

The sense of practice

A case study of tablet sealing at Nippur in the Ur III period (c. 2112–2004 BCE)

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Introduction

Catherine Bell (1992: 67), in a section titled “The Sense of Ritual” of her seminal book, *Ritual Theory, Ritual Practice*, writes about the primacy of the social act itself, “how its strategies are lodged in the very doing of the act.” For Bell, the act of doing creates the “sense of ritual,” what she calls ritualisation. This sense of ritual is additional to the traditional five senses of Western (Aristotelian) philosophy, and indeed, it incorporates and draws upon the traditional five senses of sight, hearing, taste, touch, and smell. Ritual is, according to Bell, a fully embodied experiential thing. Bell’s argument relies heavily on practice theory, espoused by scholars such as Pierre Bourdieu and Anthony Giddens. Following Bell’s logic, one can therefore understand practice to engage with and generate (at least some) bodily senses. This chapter explores this claim, specifically examining embodied crafting practices. It argues that a sense of practice emerges from acts of learning and doing and that this sense is critical to the formation of community. I consider this argument through the lens of one specific form of practice, that of sealing tablets, situating my study during the Third Dynasty of Ur (or Ur III period for short, c. 2112–2004 BCE) in southern Mesopotamia.

Learning and practice

What does it mean to learn something? To know something or know how to do something? How does one learn? These are not simple questions, and they have bedevilled the fields of cognitive science, sociology, psychology, and educational theory. Two basic opposing frameworks exist to explain the process of learning, although in reality they both operate simultaneously and in tandem with one another. One comes out of a Cartesian duality of mind and body, which locates cognitive functioning and knowledge in the mind/brain. In this view, learning is the feature by which a student grasps in the brain specific propositions. This model underlies much of our school-based learning frameworks, whereby a teacher imparts discrete chunks of knowledge to the students in a unilateral fashion, such as when a university professor stands at the front of the classroom and lectures while the students take notes to be memorised and repeated later.

An alternative model has developed during the latter part of the last century. This model—known as situated learning or situated cognition—posits learning as an inherently social activity in which the entire body and even collective groups participate (Lave and Wenger 1991). This is an embodied form of knowledge acquisition: learning by doing. We all do a great deal of this, often without even realising it, and it is becoming more commonplace within educational institutions, exemplified in the US collegiate realm by the ever-increasing emphasis on internships and non-classroom-based activities, also called “experiential learning.”

The model of embodied, situated learning, though developed to address educational issues in contemporary times, offers a powerful way to look at ancient ways of doing—that is, ancient practices—and how these practices engage and stimulate bodily senses to produce a composite “sense of belonging” or “sense of community.” The model postulates that learning entails social participation, in which participants are active in the practices of social communities and construct their identities in relation to these communities (Wenger 1998: 4). In other words, learning and the subsequent doing are both a kind of action (something you do) and a form of belonging (something you become). They are vehicles for the evolution of practices, the inclusion of newcomers, and the development and transformation of identities (Wenger 1998: 13).

If learning and doing are inherently social, much of which happens through bodily practices, then the traces of these bodily practices found in the material products left behind (that is, ancient artefacts) should allow us to infer both the mechanics of learning/doing and the social communities in which they occurred. Taken as a whole, these mechanics of learning/doing, felt through the actions of the body, produce a sense, or a feeling, of individual and community belonging. Since learning changes who we are and creates histories of becoming, looking at learned practices of doing offers access to past communities and identities.

Within the context of ancient Egypt, Willeke Wendrich (2012) has dissected the different components of learning through apprenticeship (which is a quintessential form of situated learning). She breaks the process into the following: dexterity, skill, endurance, memory, consideration, and properness (Wendrich 2012: 3). The entwining of bodily and conceptual components is critical for discerning how practice generates a sense of community. Dexterity, skill, and endurance—what Wendrich (2006) calls “body knowledge”—all focus on bodily actions: the physical ability to perform an activity in the proper sequence and for the required amount of time (Wendrich 2012: 3). At the same time, apprenticeship develops a collective memory of the activity and its products, an attention to the activity (consideration), and an awareness of the appropriateness of the activity (properness) (Wendrich 2012: 3). The bodily actions produce sensations through the doing of the actions, which in turn are integrated into the cognitive realm of memory. In other words, the collective memory and discernment of propriety emerge from the bodily doing as it is situated within a community of practitioners, and these memories and discernments fold back into the community as traditions of doing.

While one direction to follow in thinking about learning and doing is that of practice theory, drawing on the seminal scholarship of Pierre Bourdieu (1977; 1990), André Leroi-Gourhan (1993), Pierre Lemonnier (1992), and others (particularly in the French sociology/anthropology tradition), another—not mutually exclusive—way to approach the question is through sensorial effects. Practice theory convincingly proposes that bodily and material processes of doing encompass, condition, constrain, and shape social relations. Yet one could argue that the theory lacks a foundational explanation for why this should be, an explanation that I suggest is rooted in the bodily senses. It is through the feeling and sensing of the bodily practices that the memories and identities are enacted. Wendrich (2006; 2012: 4) hints at this when she describes “body knowledge” as “a physical memory embedded in muscle and the central nervous system” (muscle

memory). Thus, bringing sensory studies into conversation with practice theory offers a compelling explanation for identity and community emergence—a sense of belonging.

Sealing practices and the Ur III period

One could apply the above proposals to the production and creation of any number of different material objects that have survived for us today. For this chapter, I concentrate on the practice of sealing tablets during the Ur III period, and in particular, on a restricted corpus from the site of Nippur.¹ Ur III sealed tablets offer a particularly valuable corpus to think through the engagement of the senses with productive practices for two reasons (Figure 1.1). First, the methods and sometimes also the sequence of different practices, such as inscribing and sealing, can be discerned through close analysis of the tablets, permitting a reconstruction of the bodily actions involved in their production. Second, the inscription of the names of individuals, both those who owned the seals and those involved in the recorded transactions, allow for some educated guesswork regarding the association of various activities with specific human bodies.

It is worth noting at the outset that while sealing is a widespread and characteristic activity throughout most periods of the ancient Near East, sealing practices differ in significant ways from period to period and from place to place (Gibson and Biggs 1977; Hallo and Winter 2001; Pittman 2013; Otto 2019). It is, therefore, necessary first to discuss briefly general sealing practices in the ancient Near East and then to qualify the specific features of sealing practices during the Ur III period.

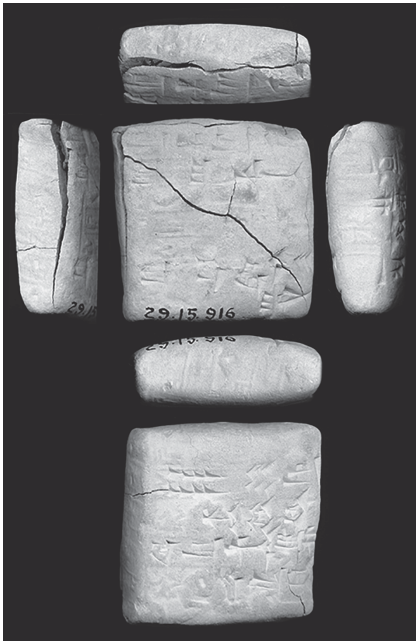


Figure 1.1 Scan of tablet UM 29-15-916 (NATN 663; CDLI P121361).

Source: Courtesy of the Penn Museum.

The use of seals to mark malleable surfaces such as clay is evidenced in the Near East already in the late Neolithic period, for example at Sabi Abyad in the Balikh River valley of northern Syria, where large quantities of containers were covered by clay which was then impressed by seals (c. 5200 BCE; Akkermans and Duistermaat 1996). Early examples of seals from the sixth through fourth millennia BCE are relatively numerous and take the forms of various stamping devices (Buchanan 1981: 5–41; Pittman 2001). Sometime around the middle of the fourth millennium, a new form of sealing device appears in the shape of a spool. This spool shape, in which the design is carved around the circumference, effectively eliminating any starting or ending points, seems to develop in conjunction with administrative experiments in information storage methods that eventually lead to the cuneiform writing system. While the precise trajectory of this development remains contested, one technique for storing information that is found at sites associated with an exchange network dating to the Uruk period (roughly the fourth millennium BCE) throughout the Near East (for example, at Susa in southwestern Iran, Habuba Kabira in Syria, and Hacinebi in Turkey) uses clay balls (referred to in the scholarly literature as bullae; Nissen et al. 1990; Schmandt-Besserat 1992; 1996; Woods 2010; Pittman 2013: 324–325; Frahm and Wagensonner 2019). The clay balls enclosed groups of small tokens that presumably conveyed information about quantity and type of transacted items. The cylindrically shaped seals were rolled over the entire outer surface of the ball, securing the tokens inside. Tablets (which may be understood to be flattened bullae, although this developmental relationship is not secure) were also rolled with cylinder seals in the earliest periods of the development of writing, during the Late Uruk and subsequent Jemdet Nasr periods (from around 3500–2900 BCE).

Once introduced, the cylinder seal remains the dominant form of sealing device through the first millennium BCE, operating in tandem with the cuneiform writing system. However, tablets themselves were not impressed with seals in all periods, and in fact, after the initial development during the Late Uruk and Jemdet Nasr periods, tablets were rarely sealed until the Ur III period at the end of the third millennium (Steinkeller 1977: 41; Tsouparopoulou 2015: 17). Instead, during the Early Dynastic and Akkadian periods (c. 2900–2112 BCE), cylinder seal use occurs primarily on sealings securing items such as containers and rooms. The Ur III period sees a dramatic increase in the sheer number of administrative documents, the vast majority produced in relation to the state apparatus to record basic economic transactions. Earlier in the dynasty, these documents were often encased in envelopes which were sealed; whereas in the latter part of the period, at the very end of the reign of King Amar-Suen (around year nine) and from the reign of Šu-Suen on, envelopes became rarer and the tablets themselves began to be sealed with increasing frequency and astonishing consistency (Steinkeller 1989: 113; Fischer 1997: 99–100; Garfinkle 2015: 150; Tsouparopoulou 2015: 17).

The so-called Third Dynasty of Ur emerged at the end of the third millennium BCE as the primary territorial state following the collapse and disintegration of the Akkadian state, the first polity to control all of southern Mesopotamia.² As is often the case during transitional periods between strong ruling institutions, written documentation is spotty, and our understanding of Ur's rise remains uncertain. Sometime around 2100 BCE, a ruler by the name Ur-Namma established a dynasty that would survive over five successive rulers: following Ur-Namma's 18-year rule is his son, Šulgi, who rules for 48 years and is succeeded by three of his sons, Amar-Suen (nine years), Šu-Suen (nine years), and Ibbi-Sin (25? years). The dynasty, while instituting a variety of centralised practices to facilitate the cohesion of the territorial state, lasted not much more than one hundred years.

Despite the relatively short length of the Ur III Dynasty, certain aspects of the state—in particular the official state economic apparatus—are exceptionally well documented. In fact, the Ur III state is best known to us today through its massive bureaucratic structures that administered

the state's activities both in the heartland and more distantly and that generated an immense quantity of cuneiform documents, more than 100,000 of which survive today. Of particular note, these administrative documents derive from a variety of different locales throughout the state, although unfortunately, most of them have been recovered through illicit digging. These include texts from the capital of Ur, the cities of Umma, Girsu (modern Tello), Puzriš-Dagan (modern Drehem), Nippur, Garšana (modern location unknown), and Irisağrig (possibly Tell al-Wilaya [Viano 2019]), as well as smaller collections from numerous other sites across Mesopotamia (Garfinkle 2015; Sallaberger 1999: 200–211). The documentation focuses almost exclusively on state-sponsored activities, providing a highly skewed view on the period (Van De Mieroop 2016: 81). The texts from Nippur offer an exception to this, presenting what appears to be more private enterprise (Garfinkle 2012). What all the texts reveal, in abundance, is the highly centralised nature of Ur III control, which incorporated formerly autonomous areas into the state by means of governors and military leaders and which derived its wealth from a complex system of taxation.

Many scholars of the Ur III period have noted the high degree of standardisation that characterises the administrative texts of the period. Van De Mieroop (2016: 84–85) writes, “The scribes who wrote them [the administrative records] had to be trained to use proper accounting techniques and formulae. We see a uniformity of the writing system in official documents through the Ur III state, and it is likely that schools were established to teach this.” Just as there was uniformity in the writing system, so too was there extraordinary consistency in the specific ways of sealing the documents. Numerous studies over the last 40 years have investigated the general sealing practices of the Ur III period, providing an important window onto the degree to which these practices were shared across regions and communities (for example, Hattori 2001; 2002; Reichel 2003; Tsouparopoulou 2015). In general, in the later part of the Ur III period when tablets were routinely sealed, the seal impressions cover the obverse and reverse of the tablet, as well as usually three or four of its edges. Atsuko Hattori (2001) demonstrated that typically the tablet was inscribed first and then impressed.

Most sealed Ur III tablets can be classified as administrative in nature. Piotr Steinkeller (1977) established a basic typology of these tablets still drawn upon today, dividing the corpus into three main groups: standard administrative texts (ration lists, receipts, disbursements, and so forth); bullae; and letter orders. Steinkeller (1977: 42) notes that among the standard administrative texts, seal impressions occur almost exclusively on receipts and disbursements. They appear most frequently on receipts characterised by certain Sumerian keywords: **šu ba-ti** (“he received” + inanimate entities), **i₃-dab₃** (“he received” + animate entities), and **kišib** (“seal (of PN)”). Christina Tsouparopoulou (2015: 9, 80–81), in her study of the sealed tablets from the administrative centre of Puzriš-Dagan, argues that tablet sealing served multiple, sometimes overlapping, purposes during the Ur III period: to identify the responsible individual in a transaction; to identify the tablet writer; to prevent tampering with the text; and to confirm receipt of goods.

The seals used to impress the tablets also exhibit highly standardised compositions (Winter 1986; 1987). The most common design is the so-called presentation scene, in which a standing individual, often with one or more lesser divine figures, comes before a seated deity or ruler (Figure 1.2). While there is some degree of variation occurring within this composition, and there are seals carved with alternative motifs (most notably animal combats), the vast majority of Ur III seals follow the basic presentation scene format (Collon 1982; Tsouparopoulou 2015: 27–36). The visual depiction is almost always accompanied by a cuneiform inscription (or legend) arranged in a rectangular field (referred to as a *cartouche*) that is divided by lines into vertical boxes. The legend, of two to six lines, names the seal owner, and, depending on the length of the inscription, also his occupation, patronym (or father's name), the father's occupation, and name



Figure 1.2 Ur III cylinder seal and impression, with two-line inscription, “Aḥa-nīšu, the servant of Nūr-Šulgi.” Black stone (hematite?). Johns Hopkins Archaeological Museum (FIC.07.178).

Source: Courtesy of the Johns Hopkins Archaeological Museum.

of the seal owner’s overlord (Tsouparopoulou 2015: 22–27). The legends are oriented 90 degrees in relation to the image such that, visually, they run vertically next to the upright forms of the standing and seated figures. Thus, in order to read the inscriptions, the seal must be turned at a right angle relative to the image—a compositional strategy with implications for the sealing process.³

The case of Nippur

Studies of Ur III sealing practices have examined which types of administrative documents are sealed and by whom, showing that, for example, at some locations, the shapes of tablets correspond to their content and that particular types of tablets tend to be sealed in specific ways (Hattori 2001; Tsouparopoulou 2015: 43–44). Hattori (2001: 89–97) presents the case of five sale tablets from Nippur that exhibit an idiosyncratic method of sealing by high-ranking officials (see also Tsouparopoulou 2015: 81). These five tablets, which are larger than the typical Ur III tablet, contain only one sealing, rolled vertically down the centre of the reverse of the tablet in such a way that both the entire imagery and the inscription are visible. The seals belong to high officials, including judges, and they authorise transactions of relatively large amounts of money. Hattori (2001: 95) notes that although only five such sale documents exist, they span a considerable period of time, approximately 20 to 30 years, lasting from year 36 of Šulgi’s reign into the early years of Šu-Suen and possibly as late as Ibī-Sin. For this reason, Hattori (2001: 95–96) suggests that the unusual method of sealing may be more than just a single individual’s idiosyncratic way of rolling a seal, and instead proposes “an established sealing practice involving a high-ranking officer as transaction authorizer.” Hattori (2001: 89) concludes that, “the content of the texts and of the seal impressions suggests that this distinctive way of sealing is a special procedure observed among the upper echelons of Nippur.” This in turn suggests that this distinctive way of sealing was “taught” (or passed along) to individuals who formed part of a small elite group.

Products of everyday practice by individuals of lower status—though still in the upper levels of society—provide further insight into how sealing practices were learned and shared, and how these practices formed communities. The ways in which these individuals learned to do everyday procedures would have enmeshed those individuals in communities of shared experiences, forming bodily memories.⁴ Nippur is a particularly useful site with which to conduct such an investigation. First, the tablets from the site derive from accredited archaeological excavations conducted by the University of Pennsylvania, even if these excavations, undertaken in the early years of Near Eastern archaeology at the end of the nineteenth century, provide only imprecise findspots within the site itself (Hattori 2002: 7–6; Garfinkle 2012: 110–112). Second, the corpus of Ur III texts from Nippur has been associated with non-institutional (“private”) entities despite the fact that many of the individuals documented in the texts have close associations with the state administration (Garfinkle 2012: 110–112). Steven Garfinkle (2012) argues for a flourishing non-institutional economy during the Ur III period, evidence for which has seldom survived in the state archives, but which is discernible from the Nippur texts.

Last, Nippur was one of the most important cities of southern Mesopotamia, with archaeological evidence for continuous occupation from the Ubaid period in the sixth millennium BCE into the Common Era (for some summaries and bibliography, see Ellis 1992; McMahon 2006). Throughout the third millennium BCE, Nippur—as the city housing the temple of the chief god of the Mesopotamian pantheon, Enlil—served as the central religious site for all of southern Mesopotamia. The main temple complex of Enlil, called the Ekur, was an extensive religious institution containing multiple buildings within a large courtyard situated on a high point of one of the ancient tells. The Ur III rulers lavished attention on the city, with Ur-Namma and his son Šulgi rebuilding the Ekur and erecting an enormous stepped ziggurat in the precinct.

For this chapter, I examined sealed administrative tablets from the University of Pennsylvania Nippur excavations that are attributed to less-high-ranking officials and that appear to relate to non-institutional transactions.⁵ It should be noted that terms such as “non-high ranking” and “non-institutional” are not without problems, especially as we know that the relationship between so-called private and public spheres was complex and not necessarily aligned with our own understanding of these terms in today’s economy (Garfinkle 2012: 18–27). I use them here principally as a way to signal an attempt to avoid the unusual and special and to focus instead on the more mundane and everyday segments of society in order to access these communities.

I concentrate primarily on receipts, because these are the most commonly sealed documents, and because there is evidence that sealing practices could vary depending on the type of text. Receipts are by far the most common type of document to be sealed during the Ur III period, and they present an ideal corpus of everyday transactions that took place among a diverse group of people. Nonetheless, because I analysed sealing practices of five different “individuals” (see below on this), not all the sealed documents belonging to a given individual are receipts. The sealing practices for receipts are generally fairly straightforward—almost always the tablet was sealed with a seal belonging to the recipient of the goods being recorded or by someone closely related to the recipient. Tsouparopoulou (2015: 79), discussing official documents from Puzriš-Dagan, suggests that it was the recipient’s responsibility to write up the receipt and seal it, and then send it to the dispenser as confirmation of receipt of the goods. Receipts offer, therefore, a self-contained glimpse into personalised sealing practices, belonging both to a larger community of practice (that is, generalised ways of doing things) as well as smaller or even individual identities as revealed by idiosyncratic ways of doing things. I also limited my corpus to tablets dated to the reign of Šu-Suen, with an occasional tablet from Amar-Suen’s final years eight and nine, due to the major shift in sealing practices that occurred at the end of Amar-Suen’s reign (Fischer 1997: 99–100).

Working from Hattori's 2002 dissertation on Ur III sealings on Nippur tablets, in which she catalogues all the occurrences of sealings belonging to specific, identified individuals, I isolated subsets in which there are four or more tablets bearing an individual's seal. According to Hattori (2001: 73), of 1,372 sealed tablets that she examined, 544 are sealed by 489 different individual seals. Only 41 seals were found on more than one document, 26 of which were found only twice. Only five seals occurred on four or more documents, constituting my five groups. A quick caveat regarding my use of the term "individual:" I am starting from the base assumption that the person named in the seal legend is the person who impressed the seal on the tablet. This of course may not have been the case, especially when the named recipient, who is usually the one to seal receipt tablets, is different from the person named on the seal. However, it does appear to be the case most of the time. Of my five groups, three contain four documents, one contains five documents, and one has at least ten (possibly 12⁶) documents. The vast majority of the tablets in my five groups are receipts of the **šu ba-ti** type, often for grains. Briefly, my groups are the following:

- (1) four tablets sealed with the seal of En-engar, all dated to the reign of Šu-Suen, all **šu ba-ti** receipts; in only one of the four receipts was En-engar the recipient (Hattori 2002: SI n. 56);
- (2) four tablets sealed with the seal of Ur-du₆-ku₃, son of Ur-me-me; two are dated to the reign of Šu-Suen, the other two are undated; one of the tablets is a **šu ba-ti** receipt, the other three are legal agreements (Hattori 2002: SI n. 102);
- (3) four tablets sealed with the seal of Lugal-ma₂-gur₃-re, scribe and servant of Lugal-me-lam₂; these are various receipts involving textiles; two of the four are dated to Amar-Suen years eight and nine, the other two date to the first year of Šu-Suen (Hattori 2002: SI n. 354);
- (4) five tablets sealed with the seal of Ma-(an)-gu-ul; four of these are receipts and one is fragmentary and preserves only the date; four tablets bear dates, all in the reign of Šu-Suen (Hattori 2002: SI n. 75); and
- (5) ten tablets sealed with the seal of Ur-^dma-mi, son of ̕u-̕a; they are all receipts: nine with the **šu ba-ti** clause, one with the **i₃-dab₅** clause; of the six that have a date, five are from Šu-Suen's reign and the sixth one probably is (Hattori 2002: SI n. 73).

These Nippur tablets conform to the general conventions of sealing administrative tablets, and especially receipts, already studied by other scholars (for recent review, see Tsouparopoulou 2015: 43–84). Tablet UM 29-15-916 is representative of the general sealing practices seen among all the tablets that I examined and can serve as an example (Figures 1.1 and 1.3a–b). UM 29-15-916 is a **šu ba-ti** receipt for barley seed (Owen 1982: no. 663; CDLI P121361). The tablet itself is of whitish-yellow clay and takes a neatly flattened, square form about 3.8 centimetres on each side, with flattened edges. Today, it has a somewhat matte, slurried surface and is cracked along the reverse and two edges. As with the other Nippur tablets, it was written first and then sealed. The recipient and sealer of the tablet is Ur-^dma-mi, son of ̕u-̕a (Hattori 2002: SI n. 73). This is one of at least ten sealings using Ur-^dma-mi's seal, the largest number of sealed documents for any individual among the Nippur corpus. The seal impressions preserve areas of the seal's presentation scene, showing parts of the seated deity (a goddess in a flounced garment), crescent moon, and a standing figure (Figure 1.3b).⁷ As is usual on these receipts, the seal legend is impressed in the empty space on the reverse of the tablet. The two-line seal legend is entirely visible in this placement, along with part of the standing "worshipper" to the right of the legend. Because the edge of the seal legend directly abuts the left edge of the tablet, and because the height of the seal (down which the seal legend runs perpendicularly) is shorter than the breadth of the tablet, the empty space that would have remained to the right side of the impressed legend



Figure 1.3a Tablet UM 29-15-916 (NATN 663; CDLI P121361) with seal impressions drawn onto it.

Source: Image created by Laurel Poolman; © Marian H. Feldman.



Figure 1.3b Reconstructed drawing of seal impressed on UM 29-15-916, showing seal legend with goddess and standing worshipper.

Source: Drawing by author; © Marian H. Feldman.

was filled with another, partial impression of the seal, ensuring that no blank space would remain. Whereas on many of these small Nippur tablets, the entirety of the inscribed text was impressed with the seal legend, I could not see any traces of impressions over the reverse text, although the surface, as noted, was slurry and the impressions might not have been visible to my eye.

The obverse also conforms to the pattern seen in the other Nippur tablets, with two columns of impressions running vertically from top to bottom over the inscribed text. These impressions highlighted the legend area of the seal, although occasional parts of the figures to either side of

the legend were also included. In all the sealings found on the tablet, the seal appears to have been pressed into the clay more so than rolled, with the seal legend repeating at least two times in both left- and right-hand columns. Because of the small size of the tablet relative to the height of the seal, the left-hand column preserves the full vertical extent of the seal (that is, the entire width of the inscription), while the right-hand column is narrower and only captured part of the length of the inscription. Two separate imprints of the seal legend, along with part of the back of the seated goddess to the left, can be clearly seen in the left-hand column, as well as fainter impressions of at least two imprints of this same seal, including part of the seated goddess, in the right-hand column. Interestingly, these imprints seem to indicate that the seal was pressed down and rocked slightly leftward, capturing the two lines of the legend and part of the seated goddess, while on the reverse, in the empty space, the seal appears to have been pressed down and rocked slightly rightward, capturing the legend and the standing figure to its right. One might imagine that the reverse imprint would be made first, since its clarity and legibility appear to have been of prime consideration, as seen in the “fixing” and re-impressing of this part of another Nippur tablet (see below and Feldman forthcoming). The sealings on the obverse then would follow and would require the tablet to be flipped vertically.

All four tablet edges were also impressed with the seal, and in a consistent manner: the seal was pressed into the edge at least twice on each side with the seal held at a right angle to the edge. The seal was not rolled, which would have generated a horizontal slice through the seal iconography, but rather pressed down and picked up in order to only impress the area of the seal legend. However, the seal legend inscription is not fully preserved because it was impressed perpendicular to the seal edge. Hattori (2001: figs. 3–6) illustrates examples of edges impressed with a seal held lengthwise to the edge (what she refers to as a “vertical” impression; 2001: fig. 1), which leaves an impression of the entire seal legend, although none of the tablets that I examined were sealed in this way. It seems clear that the impressing of the edges was performed in a somewhat rote manner so that the same part of the legend—the DINGIR and HU signs—were consistently imprinted. These signs fall in the middle-left part of the legend and therefore would have been located in the upper-middle of the seal itself. One might reconstruct the manual process of impressing the edges, holding the seal vertically in one hand and the tablet horizontally in the other, as a series of quick pressures while rotating the tablet from edge to edge.

A characteristic feature that I observed on many of the Nippur tablets I examined is a slight displacement of clay in the upper left corner of the obverse, where it appears the act of impressing the seal was begun with a certain amount of force creating a depression in the tablet surface. This feature is a good indicator of, on the one hand, the consistent order in which a seal was impressed on a tablet, and on the other hand, idiosyncratic bodily movements that appear to correlate with specific sealers who use greater or lesser force in the application of the seal. While this appears idiosyncratically more clearly on certain of the tablet groups, for example, a group of four tablets bearing the seal of En-engar (CBS 8131, CBS 8678, CBS 8686, and CBS 8705; Hattori 2002: SI n. 56), it is apparent on almost all of the other sealed tablets from my five groups, suggesting that it was the result of a shared, habitual way of sealing (Figure 1.4). According to this scenario, one would begin sealing a tablet in the top left corner, then proceed downward, picking the seal up and starting the impressing again, and then making a second set of impressions along a narrower band on the right side of the tablet. We may surmise that these “non-institutional” individuals learned a particular sequence of sealing that was widely shared, although some individuals executed it with greater bodily energy.

The complete sequence of sealing obverse, reverse, and edges is not entirely certain. The force of the indentation made on the upper left of the obverse might suggest that this would be the very first place of impression, followed by the reverse with the edges being the last to be



Figure 1.4 Tablet sealed with the seal of En-engar showing displacement of clay in upper left-hand corner of obverse. Penn Museum (CBS 8131).

Source: Photo by author; courtesy of Penn Museum.

impressed. However, the imperative to have a clearly rendered, legible impression of the entire seal legend in the space on the reverse (see below and Feldman forthcoming) may indicate that the sealer began on the reverse and then turned to impress the obverse and the edges. If, as has been proposed by Tsouparopoulou (2015: 47–48, 68, 79, 84), the sealer was also the person who inscribed the tablet (and, thus, also the person under the obligation recorded on the tablet), one might envision a sequence in which the transaction was inscribed beginning on the obverse, then flipped over to the reverse, upon completion of which the seal was impressed in the empty space of the reverse. Additional impressions on the reverse would follow, with the tablet then flipped back again to the obverse for impressing, ending with the edges. Given the need to both inscribe and impress the tablet within a short period of time before the clay dried out too much, this latter sequence makes the most sense and could be quickly performed in several seamless motions.

The sense of sealing

Multiple sensory engagements would have contributed to the overall experience of sealing a tablet. These sensory experiences would have been shared among groups of people, not only those in physical proximity to one another, but also among anyone whose learned bodily motions derived from performing similar sealing practices. Learning to seal in particular ways, thus, created a community of practitioners who would be bound to one another through the shared physical (bodily and sensory) activity of sealing. What, however, were these sensory experiences that created the community? We can deduce at least some of them from the close analysis of the sealing practices described above. Working back from the surviving sealed tablets, the easiest sensory affects for us to access are haptic, visual, and kinaesthetic experiences.⁸

The sensory experiences of touching and feeling would have been central to the formation of a sense of practice. This is the so-called muscle memory that occurs when a bodily action is engaged in repeatedly to the point that one can perform the motion without conscious thought. It is something like learning to drive a stick-shift vehicle (now a vanishing skill). At first, you have to think about each moving part—the hand on the gear stick, the left foot on the clutch, the right foot on the gas pedal; each action has to happen in the proper sequence and tempo in order to smoothly move forward or stop without stalling. In the early days of learning all the separate actions, it feels as if you will never be able to master the sequence, and then at some point it clicks, and the body performs the right moves in the correct order without thought. You have entered the community of manual car drivers. One imagines a similar process in the mastery of sealing a tablet, as well as a similar sense of initiation into a group bound by specialised knowledge and skills. We know from later, Old Babylonian school texts where scribes are first learning to write cuneiform, for example, that repeating the motions of horizontal, vertical, and oblique cuneiform wedge marks constituted an early part of scribal training (Wagensonner 2019: 141).⁹

The Ur III tablets from Nippur mostly fall within a standard size and shape, typically around three to four centimetres in height and length (usually fairly square). They fit compactly in the hand, held between the thumb, forefinger, and other fingers (Figure 1.5). On most of the tablets, there are clear indentations on the tablet edges near the corners, many of which still preserve the fingerprints of the holder (also, Taylor 2011: 13). The clay at this point would still be damp enough to be able to inscribe the text and then imprint the seal, providing a feeling of moisture and the yielding sense of the matrix as the fingers applied pressure to the tablet edges.¹⁰ As already mentioned, Tsouparopoulou (2015: 47–48, 68, 79, 84) argues that, at least for short transactional records, a single person was responsible for writing the text and sealing the tablet.

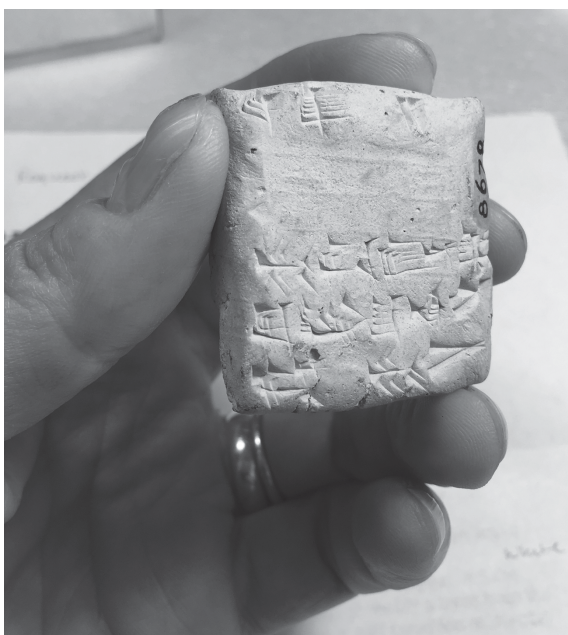


Figure 1.5 Photograph of author holding CBS 8678.
Source: Photo by author; courtesy of the Penn Museum.

Perhaps this same person also formed the tablet.¹¹ Depending on the composition of the clay (the visual inspection of the tablets reveals several different clays, exhibiting colours from yellow-green to red-brown and varying degrees of fineness of the particles), it could feel smoothly plastic, perhaps sticky or gritty.

Considering the visual experience is complicated because of what could and could not be seen of the seal and its impression. Typically, visual experience has been accorded a privileged status in the sensorium (see, for example, Candlin 2018: 27), and when we study ancient seals we focus mostly on a visual inspection of the carved representation. However, the visual operates slightly differently on the impressed Nippur tablets. First, as has been noted, the figural depiction carved on the seal seems to be, at best, of secondary interest in the sealing practice of these tablets. Instead, the seal legend assumed primacy. On all the tablets that I examined, and a common practice among Ur III administrative tablets in general, a space on the reverse permitted the impression of a fully legible seal legend. Because such blank spaces are not found on all Ur III tablets or are occasionally found devoid of any seal impressions, there has been debate regarding the intended purpose of these spaces (Tsouparopoulou 2015: 82). One of the Nippur tablets, UM 29-15-893, however, suggests that at least for many documents, providing an empty space in order to create a fully legible imprint of the seal legend was paramount (Figure 1.6). UM 29-15-893, a legal document bearing the seal of Ur-du₆-ku₃, shows evidence that its blank space was “fixed” with added clay that was then impressed (or perhaps re-impressed) with the seal,



Figure 1.6 Reverse of tablet UM 29-15-893.

Source: Photo by author; courtesy of the Penn Museum.



Figure 1.7 Detail of corrected area on reverse of tablet UM 29-15-893.

Source: Photo by author; courtesy of the Penn Museum.

providing a legible imprint of the inscription (Feldman forthcoming) (Figure 1.7). Elsewhere, I have suggested that this was in part to facilitate the visibility, legibility, and identification of the seal legend as it was impressed over the inscribed text on the rest of the tablet. Thus, the visual experience of sealing involved an intimacy with the inscription on both the part of the sealer and anyone later needing to verify the tablet (see also Chapter 8, this volume).

Kinaesthetic experiences involved in sealing tablets would derive in large part from haptic engagement. Because of the small size of both the tablets and the seals, no large or exaggerated movements would be necessary to create, inscribe, or seal the documents. Indeed, the process may have appeared fairly stationary and could be performed mostly while sitting in one place. However, the possibility that the receipts were inscribed and sealed by the person named as recipient suggests that these tablets were not produced in any kind of assembly-line fashion, nor was there a small group of trained scribes with a monopoly. Rather, when a situation required it (that is, when a transaction occurred involving a recipient and a disperser), a tablet would be drawn up by the recipient who then gave the document to the disperser for safekeeping (Tsouparopoulou 2015: 79). If the sealing practices occurred automatically, like driving a stick-shift car, sealers would seal the entire tablet in a series of already internalised/learned movements. There has been some debate about when such transactions were actually textually recorded, whether at the time and place of transaction or after the fact (Garfinkle 2015: 147, n. 15). The fact of and standardised ways of sealing the tablets strongly points to a performative element, which in turn suggests that tablets were sealed in the presence of other people, a conclusion confirmed by the listing of witnesses on some documents. The sealer's kinaesthetic experience would be, on the one hand, the repeated actions of an ingrained, learned set of motions, and on the other hand, conditioned by the assembly of other people present, the setting in which the transactions took place, and perhaps even the specifics of the transaction (fairly everyday and non-consequential versus momentous and life-changing).

Conclusion

The practices seen on the Nippur tablets are found not just among these so-called “private” or non-institutional documents from Nippur, but also in all the major archives of the Ur III period,

most of which stem from large-scale institutions and in particular, the state. These practices served an important function in bringing together the diverse populations of the emerging territorial state. Garfinkle (2015: 152) has recently explored this in the context of the written texts: “Perhaps the most important aspect of textual production was its ability to define, and sometimes to create, new social networks.” The huge uptick in the production of administrative texts during the Ur III period can be ascribed, according to Garfinkle (2015: 156), to the performative function that the texts served, creating “larger notions of community” through their evidentiary ability to document the participation of the individuals in a larger web of transactions and affairs.

Garfinkle (2015: 146, 152) has also demonstrated the interpenetration and entangled affairs of individuals operating between and within both institutional and non-institutional entities, noting that the Ur III texts exhibit both a standardisation indicative of centralisation, as well as showing continuing significance of local and regional social, economic, and political networks. Garfinkle views the administrative production of tablets, the vast majority of which are simple texts of just a few lines like the ones under study here, in a performative light, their actual making, including their sealing, standing as evidence of the various individuals’ participation in the larger Ur III system. The Ur III administrative tablets can be understood to have actively facilitated state formation, rather than simply being a result of it.

Just as Garfinkle sees the texts as performative, sealing likewise was a performative activity. While the tablets may have served an ongoing purpose of manifesting participation through their lasting physical presence, it was the act of production, which brought a group of people together—the physical actions undertaken by these people—that generated a community through their very doing of the task. Along the lines of Bell’s notion of ritualisation, this “sense of practice” might be conceptualised as practicisation: a fully embodied, experiential sensation of doing. The sensations produced by the bodily actions—of fingers holding damp clay, or hard stone cylindrical seals pressed into yielding material, or repeated motions of flipping and turning the tablet—generated a shared collective memory, a body knowledge, that bound the participants into a community.

Notes

1. This chapter draws on current research for a larger project on sealing practices in Ur III Nippur, only some of which can be included here. See also, Feldman forthcoming.
2. The designation Ur III derives from the ancient composition, the Sumerian King List, which identifies the rulers of Ur during this period as the third such dynasty from Ur to rule over Mesopotamia since kingship was first given to humanity by the gods. For a comprehensive overview of the Ur III period, see Sallaberger 1999; for a more general overview, especially of the administrative corpus, see Van De Mieroop 2016: 79–89.
3. The inscriptions are carved into the seals in mirror reverse, so that the impressed text is legible.
4. While we have preserved the evidence for scribal training “in action,” so to speak, in the form of school texts (see, below, n. 9), there are no clearly identified trial or school exercises demonstrating stages of learning how to impress a tablet. This situation appears to be similar to what Tinney (2011: 589–590) investigates in the Old Babylonian period, when he finds different “structures of learning” between the realm of liturgical and practical texts (which do not appear as school texts) and those of the scribal curriculum. As a result, Tinney (2011: 590) proposes a “stratified education” with “a common level of elementary instruction in writing, followed by a specialized training as an apprentice.” I suggest a similar manner of apprenticeship as the means by which sealing practices were transmitted and learned.
5. Tablets were examined using a hand-held magnifying glass on two separate visits to the Penn Museum on May 30, 2019 and July 30–31, 2019. My sincere thanks to Phil Jones of the Penn Museum Tablet Room for facilitating this study.

6. Hattori (2002: SI n. 73) lists 12 seals belonging to Ur-^dma-mi; however, in CDLI, two of the 12 sealings identified by Hattori are catalogued as separate seals: UM 29-15-913/NATN660/CDLI P121358 (transcribed as belonging to **ur-ma-mi, dumu ħu-ħa**?; said to be the same as a seal on UM 29-15-896/NATN645/CDLI P121343) and UM 29-15-924/NATN670/CDLI P121368 (which is sealed on the case and transcribed by CDLI as **ur-^dlamma, dumu ħu-x**).
7. The reconstructed drawing is based only on the visible sealings on tablet UM 29-15-916 and remains incomplete. The sealings preserve partial evidence of the UR, DINGIR, DUMU, and ĤU signs. The seal is also known from the other tablets in this group, which provides further evidence for both the image and signs.
8. I take kinaesthesia to be the sensation of one's own bodily movements, as in Hawthorn and Rendu Loisel 2019: 2, n. 3.
9. A considerable amount of scholarship has been undertaken regarding scribal training, mostly focused on the so-called school texts; however, most evidence for scribal training dates to the Old Babylonian period or later, with little evidence preserved for the Ur III period. Scholarship on this topic has tended to focus on curricular content of the school texts rather than on the processes of creating the texts (but for an exploration of the student–teacher relationship in the second and first millennia BCE, see Cohen and Kedar 2011). For a recent, general overview of scribal training, with references, see Wagensohnner 2019.
10. For a general overview of the production of tablets, including the physical properties of clay, ways of shaping and forming tablets, and writing practices, see Taylor 2011 and the articles from two workshops investigating the production of tablets (Biga and Taylor 2011).
11. See, for example, an ancient exhortation: “Go! Knead your tablet! Make it! Write it! Finish your tablet!” from an Old Babylonian bilingual text, cited in Wagensohnner 2019: 141; see also Taylor 2011: 12. It is unclear how such texts fit into the scribal training system, nor their relationship to the actual practices that they describe (Crisostomo 2016).

Bibliography

- Akkermans, P. M. M. G., and K. Duistermaat. 1996. “Of Storage and Nomads: The Sealings from Late Neolithic Sabi Abyad, Syria.” *Paléorient* 22 (2): 17–44.
- Bell, C. 1992. *Ritual Theory, Ritual Practice*. New York: Oxford University Press.
- Biga, M. G., and J. Taylor, eds. 2011. “Produzione, composizione e analisi delle tavolette cuneiformi.” *Scienze dell’antichità* 17: 273–426.
- Bourdieu, P. 1977. *Outline of a Theory of Practice*. Trans. R. Nice. Cambridge: Cambridge University Press [first published as *Esquisse d’une théorie de la pratique, précédé de trois études d’ethnologie kabyle*, 1972].
- Bourdieu, P. 1990. *The Logic of Practice*. Trans. R. Nice. Stanford: Stanford University Press [first published as *Le sens pratique*, 1980].
- Buchanan, B. 1981. *Early Near Eastern Seals in the Yale Babylonian Collection*. New Haven and London: Yale University Press.
- Candlin, F. 2018. “Sensory Separation and the Founding of Art History,” in D. Howes, ed., *Senses and Sensation: Critical and Primary Sources, vol. 4, Art and Design*. London: Bloomsbury, 27–41.
- Cohen, Y., and S. Kedar. 2011. “Teacher–Student Relationships: Two Case Studies,” in K. Radner and E. Robson, eds., *The Oxford Handbook of Cuneiform Culture*. New York: Oxford University Press, 229–247.
- Collon, D. 1982. *Catalogue of the Western Asiatic Seals in the British Museum: Cylinder Seals II. Akkadian—Post Akkadian—Ur III Periods*. London: British Museum Publications.
- Crisostomo, C. J. 2016. “Multilingualism and Formulations of Scholarship: The Rosen Vocabulary.” *ZA* 106: 22–32.
- Ellis, M. 1992. *Nippur at the Centennial: Papers Read at the 35e Rencontre Assyriologique Internationale, Philadelphia, 1988*. Philadelphia: Distributed by the S. N. Kramer Fund, Babylonian Section, University Museum.
- Feldman, M. H. Forthcoming. “Making an Impression: How to Seal an Ur III Period Administrative Tablet in Nippur,” in B. M. Bryan, M. Smith, T. Di Cerbo, and M. Escolano-Poveda, eds., *Festschrift for Richard Jasnow*. Atlanta: Lockwood Press.
- Fischer, C. 1997. “Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagaš: Untersuchung zu den Verehrungsszenen.” *Baghdader Mitteilungen* 28 (1997): 97–183.
- Frahm, E., and K. Wagensohnner. 2019. “Cuneiform Writing: Origins, History, Decipherment,” in A. W. Lassen, E. Frahm, and K. Wagensohnner, eds., *Ancient Mesopotamia Speaks: Highlights of the Yale Babylonian Collection*. New Haven and London: Yale University Press, 23–43.

- Garfinkle, S. J. 2012. *Entrepreneurs and Enterprise in Early Mesopotamia: A Study of Three Archives from the Third Dynasty of Ur (2112–2004 BCE)*. Cornell University Studies in Assyriology and Sumerology (CUSAS) 22. Bethesda, MD: CDL Press.
- Garfinkle, S. J. 2015. “Ur III Administrative Texts: Building Blocks of State Community,” in P. Delnero and J. Lauinger, eds., *Texts and Contexts: The Circulation and Transmission of Cuneiform Texts in Social Space*. Boston and Berlin: De Gruyter, 143–165.
- Gibson, M., and R. D. Biggs. 1977. *Seals and Sealing in the Ancient Near East*. Malibu: Undena Publications.
- Hallo, W. W., and I. J. Winter. 2001. *Proceedings of the XLVe Rencontre Assyriologique Internationale, Part II: Seals and Seal Impressions*. Bethesda, MD: CDL Press.
- Hattori, A. 2001. “Sealing Practices in Ur III Nippur,” in W. W. Hallo and I. J. Winter, eds., *Proceedings of the XLVe Rencontre Assyriologique Internationale, pt. II, Seals and Seal Impressions*. Bethesda, MD: CDL Press, 71–99.
- Hattori, A. 2002. “Texts and Impressions: A Holistic Approach to Ur III Cuneiform Tablets from the University of Pennsylvania Expeditions to Nippur.” Ph.D. Dissertation, University of Pennsylvania, Philadelphia.
- Hawthorn, A., and A.-C. Rendu Loisel. 2019. “The Senses in the Ancient Near East: An Introduction,” in A. Hawthorn and A.-C. Rendu Loisel, eds., *Distant Impressions: The Senses in the Ancient Near East*. University Park, PA: Eisenbrauns, 1–20.
- Lave, J., and E. Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lemonnier, P. 1992. *Elements for an Anthropology of Technology*. Anthropological Papers of the Museum of Anthropology 88. Ann Arbor: University of Michigan Press.
- Leroi-Gourhan, A. 1993. *Gesture and Speech*. Cambridge, MA: MIT Press [originally published as *Le geste et la parole*, 2 volumes, 1964–1965].
- McMahon, A. 2006. *Nippur V: The Early Dynastic to Akkadian Transition: The Area WF Sounding at Nippur*. OIP 129. Chicago: Oriental Institute of the University of Chicago.
- Nissen, H. J., P. Damerow, and R. K. Englund. 1990. *Archaic Bookkeeping: Early Writing and Techniques of Economic Administration in the Ancient Near East*. Chicago: University of Chicago Press.
- Otto, A. 2019. “Glyptic,” in A. C. Gunter, ed., *A Companion to Ancient Near Eastern Art*. Medford, MA: Wiley/Blackwell.
- Owen, D. I. 1982. *Neo-Sumerian Archival Texts Primarily from Nippur in the University Museum, The Oriental Institute and the Iraq Museum (NATN)*. Winona Lake, IN: Eisenbrauns.
- Pittman, H. 2001. “Mesopotamian Intraregional Relations Reflected through Glyptic Evidence in the Late Chalcolithic 1–5 Periods,” in M. S. Rothman, ed., *Uruk Mesopotamia and Its Neighbors: Cross-Cultural Interactions in the Era of State Formation*. Santa Fe: School of American Research Press, 403–443.
- Pittman, H. 2013. “Seals and Sealings in the Sumerian World,” in H. Crawford, ed., *The Sumerian World*. London: Routledge, 319–341.
- Reichel, C. 2003. “Appendix: Sealing Practice,” in M. Hilgert, *Drehem Administrative Documents from the Reign of Amar-Suena*. OIP 121. Chicago: The Oriental Institute of the University of Chicago, 603–624.
- Sallaberger, W. 1999. “Ur III-Zeit,” in W. Sallaberger and A. Westenholz, *Mesopotamien: Akkade-Zeit und Ur III-Zeit*. OBO 160 (3). Freiburg: Universitätsverlag; Göttingen: Vandenhoeck & Ruprecht, 121–390.
- Schmandt-Besserat, D. 1992. *Before Writing*. Austin: University of Texas Press.
- Schmandt-Besserat, D. 1996. *How Writing Came About*. First Abridged Edition. Austin: University of Texas Press.
- Steinkeller, P. 1977. “Seal Practice in the Ur III Period,” in M. Gibson and R. D. Biggs, eds., *Seals and Sealing in the Ancient Near East*. Malibu: Undena Publications, 41–53.
- Steinkeller, P. 1989. *Sale Documents of the Ur-III-Period*. Freiburger Altorientalische Studien 17. Stuttgart: Franz Steiner Verlag Wiesbaden GMBH.
- Taylor, J. 2011. “Tablets as Artefacts, Scribes as Artisans,” in K. Radner and E. Robson, eds., *The Oxford Handbook of Cuneiform Culture*. New York: Oxford University Press, 5–31.
- Tinney, S. 2011. “Tablets of Schools and Scholars: A Portrait of the Old Babylonian Corpus,” in K. Radner and E. Robson, eds., *The Oxford Handbook of Cuneiform Culture*. New York: Oxford University Press, 577–596.
- Tsouparopoulou, C. 2015. *The Ur III Seals Impressed on Documents from Puzriš-Dagān (Drehem)*. Heidelberg Studien zum Alten Orient 16. Heidelberg: Heidelberg Orientverlag.

- Van De Mieroop, M. 2016. *A History of the Ancient Near East, ca. 3000–323 BC*. Third Edition. Chichester: Wiley-Blackwell.
- Viano, M. 2019. “On the Location of Irisağrig Once Again.” *JCS* 71: 35–52.
- Wagensonner, K. 2019. “Becoming a Scribe: On Aspects of Education and Apprenticeship in Ancient Mesopotamia,” in A. W. Lassen, E. Frahm, and K. Wagensonner, eds., *Ancient Mesopotamia Speaks: Highlights of the Yale Babylonian Collection*. New Haven and London: Yale University Press, 139–147.
- Wendrich, W. 2006. “Body Knowledge: Ethnoarchaeological Learning and the Interpretation of Ancient Technology,” in B. Mathieu, D. Meeks, and M. Wissa, eds., *L'apport de l'Égypte à l'histoire des techniques: méthodes, chronologie et comparaisons*. Cairo: Institut français d'archéologie orientale, 267–275.
- Wendrich, W. 2012. “Archaeology and Apprenticeship: Bodily Knowledge, Identity, and Communities of Practice,” in W. Wendrich, ed., *Archaeology and Apprenticeship: Bodily Knowledge, Identity, and Communities of Practice*. Tucson: University of Arizona Press, 1–19.
- Wenger, E. 1998. *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press [18th printing, 2008].
- Winter, I. J. 1986. “The King and the Cup: Iconography of the Royal Presentation Scene on Ur III Seals,” in M. Kelly-Buccellati, ed., *Insight through Images: Studies in Honor of Edith Porada*. Bibliotheca Mesopotamica 21. Malibu: Undena Publications, 253–268.
- Winter, I. J. 1987. “Legitimation of Authority through Image and Legend: Seals Belonging to Officials in the Administrative Bureaucracy of the Ur III State,” in M. Gibson and R. D. Biggs, eds., *The Organization of Power: Aspects of Bureaucracy in the Ancient Near East*. Studies in Ancient Oriental Civilization 46. Chicago: Oriental Institute of the University of Chicago, 69–116.
- Woods, C. 2010. “The Earliest Mesopotamian Writing,” in C. Woods, ed., *Visible Language: Inventions of Writing in the Ancient Middle East and Beyond*. OIP 32. Chicago: Oriental Institute of the University of Chicago, 33–84.