Special Volume in Honor of Professor Mamoru Yoshikawa, 1:

The Study of Diachronic and Synchronic Variation in Sumerian:
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[Organized by Jeremy Black(†) and Gábor Zólyomi]
Right Writing:
Talking about Sumerian Orthography and Texts

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This discussion will focus on the terms we use to talk about the way Sumerian texts are written, that is, terms like “logographic”, “syllabic”, “phonetic”, and “unorthographic”, as well as “orthography”, “spelling”, and “writing”, and, enabling the diachronic dimension, “archaic”, “archaising”, and “historical”. I will begin with a brief consideration of the nature of the Sumerian writing system, and close with some suggestions about the terminology we use when we talk about Sumerian literary compositions, including an answer to the often asked question, “What is a text?”

In 1923, Arno Poebel, the father of us all, wrote the following rather startling description of the Sumerian writing system:1

Das sumerische Schriftsystem, wie es uns fertig entwickelt in den Inschriften vorliegt, trägt einen durchaus phonetischen Charakter, indem jedem Zeichen oder einer bestimmten Zeichengruppe ein bestimmter ein- bis viersilbiger Lautwert zukommt. Dieser phonetische Charakter wird weder dadurch berührt, dass die meisten Zeichen infolge ihrer historischen Entwicklung aus Sinnbildern oder infolge einer Vermengung ursprünglich verschiedener Zeichen polyphon sind, noch auch dadurch, dass die übliche Orthographie für die Schreibung gewisser Wortstämme, Silben usw. die Verwendung bestimmter Zeichen fordert, wie diese durch die geschichtliche Entwicklung der Schrift bestimmt worden ist. So werden z.B. die Wortstämme ku „essen“ und ku(g) „Edelmetall“ nicht mit dem gewöhnlichen Zeichen ku, sondern mit den Zeichen kū und kū ... geschrieben. In vielen Fällen stellt das gewählte Schriftzeichen das ursprüngliche Bild oder Sinnzeichen des betreffenden Wortes dar. ... aber für das vollentwickelte Schriftsystem kommen auch diese Zeichen lediglich als Zeichen mit bestimmten Lautwerten in Betracht .... Wenn hier tatsächlich noch ein Rest der den Anfang des sumerischen Schrifttums bildenden bildlichen Darstellungsweise vorliegt, so handelt es sich indessen in der weitaus größten Anzahl solcher historischen Schreibungen nicht um eigentliche „Ideogramme“, sondern lediglich um eine alte Orthographie, wie ohne weiteres daraus hervorgeht, dass beispielsweise das Zeichen si sowohl zur Schreibung von si(m)

1. Poebel 1923:§12. If Poebel can justly be considered the “father” of Sumerian grammar, and Falkenstein its mid-century master, then the scholar to whom this volume is dedicated, Mamoru Yoshikawa, must be seen as the great revolutionary grammarian who instigated a major paradigm-shift, both literally and figuratively, inaugurating the exciting era of Sumerian grammatical studies in which we still find ourselves today. It was exciting, indeed, to have been present as a student in Chicago in 1967 when Yoshikawa first presented his ideas on šanṣu and maršu to western scholars at the 16th RAI (Yoshikawa 1968), and it is an honor to be included in this present tribute to him.
„geben“ wie auch von si(g) „schlagen“ gebraucht wird.

What did Poebel mean when he wrote that Sumerian writing was thoroughly phonetic despite its presumed pictographic origin? I think he was trying to make two points, one about how a Sumerian text was written with the “completely developed” writing system, by which he probably meant ED IIIb and later, and another about how Sumerian signs represent Sumerian words.

Poebel felt compelled to make the point that Sumerian writing is not some kind of ideography conveying thoughts rather than sounds; to the contrary, in a given Sumerian text, each and every sign has one specific phonetic realization. Secondly, he wanted to stress that although there are “many cases” in which the sign for a given Sumerian word clearly was originally a pictograph representing that word, in “by far the greatest number” of cases, there is no such semantic link between sign and word. Thus, it is only the convention of a “historical writing” or “old orthography” that determines that the words šum₂ “to give” and se₂(g) “to set” are written with the sign SUM.

Poebel’s first point betrays a discomfort with the notion of “ideogram”, a term we moderns have generally discarded in favor of “logogram”. In fact, however, ideograms abound in the Sumerian writing system, although none is to be found in a connected Sumerian text. Whereas the sign KA in a given text will function either as a univocal logogram — to be read either ka “mouth” or dug₂ “to speak” or inim “word” etc. — or as the phonogram ka, the sign KA in isolation is indeed an ideogram, expressing a whole constellation of words having to do with the mouth: mouth, word, voice, nose, tooth, to speak. Poebel’s second point, that the relation of word to sign is most often a matter of convention rather than original pictographic representation, was made before the archaic texts from Warka and Jemdet Nasr were discovered, but even after those discoveries, it remains true.

The elaboration of the Sumerian logographic repertoire was effected by deploying three techniques: pictography, rebus and composition. In the first, a sign could represent a word, using C.S. Pierce’s terms, as an icon (a picture of the actual thing represented), as an index (suggesting in some way what is represented, such as “mouth” for “word”, or “sun” for “day”), or as a symbol having no pictorial relationship to the word (cross-in-circle for “sheep”). Rebus representations would include using the sign SUM which is a pictogram of garlic plants, šum₂, to represent the homophonous šum₂ “to give” and the (very) partially homophonous se₂(g) “to set”. Composition is the combination of signs, either through inscription (complex signs) or juxtaposition (compound signs); the individual elements of a complex or compound sign are related to the word the composed sign represents either on a purely semantic basis (“mouth/head” × “water” = nağ “to drink”) or through a combination of semantic and phonetic signs (“mouth”

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2. I use “writing system” for the way a script is used to encode a given language. Thus, although Sumerian and Akkadian share the cuneiform script, they have different, but related, writing systems.
ME = eme “tongue”). In addition to these three techniques, there was a system of altering individual signs through hatching, inversion, writing the sign at an angle and various forms of reduplication.

But whereas this is all very clear in theory, in practice it is often very difficult to understand how an individual Sumerian word came to be written with a given sign. There is no obvious rebus explaining the relationship of gid₂ “to be long” to the early forms of its sign, and the early forms of eren “cedar” look nothing like a tree. In fact, among the first 200 signs in Labat, there are only about a dozen obvious rebus, like ti “arrow” for ti “to live”, or gi “reed” for gi(n) “to be firm”. Someone more experienced with archaic texts might double or triple that number — Bob Englund, I seem to remember, can explain to his satisfaction what the curious implement depicted by the AK sign is — but many mysteries will remain. No doubt, a number of signs originally depicted realia that passed from the lexicon after the archaic period, surviving only as rebus for other words. And if some rebus seem semantically motivated, such as dug₃ “lap” for dug₃ “to be good, sweet”, many seem completely arbitrary. Thus, the inexplicability of many sign-word relationships, and the arbitrary nature of most of the identifiable rebus supports Poebel’s contention that sign values are, for the most part, an orthographic phenomenon established by convention, and not derived from an intrinsic relationship between the sign and the word(s) it represents. The relationship between, say, the sign HUL₂ and the Sum. word hul₃ “happy” is no different than the relationship between the sign NA and the dative infix -ma- that is always written with that sign.

As attractive as Poebel’s thesis, once explicated, may be, it has two drawbacks. First, to characterize Sumerian writing as “thoroughly phonetic” is tautological, since all writing systems are phonetic. Although it is a useful tautology to the extent that it forces us to clarify our notions about how Sumerian works, it is useless if we want to understand the individuality of Sumerian writing and compare it to other writing systems. Second, it obscures the two levels at which a writing system can work, morphological and phonetic. One must distinguish between the basic level at which the writing system communicates meaning, and the information it may also convey about other levels. So, although “a” in English is a morpheme, we still cannot say that the basic unit of the English writing system is morphological, and if most Chinese words, as the majority of Sumerian words, are monosyllabic, we cannot describe Chinese or Sumerian writing as purely syllabic or phonetic. Miguel Civil has correctly described the Sumerian writing system as encoding at the morphological level, with phonetic graphs “reserved for bound morphemes.

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3. I am using “phonetic” here and throughout in the broader sense to include representations of syllables, phonemes or phones generally, but without any illusions about the match between our transliterations and the way Sumerian may have sounded. Cf. Attinger 1993:100 and 135, who characterizes the term “phonetic” as a “pis-aller” that he uses “faute de mieux”.

loan words, and a few roots (most of them non-native). That lexemes are tied more closely than bound morphemes to the signs that orthographic convention assigns to them is clear from the variety of ways that a given bound morpheme may be expressed, so that even the verbal prefix mu-, closely identified with the sign MU, can be written ma- in certain environments, but the verb tak₄ in its reduplicated form will be written TAK₄.TAK₄, even though /tata/ or perhaps /takta/ is closer to the way it would have been read. Because the writing system encodes verbs at the morpholexical level, tak₄ is less susceptible to having its morphophonemic alternations expressed in writing than is the verbal prefix mu-, since bound morphemes are encoded at the phonetic level.

The Sumerian writing system is logophonic, a term I prefer to Gelb's widely used "logosyllabic", because it is less confusing (see below) and is a term that can be applied to the Egyptian writing system as well, so that we can say that all pristine writing systems — Sumerian, Egyptian, Chinese, Maya — are logophonic, as are many secondary systems as well. If orthography is a set of normative rules for using graphs to render written language, then Sumerian orthography uses graphs encoded for meaning (logograms) to render lexemes and graphs encoded on the phonetic level (phonograms; see below) to represent bound morphemes. When these rules are broken and lexemes are written with graphs encoded at the phonetic level, whether occasionally or throughout an entire text, Sumerologists over the last half century have most often referred to the results as syllabic writing (/orthography/spelling) or syllabically written texts, and the graphs so used have been called syllabograms. But the term "syllabic" can lead to confusion: On the one hand, it does not accurately describe either the case of a polysyllabic graph used to

7. There are, of course, numerous exceptions, such as śa₂-ša₂, so written, and not GAR.GAR.
8. Gelb (1963), of course, believed that both Egyptian phonetic signs as well as Semitic alphabetic signs were syllabic signs whose vocalic element was any vowel or none, an intriguing notion that enjoys little or no scholarly support today (Rittner 1996:73 and O'Connor 1996:88).
9. The history of Sumerian writing through OB is one of progressively increasing phonetic representation of bound morphemes, resulting in increasingly larger percentages of phonograms in Sumerian texts (Civil 1973:26). But there is no pattern of increase in the representation of lexemes phonetically, which is as rare in OB Nippur as it is at ED IIIa Abu Salabikh (Lieberman 1977:53). In fact, it has long been observed that there is more phonetic writing of nouns and verbs in Gudea and Ur III than in the preceding or following periods (Falkenstein 1949:23; Attinger 1993:133). Indeed, Sollberger suggested that this represented a trend toward completely phonetic writing that was arrested only by the dying out of Sumerian as a spoken language ca. 2000: "Les Akkadiens, ayant recueilli l'héritage, l'ont, pendant deux millénaires, pieusement maintenu sans en modifier la structure" (Sollberger 1959:118). Note that Jastin, citing Falkenstein in support, speculated that it was the monosyllabic character of most Sumerian roots that prevented Sumerian writing from becoming completely phonetic (and, one should add, the fact that those roots don't undergo internal inflection).
represent a sequence normally expressed by a string of monosyllabic graphs, or the case of one “syllabogram” replacing another in a string that would normally be encoded phonetically. Thus, Krecher in 1967 proposed the term “unorthographic” for texts that had previously been called “syllabic”. On the other hand, because Sumerian words are mostly monosyllabic, it is easy to confuse the level of encoding (as did Poebel, above), and declare that all Sumerian writing is syllabic. Indeed, for just this very reason, Jestin, in 1965, used the term “phonetic” rather than “syllabic”. If we accept that “phonetic” is more appropriate than “syllabic”, then the appropriate opposition to the term logogram should be “phonogram” and not “syllabogram”. Both terms, “unorthographic” and “phonetic”, are accurate and preferable to “syllabic” for the reasons just given. One, “unorthographic”, characterizes the writings and texts in question in terms of their deviation from the norm. The other, “phonetic”, describes the level of encoding used by the deviant writing (but also more; see below). Although the term “unorthographic” is strikingly ugly in English, we must prefer it to the more mellifluous “unusual orthography” or “non-standard orthography”, because orthography, “right writing”, can be neither unusual nor non-standard. We might also use the terms “spelling” or “writing” and speak of normative and non-standard spellings or writings.

The term “phonetic” does more than tell us that the unorthographic writing or text is using phonograms where orthography would dictate logograms, and where the orthography would dictate the use of a specific phonogram or a restricted range of phonograms, the unorthographic writing or text may use quite different phonograms. “Phonetic” also suggests the motivation or context for texts so written. J. Mountford distinguishes five “functional kinds” of writing systems: orthographies, stenographies, cryptographies, pedographies and technographies. Or-

12. Krecher 1967:19 (KA read inim used to write prefix chain i-ni-im-); Civil 1973:27 (gaba for ga-ba-
13. nammu for na-am-mu-).
14. Jestin 1965:32 and 64ff. Note that Saurel 1969 reserves the term “syllabic” for breaking down polysyllabic and CVC words into monosyllables and CV-VC writings respectively; he labels all other so-called “syllabic writings” in his corpus as “unorthographic”.
15. Actually, “phonographic” (cf. Krispijn in this volume) would be an even better adjective to contrast with “logographic”, and it avoids confusing linguists whose notion of “phonetic” is rather different than the one used here. But for someone who grew up with a phonograph, this usage would create confusion of its own. Later generations, however, may have no such difficulty.
16. This applies to the Sumerian writing system for reasons just stated. Technically, a syllabogram, in the sense of a sign that represents a string of phones one syllable long, would be a subclass of phonogram. When speaking of the system used to write Akkadian, the contrast logogram–syllabogram would be both accurate and unambiguous.
18. In English, “orthography” is sometimes used as a synonym for “spelling”, but this should be correct only if what is meant is “proper spelling”.
19. Technically, orthography includes spelling norms as well as other norms, such as punctuation, formatting, etc. Cf. Vachek 1973:9; Mountford 1996:630.
thographies are the standard written languages, and pedographies are "designed for learners as stepping-stones to standard orthographies", such as the phonetic Initial Teaching Alphabet for English or the use of pinyin in the initial teaching of Chinese. Is phonetically written Sumerian a pedography, using a simple repertoire of phonograms to ease the learning of literary Sumerian by scribes already fluent in primarily phonetic Akkadian cuneiform? This seems to be the case for texts, mainly post-OB and peripheral, which include both phonetic and orthographic versions of the same composition, often with an Akkadian translation.

But what about phonetic texts that were written without accompanying orthographic versions? The majority of these are Emesal, and since orthographic Emesal in any case uses phonograms to write many lexemes, it has been suggested that the phonetic Emesal texts represent only a more consistent use of such phonograms. Both Civil and Michalowski have also pointed to the role of oral transmission in the production of phonetic writing. The Emesal liturgies were the mainstay of Babylonian temple rituals; their proper recitation was a ritual necessity. A phonetic version of a liturgy could well represent the recording of a memorized composition by a gala who had not mastered standard Emesal orthography, or a prompt for a gala whose literacy was restricted to simple cuneiform phonograms. Similarly, phonetically written manuscripts of main dialect incantations or hymns were probably produced by and/or for practitioners. Again, it was the cultic or ritual recitation, not comprehensibility, and certainly not normative orthography, that was important in the performance of these genres. Significantly, main dialect literary genres without any known cultic or ritual context, like those we call myths and epics, seem not to have been transmitted at all in phonetic or unorthographic manuscripts (although there are plenty of manuscripts, especially from sites like Me-Turru, outside primary scribal centers, whose orthography is very faulty).

Phonetic writings in texts that otherwise conform to Sumerian orthography, while liable to pop up occasionally in even the best OB manuscript, are, as we have seen, rarer in OB (as regards the primary scribal centers) than in Gudea and Ur III sources. These OB phonetic writings must be distinguished from the archaic orthography identified by Klein in the OB manuscripts of some Shulgi hymns, which reflect diachronic change in Sumerian orthographic conventions. At-

23. Cf. Tambiah 1968, which studies traditional literacy in a village in northeast Thailand, where monks can read Pali texts but not necessarily understand them; "however their recitation in itself is supposed to confer blessings and protection. The words are sacred and effective because they are the words of the Buddha"(121).
24. Cf. ibid. 122 for the illiterate exorcist who "recites charms and spells unintelligible to himself and the patient, but here the words are an element in a therapy ... and are the secret possession of a specialist who exercises dangerous but potent power over the spirits".
26. See Flückiger-Hawker 1999:22 n.65 for bibliography on Klein's discussion of the orthography of the Shulgi
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tinger would contrast "archaic" writings, reflecting fidelity to a manuscript tradition originating in an earlier period, with what he calls "historical" writings, that is, a form like like $u_3$-$na$-$a$-$du_11$ (his example), where -a- represents the second person ergative -e(r)-, and is a frozen Ur III realization of that infix still utilized in this particular form in OB texts that otherwise follow OB orthography. Perhaps "orthographic relic" would be a better term. One might add a hypothetical "archaizing" orthography, which could apply to a manuscript of a composition that intentionally used forms that were orthographic in earlier periods, but at odds with the contemporary norm. Forms that are unusual or incipient in a given period but standard in a following period might be termed "innovative", and the forms from which they deviate could be termed "conservative" (see Jagersma in this volume).

I hope that the preceding discussion has, if nothing else, persuaded you that the term "syllabic" for certain kinds of writings and texts can be both confusing and misleading, and that "unorthographic" or "phonetic" are to be preferred. I would like to conclude by offering one further set of terminological suggestions to help avoid confusion in discussions of Sumerian language and literature:

- Prof. X: Well, what text are you working on now?
- Prof. Y: "Gilgamesh and the Stallion of Inana".
- Prof. X: Interesting. How many texts do you have?
- Prof. Y: About 270, mainly from OB Uruk, but a few from Eridu.
- Prof. X: Hmm. Are there many textual variants?
- Prof. Y: Very few, though the Uruk version has more phonetic spellings than the Eridu recension.

How often one sees the word "text" in Sumerological literature — not to mention students' papers — and wonders what exactly the author is talking about! Using the just imagined conversation as an example, I would propose that "Gilgamesh and the Stallion of Inana" is a "composition" reconstructed from 270 "manuscripts", each of which contains a portion of the composition's "text". The term "text" must retain a small measure of ambiguity insofar as it refers both to the words on an individual manuscript, and to the reconstructed text of the composition (by whatever means that reconstruction is effected).

The terms "version" and "recension" are used so loosely by Prof. Y that it is not certain that either is appropriate. It seems that his manuscripts from both Uruk and Eridu contain pretty much the same text, but that the scribal conventions at Uruk permit more deviations from Sumerian orthography than do those at Eridu. Yet there are cases in which a manuscript or group of hymns. For diachronic change in Sumerian orthography, see the brief discussions in Falkenstein 1949:7 and 20f.; Krecher 1967:19.


28. I would reserve the term "tablet" to discussions of tablet shape, size, color and other purely physical properties, using "manuscript" when discussing scribal hand or format (short-line, three-column, landscape, etc.).
manuscripts for a given composition shows a number of significant, if usually minor, variations from the texts of other manuscripts to suggest a separate recension ("Gilgamesh, Enkidu and the Netherworld" from Ur?\textsuperscript{29}). In other cases, the variants are great enough to talk about a different version of a composition, such as the short and long versions of "Gilgamesh and Huwawa".\textsuperscript{30} Similar distinctions can be made diachronically: The text of first millennium "Angim" is so close to the OB manuscripts that we speak of a late "recension",\textsuperscript{31} but what we know of the Ur III text of "Lugalbanda" is so different from its OB counterpart that we call it a different "version" of the composition (Rubio in this volume). The choice of the label "version" or "recension" may be subjective, but most Sumerologists would agree most of the time on the choice of one or the other in any given case.

To summarize, I would suggest the following use of terminology:

orthography — a set of normative rules for using graphs to render written language.
phonogram — a Sumerian graph encoding on the phonetic level (opposed to logogram).
phonetic/phonographic/northographic/non-standard writing or spelling — the use of phonograms where Sumerian orthography prescribes logograms, or the use of phonograms different from those prescribed by the orthography for a given environment.
logophonic — writing whose graphs encode at both the lexical and phonetic levels (replaces Gelb's logosyllabic).
archaic orthography — orthography reflecting the earlier stage of the language from which a given composition derives.
orthographic relic — earlier orthography maintained for a specific word or phrase in later stages of the language.
innovative writing or spelling — a form that is rare or incipient in a given period but common in the following period.
conservative writing or spelling — a form that maintains continuity with earlier orthography in opposition to innovative writings that represent continuity with later orthography.
composition — a literary work (e.g. "Inana's Descent").
manuscript — an exemplar of a composition (usually on a clay tablet, for which see n. 28).
text — the reconstructed wording of a literary composition ("the text of 'Inana's Descent'"), or the words on a particular manuscript.
recension — a manuscript or group of manuscripts whose text shows significant but minor variations from other manuscripts of a given literary composition.
version — a manuscript or group of manuscripts whose text shows significant and major variations from other manuscripts of a given literary composition.

\textsuperscript{29} Shaffer 1963.
\textsuperscript{30} Edzard 1993.
\textsuperscript{31} Cooper 1978.
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