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The theses of the Dissertation

**Nominal and Verbal Plurality in Sumerian: A Morphosemantic
Approach**

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My dissertation investigates number as a grammatical category in Sumerian. This language expresses different types of plurality via several morphological and lexical markers, but the functions and distribution of these markers are not described in an adequate way in the literature. The main goal of the study was to remedy this situation. I analysed three markers of nominal plurality – the enclitic **ene**, nominal reduplication and the grammar word **didli** – and two types of verbal plurality: stem alternation and the full reduplication of the verbal stem.

METHODOLOGY

The investigation of grammatical number is highly facilitated by current typological research, which contributed to the definitions of different possible values of number, and assessed the correspondences among these values and other grammatical categories (cf. Corbett 2000). Similar research is available related to verbal plurality. These studies determine the possible values of pluractionality with the help of big cross-linguistic samples taking the social categories of verbs into consideration (cf. Wood 2007). I

rely on these veins of research in my thesis, and apply the results of the studies mentioned above to the analysis of the grammatical category of number in Sumerian. Chapter 2. and 4. summarize the main results of the related research in language typology and cognitive linguistics.

The advent of large electronic corpora opened up a new era in the research of Sumerian. More and more Sumerian texts are available in a searchable, and in certain cases grammatically analysed, format. This makes it possible to conduct large-scale quantitative investigations, and, in certain cases, the exploitation of all data available. I use the possibilities provided by these databases in the dissertation, and analyse certain phenomena on the basis of distribution in time or among genres. This is particularly significant in the quantitative study of productivity, which is the most efficient system to answer the question of morphological productivity in dead languages.

RESULTS RELATED TO NOMINAL NUMBER

Nominal number, and its markers pose several questions in Sumerian (ch. 3). It is known that nouns belonging to the non-human class cannot take the plural marker **ene**; but opposed to the relevant literature I show that in the case of non-humans behind the lack of

morphological markedness there is no singular and/or plural, but general number (cf. Corbett 2000). Unmarked human nouns belong to kind-referring expressions (section 3.3.3) which is a well-known phenomenon in language typology (cf. Corbett 2000; Acquaviva 2008). Nouns in the absolutive case cannot be marked by **ene** either; I suggest an explanation for this based on analogy (section 3.3.2).

The main question related to the enclitic **ene** is its exact distribution and its relation to the verbal pronominal markers. Quantitative data reveals that both type of markers is relatively frequent but there is a small number of clauses where both occur and their cooccurrence can be interpreted as agreement. In the thesis I give a detailed account of the syntactic environments where **ene** and verbal pronominal markers occur, and show why their cooccurrence is relatively rare. In section 3.3.6 I investigate the question whether **ene** can be regarded as an inflectional marker.

Functions of noun reduplication (section 3.4) are subjects of debate in the literature, thus this chapter concentrates on semantic questions. Instead the inexact term collective I suggest to use the name 'greater plural'. The two terms have different definitions in linguistics and the latter is the one which covers the given function in Sumerian. Besides I find it necessary to apply the function distributive as suggested by Jagersma (2010). In certain cases,

however neither greater plural, nor distributive is an adequate interpretation for reduplicated nouns. Additionally the frequency analysis of attestations throughout different time periods reveals that in later periods reduplication typically occurs with non-human nouns which cannot be pluralized by the enclitic **ene**. These two phenomena together can be explained by a grammaticalization process: nominal reduplication had headed toward becoming a non-human plural marker.

The last question investigated in the range of nominal plurality is the grammatical word **didli** (section 3.5). There is a general consensus in the literature that the function of this item is distributive. However, neither its distribution nor its relation to noun reduplication has been clarified. Many of the questions around **didli** is connected to the fact that it almost exclusively occurs in economic texts in the third millennium B.C.E. Most probably it was a substitution for noun reduplication with lower stylistic value or even a technical term preserved for economic usage.

RESULTS RELATED TO VERBAL PLURALITY

There are two ways to express verbal plurality in Sumerian: a small number of verbs has stem alternation as a marker, and a bigger number of verbs reduplicate for pluractionality.

Stem alternation is a well-known, and well described phenomenon in linguistic typology. In the languages where it can be found it typically affects the same small set of verbs, and pluralizes the most affected participant of the verb. This approach which basically assigns participant plurality as the function of stem alternation, is accepted in Sumerology. However, Jagersma (2010) suggests the possibility that stem alternation marks event plurality, and participant plurality is only a secondary effect of event plurality. In section 5.2 I show that Sumerian stem-alternating verbs fit to the typological tendencies since the same verbs are effected by it as in other languages. The divergence from agreement is revealed by the fact that opposed to verbal pronominal marking, stem alternation is not sensitive to grammatical gender (human – non-human), nouns belonging to both classes can be pluralized by it. Jagersma's assumption that stem alternation would express event plurality may be handled in a continuum approach which rejects a strict opposition. This solution suggests that participant and event plurality may be present at the same time, but depending on the characteristics of the verb and the participants one or the other is more salient.

The other type of verbal plurality, full reduplication of the verbal base (section 5.4) affects a bigger number of verbs. The interpretation of this phenomenon is more controversial in the

relevant Sumerological literature (cf. Edzard 1971; Yoshikawa 1993; Thomsen 2001; Jagersma 2010 etc.). The range of assumed function is wide and changes from author to author. The relevant typological literature, however, provides precise description of the functions of verbal plurality, and reveals the correspondences between pluractionality and verb semantics (see Wood 2007). Besides the main classes of event plurality (event-internal, event-external, continuous, and verbal distributive which has a detailed typological description in appendix 3), lexical aspect plays an important role. Due to this role in the corresponding chapter, different values of verbal plurality are attached to verbs belonging to different classes of lexical aspect. This method makes it possible not to conclude from the – often subjective – interpretation of individual sentences, but from linguistically established categories, and thus to arrive at more objective results. This chapter involves a general algorithm of the analysis, and it shows through several examples how other parts of clauses may modify the interpretation taken as default on typological ground.

Since the grammar of Sumerian applied in the study (see Zólyomi 2005) considers traditional adjectives as stative verbs, the reduplication of these is dealt with under verbal plurality, and discussed together with the plurality of state verbs. The plurality of

stative verbs typically expresses two functions: participant plurality and the intensity of the characteristics named by the verb. I show that both of these values can be found in Sumerian, and that in the case of state verbs, intensity is particularly frequent. I also suggest principles to decide which of the two is the correct interpretation in individual clauses.

Chapter 6 discusses those nouns which contain the participle of a reduplicated verb as a base. This group of lexemes can be related to pluractionality, since this phenomenon offers the most obvious explanation to the reduplication in the base. Thus, these nouns provide important feedback to the theory of verbal plurality in Sumerian, because they reveal that at least certain values of pluractionality were present in the early (pre-writing) stage of Sumerian, and have been used as tools of word-formation. For the formal analysis of this group I apply Construction Morphology (Booij 2010) and for the explanation of the semantic side I turn to the theory of cognitive metonymies.

Chapter 7 briefly summarizes the results of the dissertation, and provides suggestions to the application of these results in the translation of Sumerian texts.

BIBLIOGRAPHY

- Acquaviva, Paolo. 2008. *Lexical Plurals: A Morphosemantic Approach*. Oxford: University of Oxford Press.
- Booij, Geert. 2010. *Construction Morphology*. Oxford: Oxford University Press.
- Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.
- Edzard, Dietz Otto. 1971. "Hamtu, marû und freie Reduplikation beim sumerischen Verbum I". *ZA* 61, 208-232.
- Jagersma, Abraham. 2010. *A Descriptive Grammar of Sumerian*. Doctoral Dissertation, University of Leiden.
- Thomsen, Marie-Louise. 2001. *The Sumerian Language: an Introduction to its History and Grammatical Structure*. Copenhagen: Akademisk Forlag.
- Wood, Esther Jane. 2007. *The Semantic Typology of Pluractionality*. PhD Dissertation, University of California, Berkeley.
- Yoshikawa, Mamoru. 1993. "Verbal Reduplication in Sumerian". In: Yoshikawa, Mamoru. *Studies in the Sumerian Verbal System*. Acta Sumerologica supplementary series 1. Hiroshima: The Middle Eastern Culture Center in Japan, 287-308.
- Zólyomi, Gábor. 2005. *Sumerisch*. In *Schriften und Sprachen des Alten Orients*. Hrsg.: Streck, Michael. Darmstadt, Wissenschaftliche Buchgesellschaft: 11-43.