Introduction

With 6,400 entries, this is the most complete available lexicon of ancient Sumerian vocabulary. It replaces version 3 of my Sumerian Lexicon, which has served an audience of over 380,000 visitors at the web site http://www.sumerian.org/ since 1999. This published version adds over 2,600 new entries, and corrects or expands many of the previous entries. Also, following the express wish of a majority of lexicon users, I have merged together and sorted the logogram words and the compound words into purely alphabetical order. This book will be an indispensable reference for anyone trying to translate Sumerian texts. Also, due to the historical position of ancient Sumer as the world's first urban civilization, cultural and linguistic archaeologists will discover a wealth of information for research.

The Sumerian Lexicon began life in the 1980s as a collection and study of Sumerian logograms (word signs), readings of cuneiform signs that represented words in the spoken Sumerian language. The situation back in the 1980s was that no modern dictionary of Sumerian existed. To create a reliable dictionary involved relying only upon scholarly materials published since the 1950s. This dictionary brings together the lexical contributions of most of the last half-century's major Sumerologists, whose heroic achievements in recovering a dead language justly deserve praise. For the first time, the results of their separate investigations are collected together in one place. This is important because often the meaning that a scholar has found for a word in one context throws light upon its use in other contexts. In addition to continuing work on the logogram words of the original project, I have worked since 1996 to add all of the more commonly used compound words, which words are more numerous in Sumerian than are logogram-only words. Beyond the simple logogram words, three-quarters of this lexicon now consists of words that are transparent compounds of logograms.

Sumerian scribes invented the practice of writing in cuneiform on clay tablets sometime around 3400 B.C. in the large city of Uruk, which was part of the early city-state civilization of Sumer that evolved in the south of ancient Iraq. Uruk's most famous king was the legendary Gilgamesh, who spoke Sumerian. The writing on the tablets progressed from compact shorthand signs to readable texts by 2800 B.C. Archaeologists have

excavated over one hundred thousand clay tablets written in Sumerian from the Old Sumerian (ca. 2800 B.C.-2350 B.C.), Old Akkadian (2350 B.C.-2150 B.C.), Neo-Sumerian (2150 B.C.-2000 B.C.), and Old Babylonian (2000 B.C.-1600 B.C.) periods. A million or more tablets written in Sumerian cuneiform may lie in the ground awaiting archaeological excavation (if these fragile clay tablets are not first destroyed by unskilled looters). The Old Babylonian period left us many Sumerian literary compositions and important bilingual cuneiform dictionaries in Sumerian and Akkadian. Akkadian is a well-understood language, belonging to the Semitic family, that was spoken by the Babylonian successors to the Sumerians. Sumerian is not genetically related to Akkadian, although the Semitic vernaculars that led to Babylonian Akkadian may have coexisted with spoken Sumerian in Greater Mesopotamia since before the invention of writing. It was probably around 1800 B.C. that Sumerian ceased to be a living language, although the Babylonian cuneiform scribes would study and write Sumerian in addition to their native Akkadian until the end of Babylonian civilization around the first century A.D.

Sumerian is a linguistic isolate, a language which is not closely connected to any other language family. Also, Sumerian writing is not alphabetic. The most important written words had their own cuneiform signs, whose origins were pictographic, as in Chinese writing. An initial Uruk IV period repertoire of about 1200 proto-cuneiform ideographic signs evolved into the standard signlist of about 900 cuneiform signs. Some of those cuneiform signs became syllabograms for writing phonetic V, VC, CV, and CVC syllables.

The Sumerian Lexicon presents Sumerian words not in cuneiform, but in readable Roman alphabet transliteration, as Sumerologists normally do when they analyze the ambiguous cuneiform symbols of an inscription and publish its text. Many cuneiform signs can be pronounced in more than one way (so that one sign can represent multiple logograms or words). The lexicon uses all upper-case or capital letters to indicate the name of a sign, usually in brackets, while lower-case or small letters indicate the word or reading of a sign. If the Sumerians wrote a word with a group of two or more cuneiform signs, a so-called diri-spelling, then a period will appear between each upper-case component sign, e.g., the sign group A.PA.GISAL.PAD.DIRIG for the word addir. If

superscripted letters appear before a word, e.g., ^{iti d}dumu-zi, they represent a determinative sign that usually appeared in front of that sign in the inscriptions. Certain Sumerian words are written before a noun or name as a 'determinative', such as ^d for ^{dingir} being written before divine names, or ^{lu2} being written before male profession names. ^{iti} is the determinative written before month names, so that the reader will know that the sign(s) that follow refer to a month. It is thought that determinatives were not pronounced in speech, but only appear in writing.

Often two or more signs share the same pronunciation, in which case it is necessary to indicate in the transliteration which cuneiform sign is meant; Assyriologists have developed a system whereby homophones are marked by subscript numerals. The homophone numeration here follows the 'BCE-System' developed by Borger, Civil, and Ellermeier. Transcribed texts often use an acute accent (´) to mark the second homophone and a grave accent (`) to mark the third homophone, but these marks did not help in sorting all the words into the right order, so this version of the lexicon uses all subscript numerals instead. The numeration system is a convention to inform Assyriologists which, for example, of the many cuneiform signs that have the reading du actually occurs on the tablet. A particular sign can often be transcribed in a long way, such as dug₄, or in a short way, such as du₁₁, because Sumerian was like French in omitting certain amissable final consonants except before a following vowel. Due to this lexicon's etymological orientation, you will usually find a word listed under its fullest phonetic form. Transcriptions of texts often contain the short forms, however, because Sumerologists try to accurately represent the spoken language. Short forms are listed, but you are told where to confer.

The vowels may be pronounced as follows: *a* as in *father*, *u* as in *pull*, *e* as in *peg*, and *i* as in *hip*. Of the special consonants, \tilde{g} is pronounced like *ng* in *rang*, \underline{h} is pronounced like *ch* in German *Buch* or Scottish *loch*, and \check{s} is pronounced like *sh* in *dash*.

Following each definition, the lexicon may indicate in a smaller font what I think is the word's etymology, usually as a compound of simpler words or less often as a loanword from Semitic Akkadian. These suggested etymologies are not the source of the word definitions, which derive from usages in context and Akkadian lexical correspondences. Etymologies are a normal part of dictionary making, but etymologies are also the most subject to speculation and debate. Sumerian studies is a very young field. There are still many learned articles yet to be written analyzing the etymologies of particular words. Etymological studies must take into account the Sumerian impulse to achieve phonetic harmony through phoneme assimilation, realizing that this tendency has disguised some original word components. But in view of the Sumerians' observed propensity for forming new words through compounding in the period after they invented cuneiform signs, it should not surprise anyone to find that this same propensity was at work in the logogram words that mostly date from before their invention of written signs.

The structure and thinking behind the Sumerian vocabulary is to me a thing of beauty. We are very fortunate to be able to look back into the minds of our prehistoric ancestors and see how they thought and lived via the words that they created. The vocabulary of proto-Sumerian and Sumerian take us back to the beginnings of human culture. There is much for the cultural archaeologist to recover in the Sumerian vocabulary. What particularly struck me as I worked on this new edition was the Sumerian knowledge of useful plants and herbs, a traditional form of knowledge that modern Western civilization has neglected. According to a 1999 United Nations report, "Amongst the 1500 or so plants used in Iraq, a large number serve medicinal and aromatic purposes." The Sumerians built their civilization in southern Mesopotamia over a continuous period of four thousand years, from the start of the Ubaid period around 6,000 BC (calibrated) to the end of the Ur III period around 2,000 BC. How much hard-won knowledge did Sumerian speakers acquire over those millennia, that can be extracted from their vocabulary?

This version of the Sumerian Lexicon includes all the variant Emesal dialect word forms in addition to the Emegir main dialect forms. We do not know the extent to which this "thin, refined tongue" or 'women's dialect' was actually spoken apart from cultic readings, but these forms do substitute for main dialect forms in literary genres that traditionally belong to women, such as laments and fertility songs. Any study of the Emesal spoken dialect question should collect the loanwords into Akkadian, such as $\delta abs\hat{u}$, 'mid-wife, accoucheur', and mu(t)tinnu, 'choice wine' (cf., Sumerian δa_3 -zu and mu-ti-in), that were transmitted in their Emesal forms.

For some verbs, the lexicon gives two sets of forms, which the Akkadians called hamtu and $mar\hat{u}$, "quick, sudden" and "fat, slow". Quoting from *A Manual of Sumerian Grammar and Texts* by John L. Hayes, "The difference in function between the two has been interpreted in various ways. It has been argued that the difference was one of tense (past ~ present/future); one of aspect (perfect ~ imperfect); one of Aktionsart (punctual ~ durative, and so on). An explanation in terms of aspect seems to fit the evidence best, and they will be called aspects here." p. 46.

The shortcomings of this concise lexicon are essentially three: 1) the lexicon does not quote examples of usage; 2) aside from the notations of each sign's Archaic Frequency, taken from the electronic archaic sign list of P. Damerow and R. Englund, the lexicon rarely indicates the source period or the provenance of words or their different meanings during the language's long history (although most of our texts are from the Neo-Sumerian and Old Babylonian periods); and 3) no attempt has been made to annotate from which of the following ninety-six sources I obtained a particular meaning. The kind of large collaborative Sumerian dictionary that would offer all of these features is still many years in the future.

In the meantime, this user-friendly Sumerian Lexicon 1) provides a complete range of actually-used meanings for each word; 2) aids the reader of texts with extensive coverage of Sumerian's grammatical particles, not just its nouns, verbs, and adjuncts; 3) throws light on the origin and meaning behind words by analyzing their etymologies; and 4) assists look-ups by cross referencing short and long word forms as well as related words.

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The Sumerian lexicon has benefitted from introductory and graduate classes with Dr. Robert Englund at UCLA. Dr. Englund is in charge of an Internet project to catalog all cuneiform tablet collections and to make available in image and transliteration all the Sumerian tablets from the Ur III and earlier periods, called the *Cuneiform Digital Library Initiative (CDLI)*. The Sumerian lexicon has benefitted from searches of these mostly untranslated texts using a Windows software program created by Massimo Pompeo called *The Cuneiform Texts Resources*.

I dedicate this lexicon to the memory of Dr. Robert Hetzron, with whom I had the pleasure of studying during every week of the four years that I attended the University of California at Santa Barbara. Dr. Hetzron was a professional linguist and an expert on the Semitic and Afro-Asiatic language family.

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