen and even unconscious aspects of the other culture. There was gravity before Newton; there was economic determinism before Marx; there was sex before Freud. We are free to use the insights afforded by our cultural and historical perspective, as long as we do not make the mistake of assigning intentionality or even awareness to the fabricating culture. Our cultural distance from the culture of the object precludes affective experience of those beliefs that are at variance with our own belief systems, but the process now begun can lead to the recovery of some of those beliefs. That is a goal of the exercise.

Program of research. The second step in the speculative stage is developing a program for validation, that is, a plan for scholarly investigation of questions posed by the material evidence. This shifts the inquiry from analysis of internal evidence to the search for and investigation of external evidence. Now the methodologies and techniques of various disciplines can be brought into play according to the nature of the questions raised and the skills and inclinations of the scholar.

The object is not abandoned after the prelim-

inary analysis—description, deduction, speculation—is complete and the investigation has moved to external evidence. There should be continual shunting back and forth between the outside evidence and the artifact as research suggests to the investigator the need for more descriptive information or indicates other hypotheses that need to be tested affectively.

Investigation of External Evidence

Allied Disciplines

Pursuing a program of research in material culture based on questions and hypotheses arising from artifact analysis involves the techniques and approaches of any of a dozen or more subjects or disciplines divided between the humanities and the social sciences.¹⁶ The following can or do utilize artifacts evidentially: archaeology, cultural geography, folklore and folk life, history of art, social and cultural anthropology, and social and cultural history. Several others that do not to any substantial degree are linguistics, psychohistory, and psychology. Since the study of material culture as a distinct discipline (rather than as a part of art history or archaeology) is relatively recent and the theoretical substructure is still being formulated, the list of allied disciplines is probably not complete.

The different relationships the allied disciplines bear to material culture need clarification. In regard to the three disciplines that do not use objects, the relationship is one-sided; material culture does not contribute significantly to, but profits from, techniques and insights of linguistics, psychohistory, and psychology.¹⁷ Conversely, one subject area that does use artifacts, folklore and folk life, profits from, but does not make a readily definable or distinctive methodological contribution to, material culture. Folklore and folk life seems out of place on the list since it refers to a broad area of investigation; as a field rather than a discipline, it is the

¹⁶ There is some question in academic circles whether social and cultural history belong to the humanities or to the social sciences. This perhaps suggests the lessening usefulness of a distinction between the study of human beliefs, values, and history on the one hand and the study of human behavior on the other, and the need for a new term to encompass those disciplines that study the interaction of human belief and behavior, whether historical or contemporary.

¹⁷ Inasmuch as the essential purpose of material culture is the quest for mind, psychohistory holds particular promise, but as yet the methodologies of this equally new (and more controversial) approach are as rudimentary as those of material culture.

opposite of material culture which is a discipline and not a field. In addition to utilizing most of the other disciplinary approaches listed here, studies in folklore and folk life have made especially effective use of material evidence, inasmuch as material culture is particularly useful for any investigation of nonliterate or quasilliterate societies or segments of societies.

The relationship of material culture to other disciplines that use artifacts is one of common or parallel interests rather than interdependence. As noted above, social and cultural history, social and cultural anthropology, and, it might be added, sociology can view material culture as simply a methodological subbranch to be utilized when appropriate.

Cultural geography has an especially close connection with material culture. The explanation may be that, since cultural geography deals directly with the shaping influence of man's mind on his physical environment, it is essentially material culture writ large. As with material culture, its primary evidence exists in the form of both artifacts and pictorial representations. Cultural geography may be defined as an important branch of material culture (as with art, all cultural geography is material culture, but not all material culture is cultural geography); in time the two subjects may turn out to be aspects of a single discipline. For the moment the study of each is in its infancy and their precise relationship remains to be determined.

Art History and Archaeology

I turn now to the two areas of scholarship that have had the longest working experience with material culture—art history and archaeology. The initial step in the analytical process, the physical description of objects (including the use of technical apparatus), is common to both these fields. Moreover the most obvious methodological steps away from the internal evidence and into external evidence also spring from, although they are not limited to, these fields.

Quantitative analysis. Quantitative analysis, more common to archaeology than to art history, is most frequently the extension of descriptive physical analysis to other objects in order to determine the distribution, in time and in space, of certain forms, materials, or modes of construction. Quantitative study can also use the original object and others like it for considering abstract questions, such as the relationship of objects to patrons or users vis-à-vis class, religion, politics, age, wealth, sex, place of residence, profession, and so on. For example,

a student in my material culture seminar, Rachel Feldberg, investigated one mid-eighteenth-century Connecticut desk-and-bookcase. She began by noting the number of apertures, then she considered how the openings might have been used by the original owner and hypothesized that they were for sorting and storing papers. Given the desk-and-bookcase's functional associations with reading and writing, its division into upper case and lower case (as in typefaces), and the possible use of the lower section as a press (as in "linen press"), her thoughts turned to printing. She speculated that if envisioned in a horizontal plane, this particular desk-and-bookcase had the same number of openings as did a printer's tray. This suggested alphabetization, with the usual conflation of certain letters (p/q, x/y/z), and the use of the apertures for systematic filing. A quantitative survey of similar desk-and-bookcases would help to confirm or negate her hypothesis.¹⁸ The development of computer technology makes possible a range and variety of quantitative research previously unmanageable.

Stylistic analysis. The other two aspects of the descriptive stage, stylistic analysis and iconography, also lend themselves to broader diachronic and geographic consideration. The search for stylistic influences or sources is a basic art historical procedure. Within the broader framework of material culture, tracing stylistic influence has considerable potential. For example, New England in the sixteenth century had few if any gravestones. With the beginning of European settlement in the seventeenth century, gravestones appeared in the coastal towns; subsequently their use spread up the river valleys and across the countryside. Since gravestones are often inscribed with considerable data regarding the deceased, a corpus of subject information can be assembled about age, sex, religion, profession, and residence. Gravestones also have a formal design component. Analysis of the evolution and spread of gravestone styles in New England, previously a stylistic tabula rasa, might lead to a significant study of the dispersion of style, of how formal information is disseminated in a

¹⁸ This example is simplified for illustrative purposes and should not be interpreted as reductive either of the possibilities for quantification studies or of the scope of Feldberg's inquiry. Most quantitative studies would deal with a much larger number of variables, as indeed would Feldberg's study of desk-and-bookcases if actually undertaken. Also, her investigation into external evidence led to various other issues not apposite here such as the use of letters of credit in the eighteenth century which might be filed in the bookcase; the velocity of correspondence of a New England businessman; locks and safekeeping; and the issue of reconciling gentlemanliness and commerce.

given culture.¹⁹ Like radioactive isotopes injected into the bloodstream of a cancer patient, the grave-stones would make visible the culture and its pattern of diffusion.

Iconology. Iconography is also a basic art historical procedure for the investigation of art influencing art. There is a gain in research potential when iconography moves to iconology and studies are made of the intellectual matrix—the web of myth, religion, historical circumstance—that spawned the legends and imbue the iconographic elements with their intellectual and symbolic power. The study of iconology leads ineluctably to the study of semiotics; all objects, not only works of art with highly developed narrative, imagic, metaphoric, and symbolic content, are the transmitters of signs and signals, whether consciously or subconsciously sent or received. And the interpretation of cultural signals transmitted by artifacts is what material culture is all about.

Another student in my seminar, Kimerly Rorschach, investigated an eighteenth-century Connecticut tall clock. Traditional research into external evidence, which is part of any investigation into material culture, led to estate inventories in an attempt to determine the normal placement of such clocks and to prove patterns of distribution by economic status. Similarly, clockmakers' account books were consulted for information about shop practices. But the deductive and speculative stages of object analysis framed qualitatively different questions and hypotheses. The tall clock stands slim and erect, slightly larger than human scale. It has human characteristics, and yet it is both less and more than human. It has a face behind which a surrogate brain ticks relentlessly. It is not capable of independent life, yet once wound its mechanism ticks on and its hands move without rest. The human occupants of a house are mortal with an allotted span of time to use or waste while the clock measures its irretrievable passage. Could the clock have played a metaphorical role as the unblinking teller of time who watches the inhabitants of the house, the agent of some extrahuman, divine power? A student in another course, Joel Pfister, analyzed a Victorian coal-fired parlor stove, a very different object. A useful black imp who ate coal voraciously and had to be emptied (its fecal ashes a material by-product in contrast to the abstract output of the clock), who would inflict a nasty burn on the unwary and could, if untended, destroy the

house, the stove was not a celestial watcher but an iron Caliban that needed itself to be watched. How does one explore the mental landscape, the beliefs, to validate or deny such speculations? Sermons, private diaries, poetry, and fiction are among the sources for the investigator seeking not only facts but also the hints or suggestions of belief. Even if such hypotheses or speculations remain unproved, they are not necessarily invalid.

Observations on the Categories of Artifacts

Although all man-made things are, in theory, useful evidence of cultural mind, in practice different categories of material yield different kinds of information in response to different investigative techniques. Some categories are responsive to familiar scholarly methodologies; some seem obdurate and mute. This final section reviews the categories of the material of material culture and considers their evidential promise.

Art

The fine arts in general have two advantages as material for the study of material culture. One, already discussed, is the applicability of the experience and methodologies of an existing discipline, the history of art. The other is that objects of art possess considerable underlying theoretical complexity (as opposed to technical or mechanical complexity), embodying by definition aesthetic and even ethical decision making.²⁰ On the other hand, as noted in the discussion of veracity, the self-consciousness of artistic expression makes art less neutral as cultural evidence than are mundane artifacts. Moreover, there is a special problem connected with the consideration of works of art as cultural evidence, what might be called the aesthetic dilemma.

Hauser has argued that there is no relationship between an object's aesthetic value and its cultural significance. Each is judged by different criteria, and each set of standards is perfectly valid as long as the two are not confused. It is self-deluding to consider an object aesthetically better because it has cultural potency, or to elevate an object as a cultural document because it accords with our sense of aesthetic quality. The aesthetic dilemma arises when

¹⁹ See James Deetz, *In Small Things Forgotten: The Archaeology of Early American Life* (Garden City, N.Y.: Anchor Press/Doubleday, 1977), pp. 64–90.

²⁰ "The more complex an object is, the more decisions its design required, the more a particular mind in operation can be discovered behind it" (Henry Glassie, "Folkloristic Study of the American Artifact," in *Handbook of American Folklore*, ed. Richard Dorson [forthcoming]).

an analytical approach breaks down the complexity of a work of art into simple categories and in so doing destroys the aesthetic experience irretrievably.²¹ The question is whether the analytical procedures of material culture wreak this kind of aesthetic damage.

The initial steps of the methodology proposed here are completely descriptive and do not compromise the aesthetic response. Close examination of the object accords with accepted procedures for aesthetic evaluation. And the second stage of deductive and interpretative analysis involves objective procedures that only enhance and magnify familiarity, understanding, and aesthetic appreciation. Danger lies in the third stage—speculation. The aesthetic dilemma does not in fact arise from analysis; it arises from speculation. The aesthetic experience of a work of art (or music or literature) can be affected, even permanently altered, by external associations—a distasteful experience at the time of perception, the intrusion of a parody, an unsolicited, uncongenial interpretation. Speculation, especially by an “expert,” can color, perhaps permanently, the perception of others. Regardless of the validity of the interpretation, the state of mind of the listener or reader is altered, innocence is lost, what has been said cannot be unsaid, the aesthetic experience is irredeemably changed.

Students of material culture who have applied the analytical techniques, including speculation, have in fact found their aesthetic pleasure in the object enhanced, not compromised. But aesthetic damage is done not to the interpreter, for whom the speculations are arrived at freely, but to his audience. This, however, is one of the pitfalls in the play of ideas, especially in the area of aesthetic criticism. Speculation is essential to a democracy of ideas, and the danger of restricting ideas or associations is much more serious than the occasional aesthetic damage caused by their expression. Imaginative critical interpretation may change an object irretrievably, but our ideas and our perceptions are continually being altered by new ideas and perceptions. That is life. The “aesthetic dilemma” turns out on close inspection to be less a real problem and more in the order of normal intellectual growing pains.

Diversions

In attempting to classify artifacts, I initially established a miscellaneous category for things, such as books, toys and games, prepared meals, and the

accoutrements of theatrical performance, that did not fit into the other obvious categories. These objects share the quality of giving pleasure, or entertainment to the mind and body, and the category has an affinity with, although separate from, art. This is a category in the process of definition and further discussion of it must be deferred.

Adornment

Adornment, especially clothing, has, like the applied arts, the advantage of touching on a wide range of quotidian functions and of embodying a relatively uncomplicated partnership of function and style that permits the isolation and study of style. The potency of this material as cultural evidence can be tested by the simple act of criticizing someone's clothes; the reaction is much more intense than that aroused by comparable criticism of a house, a car, or a television set. Criticism of clothing is taken more personally, suggesting a high correlation between clothing and personal identity and values. Although personal adornment promises to be a particularly rich vein for material culture studies, to date little significant work has been done with it.

Modifications of the Landscape

The most essential quality of an object for the study of material culture, after survival, is authenticity. The optimum object is the gravestone because it is geographically rooted and attended by a great deal of primary data; we are quite secure in attaching it to a particular cultural complex. There has been little or no faking of gravestones and only a limited amount of recarving or relocating. Although an individual gravestone can be considered as sculpture, gravestones and graveyards (or cemeteries) fundamentally belong to a broader category, modifications of the natural landscape. Architecture, town planning, and indeed all aspects of the human-shaped landscape (cultural geography) share with gravestones the same quality of rootedness that ties artifacts to a particular fabricating culture. Although lacking the inscribed data of grave markers, architecture has much greater complexity. Having been built for human occupancy, it responds in very direct ways to people's needs. Glassie has observed that historically oriented folklorists have concentrated on architecture because the material survives, it is geographically sited, and it is complex. It is both a work of art and a tool for living, combining aesthetic with utilitarian drives at a variety of conceptual levels.²² Town and

²¹ Hauser, “Sociology of Art,” pp. 274–76.

²² Glassie, “Folkloristic Study,” p. 15.

city planning, that is, architecture on a larger scale, share these qualities. In the case of less complex alterations in the physical landscape a distinction must be made between conscious shaping, as in plowing or the construction of a stone wall, and simple behavioral consequences, such as accumulations of animal bones indicative of eating habits.

Applied Arts

Applied arts (furniture, furnishings, receptacles), like architecture, are a partnership of art and craft, of aesthetic appeal and utility.²³ They lack the rootedness of architecture and, except in the case of material retrieved archaeologically, present greater hazard in associating objects with their originating culture. Applied arts, however, have an advantage in their simplicity of function which makes it easier to isolate that potent cultural indicator, style. As discussed above in *Cultural Perspective*, the fundamental values of a society are often unexpressed because they are taken for granted.²⁴ As a result, they are manifest in style rather than in content. Stylistic expression can be affected by functional utility or conscious purposefulness. The configuration of a tool or machine is almost completely dictated by its use; the configuration of a story or a play or a painting may be similarly conditioned by its content or message. In architecture and the applied arts form and function are partners. Where the function is simple and constant, as with teapots or chairs, it can be factored out. The remaining variable is style, bespeaking cultural values and attitudes in itself and in its variations across time, space, class, and so forth.

There is, of course, significant cultural evidence in the utilitarian aspect of artifacts. Both architecture and the applied arts, by their use in a wide range of daily activities, especially domestic, are bearers of information about numerous, sometimes quite private, reaches of human experience. Another student in my material culture course, Barbara Mount, studied a seventeenth-century Boston trencher salt. We take salt for granted because our contemporary (largely processed) diet more than satisfies our requirements. Yet the physiological need for salt is fundamental; if deprived of it we, like all animals, would have severe physical

and mental problems. Early economies developed a salt trade. Salt containers historically occupied a place of honor at the dinner table, and it mattered who was seated above or below the salt. Salt appears frequently in biblical imagery, representing desiccation and purity. People dream of salt. Human life emerged from brackish pools, the saline content of which is encoded in the human bloodstream. Salt has ritual functions associated with baptism; salt water is put on the infant's lips in Catholic baptismal rites; the forms of early trencher salts derive from medieval and renaissance baptismal fonts. Many body fluids are salty—blood, urine, tears—and in some cultures are associated with fertility rites. These scattered observations suggest the multiple possibilities for cultural investigation that can arise from one simple applied arts object.

Devices

Devices—implements, tools, utensils, appliances, machines, vehicles, instruments—constitute the most problematic and, to date, a relatively unproductive range of artifacts for the study of material culture. Much of the scholarship on devices has been taxonomic, recording functional details and mechanical variations. Little writing has been culturally interpretive except on the automobile, a machine with powerful personal stylistic overtones.²⁵ Theoretical writing that relates devices to culture has dealt with the stylistic modification of machine forms to make them culturally acceptable and pervasive images of technology in the popular mind.²⁶ But there has been little cultural analysis of the devices themselves, and no theoretical literature has as yet established a technological or scientific counterpart to the link between art and beliefs.²⁷ Certain devices have particular promise for cultural interpretation. For example, clocks and watches, linked with a significant aspect of everyday human experience—time—surely have cultural significance. Ocular devices—telescopes, microscopes,

²⁵ For example, Roland Barthes, "The New Citroën," in *Mythologies*, trans. Annette Lavers (1972; reprint ed., New York: Hill & Wang, 1978), pp. 88–90.

²⁶ John Kasson, *Civilizing the Machine: Technology and Republican Values in America, 1776–1900* (New York: Grossman Publishers, 1976), and Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1965).

²⁷ Perhaps this will be achieved in time. Glassie speaks of the importance of banjos as well as banjo playing for folklorists ("Folkloristic Study," p. 4), but it remains to be seen whether this assertion will be validated. Glassie had discussed banjos briefly earlier in *Pattern in the Material Folk Culture of the Eastern United States* (1968; reprint ed., Philadelphia: University of Pennsylvania Press, 1971), pp. 22–24, but did not follow through to any cultural interpretations there.

²³ The English usage of the term *applied arts* is preferable to the American *decorative arts* for material culture purposes. The term is intended to describe objects whose essential character is that they combine aesthetic and utilitarian roles. Since the noun *arts* common to both terms takes care of the aesthetic aspect, it seems sensible to have the descriptor emphasize utility, that is, *applied* rather than *decorative*.

²⁴ See also Prown, "Style as Evidence," pp. 69–71.

eyeglasses—also readily suggest themselves as extensions of the fundamental human activity of seeing. Although there may be cultural potency in a wide range of device materials, a question persists. Does the fact that they have been less successfully interpreted as cultural evidence than have other categories of artifacts simply reflect the present state of scholarship and scholarly interest, or are there fundamental differences in the nature of certain artifacts that affect their value as cultural evidence? We will consider one aspect of this question in the conclusion.

Conclusion

We have discussed the categories of the materials of material culture in a sequence moving from the more aesthetic to the more utilitarian with, given the broad scope of the categories, considerable overlap. Does the position of a general category or a specific artifact on such an aesthetic/utility scale provide any index of evidential promise?

The cultural interpretation of artifacts is still too young as a scholarly enterprise to permit final or fixed generalizations regarding the comparative potential of artifacts as evidence. But the weight of scholarly evidence, if one simply compares the body of cultural interpretation in the literature of art history, architectural history, and the history of the applied arts with the literature of the history of science and technology, suggests that it is the aesthetic or artistic dimensions of objects, to whatever extent and in whatever form they are present, that open the way to cultural understanding. The straightforward statements of fact in purely utilitarian objects provide only limited cultural insights. The fundamental reason why the cultural interpretation of works of art has been more fruitful than that of devices is the disparate character of the material itself. Art objects are the products of the needs of belief; devices are the products of physical necessity. Inasmuch as material culture is fundamentally a quest for mind, for belief, works of art are more direct sources of cultural evidence than are devices. Although devices clearly express human attitudes and values in regard to achieving control over the physical environment, the correspondence between the device and the need that brought it into existence is so direct that there seems little need for further investigation. And yet, there are devices such as clocks and telescopes with clear cultural significance. Moreover, devices respond as well as the other categories of artifacts do to the analytical procedures outlined earlier in this essay. Those procedures, especially in the descrip-

tive stage, are largely derived from the practice of art history, and when artifacts are subjected to that analysis, they are analyzed as if they were works of art. Where devices respond to this mode of analysis—as, for example, in the perceptions of my colleague Margaretta Lovell regarding sewing machines, buttons and switches, calculators and buses—they do so not in terms of what they do, but rather in the way they are formed and the way in which they operate, that is, their *style*. If the cultural significance of a device is perceivable in its style rather than its function, then there is reason to conclude that, for purposes of material culture analysis, the aesthetic aspects of artifacts are more significant than the utilitarian. Why this should be the case is explained by Jan Mukařovský.²⁸ Mukařovský observes that all products of creative human activity reveal intention. In the case of implements (he speaks specifically of implements, but his argument holds for all devices), that intention, purpose, or aim is directed externally, outside of the implement itself. An art object, on the other hand, is self-referential; it is an aim, an intention in itself. Man is a user of an implement—he applies it externally; man is a perceiver of art—he refers it to himself. Virtually all objects have an artistic dimension; only with devices do we encounter a class of objects that approaches the purely utilitarian. Even there, most devices incorporate some decorative or aesthetic elements, and every device can be contemplated as an art object, a piece of abstract sculpture, completely apart from utilitarian considerations.

It is characteristic of an implement that a change or modification affecting the way it accomplishes its task does not alter its essential nature as a particular type of implement. But a change, even a minor change, in any of the properties of a work of art transforms it into a different work of art. Mukařovský's example is a hammer. Viewed as an implement, a hammer that has its grip thickened or its peen flattened is still a hammer; but the hammer as an art object, an organization of certain shapes and colors and textures, becomes a different object if the organization of design elements is altered, if the plain wooden handle is painted red or the cleft in the claws is narrowed. The explanation for this, and here we enter the realm of semiotics, derives from Mukařovský's premise that every

²⁸ Margaretta Lovell and I cotaught a course in material culture. Jan Mukařovský, "The Essence of the Visual Arts," in *Semiotics of Art: Prague School Contributions*, ed. Ladislav Matejka and Irwin R. Titunik (Cambridge, Mass.: MIT Press, 1977), pp. 229–44, and *Structure, Sign, and Function: Selected Essays*, trans. and ed. John Burbank and Peter Steiner (New Haven and London: Yale University Press, 1978), pp. 220–35.

product of human activity has an organizing principle and a unifying intention. Different observers may interpret that intention in different ways, but the artist(s) had a single purpose in mind. It may be unrealistic and unrealizable, indeed quixotic, for a maker to intend that his purpose be understood by all perceivers equally—in the same way and in the same degree as he understands it. Nevertheless, any fabricator must have that purpose, even unconsciously, in order to make. Therefore, objects are signs that convey meaning, a mode of communication, a form of language. The object may, like words, communicate a specific meaning outside of itself. This is the case with a content-filled art object such as a magazine illustration, or with an implement, a device. Such objects relate to externals. But a work of art that is self-referential, that is, an artistic sign in and of itself rather than a communicative sign relating to some outside function, establishes understanding among people “that does not pertain to *things*, even when they are represented in the work, but to a certain *attitude* toward *things*, a certain attitude on the part of man toward the entire reality that surrounds him, not only to that reality which is directly represented in the given case.”²⁹ The art object is self-sufficient, and when apprehended evokes in the perceiver a certain attitude toward reality which resonates with the maker’s attitude toward reality. Because we cannot really experience a reality other than the one into which we are locked in time and space, we can make only limited use of an artifact as an informational sign, as a referent outside of itself, as an implement. We are dependent upon the degree of identity between its original world and ours. We may still be able to use the hammer as a hammer, but we may not be able to cure illness with a shaman’s rattle. We can, however, use the work of art as an autonomous artistic sign, as an affective link with the culture that called it into being, because of our shared physiological experience as perceivers and our sensory overlap with the maker and the original perceivers. This is the gift and the promise of material culture. Artifacts are disappointing as communicators of historical fact; they tell us something, but facts are transmitted better by verbal documents. Artifacts are, however, excellent and special indexes of culture, concretions of the realities of belief of other people in other times and places, ready and able to be reexperienced and interpreted today.

²⁹ Mukařovský, “Visual Arts,” p. 237, and *Structure, Sign, and Function*, p. 228.

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