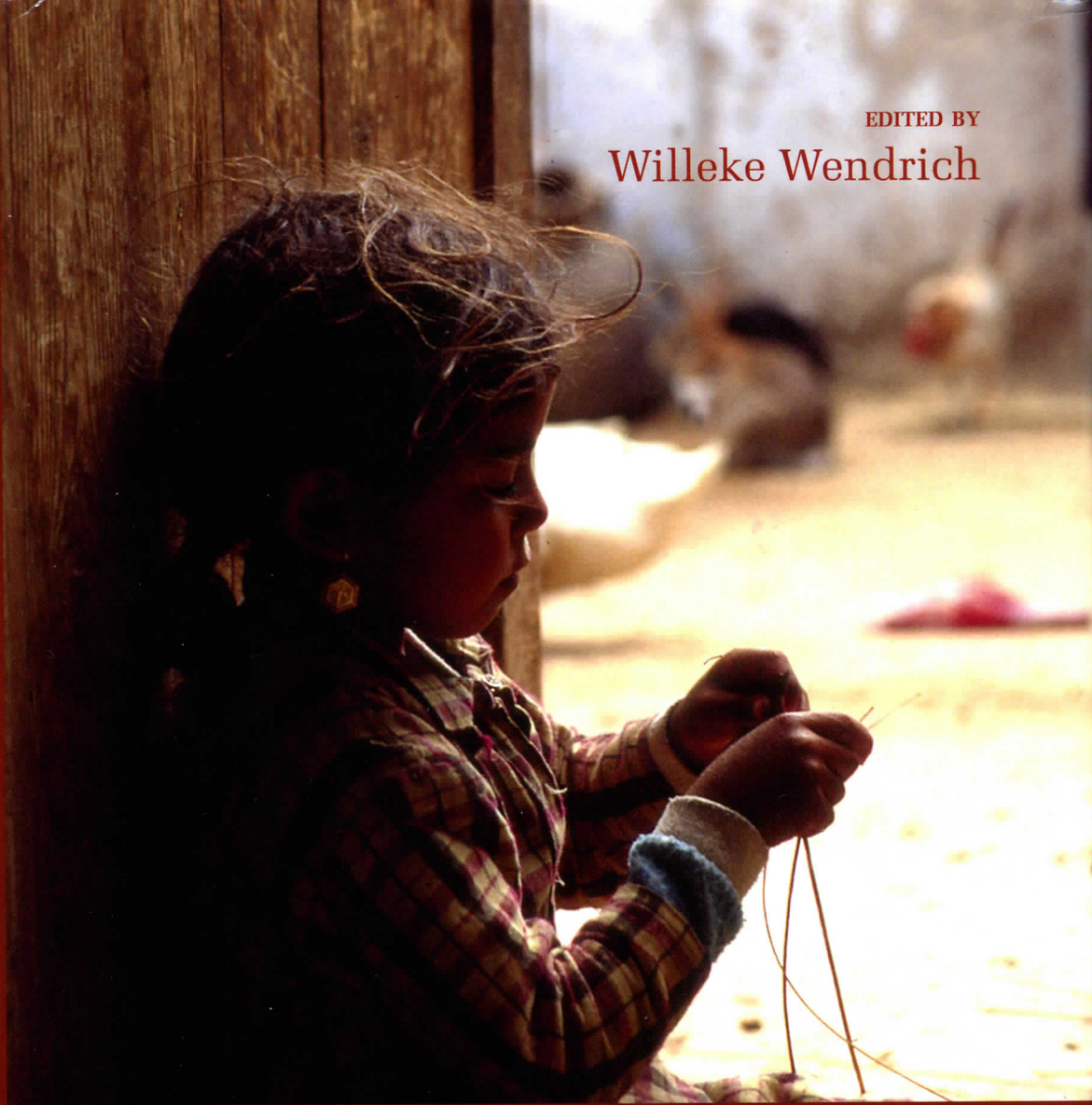


EDITED BY

Willeke Wendrich



Wendrich

Archaeology and

# Archaeology and Apprenticeship

BODY KNOWLEDGE, IDENTITY, AND COMMUNITIES OF PRACTICE



Archaeology and  
Apprenticeship  
*Body Knowledge,  
Identity, and  
Communities of Practice*

EDITED BY WILLEKE WENDRICH



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## CHAPTER TEN

# Apprenticeship and Learning from the Ancestors

### *The Case of Ancient Urkesh*

MARILYN KELLY-BUCCELLATI

A topic widely discussed by archaeologists interested in the development of identity in the prehistoric and early historic record is the growth of self-consciousness, a topic that has a long history in Syro-Mesopotamia. It is best exemplified by the exploits of Gilgamesh, a mythical third millennium king ruling the southern Mesopotamian city of Uruk who, through experiencing friendship and death, comes to the realization of his humanity and the need to exercise benevolence and good judgment in carrying out his responsibilities. In any society, a component of this growing experience of self-consciousness is the awareness on the part of individuals that they belong to a specific group to which they contribute and from which they receive both insights and information. Apprenticeship plays an important role in forming this individual and group identity, in such a way that both the teacher and the apprentice benefit on many levels from the relationship. Apprenticeship is central to the early transmission of cultural practices and social traditions due to its ability to provide a positive setting within which both technical knowledge and behavioral norms are transferred in the formation of identities. This knowledge transfer can take several forms, through direct contact or through the indirect observation of results. In the case I am proposing here, inspiration

stems from the earlier products of a craft tradition that is in some way still alive in the community of practice.

Two lines of investigation are followed in this study. In the first case, I consider a prominent example of the direct transmission from teacher to student, here the transmission of knowledge from scribe to apprentice scribe. Ancient Mesopotamian textual sources give us information on formalized apprenticeship dedicated to the training of scribes; some archaeological evidence bears on the practices of the scribe but not directly on the relationship with the student apprentices. However, archaeology does sometimes provide insight into the more informal types of teaching and learning, often in family groups (Costin 1991, 2001; Costin and Wright 1998; Ingold 2000, 339–372; Kamp 2001; Wallaert-Pêtre 2001).

My second case involves the transfer of knowledge by emulation (Bell 2002) and experimentation. In this case, the teacher is not present, only the products produced by the craft. While this is an expansion of the definition of apprenticeship in a strict sense, I think it is valid because it takes into consideration the fact that the archaeological record can at times attest to the desire of the later practitioner to learn from aspects of craft traditions no longer practiced in the community. It is then not a direct transmittal and not a direct social context but rather one of appreciation and respect, shown through emulation, by the “student” of craft products formed within ancient craft traditions—so much so that aspects of these earlier traditions are imitated in some way. This second example studies the more indirect transfer of knowledge, a sort of metaphorical or, we might say, “time-gap” apprenticeship, involving the rediscovery of skills from the past that were lost in the detail but remained alive in the general tradition of a given craft and were revived through the inspiration provided by objects made by previous generations. In the same way that experimental archaeology seeks to replicate methods and techniques of past craft traditions, some ancient potters sought to utilize a model-based approach to establish a similar set of conditions in order to produce similar ceramics. Where there were no teachers, models had to suffice. The teacher is, however, presupposed, even if not physically present, because the emulator-apprentice operates in the same setting as that intervening between a normal apprentice and teacher who goes through the physical steps of a set production sequence (*a chaîne opératoire*). The reference to experimental archaeology is instructive. While an archaeologist looks from the outside at a broken tradition and seeks to reconstruct primarily a physical object with its typological characteristics, an ancient time-gap apprentice lives within the same community of practice and re-creates an object starting from the experience of procedures and functional use that are shared with the ancestors.

For both cases, examples are used from the excavations at Tell Mozan the site of the ancient Syro-Mesopotamian city of Urkesh dating from the third and early second millennium (digital copies of most Urkesh excavation publications can be found on [www.urkesh.org](http://www.urkesh.org)).

### Evidence for Apprenticeships: Scribes and Seal Carvers

In ancient Mesopotamia, our information is most abundant concerning the apprenticeship system as it pertains to the training of scribes. The term for scribe in Sumerian, *dub-sar*, appears for the first time in Ur around 2700 BCE. However, we know most about the training of scribes from the Old Babylonian period about 1800 BCE. In all periods, though, difficulties emerged as a result of the intricate cuneiform system where students had to learn complex sign forms and multiple phonetic readings of individual signs and master the writing of texts in Sumerian and various dialects of Akkadian. Moreover, after about 2000 BCE, they needed to know how to read and write a language, Sumerian, which was no longer commonly spoken but was important for the school tradition. Because of these complexities, the apprenticeship was long and the number of scribes in any one city was relatively small (Pearce 1995; Tanret 2003; Visicato 2000). For example, during a span of approximately fifty years (around 2100 BCE) in the ancient southern Mesopotamian city of Lagash, only about 620 scribes are known to have been active.

Apprentice scribes were taught in a school by expert scribes. The first steps included tablet and stylus preparation; students then progressed to practicing the use of the stylus by pressing horizontal, vertical, and diagonal wedges, as can be seen in a school tablet excavated in Urkesh (figure 10.1a), then to writing individual signs, and then to writing words. After the apprentice had learned the signs (an average scribe knew about 620 different ones), they advanced to studying and copying lists. From early school exercise tablets, we see that students learned by copying onto the reverse of clay tablets exercises written on the obverse of the tablet. The obverse of a school tablet excavated in Urkesh contains an excerpt from a list of professions called LU E and gives professions connected with reeds (figure 10.1b) (Buccellati 2003). The grouping by categories is characteristic of Mesopotamian scribal training and made learning easier. The basic list for learning is the sign list, known as the Ea = *naqu*, that around 1800 BCE included 918 lines. Thematic lists were also fundamental for scribal training. The longest of these lists is the Har-ra = *hubullu* series, with almost 10,000 entries covering such topics as lists of clays and pottery, trees, wooden objects, reeds and objects made out of reeds, stones, domestic

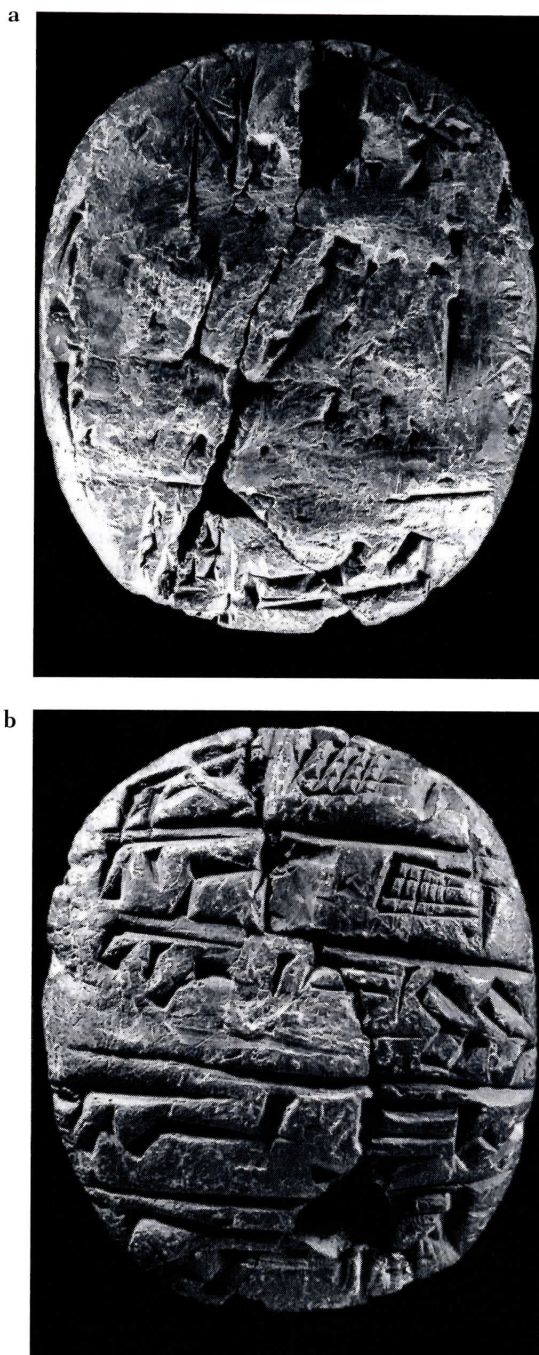


FIGURE 10.1. Urkesh school tablet. a. Reverse showing practice with a stylus. b. Obverse containing part of a Professions List. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkesh Archaeological Project.

and wild animals, place names, and kinship terms. It is a compendium of Mesopotamian knowledge like none other (Civil 1995). In this way, the formal school curriculum as well as the informal communication of information within the scribal apprenticeship setting mutually reinforced the transmission of cultural and social knowledge.

The scribal school was known in the Old Babylonian period as the “tablet house.” In these schools, an advanced student was called “big brother” and helped the expert scribe by writing the lesson of the day for the students. The lowest level of student was called “son of the tablet house.” The school day consisted in the preparation of the blank tablets, writing, and reading tablets. Colophons at the end of tablets indicate their purpose in the learning cycle. Such notations as “for reading” or “for dictation” indicate some of the instructional methods used in the schools. The method of learning consisted essentially in the copying and memorization of a vast number of lexical lists that constitute a fundamental aspect of the transmission of Mesopotamian culture in all time periods.

The physical setting of these schools is not known, but in the excavations at Terqa a workplace for at least one scribe was discovered in a large public building dating to approximately 1800 BCE (Margueron 1991). The setting included a clay work platform, a bin and a jar containing clean clay, and a basket. A number of tablet fragments were excavated in the area surrounding this scribal installation that included a jar with six clay tablets. In the royal palace of King Tupkish in Urkesh, dating to approximately 2200 BCE, a sector of the building has been hypothesized as a scribal area; the setting was a series of rooms around a small courtyard. In this area, a jar was partially buried in the floor of the corner of one room, presumably used for washing or for mixing clay with water. While only two tablets were found in this sector of the palace, the area was set apart from other similar room arrangements in the building in that the same room containing the buried water jar also held a large bin containing clean clay, and furthermore, the bin itself showed several layers of very fine clay, indicating use over a period of time. A major drain with an inlet in the courtyard ran under this area also. In other rooms around this small courtyard, there are indications that other craft activities may have been carried out, possibly including some aspects of cloth treatment.

Almost all apprentices in the schools were male, although there are some notable exceptions. For instance, Enheduanna, daughter of Sargon, king of Akkad, was a high priestess in the temple of the Moon god in Ur who composed a long Sumerian poem praising the goddess Inanna (Hallo and Van Dijk 1968). Other royal women scribes probably included two women from the Ur III dynasty: the wives of Ur-Nammu and Shulgi, two important kings. Around 1800 BCE, ten female scribes are known from the Mari texts; they were probably working for other women in the court.

At Sippar, near Babylon, in the same time period, women scribes are attested as working for other women members of a “cloister,” an institution that had important economic and social activities in the city (Lesko 1989).

### Reverence for Traditional or Ancient Knowledge

The education of scribes involved the copying of Sumerian literary texts even in much later periods when only a small number of scribes could read these texts. However, the intellectual elites considered this type of training fundamental for the continuity of the culture. In other words, learning from the ancestors and preserving their culture were important parts of Mesopotamian society as long as cuneiform was written. The “tablet house” provides an elite example of apprenticeship. The students learned in the formal setting of a school, but the training took place within the setting of a master/apprentice relationship, as the term “son of the tablet house” implies. The training of scribes is one setting in which the copying of cuneiform tablets allows the student-apprentice to appropriate the knowledge base of the scribe-master.

Cutting of cylinder seals was another sphere, typical for Syro-Mesopotamian culture, yet we know little about the training of seal cutters. However, it is clear that the copying of a cylinder seal design was not a method for the transfer of knowledge because copies of the same design are very unusual in Syro-Mesopotamia iconography. This stems, for the most part, from the fact that the cylinder seal was an important identifier in the social, cultural, and economic arenas and that a copy would invalidate this function. Nevertheless, in Urkesh we have examples of seals that were copied from the royal palace of the Hurrian king Tupkish. Administrative practices at Urkesh are unique in that some seals do have a number of copies with very small variants in each case (Buccellati and Kelly-Buccellati 1998; Kelly-Buccellati 1998). One such seal belonged to a woman, Tulli, identified in the seal inscription as the Hurrian cook of Queen Uqnitum (figure 10.2). In this case, the singular motivation for copying the seal must have been that the original seal was very worn, so much so that the name of the cook was eventually obliterated on the first seal. This must be the impetus for the cutting of an almost identical design in the second seal that contained, in addition to the inscription with her name, her hierarchical position in the palace and her clear connection with the queen. However the style of carving is quite different from that of the original so that it is clear that the carver of this second seal was trained in a different setting than the person who carved the original. In this case, the model was there to copy, but the skill set of the carver was so different that only an approximate copy could be

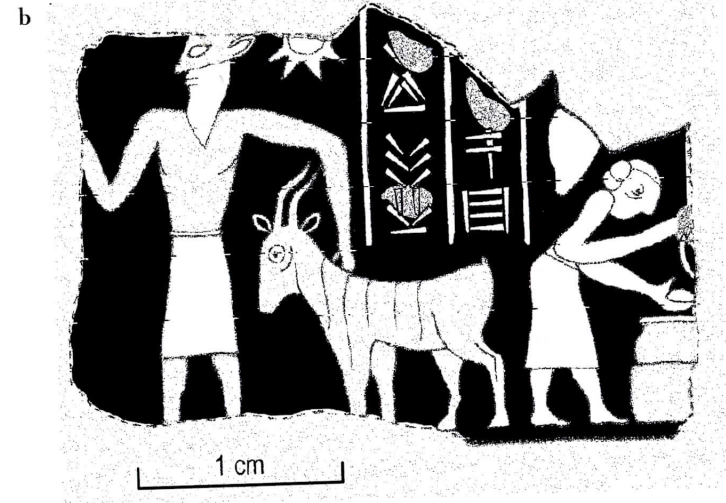
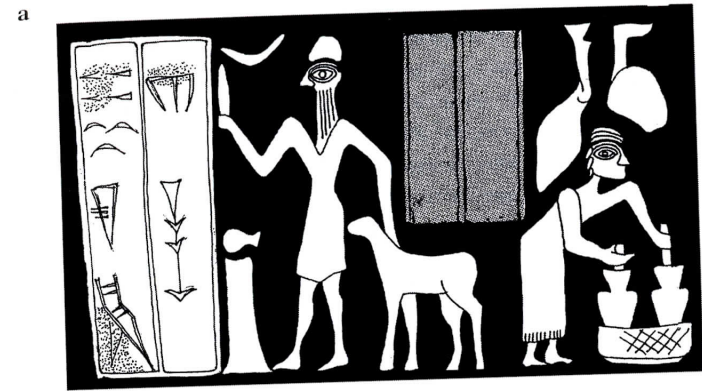


FIGURE 10.2. a. Early seal of the royal cook Tulli. b. Later seal of the same royal cook. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkesh Archaeological Project.

created. We cannot determine just where the training of these two seal cutters would have taken place but it appears more than likely that it was in Urkesh itself since both the inscription and the iconography are so closely identified with the Urkesh royal court of Tupkish (Buccellati and Kelly-Buccellati 1998, 2002; Kelly-Buccellati 1998).

A pertinent example of cultural knowledge transfer can be cited from the various detailed texts pertaining to the production of glass gathered



in the Assyrian library of Assurbanipal (Oppenheim 1970). In this corpus, there were originally a number of “recipes,” probably forty to sixty, for the production of various types of colored glass. It may be that these initially were not written as one “recipe book” but were all collected in the library for the purpose of the scribes having access to these texts in their collection. To give one example of the level of detail contained in these texts, the craftsmen were given indications of color to determine the heat temperature inside the kiln. The heat was divided into three stages, from lowest to highest: “to glow red,” “to glow green/yellow,” and “to glow golden yellow” (Oppenheim 1970, 73). While no artisan could learn to make glass only from having access to these texts, the fact that they are preserved carefully in the library shows a high level of interest in traditional craft production in the culture.

Appreciation of and identification with past generations of the same culture, or even a culture previously existing in the same geographical region, can be a powerful stimulus for group identity (Boardman 2002). For instance, it has been documented in Urkesh during the Akkadian period around 2200 BCE and in Persepolis at the time of the Achaemenid empire (550–330 BCE) that seal cutters created new seals using types of iconography and style prevalent even hundreds of years before (Kelly-Buccellati 1998). Could the “translation” of the iconographic style of previous generations add a new symbolic power to these seals? Whatever new meanings the products of this visual inspiration took on, these would have been concatenated with an appreciation of the antiquity of the design. In addition, it is well known that in Mesopotamia important monuments were kept on display for hundreds of years and that these “antiques” were even taken as booty. The most famous example is the Stele of Hammurapi, originally set up near Babylon but discovered by French excavations at Susa (Harper et al. 1992), so at some time in antiquity, the stele must have been taken from Babylon to Susa, partly in appreciation of the aesthetic qualities (calligraphy and figurative representation) as well as the ancient knowledge it contained. Even on the level of the ordinary craftsmen, not working for an elite clientele, an identification with the past and its ways of production can be observed. How this was specifically carried out can best be documented in the production of pottery.

### **Evidence for Time-Gap Apprenticeship: The Case of the Urkesh Potters**

“Time-gap” apprenticeship is not a transfer of knowledge from one generation to the next but rather an acquisition of that knowledge by a later craftsperson based on earlier examples. From the archaeological record,

it is clear that potters in any community of practice have a number of choices: (1) repeat what is already known and the usual practice in their contemporary culture; (2) introduce various levels of innovation into their contemporary craft practice, for example, a new type of temper, a new method of stacking the kiln, or a new type of decoration; or (3) create something completely new even though it is still within the dominant craft tradition. An example of the latter is the combination of two known vessel forms to produce a new and unique shape. Evidence from the Urkesh excavations shows this to happen most often in the case of burial paraphernalia specifically created for tombs dating about 1800 BCE.

Ceramic offerings placed in the tombs from this period vary in the skill level with which they were produced. In some of the poorer tombs, it is clear that vessels are being made by semiskilled individuals who create them by hand (in an overwhelming wheel throw tradition) and fire them poorly. The clay of these vessels is often very heavy and poorly mixed, and the end product appears “lumpy.” In contrast to these vessels, other ceramics found in nearby tombs are formed and fired in new shapes but with a high degree of technical expertise, indicating that they were produced by expert potters. Are both sets of potters part of the same community of practice with different training and skill sets? Or do individuals who are not habitual practitioners with the traditional training of the potters in that community view the craft as one that can be imitated when economic (or perhaps even social) pressures indicate that the products so produced would be acceptable in that particular situation? In our case, we have no way to answer these questions except for calling attention to the general political situation in the city at the time of these burials. While previously in the mid and late third millennium the city had been politically independent, by the period around 1800 BCE the city was being ruled by “governors” appointed by Zimri-Lim, a king from the south with his capital on the Euphrates River at Mari. Letters from these “governors” to the king in Mari indicate that the inhabitants of the city of Urkesh strongly objected to their overlordship, so much so that they were forced to write these reports from another nearby city (Kupper 1998). It is certainly possible that the political disruption in the city had a significant social and economic impact that in turn disrupted some ceramic production and created new options for procuring grave offerings.

Turning back to choices Urkesh potters made, another possibility, stimulated no doubt by the abundance of ceramics readily available on the ground surface throughout the city in the form of residual sherds and some whole vessels, would be to recreate ceramics produced in the past, a phenomenon sometimes called *archaism* or *revivalism* (Rice 1987, 455–456, 459). Even if the production technique is part of an ongoing ceramic tradition, a certain degree of reinventing is often necessary, for instance,

because the skill set of the potters does not exactly match that of the ancient ones or because the exact requisite raw materials are no longer available.

In the case of the archaeological evidence from Urkesh, we can ask whether the “expert” has to be physically present for the transmission of knowledge and, further, whether the “apprentices” can acquire knowledge useful for their craft directly from the artefacts produced by ancient experts. Does the practice of engaging in the performance of the task in congruent ways make the learner an apprentice of the ancient master? In the case of imitations of ancient ceramics, the learning situation is not one where the later potter simply replicates a static model from the outside but rather one where the later potter shares the same basic skill and knowledge as the earlier potter, and thus regenerates a product from within the same historical tradition. Because the knowledge base of a community of practice is encoded in the products of that community, this encoding can be deciphered by others who have the intention of learning, even at a temporal remove from the original. Obviously, these learners must be engaged in an ongoing practice of the craft in order for them to be open to the learning environment provided by the ready availability of vast amounts and varying types of ancient ceramics. In this case, the “apprentice” must be able to decode both the explicit and the tacit information given by a study of the artefacts themselves (see chapter 12 this volume).

Two types of imitations of ancient ceramics in Urkesh can be considered: the imitation of earlier decorations and the imitations of earlier wares. During the Ninevite V period in northern Mesopotamia (around 2700 BCE), ceramics were decorated with characteristic incised designs. The shapes included buff fired pottery made in a number of open and closed bowls decorated on the exterior with incisions below the rim and on the widest part of the body. From our excavations at Urkesh, an important city during that period, we have a number of these bowls (figure 10.3). More than 500 years later, a small bowl made from different clay but with the same type of incised design below the rim was created. This is the only example of this type of decoration in the later context. Shown side by side, it is apparent that the clay is different, but the inspiration for the decoration is evident. Differences in clay and temper are obvious from the sections (figure 10.3b). In this case, only the idea of the decoration was copied and carried out with a similar toothed tool.

A second example employs incised hatched running triangles for decoration, common in the Ninevite V period (figure 10.4a) but not later. Yet they are found on a jar dating, again, to hundreds of years later (figure 10.4b). Another type of Ninevite V pottery is comb incised with groups of short parallel lines. This decoration is found on larger open bowls on the



FIGURE 10.3. a. Ninevite V bowl and later bowl with imitated decoration. b. Sections of Ninevite V bowl (left) and later bowl with imitated decoration (right). Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkesh Archaeological Project.

upper half of the body (figure 10.5a). Again, a potter about five hundred years later thought this type of decoration appropriate to place on the neck of a jar (figure 10.5b). This type of design can also be seen on the rim of a later wide-rimmed bowl (figure 10.6a). Like the previous examples the clay, temper and firing are quite different, as seen from the two sections (figure 10.6b).

While statistically there are very few of these later imitations within the total ceramic inventory, the examples all come from one period around 2100 BC when some potters were interested in this type of emulation. In other words, we are dealing here not with isolated imitations made by a perceptive potter but rather with a wider appreciation of the decorative techniques of “ancient” potters (Boardman 2002, 179–180).

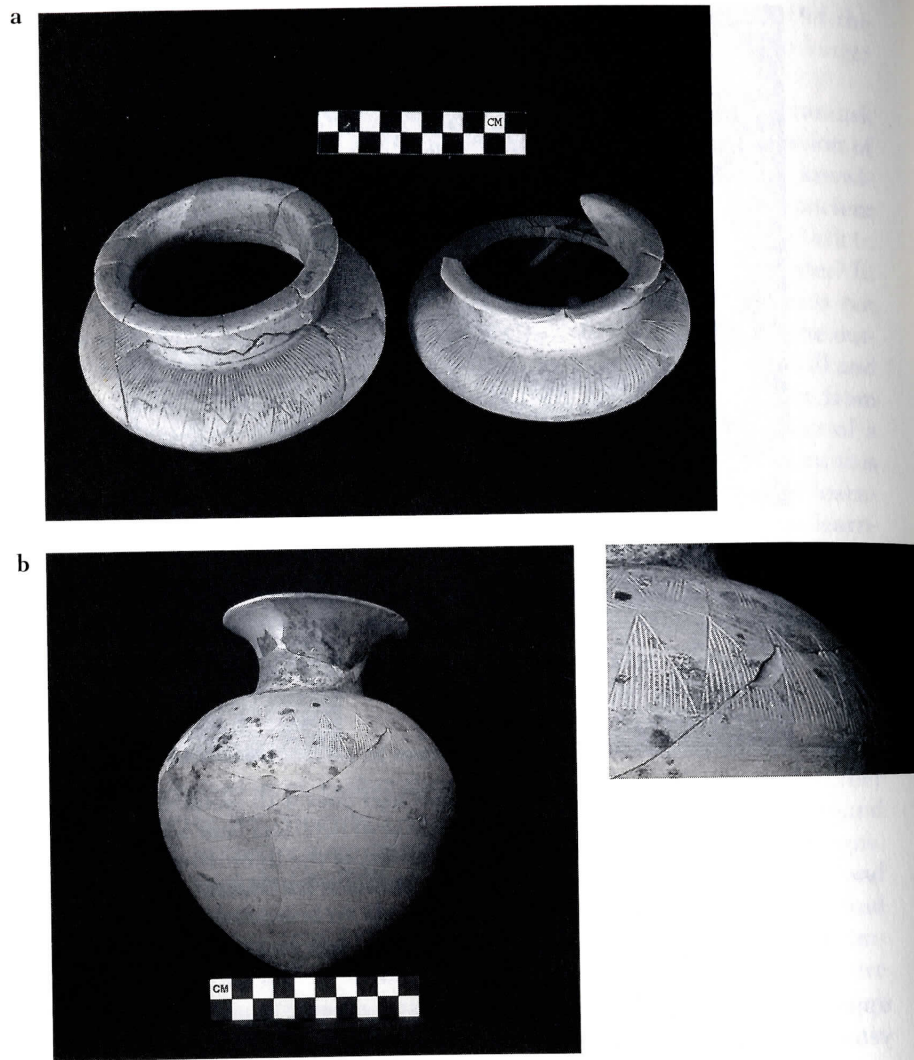


FIGURE 10.4. a. Ninevite V hatched triangles from ca. 2700 BCE. b. Later jar from ca. 2100 BCE, with detail of incised triangles. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkish Archaeological Project.

Not only is the decoration reproduced, but later imitations can also be found in simulations of the surface color of earlier finely made pottery. This happens in the case of Metallic ware that is usually gray or orange with few inclusions, highly fired, and thin walled with a wet smoothed and sometimes scraped surface (figure 10.7a). Imitations of this pottery

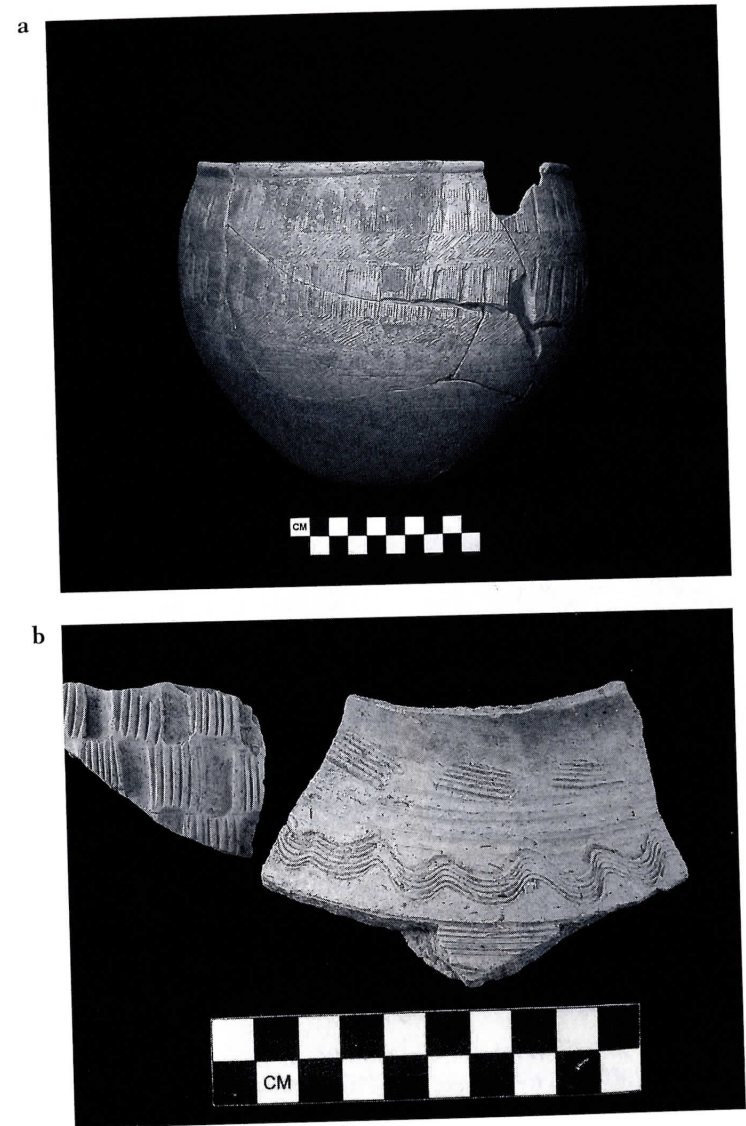


FIGURE 10.5. a. Late Ninevite V bowl from ca. 2700 BCE. b. Ninevite V sherd, ca. 2700 BCE, and jar neck dating to ca. 2100 BCE. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkish Archaeological Project.



FIGURE 10.6. a. Bowl rim, ca. 2100 BC. b. Sections: (left) section of Ninevite V sherd, ca. 2700 BCE and (right) section of sherd dating to ca. 2100 BC. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkish Archaeological Project.

include jars with a dark gray exterior covered with an iron-rich slip, partially reduced in the firing (figure 10.7b). While superficially the surface may resemble Metallic ware, the clay, temper, and firing are very different (figure 10.7c). These imitations are more widespread than the imitations of decoration just discussed and are generally thought to be motivated by

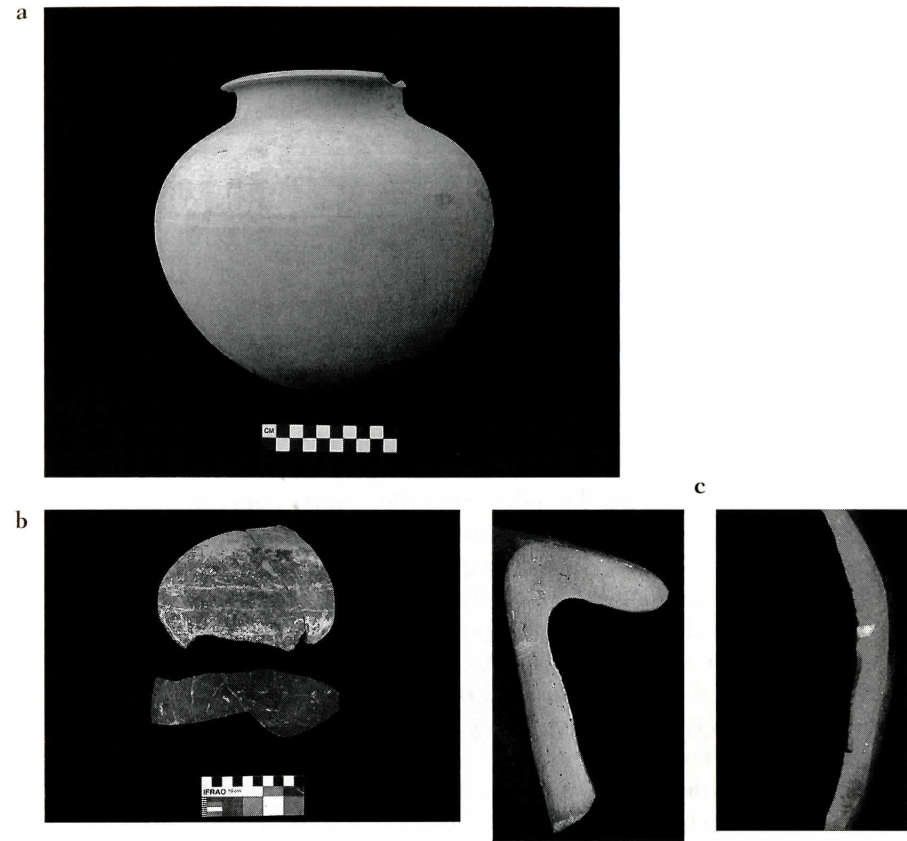


FIGURE 10.7. a. Small Metallic ware jar. b. Two Imitation Metallic ware jar sherds. c. Sections of Metallic ware (left) and Imitation Metallic ware (right). Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkish Archaeological Project.

economic choices since the color and even hardness are close to Metallic vessels.

While craft traditions in many cultures play an important role in establishing identity and distinguishing various ethnic entities, it is not possible to separate the creators of the ceramics discussed above into clearly delineated groups. We do have evidence from the texts excavated at Urkesh that both Hurrians and Akkadians lived in the city and the surrounding towns. However, on the basis of our present evidence, we cannot differentiate specific cultural identities through modes of production.

## Transfer of Knowledge: From the Formal to the Vernacular

Several authors in this volume have stressed different types of knowledge (see chapters 1, 4, and 12 this volume) and related aspects of social status. An architectural plan, excavated in ancient Urkesh, shows the transfer of abstract knowledge, an idea—in this case the design of the royal palace at Urkesh—into practical knowledge: the plan used by the building crew. Plans of individual buildings or even entire quarters of a city are well known from Mesopotamia; more than fifty of these from all time periods have been found (Dolce 2000). Ongoing excavations in Urkesh have revealed a palace built around 2250 BCE, constructed over a short period of time by the Hurrian king Tupkish mentioned above. Recently, while excavating in one wing of the palace, we found a clay tablet with the plan of three rooms, including their doorways (figure 10.8a). We interpret this as the plan of the three nearby rooms drawn by the master craftsman (i.e., the “architect”) to guide the building team constructing these rooms (figure 10.8b,c). In other words, this tablet is the means of the transfer of the master craftsman’s specialized knowledge of the specifics of the building design to the team of artisans who were building this section of the palace. Here, for the first time in Mesopotamia, we can document this type of transfer of specialized architectural knowledge. It gives us an intermediate step in the production sequence between the specialist and the construction team working in this part of the palace.

The division between theoretical and practical knowledge often brings with it an assessment of social status. Scribes and architects in many societies have a higher status than builders, who execute the plans. We do have, however, an interesting piece of evidence for the social position of an Urkesh potter from the Akkadian period (ca. 2240 BCE), which indicates how the elite sector of the society may have viewed pottery production. From the excavation of the palace, a seal impression depicts a potter working in the setting of a ceramic workshop (figure 10.9). The potter is shown kneeling before a tripod stand that seems to have “feet.” Set into this stand is a necked jar with what appears to be a pointed base. The potter is working on the final stages of the production cycle because the jar is evidently fully formed and at least in the “leather hard” stage. Placed above the potter in the scene, probably on a shelf, are two necked jars sitting in stands. The figure has physical characteristics resembling a woman, but the hairstyle can be worn by either sex. The inclusion of this workshop scene is significant because it is a so-called secondary scene placed at the end of a main scene usually containing larger figures. It is in this space, during the Akkadian period in Syro-Mesopotamia, that

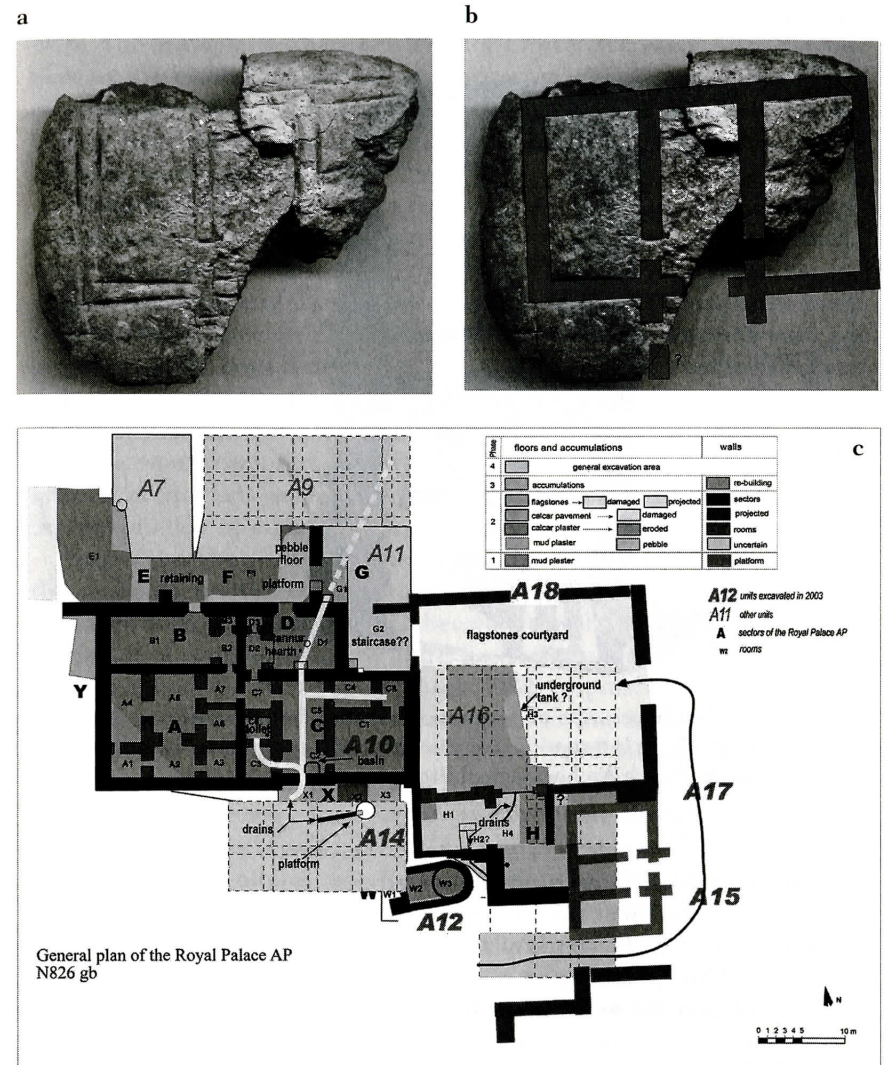


FIGURE 10.8. a. Clay tablet with architectural plan of three rooms. b. Clay tablet with overlay of rooms. c. Palace plan showing three rooms. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkesh Archaeological Project.



FIGURE 10.9. Seal impression of a ceramic workshop from Urkesh, ca. 2200 BCE. Courtesy of the International Institute for Mesopotamian Area Studies and the Mozan/Urkesh Archaeological Project.

the cuneiform inscription is often inserted that usually identifies the seal owner. The inclusion of the locus for ceramic production in such a scene must indicate that the status of the potter was such that it could be associated with a seal belonging to a person of elite status. Furthermore, it may also be that the individual who owned the seal was connected with this type of activity since in the Urkesh iconographic corpus there is very often a connection between the occupation of the seal owner and the activities depicted on the seal (Kelly-Buccellati 2010).

### Conclusion

It is often assumed that apprenticeship entails a face-to-face relationship and that these relationships are organized in certain standard ways. My point here is that in an archaeological context, these definitions can be

expanded to include historical-generative learning situations where they exist. The examples we have are few, but I think that our view of apprenticeship can extend to a form of apprenticeship where ancients study their own ancestors in a system where the creations and inventions of the ancestors were appreciated and learning from them was viewed as an acceptable source of knowledge.

While we have little evidence for how the ceramic apprenticeship system worked in practice, the imitation of certain aspects of much earlier pottery does give us a glimpse at the interest of the later potter to engage in the performance of the tasks of the earlier potters in congruent ways. In other words, they are coparticipating in ways that a contemporary apprentice would, even though this coparticipation spans centuries. Even if social and cultural values are not directly transmitted through this type of apprenticeship, it is not just technical knowledge that is rediscovered through experimentation. The very interest in previous traditions as expressed in products made by the ancient community of practice signals an appreciation of values that are in some way shared.

Apart from the direct apprentice–teacher relation, and learning from the ancestors, another type of cross-temporal apprenticeship is one where the study of the technique as such becomes the object of interest, without the intent of actually using the craft, for example, with the texts that describe methods for farming (Jacobsen 1982) or prescriptions for how to make glass (Oppenheim 1970). Here, apprenticeship is reified as an object to be looked at from the outside; clearly, a third millennium farmer is not going to learn farming methods from cuneiform texts! But the almost ethnographic interest of the scribes in describing the details of a craft point to the degree of self-awareness that had developed within the craft itself; the community of practice was ready to provide outside observers with an articulate description of its own production processes.

At no time, perhaps, did a cross-temporal community of practice become as fully aware of what it was doing as with the “Renaissance”—a word that by *antonomasia* refers to learning from the ancestors, to which one of its great practitioners, Benvenuto Cellini, gave the most appropriate expression when he wrote, “I am willing to enter into competition with the ancients and feel able to surpass them” (Cellini 1909–1914 [1558–1566], section 65).

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