

Received: 27 November 2023 Accepted: 31 January 2024 DOI: 10.33182/aijls.v3i2.2851

## Where Have All the Ur III Seals Gone?

## Jacob L. Dahl<sup>1</sup>

#### Abstract

In this paper I analyse the late 3rd millennium and early 2nd millennium seals in two mid-size collections and reach the conclusion that exceedingly few of them date to the Ur III period (c. 2100 – 2000 BC). I include some observations on other collections. I then ask the basic question: where have all the Ur III seals gone? After briefly exploring other options, I suggest with **online visual evidence**, that the vast majority of the Ur III seals were re-cut in the Old Babylonian period. At the end of the paper, I suggest that the absence or presence of seals from specific periods can be used to model larger historical trends.

**Keywords:** Cylinder seals; Ur III period; Old Babylonian Period; Re-cut objects; Heirloom objects

## Introduction<sup>2</sup>

The cylinder seal is one of the most iconic objects from ancient Mesopotamia. Invented in the middle of the Fourth Millennium BC in response to the growing complexities of early urban society, cylinder seals always fulfilled many functions in ancient society. Of course, the primary function of seals was always administrative—verifying transactions, controlling access, and identifying people—but seals were also an extension of the self with magic properties and were

<sup>2</sup> This article was partly written during my research visit at the Getty Center, Los Angeles, summer of 2023. The following people have all read and commented on previous versions of this paper, and are here thanked: Hannah Kahng, Émilie Pagé-Perron, Klaus Wagensonner, Nicholas Reid, and Richard Firth. Thanks are also due the two anonymous reviewers for their constructive and useful criticism. Needless to say, all errors in this paper are mine.

This is an open access article licensed under <u>CC BY-NC-ND 4.0</u>, which permits use, distribution, provided the original work is properly cited and is not used for commercial purposes. © 2023 The Author. AVAR published by Transnational Press London.



<sup>&</sup>lt;sup>1</sup> Jacob L. Dahl, Oxford University, Oxford, UK. E-mail: jacob.dahl@ames.ox.ac.uk

often used as jewelry and for votive offerings.<sup>3</sup> As a consequence of their importance in both domains, and of course fundamentally their intrinsic value, as they were often produced from imported, valuable materials, seals were often re-cut and handed down for generations.<sup>4</sup> Impressions of seals are found on multiple different surfaces, from tags and cuneiform tablets, to jar stoppers and door sealings.

In 1947 E. Porada, then perhaps the leading specialist of Ancient Near Eastern seals, suggested that more than 10,000 physical seals existed in collections worldwide.<sup>5</sup> No published survey of collections lay behind this estimate, and participants at a workshop held in 2014 at the University of Oxford suggested that at least 50,000 physical seals exist in collections worldwide.<sup>6</sup> The numbers of sealed clay artefacts are in the tens of thousands, with in addition as many as one hundred thousand sealed cuneiform tablets.

This article is concerned with dating of ancient objects. However, straight forward as this may seem, many ancient objects had surprisingly long lifespans, many became heirloom objects, were altered and reused; some were even later rediscovered only to inform or disinform their new

<sup>3</sup> The general introduction to seals is Dominique Collon, *First impressions : cylinder seals* in the ancient Near East, Revised and updated ed. (London: Trustees of the British Museum, 2005). For ANE seals in context see Dominique Collon, 7000 years of seals. Papers of a seminar held by the Dept. of Western Asiatic Antiquities in the British Museum, 29 June to 2 July 1992 (London: British Museum Press, 1997).

<sup>4</sup> Clemens Reichel, "A Modern Crime and a Ancient Mystery: the seal of Bilalama," in Festschrift für Burkhart Kienast zu seinem 70. Geburtstage dargebracht von Freunden, Schülern und Kollegen., ed. G. Selz, AOAT (2003); Rudolf H. Mayr, Seal Impressions on Tablets from Umma, ed. D. I. Owen, vol. 7, Cornell University Studies in Assyriology and Sumerology, (Pennsylvania: Penn State University Press, n.d.), 10. See Jacob L. Dahl, "Neo-Sumerian Temple Treasure Inventories," Supplements to the Journal of Ancient Civilizations 7 (2021): 45, 49, for evidence of seals hoarded in temples. <sup>5</sup> Edith Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan* 

<sup>&</sup>lt;sup>6</sup> See now Klaus Wagensonner, "Eine Welt in Miniatur. Ein Essay zu Aufnahme und Abbildung von Rollsiegeln.," ed. K. Wagensonner and G. Selz (Wiener Offene Orientalistik, n.d.).



Library (New York: Pierpont Morgan Library, 1947).

owners of a distant past.<sup>7</sup> For those reasons, I use the term *instance* to refer to the current, or terminal, version of a cylinder seal. An Ur III seal may be an *instance* of an older Old Akkadian seal, or an Old Babylonian seal may be an *instance* of an Ur III seal. Sometimes, it may be possible for us to discern two (or more?) *instances* on the same physical object,<sup>8</sup> or indeed using the impression of a seal and a later physical *instance* of the same seal to identify two *instances* of a seal (see the seal of Ana-Sin-taklaku discussed below as number **9**). In the Cuneiform Digital Library Initiative (CDLI, see <u>https://cdli.ucla.edu</u>), each *instance* of a seal is given its own unique identifier (P-number) as well as its own unique Seal number (S-number). The S-number is used to identify impressions of the same seal, ideally linking these to an extant seal.<sup>9</sup>

The Ur III dynasty (c. 2100-2000 BC), probably the period with the best developed central administrative machinery of all Mesopotamian states, produced staggering numbers of cuneiform tablets. Today more than 110,000 tablets are known, mostly dating to the middle 50 years of the period.

<sup>&</sup>lt;sup>7</sup> See for example the well-known example of the dynastic seals and the seal of Assur rolled on the 'Vassal Treaties of Esarhaddon' (D. J. Wiseman, "The Vassal-Treaties of Esarhaddon," *Iraq* 20, no. 1 (1958): 16ff); for an extreme example see Serap Yaylali, "An Old Babyonian Cylinder Seal from Daskyleion in Northwestern Anatolia," *Ancient Near Eastern Studies* 42 (2005), discussing an Old Babylonian cylinder seal found in northwestern Anatolia; see also the cylinder seals found at Thebes, Greece, see Edith Porada, "The Cylinder Seals Found at Thebes in Boeotia," *Archiv für Orientforschung* 28 (1981-82), and Giacomo Maria Tabita, "Reflecting on the Thebes Treasure and its Kassite Findings: The Glyptic Art and its Geo-Political Context and Distribution," *The International Journal of Ancient Iranian Studies* 1, no. 1 (2021).

<sup>&</sup>lt;sup>8</sup> Collon, First impressions : cylinder seals in the ancient Near East, 120-22; Erika Bleibtreu and Stephania Constantinescu, Rollsiegel aus dem Vorderen Orient : zur Steinschneidekunst zwischen etwa 3200 und 400 vor Christus nach Beständen in Wien und Graz : Sonderausstellung der Ägyptisch-Orientalischen Sammlung im Münzkabinett des Kunsthistorischen Museums in Wien (Wien: Verlag für Vorderasiatische Archäologie, 1981), 33, seal no 35; Agnete W. Lassen and Enrique Jiménez, "NBC 3171: A recarved Old Babylonian/ Kassite seal," Ash-Sharq: Bulletin of the Ancient Near East – Archaeological, Historical and Societal Studies 6, no. 1 (2022).

<sup>&</sup>lt;sup>9</sup> Robert K. Englund, "Seals and Sealing in CDLI files," *Cuneiform Digital Library Notes* 4 (2014), <u>https://cdli.mpiwg-berlin.mpg.de/articles/cdln/2014-4</u>, and Richard Firth, "Notes on composite seals in CDLI," *Cuneiform Digital Library Notes* 26 (2014), <u>https://cdli.mpiwg-berlin.mpg.de/articles/cdln/2014-26</u>.

Although data is not available for all sites, we can estimate that at least half of these were sealed with a cylinder seal in antiquity: from the city of Umma for which well-curated data on the seals exists, we know that almost two thirds of the extant tablets were sealed in antiquity.<sup>10</sup> The many sealed tablets from Umma allowed R. Mayr to reconstruct at least 1,100 original cylinder seals in existence in that city during the Ur III period.<sup>11</sup> A conservative estimate of the total seals in Umma during this period would therefore be in excess of 2,000. In 2015 C. Tsouparopoulou published the known seal impressions from Drehem, the redistributive centre of the Ur III state, where the situation is somewhat different from that at Umma, since a much smaller percentage of seal impressions are attested (more than 17,000 tablets, of which only c 3250 were sealed).<sup>12</sup> This may be because tablets from Drehem were placed in sealed envelopes or because seals were less used at Drehem.<sup>13</sup> Yet even at Drehem, with its smaller numbers of sealed tablets, more than 500 original cylinder seals were used in antiquity,<sup>14</sup> but note that the author included seals found more frequently outside of Drehem as well as seals found primarily at Drehem). Although these numbers do not account for re-cuttings of the same seal, and although discrepancies between seals in collections and sealings on excavated objects have led to the suggestion that people in antiquity had multiple seals,<sup>15</sup> only some of which were perhaps ever used to seal documents, we can still look across southern Babylonia during the Ur III period and

<sup>11</sup> Mayr, Seal Impressions on Tablets from Umma, 7.



<sup>&</sup>lt;sup>10</sup> Out of the c. 33,000 extant tablets, almost 20,000 were sealed in antiquity.

<sup>&</sup>lt;sup>12</sup> Christina Tsouparopoulou, *The Ur III seals impressed on documents from Puzriš-Dagān (Drehem)*, Heidelberger Studien zum alten Orient, (Heidelberg: Heidelberger Orientverlag, 2015).

<sup>&</sup>lt;sup>13</sup> Tsouparopoulou, *The Ur III seals impressed on documents from Puzriš-Dagān* (*Drehem*), 19-20.

<sup>&</sup>lt;sup>14</sup> See Tsouparopoulou, *The Ur III seals impressed on documents from Puzriš-Dagān* (*Drehem*), 134.

<sup>&</sup>lt;sup>15</sup> See for example Roger J. Matthews, *Cities, seals and writing : archaic impressions from Jemdet Nasr and Ur*, Materialen zu den Frühen Schriftzeugnissen des Vorderen Orients vol. 2, (Berlin: Gebr. Mann, 1993), 18, or Mayr, *Seal Impressions on Tablets from Umma*, 7, 24.

estimate that some 10,000 seals were in existence during this period. Although the numbers are truly staggering, they represent a modest amount of raw materials, since a single kilo of hematite was sufficient for producing more than 50 seals.<sup>16</sup>

# Proposed and Confirmed Matches between Seals and Seal Impressions

Given such high numbers of seals in antiquity, and the fact that southern Babylonia has been extensively excavated and looted, seals from the Ur III period—valuable to excavators and looters alike—should be abundant in our collections. As we shall see below, they are not.<sup>17</sup>

Similarly, we should be able to match seals in our collections with ancient impressions on Ur III cuneiform tablets. Most Ur III seals were inscribed with the name and patronymic of the owner, and often his title, which would increase the chance of finding matches between original seals in our collections and ancient sealings. This is not the case, and only one physical seal from the Ur III period has ever been securely matched with an ancient impression on an Ur III tablet

<sup>&</sup>lt;sup>16</sup> Note the erroneous translation in Jacob L. Dahl, *Ur III texts in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology, (Pennsylvania: Eisenbrauns, 2020), 286. discussing MS 2011 (<u>P250738</u>), suggesting storage of blocks of unworked lapis lazuli, not corrected in Dahl, "Neo-Sumerian Temple Treasure Inventories," 44, see Angela Greco, review of Jacob L. Dahl: Ur III Texts in the Schøyen Collection. Cornell University Studies in Assyriology and Sumerology (CUSAS), Volume 39. University Park, Pennsylvania: Eisenbrauns, 2020., *Zeitschrift für Assyriologie und vorderasiatisches Archäologie* 112, no. 1 (2022): 140.

<sup>&</sup>lt;sup>17</sup> Although excavators at for example Girsu labelled many seals 'Ur III', these are in fact for the most part to be dated to the Isin-Larsa period: distinguishing Ur III and Isin-Larsa private architecture (including graves) and small finds remains a difficult task (see also Elizabeth C. Stone, "The Ur III-Old Babylonian Transition: An Archaeological Perspective," *Iraq* 64 (2002)). According to S. Rey (*personal communication*, October 2023), substantial Isin-Larsa layers are present at Girsu, with traces of heavily eroded early Standard Babylonian layers as well. A majority of our Girsu Ur III seals from the old excavations are likely to originate from these layers rather than the Ur III layers proper.

(number **1** below, compare to the similar situation for Old Assyrian<sup>18</sup> and seals **5**, **6**, and **7** below).<sup>19</sup>

in a 2001 study W. Hallo<sup>20</sup> continued a survey originally conducted by himself and B. Buchanan,<sup>21</sup> systematically surveyed all claimed matches between seals and seal impressions published up until then. Hallo rightfully doubted any match of seal and sealing that could not be verified by inspection, and thus was suspicious of all previous candidates. Below I discuss the thirteen matches between a physical seal in a modern collection and an ancient impression on a clay artefact, also in a modern collection, that are known to me, and were accepted by Hallo, considered plausible though unverifiable by Hallo, or found after Hallo wrote his 2001 study.

**1)** WAS II 382 (BM 018830) (<u>P474625/S007848</u>) = T.155 (AO 04213) (<u>P492207</u>) (Ur III period)<sup>22</sup>

This match was first reported in a note by H. Waetzoldt,<sup>23</sup> in which he described how, with the help of E. Braun(-Holzinger), he was able to confirm the match between the seal published by D. Collon in 1982<sup>24</sup> as WAS II 382 (BM 18830) and the impression on the unopened envelope published by L.-J. Delaporte in 1920 as T.155 (AO 4213). W.



<sup>&</sup>lt;sup>18</sup> Mogens Trolle Larsen, "Seal Use in the Old Assyrian Period," in *Seals and Sealings in the Ancient Near East*, Bibliotheca Mesopotamiaca (Malibu: Undena Publications, 1977).
<sup>19</sup> See also Collon, *First impressions : cylinder seals in the ancient Near East*, 119, for a similar observation.

<sup>&</sup>lt;sup>20</sup> William W. Hallo, "Seals and Seal Impressions," in Seals and Seal Impressions, ed. W. W. Hallo and I. J. Winter, Proceedings of the XLVe Rencontre Assyriologique Internaltionale (Bethesda, Maryland: CDL Press, 2001).

<sup>&</sup>lt;sup>21</sup> William W. Hallo, "The Royal Inscriptions of Ur: A Typology," *Hebrew Union College annual* 33 (1962).

 <sup>&</sup>lt;sup>22</sup> Here and elsewhere in this article I give at least two IDs for each object. In the list of proposed matches, I list the physical seal first followed by the extant impressions.
 <sup>23</sup> Hartmut Waetzoldt, "Original eines Siegels und dessen Abrollung," N.A.B.U. 1989: 79

<sup>&</sup>lt;sup>23</sup> Hartmut Waetzoldt, "Original eines Siegels und dessen Abrollung," N.A.B.U. 19 (1989).

<sup>&</sup>lt;sup>24</sup> Dominique Collon, Catalogue of the Western Asiatic seals in the British Museum: Cylinder Seals II, Akkadian - Post-Akkadian - Ur III - Periods, Western Asiatic seals in the British Museum, (London: Trustees of the British Museum, 1982).

Hallo remained skeptical,<sup>25</sup> as he had not himself seen the image of the tablet, but R. Mayr accepted the match,<sup>26</sup> based on H. Waetzoldt's study.<sup>27</sup> Images of both the envelope and the seal are now available on the CDLI (additional images on the Louvre Museum and British Museum websites respectively), allowing me to confirm Waetzoldt's match. In that same note H. Waetzoldt suggested that the reason for the lack of matches between seals and impressions could be found in the statistical improbability of matching one of the few published Ur III seals with one of the tens of thousands of known impressions.<sup>28</sup> Basically, having only 1% of the original seals published would make it impossible to find a match.<sup>29</sup> Be that as it may, in another note the next year, H. Waetzold qualified his suggestion by referencing a reused seal,<sup>30</sup> attested from an impression on a tablet found in Kanesh, in Anatolia, which was almost certainly originally the seal of a high-ranking administrator within the city of Umma during the Ur III dynasty.<sup>31</sup>

**2)** CDLI Seals 001532 (<u>P452212</u>/<u>S001532</u>) = MVN 15, 230 (<u>P118495</u>) (Ur III period)

David Owen (comments to CDLI) suggested that the two objects, both in private collections in the US, might match.

<sup>&</sup>lt;sup>25</sup> Hallo, "Seals and Seal Impressions."

<sup>&</sup>lt;sup>26</sup> Mayr, Seal Impressions on Tablets from Umma, 7, 10.

<sup>&</sup>lt;sup>27</sup> Waetzoldt, "Original eines Siegels und dessen Abrollung."

<sup>&</sup>lt;sup>28</sup> Waetzoldt, "Original eines Siegels und dessen Abrollung."

<sup>&</sup>lt;sup>29</sup> See below and Jacob L. Dahl, "A statistical analysis of the probability of finding matches between seals in modern collections and preserved impressions on tablets from the Ur III period," (forthcoming).

<sup>&</sup>lt;sup>30</sup> Hartmut Waetzoldt, "Zur Weiterverwendung mesopotamischer Siegel im Karum Kanis," *N.A.B.U.* 1990: 48 (1990).

<sup>&</sup>lt;sup>31</sup> See <u>P537546</u> for the Kanesh object and <u>S002932</u> for the seal and see under <u>P455642</u> for a list of objects impressed with this seal; see further Mayr, *Seal Impressions on Tablets from Umma*, 7, 10; Ira Spar, *Cuneiform texts in the Metropolitan Museum of Art* (New York: New York : The Metropolitan Museum of Art, 1988), 135-36; and Paul Garelli, *Les Assyriens en Cappadoce* (Paris,: Dépostiaire: Librairie A. Maisonneuve, 1963), 31-32, for further examples of Old Assyrian tablets with Ur III seals.

However, a visual inspection of images, on the CDLI, of both does not support this interpretation.

**3)** Charterhouse 2-1956-13 (<u>P455280/S002570</u>) = NYPL 23 (<u>P122559</u>), SAT 3, 1587 (<u>P144787</u>) and MVN 16, 900 (<u>P118948</u>) (Ur III period)

A seal kept in the collection of the Charterhouse School Museum, Godalming, UK (2-1956-13), and published by, has been speculated to match a seal impressed on three tablets (S002570.1 and S002570.2): NYPL 23, SAT 3, 1587 and MVN 16, 900.<sup>32</sup> CDLI hosts images of the New York and the Yale tablets, but not the Istanbul tablet (MVN 16, 900). Unfortunately, the image of NYPL does not allow for a careful examination of the impression, but very high-quality images exist of the Yale tablet. The inscription on the impression of the seal is identical between all three tablets and the seal itself. A close inspection of both the images and the original (by Klaus Wagensonner) has determined that the seal impressed on the Yale tablet is not the same instance as the one preserved in the Charterhouse School in Godalming. The bird in front the king is missing on the Yale impression and is possibly a later addition to the seal, most probably in the Old Babylonian period,<sup>33</sup> although such birds do occasionally occur in Ur III seals<sup>34</sup> allowing for the possibility that this seal was re-cut already in the Ur III period. Regardless, the current instance of the seal does not match the impression on the Yale tablet.

<sup>&</sup>lt;sup>34</sup> Rudolf H. Mayr, "Intermittent Recarving of Seals in the New-Sumerian Period," in *Seals and Seal Impressions*, ed. W. W. Hallo and I. J. Winter, Proceedings of hte XLVe Rencontre Assyriologique Internaltionale (Bethesda, Maryland: CDL Press, 2001).



<sup>&</sup>lt;sup>32</sup> See Mayr, *Seal Impressions on Tablets from Umma*, 7, 444, and Hallo, "Seals and Seal Impressions," 249-50.

<sup>&</sup>lt;sup>33</sup> *Pace* Peter Roger S. Moorey and Oliver R. Gurney, "Ancient near Eastern Seals at Charterhouse," *Iraq* 35, no. 1 (1973): 72, see also below.

**4)** OIM A.7468 (As.30:1000) (<u>P458444/S005734</u>) = AS.30: T.650 (<u>P543169</u>), AS.30: T.643 (<u>P543167</u>), and AS.31: T.256 (<u>P448545</u>) (post-Ur III period)

In his 2001 article, W. Hallo quoted a letter from C. Reichel that confirms the seal which "Kirikiri gave his son Bilalama" (quoting the seal itself), numbered AS.30:1000, was impressed on AS.30: T.650, AS.30: T.643, and AS.31: T.256. Reichel also stated this in his own contribution to the XLV<sup>e</sup> RAI volume in which Hallo's article (concluded earlier) was published.<sup>35</sup> Hallo referred the reader to a forthcoming article by Reichel.<sup>36</sup> in which Reichel evaluated the seal of Bilalama and concluded, as already observed by Porada, that the seal was very likely re-cut at least once in antiquity.<sup>37</sup> Kirikiri, according to Reichel, had a seal originally belonging to his predecessor Nūrahum re-cut for his son, but the seal may have actually already been an original Ur III seal re-cut by Nūrahum.<sup>38</sup> It may be worthwhile to mention that both Nūrahum and his two immediate predecessors (likely well. unrelated). and possibly Kirikiri as were all contemporaries with the last king(s) of Ur III. Given the complicated history of the seal itself, it may be prudent to investigate whether the three preserved impressions are impressions of the actual seal purchased by Jacobsen and Delougaz from the dealer in Baghdad and presumed to come from Tell Asmar.<sup>39</sup> In fact, none of the three clay objects associated with the seal present a complete impression of the seal inscription. AS.30: T.643 includes column I lines 1-2, column II lines 1-2, and possibly one further line from column

<sup>&</sup>lt;sup>35</sup> Clemens Reichel, "Seals and Sealings at Tell Asmar: A New Look at an Ur III to Early Old Babylonian Palace," in *Seals and Seal Impressions*, ed. W. W. Hallo and I. J. Winter, Proceedings of the XLVe Rencontre Assyriologique Internaltionale (Bethesda, Maryland: CDL Press, 2001): 119.

<sup>&</sup>lt;sup>36</sup> Announced by Hallo as JNES but eventually printed as Reichel, "A Modern Crime and a Ancient Mystery: the seal of Bilalama."

<sup>&</sup>lt;sup>37</sup> Reichel, "A Modern Crime and a Ancient Mystery: the seal of Bilalama," 362.

<sup>&</sup>lt;sup>38</sup> Reichel, "A Modern Crime and a Ancient Mystery: the seal of Bilalama," 361.

<sup>&</sup>lt;sup>39</sup> For the odd story of the seal see Reichel, "Á Modern Crime and a Ancient Mystery: the seal of Bilalama," 355-56.

II (if indeed so, making a match with AS.30.1000 very unlikely); AS.30: T.650 includes column I lines 1-2 and perhaps traces of 3. The impression on AS.31: T.256 is so faint that the available photos make it impossible to judge whether the inscription matches AS.30.1000. It is therefore not possible to determine whether the *instance* of the seal represented by AS.30.1000, or an earlier *instance* was used to seal the three objects found at Eshnunna.

**5)** Walters Art Museum 42.0786 ( $\underline{P272880}/\underline{S018514}$ ) **or** Morgan Seal 0347 ( $\underline{P539819}/\underline{S019001}$ ) = Prague I 587 (= tablet) & Ist Ka 0908 (= envelope) ( $\underline{P359189}$ ) (Old Assyrian Period)

One of two near-identical seals in North American collections may match a sealing on an Old Assyrian envelope. The match was proposed by N. Özgüç in 1986.<sup>40</sup> Whereas the tablet is kept in Prague, the envelope on which the seal is found is kept in Istanbul, and W. Hallo remained skeptical since no photos of the Istanbul envelope have been published.<sup>41</sup> Özgüç suggested that the impression was made with the seal in the Morgan Library,<sup>42</sup> but the near-identical seal in Walters Art Museum, in Baltimore (VAM 42.0786) may be the more likely source.

<sup>&</sup>lt;sup>42</sup> See Edith Porada, *The collection of the Pierpont Morgan Library*, vol. 1, Corpus of ancient Near Eastern seals in North American collections, (Washington : Bollingen foundation, 1948), number 347E; Özgüç, "Seals of the Old Assyrian Colony Period and Some Observations on the Seal Impressions."



<sup>&</sup>lt;sup>40</sup> Nimet Özgüç, "Seals of the Old Assyrian Colony Period and Some Observations on the Seal Impressions," in *Ancient Anatolia : aspects of change and cultural development : essays in honor of Machteld J. Mellink*, ed. J. V. Canby et al. (Madison, Wis. : University of Wisconsin Press, 1986), 50.

<sup>&</sup>lt;sup>41</sup> Hallo, "Seals and Seal Impressions," 246, see also Gary Beckman, review of Ancient Anatolia, Aspects of Change and Cultural Development: Essays in Honor of Machteld J. Mellink, edited by J. V. Canby, E. Porada, B. Sismondo Ridgway, T. Stech, *Journal of Near Eastern Studies* 47, no. 4 (1988): 290, who also remained skeptical of the match in his review of Özgüç, "Seals of the Old Assyrian Colony Period and Some Observations on the Seal Impressions."

6) Metropolitan Museum 1991.368.3 (formerly Moore Seal 128)<sup>43</sup> (<u>P477465/S010724</u>) = Ka 662 (<u>P542156</u>) and O.660 (<u>P542157</u>) (Old Assyrian Period)

Another match proposed by N. Özgüç in 1986.<sup>44</sup> The Seal, in the Metropolitan Museum, from the now dispersed Moore collection, is found impressed on two uninscribed objects, each with multiple impressions. As suggested by W. Hallo, both objects are likely to be modern.<sup>45</sup> L. Matous published the Prague object in 1962;<sup>46</sup> and L. Speleers published the Brussels object in 1943.<sup>47</sup>

**7)** Ass 19664 (<u>P542164/S021323</u>)<sup>48</sup> = Ass 21042 (<u>P542165</u>) (Old Assyrian Period)

Among the 58 previously unpublished cylinder seals and seal impressions from Assur, today in the Vorderasiatisches Museum, Berlin, published as an appendix in E. Klengel-Brandt 2014,<sup>49</sup> is a matching pair of a cylinder seal (number 9 = Ass 19664, VA) and a seal impression (number 54 = Ass 21042). A. Fügert in her review of E. Klengel-Brandt 2014 points to the differences between the drawings of the seal and

<sup>&</sup>lt;sup>43</sup> Gustavus A. Eisen, Ancient oriental cylinder and other seals with a description of the collection of Mrs. William H. Moore, OIP 47 (Chicago,: The University of Chicago Press, 1940), Pl. 13.

<sup>&</sup>lt;sup>44</sup> Özgüç, "Seals of the Old Assyrian Colony Period and Some Observations on the Seal Impressions," 50.

<sup>&</sup>lt;sup>45</sup> Hallo, "Seals and Seal Impressions," 246.

<sup>&</sup>lt;sup>46</sup> Lubor Matous, *Inscriptions cunéiformes du kultépé*, vol. 2 (Prague: Editions de L'Academie Tchecoslovaque des Sciences, 1962), 51 and pl 129.

<sup>&</sup>lt;sup>47</sup> Louis Speleers, *Catalogue des intailles et empreintes orientales des Musées royaux d'art et d'histoire* (Bruxelles: Vromant, 1943), 169-71.

<sup>&</sup>lt;sup>48</sup> A low-resolution 3D model of the seal was included in the online presentations of the seals in the Vorderasiatisches Museum, Berlin, prepared by Markus Hilgert, see <u>http://repository.edition-topoi.org/collection/VMRS/object/60985</u>.

<sup>&</sup>lt;sup>49</sup> Evelyn Klengel-Brandt, *Die neuassyrische Glyptik aus Assur*, Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 140, (Wiesbaden: Harrassowitz Verlag, 2014).

the impression.<sup>50</sup> Nevertheless, the match appears to be correct.

**8)** DMMA D 307 (<u>P476275/S009534</u>) = LB 2532 (<u>P531197</u>) (Middle Assyrian Period)

As W. Hallo pointed out in his study of the Leiden tablet,<sup>51</sup> the scene of the seal on the impression matches that of the seal in the Bibliothèque nationale de France, but the impression does not include an inscription, whereas the physical seal has a prominent inscription. Furthermore, the inscription on the seal only partly matches the information in the text on the tablet (not only is the name of the seal owner written differently on the seal and in the text, but the two give different supplementary information: the tablet gives the owner's title, whereas the seal gives his patronymic), and I agree with Hallo that the seal is likely to have been re-cut in antiquity, or the impression may be incomplete or worn.<sup>52</sup>

**9)** AO 21988 ( $\underline{P539276}/\underline{S018454}$ ) = ME 71-129 and ME 198; ME 205; ME 206; ME 221; ME 234 (all sealings) and the tablet ARM 24, 089 + ARM 25, 455 (see also ARM 32, p. 370, note that Limet ARM 25: 142 describes the seal as illegible; Archipov ARM 32, 370 has seal of Ana-Sin-taklaku but add "bis" to the M-number of the ARM 25 text [M.12955bis, note that ARCHIBAB has M.12995bis, with picture]) (<u>P353504</u>) (Old Babylonian period)

<sup>&</sup>lt;sup>50</sup> Anja Fügert, review of Evelyn Klengel-Brandt: Die neuassyrische Glyptik aus Assur. Mit Beiträgen von Sabine Böhme und Othmar Keel. Fundgruppen 7. WVDOG 140. Wiesbaden: Harrassowitz, 2014., *Zeitschrift für Assyriologie und vorderasiatisches Archäologie* 108, no. 2 (2018).

<sup>&</sup>lt;sup>51</sup> William W. Hallo, "The Seals of Assur-Remanni," in *Symbolae biblicae et Mesopotamicae Francisco Mario Theodoro de Liagre Böhl dedicatae*, ed. F.M.T. Böhl and M.A. Beek (Leiden: Brill, 1973).

<sup>&</sup>lt;sup>52</sup> See also Collon, *First impressions : cylinder seals in the ancient Near East*, 119, and Wagensonner, "Eine Welt in Miniatur. Ein Essay zu Aufnahme und Abbildung von Rollsiegeln.," 17 fig. 15.

In 1966, at the art market of Tehran, A. Parrot noted the appearance of a cylinder seal which, apart from its obviously re-cut inscription, could be matched to an Old Babylonian seal known from 65 impressions at Mari.<sup>53</sup> The seal originally belonged to a well-known administrator at Mari, Ana-Sîntaklāku. Following Frayne 2016<sup>54</sup> this *instance* of the seal, mentioning Ana-Sîn-taklāku, has been given the CDLI Pnumber P519222 (and S-number S014022). However, when the seal was later re-cut and re-inscribed with the name of Adad-Šarrum that earlier *instance* was destroved, although the inscription of Ana-Sîn-taklāku is still partially visible behind the new inscription of Adad-Šarrum. Whereas the Old Babylonian instance of the seal was given the CDLI P-number P519222 (and the S-number S014022), the current, secondary instance, mentioning Adad-Šarrum, was given the CDLI P-number P539276 (and the S-number S018454). The published photos of the seal<sup>55</sup> and the published photo of the roll-out of the seal,<sup>56</sup> and online at the Louvre Museum's website, are sufficient to confirm the match. The seal was purchased in Iran, but it is unclear if it was brought there in antiquity or more recently. Today the seal is in the Louvre Museum. There are no impressions of the current instance of the seal.

**10)** Dortmond 13 (in the Allard Pierson, Amsterdam), first published in 1924 by H.A. Sayce as number 6

<sup>&</sup>lt;sup>53</sup> For the seal see André Parrot, "Une réapparition mystérieuse," Syria 43, no. 3/4 (1966), for the impressions see André Parrot, *Le palais*, vol. 68-70, Bibliothèque archéologique et historique, (Paris: Librairie orientaliste Paul Geuthner, 1959), 169-85. See also Hallo, "Seals and Seal Impressions," 241-42.

<sup>&</sup>lt;sup>54</sup> Douglas Frayne, Old Babylonian Period (2003-1595 B.C.) : Early Periods, The Royal Inscriptions of Mesopotamia, (Toronto: University of Toronto Press, 2016). = RIME 4.06.12.2014

<sup>&</sup>lt;sup>55</sup> Parrot, *Le palais*, 68-70.

<sup>&</sup>lt;sup>56</sup> Edith Porada, *Ancient art in seals : essays by Pierre Amiet, Nimet Ozgüc, and John Boardman*, ed. E. Porada (Princeton, N.J. : Princeton University Press, 1980).

# (<u>P542161/S021320</u>)<sup>57</sup> = Seal 3 on CDLB 2014/004 §2.1 (JHU T061, <u>P333863</u>)

In 1924 H.A. Savce provided the transliteration of a seal he had been shown in Jerusalem, and said by the dealer to have been found in the neighbourhood.<sup>58</sup> Similarly, to the seal said to originate in Thebes, Egypt, discussed below, Jerusalem was of course a hub for selling Mesopotamian antiquities during the first decades of the past century and the provenience is likely to not be Jerusalem. Although Sayce only provided the transliteration without dimensions or discussion of the scene of the seal. Földi and Head were able to suggest that the third seal on the tablet JHU T061 might possibly be identified with the seal described by Sayce.<sup>59</sup> In 2021 M. Stol published a seal now in the Allard Pierson Museum whose inscription is identical to the inscription given by Savce and which therefore matches seal 3 on JHU T061 (P333863).<sup>60</sup> Prior to arriving in the Allard Pierson (by way of the Special Collections Department of the University Library of Amsterdam) in 1976, the seal was in the private collection of J.A. Dortmond.<sup>61</sup> Stol had the seal measured (27 mm high),<sup>62</sup> but no measurement is reported by Földi and Head,<sup>63</sup> nevertheless, Stol claimed the match to be confirmed. Unfortunately, the impression does not preserve any of the scene of the seal, making a match satisfying Hallo's criteria

62 Stol, "Een rolzegel thuisgebracht."

<sup>&</sup>lt;sup>63</sup> Földi and Head, "Two Tablets from the Johns Hopkins University Collection."



<sup>&</sup>lt;sup>57</sup> Archibald Henry Sayce, "Unpublished Hebrew, Aramaic and Babylonian Inscriptions from Egypt, Jerusalem and Carchemish," *The Journal of Egyptian Archaeology* 10 (1924): 17.

<sup>&</sup>lt;sup>58</sup> Sayce, "Unpublished Hebrew, Aramaic and Babylonian Inscriptions from Egypt, Jerusalem and Carchemish."

<sup>&</sup>lt;sup>59</sup> Zsombor J. Földi and Ronan J. Head, "Two Tablets from the Johns Hopkins University Collection," *Cuneiform Digital Library Bulletin* 4 (2014), <u>https://cdli.mpiwg-berlin.mpg.de/articles/cdlb/2014-4</u>.

<sup>&</sup>lt;sup>60</sup> Marten Stol, "Een rolzegel thuisgebracht," Allard Pierson 123.

<sup>&</sup>lt;sup>61</sup> For the first publication see J. A. Dortmond, *De wereld schreef* (Amsterdam, 1969), 18, for the history of the collection see C. M. Faas, "Het Schriftmuseum J. A. Dortmond," *Maandblad Oud-Utrecht* 51, no. 11 (1978).

impossible.<sup>64</sup> Note in passing, that CDLI does include the inscription of numerous cylinder seals.<sup>65</sup>

**11)** BM 2002,0515.1 (<u>P542163</u>/<u>S021322</u>)<sup>66</sup>= BM 84671 (<u>P550423</u>), BM 84553 (<u>P550424</u>), BM 99214 (<u>P335549</u>, K. 348+Ki. 1904-10-9, 246) (Neo-Assyrian period)

A few years after Hallo study, Karen Radner published a recently acquired Neo-Assyrian seal belonging to Tašmetumšarrat<sup>67</sup> (Sennacherib's queen).<sup>68</sup> Radner identified it as a near certain match with the impression on three clay objects (two sealings and one docket) in the British Museum, all from the ancient Assyrian city of Nimrud. BM 84671 and BM 84553 were accessioned in 1851; the seal itself was acquired by the British Museum, May 15, 2002, at auction (Christie's). Neo-Assyrian kings and high officials, including the gueen, issued many official or 'bureau seals'<sup>69</sup> (see also number **13** below, a so-called Royal-Name Seals of Darius I). Since the impressions discussed here are all very worn, visual inspection of the seal and the impressions cannot confirm the match entirely: a small chip in the seal, close to the rim on the left side, may be identified in the worn impression of BM 84671 on the right side, behind the two figures (that area on BM 84553 is missing and the impression on K. 348+ Ki. 1904-10-9, 246 is too shallow to reflect this), suggesting that this exact seal was indeed used for at least one of the impressions. The impression on BM 84671 suggests that the

<sup>&</sup>lt;sup>64</sup> The seal and tablet have not been examined side-by-side, and no high-resolution images of the seal is available.

<sup>&</sup>lt;sup>65</sup> see Englund, "Seals and Sealing in CDLI files." *pace* Stol, "Een rolzegel thuisgebracht," 5.

<sup>&</sup>lt;sup>66</sup> See <u>https://www.britishmuseum.org/collection/object/W\_2002-0515-1</u>.

<sup>&</sup>lt;sup>67</sup> The seal is uninscribed but is identified from the text of the object BM 99214 (K. 348+Ki. 1904-10-9, 246).

<sup>&</sup>lt;sup>68</sup> Karen Radner, "The seal of Tašmetum-šarrat, Sennacherib's queen, and its impressions," in *Leggo! Studies presented to Frederick Mario Fales.*, ed. G. B. Lanfranchi et al. (Wiesbaden: Harrassowitz Verlag, 2012).

<sup>&</sup>lt;sup>69</sup> Karen Radner, "The delegation of power : Neo-Assyrian bureau seals," in *L'archive des fortifications de Persépolis : état des questions et perspectives de recherches*, ed. P. Briant, W. F. M. Henkelman, and M. W. Stolper, Persika (Paris: De Boccard, 2008).

crystal seal originally was sat in a fitting, the two other impressions were either made very lightly or the fitting was removed.<sup>70</sup> The seal of Hamâ, queen of Shalmanessar IV, found in her tomb at Nimrud is a golden pendant, suspended from a chain rather than worn on a finger.<sup>71</sup>

**12)** Morgan Seal 0773 (<u>P540129/S019312</u>) = MMA 86.11.319 (CTMMA IV 138) (<u>P500856</u>) (Neo Assyrian / Late Babylonian)

Identified by Yelena Rakic in 2014.<sup>72</sup> This match remains odd. The seal is Neo Assyrian, but the tablet is Late Babylonian or Achaemenid; the seal is rolled partially and across the reverse of the tablet in a manner and place unusual for late tablets; both the seal and the impression show similar damage. Whereas the ancient seal **6**, above, may have been used on modern clay objects, this seal may have been rolled on an ancient clay object applying a thin coating of damp clay.<sup>73</sup>

**13)** BM 89132 (<u>P539277/S018455</u>) = PFUTS 603 impressed on PFUT 1673-201 (<u>P542158</u>) (Achaemenid Period)

<sup>(</sup>New York; Winona Lake: Metropolitan Museum of Art; Eisenbrauns,, 2014). 187-189. <sup>73</sup> According to Y. Rakic (*personal communication*, August 2023), both seal and tablet were likely in the possession of William Hayes Ward prior to 1886 when he sold these to the Metropolitan Museum — the seal was later sold from the Metropolitan Museum to the J. Pierpont Morgan Library. Rakic has also expressed doubts of the antiquity of the impression in her communications with me.



<sup>&</sup>lt;sup>70</sup> According to Radner, "The delegation of power : Neo-Assyrian bureau seals," 488, Neo-Assyrian 'Bureau seals' were always golden signet rings (Akkadian: unqu), but this may be an issue with technical terminology rather than the physical shape of the object, and unqu comes to denote sealed document parallel to how Sumerian kišib<sub>3</sub> / Akkadian kunukku has the meaning cylinder seal, and sealed document, etc.

<sup>&</sup>lt;sup>71</sup> Farouk N.H. Al-Rawi, "Inscriptions from the Tombs of the Queens of Assyria," in *New Light on Nimrud Proceedings of the Nimrud Conference 11th-13th March 2002*, ed. J.E. Curtis et al. (London: British Museum, 2008), 136; Tracy L. Spurrier, "Finding Hama: On the Identification of a Forgotten Queen Buried in the Nimrud Tombs," *Journal of Near Eastern Studies* 76, no. 1 (2017).

<sup>&</sup>lt;sup>72</sup> see Joan Aruz, Sarah B. Graff, and Yelena Rakic, *From Assyria to Iberia : at the dawn of the classical age* (New Haven ; London: Yale University Press, 2014), 68, and Ira Spar and Michael Jursa, *Cuneiform Texts in The Metropolitan Museum of Art Volume IV: The Ebabbar Temple Archive and Other Texts from the Fourth to the First Millennium B.C.* 

In an appendix to his article in the FS Stolper on the Royal-Name Seals of Darius I, M. Garrison published the impression of seal PFUTS 603 recently found on the uninscribed object PFUT 1673-201,<sup>74</sup> suggesting that the British Museum seal, BM 89132, known since 1835 when it was purchased at Sotheby's, had been used to make the impression. At purchase, the provenience of the British Museum seal was given as "Thebes in Lower Egypt", but antiquities from across Western Asia did occasionally get sold by dealers of antiquities in Egypt, and this provenience is therefore by no means certain. Garrison was unable to verify the match between PFUTS 603 and BM 89132.75 Garrison compared the figure's style of hair and beard on impressions of Darius I Royal-Name seals and on the British Museum seal. Nevertheless, he considered the match possible. The impression does not include the inscription, and cannot therefore be confirmed to be a so-called Royal-Name seal, altogether. If confirmed, it is the only impression of a Darius I Royal-Name seal with the same composition as that found on the British Museum seal.<sup>76</sup> The many known impressions of Darius I Royal-Name seals were made by 8 different cylinder seals.77 Note that the BM seal previously had been considered a potential modern forgery.<sup>78</sup>

Of these 13 seals 1 and 7 are the only certain matches of the current instance of the seal and the impression, although 10, 11 and 13 are highly likely matches of the same *instance* of a seal. 3, 4, 8 and 9 are confirmed or likely matches of an earlier

<sup>&</sup>lt;sup>74</sup> Mark B. Garrison, "The Royal-Name Seals of Darius I," in Extraction and Control : Studies in Honour of Matthew W. Stolper, ed. M. Kozuh et al., SAOC 68 (Chicago: The Oriental Institute of the University of Chicago, 2014), 90.

<sup>&</sup>lt;sup>75</sup> Garrison, "The Royal-Name Seals of Darius I," 90.

<sup>&</sup>lt;sup>76</sup> Garrison, "The Royal-Name Seals of Darius I," 90.

 <sup>&</sup>lt;sup>77</sup> Garrison, "The Royal-Name Seals of Darius I," 69ff.
 <sup>78</sup> Garrison, "The Royal-Name Seals of Darius I," 82 fn 93.

instance of the same seal. **5**, **6** and **12** are likely modern impressions of an original seal. **2** is not a match.

The following reasons for a lack of overlap between the two datasets immediately present themselves: 1) the seals in our collections are primarily from votive offerings or graves and were not the same seals used to seal transactionsdiscrepancies between types of seals and the scenes on seals found in excavations and impressions of seals have been noted in the past;79 2) a statistically insignificant proportion of the original seals have been found due to lack of proper archaeological excavations, making matches between them and impressions unlikely;<sup>80</sup> 3) the data set is too large, too poorly edited/published to allow for matches to be found;<sup>81</sup> 4) or finally, that large numbers of seals were never removed from circulation but were continuously re-cut and reused.<sup>82</sup> The lack of matches in the Ur III period stands out due to the excellent state of publication of the textual data, and the almost universal use of inscriptions on Ur III seals found impressed on tablets. In other periods when seals were not always inscribed or for periods where our

<sup>80</sup> Edith Porada, "Review of Brandes, Mark A. Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka. 1979.," review of Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka, Mark A. Brandes, *Journal of the American Oriental Society* 103, no. 2 (1983): 476. However, various different statistical analyses suggest a near 100% probability of finding several matches for the Ur III period, for example, see Dahl, "A statistical analysis of the probability of finding matches between seals in modern collections and preserved impressions on tablets from the Ur III period."

 <sup>81</sup> Claudia Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," *Zeitschrift für Assyriologie und Vorderasiatisches Archäologie* 82, no. 1 (1992): 61-62, suggested that many contest scene seals, for example, were incorrectly dated using art-historical criteria and not seal impressions on dated tablets.
 <sup>82</sup> See Mayr, Seal Impressions on Tablets from Umma, 10; Joanna S. Smith,

<sup>&</sup>quot;Authenticity, Seal Recarving, and Authority in the Ancient Near East and Eastern Mediterranean," in Seals and Sealing in the Ancient World: Case Studies from the Near East, Egypt, the Aegean, and South Asia, ed. G. Jamison et al. (Cambridge: Cambridge University Press, 2018), 98, and note Collon, *First impressions : cylinder seals in the ancient Near East*, 120, who suggested that seals could leave circulation only to be found and re-enter circulation when a site was cleared for later construction.



<sup>&</sup>lt;sup>79</sup> Collon, First impressions : cylinder seals in the ancient Near East, 119., Mark A. Brandes, Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka, Freiburger altorientalische Studien 3, (Wiesbaden: F. Steiner, 1979).

searchable data is less well-structured more matches may be possible in the future.

#### Data

Seals and seal impressions are difficult to image. Cylinder seals are carved in intaglio and in mirror on minuscule stone (or bone, shell, or other materials) cylinders. The stone is sometimes highly reflective, often matte-dark. and occasionally transparent (rock-crystal), all adding to the difficulties of imaging seals.83 Seal impressions are often either excluded from text publications or they focus on seal inscription only.<sup>84</sup> In addition to the seals themselves, impressions are also very difficult to image: they are in high relief whereas the cuneiform text is in low relief, meaning that attempts to capture the text of a cuneiform tablet often leaves the seal impression insufficiently lit. The CDLI has proposed to image seal impressions with RTI technique, or HDR photography, whenever possible.85

The core data for the present study was created during a oneyear pilot project aimed at developing methods for imaging and analysing Ancient Near Eastern cylinder seals, entitled Seals and their Impressions in the Ancient Near East (SIANE), jointly funded by the John Fell Fund of the University of Oxford and the CNRS program LabEx "The Pasts in the Present" (<u>http://passes-present.eu/</u>). The methods of SIANE

<sup>&</sup>lt;sup>83</sup> Jacob L. Dahl, et al., "A structured light approach to imaging ancient Near Eastern cylinder seals: how efficient 3D imaging may facilitate corpus-wide research," in *Digital Imaging of Artefacts: Developments in Methods and Aims*, ed. K. Kelley and R. Wood (Oxford: Archaeopress Publishing, 2018).

<sup>&</sup>lt;sup>84</sup> This in fact mirrors the Ur III administrators' attitude towards seals, which privileged an uninterrupted impression of the inscription over neatly impressing the entire scene in an un-inscribed location on the tablet.

<sup>&</sup>lt;sup>85</sup> Jacob L. Dahl, Hendrik Hameeuw, and Klaus Wagensonner, "Looking both forward and back: imaging cuneiform," *Cuneiform Digital Library Preprints* 2019, 14.0 (2019), <u>https://cdli.mpiwg-berlin.mpg.de/articles/cdlp/14.0</u>.

were discussed in print and online.<sup>86</sup> Other researchers have developed and used similar and different techniques to capture both the seal and the roll-out and SIANE owes much to the forays into imaging of ancient seals by members of the West Semitic Research Project at USC, see in particular.<sup>87</sup> Traditional publications of cylinder seals typically reproduce a photograph of a rollout in plasticene or a similarly malleable material, occasionally accompanied by a photograph of the cylinder seal. Mostly the photographic documentation of the actual seal, if present, is in black and white only, making any study of the interaction of the visual grain of the seal and the scene impossible. Drawings of physical seals were common in the infancy of the study of seals, but quickly abandoned.<sup>88</sup> Occasional attempts at 3D capture using laser scanners has produced little useful data.<sup>89</sup>

During the initial phase of the SIANE project digital images of the seals in the collection of cylinder seals in the Bibliothèque nationale de France in Paris were produced and processed for publication on the web, and a majority of the seals in the Ashmolean Museum, Oxford were digitized but are not yet all processed. Later work, supported by the Getty Museum Director's Council, has added substantial numbers of images of seals to the CDLI.

In this study, I focus on the two core collections of the original SIANE project, the Bibliothèque nationale de France and the

 <sup>&</sup>lt;sup>87</sup> Wayne T. Pitard, "Circular Signatures," *Biblical Archaeology Review* 40, no. 3 (2014).
 <sup>88</sup> William Hayes Ward, *The seal cylinders of western Asia, by William Hayes Ward* (District of Columbia: The Carnegie institution of Washington, 1910); for a later example see Donald M. Matthews, *Principles of composition in Near Eastern glyptic of the later second millennium B.C*, Orbis biblicus et orientalis, vol. 8. Series Archaeologica, (Freiburg/Schweiz : Göttingen: Universitätsverlag ; Vandenhoeck & Ruprecht, 1990).
 <sup>89</sup> See in particular http://repository.edition-topol.org/collection/VMRS.



<sup>&</sup>lt;sup>86</sup> Dahl et al., "A structured light approach to imaging ancient Near Eastern cylinder seals: how efficient 3D imaging may facilitate corpus-wide research," and again Jacob L. Dahl, Bertrand Lafont, and Nordine Ouraghi, "Nouvelles recherches sur la collection des sceaux-cylindres orientaux de la Bibliothèque nationale de France," *Syria*, no. 96 (2019), see also online (<u>http://sespoa.huma-num.fr/</u>)

Ashmolean Museum, accounting for a total of c 1975 cylinder seals, with 101 dated to the Ur III period by their original publishers.<sup>90</sup>

## Annotation of Images

The images for the seals discussed in this article that are available on the CDLI, have been annotated using the VIA annotator https://www.robots.ox.ac.uk/~vgg/software/via/.91 Links to the images are loaded and annotated in the online annotator. Annotations are saved as JSON format, before being uploaded and stored in the CDLI.<sup>92</sup> Region attributes are classified ("inscription", "cuneiform sign", "motif"), identified ("animal", "crescent", "deity", etc.), described ("male", "naked", "sitting", etc.), and assessed (currently only "erased"). Annotations use Getty AAT terminology, whenever possible, and include Getty ATT IDs https://www.getty.edu/research/tools/vocabularies/aat/.93

Annotations can be viewed in the CDLI "reader page" online or downloaded for further study on a local framework. Annotations are searchable using the general and advanced search of the CDLI. Individual images can be accessed from

<sup>&</sup>lt;sup>90</sup> Louis Delaporte, *Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris* (Paris: August Picard, 1910); Briggs Buchanan, *Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals* (Oxford: Oxford University Press, 1966); and Peter Roger S. Moorey and Oliver R. Gurney, "Ancient near Eastern Cylinder Seals Acquired by the Ashmolean Museum, Oxford 1963-1973," *Iraq* 40, no. 1 (1978).

 <sup>&</sup>lt;sup>91</sup> Abhishek Dutta and Andrew Zisserman, "The {VIA} Annotation Software for Images, Audio and Video" (paper presented at the Proceedings of the 27th ACM International Conference on Multimedia, Nice, France, 2019).
 <sup>92</sup> see Willighagen, Lars, Abhishek Dutta, and Emilie Pagé-Perron. 2024. "User Guides:

<sup>&</sup>lt;sup>92</sup> see Willighagen, Lars, Abhishek Dutta, and Émilie Pagé-Perron. 2024. "User Guides: Adding and Editing Image Annotations." Cuneiform Digital Library Initiative. August 3, 2024. <u>https://cdli.mpiwg-berlin.mpg.de/docs/adding-and-editing-annotations</u>.

<sup>&</sup>lt;sup>93</sup> This study has been completed in advance of the full publication of the ACAWAI-CS Vocabulary (see <u>https://www.acawai.org/vocabulary</u>).

either the P-number or the S-number of an artifact, given for all objects discussed here.<sup>94</sup>

## **Dating of Seals**

In the published catalogs of the collections discussed here, the overwhelming majority of the physical seals that were originally classified as dating to the Ur III period are in fact Old Babylonian *instances* of original Ur III seals, re-cut in the Old Babylonian period. Similarly, many of the *Presentation Scene* seals listed in the catalogs as coming from the Old Babylonian period are in fact Old Babylonian *instances* of Ur III seals. To some extent this was already shown by Feingold in 2014.<sup>95</sup>

The optimal method for determining the date of an *instance* of a seal is to use impressions of the seal on dated or datable cuneiform tablets.<sup>96</sup> Once a repertoire of scenes from a particular period has been established based on seal impressions on dated or datable tablets, then the same parameters can be extended to physical seals. A main drawback to this method is the poor state of publication of both seal impressions and physical seals. Tsouparopoulou provides a corpus of Ur III seals reconstructed from impressions from Drehem,<sup>97</sup> R. Mayr's forthcoming book

<sup>&</sup>lt;sup>97</sup> Tsouparopoulou, The Ur III seals impressed on documents from Puzriš-Dagān (Drehem).



<sup>&</sup>lt;sup>94</sup> With <u>https://cdli.ucla.edu/P123456</u> the URL for object P123456; for citing CDLI see Robert K. Englund, "Citing CDLI," *Cuneiform Digital Library Notes* 1 (2012), <u>https://cdli.mpiwg-berlin.mpg.de/articles/cdln/2012-1</u>; see further Englund, "Seals and

Sealing in CDLI files." and Firth, "Notes on composite seals in CDLI," for more on the labelling of seals and sealings in the CDLI.

<sup>&</sup>lt;sup>95</sup> R. Feingold Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period, Gorgias studies in the ancient Near East, (Piscataway, NJ: Gorgias Press, 2014).

<sup>&</sup>lt;sup>96</sup> see already Delaporte, Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris, XIII; Briggs Buchanan, Early Near Eastern seals in the Yale Babylonian Collection (New Haven : Yale University Press, 1981); and Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 62.

provides a corpus of Ur III seals reconstructed from impressions from Umma.<sup>98</sup> Two studies by Fisher provides a partial corpus of Ur III seals reconstructed from impressions from Girsu,<sup>99</sup> and Hattori provides an overview of the Ur III seal impressions on tablets and envelopes from Ur III Nippur in the Philadelphia Museum.<sup>100</sup> CDLI data represents a wellcurated dataset for the entire Ur III period.

### Scenes dating to Ur III period

The study of seal impressions suffers from a different set of limitations to that of the preserved physical seals. For the Ur III period the standard application of seals particularly limits the study of impressions. During the Ur III period, most seals were rolled with emphasis on the inscription, usually with one clear impression of the inscription between the end of the text and the beginning of the colophon (holding the summary, if present, and calendrical information). There was much less emphasis on producing a clear impression of the scene.<sup>101</sup>

The following two main types of scenes dominate the impressions of seal found on objects dated to the Ur III period: *Contest Scenes* and *Presentation Scene*. I will make brief reference to the so-called *Libation Scene* in section 7.

<sup>&</sup>lt;sup>98</sup> Mayr, Seal Impressions on Tablets from Umma, 7.

<sup>&</sup>lt;sup>99</sup> Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš." and "Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagas," *Baghdader Mitteilungen* 28 (1997).

<sup>&</sup>lt;sup>100</sup> Atsuko Hattori, "Sealing Practices in Ur III Nippur," in *Seals and Seal Impressions*, ed. William W. Hallo and Irene J. Winter, Proceedings of the XLVe Rencontre Assyriologique Internaltionale (Bethesda, Maryland: CDL Press, 2001).

<sup>&</sup>lt;sup>101</sup> The same is true for other periods of Mesopotamian history as well, in particular the following Old Babylonian period. However, impressions on other artefacts often provides a better view of the entire sealing, unfortunately these are insufficiently published.

## **Contest Scenes:**

The Ur III *Contest Scene* is essentially a further development of the Early Dynastic and Old Akkadian *Contest Scene*.<sup>102</sup> The *Contest scene* seals depict a contest between two groups of characters: humans or humanoids (humans, bull-men, lions acting like humans, etc.) battling one or more animals, monster, or similar.

A majority of seal impressions of *Contest Scene* seals date to the early part of the Ur III period.<sup>103</sup> According to Fischer,<sup>104</sup> and confirmed by Mayr,<sup>105</sup> some 13% of all seal impressions from the Ur III period are *Contest Scene* seals. None of the seals classified as Ur III in the printed catalog of the Bibliothèque nationale de France are *Contest Scene* seals. Eight seals in the Ashmolean Museum, classified by Buchanan as Ur III, are contest scene seals.

## Presentation or Ritual scenes:

The classic study of the *Presentation Scene* is Haussperger 1991,<sup>106</sup> for a more recent study see R. Mayr's forthcoming

<sup>&</sup>lt;sup>106</sup> Martha Haussperger, *Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit* (München : Profil Verlag, 1991).



<sup>&</sup>lt;sup>102</sup> According to Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1, 33-34, a development of the scene happened in the post-Akkadian period, but note Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 61 and n 2, who doubt the dating of many of Porada's post-Akkadian seals.

<sup>&</sup>lt;sup>103</sup> Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 65 fig. 3, and Mayr, *Seal Impressions on Tablets from Umma*, 7, 44, 96 and fig. 59.

<sup>&</sup>lt;sup>104</sup> Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 65.

<sup>&</sup>lt;sup>105</sup> Mayr, Seal Impressions on Tablets from Umma, 7, 43-44.

book.<sup>107</sup> The Presentation Scene<sup>108</sup> developed in the Old Akkadian period,<sup>109</sup> and continued in use into the Old Babylonian period. According to Haussperger, two basic scenes, the Presentation Scene and the Adoration Scene are typically discussed under the general header Presentation Scene.<sup>110</sup> In the Presentation Scene seals, a standing individual, presumably the seal owner, is introduced by another standing individual, a goddess, to a seated figure. On the Adoration Scene<sup>111</sup> seals, the seal owner is standing directly in front of the seated figure, with another standing figure, a goddess, with raised arms behind him.<sup>112</sup> A fourth standing figure appears on some Ur III Presentation Scene seals. On impressions found on dated tablets from Ur III Umma, the *Presentation Scene* is attested more frequently than the Adoration Scene; conversely, the Adoration Scene appears to be more frequently associated with Imperial or

 <sup>107</sup> Mayr, Seal Impressions on Tablets from Umma, 7, 53-79. (see also Rudolf H. Mayr, "The Figure of the Worshiper in the Presentation Scene," in *Garshana Studies*, ed. D. I. Owen (Bethesda, Maryland: CDL Press, 2011). and E.D. Van Buren, "Homage to a Deified King," *Zeitschrift für Assyriologie und Vorderasiatisches Archäologie* 50 (1952).
 <sup>108</sup> Termed "worship scene" by Buchanan, *Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals*, 76, and "ritual scene" by Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1, 35.

<sup>109</sup> Haussperger, Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit, 69-70. For a post-Akkadian date see Collon, First impressions : cylinder seals in the ancient Near East, 36. <sup>110</sup> Haussperger, Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit, 69. But note how some philologists have argued that only "in-na-ba seals", see below, should be called Presentation Scene seals, as the actual inscription on these seals relates to an object (the seal?) being presented. See for example Judith A. Franke, "Presentation Seals of the Ur III/Isin Larsa Period," in Seals and Sealings in the Ancient Near East, ed. McG. Gibson and R. D. Biggs, Bibliotheca Mesopotamiaca (Malibu: Undena Publications, 1977); Douglas Frayne, Ur III period, 2112-2004 BC, The Royal inscriptions of Mesopotamia Early periods, (Toronto; Buffalo: University of Toronto Press), xxxvi-xxxix; Rudolf H. Mayr and David I. Owen, "The royal gift seal in the Ur III period," in Von Sumer nach Ebla und zurück. Festschrift. Giovanni Pettinato zum 2 7. September 1999 gewidmet von Freunden, Kollegen und Schülern, ed. H. Waetzoldt, Heidelberger Studien zum alten Orient (Heidelberg: Heidelberger Orientverlag, 2004), 145.

<sup>&</sup>lt;sup>111</sup> Called Audience Scene by Mayr, Seal Impressions on Tablets from Umma, 7, 54-55. <sup>112</sup> Mayr, Seal Impressions on Tablets from Umma, 7. uses introduction, audience and presentation, seemingly interchangeable throughout.

Royal seals<sup>113</sup> and has been temporarily considered to be a later development, and the preferred scene in the Early and Standard Old Babylonian periods.<sup>114</sup> The seated figure is sometimes identified as divine, other times not).<sup>115</sup> In this study, occasional reference is made to the differentiation between Presentation Scene and Adoration Scene, when this is important, although both are understood to be variations of the *Presentation Scene*.<sup>116</sup> For the various garments worn by the participants see Haussperger.<sup>117</sup> The seal owner is usually bald and not wearing a hat; Delaporte's use of hairdo to date a physical seal to either the Ur III period or the Old Babylonian period (see also below),<sup>118</sup> although valid for seal impressions, does not take into considerations the ease with which a figure on a cylinder seal can be re-cut to show a head of hair or a hat. The seated figure can wear a wool-hat or a horned crown. The seated figure on Ur III Presentation Scene seals found on Ur III tablets usually sits on a square "Temple Façade" throne, and occasionally on an "upholstered" chair. Occasionally the throne is shaped as a lion, or has a lion sitting under it, or a representation of a lion engraved on it.<sup>119</sup>

<sup>114</sup> Collon, First impressions : cylinder seals in the ancient Near East, 36; Haussperger, Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit, 70. See also Mayr, Seal Impressions on Tablets from Umma, 7, 78, pointing out how this is true for physical seals, without considering the possibility that frequently these are re-cut Ur III seals.
<sup>115</sup> For a through discussion of the scene see Haussperger, Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der

<sup>&</sup>lt;sup>119</sup> The relationship between the Ur III kings and lions was pointed out to me by Bob Englund some years ago when we were discussing a text discovered by David Owen, Nisaba 15, 486 (<u>P414586</u>), mentioning ropes and harnesses for lions.



<sup>&</sup>lt;sup>113</sup> A majority of the seals which mention the phrase "your slave", ARAD<sub>2</sub>-zu, which are primarily Royal or Imperial appointee seals found on dated tablets, have the *Adoration Scene*; but note Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1. Morgan Seal 315-346E, all dated to the Old Babylonian period, all *Adoration Scene* seals, and almost all Old Babylonian *instances* of Ur III seals.

altbabylonischen Zeit, 69-77. <sup>116</sup> See Haussperger, *Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit*, 73-75, for the seven different types of *Presentation Scenes* she distinguished.

 <sup>&</sup>lt;sup>117</sup> Haussperger, Die Einführungsszene : Entwicklung eines mesopotamischen Motivs von der altakkadischen bis zum Ende der altbabylonischen Zeit, 296-97.
 <sup>118</sup> Delaporte, Catalogue sommaire, 70-72.

The inscription of the seal is usually found behind the seated figure.

The *Presentation Scene* seals are by far the most numerous among the seals found on texts dated to the Ur III period. According to Haussperger, 63% of 538 Ur III seal impressions found in a corpus of texts in the BM studied by her were impressed with *Presentation Scene* seals, whereas 35% of c 7112 physical cylinder seals in her corpus, dated from the Old Akkadian to the end of the Old Babylonian period, are engraved with the *Presentation Scene*.<sup>120</sup> All of the seals in the catalog of the Bibliothèque nationale de France and a majority of the seals in the Ashmolean Museum, which are classified as belonging to the Ur III period by their principal authors, are *Presentation Scene* seals.

Although the space between the figures in the vast majority of Ur III Presentation Scene seals found impressed on Ur III tablets is empty, some notable exceptions exist. Many Ur III Presentation Scene seals impressions show an emblematic standard behind or in front of the seated figure. Occasionally, the standard is half as high as the standing figures, but most of the time it is as tall as or taller than any of the standing figures. These standards are distinct, with a symbol or an animal on the top platform. Few or none of the preserved physical seal with the Presentation Scene, and none of the ones in the two collections discussed below include such a standard. Some seal impressions of Presentation Scene seals figure a small lion (cub?) between the seated figure and the first standing figure. Instead of a lion, the same space can be occupied by a date palm altar. Occasionally, there is a space below the inscription where another depiction of an animal can be found (either a lion, a bull, or an eagle). Apart from these relatively common figures occupying the space

<sup>&</sup>lt;sup>120</sup> Haussperger, *Die Einführungsszene : Entwicklung eines mesopotamischen Motivs* von der altakkadischen bis zum Ende der altbabylonischen Zeit, 69 fn 230.

between the main figures, a handful of other objects occur very randomly on Ur III Presentation Scene seals found impressed on tablets (scorpion; eagle and scorpion; mongoose/monkey; goose (below the feet of a seated goddess); ball-staff; goat-fish; libation vessel (a few times); lahmu?; lizard; small goddess; mace). Three seal impressions on Ur III tablets have rather crowded fields between the figures.<sup>121</sup> Above I mentioned the appearance of a bird (water fowl, possibly a goose) on the Charterhouse seal, which could not be identified on any of the impressions previously linked to that seal: a similar bird is found on numerous other seals said to be Ur III instances.<sup>122</sup> On these seals, the bird often appears with other symbols (see also below). In seals published as from the Old Babylonian period we find the same bird<sup>123</sup> or another animal (mongoose) in its place.<sup>124</sup> All of these seals add various additional symbols (see below).

As we shall see below, almost all of the seals in the two collections under discussion here, and dated to the Ur III period by their principal authors, feature very crowded spaces between the figures, with a range of floating objects, including some that are never seen on any Ur III seals (heads, various staffs and standards, animals, flasks and other objects). Haussperger noted the crowding of the space in post-Ur III *Presentation Scene* seals,<sup>125</sup> and cited Van Buren,<sup>126</sup> who

<sup>&</sup>lt;sup>126</sup> E.D. Van Buren, "Füllsel," in *Reallexicon der Assyriologie*, ed. E. F. Weidner and W. von Soden (Berlin, New York: Walter de Gruyter, 1957), 122.



 $<sup>^{\</sup>rm 121}$  Mayr, Seal Impressions on Tablets from Umma, 7, seals numbers 587 B; 796 A; 1044 B.

<sup>&</sup>lt;sup>122</sup> Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1. Morgan Seal 282 (<u>P511920</u>; erased inscription); Morgan Seal 284 (<u>P511922</u>; erased original inscription, partially replaced by standard); likely altered inscription; Morgan Seal 291 (<u>P511929</u>; possibly altered inscription).

<sup>&</sup>lt;sup>123</sup> Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1. Morgan Seal 303 (<u>P539675</u>).

<sup>&</sup>lt;sup>124</sup> Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1. Morgan Seal 315E, 316, 320E, 326, 328, 331E, 333, 341, 342.

<sup>&</sup>lt;sup>125</sup> Haussperger, *Die Einführungsszene : Entwicklung eines mesopotamischen Motivs* von der altakkadischen bis zum Ende der altbabylonischen Zeit, 72.

suggested the seals had acquired a secondary function as amulets in the Early Old Babylonian period. Collon also discussed the fact that many of these symbols could point to a later date of the final re-cutting of the seal, but still included these cylinders under the Ur III period.<sup>127</sup>

Generally, catalogues have tended to more or less randomly divide the well-executed *Presentation Scene* seals between the Ur III period and the mature Old Babylonian period, delegating the more simplistically cut *Presentation Scene* seals to the post-Akkadian period or the Early Old Babylonian period (or Isin-Larsa period). *Adoration Scene* seals are primarily conscripted to the Old Babylonian period, perhaps due to the Hammurapi style headdress of the seated figure.<sup>128</sup> The same division is clear also in Buchanan's 1966 catalogue,<sup>129</sup> although more references to impressions are made there.

#### Inscriptions on Ur III seals found on dated tablets

The classic study of seal inscriptions is Gelb's 1977 article.<sup>130</sup> However, Gelb is not explicit about the sources for his study, which appear to be primarily, or exclusively, physical seals. The corpus used for his classification was assembled from an unspecified set of publications,<sup>131</sup> numbering 1000 seals. I give below a summary of the main types of seal inscriptions

<sup>&</sup>lt;sup>127</sup> Collon, Catalogue of the Western Asiatic seals in the British Museum: Cylinder Seals II, Akkadian - Post-Akkadian - Ur III - Periods, 129-30.

<sup>&</sup>lt;sup>128</sup> See for example the discussion in Porada, *Mesopotamian art in cylinder seals of the Pierpont Morgan Library*, 1, 37, which references seals from Tell Asmar found at excavations, and compare Morgan Seal 274-294 for Ur III; Morgan Seal 296-314 for Isin Larsa; and Morgan Seal 315-345 for the Old Babylonian period.

<sup>&</sup>lt;sup>129</sup> Buchanan, *Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals*, 71, 79-80.

<sup>&</sup>lt;sup>130</sup> Ignace J. Gelb, "Typology of Mesopotamian Seal Inscriptions," in Seals and Sealing in the Ancient Near East, ed. McG. Gibson and R. D. Biggs, Bibliotheca Mesopotamiaca (Malibu: Undena Publications, 1977).

<sup>&</sup>lt;sup>131</sup> Assembled by a colleague, see Gelb, "Typology of Mesopotamian Seal Inscriptions," 107.

found on dated tablets from the Ur III and Old Babylonian period with reference to Gelb's typology when possible. I do not discuss very rare types.

Ur III seals found impressed on tablets have either one or two column inscriptions. Simple seals found impressed on tablets usually list the name of the owner of the seal and his patronymic (Gelb type V(a): PN dumu PN-2), but most seals include the owner's title (Gelb VIII(a): PN title/Prof. of GN/DN dumu PN-2), and /or the title of the father.<sup>132</sup> Seals impressed on Ur III tablets almost never list the name of the owner without also listing his patronymic.<sup>133</sup> The exceptions appear to all relate to people standing in a special relationship to rulers, high ranking officials, or deities.<sup>134</sup> These seal impressions, therefore, often have two-columns, listing the titles of the ruler or official to whom the owner is subordinated, and they often include a statement of servitude (ARAD<sub>2</sub>-zu, "your slave"; see below). These seals were probably owned by people for whom this relationship was the only link to power, or it was a relationship which vastly outweighed their own familial relationship, or they were devoid of any familial relationship (orphans).135

The overwhelming number of Ur III seal impressions found on tablets have a three-line inscription that give the title dub-sar,

<sup>&</sup>lt;sup>135</sup> See Dahl, *The ruling family of Ur III Umma : a prosopographical analysis of an elite family in Southern Iraq 4000 years ago*, 108, 147-55, for more on this sort of attachment.



<sup>&</sup>lt;sup>132</sup> See Jacob L. Dahl, *The ruling family of Ur III Umma : a prosopographical analysis of an elite family in Southern Iraq 4000 years ago*, PIHANS 108, (Leiden: Nederlands Instituut voor het Nabije Oosten, 2007), 86, for the use of titles within families and add Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 69; Gelb VII for only title of father, and Gelb IX for title of both owner and father.

 <sup>&</sup>lt;sup>133</sup> Gelb IV and VI, both with Ur III examples in Gelb's typology, and compare Fischer,
 "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 68, where only two very early seal impressions of the type "PN title" are listed.
 <sup>134</sup> With titles such as sagi, "cup-bearer," or lu<sub>2</sub>-bappir DN, "brewer of (a particular) god," etc.

"scribe," for the seal owner and lists his patronymic<sup>136</sup>— very few preserved physical Ur III seals give the title of the owner as "scribe".

Some seal inscriptions contain a statement referencing the seal owner as the slave of a prominent person mentioned in the first line of the seal. Often, but not always, these seals have two columns. The prominent person of the first line could be the king, a governor, or another powerful person. Allegiance is expressed either through the statement ARAD<sub>2</sub>zu ("your slave", or very rarely the feminine equivalent geme<sub>2</sub>zu), found at the end of the seal inscription (Gelb XVIII(e)). Much ink has been spilled over the grammatical construction used in these inscriptions, but it remains certain that the owner is referenced as the slave (ARAD<sub>2</sub>) of the prominent person in the first line of the seal.<sup>137</sup> A vastly more complex seal type is the so-called 'Royal Gift Seal' or in-na-ba seals. The inscription of in-na-ba seals is a complete sentence conveying that the seal was granted to the owner by the king ("KN (titles) gave it to NN (titles) his slave"; Sum. KN (titles) NN (titles) ARAD<sub>2</sub>-da-ni-ir in-na-ba).<sup>138</sup>

From the Ur III period, 674 different ARAD<sub>2</sub>-zu seals are known from impressions, and 18 physical ARAD<sub>2</sub>-zu seals are known from collections across the world.<sup>139</sup> However, none of the physical seals are known from any ancient impressions.

<sup>&</sup>lt;sup>136</sup> Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 71, see also 68-69.

<sup>&</sup>lt;sup>137</sup> Mayr and Owen, "The royal gift seal in the Ur III period," 146 fn. 6, with reference to Mayr, *Seal Impressions on Tablets from Umma*, 7, 103-04; Gelb, "Typology of Mesopotamian Seal Inscriptions," 113-14.

 <sup>&</sup>lt;sup>138</sup> Mayr and Owen, "The royal gift seal in the Ur III period;" Gelb type XXI(a).
 <sup>139</sup> <u>P457827</u>, <u>P458581</u>, <u>P459158</u>, <u>P459159</u>, <u>P226941</u>, <u>P226719</u>, <u>P226983</u>, <u>P226976</u>, <u>P465346</u>, <u>P474636</u>, <u>P474638</u>, <u>P474685</u>, <u>P477993</u>, <u>P477996</u>, <u>P512091</u>, <u>P512118</u>, <u>P512123</u>, <u>P529601</u>.

36 different in-na-ba seals are known from impressions,<sup>140</sup> but only one physical seal (<u>P458775</u>) with this inscription type has ever been published.<sup>141</sup> This physical seal is not known from any ancient impressions and is likely a modern forgery.<sup>142</sup>

Ur III seals found on tablets almost never record a servile relationship to a deity (ARAD<sub>2</sub> or geme<sub>2</sub> DN) in the final line (Gelb XII).<sup>143</sup> In Mayr's unpublished catalog of Umma seals<sup>144</sup> and on CDLI 44 Umma seals have inscriptions where the owner lists their servitude to Šara, the main god of Umma, in the final line of their seal.<sup>145</sup> A few Umma seals mention servitude to Šara (ARAD<sub>2</sub> dšara<sub>2</sub>) in the middle line, before the patronymic.<sup>146</sup> Such relationships are found more frequently in seal impressions on tablets from the Old Babylonian period (for example "Seal 3" on CDLB 2014/004 §2.1 (<u>P333863</u>), see above number **10**).

The very low number of seals in Gelb's chart for types VIII(a) and IX highlights the problem of the exercise carried out by Gelb. Group VIII(a) has 15 attestations from the Ur III period and two from the OB period, whereas group IX, auspiciously listed with only one sub-category "PN title dumu PN-2 title", has only two Ur III attestations and six OB ones in Gelb's chart. These two groups, and in particular VIII(a), are of

<sup>&</sup>lt;sup>146</sup> Gelb XII(I): PN ARAD<sub>2</sub> DN dumu PN-2, see Mayr 59B-E, but note 59F.



<sup>&</sup>lt;sup>140</sup> P429952, P429946, P429947, P429948, P429949, P430412, P430426, P430440, P430442, P430486, P430632, P430635, P429950, P430658, P430662, P455520, P455527, P455737, P458628, P458629, P458630, P458636, P458642, P458679, P458681, P458682, P458683, P458685, P458686, P458687, P458692, P458698, P458780, P458807, P458825, P458866.

<sup>&</sup>lt;sup>141</sup> Giovanni Bergamini, "In-na-ba seal of Aakalla, governor of Umma, granted by Šu-Sîn.," *N.A.B.U.* 1998 (1998).

<sup>&</sup>lt;sup>142</sup> Convincingly argued by Claudia Fischer, "The Perils of Perfection," *N.A.B.U.* 1999: 15 (1999), but see Mayr and Owen, "The royal gift seal in the Ur III period," 152 and fn 37, for a positive assessment of the authenticity of the seal.

<sup>&</sup>lt;sup>143</sup> Note that Gelb listed several Ur III seals under this category—unfortunately with no reference to the actual seal, making it impossible to replicate his results.

<sup>&</sup>lt;sup>144</sup> Mayr, Seal Impressions on Tablets from Umma, 7.

 $<sup>^{\</sup>rm 145}$  See for example a-ši-dingir (seal numbers 59B-F) and his son ur-e\_11-e (seal number 891).

course the most prolific Ur III seal inscriptions known from impressions,<sup>147</sup> but *not* from preserved physical seals in our collections.

#### Re-cut seals

In a recent monograph on Old Babylonian seals, R. Feingold notes that up to 25% of the seals she examined were re-cut in antiquity.<sup>148</sup> This observation was based on a corpus of 1000 Old Babylonian seals from various collections assembled by Feingold. I discuss some of the same seals below and make reference to Feingold when pertinent.<sup>149</sup> In her 1997 study, C. Fischer made similar observations using seal impressions.<sup>150</sup> R. Mayr suggested that Ur III seals were continuously re-cut, something he re-iterated in his forthcoming book.<sup>151</sup>

Although scholars have used a fairly specific set of diagnostic indicators to determine whether a seal has been recut (see below), many discussions include an element of "connoisseurship"—arguing that the style of figures is mismatched or similar.<sup>152</sup> "Connoisseurship" is notoriously difficult to quantify and plays much less of a role in my study.

Occasionally, studies have mentioned the fact that re-cut seals are visibly flattened on the side where the inscription is

<sup>&</sup>lt;sup>147</sup> Fischer, "Siegelabrollungen im British Museum auf neusumerischen Tontafeln aus der Provinz Lagaš," 68-69.

<sup>&</sup>lt;sup>148</sup> Feingold, Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period, 41.

<sup>&</sup>lt;sup>149</sup> Feingold, Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period.

<sup>&</sup>lt;sup>150</sup> Fischer and even went so far as to suggest that modifications were made to seals still in use, Fischer, "Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagas," 105-08, something rejected by Mayr, *Seal Impressions on Tablets from Umma*, 7, 19, who suggested new seals were always cut.

<sup>&</sup>lt;sup>151</sup> Mayr, Seal Impressions on Tablets from Umma, 7.

<sup>&</sup>lt;sup>152</sup> Feingold, Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period, 41.

(was), indicating re-cutting of the inscription (once or several times).<sup>153</sup> Similarly, the size of cylinder seals has been suggested to indicate continuous re-cutting over generations, with for example Ur III seals being generally smaller than Old Akkadian seals,<sup>154</sup> and the former have concave sides.<sup>155</sup> Finally, D. Collon has observed how occasionally, an expanded bore-hole with smooth, flaring extremities indicates that the seal had been mounted on a horizontal spindle so as to completely erase the previous scene and inscription.<sup>156</sup> A future study of re-cut cylinder seals should be based on the circumference of the seal (from good quality top and bottom images), identifying seals with a flattened side, in addition to, of course, establishing clear diagnostics of content from impressions on dated or datable objects to compare with physical seals (see also above).

In this study, a re-cut seal is defined as having either, **(1)** an erased inscription, replaced by:<sup>157</sup>

- One or more figures
- Symbols
- New inscription
- No replacement → blank space

Or by having (2) an erased scene, replaced by:

- Inscription
- No replacement → blank space

Or by **(3)** adding objects not typically seen on Ur III seals known from impressions.

<sup>&</sup>lt;sup>157</sup> Compare to Mayr, "Intermittent Recarving of Seals in the New-Sumerian Period."



<sup>&</sup>lt;sup>153</sup> See for example Feingold, *Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period*, 45, and Collon, *First impressions : cylinder seals in the ancient Near East*, 120.)

<sup>&</sup>lt;sup>154</sup> Porada, Mesopotamian art in cylinder seals of the Pierpont Morgan Library, 1, 34.

<sup>&</sup>lt;sup>155</sup> See also Collon, *First impressions : cylinder seals in the ancient Near East*, 122.

<sup>&</sup>lt;sup>156</sup> Collon, First impressions : cylinder seals in the ancient Near East, 120-22.

Or identified by (4) a complete erasure of the old seal. Any of these erasures are identified by either:

- Traces of earlier inscription visible behind new inscription or new scene
- Traces of earlier scene visible behind new inscription or new scene
- Flatness of one side of seal (when seen from top or bottom)
- Inconsistencies in design (only when compared to corpus of seal impressions attested on dated or datable tablets)
- Overlap of new component over old component
- Enlargement of central perforation (for total recut)

Many seals were undoubtedly already re-cut in the Ur III period.<sup>158</sup> Similarly, many re-cut Old Babylonian seals may of course be originally produced in the Old Babylonian period and re-cut during the same (very long time-span of the) Old Babylonian period.

## Ur III Seals in the Bibliothèque nationale de France

In his 1910 catalogue of the seals in the Bibliothèque nationale de France, Delaporte listed 41 seals as belonging to the Ur III period.<sup>159</sup> He divided these seals into two subgroups of the so-called *Presentation Scene* (see above): numbers 83-97, belonging to a "first ceremony" depicting the worshipper being led by the hand of his personal god into the presence of the god;<sup>160</sup> and numbers 98-123, belonging to a "second ceremony" depicting the personal god of the worshipper standing behind him with hands raised, both of

<sup>&</sup>lt;sup>158</sup> See Fischer, "Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagas," 105-08, but note that Mayr, *Seal Impressions on Tablets from Umma*, 7, 19 and fn 37 is skeptical, however, see the re-cut Ur III seal 1061 B in his catalogue.

<sup>&</sup>lt;sup>159</sup> Delaporte, *Catalogue sommaire*, xii-xiv.

<sup>&</sup>lt;sup>160</sup> Delaporte, Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris, 49-57.

them in front of the main deity,<sup>161</sup> identical to the *Adoration Scene* of Haussperger).<sup>162</sup>

However, the vast majority of the seals Delaporte assigned to the Ur III period are in fact Old Babylonian *instances* of what might be original Ur III seals. The few possible Ur III *instances* stand out for particular reasons and are discussed below the table.

I have indicated the date of the current *instance* of each seal in the table below, leaving the date blank for those seals where a date cannot be established. I refer the reader to the notes in those cases.

ID	P#	S#	Notes	Date	Material
DMMA D 083	<u>P47605</u> <u>1</u>	<u>S009310</u>	Uninscribed; crystal	Ur III / OB	stone: quartz
DMMA D 084	<u>P47605</u> <u>2</u>	<u>S009310</u>	Inscription possibly erased, replaced with figures and symbols	OB	stone: serpentine
DMMA D 085	<u>P476053</u>	<u>S009311</u>	Inscription appears squeezed in between characters, typical OB inscription	OB	stone: haematite
DMMA D 086	<u>P476054</u>	<u>S009313</u>	Inscription erased; lines still visible; quadruped filling part of the space of the erased inscription	OB	stone: haematite
DMMA D 087	<u>P476055</u>	<u>S009314</u>	Typical OB inscription mentioning <sup>d</sup> utu	OB	stone: haematite

<sup>&</sup>lt;sup>161</sup> Delaporte, Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris, 57-70.

<sup>&</sup>lt;sup>162</sup> Haussperger, *Die Einführungsszene : Entwicklung eines mesopotamischen Motivs* von der altakkadischen bis zum Ende der altbabylonischen Zeit.

ID	P#	S#	Notes	Date	Material
DMMA D 088	<u>P476056</u>	<u>S009315</u>	Inscription erased and replaced by symbols; animal between king and personal deity	OB	stone: haematite
DMMA D 089	<u>P476057</u>	<u>S009316</u>	Well preserved	Ur III	stone: jasper
DMMA D 090	<u>P476058</u>	<u>S009317</u>	Extra person behind worshippers, no inscription, possible fake	OB	stone: haematite
DMMA D 091	<u>P476059</u>	<u>S009318</u>	Seated figure holding a sceptre or mace; typical OB inscription	OB	stone: serpentine
DMMA D 092	<u>P476060</u>	<u>S009319</u>	Inscription erased; crystal	OB	stone: rock crystal
DMMA D 093	<u>P476061</u>	<u>S009320</u>	Inscription erased and replaced by figure	OB	stone: haematite
DMMA D 094	<u>P476062</u>	<u>S009321</u>	Inscription possibly erased, replaced with shorter inscription and a symbol	OB	stone: haematite
DMMA D 095	<u>P476063</u>	<u>S009322</u>	Inscription possibly erased, replaced with figures and symbols	OB	stone: jasper
DMMA D 096	<u>P476064</u>	<u>S009323</u>	Possible OB inscription; jasper/crystal	OB?	stone: jasper?
DMMA D 097	<u>P476065</u>	<u>S009324</u>	Very worn, no inscription lapis	Ur III / OB	stone: lapis lazuli
DMMA D 098	<u>P476066</u>	<u>S009325</u>	Inscription possibly erased, replaced with shorter inscription and a figure	OB	stone: haematite

ID	P#	S#	Notes	Date	Material
DMMA D 099	<u>P476067</u>	<u>S009326</u>	Inscription erased and replaced by symbol; symbol between seated king and worshipper	OB	stone: haematite
DMMA D 100	P476068	<u>S009327</u>	Inscription erased; symbols around main figures	OB	stone: haematite
DMMA D 101	<u>P476069</u>	<u>S009328</u>	Inscription erased (traces of lines), replaced with figures; symbols around main figures	OB	stone: haematite
DMMA D 102	<u>P476070</u>	<u>S009329</u>	Inscription possibly erased, replaced with figures; symbols around main figures	OB	stone: haematite
DMMA D 103	<u>P476071</u>	<u>S009330</u>	Inscription partially erased; typical OB inscription	ОВ	stone: haematite
DMMA D 104	<u>P476072</u>	<u>S009331</u>	Typical OB inscription; lapis	OB	stone: lapis lazuli
DMMA D 105	<u>P476073</u>	<u>S009332</u>	Typical OB inscription; lapis	OB	stone: lapis lazuli
DMMA D 106	<u>P476074</u>	<u>S009333</u>	<sup>d</sup> utu and <sup>d</sup> a-a inscription	OB	stone: haematite
DMMA D 107	<u>P476075</u>	<u>S009334</u>	Inscription partially erased	OB	stone: haematite
DMMA D 108	<u>P476076</u>	<u>S009335</u>	Typical OB inscription; crystal	OB	stone: rock crystal
DMMA D 109	<u>P476077</u>	<u>S009336</u>	Inscription erased; symbols around main figures	OB	stone: haematite
DMMA D 110	<u>P476078</u>	<u>S009337</u>	Typical OB inscription; symbols around main figure	OB	stone: haematite



ID	P#	S#	Notes	Date	Material
DMMA D 111	<u>P476079</u>	<u>S009338</u>	Typical OB inscription; symbols around main figure	OB	stone: haematite
DMMA D 112	<u>P476080</u>	<u>S009339</u>	Typical OB inscription; symbols around main figure	OB	stone: jasper
DMMA D 113	<u>P476081</u>	<u>S009340</u>	Typical OB inscription; symbols around main figure	OB	stone: haematite
DMMA D 114	<u>P476082</u>	<u>S009341</u>	Inscription erased; symbols around main figures	OB	stone: haematite
DMMA D 115	<u>P476083</u>	<u>S009342</u>	Inscription erased; symbols around main figures	OB	
DMMA D 116	<u>P476084</u>	<u>S009343</u>	Typical OB inscription	OB	
DMMA D 117	<u>P476085</u>	<u>S009344</u>	Inscription possibly erased, replaced with shorter inscription and a figure and symbols; symbols around main figures	OB	
DMMA D 118	<u>P476086</u>	<u>S009345</u>	Inscription possibly erased, replaced with shorter inscription and a figure; symbols around main figures	OB	
DMMA D 119	<u>P476087</u>	<u>S009346</u>	Typical OB inscription; possibly re-cut, added symbol	OB	
DMMA D 120	<u>P476088</u>	<u>S009347</u>	Text of the inscription is unusual for the Ur III	Ur III / OB	crystal

ID	P#	S#	Notes	Date	Material
			period but not impossible <sup>163</sup>		
DMMA D 121	<u>P476089</u>	<u>S009348</u>	Typical OB scene with standing/ascending deity; inscription erased	OB	
DMMA D 122	<u>P476090</u>	<u>S009349</u>	Typical OB scene and inscription	OB	
DMMA D 123	<u>P476091</u>	<u>S009350</u>	Re-cut scene and inscription; two crescent moons	OB	

Only five of Delaporte's 41 "Ur III seals" are possible Ur III *instances*, that is, they are currently preserved in the same state that they were in during the Ur III period (DMMA D numbers **83**, **89**, **96**, **97**, **120**). The remaining 35 seals are all likely Old Babylonian *instances*, many of them re-cut in antiquity, and most of these are probably from Ur III originals.

The rock crystal seal **120** (<u>P476088</u>) and the quarts seal **83** (<u>P476051</u>) may have been difficult to re-cut, as rock crystal and quartz seals are notoriously difficult to work (see for example, but note). However, **83** (<u>P476051</u>) lacks an inscription, present in almost all Ur III seals attested from impressions. **96** (<u>P476064</u>) may also be quartz or crystal. **89** (<u>P476057</u>) has a short two-line inscription. Both the name of the owner, lugal-ur<sub>2</sub>-ra-ni, and that of his father, u<sub>2</sub>-u<sub>2</sub>(-mu) (possibly patronymic and title muḫaldim), are attested, independently, in Ur III texts, but there exist no impressions of a seal of lugal-ur<sub>2</sub>-ra-ni dumu u<sub>2</sub>-u<sub>2</sub>-mu (or u<sub>2</sub>-u<sub>2</sub> muhaldim). The seal is well preserved and not worn. **97** (<u>P476065</u>) is very worn and no determination could be made concerning the date.

<sup>&</sup>lt;sup>163</sup> Compare to the seal Newel 135, also rock crystal, and see now Jacob L. Dahl and Agnete W. Lassen, "Newell 135: A Re-Cut Seal," (forthcoming).

# "Old Babylonian" seals in the Bibliothèque nationale de France

Delaporte's list of Old Babylonian seals (his numbers 124 – 295) include many *Presentation Scene* seals. One of his criteria for assigning a seal with the *Presentation Scene* to either the Old Babylonian or the Ur III period is the head of the worshipper, which, according to Delaporte, is always bald on *Presentation Scene* seals found on impressions dated to the Ur III period.<sup>164</sup> Delaporte's catalog therefore introduces a "third ceremony"<sup>165</sup> for the *Presentation Scene* seals with a worshipper with a head of hair.

The other scenes Delaporte assigns to the Old Babylonian period are a Presentation Scene seal of the "fourth ceremony" (pp. 72-86,) which depicts a person with a mace in front of a deity with raised hands. His "fifth ceremony" depicts a variation of the "first and second ceremony", but with only a worshipper in front of the seated figure, and with the worshipper raising his hand (pp. 87-89). Next come "libations" scenes (pp. 89-91), followed by scenes depicting the "offering of a kid" (pp. 91-102), followed by scenes with a "person in short dress" (pp. 103-109), then scenes with a "person with a mace" (pp. 109-125). This is followed by scenes with a "warrior goddesses" (pp. 125-137), followed by scenes with a "person armed with maces arranged in a fan" (pp. 138-140), and the scenes of "the god of lightening" (pp. 138-147), scenes of the "god with the curved staff" (pp. 147-148), and finally, "diverse subjects" (pp. 148-166).

Subsequent to the publication of Delaporte 1910, one seal, Delaporte's number **198** ( $\underline{P476166}$ ), has been dated to the

<sup>&</sup>lt;sup>164</sup> Delaporte, Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris, xiii.

<sup>&</sup>lt;sup>165</sup> Delaporte, Catalogue sommaire des manuscrits coptes de la Bibliothèque nationale de Paris, 70-72.

Early Old Babylonian period based on the inscription. The seal belonged to a servant of Ipiq-Adad, perhaps the Early Old Babylonian ruler of Eshnunna by that name. The seal has a scene with a person with a mace. This scene is known only from Old Babylonian and not Ur III seal impressions. Delaporte himself did not distinguish Early Old Babylonian and Old Babylonian.

All of seals from Delaporte's "third ceremony" (numbers 124-133) appear possible Ur III re-cut seals. Of these, Delaporte number **126** (<u>P476094</u>) almost certainly has an erased inscription with the addition of a walking figure behind the seated figure. Outlines of the inscription are visible behind the figure. Delaporte number **128** (<u>P476096</u>) is also likely recut from a seal which originally had an inscription with three or more lines, behind the seated figure. In the current *instance*, a standard and a bull-man (?) take up the space behind the seated figure. Additionally, objects are placed between the three figures of the *Presentation Scene*.

Many of the remaining Old Babylonian seals feature a standing or ascending figure instead of the seated figure. This scene (a variation of the *Presentation Scene*) is very rarely found on Ur III seals impressed on dated tablets.<sup>166</sup> However, some of these seals and some of the more traditional *Presentation Scene* seals, with a seated person are likely recut seals, possibly originally from the Ur III period.<sup>167</sup>

**<sup>151</sup>** (<u>P476119</u>), **152** (<u>P476120</u>), **158** (<u>P476126</u>), and **162** (<u>P476130</u>).



<sup>&</sup>lt;sup>166</sup> Mayr, Seal Impressions on Tablets from Umma, 7, 60.

<sup>&</sup>lt;sup>167</sup> For example Delaporte's numbers **138** (<u>P476106</u>), **141** (<u>P476109</u>), **150** (<u>P476118</u>),

## Ur III Seals in the Ashmolean Museum

In his catalogue of the cylinder seals of the Ashmolean Museum,<sup>168</sup> Buchanan included both seals typically labelled post-Akkadian and Early Old Babylonian<sup>169</sup> within his group of Neo-Sumerian seals,<sup>170</sup> totaling 60 seals. Moorey and Gurney<sup>171</sup> published an additional five Neo-Sumerian seals acquired by the Ashmolean Museum following the publication of Buchanan's 1966 catalogue using notes from Buchanan when possible.<sup>172</sup> 12 of the Ur III (Neo-Sumerian) seals in the Ashmolean Museum were found during regular archaeological excavation (Kish, Ur and Tell Brak).

Buchanan's sensible decision not to distinguish post-Akkadian, Ur III, and Early Old Babylonian is marred by his considerations of ethnicity, purity, and style.<sup>173</sup> Buchanan's 1966 catalogue listed 19 seals and two impressions as post-Akkadian, 26 seals (divided between "Contest Scenes" and "Worship Scenes," his terminology) and 8 impressions as Ur III, and 15 seals and one impression as Early Old Babylonian.<sup>174</sup> In an effort to avoid assigning seals that appear less well executed to periods of decreased statecontrol based on the assumption of general collapse, I include all 60 seals from and the five seals from,<sup>175</sup> below.

<sup>&</sup>lt;sup>168</sup> Buchanan, Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals.

<sup>&</sup>lt;sup>169</sup> Isin-Larsa, although Buchanan only included seals from the first c 100 years of this period.

<sup>&</sup>lt;sup>170</sup> Buchanan, Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals, 71-82.

<sup>&</sup>lt;sup>171</sup> Moorey and Gurney, "Ancient near Eastern Cylinder Seals Acquired by the Ashmolean Museum, Oxford 1963-1973."

<sup>&</sup>lt;sup>172</sup> Moorey and Gurney, "Ancient near Eastern Cylinder Seals Acquired by the Ashmolean Museum, Oxford 1963-1973," 41.

<sup>&</sup>lt;sup>173</sup> Buchanan, Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals, 71.

<sup>&</sup>lt;sup>174</sup> Buchanan, Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals.

<sup>&</sup>lt;sup>175</sup> The five Ur III seals from Moorey and Gurney were not available for imaging prior to the conclusion of this article and the annotations were made on the low-resolution rollouts from the article.

♦€

Similar to seals in the collection of the Bibliothèque nationale de France identified as Ur III by their original publisher, the vast majority of the seals identified by Buchanan as Ur III (or more broadly "Neo-Sumerian") are likely to be Old Babylonian (including Isin-Larsa) *instances*, possibly of original Ur III seals.

ID	P#	S#	Notes	Dat e	Material
Buchanan 389	<u>P473086</u>	<u>S00683</u> <u>1</u>	Inscription not framed; added symbols around figures; throne unusual for Ur III	OB	Shale
Buchanan 390	<u>P473087</u>	<u>S00683</u> <u>2</u>	Two-line inscription following OB pattern; inscription not in mirror	OB	Lapis Iazuli
Buchanan 391	<u>P473088</u>	<u>S00683</u> <u>3</u>	Female owner; added object between figures	OB?	Calcite/ crystal?
Buchanan 392	<u>P473089</u>	<u>S00683</u> <u>4</u>	No inscription; direction of scene opposite of usual Ur III Presentation Scene	OB?	Steatite
Buchanan 393	<u>P473090</u>	<u>S00683</u> <u>5</u>	Re-cut inscription replaced by standing person	OB?	Limeston e
Buchanan 394	<u>P473091</u>	<u>S00683</u> <u>6</u>	Worn; two-line inscription	OB	Limeston e
Buchanan 395	<u>P473092</u>	<u>S00683</u> <u>7</u>	OB inscription; likely OB style	OB	Steatite
Buchanan 396	<u>P473093</u>	<u>S00683</u> <u>8</u>	No inscription	OB	Serpentin e
Buchanan 397	<u>P473094</u>	<u>S00683</u> <u>9</u>	No inscription	OB	Schist
Buchanan 398	<u>P473095</u>	<u>S00684</u> <u>0</u>	No inscription	OB?	Sandston e

ID	P#	S#	Notes	Dat e	Material
Buchanan 399	<u>P473096</u>	<u>S00684</u> <u>1</u>	Likely OB style; no inscription	OB	Steatite
Buchanan 400	<u>P473097</u>	<u>S00684</u> 2	Central tree, OB or later; no inscription	OB	Steatite
Buchanan 401	<u>P473098</u>	<u>S00684</u> <u>3</u>	Date palm scene, no inscription	OB	Serpentin e
Buchanan 402	<u>P473099</u>	<u>S00684</u> <u>4</u>	Date palm scene, inscription re-cut, replaced with standard	OB	Steatite
Buchanan 403	<u>P473100</u>	<u>S00684</u> <u>5</u>	Date palm scene, no inscription	OB or later	Steatite
Buchanan 405	<u>P473101</u>	<u>S00684</u> <u>6</u>	Damaged; woven pattern and scorpions	OB?	Limeston e
Buchanan 406	<u>P473102</u>	<u>S00684</u> <u>7</u>	Row of animals?	OB?	
Buchanan 407	<u>P473103</u>	<u>S00684</u> <u>8</u>	Pair of vultures?	OB?	
Buchanan 409	<u>P473104</u>	<u>S00684</u> <u>9</u>	Animals on either side of tree and hunter; two cuneiform signs;	OB?	Schist
Buchanan 410	<u>P473105</u>	<u>S00685</u> <u>0</u>	Contest scene; two- line inscription, listing owner and title;	OB	Serpentin e
Buchanan 411	<u>P473106</u>	<u>S00685</u> <u>1</u>	Contest scene; inscription erased	OB	Steatite
Buchanan 412	<u>P473107</u>	<u>S00685</u> <u>2</u>	Contest scene; inscription worn or erased	OB	Limeston e
Buchanan 413	<u>P473108</u>	<u>S00685</u> <u>3</u>	Contest scene; inscription worn or erased	OB	Serpentin e

ID	P#	S#	Notes	Dat e	Material
Buchanan 414	<u>P473109</u>	<u>S00685</u> <u>4</u>	Contest scene; inscription erased	OB	Steatite
Buchanan 417	<u>P473110</u>	<u>S00685</u> <u>5</u>	Contest scene; compare to Mayr n.d. 915 B and Fischer 1997 fig 6	Ur III	Serpentin e
Buchanan 418	<u>P473111</u>	<u>S00685</u> <u>6</u>	Contest scene; two-line inscription (owner and patronymic); added objects;	OB	Serpentin e
Buchanan 419	<u>P473112</u>	<u>S00685</u> <u>7</u>	Worn; no inscription	OB	Shell
Buchanan 420	<u>P473113</u>	<u>S00685</u> <u>8</u>	Two-line inscription (owner and patronymic)	OB	Steatite
Buchanan 421	<u>P473114</u>	<u>S00685</u> <u>9</u>	Re-cut inscription; original inscription partially visible; additional objects	OB	Serpentin e
Buchanan 422	<u>P473115</u>	<u>S00686</u> 0	Re-cut inscription; original inscription partially visible	OB	Serpentin e
Buchanan 423	<u>P473116</u>	<u>S00686</u> <u>1</u>	Two-line inscription	UR III or OB	Serpentin e
Buchanan 424	<u>P473117</u>	<u>S00686</u> <u>2</u>	Two-line inscription	Ur III or OB	Serpentin e
Buchanan 425	<u>P473118</u>	<u>S00686</u> <u>3</u>	Re-cut inscription, replaced by symbol; additional objects	OB	Serpentin e
Buchanan 426	<u>P473119</u>	<u>S00686</u> <u>4</u>	Erased inscription	OB	Rock crystal
Buchanan 427	<u>P473120</u>	<u>S00686</u> <u>5</u>	Very worn	OB	Steatite
Buchanan 428	<u>P473121</u>	<u>S00686</u> <u>6</u>	Re-cut inscription	OB	Schist

ID	P#	S#	Notes	Dat e	Material
Buchanan 429	<u>P473122</u>	<u>S00686</u> <u>7</u>	Re-cut inscription?	OB	Steatite
Buchanan 430	<u>P473123</u>	<u>S00686</u> <u>8</u>	Re-cut inscription	OB	Steatite
Buchanan 431	<u>P473124</u>	<u>S00686</u> <u>9</u>	Re-cut inscription	OB	Steatite
Buchanan 432	<u>P473125</u>	<u>S00687</u> 0	Re-cut inscription	OB	Steatite
Buchanan 433	<u>P473126</u>	<u>S00687</u> <u>1</u>	Re-cut, worshipper and deity replaced by figures and symbols	OB	Steatite
Buchanan 435	<u>P473127</u>	<u>S00687</u> <u>2</u>	Re-cut inscription	OB	Serpentin e
Buchanan 441	<u>P473128</u>	<u>S00687</u> <u>3</u>	Two-line inscription	OB	Steatite
Buchanan 442	<u>P473129</u>	<u>S00687</u> <u>4</u>	Missing the deity introducing worshipper	Ur III or OB	Lapis Iazuli
Buchanan 443 <sup>176</sup>	<u>P473130</u>	<u>S00687</u> <u>5</u>	Inscription re-cut and replaced by symbols	OB	Steatite
Buchanan 444	<u>P473131</u>	<u>S00687</u> <u>6</u>	Two-line inscription	OB	Limeston e
Buchanan 445	<u>P473132</u>	<u>S00687</u> <u>7</u>	Inscription re-cut and replaced by standard	OB	Obsidian( ?)
Buchanan 446	<u>P473133</u>	<u>S00687</u> <u>8</u>	Inscription re-cut and replaced by symbols	OB	Limeston e
Buchanan 447	<u>P473134</u>	<u>S00687</u> <u>9</u>	<sup>d</sup> utu and <sup>d</sup> a-a inscription	OB	Hematite
Buchanan 448	<u>P473135</u>	<u>S00688</u> <u>0</u>	No inscription	OB	Marble
Buchanan 449	<u>P473136</u>	<u>S00688</u> <u>1</u>	No inscription	OB	Hematite

<sup>&</sup>lt;sup>176</sup> Unavailable for imaging.

ID	P#	S#	Notes	Dat e	Material
Buchanan 450	<u>P473137</u>	<u>S00688</u> <u>2</u>	Inscription re-cut and replaced by symbols	OB	Soapston e
Buchanan 451 <sup>177</sup>	<u>P473138</u>	<u>S00688</u> <u>3</u>	Inscription re-cut and replaced by symbols	OB	Steatite
Buchanan 452	<u>P473139</u>	<u>S00688</u> <u>4</u>	<sup>d</sup> utu and <sup>d</sup> a-a inscription	OB	Jasper
Buchanan 453	<u>P473140</u>	<u>S00688</u> <u>5</u>	Inscription re-cut and replaced by symbols	OB	Volcanic ash?
Buchanan 454	<u>P473141</u>	<u>S00688</u> <u>6</u>	Inscription re-cut; <sup>d</sup> utu and <sup>d</sup> a-a inscription	OB	Limeston e
Buchanan 455 <sup>178</sup>	<u>P473142</u>	<u>S00688</u> <u>7</u>	No inscription	OB	Steatite
Buchanan 456	<u>P473143</u>	<u>S00688</u> <u>8</u>	No inscription, possibly inscription re- cut and replaced by additional person	OB	Hematite
Buchanan 457	<u>P473144</u>	<u>S00688</u> <u>9</u>	No inscription	OB	Limeston e
Buchanan 459	<u>P473145</u>	<u>S00689</u> <u>0</u>	No inscription	OB	Volcanic ash?
Moorey and Gurney 1978 25	<u>P381719</u>	<u>S01211</u> <u>5</u>	Inscription re-cut	OB	Serpentin e
Moorey and Gurney 1978 26	<u>P381720</u>	<u>S01211</u> <u>9</u>	Inscription re-cut replaced by symbols	OB	Nephrite
Moorey and Gurney 1978 27	<u>P381721</u>	<u>S01211</u> <u>Z</u>	Likely OB inscription	OB	Serpentin e
Moorey and Gurney 1978 28	<u>P381722</u>	<u>S01211</u> <u>8</u>	Inscription re-cut replaced by standard	OB	Steatite

<sup>&</sup>lt;sup>177</sup> Unavailable for imaging.<sup>178</sup> Unavailable for imaging.

Dahl 243

ID	P#	S#	Notes	Dat e	Material
Moorey and Gurney 1978 29	<u>P381723</u>	<u>S01212</u> 0	No frame around inscription, typical OB	OB	Carnelian

Only one of the 60 Ur III seals in Buchanan's 1966 catalogue is likely to be an Ur III instance of a seal, whereas the remaining 59 seals are likely to be OB instances, mostly recut Ur III seals. Out of these, Buchanan classified numbers 444-59 as either late Ur III or Early Old Babylonian, but there is no reason to not extend this to numbers 389-443 as well. Most of numbers 389-443 have either a typical Old Babylonian style inscription, or no inscription at all. Seals without inscription are virtually unknown from Ur III tablets.<sup>179</sup> Several examples in the early group have the original inscription removed and replaced by a symbol or lines (numbers 425 (P473118), 426 (P473119), 428 (P473121)), in two cases leaving a space for a new inscription (numbers 411 (P473106) and 414 (P473109)). In two cases an earlier inscription can perhaps still be seen behind the Old Babylonian one (numbers 421 (P473114) and 422 (P473115)).

The only Ur III seal in the Ashmolean, therefore, is Buchanan number **417** (<u>P473110</u>). The unique inscription of this seal is that of a high-ranking official in the Ur III state, Ur-Bagara, scribe, child of Ur-Baba, major-domo of (the temple of) Šulgi (ur-ba-gara<sub>2</sub> / dub-sar / dumu ur-<sup>d</sup>ba-ba<sub>6</sub> / šabra <sup>d</sup>šul-gi,). The scene is uncommon but not inconceivable for Ur III seals found on dated Ur III tablets. It shows two men with a winged creature between them.<sup>180</sup> The men are naked, apart from a

<sup>&</sup>lt;sup>179</sup> Mayr, Seal Impressions on Tablets from Umma, 7, 24.

<sup>&</sup>lt;sup>180</sup> Compare Mayr, Seal Impressions on Tablets from Umma, 7, 395, catalogue number 915 B, and Fischer, "Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagas," figure 6.

waist-cloth, and carry weapons. The creature is a hybrid lioneagle. Three symbols are present between the figures: a goose(?), a flask, and the ball staff.<sup>181</sup> The seal does not appear to be worn. The inscription overlaps with both figures, but there is no conclusive evidence that the inscription is recut.

A number of other seals could be Ur III in date (for example numbers **391** (<u>P473088</u>), **423** (<u>P473116</u>), **424** (<u>P473117</u>), and **442** (<u>P473129</u>)), but there is no reason for dating them to this period and not to the following Isin-Larsa or Early Old Babylonian period. In fact, that none of these seals are known from impressions should give caution against dating them to the Ur III period.

## "Old Babylonian" Seals in the Ashmolean Museum

Buchanan's 1966 catalogue (pp. 85-86) listed 10 seals (numbers 460-9) which he classified as "worship scenes of mature style," a style he claimed evolved after c 1850 BC,<sup>182</sup> and 29 seals classified as "varied scenes, transitional and early".<sup>183</sup> Most of the seals Buchanan termed "worship scenes of mature style", are likely to be re-cut Ur III seals, and Feingold had already listed **461** (<u>P473147</u>), **462** (<u>P473148</u>), **463** (<u>P473149</u>), **464** (<u>P473150</u>), **466** (<u>P473152</u>), and **467** (<u>P473153</u>) as re-cut.<sup>184</sup> The "varied scenes" are mostly *Presentation Scene* seals with a standing or ascending figure instead of a seated figure, a rare motif on Ur III dated seal impressions.

<sup>&</sup>lt;sup>181</sup> Dominique Collon, Catalogue of western Asiatic seals in the British Museum. Cylinder seals III, Isin/Larsa and Old Babylonian periods (London: Trustees of the British Museum, 1986), 49-51.

<sup>&</sup>lt;sup>182</sup> Buchanan, Catalogue of Ancient Near Eastern seals, 83.

<sup>&</sup>lt;sup>183</sup> Buchanan, Catalogue of Ancient Near Eastern seals, 85-90, numbers 470-98.

<sup>&</sup>lt;sup>184</sup> Feingold, *Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period*, 99. Feingold did not look at the Neo-Sumerian seals, as the scope of her book was the Old Babylonian seals.

Among the seals Buchanan termed "worship scenes of mature style," one is almost certainly an Ur III seal with the original inscription erased. That seal, number 466 in Buchanan's 1966 catalogue (p. 85) (P473152/S006897), has a typical Ur III Adoration Scene with an erased inscription. The inscription may originally have had four lines. The name of the original owner can be reconstructed as ARAD<sub>2</sub>-<sup>d</sup>DN, a common type Ur III name type. Few four-line seals belonging to a person allegiance to someone by a name of the type ARAD<sub>2</sub>-<sup>d</sup>DN exist. In the current corpus I have been able to identify three poorly attested seals, belonging to lu2-dnanna (S001608), wa-wa (S001609), and ig-gu-u<sub>2</sub> (S001607). All three had a seal with a four-line inscription, expressing their relationship to ARAD<sub>2</sub>-<sup>d</sup>nanna, the sukkal-mah (traditionally translated as "Grand Vizir") as that of his slave (ARAD<sub>2</sub>-<sup>d</sup>nanna / sukkal-mah / PN / ARAD<sub>2</sub>-zu). However, none of the three names are a perfect fit with the remaining traces of the third line of the inscription, nor is it easy to fit sukkal-mah in the second line. Additionally, the two seal impressions for which good visual documentation exists (NMC 5407 (P108776) and AO 12989 (P109373)) have two different versions of the Presentation Scene: the Louvre text has an Adoration Scene that potentially matches 466 (P473152), and the Copenhagen seal has a Presentation Scene, making a match impossible. Nevertheless, a close comparison of the impression on AO 12989 and the seal 466 (P473152) rules out an exact match.

The inscription on seal **461** (<u>P473147</u>) (p. 85 in Buchanan's 1966 catalogue), another *Adoration Scene* seal, almost certainly has an erased third line, making it another very good candidate for a re-cut Ur III seal reused in the Old Babylonian period. Although the traces of the erased inscription, now hidden behind the new two-line inscription, may suggest that this too was a seal of a person whose name began with ARAD<sub>2</sub>-, this cannot be proven.

Seals numbers **462** (<u>P473148</u>), **464** (<u>P473150</u>), and **467** (<u>P473153</u>) in Buchanan's 1966 catalogue all look like re-cut *Adoration Scene* seals, but no traces of the original inscriptions exist that allow me to identify the original owner.

Seals numbers **463** (<u>P473149</u>), **465** (<u>P473151</u>), and **468** (<u>P473154</u>) in Buchanan's 1966 catalogue are poorly preserved and may be Old Babylonian *instances* of Ur III seals. seal number **469** (<u>P473155</u>) is heavily re-cut, visible from the top or bottom view (flattened on one side) as well as from the scene itself. It is likely that the final re-cutting happened in the post-Old Babylonian period, or outside Southern Mesopotamia, where the iconography of the original scene had less meaning.

## **Other Collections**

The collections of the Bibliothèque nationale de France and the Ashmolean Museum are similar in size, but have very different collection histories. As part of the French national collection, the Bibliothèque nationale de France includes objects from former official collections (including the royal collections), as well as donated and purchased collections,<sup>185</sup> but since it is not an archaeological museum, it contains no directly excavated seals. The Ashmolean Museum, on the other hand, contains many seals excavated during the expeditions led by or with University of Oxford participation, in addition to gifts and purchases.<sup>186</sup> Delaporte's publication

<sup>186</sup> See Buchanan, *Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals*, and Moorey and Gurney, "Ancient near Eastern Cylinder Seals Acquired by the Ashmolean Museum, Oxford 1963-1973," for the history of the Ashmolean collections of seals. Three main Ur III centres have been excavated: Ur, Nippur, and Girsu. A majority of the seals listed in Donald E. McCown, Richard C.



<sup>&</sup>lt;sup>185</sup> For the history see Dahl, Lafont, and Ouraghi, "Nouvelles recherches sur la collection des sceaux-cylindres orientaux de la Bibliothèque nationale de France."

of the cylinder seals in the Bibliothèque nationale de France is a very early work (1910), when the study of the Ancient Near East, in general, and the glyptic record, in particular, was still in its infancy, whereas Buchanan's publication of the Ashmolean seals (1966) was done during a time when several scholars across the world worked intensely on studying and publishing collections of seals.<sup>187</sup> Nevertheless, it is prudent to ask if our two collections here are representative or whether they are outliers. The best way to answer that question is to see how the results compare with other collections.

The approach in Buchanan's 1981 publication<sup>188</sup> follows that of his publication,<sup>189</sup> but extends the use of impressions to date the cylinder seals (almost all the Yale cylinder seals originate from the arts market). Almost all the Post-Akkadian, Ur III, and Isin-Larsa seals published in Buchanan 1981 have no, or only short inscriptions (and none of the type Gelb VIII(a), see above),<sup>190</sup> and most of the seals consigned to the post-Akkadian and Isin-Larsa periods are assigned these dates based on evaluations of quality with the presumption, for example, that the Guti invaders produced "stodgy" work.<sup>191</sup>

Haines, and Donald P. Hansen, *Nippur. I. Temple of Enlil, scribal quarter, and soundings. Excavations of the Joint Expedition to Nippur of the University Museum of Philadelphia and the Oriental Institute of the University of Chicago*, OIP 78, (Chicago: The University of Chicago Press), as dating to the Ur III period (Nippur) are in fact later instances (Old Babylonian); for Girsu see fn 17 above.

<sup>&</sup>lt;sup>187</sup> E.g., Henri Frankfort, Cylinder seals : an essay on the Art and Religion of the Ancient Near East (London: Macmillan and co, 1939); Anton Moortgat, Vorderasiatische rollsiegel : ein beitrag zur geschichte der steinschneidekunst (Berlin: Gebr. Mann, 1940); Porada, Mesopotamian art in cylinder seals of the Pierpont Morgan Library, 1., D. J. Wiseman, Cylinder seals I : Uruk, early dynastic periods (London: Trustees of the British Museum, 1962); Rainer M. Boehmer, Die Entwicklung der Glyptik während der Akkad-Zeit (Berlin: De Gruyter, 1965); Pierre Amiet, Glyptique susienne des origines à l'époque des Perses achéménides (Paris: P. Guethner, 1972)..

<sup>&</sup>lt;sup>188</sup> Buchanan, Early Near Eastern seals in the Yale Babylonian Collection.

<sup>&</sup>lt;sup>189</sup> Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals.

<sup>&</sup>lt;sup>190</sup> Buchanan, Early Near Eastern seals in the Yale Babylonian Collection.

<sup>&</sup>lt;sup>191</sup> Buchanan, Early Near Eastern seals in the Yale Babylonian Collection, 189.

Buchanan's 1981 catalogue lists 256 seals belonging to the same period as the Neo-Sumerian seals found in his 1966 catalogue, or seals assigned to the post-Akkadian, Ur III and Isin-Larsa period (a few for some reason listed but "not shown"). However, only 159 are physical seals in the Yale Babylonian Collection; the remainder are examples of impressions on tablets also in the Yale Babylonian Collection. Of these 159 seals, only three seals are, in my opinion, possibly actual instances of an Ur III seal. The remainder are mostly re-cut seals, often likely Old Babylonian instances of Ur III seals (numbers 552, 567, 577, 578, 583, 593, 628, 629, 630, 631, 634 etc.), or impossible to date given the lack of an inscription (e.g. 545, 555, etc.). The three possible Ur III instances are 562 (NBC 6010, P477996/S012064), 595 (YBC 12605, P455811/S003101), and 596 (NCBS 135, 192 P498000) , listed as "Not Shown" in Buchanan's catalogue<sup>193</sup>).

The inscription of **562** (NBC 6010, <u>P477996/S012064</u>) is worn, but still readable, and agrees structurally with Ur III seal impressions, found on dated tablets, although this one has not been identified (ur-sa<sub>6</sub>-ga / šagina / umma<sup>ki</sup> // ur-šul / šabra / ARAD<sub>2</sub>-zu). Seal number **595** (YBC 12605, <u>P455811/S003101</u>) is perhaps another Ur III instance of a seal. The inscription conforms with the typical Ur III period seal inscription known from tablets listing the owner, his title (dub-sar) and the name of his father (Gelb VIII(a)). However, the inscription (šu-i<sub>3</sub>-li<sub>2</sub> / dub-sar / dumu ur-<sup>d</sup>utu) is not known from any impressions on a tablet. Seal number **596** mentions Šulgi, king of Ur, but shows signs of re-cutting.<sup>194</sup>

Seal number **538** (YBC 9685, <u>P477993</u>/<u>S012061</u>) is the seal of a person claiming a servitude relationship to Gudea, the

<sup>&</sup>lt;sup>194</sup> Dahl and Lassen, "Newell 135: A Re-Cut Seal."



<sup>&</sup>lt;sup>192</sup> Hans Henning von der Osten, *Ancient oriental seals in the collection of Mr. Edward T. Newell*, vol. 22, OIP, (Chicago: University of Chicago Press, 1934), 26.

<sup>&</sup>lt;sup>193</sup> Buchanan, Early Near Eastern seals in the Yale Babylonian Collection, 226.

governor of Girsu (pre-Ur III) (gu<sub>3</sub>-de<sub>2</sub>-a / ensi<sub>2</sub> / lagaš<sup>ki</sup> // sipa-<sup>d</sup>nin-gir<sub>2</sub>-su-ke<sub>4</sub>-i<sub>3</sub>-pa<sub>3</sub> / ra<sub>2</sub>-gaba ARAD<sub>2</sub>-zu). A seal impression is known of a Sipa-Ningirsuke-ipa on a tablet dated to the early Ur III period (BM 012266, <u>P119663</u>). In that seal (<u>S005723</u>), Sipa-Ningirsuke-ipa claims servitude to Šulgi, the second king of the Ur III dynasty. That seal impression show an *Adoration Scene* seal, whereas seal **538** from Buchanan's 1981 catalogue is a more traditional *Presentation Scene* seal. **538** may be a pre-Ur III *instance* of a seal.

A few seals in Buchanan's 1981 catalogue have a *Presentation Scene* with a standing or ascending figure instead of a seated figure. Such scenes are rare, but not inconceivable on Ur III impressions. Most of these show signs of re-cutting, and there is no particular reason why any of them should be assigned to the Ur III period and not the following Old Babylonian period.

Seals **680** to **693** in Buchanan's 1981 catalogue all depict a date-palm altar.<sup>195</sup> Such scenes are rare on Ur III tablets, but not unconceivable. Date-palm altars occur occasionally between the seated figure and the worshipper on *Presentation Scene* seals impressed on dated tablets. However, there is no evidence that any of the *Libation Scene* seals in Buchanan's 1981 catalogue are actual Ur III instances of seals. **680** (NCBS 701, <u>P498013</u>), for example, could be a *Presentation Scene* seal recut as a *Libation Scene* seal but with a griffin and a small deity; that element of the seal is similar to the seal of the scribe of the Governor of Simurrum on tablet BIN 3, 627 (<u>P106434</u>).<sup>196</sup>

<sup>&</sup>lt;sup>195</sup> Mayr, Seal Impressions on Tablets from Umma, 7, uses Libation Scene.

<sup>&</sup>lt;sup>196</sup> See also Buchanan, *Early Near Eastern seals in the Yale Babylonian Collection*, 260-61, number 679.

The Old Babylonian seals section begins with a list of 11 seals described as Early Old Babylonian.<sup>197</sup> They are *Adoration Scene* seals, and they are all likely Ur III seals, recut in the Old Babylonian period.

Perhaps the collection that could yield the largest number of Ur III seals is that of the British Museum, with its more than 5,000 cylinder seals. In her 1982 publication D. Collon listed 148 seals which she dated to the Ur III period (in addition to 243 Old Akkadian, 75 Post-Akkadian, and 17 poorly preserved seals probably dated to the Ur III period).<sup>198</sup> Of these, six are dated to the Ur III period due to names of kings found in the inscriptions:

WAS II 87 (BM 103321, <u>P474329</u>/<u>S007552</u>): <sup>d</sup>amar-<sup>d</sup>suen / nita kal-ga / lugal uri<sub>5</sub><sup>ki</sup>-ma // puzur<sub>4</sub>-eš<sub>18</sub>-dar / gudu<sub>4</sub> <sup>d</sup>nin-e<sub>2</sub>-gal / ARAD<sub>2</sub>-zu

WAS II 445 (BM 091023, <u>P474685/S007908</u>) purchased in Baghdad: <sup>d</sup>šu-<sup>d</sup>suen / nita kal-ga / lugal uri<sub>5</sub><sup>ki</sup>-ma / lugal anub-da limmu<sub>2</sub>-ba // lu<sub>2</sub>-<sup>d</sup>na-ru<sub>2</sub>-[a] / dub-sar / dumu ḫe<sub>2</sub>-sa<sub>6</sub> / ARAD<sub>2</sub>-zu#

**WAS II 446** (BM 102510, <u>P226719/S006354</u>): <sup>d</sup>i-bi<sub>2</sub>-<sup>d</sup>suen / dingir kalam-ma-na / lugal kal-ga / lugal uri<sub>5</sub><sup>ki</sup>-ma / lugal anub-da limmu<sub>2</sub>-ba // a-ḫa-am-ar-ši / dub-sar / dumu ba-ba-ti / ARAD<sub>2</sub>-zu

**WAS II 452** (BM 089180, <u>P474692</u>/<u>S007915</u>), purchased in Shahreza south of Isfahan: 1. nu-ur<sub>2</sub>-<sup>d</sup>šul-gi / aga<sub>3</sub>-us<sub>2</sub> lugal / dumu i-ti-<sup>d</sup>suen / nu-banda<sub>3</sub>

<sup>&</sup>lt;sup>198</sup> Collon, Catalogue of the Western Asiatic seals in the British Museum: Cylinder Seals II, Akkadian - Post-Akkadian - Ur III - Periods.



<sup>&</sup>lt;sup>197</sup> Buchanan, Early Near Eastern seals in the Yale Babylonian Collection, 276-77.

WAS II 469 (BM 089126, <u>P458581/S005871</u>), originally sourced at Babylon/Baghdad: 1. ur-<sup>d</sup>namma / nita kal-ga / lugal uri<sub>5</sub><sup>ki</sup>-ma // ḫa-aš<sub>2</sub>-ḫa-me-er / ensi<sub>2</sub> / iš-ku-un-<sup>d</sup>suen<sup>ki</sup> / ARAD<sub>2</sub>-zu

**WAS II 470** (BM 089131, <u>P226633/S006350</u>) from the art market: 1. <sup>d</sup>mes-lam-ta-e<sub>3</sub>-a / lugal a<sub>2</sub> zi-da / lagaš<sup>ki</sup>-ke<sub>4</sub> / nam-ti-il / <sup>d</sup>šul-gi nita kal-ga / lugal uri<sub>5</sub><sup>ki</sup>-ma-ka-še<sub>3</sub> / ki-lu<sub>5</sub>-la gu-za-la<sub>2</sub> / dumu ur-ba-gara<sub>2</sub>-ke<sub>4</sub> / mu-na-dim<sub>2</sub> kišib<sub>3</sub>-ba / lugal-mu geštu<sub>3</sub> nig<sub>2</sub>-sa<sub>6</sub>-ga-ka-ni / ga-an-ti-il / mu-bi

Most of these seals are unusual and no impressions of any of them are known. According to Collon,<sup>199</sup> **87** was recut in the Ur III period; the name of the owner of **445** is well attested but never with the patronymic he<sub>2</sub>-sa<sub>6</sub>; **446** belonged to a member of the clan of Babati, a cadet branch of the Ur III Royal Family and might have belonged to someone not directly involved in the Ur III administration and who lived on the fringes of the Ur III state; the owner of **452**, a soldier, might have lost the seal or his life in Iran where the seal was found; **469** belonged to someone with a peripheral connection to the Ur III empire; the inscription on **470** is unique and the composition of the scene has also led to speculation that this may be a modern forgery.<sup>200</sup> **87** is a *Contest Scene* seal; **445**, **446**, and **452**, are regular *Presentation Scene* seals.

In addition to these six plausible *instances* of Ur III seals, the published Ur III seals in the British Museum collection of cylinder seals includes only a few that may be Ur III *instances* of seals (**373** (BM 102591, <u>P474616</u>)?; **375** (BM 129497, <u>P474618</u>)?; **377** (BM 089069, <u>P474621</u>); **382** (BM 018830,

<sup>&</sup>lt;sup>199</sup> Collon, Catalogue of the Western Asiatic seals in the British Museum: Cylinder Seals II, Akkadian - Post-Akkadian - Ur III - Periods.

<sup>&</sup>lt;sup>200</sup> Collon, Catalogue of the Western Asiatic seals in the British Museum: Cylinder Seals *II, Akkadian - Post-Akkadian - Ur III - Periods*, 169.

<u>P474625</u>); **391** (BM 089187, <u>P474633</u>); **394** (BM 129491, <u>P474636</u>); **450** (BM 089138, <u>P474690</u>))

Four years after the publication of the Ur III seals in the British Museum, D. Collon published the seals from the same collection that she dated to the Old Babylonian period.<sup>201</sup> The criteria provided for dating a seal to either period remained vague, or according to Collon "subjective and arbitrary".<sup>202</sup> Her broad distinction between a "leading goddess" indicating an Ur III date and a "supplicant goddess" indicating a post-Ur III date was immediately drawn into doubt by Collon's own comment,<sup>203</sup> and quickly turned into a distinction based on style and technical execution, suggesting that seals depicting a "supplicant goddess", but dated to the Ur III period, were only those that belonged to an "influential minority", for example. Collon provides some other criteria for the division between Ur III and Old Babylonian seals, but acknowledged that many of the diagnostics (such as filling motifs and the hair or headgear of the worshippers) can easily be added.<sup>204</sup> Nevertheless, and notwithstanding her footnote 1 on page 59.<sup>205</sup> Collon proceeded to list a majority of the hematite seals with a Presentation Scene to the Old Babylonian period and to claim that hematite was only just introduced in the Ur III period.<sup>206</sup> Many, if not all, of the *Presentation Scene* seals in Collon's 1986 catalogue featuring a seated king/god, are likely re-cut seals.<sup>207</sup> Although none of the seals in Collon's 1986 catalogue can be matched up with an Ur III impression, and none of them are clear palimpsests, many are likely to be Old Babylonian instances of Ur III seals (in particular

<sup>&</sup>lt;sup>201</sup> Collon, Catalogue of western Asiatic seals in the British Museum. Cylinder seals III, Isin/Larsa and Old Babylonian periods.

<sup>&</sup>lt;sup>202</sup> Collon, Isin/Larsa and Old Babylonian periods, 59.

<sup>&</sup>lt;sup>203</sup> Collon, 59 footnote 1.

<sup>&</sup>lt;sup>204</sup> Collon, 59.

<sup>&</sup>lt;sup>205</sup> Collon, 59 footnote 1.

<sup>&</sup>lt;sup>206</sup> Collon, 59-60.

<sup>&</sup>lt;sup>207</sup> See already Feingold, *Engraved on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period.* 

numbers 1 to 8 and 9 to 23 for the standard *Presentation Scene* seals, numbers 36 to 75 for the standard *Adoration Scene* seals).

## Conclusions

An obvious and first conclusion is, therefore, that we are left with virtually no instances of Ur III seals in our collections. The vast majority of the seals classified as Ur III in the two collections discussed here are in fact Old Babylonian instances, possibly re-cut from Ur III seals. This fact is also likely to be a main reason behind the lack of matches between published Ur III seal impressions and physical seals in our collections. I discussed the three candidates (1, 2 and 3 above) and concluded that only one, 1, could be conclusively shown to be a match. It is perhaps noteworthy that the impression is found on an unopened envelope, allowing for some (not insignificant) loss of data through destruction of envelopes in antiquity. However, given the remaining known seal impressions from the Ur III period, the low number of matches remains a problem. 2 could not be verified and 3 was likely re-cut in antiquity.<sup>208</sup> Among the many published seals from the Yale Babylonian Collection dated by Buchanan in his 1981 catalogue to the post-Akkadian, Ur III, or Isin Larsa period, a maximum of three seals are likely candidates for Ur III (or pre-Ur III) instances. Again, we saw that seals dated to the Old Babylonian period with the Adoration Scene are likely candidates for re-cut Ur III seals. A similar picture emerged from a cursory study of the Ur III and Old Babylonian seals in the British Museum.

Another, obvious conclusion is that the increase in hematite (or iron oxide) seals did not occur during the Old Babylonian

<sup>&</sup>lt;sup>208</sup> I also noted how one Ashmolean Museum seal was a very close match to an impression in the Louvre, although the inscription on the Ashmolean seal had been erased (**466**).

period,<sup>209</sup> but earlier during the Ur III period,<sup>210</sup> and that Ur III hematite seals were recut in the Old Babylonian period.

But these are rather technical conclusions that do not in any significant way change our understanding of the history of the ancient Near East. However, we may be able to draw somewhat broader conclusions from this study when considering which other periods "produced" the seals in our collections, and which periods have left fewer seals. In addition to the Old Babylonian period which, as we have just seen, produced large numbers of seals, the Kassite period stands out. The Kassite period is known for its many beautiful seals, sometimes from rare contexts.<sup>211</sup> Perhaps then, we can suggest that the seals we have in our collections are from periods that ended in downfall and prolonged disruption? If so, we may also be able to suggest that there was no true break or collapse between the Ur III and Isin-Larsa periods, and even the Standard Old Babylonian period. This highlights again how frequently we fall victim to the propaganda of ancient court poets and our own numerological thinking - we like to place a significant chronological boundary at dates with round numbers such as year 2000 BC, and when presented

<sup>&</sup>lt;sup>211</sup> Including some found in Greece, see Porada, "The Cylinder Seals Found at Thebes in Boeotia." and more recently Tabita, "Reflecting on the Thebes Treasure and its Kassite Findings: The Glyptic Art and its Geo-Political Context and Distribution," with literature, and note seal **462** (<u>P473148</u>) in the Ashmolean Museum, claimed by Buchanan, *Catalogue of Ancient Near Eastern seals in the Ashmolean Museum. Volume I. Cylinder seals*, 84, with reference to Stephen Langdon, "Two Babylonian Seals," *Babyloniaca* III (1910), to have been found near Rome (Langdon makes no mention of the findspot, the seal was previously in the collection of C.D.E. Fortnum with number G19), see further Collon, *First impressions : cylinder seals, in the ancient Near East*, 97-99, discussing seals early European records of seals, including one possibly retrieved by a crusader in Palestine and enshrined in a reliquary in Palermo.



<sup>&</sup>lt;sup>209</sup> Pace Collon, Catalogue of western Asiatic seals in the British Museum. Cylinder seals III, Isin/Larsa and Old Babylonian periods, 59; Margaret Sax, Dominique Collon, and M.

N. Leese, "The Availability of Raw Materials for near Eastern Cylinder Seals during the Akkadian, Post Akaddian and Ur III Periods," *Iraq* 55 (1993): 100-02; Feingold, *Engraved* on stone : Mesopotamian cylinder seals and seal inscriptions in the old Babylonian period, 3 and 8; and most recently Martine Marieke Melein, *Iron oxide rock artefacts in Mesopotamia c. 2600-1200 BC : an interdisciplinary study of hematite, goethite and magnetite objects* (Oxford: Archaeopress Archaeology, 2018) (with literature).<sup>210</sup> As strongly suggested by Fischer, "Siegelabrollungen im British Museum auf Ur-III-Zeitlichen Texten aus der Provinz Lagas," 104.

with the downfall of a dynasty happening around that time, whose exploits were sung in generations to come, we are probably likely to highlight the change, rather than discard it. In his preface to the volume Akkad: The First World Empire,<sup>212</sup> Mario Liverani, the editor, discussed the fact that settlement patterns and material culture alone would not have indicated the presence of the Old Akkadian empire, and pointed us to the obvious conclusion that for periods from which we may not have the comparable texts, similar political shifts may have occurred unnoticed.<sup>213</sup> Perhaps then, without the royal inscriptions and the literary texts of the Old Babylonian period, we would not have distinguished between the Ur III and the Isin-Larsa periods at all. In this context it is interesting to think about what historical events entered the literary tradition and what events that did not. In a recent article H. Ghobadizadeh and W. Sallaberger locate the ancient states of Kimaš and Hurti and present evidence for the burial mound erected over the dead Ur III warriors following the campaign there in King Šulgi's 46<sup>th</sup> year.<sup>214</sup> No doubt, Šulgi himself, by then likely in his late 60s or 70s, remained in Ur, and news about the outcome of the campaign, therefore, most likely reached him in letters delivered by messengers. Why, then, did this event not enter the literary traditions surrounding the Ur III kingdom? Perhaps we should return for a second time to the writings of Mario Liverani, whose suggestions concerning the literary traditions surrounding the Old Akkadian kings can be easily transferred to those of the Ur III kings, and we can suggest Old Babylonian scribes used names and places related to the Ur III kings, but telescoped relevant political events of their own time onto these past

 <sup>&</sup>lt;sup>212</sup> Mario Liverani, "History of the Ancient Near East Studies," in *Akkad : the first world empire : structure, ideology, traditions* ed. M. Liverani (Padova: Sargon, 1993).
 <sup>213</sup> Liverani, "History of the Ancient Near East Studies," 7-8.

<sup>&</sup>lt;sup>214</sup> Hamzeh Ghobadizadeh and Walther Sallaberger, "Šulgi in the Kuhdasht Plain: Bricks from a Battle Monument at the Crossroads of Western Pish-e Kuh and the Localisation of Kimaš and Hurti," *Zeitschrift für Assyriologie und Vorderasiatisches Archäologie* 113, no. 1 (2023).

kings to increase the legitimacy of their own actions.<sup>215</sup> Past rivalries and conflicts were forgotten when not useful to explain current affairs.

How then can we write the history of the Ur III kingdom (or the Old Akkadian empire?). We can use exactly the kind of data presented in the article by H. Ghobadizadeh and W. Sallaberger,<sup>216</sup> together with studies such as M. Widell on the inspection of royal children<sup>217</sup> and B. Lafont on conflict between Amar-Suen and Šu-Suen<sup>218</sup> to arrive at a true history of the Ur III kingdom, and not its use in later allegories or fairy tales about great walls and scheming officials.



<sup>&</sup>lt;sup>215</sup> Mario Liverani, "Model and Actualization: The Kings of Akkad in the Historical Tradition," in *Akkad : the first world empire : structure, ideology, traditions*, ed. M. Liverani (Padova: 1993).

<sup>&</sup>lt;sup>216</sup> Ghobadizadeh and Sallaberger, "Šulgi in the Kuhdasht Plain: Bricks from a Battle Monument at the Crossroads of Western Pish-e Kuh and the Localisation of Kimaš and Ḫurti."

 <sup>&</sup>lt;sup>217</sup> Magnus Widell, "The Sumerian Expression IGI-KAR<sub>2</sub> Revisited," *Iraq* 70 (2008).
 <sup>218</sup> Bertrand Lafont, "Game of Thrones: the Years when Šu-Sin Succeeded Amar-Suen in the Kingdom of Ur," in *The First Nintey Years. A Sumerian Celebration in Honor of Miguel Civil*, ed. L. Feliu, F. Karahashi, and G. Rubio, SANER (Boston-Berlin: Walter de Gruyter, 2017).