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## Language, Translation, and Commentary in Cuneiform Scribal Practice

https://doi.org/10.1515/janeh-2018-0005

**Abstract:** Cuneiform scholarly practices systematized an exploration of meaning potential. In cuneiform scholarship, knowledge making emerged from multiple scribal practices, most notably list-making, analogical reasoning, and translation. The present paper demonstrates how multilingualism stands at the core of cuneiform scholarly inquiry, enabling hermeneutical exploration of possibility and potential. Cuneiform scholarly practices of translation and analogical hermeneutics coupled with an understanding of the cuneiform writing system constituted a system analogous to the medieval *artes grammaticae*.

Keywords: translation, commentary, analogy, lists

In a series of lectures given at the University of Cambridge, Ian Hacking asked the question "Why does language matter to philosophy?" He concludes "Language matters to philosophy because of what knowledge has become. … [Discourse is] that which constitutes human knowledge" (Hacking 1975: 187). Why does language matter to cuneiform "philosophy"? Or, perhaps, rather than Why, we can ask How.

In order to answer this question, I examine the social and textual contexts in which a discussion of cuneiform "philosophy" can properly take place, namely in cuneiform scholarship. At the core of cuneiform scholarly practices and knowledge making is list-making. In his recent book *Philosophy Before the Greeks*, Marc Van De Mieroop argued that the list—the listing structure—provides the basis for a Babylonian epistemology which is grounded in the cuneiform writing system. As he states in his more recent work, "Lists were the dominant format in which Mesopotamian intellectuals speculated" (Van De Mieroop this

<sup>1</sup> Van De Mieroop (2015). I have made a similar argument—albeit with perhaps a different conceptualization of epistemology and a more localized portraiture—in Crisostomo (forthcoming).

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volume).<sup>2</sup> Moreover, Van De Mieroop views the writing system as "the path to truth"—his Thesis IV—and controlled within scholarly institutions—his Thesis V (Van De Mieroop this volume). Van De Mieroop is certainly correct. Babylonian "philosophy"—or I would prefer scholarly practice, so as not to burden cuneiform scholarly activities with baggage<sup>3</sup>—was indeed a product of multiple factors: list-making practices, the medium of writing, the potential of the writing system, scholarly and scribal conventions, and resemblance (or as Francesca Rochberg would prefer, analogies).<sup>4</sup> To this I would add another important factor: multilingualism.

In this necessarily brief discussion, I focus especially on the role of language and multilingualism in the creation of knowledge in conjunction with the above listed practices.<sup>5</sup> How does language provide an impetus for scholarly innovation? And what does language have to do with reason? I submit that language, in particular the act of translation, is foundational to understanding what might be considered "Mesopotamian Reason," by which I must emphasize reason as demonstrated through cuneiform scribal practices. As translation is a hermeneutical process, so too did cuneiform scholars take the opportunity presented by translation to engage in the exploration of potentiality. Translation in conjunction with the potential of the writing system grounds most cuneiform scholarly endeavors, from lists to commentaries, with many other text groups in between. My basic argument today, if I may adapt Hacker's assessment from above, is that language, via translation, is that which constitutes and effects cuneiform scribal knowledge. That is, in Babylonia, multilingualism and translation was at the heart of the creation and ordering of knowledge. Multilingualism and translation effectively drove list-making and writing potential into a new, systematized realm of scholarly possibility. In a rather simplistic presentation, I demonstrate how translation served as the basis of broader intellectual engagement with the cuneiform writing system, framing scribal inquiry into a sort of artes grammaticae.

In both the ancient and the modern imaginations, the Tower of Babel has served as a creative metaphor for considering language, translation, and human knowledge. The well-known biblical story presented the tower as representative of human desire to attain divine knowledge and utilized multilingualism as a foil to those attempts.

<sup>2</sup> For a more extensive exposition, see especially Veldhuis (2014).

<sup>3</sup> See Van De Mieroop's Thesis VI (Van De Mieroop this volume).

<sup>4</sup> For Rochberg's statements on the role of analogical reasoning in Babylonian scholarship, see Rochberg (2016: 140–63) and Rochberg (this volume).

**<sup>5</sup>** I expound on many of the ideas presented here in Crisostomo (forthcoming).

Jorge Luis Borges's "La biblioteca de Babel" famously depicted the universe as a library, via the metaphor of Babel, through which all human knowledge appears finite, but is proven infinite. Indeed, the opening quote that Borges invokes from Robert Burton's The Anatomy of Melancholy emphasizes the potentiality: "By this art you may contemplate the variation of the 23 letters ..." Borges conceived of this library as a storehouse of linguistic possibility in which all knowledge is conveyed to the knowledgeable via a constricted set of twentyletters, two punctuation marks, and the space. Borges's narrator emphasizes that the books comprising the library do not correspond to ancient (presumably unknown) languages, but represent all languages.

In his After Babel, George Steiner's philosophical examination of literary translation theories was embedded in a complex but important argument regarding the very nature of language, communication, and translation within a hermeneutical framework. For Steiner, the hermeneutics of translation was about understanding language and diagnosing meaning. Translation, "the art of elicitation and appropriative transfer of meaning" (Steiner 1998: 312) is an 'exact art' which focuses on the translator as exegetist in a dialectical communication with her text.<sup>8</sup> For Steiner. translation is a circle of trust and a betrayal of trust, a reinterpretation, even appropriation, of an original text that allows and invites the creation of something new. The hermeneutical emphasis on the potential of language and translation considered by these two authors who invoke the metaphor of Babel-though not necessarily their intent—is indeed very Babylonian.

This hermeneutical focus on language and translation will guide some of my thoughts on conceptions and practices of scholarly reasoning in cuneiform scribal culture. Although cuneiform scholars were not always or not only literary translators, they nevertheless engaged in a hermeneutical dialectic whenever they engaged their texts, especially when it came to—even because of translation.

Babylonia has a long linguistic history, the site of one of the pristine writing systems, perhaps even the earliest. 10 In the late fourth millennium BCE, the cuneiform writing system was developed to handle the burgeoning demands

**<sup>6</sup>** See Borges (1962: 62–68).

<sup>7</sup> Steiner (1998), originally published 1975.

<sup>8</sup> Steiner's model is certainly worthy of criticism not least for its misogynistic metaphors which I do not wish to employ here. For such a critique of Steiner, see for example Chamberlain (1988: 463-65).

<sup>9</sup> See, in particular, Steiner's chapter on "The Hermeneutic Motion" (Steiner 1998: 312-435).

<sup>10</sup> Emerging c. 3200 BCE at Uruk in what is now southern Iraq, around the same time as Egyptian hieroglyphs found in Abydos. On pristine writing systems and early writing, see Woods (2010).

of urban bureaucracy. By the middle of the third millennium BCE, the system had been expanded and adapted to accommodate at least two languages—Sumerian and a handful of related Semitic dialects or languages collectively referred to as Akkadian—and multiple modes of writing, including administrative, literary, magical, laudatory, and educational texts.

As reiterated throughout the papers in this volume, the cuneiform writing system is a polyvocalic and polysemantic system of signs; that is, a single sign may represent multiple phonetic values and multiple words. It is important to understand how these elements of the system are fundamental and how the system thus emerges in practice. Often, the various words that an individual sign represents may be semantically related; but a sign may also represent words that are only phonetically related. The sign KA serves as an exemplary reminder, KA in its original iconic form a head with markings to focus on the mouth arearepresented multiple Sumerian words that dealt with the physical vicinity of the mouth and things emanating from the mouth, such as kag "mouth," kiri, "nose," gu, "voice," zu, "tooth," dug, "to speak," and inim "word." The cuneiform writing system employs rebus-using the phonetic imprint of words represented by a sign to represent other words or sounds with the same phonetic representation, regardless of semantic similarity. Because KA is used for kiri, "nose," it may also be used for kir, "hyena"; since it represents zu, "tooth," it is then also available for the phonetically similar **zuh** "to steal." The cuneiform writing system thus embeds potential.

The cuneiform writing system can be adapted to other languages, much like the Latin alphabet has been adapted for anything from Latin to English to Turkish to Vietnamese to the International Phonetic Alphabet. When cuneiform was adopted for writing Semitic languages, the scribes maintained its Sumerian associations and added Semitic possibilities. In addition to the words and phonetic shapes associated with Sumerian, the sign KA could also represent any of the Akkadian words that corresponded to the Sumerian words and, theoretically, their phonetic values. So KA not only indexed Sumerian  $\mathbf{kag}$  "mouth," but also Akkadian  $p\hat{u}m$  "mouth" in any of its declined forms, such as  $p\hat{u}m$ , the genitive case.

The representative potential for each cuneiform sign is thus vast; however, writing and social conventions typically limited the use of signs to particular words and phonological shapes. Nevertheless, each sign could offer a myriad of possibilities for someone who wished to employ the writing system in such an exploratory fashion, and cuneiform scholars took advantage. 11 Such exploration,

<sup>11</sup> See also Frahm (this volume).

innovation, and examination was foundational for cuneiform scholarly knowledge beginning around the middle of the third millennium BCE until the conclusion of cuneiform culture sometime in the early centuries of the first millennium CE. The repertoire and potential of the writing system was especially explored in the word and sign lists used in scribal education, and the practice of such exploration was particularly systematized in the first half of the second millennium through the curriculum. I focus almost exclusively on this earlier material in order to localize our portraiture of language as a tool for knowledge creation.

Recent studies on the practice of list-making in Mesopotamia have emphasized both the ubiquity of the lists themselves and the pervasiveness of the practice. 12 Lists juxtapose entries comprising cuneiform signs or lexemes. For cuneiform scribal communities, these entries represent objects of inquiryknowledge. By juxtaposing objects of knowledge in the list, cuneiform scribes manufactured a way to manipulate the cuneiform writing system as a means for creating new knowledge. We see this very early on, for example, in the List of Vessels (see Figure 1), a list created along with the earliest writing in the late fourth millennium and maintained throughout the third millennium, 13 where a number of signs appear to have been generated expressly for the list (see e.g. Krispijn 1992; Wagensonner 2015).

In this composite example, the signs in columns 1 and 2 are the sign DUG  $\Box$ used for "vessel" with various internal signs, presumably representing commodities or quantities that could be placed inside vessels. Veldhuis notes that some of these signs, "which apparently were not used in administrative records, may be regarded as extrapolations, based upon an understanding of how the writing system works" (Veldhuis 2014: 37). So from the earliest periods of writing, the cuneiform writing system was subject to experimentation and generation, particularly through the medium of the list.

At times the juxtapositions presented in lists are opaque, seemingly irrational by our standards of reasoning. As Van De Mieroop recently wrote, "The list format invites an element of play" (Van De Mieroop 2015: 73). But, I argue (and I think Van De Mieroop would agree despite the word choice), the paradigmatic juxtapositions and, most pointedly, the translations in lists are more than mere play or scribal whimsy. The practices involved in list-making are fundamental if we wish to understand "reason" in cuneiform scribal contexts; they are no more inconsequential play than are Wittgenstein's Language Games by which Wittgenstein entailed that language operates according to rules defined by each particular circumstance

<sup>12</sup> Most notably Veldhuis (2014) and Van De Mieroop (2015).

<sup>13</sup> On this list, see Veldhuis (2014: 37-39, 76-79).

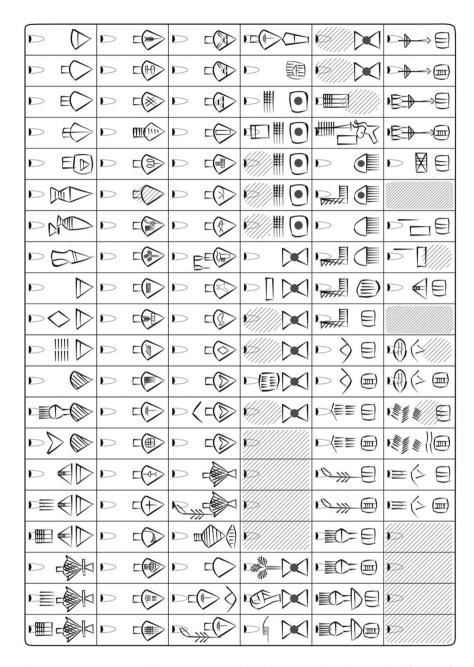


Figure 1: Composite copy of the list archaic vessels and garments, based on Englund (1998: 20).

and language users employ motivated strategies accordingly. 14 In cuneiform scribal contexts, these practices are habitualized performance, part of the very rules of the field of cuneiform scholarship. They are as fundamental to "scribal games" as the prohibition on the use of hands in football, as unquestioned as the idea that the side that scores the most goals wins the game. These scribes are not "playing"; they are "scribing." They are performing as scribes must.

According to Liam Cole Young, lists regularly create a relationship between epistemic things: "Any list forges connections between its contents—even if just the basic fact of being placed together—that did not exist prior to the act of listing" (Young 2017: 45) and "By combining and stabilizing data so that it can be mobilized as knowledge, lists are constitutive of epistemology" (Young 2017: 47). The list medium is thus more than utilitarian or aesthetic<sup>15</sup>; rather, the list medium allows for the active creation of knowledge. In cuneiform cultures, list-making provided a method for knowledge creation and scribal innovation. The part I focus on here is how the habits that cuneiform scribes and scholars embodied by list-making combines with multilingualism to form the basis for a culture of analogical reasoning that defines cuneiform hermeneutics. I have argued previously that, as part of their education, student—scribes habituated a practice I call analogical hermeneutics (somewhat akin to "resemblance" in Van De Mieroop's terminology).<sup>16</sup>

Analogical hermeneutics refers to a scribal practice wherein students and scholars of cuneiform writing regularly recognized and created analogies via juxtaposition of two objects of knowledge, such as cuneiform signs or entries in a list. It is a mode of scholarly interpretation by which a scribe perceives, generates, or imposes through analogical reasoning associations between two or more epistemic objects.<sup>17</sup> The analogies could be perceived in various ways: analogy between similar sounding items, semantically related objects, graphically similar signs, or linguistically related concepts. Thus, lists afforded cuneiform students and scholars a perfect medium for exploring the extent of analogy available in the writing system. Through analogical reasoning via the knowledge format represented by the lists, they explored, even created, the meaning potential of cuneiform.

One important mode of analogical hermeneutical practice was interlingual analogy-recognizing correspondence between languages, or rather words or

<sup>14</sup> On Wittgenstein's notion of 'games,' see his Philosophical Investigations 65-71 (Wittgenstein 2009: 35-38).

<sup>15</sup> Or, to copy Belknap's subtitle, for use and pleasure (Belknap 2004).

<sup>16</sup> See further Crisostomo (forthcoming).

<sup>17</sup> For a discussion of analogical reasoning applied to cuneiform scholarship, see Frahm, Jiménez, and Rochberg (all this volume).

phrases of two languages—so, for example, the analogy that Sumerian  $\mathbf{kag}$  "mouth" corresponds to Akkadian  $p\hat{u}m$  "mouth." As part of their scribal training, student—scribes extended their habituated practices systematized in their education to the interlingual space, where they conceived of Sumerian, Akkadian, and the cuneiform script more fluidly.

The combination of a habituated practice such as analogical hermeneutics, a writing system with innate potential, and multilingualism presented opportunity for scholarly inquiry. Many of these scholarly inquiries were fundamentally multilingual, especially as these lists become codified as part of the cuneiform scribal tradition beginning in the early second millennium, even when written bilingualism was still a rarity. One particularly elaborate example is from the word list Izi, part of a student's curriculum during the early part of the second millennium. A student equates the Sumerian word for Sun with the Akkadian word for donkey: **utu** "sun": *imērum* "donkey" (I:21). The basis for this equation exists in the phonological reference(s) of the sign UD used to write utu and the multilingual correspondences associated through phonological and interlingual analogy. In this instance, **utu** is phonologically similar to **udu** "sheep" which corresponds to Akkadian immerum "sheep" which is phonologically similar to imerum "donkey"—a multi-step analogy that may be represented as  $A \approx B = C \approx D$ : A = D. Indeed, the use of this analogy is rooted in the possibilities provided by the writing system in which the sign UD is theoretically allowed to accommodate the phonetic shapes /ud/, /utu/, /udu/, /immerum/, and /ime:rum/ just as the sign KA signifies /kag/ and /pu:m/. Such examples are not rare, but are regular types of translations provided in this particular word list as well as many other lists used by cuneiform students and scholars. 18 They are therefore an integral part of cuneiform scholarship, not just in the lists but in all scholarly genres.

Another text type common from the early second millennium are mixed vocabularies, seemingly enigmatic lists of random words and translations. Careful consideration of these words reveals that they invoke analogical hermeneutics, even at the interlingual level.

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ta-ni-it-tum ar<sub>2</sub> "praise"
ta-ni-ih!-tum ar<sub>2</sub> "moaning"<sup>19</sup>
a-ra-zu te-es-li-tum "supplication"
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<sup>18</sup> See the many examples cited in Cavigneaux (1976) and Crisostomo (forthcoming).

<sup>19</sup> Unclear whether the Sumerian should be understood as a semantic extension of  $ar_2$  "to praise" or if it represents a phonological analogy to  $er_2$  "to weep," a typical correspondence to  $t\bar{a}n\bar{t}hu$ . The latter seems more plausible.

In the preceding example, the primary ordering principle seems to be phonological analogy based on the Sumerian. The choice of the Akkadian words tanittum, tānīhtum, and teslītum may also be affected by phonological analogy. The following example illustrates the complexities of interlingual analogical practices.

ukur <sub>3</sub> si-ig	la-ap-nu-um	"poor"
KA <b>silim-ma</b>	ka-tu-ú-um	"needy"
KA-KA	mu-uš-ta-ri-ḫu <sup>!</sup> -um	"conceited"
zu-ma	la-ap-nu-um	"poor"
AŠ <sup>zu-zu-um</sup>	ka-tu-ú-um	"needy"
TIM 9, $90^{22}$		

Here, the vocabulary gathers words that are semantically related based on the Akkadian.<sup>23</sup> The structure, however, particularly for the final four entries, is based on phonological analogy of the Sumerian. Moreover, the words given in Sumerian are rare or even elsewhere unattested with the meanings referenced by their Akkadian correspondences. Elsewhere, analogy could operate along multiple levels. The following, for example, appears to be conceptually unified, at least to some degree.

6′.	dub-zu sag <sub>3</sub> -ga	"Knead your tablet!" =
7′.	tu-pa-ka ma-ḫa-aṣ	"Knead your tablet!"
8′.	「ak?⁻-ga-ab e-pu-uš	"Make it!" = "Make!"
9′.	「 <b>šar⁻-ra-ab</b> šu-ṭú-ur	"Write!" = "Write!"
10'.	dub-zu til-ab	"Finish your tablet!" =
11'.	tu-pa-ka gu-ʿmu-urʾ	"Finish your tablet!"

<sup>20</sup> The translation likely reflects a phonological analogy to [ere] the perfective plural stem of

**<sup>21</sup>** See the edition on oracc.org/dcclt/P346402

<sup>22</sup> The exercise is repeated on the reverse. See the edition at oracc.org/dcclt/P223421.

<sup>23</sup> The exception here seems to be line 3, KA-KA: muštarrihum "conceited." In Lu-Azlag A, muštarrihu corresponds to lu, ka-silim dug<sub>a</sub>-dug<sub>4</sub>. Its occurrence here, then, is based on the preceding Sumerian KA silim-ma (: katûm).

As Veldhuis has noted, this mechanism of grouping based on Akkadian is used in later lists such Erimhuš and Nabnītu (Veldhuis 2014: 177).

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19'. ninda du-um
                               "Bring food!" =
20'. a-ka-lam bi-la-am
                               "Bring food!"
21'. a du-um
                               "Bring water!" =
22'. me-e bi-la-am
                               "Bring water!"
23'. kaš du-um
                               "Bring beer!" =
24' ši-ka-ra-am hi-la-am
                               "Bring beer!"
25'. de-ba ta-ba-al
                               "Take it away!" = "Take it away!"
26'. a-na-am, mu gub-ba-zu "What is your line?" =
27'. mi-iš-šu šu-mu-ka
                               "What are your lines?"
Rosen Vocabulary col. i<sup>24</sup>
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Lines such as 6–11 and 26–27 all seem to relate to basic scribal practice. However, the intervening lines 19–25 appear to be conceptual interventions. On this basis, I have postulated elsewhere that mixed vocabularies may include allusions to particular literary texts (Crisostomo 2016). In the case of this vocabulary, the intertextual analogy may be grounded in an Eduba text such as *Schooldays*. But rather than citing these literary compositions verbatim, the mixed vocabularies operate as a sort of commentary to them. They cite the literary in an allusive manner. Then they add additional lines that might be semantically or conceptually related.

In these lexical lists and mixed vocabularies—and I would argue in all cuneiform scholarship—the sign is not only nor primarily about its reference in the natural world, but about its place within the system of scholarship, its analogical relationship to other signs, words, and correspondences in other languages. Thus, it is irrelevant that **utu** refers to the sun or that *imēru* refers to a donkey. The analogically-based reasoning of cuneiform scholarly hermeneutics allows for this translation. Obviously, this should not be considered a search for the "True meaning" of Sumerian **utu** or Akkadian *imēru* or the sign UD.<sup>26</sup> The analogical possibility to manufacture such a correspondence exists because of the polyvalency of the sign and the near homophony of the lexemes operating in an interlingual dialectic. The scribe who knows and understands

<sup>24</sup> See the edition on oracc.org/dcclt/P322250 and Crisostomo (2016).

<sup>25</sup> See Kramer (1949).

**<sup>26</sup>** There is therefore no recourse to any corresponding form in reality as though cuneiform scholars held some sort of pre-Platonic conceptualization of word and essence (see, e.g. the arguments of Frahm 2011: 39–40). Rather, the semiotic representation in the context of cuneiform scholarly inquiry is grounded specifically in the potential of the script. Literary texts (e.g. *Enuma eliš*) that seem to speak to an alternative conceptualization of form and reality should not be considered normative (see further Crisostomo forthcoming).

the writing system and languages can recognize, create, and validate this supposedly irrational translation.

Similarly, the relationship between "Finish your tablet!" and "Bring beer" likely has little to do with the activities of consuming alcohol while writing. Here, the analogical hermeneutic employed by this scribe seems to perceive a literary connection based on a known trope from a literary text. In a sense, the scribe has created a sort of commentary.

I now briefly discuss the relationship between language, translation, and commentary, Commentary, of course, is the textual genre with which we readily associate hermeneutics and scholarly endeavor.<sup>27</sup> In cuneiform culture, all translation may be considered a type of commentary. After all, many commentary texts proper do little more than provide translations for words; further exegesis and explanation is largely based on translation.<sup>28</sup>

Miguel Civil suggests that the Ebla Sign List from the middle of the third millennium could be considered a type of commentary as it selects signs from the ubiquitous traditional Mesopotamian list of professions, Lu A, and provides a Semiticized rendering of the sign (Civil 2009). The Ebla Sign List does not follow Lu A directly; rather it is selective. Moreover, much like the examples from the mixed vocabularies which we looked at just a few minutes ago, the Ebla Sign List inserts entries that are not part of Lu A, but rather are analogously related. Note the following examples, taken directly from Civil's discussion.

L<sub>11</sub> A Ebla Sign List **gal-bahar**, BAHAR, = ba-ha- $ru_{12}$ -umEDIN =  $\hat{i}$ - $d\hat{i}$ - $n\hat{u}m$  $GIŠGAL \times IGI = si-la-ga-um$ gišgal

GIŠGAL = giš-ga[l-lum]

As Civil notes, "The function of such additional signs is to show distinctions or contrasts of a graphic or phonological nature" (Civil 2009: 65). So the sign EDIN 틱文 is added in the Ebla Sign List in proximity to BAHAR, 🗷 🦙 to demonstrate the graphic similarity of the two signs. Similarly, the addition of GIŠGAL × IGI explicitly indicates how the addition of the internal sign IGI differentiates silig and gišgal. Civil provides further examples, but these serve to illustrate the point. The additions and variations in the Ebla Sign List seems to serve an explanatory function in comparison to the "source text" Lu A.

<sup>27</sup> See especially Frahm (2011) and Frahm (this volume).

<sup>28</sup> See Frahm (2011: 17-19, 60-76).

We thus see an association between some of the earliest texts presented as multilingual and (a type of) commentary, further illustrating the fundamental correlation between translation and interpretation. As discussed above, Steiner argued in *After Babel*, translation—or, better, the literary translator—engages in a hermeneutical exercise. The cuneiform scholar makes a similar move. Translation—even from the earliest explicit examples—seems to provide a marked impetus allowing for hermeneutical exploration, not based on empiricism, but on scribal practices rooted in analogical reasoning. Analogically-based hermeneutics in cuneiform scribal culture certainly presents meaning potential. But, within that scholarly culture, the emphasis is on potential rather than meaning.

For Babylonian scholars, hermeneutics via the cuneiform writing system is not about any pursuit of Truth in singularity, but the exploration of potentialities made possible by list-making, the polyvalency afforded by the writing system, and multilingualism. They are not interested in "The Meaning," but *all* the meanings.<sup>29</sup> Thus, when we examine what may be considered reason in cuneiform scribal culture, we find that knowledge itself consists of possibilities. Rather than a pursuit of truth, we find that cuneiform scholarly hermeneutics constituted an exploration of potential.

Explorations of potential are most prominently evident in the lists, especially those which explore both the vertical, paradigmatic as well as the horizontal, syntagmatic, and interlingual. I have therefore restricted my examples here to lists, but we must be conscientious that these practices are common in nearly all—and I would even say all—scholarly genres.<sup>30</sup> Nor should my focus on lists from earlier periods imply that similar practices were not employed in later lists. In fact, later lists—even and especially newly created lists—exploit potential and possibility even more extensively. And such knowledge is further explicated in commentaries, divinatory treatments, literary translations, and throughout cuneiform scribal culture by the textual community of the scholarly literati.<sup>31</sup>

<sup>29</sup> See also Frahm and Jiménez both this volume.

**<sup>30</sup>** On the role of analogical hermeneutics in literary production in Old Babylonian schools, see Crisostomo (2015). I explore this relationship further in two forthcoming articles, the first on the relationship between literary compositions in so-called compilation tablets and the second on the Sumerian Proverbs collections. P. Michalowski has already suggested that some Sumerian literary compositions may in fact be grounded more in scribal knowledge exercises than narrative (Michalowski 2010).

<sup>31</sup> See, for example, Frahm and Van De Mieroop both this volume.

How does this interlingual manipulation of cuneiform writing, these analogical hermeneutics, create and reproduce knowledge? These practices have parallels in another textual culture. The scribal practices of cuneiform scholars are similar to the artes grammaticae of late Classical and Medieval scholarship. The ars grammatica constituted an entire discipline of literate scholarship, from the most elementary Latin exercise to advanced grammar and interpretation of language and literature. The Medieval artes grammaticae was grounded in a Hellenistic model of grammatike, an institutionalized and habitualized techne embedded during curricular education that aimed at understanding the meaning of written texts.<sup>32</sup>

According to Rita Copeland (1991), translation theories and practices in Roman and medieval academic texts were grounded in Roman rhetoric and later Medieval hermeneutics, part of what Martin Irvine would consider artes grammaticae.<sup>33</sup> Copeland, moreover, considers translation part of rhetorical invention and that invention part of hermeneutical practice. She explains the "basic paradox: that exegetical activity, which is ostensibly service to a foregoing, authoritative text, can be the agent of rhetorical invention, which for translation ... historically implies effacement of and difference with foregoing *auctores*" (Copeland 1991: 185). In other words, what Copeland marks as a role of translation in the medieval world may be analogous to the scholarly innovation demonstrated above.

<sup>32</sup> Note, for example, the Stoic Diogenes of Babylon's Techne peri phones (see Diogenes Laertius Lives of Eminent Philosophers 7.1.55-59 available at data.perseus.org/citations/urn: cts:greekLit:tlg0004.tlg001.perseus-eng1:7.1), which, according to Irvine, grounded the notion of grammatike in language as particularly represented in writing: "What became Stoic grammatike thus formed the main part of 'things signifying' (language as vehicle of meaning), which meant phone engrammatos, scriptible utterance, the beginning principle of dialectic and, hence, of all knowledge" (Irvine 1994: 34). For Classical education, see Joyal et al. (2009) for primary sources, as well as Kaster (1988), Morgan (1998), and relevant articles in Bloomer (2015). For Greek education, see chapters in Montanari et al. (2015). For Latin education, see especially Bonner (1977), Bloomer (2011), and Dickey (2016). For Greek education in Egypt, see Cribiore (2001).

<sup>33</sup> It is important to note that Copeland argues that translation theories emerged in the Roman academy as part of the differentiation between the disciplines of grammar and rhetoric. The two disciplines are, in a way, merged in the intersection of exegetical and heuristic functions and taken up by Medieval hermeneutical practices, wherein vernacular translation serves as a form of discursive commentary. According to Copeland, vernacular translations effectively force themselves linguistically into the academic field (see especially Copeland 1991: 103-107). While I do not think that the notion of vernacular translation as replacement is necessarily at work in the same way in cuneiform (i. e. Akkadian for Sumerian) as in Europe in the Middle Ages, it is certainly possible that translation in Old Babylonian schools served to validate Akkadian as a legitimate scholarly language (see Crisostomo forthcoming; see also Van De Mieroop 2016 on vernaculars in cuneiform literate cultures).

Moreover, according to Irvine, "grammatica was foundational, a social practice that provided the exclusive access to literacy, the understanding of Scripture, the knowledge of a literary canon, and membership in an international Latin textual community" (Irvine 1994: 1). Grammatica was the basis for the entire system of written knowledge within the Medieval textual tradition, including philology, translation, and hermeneutics. In the Medieval European world, the scholarly practices of artes grammaticae ground knowledge and simultaneously allow the innovation of potential.

Similarly, the cuneiform scribal practices of translation and analogical hermeneutics coupled with an understanding of the cuneiform writing system were *artes grammaticae* of a sort.<sup>35</sup> These practices were fundamental to scholarly knowledge; they were the exclusive realm of those properly trained in the scribal arts, a cuneiform textual community. They allowed scholars to adapt and refine and innovate literature and language in new and creative ways. At the core of these practices is multilingualism and translation. The transformative nature of translation coupled with the potentiality of the cuneiform script and the interpretive capabilities of analogical hermeneutics released cuneiform scribes to do more than simply babble on with their languages. To once more invoke the metaphor of Babel, analogical hermeneutics allowed cuneiform scholars to attain the pinnacle of knowledge, to reach the heights of the sky.

**Acknowledgements:** I am grateful to Gösta Gabriel for organizing the original conference and editing this volume, the attendees at this conference for their many insights on this topic, and especially to Francesca Rochberg, Eduardo Escobar, and two anonymous readers for their comments on this paper and to Marc Van De Mieroop for our conversations on this topic. The present article should be considered largely a summation to the concepts I explore more systematically and extensively in Crisostomo (forthcoming).

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**<sup>34</sup>** See also Morgan (1998: 74-89).

**<sup>35</sup>** The parallels, of course, are not exact. Cuneiform scholarship may be considered analogous to some later systems of academic scholarship such as the *artes grammaticae* and these later forms and practices provide a potential comparison which may prove beneficial for our understanding of cuneiform scholarly practices and ancient world scholarship in general.

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