



An Outline of the Synchronic and Diachronic Variations of Sumerian

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Abstract. Since Sumerian as a spoken language died out at least four thousand years ago, all studies of it have been limited to the written language. An analysis of these texts reveals that Sumerian writing is not static and that, like other languages, it is subject to both synchronic and diachronic variations.

Keywords: Sumerian · synchronic · diachronic · writing · variation

1 Introduction

The Sumerians called their language ‘**eme-gi₇**’, which means the native tongue or local tongue. This expression may have come into being under the long-term interaction of the city-states that used this language, whether the interaction was violent or peaceful. They could not realise that they were in the same ethnic group but could realise that they used the same language. People who spoke Sumerian as their mother tongue can be regarded as the Sumerians, which is the only reliable way to distinguish them from others.

Writing’s emergence must be based on a complex society to address the increasing complexity and diversity of social affairs. In the last century, scholars tried to understand this pre-Sumerian period and put forward various theories. For instance, Landsberger believed that settlers were there long before the Sumerians migrated to southern Mesopotamia. However, such arguments have serious flaws, as Rubio proved that many substrates belonged to Sumerian, Semitic, or culture and wandering words [1]. Regardless of which view is correct, all scholars involved in this issue recognise that Mesopotamian culture has been in linguistic contact initially, and multiple languages must exist in the area. Mesopotamia is not a closed area; whatever the language of a group, it cannot exist in isolation. In such a linguistic environment, each language inevitably interacts with other languages. This argument itself shows the complexity of the language environment in this region, and its evolution is deeply influenced by the realistic language environment, no matter what the causes of writing are. It is only due to the limitations of the surviving material that scholars have been unable to glimpse the real linguistic environment of that time.

2 Language Contact

Evidence from existing texts supports the view that the essential language in contact with Sumerian was Akkadian, and this contact can be traced back to around 3000 BC. The early vocabulary word ‘*uruda*’, for ‘cooper’, is probably a Semitic vocabulary whose root is the Akkadian *werûm*. Texts from around 2600 BC from Fara and Abu-Salabikh provide the most direct contact evidence. Semitic names, such as *Iš-lul-il*, *Ad-da-lum*, *Ur-dE-lum* in Fara and *En-na-il*, *I-Ku-gu-il* in Abu-Salabikh, appear in the text mainly in Sumerian [2].

The evidence confirms that contact between the two language systems took place initially and was not the result of external forces; the people who spoke them inhabited the area simultaneously. The interference of Akkadian must be taken into account when studying the diachronic and synchronic changes in Sumerian, their interaction had been going on for thousands of years, and they had profoundly influenced each other. The boundary between changes that took place within Sumerian itself and changes resulting from the interference of Akkadian is often vague and uncertain. We can only observe these changes in the written system, and the long-term interaction between these languages makes it difficult to determine which changes occurred within Sumerian itself without influence from external forces simply through examining the texts.

The limitations of written language make it difficult to explore the real language environment and understand the system itself. If a language emerges as written, it would have to have been a spoken language system. Hockett pointed out the basic fact that human beings could speak thousands of years ago, while the history of writing is only a few thousand years old, and it has been the privilege of only a few people to master writing for most of that time. In any society with a sufficiently developed language, the spoken system is not limited to privileged elites. Just because illiterate people cannot read or write does not mean that they can only communicate in straightforward and crude language. Their vocabulary is often rich and colourful [3]. All of the people who wrote Sumerian texts were intellectuals, and they primarily represented the society of elites and property owners. No one can know whether the language activities of the ordinary class affected the writing system of the upper class. More importantly, the composition of elites also changed. Intellectuals came from different city-states, and sometimes the mother tongue of them was not Sumerian. Especially in the Ur III period (2200–2004 BC), fewer and fewer people whose mother tongue was Sumerian, allowing others whose writing tradition and mother tongue were different to influence it. The writing of this language differed in different periods and among different scribes in the same age. The so-called orthography of Sumerian spelling is a concept created by modern scholars. Even though the ruling class of the Ur Empire raised Sumerian to a special status throughout the empire, they never set and enforced a writing standard for scribes. Nevertheless, this orthography is authentic, and scholars regard the Spelling Tradition accepted by most scribes as a kind of ‘standard’ and the common changes appearing in the texts as standardised spelling over time. There may be different standardised spellings in Sumerian simultaneously: one is based on regional differences while the other is based on the purpose of writing. There are significant differences between literary works and other texts, and there are also differences between administrative archives, private letters

and court decisions. Although the elites entirely controlled the writing system of this language, researchers must deal with many uncertainties.

3 Several Evidences

Halliday has written that ‘writing is not the representation of speech sound’ [4]. In this sense, the two systems are not completely synchronized, and the writing system may not truly reflect the actual sound in spoken language. Jagersma believed that it used a sign **DU** to represent the consonant /f/ and vowels /a/ and /e/, and by establishing a connection with the Akkadian sound system, he confirmed the existence of this consonant. In the second half of the third millennium, /f/ lost its position as an independent phoneme and merged with /d/ or disappeared completely [5]. But the reason for the loss of this consonant remains unclear. It may be due to the interference of Akkadian, or there may be no external influence at all. The recreation of the Sumerian sound system depends on scholars’ understanding of Akkadian in the Old Babylonian period (1800–1500BC) and later, and the Akkadian sound system seriously interferes with this reconstruction. Therefore, it is challenging to produce a definitive answer to why a specific Sumerian phoneme disappeared, but based on texts from different periods, scholars can determine that it disappeared at least at the level of the written language.

Although there may be significant disparities between the written and spoken of the same language, they are organised by grammar, and any language has grammar. This understanding of grammar’s function can further deepen the modern understanding of all languages that have died and left rich written texts. In Sumerian specifically and its contact with Akkadian, there is also the contact of ‘Sumerian with Sumerian’ to consider. This contract means that, in terms of a diachronic approach, future generations of scribes had to learn and imitate the patterns of their predecessors to inherit this skill; in terms of a synchronic approach, as a critical written language, scribes from different regions and responsible for different texts would interact with each other. This interaction among texts is the fundamental reason for variations in the Sumerian language corpus. Sumerian synchronic and diachronic differences are very complex. Time, space and scribes may be the factors that led to such variety, but this investigation will focus primarily on variations in grammatical features.

3.1 The Locative /’ a/ Replaces the Dative /ra/

Generally speaking, the form of the nominal dative case-marker depends on gender. Human verbal participants are case-marked with the enclitic **/ra/** and non-humans with the enclitic **/e/**. The form of this case-marker **/ra/** is a ‘standard’ format, see ex. (1). Therefore, it became particularly prominent when locative case makers began to replace the dative function in some Ur III period texts, see exx. (2) and (3).

(1) ca. 2500–2340 BC, CDLI no. P431120

| | | |
|--|------------------------|---|
| ^d nin-ŋir ₂ -su ₂ -ra | eš ₃ dug-ru | mu-na-du ₃ |
| Ningirsuk=ra | eš Dugru=ak=∅ | s ₄ mu-s ₆ nn-s ₇ a-s ₁₁ n-s ₁₂ du-s ₁₄ ∅ |
| Ningirsu=DAT | shrine | VEN-3SG.H-DAT-3SG.H.A-built-3SG.P |
| | Dugru=GEN=ABS | |

He built the shrine of Dugru for Ningirsu.

(2) ca. 2100–2000 BC, CDLI no. P112634

| | | |
|--|----------------------|--|
| ur-niŋar ^{ŋar} -ke ₄ | dam-na | in-na-an-ba |
| Urnigark=e | dam=ane =’ a | s ₂ i-s ₆ nn-s ₇ a-s ₁₁ n-s ₁₂ ba-s ₁₄ ∅ |
| Urnigar=ERG | wife=3.SG.POSS.H=LOC | FIN-3SG.H-DAT-3SG.A-portion-3SG.P |

Urnigar denoted it to his wife.

(3) ca. 2100–2000 BC, CDLI no. P381707

| | | |
|------------------------|-----------------------|--|
| ARAD ₂ -dam | šeš-ŋa ₂ | u ₃ -na-a-du ₁₁ |
| ARADdam | šeš=ŋu =’ a | s ₁ u-s ₆ nn-s ₇ a-s ₁₁ e-s ₁₂ du-s ₁₄ ∅ |
| ARADdam | brother=1.SG.POSS=LOC | ANT-3.SG.H-DAT-2.SG.A-speak-3.SG.P |

Say to my brother ARADdam.

Here is an unconventional usage because when /’ a/ is used as a locative case-marker, it can only be used after a non-human. But in exx. (2) and (3), /’ a/ replaces the dative case-marker /ra/, which should be used after **dam=ane** and **šeš=gu**. Even if the scribe really thought that the locative could be used instead of the dative, he should have selected /ra/ based on the rule that /’ a/ cannot indicate a non-human when used as a locative in standard writing. This usage is not found in texts earlier than the Ur III period.

(4) ca. 2100–2000 BC, CDLI no. P145708

| | |
|---------------------------|--|
| i ₃ -kal-la-ar | u ₃ -na-a-du ₁₁ |
| Ikalla=ra | s ₁ u-s ₆ nn-s ₇ a-s ₁₁ e-s ₁₂ du-s ₁₄ ∅ |
| Ikalla=DAT | ANT-3.SG.H-DAT-2.SG.A-speak-3.SG.P |

Say to Ikalla

Ex. (4) and ex. (3) belong to the same period of texts, and their sentence structure is the same, but ex. (4) uses /ra/. The phenomenon of /’ a/ substituting for /ra/ appears in the Ur III period, but it does not form a fixed usage. There are two possible explanations for this change. One is that the local scribes spontaneously made a new writing habit; that is, when the possessive pronouns such as ‘gu’ or ‘ane’ appeared, /’ a/ replaced /ra/, but it is difficult to explain why this change did not happen until this period. Another explanation is that the native language of the scribe was not Sumerian. In this case, the scribe did not care whether locative /’ a/ could appear after a non-human at all. Instead,

he chose according to his native language, *a-na* is ‘to’, ‘for’, or ‘at’ in Akkadian, in this language, the nouns following the prepositions are always in the genitive, these nouns only need to use genitive, and whether it is ‘human’ or ‘non-human’, there is no such distinction. The Sumerian /a/ has a similar semantics to *a-na* when used after the nouns, and so the scribe chose this semantics. However, the scribe had chosen semantics alone, ignoring the practical way Sumerian case-markers are used—they need to be associated with the various components of the verb. The slot7 is a dative prefix. It needs to be associated with dative /ra/ and cannot be associated with locative.

3.2 The Terminative /še/ Replaces the Locative /’ a/

Ex. (5) shows that the locative case-marker indicates the location where the action enters. But at the same time, ex. (6) shows that another expression appeared in the same sentence structure in the Ur III period.

(5) ca. 2100–2000 BC, CDLI no. P111264

| | |
|------------------------|---|
| e ₂ -gal-la | ba-an-ku ₄ |
| e.gal =’ a | s ₅ ba-s ₁₀ ni-s ₁₂ ku-s ₁₄ ∅ |
| Palace=LOC 1 | MID-L1.SYN-enter-3.SG.S |

It was brought into the palace.

(6) ca. 2100–2000 BC, CDLI no. P115536

| | |
|--|---|
| e ₂ -kišib ₃ -ba-še ₃ | ba-an-ku ₄ |
| e.kišib=ak=še | s ₅ ba-s ₁₀ ni-s ₁₂ ku-s ₁₄ ∅ |
| storeroom=GEN=TERM | MID-L1-SYN-enter-3.SG.S |

It was brought into the storeroom.

Here is a synchronic difference. Both relate to tribute management by the government, but the former is the standard Sumerian writing format, while the latter reflects Akkadian interference. In ex. (5), slot10 ‘ni’ in the finite verb is associated with the locative /’ a/, which indicates palace. In ex. (6), the scribe should have used the same form here because he used verbs with the same format, but he chose to use the terminative to indicate a storeroom. In Akkadian, ‘to enter’ can be expressed as *ana bītim ērub* ‘I entered the house’. Its tense and person changes are reflected in the verb itself, which has nothing to do with ‘*a-na*’. *Ana* is just a preposition, which can point to anything. Same as the previous question, the scribe considered the exact meaning of /še/ and *ana* when he was writing the Sumerian text but did not consider that the case-marker should be associated with the verb’s slot, slot10 is a locative prefix, it can never be associated with terminative in a standard format (Table 1).

The scribes did not notice the difference between the two vital factors in Sumerian: 1) human vs. non-human, 2) every slot in the verb system has its fixed function. These two factors are absent in Akkadian. They did not carefully identify the specific usage of the Sumerian case-marker but applied their understanding of their mother tongue to Sumerian.

Table 1. Case-marker (G. Zolyomi, *An Introduction to the Grammar of Sumerian*, Budapest)

| Case | Nominal case-marker | | Verbal affix | Approx. Meaning |
|-------------|---------------------|-----------|----------------|------------------------------|
| | human | non-human | | |
| dative | -/ra/ | /e/ | /a/ S7 | / |
| terminative | -/še/ | -/še/ | /ši/ S9 | towards |
| locative 1 | / | -/ a/ | /ni/ S10 | on, onto |
| locative 2 | -/ra/ | -/ a/ | /i/ or /e/ S10 | at, into, connection with |
| locative 3 | -/ra/ | -/e/ | /i/ or /e/ S10 | in, into |

4 Conclusion

From the above brief overview it can be concluded that Sumerian writing is in a constant state of flux. The main reasons for these variations are the interaction between Sumerian and Semitic languages and the variations that have naturally occurred within Sumerian as a result of its long-term variability. Another conclusion that can be drawn from these changes in the written script is that by the end of the third millennium BC some native Akkadian speakers had mastered the writing of the language (as the distinctly Akkadian features reveal), meaning that at least among the elite Sumerian had lost its potential as a native language.

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