questions that are asked. It no longer seems possible to view archeology as only
the study of the past. To be sure, questions in Strategy 1 properly will continue
to occupy the research efforts of most archeologists, but a more productive view
of the field as an integrated whole recognizes the essential contribution of other
archeologists. In the framework of a behavioral archeology, the study of urban-
ization at Teotihuacan, stone chipping in the Outback, human adjustments to
environmental stress, and meat consumption in Tucson, Arizona, all are legiti-
mate and productive archeological research activities.

2

A Synthetic Model
of Archeological Inference

The early years of the new archeology witnessed the frequent and unquestion-
ing repetition of major methodological principles. One such principle was enun-
ciated by Binford (1964:425) in perhaps its most explicit form:

The loss, breakage, and abandonment of implements and facilities at
different locations, where groups of variable structure performed different
tasks, leaves a “fossil” record of the actual operation of an extinct society.

Closely paraphrased variants of this statement have continued to appear in the
literature, frequently as part of an introductory section to empirical studies.
Under the aegis of this principle, new archeologists have approached the remains
of the past in bold and exciting ways, seeking with sophisticated techniques
assorted patterns in artifact distributions and interpreting them directly in terms
of past behavior and social organization. As often happens in times of normal
science, few investigators have noticed that the principle is false.

It is false because archeological remains are not in any sense a fossilized
cultural system. Between the time artifacts were manufactured and used in the
past and the time these same objects are unearthed by the archeologist, they
have been subjected to a series of cultural and noncultural processes which have
transformed them spatially, quantitatively, formally, and relationally (see also
Collins 1975). If we desire to reconstruct the past from archeological remains,
then these processes must be taken into account, and a more generally applicable
methodological principle substituted for the one that asserts that there is an
equivalence between a Past cultural system and its archaeological record. The principle I offer is that archaeological remains are a distorted reflection of a past behavioral system. However, because the cultural and noncultural processes responsible for these distortions are regular, there are systematic (but seldom direct) relationships between archaeological remains and past cultural systems.

With this principle in mind, it becomes possible to frame the basic problem of archeological inference: How can we take into account the intervening processes when using archaeological remains to inform on the past? These intervening processes and the multifaceted relationships between behavior and material objects form the basis of the synthetic model of archeological inference. Before this model is presented, some preliminary definitions are in order. **Archeological knowledge** is defined as consisting of the laws that are employed implicitly or explicitly to retrieve knowledge of the past from archaeological data. In confining the meaning of archeological knowledge to sets of laws, I do not imply that other kinds of knowledge are unimportant.

An inference is a descriptive statement of high probability about past cultural behavior or organization. By this definition, a positively tested hypothesis within Strategy I becomes an inference. **Inference justification** is the archeological knowledge and data—and their structure—that give an inference its credibility.

**THE SYNTHETIC MODEL**

The basic problem in constructing this synthetic model is to determine the general nature of archeological knowledge. The model presented here is based on what I suggest is the knowledge required to solve the problems that confront every archeologist as a result of the three basic properties of archeological data:

1. They consist of materials in static spatial relationships.
2. They have been output in one way or another from a cultural system.
3. They have been subjected to the operation of noncultural processes.

Because a solution to each of these problems must be reached in the justification of any inference, three sets of laws, or at least assumptions within each problem domain, are employed. I now present the basic problems in greater detail and discuss the corresponding law sets.

Let us begin by visualizing an ongoing cultural system. Such a system consists of material objects, human actors, foods, and fuels, and is manifest in the repetitive occurrence of activities. What one pictures is a system of action—of energy transformations and material flows occurring in space. If the human participants and all other energy sources completely halt their actions, the activities cease, as does the operation of the behavioral system. What remains (assuming no modification by other processes) is the closest conceivable approximation to a "fossil" of a cultural system—its material elements in a system-relevant spatial matrix. Even though most archeologists would accept gratefully a site produced under those conditions, when confronted by one, there still would be left a major problem to solve by the application of laws before inferences could be made.

Because the data themselves are totally silent and do not apprise the investigator of the ways artifacts once participated in a behavioral system or how they reflect the organization of that system, a set of laws must be acquired and applied to the materials. These statements relate behavioral variables to variables of material objects or spatial relations. They also may involve organizational and environmental variables. Such statements have the important property of being operationally definable and therefore testable in an ongoing cultural system. Principles of this sort—which, no archeologist possibly could know anything about the operation of a cultural system, past or present, by observing its material objects and their spatial relations—are termed "correlates" (after Hill 1970:63). I have referred elsewhere to these laws as "arguments of relevance" (Schiffer 1972a,b), but that usage is misleading. In a strict sense, all principles that link an inference to specific archeological observations are arguments of relevance (Binford 1968a:23, 1968b:273).

One important kind of correlate relates variables of behavior to variables of material objects. Such correlates are used often (but not exclusively) to infer the manufacturing operations that produced an artifact, or the use(s) to which it was put. Statements that relate the fracturing properties of a lithic material and the particular applied forces to attributes of the resultant products and by-products are examples (Schiffer 1974). Crabtree's (1968) experiments on the removal of blades from polyhedral cores have produced many correlates of this type:

Assuming that obsidian has been properly preformed into a core with ridges, the platform is ground until it has the appearance of frosted glass... The pressure crust has been made, and the specimen is now ready for removal of the first blade [Crabtree 1968:463].

Blade types are governed by the manner in which the pressure tool is placed on the edge of the core. The triangular blade is made by directly following one ridge, and the trapezoidal type is made by positioning the tip of the pressure tool in line with but between, two ridges [Crabtree 1968:465].

Armed with this correlate (and several others not made explicit), an investigator examining materials in the hypothetical stalled cultural system could recognize
the attributes of certain artifacts and waste products as indicative of a particular kind of manufacturing behavior. Or viewed in another way, if he were seeking to identify this kind of behavior, the application of the correlates would readily produce test implications.

Correlates are often exceedingly complex and may involve multiple variables of behavior, system organization, spatial relations, and material objects (see Rathje 1973 for an example of a correlate relating social mobility to status symbols). The terms “behavioral—material” or “behavioral—spatial—material” or any other meaningful combination may be applied to these laws (Schiffer n.d.a). Despite the potential complexity in both laws and terminology, all correlates function in inference justification by allowing the derivation or identification of some aspects of an operating cultural system from knowledge of those aspects, spatial and material, which would be or are present in the archaeological record.

C-Transforms

The formulation and use of correlates is the procedure that archeologists employ to solve the problem posed by the nonbehavioral nature of archeological data. The second problem, solutions to which also lie embedded in the justification of any inference, requires the construction and use of laws that relate variables of an ongoing cultural system to variables describing the cultural deposition or nondeposition of its elements.

It is possible to define more precisely the nature and function of these laws by returning to the hypothetical cultural system. If the operation of the energy sources resumes, one notes that continuous activity results in periodic outputs of exhausted tools, waste products of food and fuel consumption, obsolete items, and others. Items discarded during the normal operation of a cultural system constitute a major source of the archeological record. Another source of materials that begins a path to the archeological record is de facto refuse, produced when the inhabitants abandon a site and leave usable materials behind (Schiffer 1972b).

The general problem of cultural formation processes typified by normal outputs, de facto refuse, and other sources is taken into account by laws of the cultural formation processes of the archeological record (Schiffer 1972b). These principles permit an investigator to specify the ways in which a cultural system outputs the materials that eventually may be observed archeologically. Application of these laws is necessary to relate the past qualitative, quantitative, spatial, and associational attributes of materials in systemic context to materials deposited by the cultural system. Such laws are termed “c-transforms” (Schiffer 1973a; Schiffer and Rathje 1973).

Unfortunately, c-transforms are the most seriously embedded principles of archeological knowledge; the necessity of their use is generally unacknowledged and only a very few are explicit (Schiffer 1972b, 1973a). One hypothesis that functions within the c-transform domain is that

with increasing site population (or perhaps site size) and increasing intensity of occupation, there will be a decreasing correspondence between the use and discard locations for all elements used in activities and discarded at a site (Schiffer 1972b:162; emphasis in original).

Employing this principle (untested though it is) one can justify the use of data from limited activity sites (Wilmsen 1970) to postulate locations of past activity performance, since most elements of such a site are discarded at their locations of use (assuming no modification of spatial relationships by subsequent processes). Many inferences that rest on similar c-transforms are found in Binford et al. (1970) and Brose (1970); in both of these monographs, the assumption is made of a correspondence between use and discard locations for many classes of debris.

Other c-transforms relate quantitative variables of a cultural system to quantitative variables of cultural deposition. For example, Howells (1960) developed several c-transforms that allow the reconstruction of site population size through the use of data from the retrieved buried population.

Superficially, c-transforms resemble correlates. At one level, they both apply to the dynamics of ongoing cultural systems. But only c-transforms contain information about system outputs, such as discard rates, discard locations, loss probabilities, burial practices, and others. Only c-transforms can be used to predict the materials that will or will not be deposited by a system.

For purposes of presenting the synthetic model, this discussion of c-transforms and cultural formation processes will suffice; in the next chapter, a more developed discussion unfolds.

N-Transforms

The last major problem presented by the nature of archeological data concerns the postdepositional changes in site and artifact morphology caused by noncultural processes, such as wind, water, rodent activity, and chemical action. Noncultural formation processes are taken into account in inference justification by the use of principles called “n-transforms” (Schiffer 1973a; Schiffer and Rathje 1973). n-Transforms comprise the most highly developed area of archeological knowledge, and many are explicit. As two simple examples of n-transforms, I note that pollen is preserved in acidic soil, but bone is destroyed in acidic soil (all other variables constant). Additional examples of n-transforms may be found in works by Clark (1957), Coles (1973), Hole and Heizer (1973), and others. N-transforms allow the archeologist to predict the interaction be-
tween variables of culturally deposited materials and variables of the noncultural environment in which the former materials are found.

**Stipulations**

It has been argued thus far that archeological knowledge consists of correlates, c-transforms, and n-transforms. To complete the synthetic model of inference, several elements must be added. In the first place, one often must make assumptions within the domains of the three law sets. These additional but necessary bits of information are termed “stipulations.” I have refrained deliberately from calling them “assumptions.” The point to be emphasized is that they are assumed or stipulated only in a specific inference justification; in principle, stipulations are subject to independent testing. Assumptions, on the other hand, seem never to be tested.

Stipulations convey information about other conditions that were present in the past. These may pertain to the cultural system under study, to its natural and cultural environment, or even to subsequent cultural systems. As an example, in applying Howell’s c-transforms, discussed earlier, it is necessary to stipulate that population remained constant during site occupation.

In addition to archeological knowledge, stipulations, and the inference itself, the completed synthetic model requires that inference justification include statements about observations made on the archeological record. Figure 2.1 illustrates this structural model of archeological inference and inference justification.

**Archeological Explanation**

The synthetic model specifies that the explanation of archeological observations is achieved when they are shown to be the expectable consequence of the initial conditions, given the relevant laws (see also Fritz and Plog 1970; Watson, LeBlanc, and Redman 1971). The inference itself and the stipulations are seen as the initial and boundary conditions, while correlates, c-transforms, and n-transforms constitute the laws. Together, these statements function to explain aspects of the archeological record. In other words, a given behavioral or organizational property, other features of a past cultural system and its environment, post-depositional variables, and the relevant laws provide the conditions to account for (or allow the prediction of) aspects of material items and their interrelationships in the present. When coupled to stipulations and laws, an inference is justified to the extent that it makes certain archeological observations expectable. Of course, alternative inferences and explanations are never precluded.

**ACQUISITION OF ARCHEOLOGICAL KNOWLEDGE**

The basic structure of archeological inference, simple though it is, has eluded previous archeological epistemologists for the understandable reason that very few inferences are completely justified in the literature. The general lack of explicit laws not only has misled archeological epistemologists, but it has important implications concerning the means by which correlates, c-transforms, and n-transforms are acquired. In advanced scientific disciplines, most laws are explicit and can be learned by the diligent study of textbooks (Kuhn 1970). This is not yet the case in archeology. Even if one internalized every law contained in
arqueological textbooks, he would be incapable of generating from the data all the knowledge of the past that we claim is accessible. Conspicuously absent in all introductory textbooks (e.g., Hole and Heizer 1973; Fagan 1972; Rouse 1972) or in any texts, for that matter, is a section or sections describing the arqueological knowledge required to infer some aspect of a past cultural system.

Clearly, the laws composing arqueological knowledge must be acquired by prospective arqueologists, but the question is: How? I believe that the process of law acquisition is not unlike the way a child learns the grammar of a language. After ploughing through a large sample of site reports and syntheses, a student unconsciously proposes and internalizes trial relational statements to account for the linkage between the data an investigator presents and his inferences about the past. These relational statements correspond to what I have termed "correlates," "c-transforms," and "n-transforms."

Because arqueological knowledge rarely reaches the printed page, residing primarily in the conceptual framework of individual investigators, there is no shortcut method of learning these principles beyond the laborious and wasteful task of reinventing them while reading and comprehending the literature. The nonpresentation of laws is perhaps the most efficient way to write site reports, syntheses, and interpretive papers, but, in the absence of good textbooks, we are left without an efficient means of cultivating aspiring arqueologists. More importantly, we cannot take stock of the conceptual progress of the discipline or easily determine the undeveloped areas of arqueological knowledge. I suggest that writers of future textbooks will have to devote much more space to listing and illustrating the use of relational statements of arqueological knowledge. I envision, for example, several introductory texts covering separately many complex subjects in reconstruction, such as social organization, lithic technology, and subsistence. Such texts would be nothing less than catalogs of law statements with examples of their applications to specific arqueological situations and with discussion about the extent to which they had been tested.

TESTING THE MODEL

The domain of the synthetic model consists of all statements about past cultural behavior and organization derived from or applied to arqueological data. This domain is manifest in the arqueological literature of site reports, regional syntheses, topical books, and combinations of these.

Implications

The following implications of the synthetic model may be examined in light of data from this vast domain.

1. Inferences about the past may be presented with or without the explicit justification of arqueological data and knowledge.
2. Although most inferences will not be accompanied by rigorous justification, a sample of the literature should reveal the occasional explicit use of instances of each type of law.
3. If arqueological knowledge is internalized in the manner I have suggested, a large sample of inferences, especially those concerning the same subject matter of reconstruction, will reveal repeated uses of a single, independently invented principle.

Data Collection

In order to examine these implications of the synthetic model, undergraduate students enrolled in a course entitled "World Prehistory" during the fall of 1972, at the University of Arizona, were assigned a term paper that required, in part, the gathering of a sample of the arqueological literature and its perusal for explicit laws of arqueological knowledge. Specifically, students were given this set of instructions:

A. The student will choose an area of the world that he or she finds interesting. By use of the card catalog, or in consultation with faculty who know this area, the student will select two arqueological books or monographs. Normally one of these should be a site report. The other may be an areal synthesis or topical book. This selection process is critical—take time to ensure that the site reports contain interpretive sections as well as data.

B. Read your books through once to get a general idea of what they contain.

C. After you become familiar with the author's presentation, you are ready to reread the work carefully and begin the analysis. The basic task is to identify and record the correlates, c-transforms, and n-transforms, that serve as the basis for the author's interpretations and predictions.

D. Copy down word-for-word each correlate, c-transform, and n-transform, giving the page number next to the quotation. This is your basic data and should be complete.

E. Make notes in the above sections as to which inferences and predictions are made by an author for which he does not present the appropriate principles.

The sample of arqueological literature obtained by the students is not, of course, statistically adequate nor totally representative; but, after examining these data (which were derived from a surprising variety of sources), I believe it unlikely that a more rigorous search of the literature would uncover any new or unusual inference justification patterns. Sites used by the students included early
There is one instance in the text that requires correction:

"...in the context in which inference justifications are explicit. The data provide strong support for the hypothesis, so much so that..."

The corrected sentence should read:

"...in the context in which inference justifications are explicit. The data provide strong support for the hypothesis, so much so that..."
really a remarkable finding, which demonstrates conclusively the noncumulative
character of archeological principles.

With respect to the three implications examined, the synthetic model has held
up under testing. However, it should be noted that, in the context of confirming
epistemological models, the term "test" is used somewhat loosely. At best, it is
possible to state that the synthetic model accords with presently known patterns
of inference justification. (Additional findings of the inference model test are
presented in Schiffer 1973:50–52.)

USING THE SYNTHETIC MODEL

The synthetic model is intended to be more than a contribution to archeologi-
cal epistemology; it is also a practical research tool. The primary use of the
synthetic model is in eliciting the structure of specific inferences. With the
insight provided by the synthetic model, that inferences are justified in terms of
principles or stipulations in the three domains, one can raise questions about an
inference and reveal weaknesses in its justification. I will illustrate this use of
the model with a familiar example from processual archeology.

The inference to be examined is the identification of uxorilocality resid-
ce (units) at the sites of Carter Ranch (Martin et al. 1964; Longacre 1968, 1970a)
and Broken K Pueblo (Martin, Longacre, and Hill 1967; Hill 1970a). These
inferences stand particularly vulnerable to close examination because many of
the underlying principles and stipulations have been published previously by
Longacre and Hill. In this discussion, I treat only that part of the justification
that concerns the spatial distribution of ceramic design elements. In addition,
problems of the contemporary occupation of residence areas and the statistical
interpretation of nonrandom patterning are not discussed. And, finally, no
alternative inferences and justifications are presented that could account for the
same archeological phenomena.

Longacre (1970a:28) states the major hypothesis (a correlate) as follows:

Social demography and social organization are reflected in the material
system. In a society practicing postmarital rules stressing matrilocality,
social demography may be mirrored in the ceramic art of female potters;
the smaller and more closely tied the social aggregate, the more details of
design would be shared.

The next statement, that "differential relative frequencies of designs may suggest
the delimitation of various social aggregates [Longacre 1970a:28]," does not
follow as directly as Longacre implies. In this example, he attempts to spell out
the nature of some of the correlates that underlie his analysis. What he does not
present, nor does Hill, are the important remaining correlates and transforms
that are embedded in the justification of this inference.

The incomplete presentation of the uxorilocality inference justification by
Longacre and Hill has had an impact on research undertaken after, and stimu-
lated by, their early published statements (Longacre 1964; Hill 1966). Stanis-
lawski (1969a:30), for example, has set out among the modern Hopi to examine
"the method of Hopi pottery training, and the association of family unit and
pottery style or type." This research, although important in its own right, is
completely irrelevant with respect to testing the laws justifying the uxorilocality
inference (see also Longacre 1970b). Had Stanislawski attempted the analysis
undertaken here with benefit of the synthetic model, he would have discovered
an essential implicit stipulation (which also can be represented as a correlate).
This stipulation is that the social unit of pottery manufacture is the same as, or a
subset of, the social unit of pottery use. This is certainly not the case among the
modern Hopi. Most of their pottery has been made for export since the ceramic
art was revived there before the turn of the last century; only a very few pots
actually are used by Hopi households. And, although Stanislawski (1969b:12) is
aware of these conditions, the implications seem to escape his notice. Only
under the above conditions of the relationship between use and manufacture
social units would one expect designs to be transmitted intergenerationally
within a localized social unit.

In addition to the stipulated relationship between the social units of pottery
manufacture and use, an implicit c-transform (or stipulation) underlies this
inference. The tables presented by Hill (1970a:63, 1970b:59) and Deetz (1965:
93) purport to represent relationships between postmarital residence patterns
and the intrasite spatial distribution of female- and male-associated style ele-
ments. Such relationships totally omit factors of cultural formation processes.
Hill (1970b) has termed these relationships "correlates," and they do meet the
definition for correlates presented in the present volume. Such statements relate
a behavioral aspect of a cultural system (marital residence pattern) to material
variables (ceramic design elements) and spatial variables (design element distri-
butions). As such, they contain no terms that deal with aspects of the archeologi-
cal record.

Using such principles, it might be possible to infer residence pattern by
examining design element distributions in a modern community (making the
appropriate stipulations), but only by inclusion of c-transforms and n-transforms
(or stipulations within those domains) can one make a complete linkage to
archeological observations. Thus, unless it is assumed that at least some pottery
was discarded or abandoned at the location of pottery use, there is no reason to
expect the occurrence of a nonrandom distribution of design elements in the
rooms where the pottery was used. This aspect of the inference justification has,
to date, been overlooked but is as essential to the rigorous explanation of the
Table 2.1 The Uxorilocality Inference and Its Justification

**Inference:** Localized uxorilocal residence units

**Correlates**

1. If there is uxorilocality, and the social unit of pottery manufacture is the same as, or a subset of, the social unit of pottery use, and there is matrilineal transmission of style, then uxorilocal units will be equivalent to design units, and there will be more sharing of designs within units than between units.
2. If the social unit of pottery manufacture is the same as, or a subset of, the unit of use, and women make the pottery, then there will be matrilineal transmission of style.
3. If uxorilocal residence units are localized, then by (1) and (2) above, there will be differential relative frequencies of design elements in the community, corresponding to the various uxorilocal residence units.

**Situations**

1. Some pottery is discarded or abandoned at its location of use and the design elements on this pottery are a representative sample of the design elements made by the manufacture unit.

**N-Transforms**

1. Pottery paste and fired-on design elements are preserved under most soil conditions.
2. Items will remain at their locations of discard unless there is postoccupational disturbance of the site.

**Archeological observations**

1. At the site in question, there will be differential distributions of pottery design elements across residential areas.

**C-Transforms**

1. The social unit of pottery manufacture is the same as, or a subset of, the social unit of use.
2. Women make the pottery.

Data and the justification of the inference as is any other aspect. Limitations of space prevent a detailed presentation of the complete justification for the uxorilocality inference. But the entire justification as I have reconstructed it is presented in Table 2.1.

Examination of Table 2.1 illustrates that the entries in any of the law domains can be presented as either a stipulation or a relational statement. A stipulation can be changed readily into the respective relational statement: that is, it becomes a law that specifies the former stipulated information in one term and one or more additional variables of the past system under examination in its other term. This leads through another logical path to the archeological data. For example, the stipulation that the use and manufacture social units are related could be transformed into a general statement: In villages where pottery is made without wheels or molds and where there is no intervillage exchange of the pottery, the social unit of pottery manufacture is the same as, or a subset of, the social unit of pottery use. One can then either stipulate that the conditions for the applicability of this law are met (such as handmade pottery with no external exchange) or produce other correlates and transforms that specify which sets of data at that site would tend to confirm the presence of these prior conditions. Of course, all inference justifications must contain at least one correlate.

This discussion is not intended to be the last word on the uxorilocality inference—other reconstructions are both possible and desirable (see Binford 1968c:270; Watson, LeBlanc, and Redman 1971:34–37; Allen and Richardson 1971). And relevant tests of the actual principles that justify it still must be produced, as Longacre (1974) is now attempting. The examination of the inference with benefit of the synthetic model has indicated what some of these additional principles might be.

**SUMMARY**

In this chapter, I have attempted to lay bare the general structure of inference justification and the nature of archeological knowledge. Despite the many ways archeologists have devised to gain knowledge of the past, the basic structure of inference justification seems to be the same.

Some of the important implications of the synthetic model are:

1. All descriptive statements about the past—inferences and tested hypotheses—are part of a complex explanatory framework that accounts for aspects of the archeological record.
2. Some of the laws in these explanations—correlates and c-transforms—are laws of cultural dynamics.
3. All knowledge of the past is inference in the sense that there is no epistemically tenable or otherwise useful distinction between direct and indirect knowledge of the past. All knowledge of the past acquired through archaeological means is made accessible by the use of laws.

The brief examination of the inference model in light of archaeological inferences has indicated the vulnerability and weaknesses of implicit approaches to both the explanation of archaeological observations and the derivation of knowledge of the past. Although many laws of archaeological knowledge are shared widely, others are contradictory, and still others appear hopelessly embedded and inadequate. The case made earlier for extricating, systematizing, and testing of extant laws still seems to be an appropriate strategy for expanding the small set of explicit, reliable laws of archeological knowledge. Some investigators may feel such an activity is relatively unproductive because of the great amount of effort required to find the extant laws. Individuals who hold this view may desire to expend their energies in Strategy 2 of behavioral archaeology. The remainder of this study demonstrates the viability of both approaches for deriving laws.

The examination of a body of archeological inferences and the unlikelihood inference in particular has given substance to my previous claim (Schiffer 1972b) that the cultural formation processes of the archeological record are poorly known at present. In order to increase the set of useful c-transforms, a general framework for understanding the operation of cultural formation processes is required. It is to the construction of such a framework that the next chapter is devoted.

It is established in the previous chapter that knowledge of the past is accessible only when formation processes are considered. In order to build models that explicitly take these processes into account, it is necessary to understand in more detail the varied cultural processes responsible for forming evidence of the past. The primary purpose of this chapter is to identify and describe one encompassing framework cultural formation processes (Schiffer 1972b, 1973a). The record of evidence of the cultural past exists in two forms. The first, used principally by historians, consists of materials–documents and other items–present within an ongoing cultural system. The second is made up of materials in the archeological record, and these are studied primarily by archeologists. I designate the two types of evidence as the historical record and the archeological record. Let the reader note that my use of these terms differs from customary usage: In the present framework, a clay tablet at Babylon is part of the archeological record, whereas a nineteenth-century loom in a museum is a historical record.

ARCHEOLOGICAL CONTEXT AND SYSTEMIC CONTEXT

Before one can understand the formation of the archeological record, it is necessary to emphasize its principal characteristic. The archeological record