A000-Seals-Cylinder

**Seals and Sealings**

1. **Background**

**From the eighth millennium BCE to the third millennium BCE in a zone extending from northern Mesopotamia through the Persian Gulf to the Indian sub-continent the use of the impersonal stamp seal was employed in economic and administrative contexts with the development of inter-regional trade and exchange. This was an intense period of inter-societal interactions that required communications among peoples of widely differing linguistic backgrounds. Consequently, the stamp seals of this period made use of commonly recognizable signs that could be used in impersonal economic transactions.**

**Then in the fifth millennium BCE in southern Mesopotamia a new type of seal, the cylinder seal, was developed to express the intimate personal identity of a rising mercantile class of bureaucrats during the early stages of state formation. These carved cylinders of precious or semi-precious stone, and later bronze, display scenes involving beings both natural and supernatural that visually presented legends and myths reflective of the identity of a family cohort. They were displayed as talismanic stone amulets reflecting the enduring identity of the founding patriarch, his progeny, and their social, religious, and legal obligations (Cassin 1960; Radner 2005: 22–23; 78-79; Koppen 2002).**

**The cylinder seal was, literally, the revolving stage expressing one’s personal piety linking the mythic characteristics of favorite Mesopotamian deities with themselves. Cylinder seals were rolled on wet clay to obtain a mirror impression, and these mirror sealings have been found on a variety of clay surfaces: cuneiform documents, clay slabs and ceramic jars. Cylinder seals were made possible by an emerging group of gifted intaglio artists who incorporated psychological insight into constructing familial psycho-mythologies into recondite iconographies (Wiggermann 2003). Practically, Old Babylonian cylinder seals defined the seal owner in four lines: by name, profession, parentage, and a god or ruling king as the master to whom the individual within his family cohort group were portrayed as servants (Charpin 1990). For the iconography to be authentic it is suggested that the artist knew the family and its traits in order to portray their collective psycho-mythology accurately. Family members, therefore, were obligated to invoke their familial deity, perpetuating a piety that acknowledged familial not individual identity. When deviations from this scheme occur they can be seen as a consequence of famial piety subsuming individuality. While the individual seal owner’s name can be missing from the usual schema, the master’s name (deity or regent) is always present as the object of collective devotion to the “god of the [founding] father” of the family (Oppenheim 1977: 198).**

The study of the function of seals and sealings has played a major role in the

reconstruction of administrative practices in times and places where writing was not yet

invented or was still not widely used. But whenever information on the administrative practices

could be drawn from the texts themselves, scholars have tended to focus on the text itself and

less on the sealing practice. This is especially true for early publications of cuneiform texts,

when authors did not even acknowledge the existence of a seal on the documents they

published. Assyriologists are increasingly aware of the sealing practice on

cuneiform documents; their interest focuses mainly on the text of the inscribed seals, the so-called

“legend”, in combination with the text of the sealed document. Since most seals were

an-epigraphic and since the sealing practice is not limited to the textual information, the main

bulk of literature on this topic is iconographical. In addition, information regarding the physical

characteristics of the sealed documents, their location within the archaeological context and information that can be obtained from any text written on them.

**2. Brief overview of iconographic repertoire**

An overview of miniature glyptic art of more than five millennia encompasses a number of iconographic characteristics that are detailed in the following sources" Porada 1947, Boehmer 1965, Amiet 1980, Porada et al 1980, Teissier 1984, Collon 1987, Pittman 1994 - to name just a few.

In the prehistoric period stamp seals were mostly decorated with geometric patterns and

animal scenes. In the Uruk period, geometric designs and animal scenes were again preferred,

with a wide variety of animals represented, but also characteristic of this period are the pigtailed

figures in a variety of performing activities. Uruk cylinder seals are mostly made of

limestone or gypsum while a few were of lapis lazuli. In the Jemdet Nasr period, animals,

activities and geometric patterns are characteristic. The materials used were mostly soft stones

such as chlorite or calcite, while also one can find hard stones such as rock crystal.

It is in the Early Dynastic period that more complex and individualized scenes appear:

contest scenes, banquets, figures and animals together. The banquet scene became popular in

the ED III period. Cylinder seals of this period were made mostly from soft stones, such as

marble, calcite, limestone while there appear also seals made of precious materials, such as

lapis lazuli and alabaster.

Characteristic scenes of the Akkadian period are the contest scene, and plenty of

“mythological scenes” with the Sun god and the Water God. There are also many introductions

and worship, banquet scenes. Akkadian seals are usually large concave cylinders, and have two

main themes. The predominant material used for cylinder seals of this period is serpentine,

while seals of diorite, greenstone, jasper and rock crystal have also been found.

By the Ur III period, the standard scene was the presentation, either towards a deity or the

king. Several variations of the presentation scene occur: audience with the king, introduction of

a worshipper to a deity or the king by the Lama-goddess, salutation scenes, etc. There are

however still some contest scenes as well as a few ritual scenes, especially libation scenes.

Serpentine and steatite were the predominant stones used, while there exist also seals made of

marble, hematite and lapis lazuli.

In the Old Assyrian trading colonies, the seals that appear impressed on cuneiform

documents seem to be quite distinct but also influenced from the Mesopotamian tradition. The

main material used for the manufacture of seals during this period is hematite. Introduction

scenes, worship and procession scenes are rather common, while the weather god is the most

often represented deity.

The Old Babylonian seals were quite “formal”, and the repertoire ranged from presentation

scenes with deities and worshippers, to contest scenes and a few ritual scenes. New figures

appear such as the figure with the mace, god with scimitar, or the nude figure. The prevalence

of hard stones is also evident; hematite, limonite and serpentine being the preferred stones,

while in the Late Old Babylonian period there appears seals with long inscriptions made of

agate or jasper.

In northern Mesopotamia and Syria during the Mitannian hegemony, two glyptic styles

can be distinguished: the “Common” and the “Syro-Mitannian style”. Seals of the “common”

style although distinctive are rather limited in their iconographic repertoire, with simple ritual

scenes predominating, usually figures flanking a tree. The materials par excellence for their

manufacture was compositional, and occasionally some have been found made of chert and

hematite. Seals of the “Syro-Mitannian” style on the contrary are characterized by the use of the

drill on hard stones, such as hematite, chalcedony, carnelian and agate. The iconography motifs

are taken from Cappadocian, Syrian and Mesopotamian seals, with ritual scenes, drinking and

offering scenes, scenes of animal rows.

In the south, Kassite seals, found as far as Dilmun (Bahrain), the Persian Gulf, Mycenaean

Thebes, and the Ulu-burun shipwreck, are divided into several stylistic groups: the First

Kassite Group - with one or two figures, filling motifs and long inscriptions - which was in use

throughout the 14th century, the Pseudo-Kassite style – linear style, seals of soft composite

materials – which was used in the later half of the 14th century, the Second Kassite Group –

with its most characteristic scene a mountain deity flanked by streams of water – which

appeared in the second half of the 14th century and the Third Kassite Group – uninscribed, of

soft stones and quartz, often depicting quadrupeds flanking a tree – which appeared in the 13th

century and dominated the glyptic production of the second Dynasty of Isin. The first and

second Kassite groups included seals made of hard stones, such as chalcedony and agate and

were often mounted on golden caps.

Middle Assyrian glyptic art has been distinguished in three phases: early (14th century),

middle (13th century) and late (12th century). The later phase shows a greater variety of

iconographic repertoire with chariot scenes and cultic scenes before temples, while contest

scenes were prevalent in all phases of this period. In animal scenes, characteristic of this

period, the horse and the winged bull appear for the first time in the glyptic art, only to reappear in the Neo-Assyrian glyptic art. Agate, marble, quartz, carnelian, were the most preferred

stones while there are also seals made of soft materials, such as talc.

In the first millennium, devotional, hunting, contest, banquet, siege and animal scenes

characterize Neo-Assyrian glyptic repertoire. Subject matters treated in the glyptic art of the

period include the “royal worship”, the “king with bow and cup”, the “king”s fight with the

lion”, “figures flanking a tree”, the “siege”, the “hunt”, etc. (Winter 2000). Soft stones

(serpentine and limestone) are the preferred material for the 9th century, while by the end of the

9th century seals were cut on hard stones. By the end of the 7th century, stamp seals had

replaced cylinder ones in relation to official business. Distinguishing between Neo-Babylonian

and neo-Assyrian seals seems difficult, but there appear certain characteristics that aid this

identification. Neo-Babylonian seals were cut almost entirely in hard stones; other typical

Babylonian features are the high headdress worn by deities; the duplication of figures; and the

wings of equal length in the four-winged creatures.

During the Achaemenid period, both cylinder and stamp seals were used; stamp seals were

used privately while cylinder seals were used for official business, in contrast to Neo-Assyrian

and Neo-Babylonian practices 200 years before. Many links can be found between the

Achaemenid glyptic and that of Neo-Assyrian and Neo-Babylonian. Colorful stones were

chosen as the medium for the seals, such as agate, jasper, chalcedony, while iconographically

the main subjects were the royal hero grasping animals, the kneeling archer, abstract designs,

animals in combat.

**3. Brief overview of sealing practices on lumps of clay (sealings)**

Stamp and cylinder seals have been impressed on a variety of clay objects since the 7th

millennium. However, information on the function of these sealed clay surfaces can be obtained

mainly from the Late Neolithic period onwards. The study of sealings entails, apart from the

iconography and style of the seal impressed, the study of the function of the sealing. Namely

only by studying the underside of the lump of clay are we in a position to comprehend the use

and function of sealings. The underside bears marks of the object on which the sealings were

attached to, such as strings, ropes, leather surfaces, textiles, door pegs, clay and stone vessels

and many more (see Otto 2009). The pioneer in this avenue of work is Fiandra (1975) and

many researchers have since followed her lead (Charvat 1988; Zettler 1987).

The earliest documented use of sealings comes from Northern Mesopotamia and

especially from Sabi Abyad, in the Balikh Valley in Northern Syria. In Level Six, which was

destroyed by fire and dated to the transition between Late Neolithic and the Halaf period,

approximately 300 sealings were found (Duistermaat 2010). These sealings used on baskets,

jars, stone bowls, leather bags and mats, were mostly found in two rooms of Building II,

identified as a storage area, and associated with vessels, figurines and tokens (Akkermans &

Duistermaat 1996). No door sealings have been found.

In Degirmentepe located on the upper Euphrates, approximately during the end of the fifth

millennium, about 450 sealings were found, attached to sacks and jars, doors as well as bullae

(Esin 1994: 66-69). Twenty-four stamp seals were also found. These seals and sealings were

generally found dispersed at the site of Degirmentepe, but most sealings were found together in

one room.

At Tepe Gawra, located near the Upper Tigris in northern Mesopotamia, at Level VIII

(Rothman, 1997: 185), sealings have been found in connection to centralized administration

and storage. Sealings for closing sacks, bags, baskets, jars and doors, as well as bullae have

been found within a central storehouse, within a building interpreted as an administrative

center, and within buildings related to workshops and religious areas (Rothman 1994).

The earliest levels of Arslantepe date to the end of the Northern Ubaid period (end of fifth

millennium). In the VIa period more than 2000 sealings were found discarded in a fill within Building IV”s southern storeroom, a palace-like complex. The excavators managed to match

the sealings to their function and have recognized jar-sealings, door sealings, sealings that

closed containers such as bags, sacks and wicker containers. When the item that was sealed

was opened, the sealing was kept and carefully discarded (Frangipane 2007).

Sealings have been also found within purely domestic contexts in Northern Mesopotamia,

such as at Hamoukar, where hundreds of sealings from jar and baskets have been excavated

(Reichel 2002). Equally, from the LC3-4 structures at Brak (LC3 corresponds to Middle

Northern Uruk, approximately 3600 BCE), many sealings applied on containers were discarded

at dumps (Emberling & McDonald 2003; McMahon et al 2007: 163-166). Hacinebi has also

produced a number of sealings used only to close containers, such as bags, sacks and baskets

while there is no evidence at all for door sealings (Pittman 1999).

Even though sealing has been and still is equated to bureaucracy, evidence from the above

“households” in Northern Mesopotamia shows that the act of sealing was not reserved for the

state or the elite but it is also “a property control mechanism at the level of the household…

clearly not restricted to centralized political authority” (Ur 2010: 397). Moving on to the third

millennium in Northern Mesopotamia, Tell Beydar seems to have the largest corpus for the

sealing practices of Late Early Dynastic in the North. 1535 sealings, representing 215 different

designs (Jans & Bretschneider 2011). Forty-four Nineveh sealings have been studied by

Charvát (2005; the reverse of the sealings) and by Collon (2001; iconography), produced in the

transition from Ninevite 4 to Ninevite 5 in the early third millennium BCE. Sixty-four per cent

of the sealings were attached to mobile containers, while 16 per cent were used for door

locking mechanisms, non-existent in Ninevite 2-3 sealings.

In Southern Mesopotamia, evidence for sealings comes mainly from the 3rd millennium

BCE, as well as from Uruk and Susa in Iran for the end of the fourth millennium. Charvat

(1988) studied the sealings from Susa dated from 4000 to 2340 BCE and concluded that Susa

B-style seals (used 4000-3500 BCE) were used for the closing of mobile containers (bags,

sacks, pots), Susa C-style stamp and cylinder seals were reserved for bullae and for closing

doors (‘locks), while Proto-Elamite and Pre-Sargonic cylinder seals were employed both for

mobile containers and for door apertures.

In the Early Dynastic period at Fara large collections of sealings have been found in two

loci: a rubbish dump of ED I date and a large house of ED IIIa date. At least 838 sealings were

found in the ED rubbish dump; from the identified ones 88 percent were door peg sealings, and

only 9 per cent were applied to containers (Matthews 1991). From the sealings found in the

house, 75 per cent were door peg sealings, while 14 per cent were from containers, indicating a

more heterogeneous range of activities.

Similar functions to the door sealings from the dump in Fara can be seen from the sealings

found at the Seal Impression Strata at Ur (Legrain 1936), where again almost all sealings were

applied to doors and were probably discarded after use in a building of supra-domestic

function, perhaps a temple. Again in the Ash Tip at Abu Salabikh (Martin & Matthews 1993),

out of the total 202 sealings unearthed, door peg sealings prevailed – almost 57 per cent of the

sealings were used for the aperture of doors. This seems to have been also the case from the

4C88 dump at Jemdet Nasr (Matthews 1990). Moving to the Ur III period, Zettler has studied

the 149 clay sealings found in Level IV of the Inana temple and managed to reconstruct

administrative procedures operating at the building from the sealings.

From the above it seems that sealings as part of door locking or closing mechanisms

appeared first in Late Ubaid period, but were consolidated only in the third millennium in both

North and South Mesopotamia.

In the second millennium BCE, sealings have been found in both North and

South. In Kassite Nippur, sealings were found that were used to close doors, as well as some

that were attached on containers. In Tell Sabi Abyad, more than 170 sealings have been found

dated to the Middle Assyrian period, mostly impressed with cylinder seals and rarely with stamp seals. Thirty-one different seals have so far been identified impressed on these clay

sealings with no correlation to the actual seals found so far. These sealings were used to either

close doors or mobile containers (bags, wooden boxes, pottery jars). Interestingly only two

seals were used both for fastening doors and mobile containers.

In the first millennium, Herbordt”s study remains the most complete (1992: 53-70) for

Neo-Assyrian sealings. 565 sealings come from Nineveh, found within Room LXI of the

Southwestern palace in the excavations by Layard, while 66 sealings have also been found in

Nimrud. Those were used to close mobile containers, while there are also a few that were used

to fasten doors. But as writing takes over, documentation and study of sealings practices other

than on tablets weans. The above are examples of the few studies that concentrate on sealings

in the 2nd and 1st millennia on other media than documents.

**4. Brief overview of sealing practices on cuneiform documents**

A very brief overview for sealing practices on documents is included (for a philological

overview of sealing practices, see Radner 2009). As just shown, seals were stamped on clay

surfaces from at least the 7th millennium BCE. However, it is only in the 4th millennium BCE,

during the Uruk period, that they appeared alongside writing, impressed on clay tablets bearing

numerical notations and cuneiform signs. Those were the so-called archaic tablets, coming

mainly from Uruk and Ur - two of the most important southern Mesopotamian sites - and the

sealing practice of these documents has been extensively studied (Matthews 1993;). From the

end of the 4th millennium until the end of the 3rd millennium the practice of sealing cuneiform

documents were scarce, whereas the sealing of other media, such as baskets, doors, pots and

tags were common. Whether this was intentional or due to accidental discovery is hard to say.

Tablets from the Early Dynastic I period (c. 3000-2750) are lacking seals, and the same is true

for the Early Dynastic II tablets (c. 2750-2600), while for the late Early Dynastic (2600-2350)

there is only one sealed envelope from Lagash (Zettler 2007).

From the Akkadian period (2334-2154) only eleven tablets are known to be sealed (Rakic

2003): four administrative tablets of unknown provenance, recording delivery of ovine

animals, written in Sumerian; one administrative tablet encased in a sealed envelope from

Nippur, written in Akkadian, documenting receipt for barley; one administrative tablet of

unknown provenance, of the letter-order type, authorizing an issue of grain, written in

Sumerian; one more letter-order from Uruk, written in Sumerian, and an unprovenanced letter order written in Akkadian. There are also three legal documents which were sealed: one letter order in Akkadian regarding the beginning of a court case, a sealed tablet probably from Isin

recording the conclusion of a legal case and one sealed legal text from Nippur.

On the contrary, sealed documents from the Ur III period (2112-2004) number to

thousands and it seems that it is only during this period that rolling a seal on a document

became mainstream practice. From the Ur III we have a corpus of more than 120,000 tablets

documenting minute details of one of the most centralized bureaucratic systems ever known,

stemming from at least six administrative centers of the state and the periphery: Umma,

Drehem, Nippur, Girshu, Garshana and Ur. Almost one fifth of these documents was sealed.

The majority of Ur III sealed documents come from Umma, where almost half were sealed

(Mayr 1997; Dahl 2007). Hattori has studied extensively the sealed tablets from Nippur (2001,

2002), whereas Laurito in D”Agostino et al. (2004) studied some Ur sealed documents from the

British Museum. However, Ur sealed documents have not yet been comprehensively studied.

The same is true for the sealing practice on documents from Girsu; Fischer (1992; 1997) has

studied such Girshu sealed tablets, housed in the British Museum. Tsouparopoulou (2008;

forthcoming) has comprehensively studied the Drehem sealed documents, and the Garshana

material is currently being prepared for publication by Mayr (forthcoming). However, the bulk

of material related to the sealing practice during the Ur III period remains to be documented and studied.

By the second millennium seal praxis on inscribed documents becomes much more

complicated, since it is then that we start having private archives, i.e. archives belonging to

merchants, families etc. and the first proper legal documents. In Southern Mesopotamia, during

the Old Babylonian period (c. 2000-1600), sealing played a major part in legal transactions,

private and official (Renger 1977). The sealers were mainly the witnesses and participants to

these transactions (Blocher 1992a; 1992b). The practice of encasing tablets in a sealed

envelope also becomes mainstream during this period, again mainly to document legal affairs

and contracts (Leemans 1950, 1960, 1982; Kraus 1985). The envelope was used to safeguard

the content of the tablet and if a dispute arose, the envelope could be torn open and the actual

contract read. Interestingly, in Ur the use of an actual seal seems to have been thought of as

essential; even clay seals made on the spot are attested (the so-called burgul seals) in contrast

to Sippar (Tanret (2010), Nippur, and Dilbat where garment hems or fingernails could be

impressed in place of a seal (Blocher 1991: 144).

In Northern Mesopotamia, during the Old Assyrian period (1900-1740), merchants left the

capital Assur to establish trading colonies in Anatolia for the acquisition of silver and gold by

exchanging textiles and tin, with the most famous trading colony being Kanesh (modern-day

Kültepe). These merchants communicated with the capital and their families via letters and it is

mainly this correspondence that was sealed. However, the seals used on these documents were

mostly uninscribed, making the sealing practice difficult to apprehend (Teissier 1994; Özguc-

Tunca 2001).

During the Mitanni period, in the North (c. 1500-1370), Nuzi produced most of the written

documentation for the period (almost 20,000 tablets), with family legal archives occupying the

main bulk of textual evidence, although there are some few public documents. The sealing

practice on the documents stemming from the archive of Šilwa-teššup has been

comprehensively studied by Stein (1993), while the sealing practice on documents from the

Pula-Hali family archive has also been studied by Lion and Stein (2001).

In the south, after the fall of the Old Babylonian Empire and the sack of Babylon by the

Hittites in 1585 BCE, the Kassites took over Babylon. Of unknown origin, they came to rule

Babylonia for almost five hundred years. The sealing practice of this period has been studied

by Matthews (1993), with a focus also on the iconography and style of the cylinder seals.

The sealing practice of the documents produced during the Middle Assyrian period (c.

1400-1050), when Assyria re-emerged as a political power after a long period of decline, has

been the object of numerous studies [Röllig 1980; Postgate 1986 and most recently Feller

(forthcoming)]. The bulk of documentation comes from the capital Assur and other provincial

centres such as Tell Billa (Matthews 1991), Tell al-Rimah, Sheikh Hamad and Tell Sabi Abyad

and comprises both private and official texts. All or some of the witnesses present usually

sealed the legal contracts in the legal case, as well as the person accepting liability. On the

other hand, the administrative texts bear the seal impression only of the person acknowledging

liability.

The first millennium was a period of major political changes in Mesopotamia, which left

their imprint on administrative practices. Thus the subsequent documentation and sealing

practice also evolved and changed. For example, during the Neo-Assyrian period (911-612

BCE) the seal was sometimes not used to secure the content of the text against tampering, but

to add more information to the text written on the tablet (Radner 2008). Moreover, during this

period and especially in the second half of the 8th century BCE, the stamp seal, which had

fallen out of use, reappeared and slowly started taking over from the cylinder-seal (Boehmer

1976: 343). The sealing praxis consequently changed since the application of a stamp seal on a

clay surface is quite different from that of a cylinder. An innovation of this period was the use

of “bureau seals”: “seals that are associated with a particular administrative department - a

“bureau”- rather than a specific person and that exist in a number of copies…(T)he bureau seals employed by the palace administration were always stamp seals.” (Radner 2008). Interestingly

those seals, in contrast to seals used in previous periods by officials high in the bureaucracy,

were of very simple design. For Neo-Assyrian sealing practices on documents, see Herbordt

1992 and Klengel-Brandt & Radner1997.

During the Neo-Babylonian period (626-539 BCE) sealed documents were usually

administrative and legal in nature coming both from private as well as official archives (Jursa

2005). Generally, Neo-Babylonian sealed tablets were differently shaped from the rest. One

main aspect of sealed Neo-Babylonian legal texts was the clauses included at the end of the

text with the list of the witnesses present (Baker 2003). After that a seal could be impressed,

followed by a caption, or there could be a caption only, nail-marks or blank edges.

In the Achaemenid period, two archives have been mostly unearthed with tablets

impressed with stamp seals: the Persepolis Fortification tablets and the private Murašû archive

at Nippur (Bregstein 1993). The majority of the Persepolis archival texts (almost 15-18,000

distinct tablets) are in the Elamite language and record storage and distribution of food. There

are also a number of uninscribed, sealed clay tags (Jones & Stolper 2008). The seal praxis on

both inscribed and uninscribed tablets on the Persepolis archive seems to be consistent between

the size of the tablet, the number of sealings on the tablets and the office held by the sealer

(Garrison 2008). The Murašû family archive comprises 880 cuneiform clay tablets written in

the Late Babylonian dialect of Akkadian, together with some twenty anepigraphic sealed clay

tags. Many of the tablets were impressed with cylinder and stamp seals of the Babylonian

style, as well as with metal rings and fingernails. Captions were included in cuneiform

documenting the personal names of the witnesses and sealers (Bregstein 1993; 1996).

**5. The Physical Material of Seals and Sealings**

Two main “types” of seals and their sealings (impressions) can be identified: 1) the physical seals, and 2) the impressions of those seals on clay impressed on wet clay that were integral to

tablets, tablet clay envelopes, and bullae or lumps of clay used to secure as a sealing device

doors, baskets or ceramic containers.

The so-called physical seals could be of many different shapes, the two main being the

cylinder (fig. 1a) and the stamp seal (fig. 1b), followed by ring seals, engraved amulets, and

engraved pendants.

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***Figure 1a: Physical seals together with their modern impression. Old Babylonian cylinder seal;***

***hematite; BM ME 86267.***



***Figure 1b: Pyramidal-shaped Neo-Babylonian stamp seal; chalcedony; BM***

***ME 115607 © Trustees of the British Museum***

The second “type” of material, the impressions left on clay objects, produce what we will

call composite seals (fig. 2): the mirror image of the physical seal, reconstructed from the

ancient impressions of the physical seal on objects, for which we do not have the physical seal.

In cases where we have only one impression of a particular seal then that impression is treated

as the composite seal.

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***Figure 2: Drawing of an Old Assyrian seal composite. CS 73, Pl 21***

It is extremely rare to have both the ancient physical seal and its ancient impressions on clay

objects. Hallo documents two such confirmed cases for an Old Babylonian and a Kassite seal

(Hallo 2001: 252, 253 n. 43), while he also mentions two possible cases from the Ur III and the

Old Assyrian period (Hallo 2001: 246-267). Radner (2012) recently confirmed a fifth case for

the Neo-Assyrian period. This database would eventually facilitate such recognition and

answer important questions as to the function of seals.

**6. Documentation related to Seals and Sealings and Their Significance**

Here, the main categories of information related to both the physical seals and their sealings will be discussed.

6.1 Basic information

Basic information, such as the museum/collection number of the physical seal, publication data

of the physical seal and of the composite seal (if there exists – but only of the composite seal

and not the object(s) on which we have the impressions), and chronology can be documented. Chronology requires many different stylistic characteristics, many different geographic

peculiarities, and time-horizons if they relate to find spots in an archaeological site.

Moreover, information on the provenience of the physical seal is also of concern. With

provenience, apart from the main excavation site and the find spot square, the find spot

location if known can also be documented, such as whether the seal was found in a grave, on

the street, in a public building, rubbish dump, archive, storeroom/magazine, in a room fill, as a

surface find, etc.

6.2 Iconography/design:

Iconographic information derives from both physical and composite seals. The main

distinction is made between figurative and geometric **design**. Afterwards, one can choose the

**scene** appearing on the seal such as human activity, warfare, presentation, master of animals,

worship, mythological, sexual, hunting, contest, boat, banquet, procession, ritual and

commemorative, unidentifiable, and other. After choosing the scene, one is asked to choose

**elements** that appear in the scene: for example crafts, deities, filler motifs, emblems, body

parts, astral symbols, architecture, heroic figures, monsters, etc. Then a free-text field is used to

describe the seal. This is considered extremely important since art needs to be described with

words chosen each time by the art historian and cannot always fit in boxes. Style can also be

included in free-text field. Lastly, there is a field where one can enter information on the

composition of the seal: whether it is circular, heraldic, in one-register, two-registers, têtebêche,

triangular, vertical or other.

6.3 Technology of seal manufacture and the sourcing of materials used

Information on the technology of seal manufacture derives from its

**sealing device** (whether it is a cylinder, a stamp, a seal-ring, and an engraved

amulet or engraved pendant). This can provide crucial information regarding its user and its intended use. 

***Figure 3: Cylinder seal of lapis lazuli with original gold mounting or ornamental caps and its modern***

***impression, from the Royal Cemetery at Ur (2200-2100 BCE); BM 121547 © Trustees of the British Museum***

There are various incising **techniques that can be used to help identify style and/or period and method of manufacture. The material of the physical seal is also of importance to help identify its provenience, since many minerals may be identified as to their source location. If one is dealing with a sealing, it may be possible to identify the source of the clay using mineralogical assays of chemicals in the clay.**

6.5 Inscriptional information

Inscribed seals first appeared in the Early Dynastic period, when the “legend” of the seals most

commonly included the seal owner’s personal name and his/her patronymic. In the Akkadian

period, many seal legends bore also the owner’s professional affiliation. In the Ur III period

there appear inscribed seals denoting also the seal owner’s servitude, either towards the king, a

deity or other individuals. The same applies also to the Old Babylonian period, while in Late

Old Babylonian and Kassite seals there appear legends with a short prayer; incantations appear

only on Kassite seals. From the Mitannian period onwards seals were only rarely inscribed.

The inscription was cut vertical to the design of the seal, and by the Achaemenid times the

rotation changed to 90° and could now be read horizontally (Gelb 1977). Interestingly while

on most seals of the third and second millennia, the inscription was cut in negative, so that

when impressed on a clay object it would be positive and thus legible, on many seals of the

first millennium the legend seemed to have been cut in positive (Collon 2001: 17). On the

contrary, many Neo-Babylonian seal impressions show the inscription on positive.

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