

Voice and Topicalization in Sumerian

Gábor Zólyomi

Bölcsészdoktori disszertáció
Budapest 1993

Table of contents

	<i>Table of contents</i>	<i>page</i> iii
	<i>Kivonat</i>	vi
	<i>Acknowledgments</i>	xiii
	<i>List of abbreviations</i>	xiv
0.	Introduction.....	1
1.	Sumerian Genitive Constructions.....	7
1.0	Preliminaries.....	7
1.1	Noun Phrase in Sumerian.....	8
	1.1.1 Sumerian NP as "nominal chain".....	8
	1.1.2 Previous descriptions of Sumerian NP.....	10
	1.1.3 The status of possessive suffix.....	13
	1.1.4 The structure of NP in Sumerian.....	14
1.2	Clitics in Sumerian.....	15
	1.2.1 Clitics in linguistic theory.....	15
	1.2.2 The Sumerian possessive enclitic.....	17
	1.2.3 Other enclitics.....	18
1.3	Indefinite Genitive.....	19
	1.3.1 Non-possessive genitives.....	19
	1.3.2 Indefinite genitives in Turkish.....	21
	1.3.3 Indefinite genitives in Sumerian.....	23
1.4	Anticipatory Genitives.....	24
	1.4.1 Types of Anticipatory Genitives.....	24
	1.4.2 an-ub-da limmu-bi	26
1.5	Overview.....	27
2.	The Function of Anticipatory Genitive.....	29
2.0	Preliminaries.....	29
2.1	Anticipatory Genitive as Topicalization.....	29
	2.1.1 Topicalization in linguistic theory.....	29
	2.1.2 Topicalization in Sumerian.....	31
	2.1.3 Chains of equi-topic clauses.....	33
	2.1.4 é, é-ninnu , and és é-ninnu in topic position.....	35
	2.1.5 The information status of recta.....	37
	2.1.6 The grammatical case of regentia.....	39
	2.1.7 Recta containing NPs in apposition.....	39
2.2	Overview.....	41

3.	Voice in Sumerian	43
3.0	Preliminaries.....	43
3.1	Traditional treatments of Sumerian passive.....	43
	3.1.1 Diakonoff.....	43
	3.1.2 Oberhuber.....	46
	3.1.3 Thomsen.....	48
	3.1.4 Hayes.....	49
	3.1.5 Recapitulation.....	50
3.2	Wilcke's description of Sumerian passive	51
3.3	Split ergativity in Sumerian in terms of formal and distributional cases.....	54
3.4	An alternative analysis of Wilcke's passive.....	59
3.5	A functional approach to passives.....	63
	3.5.1 Semantic, syntactic, and pragmatic functions	63
	3.5.2 Passive as derived voice.....	67
	3.5.3 Sumerian derived voice.....	67
	3.5.4 Another backgrounding device.....	69
3.6	Infixes of slot Nr. 3 and 1	70
3.7	Examples of backgrounding passive.....	72
3.8	Overview.....	79
4.	The prefix ba-	80
4.0	Preliminaries.....	80
4.1	Typical contexts of the prefix ba-	80
4.2	Previous descriptions' of ba-	99
	4.2.1 Poebel	99
	4.2.2 Falkenstein	100
	4.2.3 Sollberger.....	101
	4.2.4 Jacobsen	102
	4.2.5 Postgate.....	103
	4.2.6 Thomsen.....	104
	4.2.7 Yoshikawa	106
	4.2.8 Common failures of earlier theories on ba-	107
4.3	The middle ba-	107
	4.3.1 The three main uses of ba-	107
	4.3.2 Middle voice in current linguistic theory	108
	4.3.3 Middle voice in Sumerian	110
	4.3.4 Passive verbal forms without ba-	112
4.4	Overview.....	113
5.	Foregrounding in Sumerian.....	114
5.0	Preliminaries.....	114
5.1	Syntactic ergativity in Sumerian.....	115
	5.1.1 Syntactic ergativity in linguistic theory	115
	5.1.2 Previous claims on Sumerian	118
	5.1.3 Sumerian in terms of Marantz's Ergativity Hypothesis.....	121
	5.1.4 Sumerian in terms of Dixon's syntactic ergativity	122
	5.1.5 Subject and topic in Sumerian.....	127

5.2	Pro-drop in Sumerian	129
	5.2.1 Pro-drop in linguistic theory	129
	5.2.2 Empty pronouns in Sumerian	131
5.3	Topical NPs in Sumerian	135
	5.3.1 The position of non-referent constituents	135
	5.3.2 Topical constituents in sentence initial position	137
5.4	Overview	140
6.	Conclusions	142
7.	Appendix: Statue C of Gudea	146
	<i>Index of quoted texts</i>	156
	<i>References</i>	159

Acknowledgments

The occasion for starting to study the subject of this work was a paper entitled 'Genitive Constructions in Sumerian' which I presented at the 3rd meeting of the Sumerian Grammar Discussion Group (SGDG) in Oxford in 1992.

My participation in the SGDG began in 1990 while I was a visiting student at the Oriental Institute in Oxford, Worcester College, on a scholarship awarded by the Soros Foundation. My tutor was Dr. Jeremy A. Black whom I am indebted to both for inviting me to the 2nd and subsequent meetings of the SGDG and for his continual help in connection with my studies since 1990.

During my second longer stay in Oxford, made possible by a TEMPUS Grant, in the Trinity term of the 1992-1993 academic year, I became familiar with many of the linguistic studies I use or refer to in chapter 3-5 of this work. An earlier version of Chapter 5 was read at the 4th meeting of the SGDG in 1993. I am grateful to the members of the SGDG (J.A. Black, D.O. Edzard, the late Th. Jacobsen, B. Jagersma, J. Krecher, P. Michalowski, C. Wilcke, M. Yoshikawa) for their useful comments on various parts of this work. I am especially indebted to Bram Jagersma whose detailed criticism and suggestions had a significant impact on the final form of this study. He was also kind enough to make available to me a computerized database of the Gudea texts which proved to be a useful time-saving technical aid. I am also grateful to K. É.Kiss for her kindness to comment on the linguistic side of this study.

Needless to say, all errors are mine.

*List of abbreviations**

A	Agent	LD	left-dislocation
abs/ABS	absolute	loc/LOC	locative
acc/ACC	accusative	loc-term	locative-terminative
ACT	actor	N	noun
ADJ	adjective	nom/NOM	nominative
AG	anticipatory genitive	NP	noun phrase
cop/COP	copula	O	Object
CV	compound verb	obl/OBL	oblique
dat/DAT	dative	pers	person
		pl	plural
EH	Ergativity Hypothesis	poss/POSS	possessive
EP	empty pronoun		
erg/ERG	ergative	RECIP	reciprocal
		REFL	reflexive
GB	Government and Binding Theory	S	Subject
gen/GEN	genitive	Sp	subject-prominent
intr.	intransitive	TOP	topic
		Tp	topic-prominent
		tr.	transitive

*In the case of Assyriological abbreviations, we follow the Chicago Assyrian Dictionary.

0. Introduction

0.1 The main objective of this study is to find a plausible answer to one simple question: How would Sumerian grammar express differences of meaning like those of the following sentences?

- (0.1) Gudea has built the Eninnu.
- (0.2) The Eninnu has been built by Gudea.
- (0.3) The Eninnu, Gudea has built it.
- (0.4) Gudea, he has built the Eninnu.
- (0.5) It was Gudea that has built the Eninnu
- (0.6) It was the Eninnu that Gudea has built.

The common characteristic of these examples is that, despite the differences in morphosyntax, word order, and structure, every sentence expresses the same propositional content, namely that somebody, called Gudea, has built something, a temple called Eninnu. It can be also noted that for describing these differences one should probably refer to the level of sentence or, even higher, to that of discourse in the grammar of Sumerian. But it is exactly these two levels of grammatical description that are traditionally disregarded by Sumerologists. Consequently, it is no wonder that one could hardly find any detailed description of voice, topicalization and related issues in studies on Sumerian grammar.

Regarding passivity, this negligence receives a natural explanation in the following circumstances: First, the traditional descriptions of Sumerian rarely go further than the level of morphology.¹ Furthermore, in Sumerian, unlike in other languages, there is no morphological marking of passivity. It is not possible to isolate a specifically passive mor-

¹For example, the major part of what is described as syntax in Falkenstein (1950) belongs either to the level of morphology or to the lexicon in the modern linguistic thinking. Thomsen (1984), the last more or less comprehensive grammar of Sumerian, contains only a short paragraph on word order and a longer but (as we will show) not entirely correct chapter on NPs (including the general structure of NPs). Even a brief look at the book's table of contents can reveal that Thomsen's main interest lies in morphology.

pHEME as in the case of some other agglutinative languages.² Thus, one should not find it surprising that a grammatical category which is not marked by morphemes does not exist in the eyes of scholars with a bias towards morphology. Finally, the ergative trait of Sumerian, which is decisively proved only in the case of morphological marking, has also led many Sumerologist to disregard passivity totally. For these scholars morphological ergativity is enough to conclude that voice phenomena cannot exist in Sumerian.³

0.2 Our starting point is different from that of the grammatical descriptions characterized briefly in the preceding subsection. In our view, despite the lack of morphological marking of passivity, one should assume that Sumerian, as any other language, was capable to express the differences illustrated by (0.1-2). One can also take it for granted that a native speaker of Sumerian would have been able to provide appropriate translations for sentences like (0.3-6). It is on the basis of these assumptions that we hope to be able to find and describe linguistic devices that participate in the information packaging of Sumerian.

Chapter 1. and 2. treat a Sumerian grammatical construction called anticipatory genitive. With the help of this construction, we intend to prove that there exists a syntactic rule in Sumerian which moves a constituent to the beginning of a sentence. We will characterize this movement as topicalization.

In the subsequent chapters, we will investigate the possibility that the existence of a topic position in Sumerian clause has some bearing on the way the language backgrounds or foregrounds various constituents of a sentence. Chapter 3. describes a backgrounding device in Sumerian. The main characteristic of this construction is the demotion of Agent, which manifests itself solely in the disappearance of the Agent marker from the verbal complex. We will call passive this construction. Chapter 4. deals with the prefix **ba-** of the verbal prefix-chain because this controversial prefix occurs in passive forms so often that some scholars have even proposed that it is the **ba-** that carries the

²In Yakuts, for instance, the passive is formed by adding an affix -ilin:

Biiir taabir~~in~~ taaj-~~in~~-t-ta
one riddle solve-PASS-PAST-3sg.
'One riddle was solved.'

The example is from Spencer (1991), p. 238 (7.8). Yakuts is a Turkic language and is spoken in Eastern Siberia.

³See 3.1.1-2.

passive meaning in the forms concerned. We will review the various contexts the prefix can occur in and suggest that one of the functions of **ba-** is to mark middle voice in Sumerian. Moreover, we will argue that the **ba-** prefix of passive forms functions as a middle prefix. Chapter 5. concentrates on foregrounding devices in Sumerian. We will claim that it is topicalization that allows Sumerian to dispense with a specifically passive morpheme and a foregrounding passive.⁴ We will also discuss the controversial question of syntactic ergativity in Sumerian. We will consider both Dixon's and Marantz's understanding of syntactic ergativity. In the case of the former we will argue that the Dixon-type syntactic ergativity is not pertinent to Sumerian. Regarding the latter, we will suggest that Sumerian is more likely to be a nominative language. Chapter 6. repeats the main conclusions of this study. In the Appendix, we will attempt to apply the findings of this study to the analysis of a short text, namely Statue C of Gudea.

0.3 Due to the fact that Sumerian is an extinct language, writing on Sumerian grammar involves many complications. The scholar has no opportunity to check his theories about the grammar since there are neither native speakers nor enough texts available. Our limited understanding of the texts makes it also impossible to notice nuances of meaning in such an extent as in the case of modern languages. Compared to Latin or Classical Greek, in the case of Sumerian, there are even less opportunities since there exist no continuous tradition of grammatical description: Sumerian has been discovered only in the second half of the last century after almost two thousand years of oblivion. Another element that renders the task of the linguists difficult is the writing system which conveys the language to us. The cuneiform system used for writing Sumerian is a mixed one using word signs, syllabic signs and determinatives. The amount of phonetic information provided by this kind of system, in no period during its use, can be compared to the phonetic exactness of our modern alphabetic writings.

These two difficulties, namely the lack of a continuous grammatical traditions and the defective writing system, conflict with the fact that the most influential scholars writing on Sumerian adhered to a kind of traditional descriptive linguistics which is rooted in the comparative and descriptive linguistics of the last century. They have adopted its methodology and its categories. As far as its methodology is concerned, it entails an

⁴After Foley -- van Valin (1985) the term "foregrounding passive" is meant to refer to those passives in which the Agent is demoted but present (e.g.: The bean was eaten by John). See 3.5 for details.

almost absolute reliance on phonetic forms and on the morphological analysis based on that phonetic form. Hence one can rightly be skeptical about its use for describing a language the only source of which is an inherently defective writing system. Regarding the grammatical categories, they are the categories of the ancient Greek and Latin grammarians and there is no reason to suppose that only these categories can be present in Sumerian.

There are two types of linguistic approaches which can, in our view, lead to false generalizations as to the structure and the functioning of Sumerian language. The first attitude forces Sumerian into grammatical categories which are thought to be independent from any theory but in fact reflect the categories of the linguistic tradition the scholar adheres to. If the familiar set of categories do not accord with a phenomenon of Sumerian, then this phenomenon is either considered to be non-pertaining from the point of view of the grammatical description of the language or treated in the way that typifies the other attitude which bears note. According to this, Sumerian so unique or exotic that for describing it, one is allowed to make up any sort of grammatical categories. Typically, this attitude confuses conversational implicatures with conventional ones.⁵ In other words, it associates morphemes with meanings which result only from the context. The chance for this failure is enhanced by the situation mentioned above, namely that our sources for reconstructing Sumerian are limited. This entails that the distribution of a given morpheme might not be diversified enough for being able to distinguish between its grammatical meaning and the meaning which is implied solely by language external factors. Our description would like to follow a middle course. We will apply a set of grammatical categories larger than that of the traditional descriptions and, at the same time, we regard the range of possible grammatical categories constrained by actual attestation of categories in better understood and described languages of the world. We think that, on the basis of cross-linguistic comparison, Sumerian can be showed to be less exotic than it is sometimes suggested.

The first two chapters of this study use the generative theory of the 80's for describing the NP in Sumerian. Throughout this work, we also rely on scholars who adhere to a functional-typological approach. Both the Chomskyan and the functional approaches

⁵For details about conversational and conventional implicatures, see, for example, Hopper -- Traugott (1993), pp. 72ff.

"consider the central question of linguistics to be 'What is a possible human language?' and believe that there are universal constraints that define the answer to this question... And both approaches utilize a considerable amount of abstraction, though the Greenbergian [= functional-typological] abstracts patterns across languages and the Chomskyan abstracts patterns within languages."⁶

In addition, both schools use a fair amount of languages for their purposes. They examine exotic languages with unfamiliar grammatical categories. For all these peculiarities, they are likely to prove useful for describing a language like Sumerian which can be likened to a hopelessly incomplete puzzle. Generative grammar and typological linguistics could help in hinting at least at the range of pictures we can expect to find in the Sumerian puzzle. Gragg has put pertinently what one can expect from applying modern linguistic theories to Sumerian:

"... it should be kept in mind that a theory and its accompanying heuristics provide not only a way of answering questions, but also, and even more so, of asking question. ... therefore what is to be expected as a result of linguistic research in individual languages such as Sumerian, is not so much that all the old question marks will be cleared up (though there should be a certain amount of that), as that new aspects of texts will be accounted for, those aspects, namely, which are more syntactical in character."⁷

0.4 The grammatical analysis of this study is mainly based on the cylinders and statue inscriptions of Gudea, the ruler of Lagash in the 22. century B.C. Less extensively, we also refer to some inscriptions of the rulers of the I. Lagash dynasty, Old Sumerian economical texts, and the letter orders from the Ur III period published in TCS 1. Principally, we try to avoid basing any conclusion regarding the grammar on texts after the Ur III period. With restricting the main scope of our analysis to the Gudea texts, our intention is to avoid committing the usual mistake, namely to argue about grammar using texts which are very far from each other both in space and in time.

In the Sumerian examples, letters of the Latin alphabet represents only the conventional transliteration of cuneiform signs, therefore the transliterated texts do not give exact information about the phonetic shape of morphemes. We avoided using trans-

⁶Croft (1990), p. 3.

⁷Gragg (1973b), p. 86.

criptions because this would entail the phonetic reconstruction of Sumerian word forms which itself could be the topic of a longer study. We think, however, that our assumptions about Sumerian grammar can be argued for without referring to the exact phonetic shape of words.

1. Sumerian Genitive Constructions

1.0 Preliminaries

The main objective of this chapter is to give a detailed characterization of Sumerian genitive constructions. Although genitive constructions are relatively simple compared to other clause-level constructions we think that the earlier descriptions (e.g., Falkenstein's, Jacobsen's, Thomsen's) have failed to account for several of its features (e.g., the multiple occurrence of the genitive case-mark in one NP, the unusual distribution of the possessive suffix). Consequently, Sumerian genitive construction seemed to be considered as unique compared both to other languages' functionally similar constructions and to other constructions of Sumerian.¹ The mistreatment of genitive constructions are, in our view, connected with the way the Noun Phrases have been described and analyzed in Sumerian. Therefore, we cannot avoid to provide a characterization of Noun Phrases as well. In the following, we intend to prove that all the peculiarities of Sumerian NPs and genitive construction are the consequences of a unique combination of common grammatical features. We will claim that the possessive suffix, plural marker, and the case-markers are in fact enclitics. We intend to prove that there exist two kinds of genitive construction in Sumerian that are different both formally and functionally.

¹See Croft (1990), pp. 27-38 for a list of ways to express the semantic relationship of ownership.

1.1 Noun Phrase in Sumerian

1.1.1 Sumerian NP as "nominal chain"

Authors describing the Sumerian noun phrase usually use the expression "chain" ("Wortkette"). As far as we can judge this expression has its origin in Poebel's following statement: "Seinem agglutinierenden Charakter gemäss drückt das Sumerische die grammatische Zusammengehörigkeit der einzelnen Wörter oder Satzelemente im allgemeinen nur dadurch aus, dass sie dieselben zu Wortketten aneinander reiht."² While Hungarian is also characterized as an agglutinative language, we are not familiar with any Hungarian grammar which would use this expression. And indeed the Hungarian phrase:

- (1.1) a nagy király-ok fényűző palotá-já-~~Q~~-ban³
the big king.pl opulent palace.poss.3rd pers.loc
'in the opulent palace of the big kings'

would not remind anybody of a chain, although its Sumerian counterpart perhaps could:

- (1.2) e-gal maḥ lugal gal.ene.ak.a
temple opulent king big.pl.gen.loc

We think that phrases similar to (1.2), in which all affixes stand at the end of the phrase, could have led Poebel to use the term "Wortkette". Our point is that this feature has nothing to do with agglutination, rather it is the consequence of the order of constituents of the noun phrase and from the nature of various affixes in Sumerian. In order to argue in favour of our assumptions, it is necessary to introduce some linguistic concepts unused in the traditional descriptions of Sumerian.

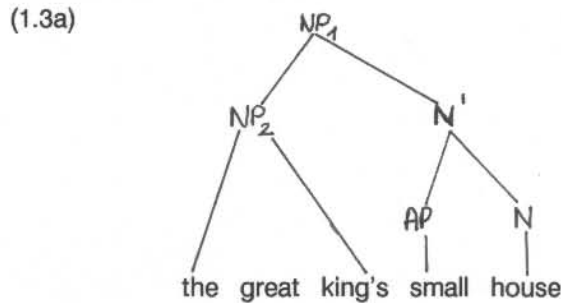
²Poebel (1923), p. 35 (§ 98).

³For Hungarian examples we will follow the description and segmentation of Szabolcsi (1981) and (1983). Her segmentation eventually goes back to Mel'cuk (1973). Poss. stands for a possessive marker. ~~Q~~ is a suffix agreeing here in person with the possessor.

In the generative grammar of the 80's (called the "Government and Binding Theory" [=GB]) various phrases are assigned a structure based on the X-bar theory.⁴ So a phrase like

(1.3) the great king's small house

will have the following structure:



using labelled bracketing instead of tree-diagrams⁵:

(1.3b) [NP₁[NP₂ the great king's][N'[AP small][N house]]]

N is the head of the phrase, AP is in the position of the modifier and the NP, dominated immediately by the NP₁, is in the specifier position, so the possessor occupies the specifier position.⁶

⁴For information on the reasoning of the existence of different phrase levels in X-bar theory one can consult Radford (1988), 'Chapter 4: Noun Phrases' or Haegeman (1991), 'Chapter 2: Phrase Structure'. A short, popular and yet very informative account of GB, including the X-bar theory, can be found in Bickerton (1990), pp. 57-74. For an attempt to describe the Sumerian nonfinite forms in the GB-framework see Huber (1989-90).

⁵Actually *house* should be an N' in English because of its possible complement (e.g. *house with red roof*) but in Sumerian this position does not exist therefore for the sake of simplicity we take it as N. It does not have any bearing on our topic.

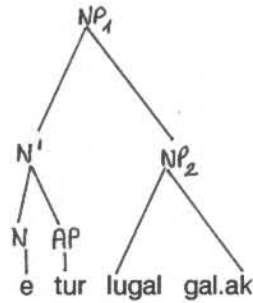
⁶One possible way to describe the intuition underlying the three levels of phrases (head, modifiers, specifier) is the following: '... the three layers of X-bar structure represent, respectively, (a) a generic class, X; (b) the properties peculiar to particular members of that class (*large, with a dark red cover, of Mary's*), and (c) the specification of the complete individual in terms of abstract relations such as quantity, proximity, familiarity, and so on (*a, this, three*).' (Bickerton, op. cit., p. 195).

1.1.2 Previous descriptions of Sumerian NP

Let us try to assign a similar structure to Sumerian nominal phrases.

- (1.4a) e tur lugal gal.ak
'the small house of the great king'

(1.4b)



- (1.4c) [NP1[[N'[[N e][AP tur]]][NP2 lugal gal.ak]]

As we can see from these examples, the two phrases differ only in the order of their constituents. In English the specifier and the modifying adjective are in front of the noun, while in Sumerian, it is the other way round - the two structures are each other's images reflected by a mirror. As far as the genitive marker is concerned, in English, it is attached to the NP and not to the N, which can be deduced from phrases like:

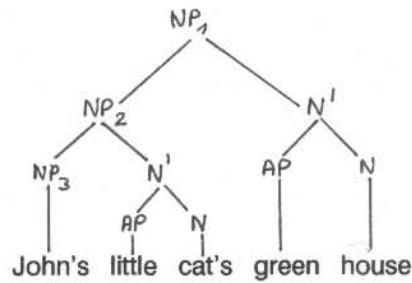
- (1.5) the king of England's house
(It is the king that possesses the house and not England.)

If we suppose that in Sumerian the potential affixes (i.e. possessive suffix, plural and case markers) are attached in the same way to phrases, then it can be claimed that the main difference between the two languages lies in the order of their constituents.⁷ In order to make my point more clear let us compare the following two phrases:

⁷This is equal to saying that all these affixes are in effect clitics. We think that this is the case. We return to this topic in detail below (See 1.2).

(1.6a) John's little cat's green house

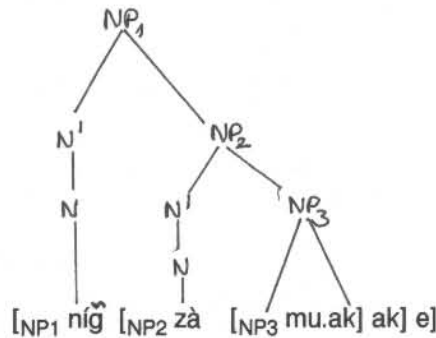
(1.6b)



(1.6c) [NP₁[NP₂[NP₃ John's] little cat's] green house]

(1.7a) níġ zà mu-ka-ke₄ (Šulgi P, Section b l. 9)
'the offering of the New Year'

(1.7b)



(1.7c)

[NP₁ níġ [NP₂ zà [NP₃ mu.ak] ak] e]

What (1.7) shows is that the succession of genitive markers is rather ostensible. Each genitive marker belongs to a different phrase and each phrase is embedded into another one, "... because phrases are not, as they might appear to be, strung together serially, like beads on a string. Phrases are like Chinese boxes, stacked on inside another."⁸ The reason why in Sumerian, unlike in English, all the genitive markers could fall at the end of the whole phrase is that the order of constituents is reversed compared to the order in English.

Poebel's description and illustration of the same phenomenon ("é-[dumu-(lugall-ak)-ak]-a"⁹) shows some similarity to ours, but as he used a different framework and terminology, he was not able to point out the cause of this seemingly unique way of forming noun phrases and its relation to other languages' construction.

⁸Bickerton, op. cit., p. 60.

⁹Poebel, (1923), p. 134 (§ 367-8). See also fn. 20 below.

Consider the following two descriptions of Sumerian noun phrases:

a. Falkenstein¹⁰:

1. Substantiv, 2. attributiv Adjektiv, 3. Rektum des Genetivs,
4. Pronominalsuffix, 5. Pluralzeichen -ene, 6. Postposition

b. Thomsen¹¹:

Regens	Rectum	Rectum's affixes	Regens' affixes
NOUN-ADJ	NOUN-ADJ	POSS-PLUR-GEN	PLUR-CASE-COP

The difference between the two systems is that Thomsen's scheme cannot generate constructions like "é-riir-su^{ki}-ka-ni 'sein Haus von Girsu' (= 1 + 3 + 4)" or "é-uru-kù-ga-ka-ni 'ihr Haus der "Heiligen Stadt"' (= 1 + 3{= 1 + 2} + 4)".¹² We would like to return to this sort of constructions later in 1.3 below and now we will analyze only those phrases which fit into Thomsen's system.¹³

What is noticeable and, in our view, misleading in Thomsen's chart is that the system is asymmetrical in respect to the affixes and cases allowed. A regens cannot have a possessive suffix. It cannot have a genitive marker either, only markers of other cases which seem to imply that the genitive and other cases are in a different rank.¹⁴ This is suggested by Jacobsen as well: "That -ak- is ... seen to precede casemarks, to be compatible with them rather than being replacive for them, sets it apart as representing, or belonging

¹⁰Falkenstein (1959), p. 37 (§ 19).

¹¹Thomsen (1984), p. 54 (§ 46).

¹²Falkenstein (1959), p. 37 (§ 19).

¹³We do not treat the genitive construction described in Yoshikawa (1992). We think it would be misleading not to take into account that Sumerian has changed during its history. None of the modern grammars of English, for example, would describe the verb inflection merging the Old and Modern English paradigms into one system. As far as we can see the relevant examples of the article considered all come from later periods of the language, so the construction is very likely to be a secondary development in Sumerian. One cannot rule out the impact of another language, namely Akkadian. We agree with the author in identifying the element -e as a demonstrative enclitic. From a formal point of view the construction differs from the common noun phrase of Sumerian in that the demonstrative element occupies the slot of modifier (e.g. the place of adjectives) instead of that of specifier. It is easy to notice that in Akkadian the demonstrative *annûm* behaves similarly to adjectives: *bītum annûm*; *bītum šīrum*. This explanation would consider only the formal side of the problem. As far as the function of the construction is concerned that is still to be investigated.

¹⁴See also Thomsen (1984), p. 90-1 (§ 163) and Hayes (1990), p. 54-5.

to, a separate and different rank class. It is not one of them."¹⁵ The same can be said against Jacobsen's argument as has already been mentioned above: a genitive case and a case-marker following it belong to different phrases. As well, concerning the double or triple occurrence of the genitive marker, (*pace* Jacobsen¹⁶) this phenomenon does not entail either that the genitive must be set apart from other markers. Cases, in our opinion, mark syntactical relations between constituents of a sentence. Cases which are usually classified in Sumerian as adverbial cases mark a relation between a NP and a verb. Since every clause contains only one finite verb it is natural that the markers of these relations occur only once in a sentence.¹⁷ The genitive marker, however, marks the relation of two NPs, and since somebody/thing which belongs to somebody/thing can have something belonging to it, the marker of this relation can occur more than once in a clause. So in the case of the genitive element only the related constituents are different compared to other case-markers and not the character of the relation.

1.1.3 The status of possessive suffix

Consider the following phrase:

- (1.8) dumu lugal.ak.ene.ra
 'for the sons of the king'
- (1.8b) [NP₁[N'[_N dumu]]][NP₂ lugal.ak] ene.ra]

A different version of (1.8) is the so called "anticipatory genitive" [= AG]:

- (1.9) [NP₂ lugal.ak][NP₁[N'[_N dumu]][_x ani] ene.ra]

In (1.9) the rectum precedes the regens and a possessive suffix agreeing in class, person, and number with the possessor is attached to the regens.

¹⁵Jacobsen (1973), p. 162.

¹⁶*ibid.*, p. 163.

¹⁷Adverbial cases behave differently in this respect but NPs marked by these cases, in a stricter sense, are not construed by the verb.

Which position is occupied now by **-ani**? According to Thomsen's chart a regens cannot have a possessive suffix. Is **-ani** in the position which otherwise would be occupied by the rectum's poss. suffix? Examples like

- (1.10) é-ǵá ní-gal-bi (Gudea Cyl. A 9:17)
 house.my.gen awe.its
 'the great awe of my house'

show that the answer must be in the negative. I think that **-ani** occupies the place of the whole rectum; it is in the specifier position of NP₁, so x in (1.9) is NP, i.e. it is in complementary distribution with the rectum. It is reasonable then to assume that in Sumerian possessive suffixes always occupy the specifier position of NP. Taking this for granted, we have a simpler grammar because the asymmetry that the regens cannot have a poss. suffix will disappear, and in this grammar, genitive will be in the same rank as the other cases.

1.1.4 The structure of NP in Sumerian

Sumerian noun phrase will have the structure

- (1.11) NP --> N *XP NP
(1.12) NP + PLURAL + CASE

Head is the only obligatory constituent of a NP. The modifier and the specifier positions are optional, and there can be more than one modifier. XP can be first of all an adjective phrase, but the various non-finite and nominalized finite verb forms can also fill this position. The specifier position can be occupied either by a referential expression or by a possessive pronoun. NPs occupying the specifier position are in the genitive case, so the difference between genitive and other cases is not in their rank but in the syntactic function of the NP they are attached to. NPs are followed by two "slots". Slot 1. is that of a plural marker, slot 2. is that of a case-marker. The chain-like character of Sumerian NP is due to the order of head, modifier, and specifier, to the nature of various affixes and to the fact that the NP occupying the specifier position of another NP, that is the rectum, is formed after the same rules. Therefore it can have a modifier and a specifier, and it could be in the plural and have a case (namely the genitive).

Both Falkenstein's and Thomsen's description of the Sumerian NP, as must have become apparent by now, fail to capture an important characteristic of the language: the rectum and the possessive pronoun occupy the same position. Thomsen, in addition, with Jacobsen and Hayes think that the genitive and the other cases are not in the same rank. In both cases the explanation for this lies in the authors' implicit assumption¹⁸ according to which the 'language is some kind of serial stringing process'¹⁹ as opposed to the "Chinese boxes" principle. Another reason why Falkenstein and Thomsen's description of the distribution of the rectum and the possessive pronoun is incorrect, lies in not recognizing the real status of an element in the language. If the possessive pronoun is classified as a kind of suffix it really would seem odd that it shares its slot with a NP, but if one assumes that this element is a clitic then everything finds its place.²⁰ The next part of this work attempts to elucidate the role of clitics in Sumerian.

1.2 Clitics in Sumerian

1.2.1 Clitics in linguistic theory

As it is clear from 1.1.3 the possessive suffixes are in complementary distribution with NPs. Syntactically they are words. This property makes it very likely that our usage of the term "suffix" is not entirely appropriate. We should consider whether it would be better to classify them as clitics.

¹⁸This assumption is not even tacit since Falkenstein uses the term 'Kettenbildung' and Thomsen names the NP as 'nominal chain'.

¹⁹Bickerton op.cit., p. 61.

²⁰These examples can also serve as an argument against some scholars who think that modern linguistic approach provides only a new terminology without adding anything to our knowledge and understanding of Sumerian. Interestingly enough, Poebels description of Sumerian differs from the two schemes concerned in respect of the distribution of the rectum and the possessive pronoun. In his scheme the 'besitzanzeigendes Fürwort' and the 'besitzanzeigender Genetiv' occupy the same slot (Poebel (1923), p. 35 (§ 98)). In connection with the string quoted above in 1.1.3, Poebel states that 'in diesem Wortkomplex am Anfang die drei Substantiva und am Schluss die drei Postpositionen zusammenstehen, u.z. in einer derartigen Anordnung, dass das erste Substantiv und die letzte Postposition, das mittlere Substantiv und die mittlere Postposition, das letzte Substantiv und die erste Postposition zusammengehören, die zusammengehörigen Paare also konzentrisch ineinander geschachtelt sind' (op. cit., p. 134 (§ 368)). In stating this Poebel was very near to freeing himself from the constraints of the view which treats constituents as beads on a string.

First, we will try to review the different definitions of clitics since their various treatments or classifications could give entirely different results in respect of whether an element in a given language can be perceived as a clitic. What one can ascertain from these treatments is the following:

Clitics are elements that share the features of both fully-fledged words and affixes. They "give the syntactic properties of words but the phonological properties of affixes."²¹ Cliticness is a graded continuum, there are several parameters to take into account and in most cases a given element will behave in one case as a word but in another case as an affix; cliticness is an intermediate status between being a word and developing into an affix.

Usually the following considerations are taken into account when deciding the status of an element: "... prototypical clitics are syntactically like words, in that they are relatively independent of the words they attach to (that is, they are not specifically selected by their bases), they have a straightforward meaning, they tend not to show idiosyncratic allomorphy themselves, and they do not condition idiosyncratic allomorphy on their hosts. Inflectional affixes, on the other hand, are highly dependent on the bases they attach to, exhibit multiple exponence, and show much allomorphic variation including suppletion. In addition, they frequently condition idiosyncratic allomorphy on the stems to which they attach."²² An element attached after a clitic is a clitic itself, clitics are not followed by affixes. Clitics can gather into clusters (e.g. Serbo-Croat pronominal clitics) and in these cases they have a particular order.

There are several classifications of clitics. Zwicky²³ classifies the clitics into three groups. *Simple clitics* or reduced forms of words, come into being because of speech rate, level of formality and the like. They can be substituted by the full forms, unlike the *special clitics* which are the allomorphs of full form words but are not derived from their equivalents as a result of phrase phonological reduction processes. *Bound words* do not have a full form equivalent but need a host and can be restricted to a particular sentence position.

Another classification is that of Klavans's.²⁴ She is not interested in the origin of clitics because "the source of clitics is probably a language particular fact... However, what is strictly constrained is the position where a clitic can occur in a tree struc-

²¹Spencer (1991), p. 391.

²²Spencer (1991), p. 381.

²³Zwicky (1977).

²⁴Klavans (1985).

ture; i.e. the locus of cliticization, and how the clitic attaches to a host; i.e. the morphology of cliticization."²⁵ She defines clitics as *phrasal affixes* (i.e. affixes attaching to phrases and not to lexical heads) that are characterized by having a domain. This domain is their syntactic host. The notion of a phonological host is not dropped, but this could be different from the syntactic host. Three binary parameters concerning the place of attachment of clitics are set up. P1 defines whether a clitic attaches to the initial or final constituent of its syntactic host (Initial/Final). P2 determines whether a clitic attaches before or after this constituent (Before/After). P3 determines where a clitic attaches phonologically to, i.e. to the left or to the right (Enclitic/Proclitic).²⁶

1.2.2 The Sumerian possessive enclitic

The Sumerian possessive element evidently attaches to a phrasal category. This has the consequence that it can attach to a range of word classes depending on whether there is something in the modifier position of the NP and what it looks like. It is an allomorph of a full form word, namely the personal pronoun, and is in complementary distribution with NPs. It does not condition an idiosyncratic allomorphy on its host (at least the writing does not reflect it) but it does show up occasionally. It does not exhibit multiple exponence and its meaning can be said to be straightforward. One of the syntactic tests proposed by Zwicky concerns movement. According to him "... in an X + Y combination if either X or Y can be moved without the other, then X and Y are words, neither of them is clitic."²⁷ (1.10) above shows that this test defines the possessive element as not being an independent word. After these considerations, I think it is reasonable to conclude that the Sumerian possessive element is a clitic. Zwicky's classification puts it among the special clitics. Turning to Klavans's typology we can claim that it is a Final/After/Enclitic clitic which (Klavans's 7th) is one of the most frequent types as it is very iconic. Its domain is N'.

²⁵Klavans *ibid.*, p. 96.

²⁶One of the corollaries of these parameters is that a clitic, the syntactic domain of which is a NP, can, in theory, attach phonologically to a word immediately before the NP (Initial/Before/Enclitic).

²⁷Zwicky (1985), p. 289.

1.2.3 Other enclitics

If the Sumerian possessive element is an enclitic as we concluded, we cannot avoid looking into the plural element and the case-markers. I have already mentioned following Zwicky and Pullum²⁸, that clitics can be followed only by clitics, but we think other criteria can also make it likely that these two classes of elements too must be regarded as clitics. The distribution of both is similar to the possessive enclitic (i.e. they are also phrasal affixes), but some of the case-markers can also turn up in the verbal prefix-chain just like the plural element, which, in addition, could be a verbal suffix as well. They differ from the possessive enclitic in that they are not in a complementary distribution with full form words. Concerning the full form equivalents, as far as we can see, only the comitative element is likely to have an equivalent in the Sumerian with which we are familiar. Both the plural marker and the case-markers can show idiosyncratic allomorphy, and the former and some of the case-markers (e.g. genitive marker) condition idiosyncratic allomorphy on their phonological host. The plural marker and some of the case-markers (e.g. dative) show semantic idiosyncrasy in that they can be attached only to a particular class of words, namely to animate nouns. After Zwicky's classification the plural marker is most likely a special clitic, but we would hesitate to put all the case-markers into this class instead of putting some of them among the bound words. In Klavans's system their domain is the NP. They are different in this respect from the possessive enclitic. The parameters classify them similarly as Final/After/Enclitic clitics. In conclusion, if we suppose a scale between "wordhood" and "affixhood", we would propose the following order: possessive - plural marker - case-markers, that is the possessive enclitic is the most word-like while the case-markers are the most affix-like, but we would certainly classify all the three elements as clitic.

Treating these three elements as clitic is again not only a matter of terminology. It has bearing on the definition of *word* in Sumerian. In some languages, this definition is an easy task because the various (semantic, syntactic, phonological) criteria all define the same unit, but in languages where clitics play a role, the definition is not that simple (see e.g. French). Is **lugal.ani.ra** [king.his.dat.] "for his king" one word, but **lugal gal.ani.ra** [king great.his.dat.] "for his great king" two and **lugal gal uru.ak.ene.ra** [king great city.gen.pl.dat.] "for the great kings of the city" three words? Counting the number of

²⁸Zwicky -- Pullum (1983), p. 502.

the lexemes the answer is yes. But **-ani**, as we have argued, at least syntactically, has an equal status with **lugal**, so from this point of view the three expressions contain 2, 3, and again 3 words, respectively. **-ene** in the third expression obviously expresses a category (namely the number) of **lugal** but not of **uru**", the same can be stated of **-ra**. If **-ene** and **-ra** were affixes one should conclude **lugal gal uru.ak.ene.ra** is one word. Writings like **lugal-a-ni-ir** at least imply that from the point of view of phonological criterium a word ends in Sumerian after the last casemark. All these problems can be realized and dealt with, although not solved unanimously, if one recognizes the clitic status of these three elements.²⁹

1.3 Indefinite Genitive

1.3.1 Non-possessive genitives

In an unpublished paper Jagersma has presented evidence for the existence of what he called a 'compounding' genitive construction.³⁰ According to him, this construction differs from other genitive constructions in word order and the place of the genitive casemark: In a compounding genitive construction "the genitive postmodifier precedes any attributive adjective" and "the genitive postposition of the genitive postmodifier is attached to the last word belonging to the "compounding" genitive construction, regardless of whether it is the last word of the phrase or not".³¹ Jagersma claims that "compounding" genitives "express the same kind of meanings as compounds in English, German, or Dutch." Two of his examples:

- (1.13) ki s^um-ma ašag gibil tur-ka mu-sur
 "he planted them in the onion plot of the
 Small New Field" (STH 1:52 iii 1-2)

²⁹So, e.g., we can not see any basis for transliterations like **lugal-gal-uru-ka-ar**. Would anybody write *the-great-king-of-England's-palace*? In my view, each lexeme of a noun phrase, except of lexicalized compounds, should be written seperately and only the clitics must be hyphened to the last lexeme of the phrase.

³⁰Jagersma (1992).

³¹ibid., p. 3.

- (1.14) saḡ apin-na dumu-dumu-ke₄-ne
 "for the chief ploughmen of the children"
 (VAT 4861 vi 1)
- (1.15) [_{NP1}[_{N'}[_x saḡ apin.ak]][_{NP2} dumu.dumu.ak]ene.ra]

In contrast to Jagersma³², we would attribute similar properties to constructions (a) Noun **nam** + Noun.ak (e.g. **igi nam-ti-ka-ni** Gudea St C 2:12), (b) Noun GN.ak (e.g. **é uru-kù-ga-ka-na** Gudea St D 3:17). We shall call Jagersma's compounding genitive and constructions like (a), (b) non-possessive genitive, but later a new term will be proposed below in 3.1.3.³³

As it can be seen in (1.15), the problem is that in the position of the head of the NP we find a phrase which, according to our grammar, is an NP itself (being a genitive phrase). But we wonder whether the fact that it looks like an NP means that it behaves like an NP. Let us explain my point using a Hungarian example. In Hungarian a genitive construction looks like:

- (1.16) a ház ablak-a-∅
 the house window.poss.3rd pers.
 'the window of the house'

There can be words between the rectum and the regens, but in this case the rectum receives a dative case:

³²In personal communication (Letter 29/07/92), Jagersma pointed out that his 'compounding genitive' does not contain constructions like our (a), (b). His argument is based on examples where the first noun of the construction is followed by an adjective but at the same time there is pronominal enclitic after the genitive marker. Our opinion about these examples is detailed in fn. 38 below.

³³Poebel (1923) § 168 describes a genitive construction which is similar to non-possessive genitive. He calls it "beschreibender Genetiv" and puts it into the same slot with Adjectives (see his scheme on p. 35 (§ 98) The problem with his description is that in his scheme one cannot put an Adjective after Substantiv + beschr. Genetiv, in other words, his system is not recursive - he could not capture that side of the phenomenon that a word level category is brought about (again only his linguistic framework is 'guilty'). So a Subst. + beschr. Genetiv is a construction which should behave like a Substantiv in his scheme. Cf. also Klein (1983), p. 203¹⁷ where Klein coins the phrase "internal genitive" for constructions similar to our non-possessive genitive.

- (1.17) a ház-nak nagy volt az ablak-a- \emptyset
 the house.dat. big was the window.poss.3rd pers.
 'the window of the house was big'

There are some street and square names in Hungarian which are genitive constructions:

- (1.18) Hős-ök ter-e- \emptyset
 hero.pl square.poss.3rd pers.
 'square of heroes'

It is not possible to say (if I am speaking about that particular square):

- (1.19a) *Hős-ök-nek szép volt a ter-e- \emptyset
 hero.pl.dat nice was the square.poss.3rd pers.

but

- (1.19b) a Hősök tere szép volt
 'The square of heroes was nice'

So we think **saḡ apin-na** phrase behaves in the same way as the *Hősök tere* in the Hungarian example. Syntactically it is an N, the x in (1.15) is N, but regarding its origin, it is a genitive phrase.

1.3.2 Indefinite genitives in Turkish

There exists another way of looking at the problem. One of the questions that can be proposed is whether, for example, **saḡ apin-na** is a lexicalized phrase listed in the lexicon or is it built obeying the rules of Sumerian concerning the genitive constructions. In other words, is **saḡ apin-na** or **ki súm-ma** a compound (i.e a word level category) or a phrase? It is possible not to answer this question if we suppose that syntactic rules can produce expressions which are word level categories. An example of this can be found in Turkish.³⁴ In this language there are two constructions expressing possession. The con-

³⁴We follow the description by Spencer (1991), pp. 313-319. All of our examples come from this book. His analysis is based on Lewis (1967).

struction called indefinite izafet (1.20a) has the form Noun + Noun-poss (the possessor agrees with the possessor in person and number). The definite izafet (1.20b) consist of Noun-gen + Noun-poss.

- (1.20a) yatak oda-sı
 bed room-its
 'bedroom'
- (1.20b) uzman-in rapor-u
 expert-of report-his
 'the expert's report'

The relation between the elements of an indefinite izafet "can't sensibly be called that of 'possession'. Rather, the possessive affix simply marks some sort of attributive relation between the head and the modifying noun, a relation which is signalled by simple concatenation in English."³⁵ The indefinite izafet behaves differently in some respects compared to its definite counterpart. First, it is the indefinite izafet which tends to become lexicalized. Second, it is not possible to modify its head. If one wants to modify the head by using an adjective, this can be done only by forming a definite izafet construction.

- (1.21a) İstanbul camiler-i
 I. mosques-its
 'Istanbul mosques'
- (1.21b) İstanbul-un tarihi camiler-i
 I.-of historic mosques-its
 'Istanbul's historic mosques'

In an indefinite izafet the "non-head loses its referentiality and becomes simply a modifier of the head, losing at the same time many of its syntactic properties. Moreover, the non-head may only be a word or another indefinite izafet, suggesting that the indefinite izafet itself is a word level category"³⁶(i.e a noun).

³⁵Spencer (1991), p. 315.

³⁶ibid., p. 318.

- (1.22) Türk Dil-i Dergi-si
 Turk language-his journal-its
 '[[Turkish Language] Journal]'

1.3.3 Indefinite genitives in Sumerian

As we tried to show in 1.3.1 above, Sumerian non-possessive genitives are also word level categories. In Sumerian also, the non-head loses its referentiality. In **ki súm-ma** the word **súm** does not refer to any particular onion of the world, it rather describes a kind of field. As far as we can see, there is no example for a non-possessive genitive where the head is modified by an adjective, that is an expression like ***ki gibil súm.ak ašag tur.ak** [place new onion.gen field small.gen]³⁷, meaning something like "the new onion-plot of the small field" is excluded on principle. If one is to modify only **ki**, the phrase must be **ki gibil súm ašag tur.ak.ak** [place new onion field small.gen.gen]. Similarly, phrases like ***ki súm gibil.ak ašag tur.ak** [place onion new.gen field small.gen] "the plot of new onion of the small field" cannot occur either.³⁸

It is possible to find a construction in Sumerian equivalent to the Turkish example (1.22).

- (1.23) 26 túg gú anše.ka sumun
 [túg [gú anše.ak].ak] sumun
 [cloth [neck donkey.gen].gen] old
 '26 old donkey neck clothes'
 (TSA 31 ii 4)³⁹

The differences again are only due to the reversed order of constituents in Sumerian NP.

³⁷See also **uru-sag-an-na libir-ra-še** (Letter B:4 I.7; Ali (1964), p. 71).

³⁸One could mention two phrases from the Gudea texts which seem to be counter-examples: (a) **é uru-kù-ga-ka-na** (e.g. St D 3:17; St H 3:7); (b) **šis dūr-šar-maḥ nam-nin-ka-ni** (St E 4:3-4; St F 3:8). In the case of (a), I regard **uru-kù** as not an Noun + Adjective construction. Syntactically it must be a noun, similarly to *New York*. Regarding (b) it is possible to argue the other way around. Since **šis dūr-šar-maḥ** occupies a slot which, in other compounding genitives, can be occupied only by a noun (a word level category), we think, it is reasonable to conclude that syntactically **šis dūr-šar-maḥ** should also be regarded as a noun (i.e. as a **blackboard-** or **é-gal-**type compound). In the case of **maḥ** this would not be exceptional as it is demonstrated by Akkadian words like *kimāḥu*, *kirimāḥu*.

³⁹Quoted by Jagersma (1992), p. 3.

Non-possessive genitives also can become lexicalized. One possible way to test this is to count the number of genitive casemarks in a phrase. In (1.27) below, there is a form ^dnin-ġír-su-ka-ka, i.e. *niġirsuk.ak.ak*. Sumerian does not write out a third genitive casemark⁴⁰, so one can draw the unsurprising conclusion that *niġirsuk* has already become lexicalised.

So, apart from the differences in the morphological marking of the constructions, Turkish and Sumerian show an interesting similarity from the point of view of function. Accordingly, we would suggest a similar terminology in Sumerian, that is we would call non-possessive genitive indefinite genitive, while the other construction could be named definite genitive» construction.⁴¹

1.4 Anticipatory Genitives

1.4.1 Types of Anticipatory Genitives

We have already quoted one example of AG. In the case of (1.9), which is a simple genitive construction, there is only one rectum which can get in front of the whole phrase. If we take into account the double genitive constructions the following variations can be assumed⁴²:

⁴⁰See **Poebel (1923)**, P.1 136 (§ 370).

⁴¹Cf. the following examples of indefinite genitive in the Gudea texts: *á-nam-ur-saġ-ka* (Loc.) "arm of heroism" (Cyl A 6:21); *ki-banšur-ra-ġu*₁₀ (Loc.) "my table-place (? = restaurant) (Cyl A 10:27); *é-nam-lugal-ġu*₁₀ (Term.) "my royal temple" (Cyl A 11:4); *sipa-anše-ka-ni* (Erg.) "his donkey-shepherd" (Cyl B 10:1); ; *á-nam-ur-saġ-ġá* (Abs.) "arm of heroism" (Cyl B 14:3); ? *me-nam-lugal* (Abs.) "royal me" (Cyl B 14:8); *i-ir-nun-ka* (Loc.) "fine scented oil" (St C 3:9; E 3:14; F 3:4). One can wonder whether the translation of ^dnin-ġír-su as 'the lord of Girsu' can be justified. Should this phrase be interpreted as an indefinite genitive, then, in our view, it could rather mean 'Girsu Lord' (like 'Oxford University Press'). In the case of *lú é.dù.a(k)* (see (54) below) the translation like 'the man of temple-building' ('der Mann des Tempel-Bau(en)s (see Steible (1991), II, p. 42, note 15) also seems to be not entirely correct. This expression should simply be translated as 'the temple-builder' or 'the architect'. Not recognizing the difference between a definite and an indefinite genitive can have a more serious effect on translation: the phrase *šà-érin-na-ka-ni* (Gilgamesh and Agga I. 81;99) is translated by Jacobsen as "in the midst of his troops" (Jacobsen (1987), p. 353;354). Apparently Jacobsen took it as a definite genitive although the possessive enclitic would imply an indefinite one, as it is understood by Kramer who translated it as "his soldierly heart" (Kramer (1949), p. 12).

⁴²Owing to the fact that Sumerian is an extinct language, i.e. there does not exist any native speaker of it, we have to suppose that attested forms are correct and only they are correct. At the same time we are fully aware of the limitations of this approach but we think this is a useful working hypothesis if the texts come from before the OB times.

- i. NP_i [NP₁ N' [NP₂ POSS_i]]
- ia. NP_i NP_x [NP₁ N' [NP₂ POSS_i]]
- ii. NP_i [NP₁ N' [NP₂ N' [NP₃ POSS_i]]]
- iii. [NP_i N' NP₃] [NP₁ N' [NP₂ POSS_i]]
- iiia. [NP_i N' NP₃] NP_x [NP₁ N' [NP₂ POSS_i]]
- iv. NP_j [NP_i N' [NP₂ POSS_j]] [NP₁ N' [NP₂ POSS_i]]

Attestations:

- i. (1.24) ^dnin-ǵír-su-ka nam-nir-ǵál-ni (Gudea Cyl. B 24:12)
 - < == ninǵirsuk.ak namnirǵal.ani
 - Ninǵirsu.gen authority.his
 - < == namnirǵal ninǵirsuk.ak
 - 'authority of Ningirsu'
- ia. (1.25) é-a ^den-ki-ke₄ ǵiš^v-hur-bi si mu-na-sá (Gudea Cyl. A 17:17)
 - < == e.ak NP_x ǵišhur.bi
 - temple.gen NP_x plan.its
 - < == ǵišhur e.ak
 - 'plan of the temple'
- ii. (1.26) ^den-líl-lá lú šà-ga-na-kam (Gudea Cyl. A 17:11)
 - < == enlil.ak lu šag.ani.ak.am
 - Enlil.gen man heart.his.gen.cop
 - < == lu šag enlil.ak.ak.am
 - 'he is a man of Enlil's heart'
- iii. (1.27) [3] en-te-me-na [4] ǵiš^v-KÉŠ^v-rá dù-a [5]
 - ^dnin-ǵír-su-ka-ka [6] diǵir-ra-ni
 - [7] ^dsul-utul₁₂-am₆ (Ent. 35, 8:3-7)
 - < == entemena ǵiškesra dua Ninǵirsuk.ak.ak diǵir.ani
 - Ent. dam builder Ninǵirsu.gen.gen god.his
 - < == diǵir E. ǵiškesra dua Ninǵirsuk.ak.ak
 - 'E., the dambuilder of N.'s (personal)god'

- iii. (1.28) [39] gù-dé-a [40] énsi [41] lagaš^vki-ka
 [42] lú inim-ni íb-kúr-a (St B 8:39-42)
 < == gudea ensi lagaš.ak.ak NP_x inim.ani
 Gudea ensi lagash.ak.ak NP_x word.his
 < == inim G. ensi lagaš.ak.ak
 'Gudea, ensi of Lagash's word'
- iv. (1.29) [1] é-a dù-ba mul-kù-ba
 [2] gù ma-ra-a-dè (Gudea Cyl. A 6:1-2)
 < == e.ak du.bi.ak mul ku.bi.a
 temple.gen building.its.gen star holy.its.loc
 < == du e.ak.ak. mul ku.bi.a
 < == mul ku du e.ak.ak.a
 'holy star of the building of the temple'

(This construction could be coined as a doubly anticipatory double genitive.)⁴³

1.4.2 an-ub-da limmu-bi

There is one more construction we should consider. Poebel⁴⁴, Sollberger⁴⁵ and Hayes⁴⁶ describe an AG which, according to them, would have the structure:

- v. (1.30) [_{NP1} N' [_x NP_i [_{NP2} N' [_{NP3} POSS_i]]]]
 lugal an-ub-da limmu-ba (Sulgi 52, 6)
 < == lugal anubd.ak limmu.bi.ak
 king quarter.gen four.their.gen
 < == lugal limmu anubd.ak.ak
 'king of the four quarters'

⁴³An interesting late development of AG is **me-e e-ne-è-m kù-ḡu₁₀** (SBH Nr. 56, l. 68.). Poebel analyses this phrase as AG (Poebel (1926), p. 264). Oberhuber apparently has a different view saying "zum merkwürdigen Possessivausdruck (Personalpronomen + Besitz + Possessivpronomen) vgl. typologisch ungar. *az én szavam* 'mein Wort'" (Oberhuber (1990), p. 324, s.v. 61. me.e --.mu). If he means that Hungarian has the construction described by him, then he is wrong. In the Hungarian phrase *az én szav-a-m* the morpheme *-m* is an agreement marker and not a possessive pronoun. So **-ḡu₁₀** in the Sumerian phrase is the equivalent of *én* in Hungarian.

⁴⁴Poebel (1923), p. 112-3 (§ 307-8); Poebel (1947), p. 52¹⁸.

⁴⁵Sollberger (1966), p. 183.

⁴⁶Hayes (1990), p. 111. See also Hayes (1991).

They think that **-bi** would agree with **an-ub-da**. A similar phrase turns up in the NG texts.

(1.31) di-til-la di-ku₅ lugal imin-ba (NG 117, 20-21)

di-ku₅ lugal is a genitive construction as we can see in

(1.32) di-ku₅ lugal-ke₄ lú-ès-sá-ra bala in-na-an-sum
(NG 113, 37-38)

Should (1.31) have the structure y, we ought to have **di-ku₅ lugal-ka** (i.e. **di-ku lugal.ak.ak** [judge king.ak.ak]⁴⁷). Our assumption is that the function of **-bi** in these phrases is similar to its role in the word **imin-bi**; *sibitu* "a group of seven"⁴⁸, i.e. it is a possessive enclitic attached to numerals which are not standing attributively to nouns.⁴⁹ The construction numeral + pronominal enclitic makes the phrase, to which it stands in apposition, definite.⁵⁰ (1.31) would mean literally "decision of [judge of the king, seven of them]" that is "decision of the seven judges of the king". In (1.30) **lammu** is in apposition to **an-ub-da**, literally it means "king of [quarter, four of them]" that is "king of the four quarters". Accordingly (1.30) is neither double nor AG.

1.5 Overview

Let us recapitulate the main points of this chapter. First, we showed that the characterization of Sumerian NP as a nominal chain is not appropriate. We provided an alternative description using the X-bar theory of GB. As a result, we concluded that the possessive suffix is in complementary distribution with NPs in genitive case, therefore syntactically, it must be regarded as word. In 1.2, we showed that, beside the possessive suffix, the plural marker and the various case-markers should also be classified as clitics.

⁴⁷The same applies to examples like **alan é-sà-ga 8-ba-kam** (instead of the expected **alan é-sà-ga-ka**) (DP 53 ix 14; Nik 23 xi 7; TSA 1 ix 11). Further examples are **é amar-subar_x sitim gal 3-a-bi** (TCS 1, Nr. 321, 3) and (?) **udu lam-lam-ma 101-bi** (TCS 1, Nr. 170, 4).

⁴⁸See CAD S, p. 230 and also s.v. *erbettu* in CAD E, p. 256.

⁴⁹Thomsen (1984), p. 83 (§ 142).

⁵⁰Although Poebel analyses this construction differently, he has the same view about its function: "die Verbindung hat ... stets determinierende Kraft" (Poebel (1923), p. 112 (§ 307)).

We noticed that the difficulties in defining "word" in Sumerian follows from the existence of clitics. In 1.3, we presented evidences of the existence of two formally and functionally different genitive constructions. Borrowing the terms from a grammar of Turkish, we called them indefinite and definite genitive respectively. Indefinite genitive is a word level category and used to express a sort of attribution. Definite genitives are NPs, they express possession. In 1.4, we gave the formal description of a construction, which can be formed only from definite genitives and called anticipatory genitive. The function of AG will be investigated in the following chapter.

2. The Function of Anticipatory Genitive

2.0 Preliminaries

In 1.4 above, we gave the formal description of a definite genitive construction of a special sort called anticipatory genitive. This chapter attempts to clarify its function. We will claim that the function of AG is to topicalize its rectum. Similar suggestions have already been made by other scholars. Falkenstein for example, states that in an AG the rectum becomes emphasized ("betont").¹ Attinger refers to the AG either as focalization or as topicalization.² The shortcoming of these characterizations is that they are not provided with a clear linguistic definition as to how should one interpret notions like emphasis or topicalization. Consequently, there is no attempt to determine their relation to other parts of the grammar. In this chapter we will characterize the assumed topicalization of the recta of genitive constructions in linguistic terms. We intend to show that pragmatic salience of constituents is involved in the organization of Sumerian grammar.

2.1 Anticipatory Genitive as Topicalization

2.1.1 Topicalization in linguistic theory

In the previous chapter, we have tried to avoid making any definite statement about the status of the possessive enclitic in AGs (resumptive pronoun?), since we do not think we need any definite approach concerning it, the problem is only technical in this context and whatever the outcome, it would not have any bearing on our topic. There are, however, some statements on these constructions which are needed to be made in order to proceed.

¹See Falkenstein (1950), p. 12 (§ 85).

²See Attinger (1993), p. 153 (3.2.1.6., § 96); p. 259 (3.2.4.11., § 168) respectively.

(2.1) AGs derive from 'simple' definite genitive constructions.

If we did not accept this assumption we would have to suppose that NPs can receive the genitive case in a position different from NP's specifier.

(2.2) An AG is a marked construction compared to its simple equivalent.³

By this we mean that AG has a function which is different from that of its counterpart. Our main concern in the following will be to ascertain this function of AG.

The question to consider is on which level this phenomenon has relevance. One feature shared by all AGs is that the rectum never moves backwards. In all cases the rectum stands in front of the regens. The key examples are those which have either the structure *ia* or *iiia* (see 1.4.1). In these cases, since the regens is the object of the verb and there is an overt subject in the sentence, it is apparent that the rectum fills a position which is different from both that of subject and that of object. It is usual to differentiate syntactically between two sorts of process by which a constituent can occur in front of a sentence: topicalization and left-dislocation. These labels define the process only in syntactic terms while they do not say anything about their function in a given language.

(2.3) Peter, I can't stand.

(2.4) Simon_i, I don't like him_i.

In the case of the latter there is a pronoun coindexed with the NP in the sentence. I suggest that we should treat AG as a left-dislocation [=LD] phenomenon. My assumption is that its function in Sumerian is to move the rectum into the topic position of a sentence.⁴ Before we go any further a short excursus is needed in order to clarify what is meant by *topic*.

³Keenan's definition seems to apply to our case: "a syntactic structure *x* is semantically more basic than a syntactic structure *y* if, and only if, the meaning of *y* depends on that *x*. That is, to understand the meaning of *y* it is necessary to understand the meaning of *x*." (Keenan (1976), p. 307).

⁴Should the function of AGs be to move a constituent into the topic position of a sentence, then the lack of structures like *y*. has an easy explanation. In constructions like *y*., the rectum cannot reach the sentence initial position, which is the landing site aimed at by AG, since it does not even move out from the NP. It must be noted that if we were not to treat the constituents in the genitive case standing in front of the sentence as the result of some kind of derivation, it should lead to claiming that in Sumerian a topic marker exists, its form being **-ak**.

"Traditionally, the topic is the constituent denoting what the sentence is about, i.e., in the logical sense, it is the subject of the sentence. This logical interpretation of the term subject, going back to Aristotle ..., is also called 'notional subject'. Although the topic, or notional subject, is very often identical with the grammatical subject, this is not necessarily so. Sentences which have a grammatical subject can be subjectless in the logical sense."^{5;6} On the basis of the difference between the notional and grammatical subject, it is possible to differentiate between semantic and syntactic predication. There are languages in which it is the semantic predication that determines the syntactic structure of a sentence (i.e. the word order). In these 'discourse-configurational' languages "the semantic function 'notional subject', or 'topic' ..., serving to foreground an entity about which something will be predicated, is expressed through a particular structural relation (in other words, it is associated with a particular structural position)."⁷

In the following, we shall try to demonstrate through examples from Sumerian texts that AG really functions as a device to move a constituent into topic position and that the rectum occupying the topic position can be interpreted as a 'notional subject'.

2.1.2 Topicalization in Sumerian

Consider first the following passage from Gudea St B:

⁵É.Kiss (forthcoming), p. 2. A sentence being subjectless in the logical sense is e.g. *It is raining*.

⁶Li and Thompson give a list of those features in which subject and topic can be said to be different (Li -- Thompson (1976), pp. 461ff.). Some of their observations: **a.** Topics are always definite, subjects do not need to be definite. **b.** Topic "need not have a selectional relation with any verb in a sentence; that is, it need not be an argument of a predicative constituent." **c.** "Topic-predicate agreement ... is very rare, and we know of no language in which it is widespread or obligatory." **d.** "Although the surface coding of the topic may involve sentence position as well as morphological markers, it is worth noting that the surface coding of the topic in all languages we have examined always involves the sentence initial position". **f.** "The subject but not the topic plays a prominent role in such processes as reflexivization, passivization, Equi-NP deletion, verb serialization, and imperativization."

⁷É.Kiss, op. cit., p. 1. It seems typical to us that earlier, when attention was paid solely to syntactic predication, Hungarian, a discourse-configurational language, was characterized as a free word order language. Cf. Thompsen (1984), p. 51 (§ 44): "The order of the various nominal chains (ergative, dative, terminative etc.) in the sentence is, however, rather free, but the verb is always at the end of the sentence."

- (2.5) [8:39] gù-dé-a [40] énsi [41] lagaš^{ki}-ka [42] lú inim-ni íb-kúr-a
 [43] di ku₅-a-na šu í-b-bal-e-a [44] an-e ... [9:4] diğir-ğū₁₀ ^dnin-ğis-zi-da-ke₄
 [5] nam-tar-ra-ni h́é-dab₆-kúr-ne [6] gu₄-gin₇ (7) u₄-ne-na h́é-gaz
 [8] am-gin₇ [9] á huš-na h́é-dab₅ (Gudea St B 8:39-9:9)
 'Gudea, ensi of Lagas (topic), the man who changes his decisions,
 and alters his judgments(topic), let An, ..., my personal god Ningiszida
 change his fate; like an ox let him be killed immediately and like a bull
 let him be seized by his terrible arms'.⁸

In this thematic unit there are two AGs. Lines 39-41 are the rectum of **inim-ni**. Lines 39-43 are the rectum of **nam-tar-ra-ni**. In both cases the rectum is in the topic position of the clause and the sentence respectively. In both cases the rectum stands in front of the subject. In the relative clauses Gudea is the topic and although in the main sentence the grammatical subjects are the various gods, it is the offending person that is the real theme of this unit. Of course up to this point this has been a matter of interpretation, but there are other points in favor of this interpretation. Li and Thompson list among the characteristics of Tp languages that "in a Tp language, the topic and not the subject, typically controls co-referential constituent deletion."⁹ Their example is from Mandarin:

- (2.6) Nèi kuài tián dàozi zhǎngde hěn dà suǒyǐ ____ hěn zhíqián
 that piece land rice grow very big so ____ very valuable
 "that piece of land (topic), rice grows very big, so it (the land) is
 very valuable."

In this example the deleted constituent is the NP in the topic position and not the subject. Turning to our example, in my opinion, we find the same phenomenon in case of ll. 9:6-9. In the previous sentence the offending person is neither the subject nor the object, but a topic. In both sentences of ll. 9:6-9, this topic will be the subject. The two verbs have a pas-

⁸We are aware that this and the following translations sound clumsy or are even not entirely correct in English but English being a Sp language makes it very difficult to give back topic-comment structure. Our intention was to make apparent which constituent we think to be the topic. Li -- Thompson (1976) however emphasize that in languages where topic does play a role these sentences are not marked or special in any respect.

⁹Li -- Thompson (1976), pp. 469f.

'The house of B. having been restored; its abundance having been made apparent; the throne of Lagash (topic), its base being firm; G. ensi of Lagash (topic), the scepter of firm word being held in his hand; his (topic) life, its days being made lasting; his (topic) personal god Ningishzida. was going to B. into her Eurukuga.'

What we have in this excerpt from St E is chain of equi-topic clauses. This chain starts from l. 7:4 and lasts until the end of the passage. First, the topic is a full NP (ll. 7:4-6). In the subsequent clauses Gudea remains the topical and a bound pronoun refers to him. This suits the prediction made by Givón that a identifiable topic will be referred to with a pronoun. So in l. 7:9 **nam-ti-la-na** moves in front of the sentence because the possessive enclitic refers to Gudea, i.e. strictly speaking it is the possessive enclitic referring to Gudea that moves, but being a clitic, it cannot move without its host (the same would apply to ll. 13-4 in (2.9)). The problem of **diġir-ra-ni** ^d**nin-ġiš-zi-da** (which contains two constituents standing in apposition) in l. 7:11-12 is more complicated. In the majority of cases this phrase occurs in a reversed order (St I 3:7-8; St P 3:8-9; St Q 1:1-2; Gudea 64, 1-2; 65, 1-2; 66 Beischrift 1:1-2; 67, 1-2; 68, 1-2; Cyl A 18:15; St B 3:4-5). With the exception of the last two occurrences, in these examples ^d**nin-ġiš-zi-da** **diġir-ra-ni** [Ningishzida god.his] is construed with a **-na** infix in the verbal prefix-chain and occupies the beginning of either the whole text or a clause. It occurs in the same order as in our text three more times, in St B 9:4 as **diġir-ġu**₁₀ ^d**nin-ġiš-zi-da-ke**₄ [god.my Ningishzida.erg], in Cyl A 5:20 as **diġir-zu** ^d**nin-ġiš-zi-da-ke**₄ [god.your Ningishzida.erg], in St G 2:8-9 as **diġir-ra-ni** ^d**nin-ġiš-zi-da** [god.his Ningishzida]. Below in (2.23) I will refer to the so called 'hierarchy of salience' which has something to do with the inherent information status of NPs. Speaker/addressee, as the most salient constituent, can be found on the top of this hierarchy. So it seems probable that in the cases of St B 9:4 and Cyl A 5:20 this hierarchy is responsible for the order. In the cases of our text and St G 2:8-9 this solution does not work. A more likely explanation would rely upon the contextual salience of the person to whom the pronoun refers. St G 2:8-9 does not exclude such an interpretation and in the case of our text this would seem natural since Gudea occupies the topic position of the two clauses standing before ll. 7:11-14.¹³

¹³See Falkenstein (1966), p. 102 (about St G 2:8-9): "Bei der Übergabe der 'Hochzeitgaben' an Baba, die Ningirsu selbst überbrachte, 'trat sein (d. i. Gudeas) Gott dahinter' offensichtlich um dabei als Vertreter des Stadtfürsten darüber zu wachen, dass sich der Akt in der rechten Weise abspiele'.

In the next example the 3rd person possessive enclitics refer to the left-dislocated topic of the first sentence. The topic remains the same throughout the thematic unit.

- (2.9) [5] lú é-an-na-ta [6] íb-ta-ab-è-è-a
 [7] íb-ze-re-a[8] mu-sar-a-ba šu bí-íb-úr-a
 [9] ^dinanna [10] nin kur-kur-ra-ke₄
 [11] saġ-ġá-ni ukkin-na [12] nam h_é-ma-ku₅-e
 [13] ^gis-gu-za gub-ba-na [14] suh_uš-bi
 [15] na-an-gi-ne [16] numun-a-ni h_é-til
 [17] bal-ani h_é-ku₅ (St C 4:5-17)

'The man who removes it [=the statue] from Eanna, who tears it out, who erases its inscription (topic), let Inanna, lady of all countries curse his head in the assembly, the throne erected for him (topic), she should not make firm its base. Let his (topic) seed come to an end. Let his (topic) reign be cut off.'

2.1.4 é, é-ninnu, and ès é-ninnu in topic position

The word referring to the Eninnu in the Gudea texts (**é, é-ninnu, èš é-ninnu**) tends to move in front of the sentence when it is the rectum of a genitive phrase.

- (2.10) [11] é-ninnu me-bé an kí-a pa-è mu-ak-ke₄ (Cyl A 1:11)
 'Eninnu (topic), he is going to make its *mes* to appear in the heavens and in the earth'
- (2.11) [4] é-a ġis-hur-bi im-ġá-ġá(Cyl A 5:4)
 'The temple (topic), (he) was setting down its plan.'
- (2.12) [5] ^dnin-DUB-kam é-a ġis-hur-ba im-mi-sè-sè-ge (Cyl A 6:5)
 'It was N. The temple (topic), (he) was making its plan.'¹⁴
- (2.13) [10] é-ġá uš ki gar-ra-bi-da [11] h_é-ġál h_é-da-ġen Gudea Cyl A 11:10-11)
 'My temple (topic), may with the laying of its foundation abundance come'

¹⁴I take it as a form deriving from **sá -- sè-sè = summuru** 'to plot, plan'. This would explain the locative **-a** of **ġis-hur-ba**. See Sjöberg (1969), pp. 103-4.

- (2.14) é-a ^den-ki-ke₄ ḡiṣ-ḥur-bi si mu-na-sá (Cyl. A 17:17)
'The temple (topic), Enki prepared its plan for him'
- (2.15) [14] é-a ní-gal-bi [15] kalam-ma mu-ri [16] ka-tar-ra-bi [17] kur-re ba-ti
[18] é-ninnu ní-bi kur-kur-ra túg-gin₇ im-dul₄ (Cyl A 29:14-18)
'The temple (topic), its great awe settles upon the country.
Its glory reached the highland. Eninnu (topic), its awesomeness like
garment covered all the lands.'
- (2.16) [1] ur-saḡ ^dnin-ḡír-su é-a mi-ni-ku₄-ku₄
[2] é-a lugal-bi im-ma-ḡen (Cyl B 5:1-2)
'Warrior N. entered the temple. The temple (topic), its king has arrived.'
- (2.17) [18] éš ^vé-ninnu-na dù-ba za-ra ma-ra-an-du₁₁ (Cyl A 5:18)
'His shrine, Eninnu (topic), he ordered me to build it up.'
- (2.18) [17] é-ḡá ní gal-bi kur-kur-ra mu-ri (Cyl A 9:17)
'My temple (topic), its great awe settles upon the country.'
- (2.19) [9] é lugal-na-ka dù-bi [10] é-ninnu an ki-ta bad-bi
[11] igi-a mu-na-a-ḡál (Cyl A 20:9-11)
'His king's temple (topic), its building; Eninnu (topic), its separation of
heaven from earth appeared form him in the vision.'
- (2.20) [15] é ^dnin-ḡír-su-ka dù-a [16] zà-mí mu-ru-bi-im (Cyl A 30:15-16)
'The hymn "The building of N.'s temple (topic), its middle'
- (2.21) [23] é-a nam-íṣib-ba ^vsu mi-ni-du₇ (Cyl B 5:23)
'The temple (topic) its purification was completed'

See also (1.29) above. One apparent exception to this tendency is

- (2.22) [4] en-na ^vša an-gin₇ sù-rá-ni
[5] ^dnin-ḡír-su dumu ^den-líl-lá-ka za-ra ma-ra-hun-ḡá-e
[6] ḡiṣ-ḥur é-a-na ma-ra-pàd-pàd-dè (Cyl A 7:4-6)
'Lord (topic), his, N. son of E.'s heart which is as far as the heaven,
will be appeased for you (by the *baḷaḡ*-drum). He will reveal the plan of
his temple for you.'

The topic of this short unit is the lord (i.e. Ningirsu) as it can be seen in l. 4. Ningirsu remains the topic in l.6 too, this has the effect that é in l. 6. is not left-dislocated. One can wonder why the assumption that a possessive enclitic would be able to make its host move to the front of a sentence, does not seem to apply here. The important difference between the examples of 2.1.3 and (2.22) is that there, in ll. 9-10 of (2.8) and ll. 13-14 of (2.9), the topic and the subject are different, however, in the case of (2.22), the topic and the subject are different in the first sentence (ll. 4-5) but coincide in the second (l. 6).

2.1.5 The information status of recta

Another notion which seems to be applicable to our subject is the information status of NPs or constituents.¹⁵ The more prominent a constituent is, the more likely it is to be the topic of a sentence. The information status of NPs depends both on contextual factors and on the inherent properties of their referents. Regarding the contextual factors, an NP can be referential or non-referential, definite or indefinite, it can refer to "a participant being introduced into the discourse (new information) or to a participant already established in the discourse (given information)".¹⁶ As far as the inherent properties are concerned a hierarchy of salience can be set up:

(2.23) speaker/addressee > 3rd person pronouns > human proper nouns >
human common nouns > other animate nouns > inanimate nouns

Givón approaches the same phenomenon in a slightly different way. He speaks about "the universal hierarchy of topicality, i.e. the likelihood of various NP arguments being the topic of sentences...".¹⁷

His hierarchy actually takes on the form of binary hierarchic relations:

¹⁵See Foley -- van Valin (1985), pp. 283-291.

¹⁶ibid., p. 286.

¹⁷Givón (1975), p. 152.

- (2.24)
- a. human > non-human
 - b. definite > indefinite¹⁸
 - c. more involved participant > less involved participant
 - d. 1st person > 2nd person > 3rd person

Of these considerations only the definite vs. indefinite feature might cause any problem, it being the case that there is no article in Sumerian. Taking into account the hierarchies above, the behaviour of *é* "temple" in examples (2.11)-(2.21) seems to be interpretable. In all the examples we can assume that either *é* is the "more involved participant" or the "more given" compared to its regens since the text itself describes the building of Eninnu. In the case of (2.15) and (2.18) the regens is an abstract noun and it is likely that in (2.17) and (2.19) the building of the temple (*dù*) takes a position which is lower down the hierarchy than the temple. As it can be seen in the case of (2.22) other principles can interfere with these tendencies. Similar considerations seem to apply to the following examples:

- (2.25) [18] *gù-dé-a* [19] *lú é dù-a-ka* [1] *nam-ti-la-ni h́é-sù*
 [2] *mu-sè mu-na-sa₄* (St C 3:18-4:2)
 'G., the temple-builder (topic), let his life be made long - he named it.'¹⁹
- (2.26) [27] *gaba-gál dig̃ir-re-ne-ka* [28] *en^dnin-g̃ir-su-ka*
 [29] *nam-mah-a-ni* [30] *kalam-e h́é-zu-zu* (St B 9:27-30)
 'The steadfast of gods, lord N. (topic), let his greatness
 be known by the land.'

¹⁸In connection with (2.24) a. and b., consider the following Hungarian sentences. In these examples, the first NP is always the topic:

- | | | | |
|----|---------------------------------------|-------------------------------|---------------------------|
| a. | [Erzsit] _T
E.-acc. | megharapta
bite-past-3Sg | a kutya.
the dog-subj. |
| | 'The dog has bitten E.' | | |
| b. | ?[A kutya] _T | megharapta | Erzsit. |
| a. | [A fiú]
the boy-subj. | megállított
stop-past-3Sg | egy lányt.
a girl-acc. |
| | 'The boy stopped a girl' | | |
| b. | ?[Egy lányt] _T | megállított | a fiú. |
| a. | [A fiút] _T
the boy-acc. | megállította
stop-past-3Sg | egy lány.
a girl-subj. |
| | 'A girl stopped the boy' | | |
| b. | ?[Egy lány] _T | megállította | a fiút. |

In each b. sentence, the topic is either non-human or indefinite. Consequently, the b. sentences are marked, less neutral compared to the a. sentences. (The examples are after É.Kiss (1992), p. 107. (Examples Nr. 65, 67, 68)).

¹⁹Also St P 5:3-7. See further St I 5:3-7; St A 3:4-4:3.

- (2.27) [12] ^dnin-ǵír-su-ka nam-nir-ǵál-ni [13] kur-kur-re zu-a (Cyl B 24:12-13)
 'N.'s authority (topic), being known by all the countries.'

See also (2.5) above (Gudea vs. inim).

2.1.6 The grammatical case of regentia

Examining the AGs according to the role their regentia play one can find that there does not seem to be any restriction.²⁰ Most often it is the object of the verb. There are no differences in respect to subjects of transitive or intransitive verbs either. There are some cases when the regens is in a case different from ergative or absolutive. In (2.13) it is construed with **-da**, in St E 8:6-8 (2.9) and in (2.12) with locative. Another example of a regens in the locative is the following:

- (2.28) [1] uru-na ú-KAxUD.NI zà-bi-a mu-da-a-ná-àm (Cyl B 18:1)
 'His city (topic), the unclean(?) slept in its outskirts.'

2.1.7 Recta containing NPs in apposition

If the rectum contains several NPs in apposition, there are some variations regarding the AG. In (2.22) (repeated here for the sake of convenience as (2.29)) parts of the original constituent are separated by the regens.

- (2.29) [4] en-na ^vsà an-gin₇ sù-rá-ni
 [5] ^dnin-ǵír-su dumu ^den-líl-lá-ka za-ra ma-ra-hun-ǵá-e
 [6] ^vǵis-_{hur} é-a-na ma-ra-pàd-pàd-dè (Cyl A 7:4-6)
- (2.30) dumu ^den-líl-lá en ^dnin-ǵír-su (Cyl A 8:21; 9:3)

²⁰According to Li – Thompson (1976) : "In certain Sp languages, the topic-comment type of sentence is highly constrained in terms of what can serve as the topic constituent" (op. cit. p. 470). They mention Indonesian, in which only the subject and its rectum can be the topic. I quote their example because of the striking similarity with Sumerian:

Anak itu, ibu-nja membeli sepatu
 child that, mother-poss buy shoe
 'That child, his mother bought shoes.'

Taking (2.30) as the initial form the following derivation can be imagined:

- (2.31)
- a. regens [a + [b + c]]-GEN
sà an-gin₇ sù-rá [dumu en-líl-lá + [en + ^dnin-gír-su]]-GEN
 - b. regens [[b + c] + a]-GEN (?)
 - c. b-GEN regens [c + a]-GEN

(2.26) would look using this notation as follows:

- (2.32)
- a. regens [a + [b + c]]-GEN
nam-mah [gaba-gál digir-re-ne + [en + ^dnin-gír-su]]-GEN
 - b. a-GEN [b + c]-GEN regens

To ascertain rules, if there are any, which govern these constructions, would need more examples. I would venture the assumption that the reason why in (2.32) each of the two phrases in front of the regens receives a case is that they are treated as distinct constituents i.e. they are in different slots in front of the sentence. In (2.26) the whole object phrase is before the subject. As it is clear from the numerous votive inscriptions, where the beneficiary stands at the beginning the sentence, AG must be only one of those devices which works on discourse level in Sumerian. So the existence of other topicalization rules cannot be ruled out. Accepting this, one possible explanation of the structure of (2.26) could be that the object is moved before the subject as a result of topicalization, and in a second step AG comes about because the rectum is more salient (in terms of those we brought up in 4.2.5). Again we can only guess about the nature of the various intonation patterns accompanying these rules. But if it were really the case that **gaba-gál dígír-re-ne-ka** and **en ^dnin-gír-su-ka** are viewed as two distinct constituents, that would entail the assumption that a sentence can have more than one topic.²¹ Then in (2.33) the subject could be perceived as moved out from its original position in front of the object.

²¹This is not exceptional either. É. Kiss (1987) assumes a sentence initial slot for topic in Hungarian. This slot can be occupied by more than one constituent. É. Kiss (forthcoming) names Catalan, Bulgarian, Greek, Quetchua, and Somali in addition to Hungarian as languages in which there can be multiple topics (op. cit., p. 5).

- (2.33) [5] ^dnin-tu [6] ama ^dgír-re-ne-ke₄
 [7] gù-dé-a [1] lú é dù-a-ka [2] nam-ti-la-ni mu-sù
 [3] mu-^sè mu-na-sa₄ (St A 3:4-4:3)
 'N., mother of all gods (?), G. the temple-builder (topic),
 she made his life lasting - he named.'

This explanation does not sound so forced if we look at (2.34) where part of the subject is placed in front of the rectum of a genitive construction.

- (2.34) [26] lugal mu-ni-^sè kur KU.KU-e [27] gù-dé-a en ^dnin-^gír-su-ke₄
 [27] gu-za-ni mu-gi (Cyl A 23:26-27)
 'The king, at the name of whom the mountains tremble (topic), Gudea
 (topic),
 lord N. made his throne firm.'

2.2 Overview

In this chapter we provided evidence in favour of the assumption that the function of AG is to move the rectum into a sentence initial topic position. Moreover, we were able to show that the order of regens and rectum in a definite genitive construction is also affected by the relative topicality of its constituents. All these findings imply that in Sumerian the pragmatic salience of constituents could play a more important role than it was assumed earlier. In the case of AG, we have a morphologically readily discernible syntactic structure which helps us to examine it, but should the rectum of AG function as a topic then it is likely that other, not easily perceptible structures, also fulfill the same function. As is clear from the definition of *topic*, the 'notional subject' is a foregrounded constituent. Foregrounding is also an important concept in the case of the passive. What passive basically does is to foreground the undergoer of an action and/or to background the previous actor.²² The passive in Sumerian is one of the perplexing problems of grammar which has eluded a coherent description so far. If Sumerian should be a language in which topic plays a role one should describe voice in Sumerian in an completely different way

²²See Foley -- van Valin (1985) for describing the passive in these terms.

from passives in Indo-European languages.²³ In the subsequent chapters, we will investigate the possibility that the existence of a topic position in Sumerian clause has some bearing on the way the language backgrounds or foregrounds various constituents of a sentence.

²³The following examples from Brown -- Yule (1983) (p. 127) demonstrate clearly that foregrounding of constituents and the proper interpretation of the various foregrounding devices in a language do contribute a lot to the meaning. Although examples a-g express the same propositional content, the meaning of the sentences is rather different:

- a. John kissed Mary.
- b. Mary was kissed by John.
- c. It was John who kisses Mary.
- d. It was Mary who was kissed by John.
- e. What John did was kiss Mary.
- f. Who John kissed was Mary.
- g. Mary, John kissed her.

3. Voice in Sumerian

3.0 Preliminaries

We have already mentioned in the introduction that voice and related phenomena are poorly described and therefore imperfectly understood parts of Sumerian grammar. One can also notice that even if an author mentions voice in connection with Sumerian, it is not entirely clear what is meant for example by passive or middle. Thus it seems as if the meaning of these notions were absolute, independent from the linguistic theory that uses them. In our view the unreflected use of the terms concerned contributed greatly to the misunderstanding of the phenomenon in Sumerian, therefore we would like to introduce the following terminology. After Klaiman (1991), we will distinguish three sorts of voice phenomena. What is traditionally called active/passive alternation will be treated under the term derived or role-remapping voice in the sense to be described later in this chapter. The main objective of the present chapter is to prove that there exist a backgrounding device in Sumerian which rightly can be characterized as derived or role-remapping voice. The active/middle alternation will be referred to as basic voice. We will explain the meaning of the term in Chapter 4. Also in this chapter we will discuss the **ba-** prefix of the verbal prefix-chain and argue that one of the functions of **ba-** can be characterized as marking middle voice. Finally, we will consider a third type of voice phenomenon called pragmatic voice. This sort of voice changes the information salience of participants. The phenomenon will be explained in Chapter 5.

3.1 Traditional treatments of Sumerian passive

3.1.1 Diakonoff

The traditional descriptions regard passive in Sumerian as more or less non-existing. This neglect of passive is based on theoretical considerations. Since Diakonoff's understanding of this matter is rather exemplary, we intend to review his des-

cription a bit longer. Diakonoff states that the essence of the ergative construction "lies in the non-existence of the grammatical category of the direct object".¹ This interpretation of ergativity, however, seems to disregard levels of grammatical description other than morphological. It is also relevant that morphological ergativity seems to be unimportant characteristic when deciding whether a language is likely to have passive.² For making any decisive statement about passives in Sumerian, it probably would be better to investigate the language also in terms of this kind of ergativity. Since Diakonoff is apparently not aware of this rather important distinction, his conclusion on passive in Sumerian can not be taken as final. Moreover, Diakonoff apparently fails to distinguish between "a case

¹Diakonoff (1965), p. 16.

²See Dixon (1979); Dixon (1987), especially p. 7-9. Cf. Larsen (1987), p. 34 for a summary of Dixon's view. Morphological ergativity refers to the way a language marks grammatical functions (A(gent) = subject of transitive verb, S(ubject) = subject of intransitive verb, O(bject) = object of transitive verb). These functions can be encoded by (i) case inflections, (ii) pre- or postpositions, (iii) verbal cross-referencing, and (iv) word order. "With respect any of these mechanisms, S may be marked in the same way as O, and differently from A (an ergative pattern)" (Dixon (1987), p. 3.). Syntactic ergativity has two, in a certain extent different interpretations: one advocated by Dixon and another by Marantz. Although these two understandings of syntactic ergativity defines syntactic processes like passive and antipassive in different terms, yet both agree that morphological marking is not relevant of the problem. In Marantz's theory, passive is defined in such a way that even syntactic ergativity of a language is not pertaining. We will give a detailed description of Dixon's and Marantz's theory of ergativity and passive in 5.1.1. Cf. Keenan (1985), p. 248: "... it is not the case that ergative languages generally fail to have passives. For example, Gugu Yalanji (Australia), Georgian (Caucasian), Basque ..., and Mayan languages generally, for example Jacalteco, are ergative in either case marking, verb agreement, or both; and all present passives, sometimes more than one." The following example from Mam (an Eastern Mayan language of the Mamean branch) is a point in case. Moreover, Mam is syntactically ergative language (England seems to consider only the Dixonian understanding of syntactic ergativity).

- | | | | | | |
|-----|-------------------------------|--------------------|----------------------|---------------|---------------|
| (a) | <i>ma</i> | <i>Ø-jaw</i> | <i>ky-tx'ee7ma-n</i> | <i>xiinaq</i> | <i>tzee7</i> |
| | REC | 3SG ABS-DIR | 3PL ERG-CUT-DS | man | tree |
| | 'The man cut the tree.' | | | | |
| (b) | <i>ma</i> | <i>Ø-tx'eem-at</i> | <i>tzee7</i> | <i>ky-u7n</i> | <i>xiinaq</i> |
| | REC | 3SG ABS-cut-PASS | tree | 3PL-RN/AG | man |
| | 'The tree was cut by the men' | | | | |

"[a] cross-references the object absolutely with the singular Ø, and the agent ergatively with the plural *ky-*. [b] cross-references the original object with Ø, while the agent is in an oblique phrase introduced by the plural relational noun. (England (1988), p. 535. (pp. 534-535 (27a,b)). According to Shibatani, the existence of passive in a syntactically ergative language is an argument in favor of the basically defocusing character of passives (Cf. Shibatani (1985), p. 836-837). Cf. 3.5.

system (a system of case values) and a case marking system (the means by which case values are signalled)".³ These basic failures lead him to conclusions like

"In languages having ergative construction there is no grammatical direct object, and there cannot exist voices because it is impossible separately characterize the action in the verbal form from the point of view of the logical subject, without taking into consideration the point of view of the logical object. What we grammatically regard as the object of the action is for the ergative languages the subject of a state, namely, the state resulting from the action. It therefore is expressed by the case-form of the subject of the state (the Absolute case which correspond to our Nominative) even if it logically also is the object of an action."⁴

The author here keeps mixing up the grammatical functions with their markers and, furthermore, he seems to attribute meaning to the case-markers themselves. In these lines, one can also detect the tacit assumption that the transitive verbal forms in ergative languages are basically passive. This theory, related in some extent to the mistreating of cases and case-markers, has been disproved by a number of scholars.⁵ It is worth mentioning that by denying the existence of any voice in ergative languages, Diakonoff also excludes the possibility of an antipassive.⁶ We can not agree with the following statement either:

³Goddard, (1982), p. 176. In 3.2 below, we will detail the difference between the two concepts.

⁴Diakonoff, op. cit., p. 16.

⁵For example, Anderson proves that there are morphologically ergative languages in which after all certain syntactic rules (coordination, subordination, participial relativization, raising) equate Subject and Agent. Having listed the various theories (including that which considers ergative languages as basically passives) he states: "Of course, as long as we confine ourselves to the analysis of surface structures (and their morphological characterization in particular), since all of the above views are at least internally consistent any of them is possible. In contemporary syntactic theory, however, the basic features of clause structure are much more than a foundation for morphological categories." (Anderson (1976), p. 7). Cf. Comrie (1988). Comrie summarizes the comparison between passive and ergative as follows: "(i) passive and ergative are alike in that both involve assignment of at least some subject properties to the patient rather than the agent, although the extent of this assignment is typically greater for passive ; (ii) passive and ergative differ in that the ergative typically involves greater integration of the agent phrase into the syntax of the clause; (iii) passive and ergative differ in terms of markedness - the passive is a marked construction, whereas the ergative is typically an unmarked construction" (ibid., p. 9) (Comrie means here syntactic ergativity). Cf. also Cooreman -- Fox -- Givón (1984), pp. 2-4 (1.2) for a view partly differing from that of Anderson.

⁶"Ergative languages often have a voice in which the direct object is demoted to an optional adjunct in an oblique case while at the same time the $S_T [= A]$ of the transitive construction becomes a $S_I [= S]$ in the Absolutive. This is referred to as the **antipassive** construction" (Spencer (1991), p. 24.).

"In the ergative construction ... both the point of view of the logical subject of the action and that of the resulting state (the logical object) are reflected simultaneously. Therefore both are grammatically subjects, and the verbal form may be in concord with both, which is impossible in a passive construction".⁷

We have found difficult to see why marking of a participant in the verbal form would entail necessarily its recognition as grammatical subject. In one of his later papers Diakonoff maintains a similar opinion and draws the conclusion:

"Thus the terms such as 'transitive' and 'intransitive', 'active' and 'passive', 'nominative' and 'accusative' ... are, I believe, out of place in the study of Sumerian itself and tend only to obscure the grammatical issues under consideration."⁸

3.1.2 Oberhuber

It seems that many have heeded this warning because describing passives in Sumerian has become possible only in negative terms. In his paper on passivity, Oberhuber seems to accept Diakonoff's assumption that an ergative language can not have passive.⁹ He does not show any sign of being aware of the distinction between morphological and syntactic ergativity either. He considers two types of constructions which "unserer Vorstellung entsprechend passivisch aufgefaßt und wiedergegeben werden".¹⁰ Constructions like **mes an-e pa-da** and **á sum-ma^den-lil-lá** belong to his type 1a and 1b respectively. He states about these forms that:

"Die Syntagmata **an-e pa-da**, **kur-e tud-a** bzw. **á sum-a^den.lil-ak** sind für die Sprachlogik flektierenden Sprachen passivisch zu verstehen: 'von An gerufen', 'vom "Berg" gezeugt' bzw. 'mit Kraft begabt von Ellil'. Es fällt dabei auf, daß der in der Passivwendung in beiden Typen aufscheinende Agensbezeichnung 'von NN' im Sumerischen zwei verschiedene Bezeichnungen gegenüberstehen: **an-e** bzw. **kur-e** einerseits **en.lil-ak** andererseits. Dies beweist, daß wir es im Sumerischen mit keiner 'Passiv'-Struktur zu tun haben können."¹¹

⁷Diakonoff, op. cit., p. 17.

⁸Diakonoff (1976), p. 116.

⁹Oberhuber (1982).

¹⁰Oberhuber, op. cit., p. 129.

¹¹Oberhuber, op.cit., p. 130.

It is not entirely clear what "die Sprachlogik flektierenden Sprachen" would refer to. If Oberhuber means that the Agent occurs with a "von" preposition, this phenomenon has nothing to do with the inflectional character of languages. Oberhuber seems to identify passivity with its morphological features in languages like German. But even if we disregard the objections just raised, it seems to us challenging to grasp how the observation entails the conclusion in the quoted excerpt.

Oberhuber's type 2 contains the infamous verbal forms of year-names which are prefixed with a **ba-**. Oberhuber considers the **ba-** prefix, without arguing in favor of his assumption, as the element carrying the passive meaning.¹² He makes the following observation about the difference of **mu-** and **ba-** forms in year-names:

Die beiden Formulierungen unterscheiden sich voneinander ..., daß in der 'aktivischen' Formulierung ein Agens genannt ist, während in der 'passivischen' die Nennung des Agens fehlt. Daraus ergibt sich, daß das Sumerische dieser Zeit offensichtlich keine Möglichkeit besaß, Agensnennung in der 'Passiv'-Konstruktion durchzuführen. Das bedeutet, daß der dafür mögliche Typus (1b) NN á **sum.ma** ^d**en.lil.ak** nicht mehr produktiv, sondern nur mehr altererbtes Formular war. Dies bedeutet weiterhin zugleich, daß die genuine sumerische Ergativkonstruktion nicht mehr lebendig, sondern der Kontaktwirkung der Symbiose des Sumerischen mit dem Akkadischen zum Opfer gefallen war.¹³

The fact that the two constructions compared are different both in their functions and in their structures makes dubious the validity of these statements. Type (1b) is non finite form functioning as an adjective with respect to its distribution. Type 2, which contains forms without an **-a** as well, is a clause containing a finite verb. There seems to be no basis for

¹²This assumption is simply illogical. If one assumes that the **ba-** element makes a verbal form passive, it would entail that **mu-** should carry the transitive meaning, however, there are many examples of intransitive verbs with the prefix **mu-**. He leads back the passive function of **ba-** to its alleged reflexive meaning and then he concludes that "Die Doppelfunktion des Präfixes **ba-** (reflexiv und passiv) einerseits und die Tatsache, daß für uns passivisch zu verstehende Verbalformen anderer Präfixe gebildet werden können, andererseits läßt den Schluß zu, daß das sumerische Verbum von Haus aus kein echtes genus verbi gekannt hat" (ibid. p. 132). It seems to us that Oberhuber's conclusion makes sense only if one thinks of passive solely in terms of morphology but does not consider its pragmatic function. On the basis of the same observations we would like to suggest a different conclusion on the role of **ba-** in the passive verbal forms in Chapter 4.

¹³op. cit., p. 132.

stating that one of them should substitute the other as is implied by Oberhuber. The author does not support his theory either by an analysis which would examine the temporal distribution of the forms concerned. Finally, we can not see why a passive construction necessarily should contain an Agent phrase. Oberhuber's conclusion is as unsubstantiated as his final statement "Ein eigentliches 'Passivum' ist dem Sumerischen als einer Ergativsprache von Haus aus fremd."¹⁴

3.1.3 Thomsen

In connection with finite verbs in Sumerian, Thomsen states the following:

Both on the syntactic, grammatical and on the morphological level the intransitive and transitive finite constructions can be distinguished¹⁵

Nevertheless, Thomsen supports the first part of her statement with no evidence. It is not clear what sort of syntactic phenomena would prove her point. As far as the morphological level is concerned, it is true that neither *hamtu* nor *maru* conjugation distinguishes between the subject of a passive and that of intransitive verb, but intransitivity or detransitivization is only one consequence of passivization and there can be other levels of grammatical description on which an intransitive and a passive verb can be distinguished; Thomsen's classifying of passive verbal forms as intransitive is based solely on their verbal cross-referencing pattern identical with that of intransitive verbal forms. In equating passive with intransitivity, Thomsen follows Falkenstein who also grouped the verbs into two types: transitive vs. intransitive-passive.¹⁶ That it is not appropriate to equate intransitivity with passivity is shown clearly by the following excerpt:

"The Sumerian verbal root is in principle neither transitive nor intransitive but neutral in this respect. The root **ku₄.r** can thus mean both 'to enter' (intrans.) and 'to bring in, to make enter' (trans.), the root **sum** both 'to be given' (intrans.) and 'to give'"¹⁷

¹⁴op. cit. p. 133.

¹⁵Thomsen (1984), p. 140 (§ 275).

¹⁶See Falkenstein (1959) p. 45 (§ 29-31).

¹⁷Thomsen, op. cit., p. 140 (§ 276).

Here, passive is equated to intransitive or one-participant verbal form, again solely on the basis of criteria of morphological sort. Thomsen has nothing to tell about the Agent of the original transitive form either. Of course, the main motive of Falkenstein and Thomsens's understanding lies in the lack of a specifically passive morpheme in Sumerian. We will argue later in this chapter that this does not necessary entail that there is no category like passive in Sumerian. We would like to relate this peculiarity of the language to another feature of it, namely the existence of topicalization.

3.1.4 Hayes

According to Hayes "The problem [of passive] is exacerbated by a tendency in the past to transfer categories found in Indo-European or Semitic to Sumerian."¹⁸ Yet he seems to commit the same mistake saying: "In any case, it seems that the two constructions which are differentiated in English as 'intransitive' and 'passive' are expressed by one construction in Sumerian"¹⁹ He illustrates his points as follows:

"The house was built
e.ḳ i.du.ḳ

The .ḳ case-marker of the subject of the passive verb is cross-referenced by the .0 at the end of the verb."²⁰

Apart from the unlikely presence of the prefix i- in the sample example above²¹, one can again notice that passivity seems to mean nothing more than a type of cross-referencing for the author. This understanding makes voice a morphological phenomenon and does not ask what is actually marked in various languages as passive. We would like to show later in this chapter that it is more pertinent, and in the case of Sumerian it is also more useful, to describe passive from the point of view of its function. A functional approach would also make possible to distinguish between two related but independent functions of passive, namely foregrounding and backgrounding.

¹⁸Hayes (1990)., p. 197.

¹⁹op. cit., p. 198.

²⁰ibid.

²¹The verb would almost certainly be prefixed with a **ba-** in Sumerian.

3.1.5 Recapitulation

Let us restate our objections concerning the traditional assessments of the existence of passive in Sumerian. Their denial is rooted in two, in our view, erroneous presumptions:

- i. Generally, ergative languages have no real passive constructions.
- ii. If the verbal cross-referencing does not distinguish between the subject of an intransitive and that of a passive verb and there is no specifically passive morpheme present in the passive forms then passive is equal to intransitivity and the language does not have the category passive.²²

Concerning i., we tried to show that this understanding is the result both of the overvaluing of morphological marking and of disregarding syntactic ergativity as an important feature in the problem of passive. It was also shown that a number of languages can disprove generalization i. As far as ii. is concerned, we will prove that by referring to levels of the grammatical description other than the morphological, one can identify a sort of role remapping passive in Sumerian which backgrounds the Agent. The backgrounding nature of Sumerian passive has already been implied by Gragg:

... opposed to the genuine passive construction (cf. most Indo-European and Semitic languages), where the object of a transitive verb is moved into subject position of a passive verb, a 'passive' in Sumerian is characterized simply by the absence of a definite or explicit agent, and the logical object of the verb has the same shape (i.e., zero postposition) as in the corresponding active sentence. ... In passing we note that Sumerian needs thus no passive transformation (a transitive verb without an agentive must be translated as passive into languages having that construction), and we are thus relieved of a crux other linguists have to live with."²³

This statement certainly oversimplifies the problem and contains some minor incorrectness. One can remark that the movement of object into subject position described as the main feature of passive in some languages in fact would be not observable at all in Sumerian for two reasons. First, because in Sumerian, both the subject and the object

²²In the parlance of generative theory, Thomsen's, Falkenstein's, and Hayes's linguistic approach can be characterized as one operating only on the surface structure of sentences.

²³Gragg (1973), pp. 92f.

stand in front of the verb. If only one participant is present, which could easily happen, there is no way to tell which position it actually occupies. Second, Sumerian is a pro-drop language. This entails that even a sentence with no overt nominal constituents can be correct. Consequently, we think Gragg's relief is overhasty.²⁴

3.2 Wilcke's description of Sumerian passive

The latest attempt to describe a passive in Sumerian was made by Wilcke.²⁵ He gets rid of the lasting and misleading assumptions that we reviewed in 3.1.²⁶ As starting point, he used the precative verb forms from the Gudea texts that, although use a *hamtu* base, are to be translated as passive precatives (e.g St B 1:20; 9:6; 9:9). In connection with these forms, Edzard made the following statement: "Vielleicht darf man ... die Regel ableiten, daß bei einem transitiven Prekativ *marû*, bei einem intransitiv-passiven dagegen *hamtu* obligatorisch war".²⁷ Wilcke presents other non-precative examples in addition. The followings are the main feature of this passive in Wilcke's account:

- (i) Regular verbs contain no personal element after their base, other verbal classes use a *hamtu* base;
- (ii) the forms are conjugated after a so called *marû*-pattern but
- (iii) the slot occupied by the Agent is empty and
- (iv) the slot before the base can be optionally occupied by an element referring to the Object.

²⁴It should also be noted that the generative theory and its description of passive transformation used by Gragg has become outdated by now. Therefore, even if Gragg's arguing were not flawed, it would be difficult to agree with it. For a description of passive in the Government and Binding Theory one can consult Jaeggli (1986).

²⁵Wilcke (1990), pp. 488-98. See also Wilcke (1988), p.9³⁷. Cf. also Attinger (1993), pp. 195-7 (3.2.3.11. Les constructions passives).

²⁶Although with some hesitation: "Es mag eingewandt werden, daß die Kategorie des Passivs in den Bereich der Subjektsprachen gehört und dort den Fall beschreibt, in dem das Objekt einer Handlung bei Tilgung des Subjekts im Satz die Funktion eines Subjekts übernimmt und das bezeichnende Morphem beim Verbum an die freigewordene Stelle des Subjektsmorphemes tritt. Man könnte auch einwenden, daß im Bereich der Ergativ-Sprachen schon der Begriff des Antipassivs eingeführt ist und so Verwechslungen möglich werden. Bei der Bezeichnung des beschriebenen Phänomens als Passiv geht es mir um die Abgrenzung von der "Normalform" des intransitiven und passiven Verbums" (Falkenstein, *AnOr* 28, S. 173) und auf der Ebene der Handlungsbeteiligten um die Betonung der Bindung an das Konjugationsmuster des transitiven mit Agens und Patiens versehenen Verbums, wobei im Passiv des Agens getilgt ist, seine Teilnahme am Geschehen jedoch notwendig bleibt..." (Wilcke (1990), p. 497.

²⁷Edzard (1971), p. 214. For the *marû* and *hamtu* conjugation patterns see

3.3.

My first concern regards (iv). If one looks at Wilcke's examples, it is easy to notice that many of his examples contain compound verb: **š**u -- dug₄ (Lugalzagesi 3:24-26); **si** -- **sá** (Lugalzagesi 3:27-28); **inim** -- **gi**₄ (Gudea St B 1:14; 1:19); **š**u -- **ti** (Cyl. A 7:3); **saġ** -- **il** (Cyl. A 1:15); **gú** -- **zi** (Cyl. A 1:16). Characteristically, it is these verb forms that contain a **-b-** element before the verb base. Since Wilcke claims that "Das [b] in -dab₆- (III 26;28) bezieht sich jeweils auf ein Objekt der Sachklasse (su-dagal; si.)"²⁸, it is likely that similarly, he thinks the **-b-** to refer to the nominal part of the compound verb in his other examples as well. There are two doubtful consequences of this interpretation. First, in the case of compound verbs the second object of the verb will never be cross-referenced since the verbal forms concerned do not contain an element referring to second object. Second, one can find that, in the case of non-compound verb (see e.g. **h**é-kés^v in St B 1:20 below), it could happen that there is no personal element at all before and after the verb base. The assumption that there could exist finite verbs which do not contain agreement marker at all raises serious doubts against Wilcke's theory. Although the supposed optionality of the object marker in *marû* conjugations could explain the lack of any element, yet it seems to us rather eye-catching that this "optional" element always prefers to appear in the passive forms of compound verbs. Since what distinguishes a compound verb from a simple transitive one is the presence of a second object we wonder whether one would not be better off connecting the **-b-** before the base with this constituent. In this case, the assumption of a *marû* conjugation (cf. (ii) above) should also be questioned. In our view, before assuming that the slot before the base is occupied by an Object marker, one should consider other likely possibilities. We will use an excerpt from Gudea St B for making our points. The same text is used by Wilcke too but, in our view, his translation cuts into two separate parts one single sentence.²⁹

- (3.1) [1] é^dnin-ġír-su [2] lugal-na-ta [3] alan gù-dé-a [4] énsi [5] lagaš^{ki}
 [6] lú é-ninnu [7] in-dù-a-ke₄ [8] 1 sila kaš ... [12] sá-du₁₁ ba-ġál-la-àm
 [13] énsi [14] inim bí-lb-gi₄-gi₄-a [15] me^dnin-ġír-su-ka [16] ba-ni-lb-lá-a
 [17] sá-du₁₁-na [18] é^dnin-ġír-su-ka-ta [19] inim h^vé-lb-gi₄
 [20] KA-KA-ni h^vé-kés^v (St B 1:1-20)

²⁸Wilcke (1990), p. 490.

²⁹In Wilcke (1990), p. 491 the sentence begins from St B 1:13.

'May the regular offering of the ensi, who the 1 sila beer, etc ...,
which are the regular offerings that are placed to the statue of Gudea's,
the ensi of Lagas, who has built the Eninnu, withdraws from Ningirsu,
his lord's temple, who diminishes the me of Ningirsu, be withdrawn from
Ningirsu's temple; may his words be unheard³⁰

(the main sentences are underlined; the relative clauses referring to the "ensi" are italicized; the one referring to Gudea is in bold)

There are two verb forms here which can be considered as an active and a corresponding passive one:

- (3.2.i) 1 sila kaš ... ba-ǵál-la-àm énsi inim bí-íb-gi₄-gi₄-a
 (3.2.ii) sá-du₁₁-na ... inim h_é-íb-gi₄

³⁰I think that one can "generate" the text with all its complexities solely by moving constituents out from another constituent. It would have the following steps, the order should not necessarily be like ours (AP = adjective phrase, NP = noun phrase, N = noun; e refers to the place from which a constituent has moved out, it is coindexed with that constituent; the constituent being moved is underlined):

1. The underlying sentence:

NP₁[N[sá-du₁₁] NP₂[énsi 1 sila kaš ... sá-du₁₁ alan gù-dé-a énsi lagaš^{ki} lú é-ninnu in-dù-a-ke₄ ba-ǵál-la-àm é ^dnin-ǵír-su lugal-na-ta inim bí-íb-gi₄-gi₄-a me ^dnin-ǵír-su-ka ba-ni-íb-lá-a]] é ^dnin-ǵír-su-ka-ta inim h_é-íb-gi₄ KA-KA-ni h_é-kés

2. Rectum of an anticipatory genitive moves out:

NP₁[énsi AP₁[1 sila kaš... sá-du₁₁ alan gù-dé-a énsi lagaš^{ki} lú é-ninnu in-dù-a-ke₄ ba-ǵál-la-àm é ^dnin-ǵír-su lugal-na-ta inim bí-íb-gi₄-gi₄-a] AP₂[me ^dnin-ǵír-su-ka ba-ni-íb-lá-a]] sá-du₁₁-na; é ^dnin-ǵír-su-ka-ta inim h_é-íb-gi₄ KA-KA-ni h_é-kés

3. A constituent marked by -ta moves out from a relative clause (AP₁):

NP₁[é ^dnin-ǵír-su lugal-na-ta] [énsi AP₁[1 sila kaš ... sá-du₁₁ alan gù-dé-a énsi lagaš^{ki} lú é-ninnu in-dù-a-ke₄ ba-ǵál-la-àm e_{NP₁} inim bí-íb-gi₄-gi₄-a] AP₂[me ^dnin-ǵír-su-ka ba-ni-íb-lá-a]] sá-du₁₁-na é ^dnin-ǵír-su-ka-ta inim h_é-íb-gi₄ KA-KA-ni h_é-kés

4. A constituent marked by -a moves out from a relative clause (AP₁):

é ^dnin-ǵír-su lugal-na-ta NP_k[1 sila kaš ... sá-du₁₁ alan gù-dé-a énsi lagaš^{ki} lú é-ninnu in-dù-a-ke₄ ba-ǵál-la-àm] énsi e_{NP_k} inim bí-íb-gi₄-gi₄-a me ^dnin-ǵír-su-ka ba-ni-íb-lá-a sá-du₁₁-na é ^dnin-ǵír-su-ka-ta inim h_é-íb-gi₄ KA-KA-ni h_é-kés

5. A constituent marked by -e moves out from a relative clause (AP₃):

é ^dnin-ǵír-su lugal-na-ta NP_m[alan gù-dé-a énsi lagaš^{ki} lú é-ninnu in-dù-a-ke₄] NP_k[1 sila kaš ... NP_n[sá-du₁₁ AP₃[e_{NP_m} ba-ǵál-la-àm]] énsi inim bí-íb-gi₄-gi₄-a me ^dnin-ǵír-su-ka ba-ni-íb-lá-a sá-du₁₁-na é ^dnin-ǵír-su-ka-ta inim h_é-íb-gi₄ KA-KA-ni h_é-kés

(I do not mean that Sumerian sentences come into being through this kind of steps. But this representation can help to understand the meaning of the sentences.)

The second object of (3.2.i) is the list of offerings followed by a relative clause the predicate of which is the copula -àm. The copula conceals the locative case of this NP.

(3.2.iii) $NP_2\text{-a ensi}_A NP_1 O_2 + O_1 + \text{base}_m + A\text{-a}$ ³¹

(3.2.iv) $NP_2\text{-a } NP_1 O_2 + \text{base}_h + ?$ ³²

(3.2.iii) is the most likely interpretation of (3.2.i). In the case of (3.2.ii), however, one faces problems, since there exists at least six possible interpretations:

- (3.3.a) $O_1 + \text{base}_h$
- (3.3.b) $O_1 + \text{base}_h + S$
- (3.3.c) $O_1 + \text{base}_h + O_2$
- (3.3.d) $O_2 + \text{base}_h$
- (3.3.e) $O_2 + \text{base}_h + S$
- (3.3.f) $O_2 + \text{base}_h + O_1$

Before moving forward, we would like to make clear our notation (A, O, S) which is based on theoretical considerations.

3.3 Split ergativity in Sumerian in terms of formal and distributional cases

Ergativity in Sumerian is usually characterized as split ergativity.³³ The split ergativity manifest itself in the verbal agreement and in the nominal system. The verbal agreement can be tabulated as follows:

³¹NP₂ of (3.2.iii) is actually a constituent of a relative clause the head of which is ensi_A. For an explanation of its position, see step 4. in the previous footnote.

³²A(gent) is the subject, (O)bject is the object of transitive verbs. The subject of intransitive verbs is called S(ubject). O₂ marks the second object of a compound verb. It is marked by a locative infix in the verbal prefix-chain. Although it can be confusing that many linguists use Agent as the name of an important semantic role, yet we retain its use. The name of semantic roles will always be in capital letters (e.g., AGENT, PATIENT, etc.). For semantic functions or roles see 3.5 below.

³³See Michalowski (1980) and van Aalderen (1982). The terms *hamtu* and *maru* refer to a basic distinction of Sumerian verbal system. According to a number of Sumerologists, *hamtu* verbal forms imply a perfective meaning, while *maru* forms imply an imperfective meaning. Formally, they are distinguished by different stems or/and different agreement patterns.

marû O+base+A/S³⁴

hamtu A+base+S/O

(Table 1.)

The system of verb agreement is usually described as two set of infixes and suffixes, where in the case of the *hamtu*-base the set of suffixes marks Absolutive (S/O) and the set of infixes marks Ergative (A) (ergative pattern); while in the case of the *marû*-base, a set suffixes stands for Nominative (A/S) and another set of infixes for Accusative (O) (nominative-accusative pattern).³⁵ The imperative, the cohortative and the verbs of "when" clauses also have a nominative-accusative agreement.³⁶ Although the evident exceptions of this scheme are always mentioned no one has questioned the correctness of this description.³⁷ According to the generally accepted description, Sumerian distinguishes two core cases in its nominal system. Agent is marked by the ergative case (-e), Subject and Object is marked by the absolutive (-Ø). Pronouns are marked after a nominative-accusative pattern since there is no formal difference between a pronominal Agent and a Subject. This kind of split in the nominal system is not unusual at all, many languages exhibit a similar one.³⁸

The validity of describing split ergativity as two parallel existing bipartite systems has been challenged by Goddard and Comrie.³⁹ Their criticism is based on distinguishing between "a case system (a system of case values) and a case marking system (the means by which case values are signalled)"⁴⁰ or, with Comrie's terms, between "formal" and "distributional" cases. According to Goddard "the concept of case is based on relationships of form AND distribution - roughly a case is a class of nominal forms which are mutually substitutable in certain syntactic or semantic environments given that any two cases, case_i and case_j, are formally distinguished by at least one subclass of nominal".⁴¹ The concept of distinguishing between distributional and formal cases prevails also in the

³⁴See again fn. 30 above for the meaning of the abbreviations A, S, O.

³⁵see e.g. Wilcke, op. cit., p. 481 fn. 62.

³⁶Michalowski (1980), p. 96-99; see also his table on p. 103.

³⁷See Edzard (1959), pp. 235-46; Michalowski, op. cit., p. 94.

³⁸See Dixon (1979), p. 87; van Aaldern (1982), pp. 35-36. For a different interpretation of this phenomenon see Wierzbicka (1981) and Goddard (1982).

³⁹Goddard (1982); Comrie (1991).

⁴⁰Goddard, *ibid.*, p. 176.

⁴¹Goddard *ibid.*, p. 169.

traditional grammatical descriptions applied to languages like Latin or Greek. So, for example, in the case of the Latin *bellum* 'war', one says that *bellum* is the nominative, the accusative, and the vocative form of the word because in other declensions the three (distributional) cases have different case marks. Having investigated Australian split ergative languages Goddard finds that if one applies the above presented principles to them, the outcome must be that these languages have a tripartite case system (ergative (A), absolutive (O), and nominative (S)) instead of having two bipartite (nominative/accusative vs. ergative/absolutive). He presents examples which make clear that a tripartite case system allows otherwise impossible generalizations in the grammatical description of the languages concerned, in other word, this whole business is not only a matter of terminology.

Similar method can be applied to the verbal agreement and the nominal system of Sumerian. The traditional descriptions are based on formal cases, so having applied the above outlined principles to Sumerian, one can expect to arrive at a different system of distributional cases. The verbal agreement markers always refer to a nominal constituent of a clause. This makes it possible to label the markers according to the syntactic function of the NP that they refer to. We consider as relevant and different syntactic environments the subject (Agent) and the object (Object) of the transitive verb and the subject (Subject) of the intransitive one.

Suppose that there is a sentence containing a finite verb with a *maru*^u base and a NP marked by the ergative -e. If one adheres to claiming that there exist two parallel bipartite systems in Sumerian, he or she runs into difficulties here: An ergative NP is referred to by a Nominative agreement marker. For avoiding this situation, one should treat the two systems as one. This can only be done in a tripartite system. The agreement markers would look as follows in a tripartite system (1 + base + 2):

<u>Position</u>	1	2
<i>hamtu</i>	A	O/S
<i>maru</i> ^u	O	S/A

(Table 2.)

Consider the following table too:

<u>Functions</u>	A	S	O
<i>ḥamtu</i>	1	2	2
<i>marû</i> [^]	2	2	1

(Table 3.)

In order to ascertain whether it is justifiable to suppose three different cases one can apply Comrie's following operational definition of distributional cases: "If the distribution (c+d [=O/S]) of some form of some nominal mutually and nonexhaustively overlaps the distribution (d+e [=S/A]) of some form of any other nominal, then each of c, d, e is a distinct case for all nominals".⁴² If one applies this definition to our data in **Table 3**, the conclusion must be that, contrary to the generally accepted description, there is in fact a tripartite system of agreement markers in Sumerian. In our case, the distribution means the various syntactic functions to which the markers refer. The form of nominals corresponds to the slots that the markers can occupy. The situation which occurs here resembles the homophonous case markers of different distributional cases. In the *ḥamtu* forms S and O are alike regarding their slot; in the *marû*[^] forms A and S shares the same slot. In the case of nominal case-markers, one should assume two distributional cases if "any two cases, case_i and case_j, are formally distinguished by at least one subclass of nominal"⁴³ Similarly, *marû*[^] and *ḥamtu* verbal forms can also be interpreted as two subclasses and in either of these, there is set of markers which stands for syntactic functions marked by two different sets of markers in the other. The table of the actual agreement markers supports this conclusion since in the 3rd person *marû*[^]-form each grammatical function has a different marker.⁴⁴

⁴²Comrie (1986), p. 91.

⁴³Goddard *ibid.*, p. 169.

⁴⁴For the sake of simplicity we use only the singular forms except of the the plural forms of the *marû*[^] aspect. As Michalowski (*op. cit.*, p. 94) also noticed, there are different markers for A and S in the third plural of the imperfect aspect, that is each three function is differentiated in this person as well.

	<u>Pers.</u>		A	S	O
<i>hamtu</i>	Sg.	1st	-0-(?)	-en	-en
		2nd	-e-	-en	-en
		3rd	-n/b-	-0	-0
<i>marû</i>	Sg.	1st	-en	-en	-en-(?) ⁴⁵
		2nd	-en	-en	-en-(?)
		3rd	-e	-0	-n/b-
	Pl.	3rd	-ne	-es	-ene-(?)

(Table 4.)

The analysis of the nominal system in tripartite terms gives similar results.

	A	S	O
NPs	lú-e	lú	lú
Pronouns	e-ne	e-ne	0 (?)

(Table 5.)

Following Goddard who named the three cases ergative (A), absolutive (O), and nominative (S) in the languages he analyzed, I will use the same terms for the Sumerian nominal expressions. Using this terminology, one can state that in the case of referential NPs the absolutive and the nominative have the same case mark. In the case of pronouns, however, it is the ergative and the nominative that have homonymous forms. For our topic, the importance of the above analysis lies in being able to distinguish between S and O markers on verbal forms.

⁴⁵See Attinger (1985).

3.4 An alternative analysis of Wilcke's passive

From the six possible interpretations of St B 1:19 at the end of 3.2, Wilcke's interpretation is (3.3.a): $O_1 + base_h$. The shortcoming of Wilcke's examples is that since the agreement marker after the base would be a zero-marker in all of them, it is impossible to test whether really there is a morpheme after the base or, with other words, nobody is to tell whether what we have is really a *hamtu* base with a *maru* conjugation pattern. It would help choosing among the various interpretations if one could establish which participants (A, O, O_2) the infixes and suffixes of a compound verb are construed with. For this purpose we would like to use verbal forms from the *gar*; *šakānu* (OBGT 6), *sá -- dug₄*; *kašādu* (OBGT 9) and *kas₄ -- dug₄*; *lasāmu* (OBGT 8) paradigms.

Suppose that one would like to apply Wilcke's theory about passives to those forms which are glossed with Akkadian Nt-stems or statives. Using the forms of the OBGT texts one can have forms with agreement markers construed with 1st and 2nd person participants. There are two things which would justify this attempt: (a) similarly to Wilcke's passive, all the forms concerned use a *hamtu* base and (b) they are translated to Akkadian with either G-stem stative or with N-stem forms. Consider the following forms:

(3.4)	ba- <i>gar</i> ba- <i>gar</i> -re-en ba- <i>gar</i> -re-en (OBGT 6:160-162)	it-ta -aš-ka[-an] at-ta -aš-ka[-an] ta -at-ta-aš[-ka-an] ⁴⁶	
(3.5)	ba-ab- <i>gar</i> ba-ab- <i>gar</i> -re-en ba-ab- <i>gar</i> -re-en (OBGT 6:82-84)	š-su -uš-ku-un (blank) (blank)	'he is being put' 'I am being put' 'you are being put'
(3.6)	kas ₄ ab -bé kas ₄ ab -bé-en kas ₄ ab -bé-en (OBGT 8:37-39)	i- la -súm (blank) (blank)	'he runs' 'I run' 'you run'

⁴⁶For the function of *ba-* in these forms see Black (1991), p. 29.

(3.7)	kas ₄ [!] bí-in- dug ₄ kas ₄ bí-dug ₄ kas ₄ bí-dug ₄ (OGBT 8:52-55)	il-súm (blank) (blank)	'he run' 'I run' 'you run'
(3.8)	sá bí- in-dug ₄ sá bí [-dug ₄] sá bí [-dug ₄] (OGBT 9:79-81)	ik- ^v su -ud (blank) (blank)	'he reached to' 'I reached to' 'you reached to'
(3.9)	sá mu-ri-in-dug ₄ sá mu-ri <<-in>> -dug ₄ (OGBT 9:128-129)	ik- ^v su-da-ka (blank)	'he reached to you' 'I reached to you'
(3.10)	sá an-dug ₄ sá a-dug ₄ sá e-dug ₄ (OGBT 9:105-107)	ka- ^v si-id! <<ka>> (blank) (blank)	'he is reached' 'I am reached' 'you are reached'
(3.4)		base _h + S/O	
(3.5)		O ₂ + base _h + S/O	
(3.6)		O + base _m + A	
(3.7)		Loc. + A + base _h + S/O	
(3.8-9)		O ₂ + A + base _h + S/O	
(3.10)		O ₂ + base _h + S/O	

In the case of (3.4-5) Wilcke's theory would predict a marker before the base. But as it is clear from the paradigms it is the suffixes that are construed with the S/O. In (3.5) the **-b-** must refer to the causee of the causative form. In (3.6) and (3.7) the verb is translated with an intransitive verb to Akkadian but being a compound verb it is a transitive construction in Sumerian. The causative forms of the paradigm support this assumption. In (3.8) and (3.9) the object of the verb is marked by locative infixes. When

the verb uses the stative form in Akkadian, the markers referring to the second object appear in slot Nr. 1 (Cf. (3.10)) in Sumerian. Two conclusions can be drawn from these examples contrary to Wilcke: (a) The original Object is marked after the base in forms translated as stative or as Nt-stem form; (b) In forms where the Agent disappears it is the marker of the second object that can move into the slot left empty.

Although it is possible to argue that the OBG forms should not be considered, but we think one can find an explanation which would describe both Wilcke's and the OBG's forms and in this case this explanation should be regarded as a better one since a more numerous set of sentences could be described by it and it would not entail the assumption of finite verbs without any agreement marker either. Albeit our different analysis is based on OBG forms, we will show later that it can explain many more forms than the interpretation proposed by Wilcke.

The explanation to be proposed would use the (3.3.e) interpretation from the six listed in 3.1 above: $O_2 + base_h + S$. It would derive $\underline{h}\acute{e}\text{-}ib\text{-}gi_4$ (3.2.ii, passive form) from $\underline{b}\acute{i}\text{-}ib\text{-}gi_4\text{-}gi_4$ (3.2.i, active form) through the following steps:

1. $NP_{A-e} NP_{2-a} NP_1 O_2 + O + base_m + A$
2. $*NP_{A-e} NP_{2-a} NP_1 O_2 + A + base_h + O$
3. $*[NP_{A-e}] NP_{2-a} NP_1 O_2 + [A] + base_h + [O] \rightarrow S$
4. $NP_{2-a} NP_1 O_2 + base_h + S$

Thus contrary to Wilcke, we give the following characterization to the forms described by him (see 3.2):

- (i) the Agent is missing from the sentence
- (ii) the Agent infix is omitted from the slot before the base
- (iii) if there is a locative infix in the verb form it moves into the slot omitted by the Agent (e.g. $bi + n + base \rightarrow b + base$)
- (iv) the slot after the base is not empty, it is occupied by a derived S
- (v) all the verb forms use a $\underline{h}amtu$ base and are conjugated after the usual $\underline{h}amtu$ -pattern

Let us see again the six possible interpretations listed as (3.3)

- | | |
|---------|----------------------|
| (3.3.a) | $O_1 + base_h$ |
| (3.3.b) | $O_1 + base_h + S$ |
| (3.3.c) | $O_1 + base_h + O_2$ |
| (3.3.d) | $O_2 + base_h$ |
| (3.3.e) | $O_2 + base_h + S$ |
| (3.3.f) | $O_2 + base_h + O_1$ |

We are to dismiss (3.3.a), Wilcke's interpretation, because it would entail the existence of verbal forms without any agreement marker and it would not be able to explain the examples from OBG. It also seems to us more likely that the **-b-** before the base refers to O_2 instead of O in forms like *inim hé-ib-gi*₄, because according to Wilcke's analysis O_2 would just disappear from the verbal form without any reason, although in the transitive forms it is clearly marked by locative infix. If Wilcke states that, in a passive form, what happens is solely the omission of the Agent, the all-out disappearance of markers referring to O_2 would remain unexplained. If one is to exclude the existence of verbal forms without agreement marker, (3.3.d) should be dismissed since in the case of non-compound verbs this interpretation would also exclude the presence of any marker. (3.10) makes (3.3.b) and (3.3.c) unlikely since in this form the slot Nr. 1 is clearly occupied by markers referring to O_2 . It is more problematic to choose between (3.3.e) and (3.3.f). Since S and O are homophonous in *hamtu* forms it seems to be impossible to select either of them definitely. The analysis (3.3.f) would equate to a kind of "truncated" active in the sense the term is used by Keenan:

"A possibly less common alternative to passives is simply to eliminate the subject of the active. This possibility is realized in some ergative languages, such as Tongan... It is not clear whether we want to consider such cases ... as a 'truncated' active, with perhaps a 3PL pronoun understood (note that Tongan commonly 'pronominalizes by deletion' rather than using an overt pronoun) or as some kind of morphologically degenerate passive in which the verb form is not distinctively marked."⁴⁷

⁴⁷Keenan (1985), p. 248. It should be noted that the analysis in terms of 3rd Ps. Pl. pronouns is not tenable in the case of Sumerian because a 3rd Ps. Pl. subject would be clearly marked on the verbal form. Foley -- van Valin mentions Ulcha (Manchu-Tungus, Siberia) as a language in which the object remains in accusative case after the demotion of Agent (Foley -- van Valin (1985), pp. 318-319); Cf. Attinger (1993), p. 153 (3.2.1.5. (§ 95)).

We would like to mention two arguments which can be raised against an analysis in terms of (3.3.f). First, as we have already mentioned in 3.2 above, both intransitive and passive precative forms use the *hamtu*-base. This argument, however, is less strong because of the part the subject of intransitive verbs and the object of transitive verbs play in *hamtu*-reduplication of verbal bases. Either of these participants can trigger the reduplication, therefore, one could state that it is the absolutive case of both participants that is pertinent.⁴⁸ The second argument is related to the **ba**- prefix. Passive verbal forms often contain this prefix. In 4.3.2 below, we will argue that one of the functions of the **ba**- prefix is to mark the middle voice in Sumerian and that it is this function that is relevant to the passive forms. Since, as we will show, middle voice expresses the subject's affectedness and it is this function that explains its use in passive forms (where the earlier affected participant, the object becomes the subject), one should conclude that, in a passive clause, the former object acquires the subject's status after the demotion of the agent.

Thus we have chosen (3.3.e) among the six theoretically possible analysis. This analysis seems to be identical with the traditional one which regards passive as intransitive. In the following subsection, however, we will argue that the similarity is only superficial.

3.5 A functional approach to passives

3.5.1 Semantic, syntactic, and pragmatic functions

In order to make our points it is necessary to introduce some linguistic terms rarely used in studies on Sumerian language. After Andrews (1985), we will distinguish three basic functions that NPs can have: semantic, pragmatic, and grammatical. Semantic

⁴⁸See Edzard (1971), pp. 226-232. However, it should be noted, as an argument against the counter-argument, that according to Edzard the *hamtu*-reduplication can serve as "Betonung der Pluralität oder Totalität des direkten oder dimensionalen Objektes" (ibid., p. 231) Cf. *giri hu-mu-gur kaskal-kalam-ma-ke₄ si hé-em-mi-sá-sá* (Sulgi A 28) "ich setzte mich fürwahr in Bewegung, um alle Wege des Landes Sumer in Ordnung zu bringen" (ibid., p. 230, 10.17). In this example the reduplication signs the plurality of the second object case-marked with a locative-terminative **-e**.

functions or roles are the ways of participation in a sentence with a verbal element. A sentence containing e.g. the verb *kill* denotes a situation that supposes the presence of a "killer" and a "killed". The various roles of different verbs, however, can be grouped into classes which are to be found in every language. One of the most important roles is the AGENT. It can be defined e.g. as "a participant which the meaning of the verb specifies as doing or causing something, possibly intentionally".⁴⁹ A PATIENT is "a participant which the verb characterizes as having something happen to it, and as being affected by what happens to it".⁵⁰ Other important, often used semantic functions are e.g. the DIRECTIONAL, EXPERIENCER, THEME, etc. Since the relation between semantic roles and grammatical functions (Agent, Subject, Object) is highly systematic, it is possible for syntactic rules to refer to the latter instead of directly targeting semantic roles.⁵¹ There are languages, however, in which semantic roles play significant role in the grammar: syntactic rules are sensitive to semantic roles instead of grammatical functions. In our view, Sumerian does not belong to this group of languages, consequently the following description will refer to semantic functions only sparingly.

Pragmatic functions regard "such things as the hearer's presumed ignorance or knowledge of various feature of the situation being talked about, what the speaker wishes to put forward as the topic of conversation, and so on".⁵² Similar things have already been touched upon in the previous chapters when we described Sumerian anticipatory genitive as a kind of left-dislocation moving an NP into the topic position of the sentence. There we used a definition according to which "the topic is the constituent denoting what the sentence is about, i.e., in the logical sense, it is the subject of the sentence".⁵³ Our assumption is that pragmatic functions have prominent role in Sumerian grammar and that the disregard of these functions has been a major factor in the mistreatment of passives in Sumerian.

Grammatical functions correspond only partly to the traditional concepts of Agent, Subject, and Object. In the present context, they are regarded as abstract intermediaries between the semantic and pragmatic roles and their overt coding features like word order, case marking and agreement in the following way:

⁴⁹Andrews, op. cit., p. 68.

⁵⁰ibid.

⁵¹In English, for example, the AGENT will be the Subject and the PATIENT will be the Object of a transitive sentence in almost every cases. Although, in the case of other semantic roles the correlations are not that simple, they undoubtedly obey definable rules.

⁵²ibid.

⁵³É.Kiss (forthcoming), p. 2.

"the coding features indicate the grammatical structure of the sentence, and the grammatical structure determines the semiotic [= semantic and pragmatic] functions. The grammatical functions of NPs are the relationships in this grammatical structure which participate in determining the semantic roles and pragmatic functions of NP. For example, in (1) [= The farmer kills the duckling] we recognize the grammatical functions of subject (preverbal NP) and object (postverbal NP). There is a principle associated with the verb *kill* which assigns the 'killer' role to the subject and the 'killed' role to the object. The semantic role of an NP is thus determined jointly by the verb and the grammatical function of the NP".⁵⁴

An important aspect of this framework is that it clearly distinguishes between coding features and grammatical functions similarly as we have differentiated between distributional and formal cases in 3.2. Our distributional A, S, and O coincide with the grammatical functions described just above.

A NP thus can be characterized by referring to each three functions and their coding features. The traditional descriptions of Sumerian put the emphasis on the coding features of grammatical functions. Sumerian marks grammatical functions by case-markers (enclitics) and verbal cross-referencing. Pragmatic functions, however, are coded by word order.⁵⁵

There is one more term to be introduced: pivot. Various languages treat grammatical functions different way. Some equates S with O, others handle A and S alike. The description of these typological variations needs another level of grammatical analysis. Pivot belongs to this level and can be defined as "any NP type to which a particular grammatical process is sensitive, either as controller or as target".⁵⁶ Consider the following examples⁵⁷:

⁵⁴Andrews, op. cit., p. 63.

⁵⁵It is also possible that some of the elements of the verbal prefix chain turn out to code pragmatic functions (as it has already been proposed by scholars) but this assumption needs further study.

⁵⁶Foley -- van Valin (1985), p. 305. Andrews (1985) uses a different terminology naming the pivot as subject grammatical relation. We found Foley and van Valin terminology more clear.

⁵⁷The examples are from Foley -- van Valin (1985), p. 304. (No. 51-54).

- (3.11) a. Fred wants to go to the movies
 b. Fred wants to see Marsha
 c. *Fred wants Marsha to see [him]
 d. Fred wants to be seen by Marsha
- (3.12) a. The woman scolding the policeman is my mother
 b. *The policeman the woman scolding is my father
 c. The policeman being scolded by the woman is my mother.
- (3.13) a. It seems that Paul caught the wombat
 b. Paul seems to have caught the wombat
 c. *The wombat seems Paul to have caught
 d. The wombat seems to have been caught by Paul
- (3.14) a. Oscar went to the store and bought some milk
 b. *Oscar went to the store and Bill spoke to [him]
 c. Oscar went to the store and was spoken to by Bill

The English sentences are instances of control in infinitives (or deletion in complement), control in participles (or participial relativization), raising-to-subject, and deletion in coordinate structures respectively. In all these examples subject has a prominent role. In (3.11) only the subject of infinite verb can be deleted; in (3.12) only subject can be relativized; in (3.13) only subject can be raised; in (3.14) only subject can be missing from the conjoined sentence. If one would like to apply these grammatical processes to the objects of the sentences, passivization is needed. In Dixon's interpretation, syntactic ergativity is defined in terms of pivot.⁵⁸ In English, for example, pivot corresponds to the subject (A, S) and consequently English can be characterized as syntactically nominative-accusative language. In syntactically ergative languages, e.g. Dyirbal, the pivot coincides with two functions, namely with S and O.

⁵⁸See 5.1.1 for more on Dixon's and Marantz's understanding of syntactic ergativity.

3.5.2 Passive as derived voice

In 3.0, passive/active alternation was referred to as derived or role-remapping voice after Klaiman (1991). The label is based on the assumption that every verb can be characterized as having a basic configuration of semantic roles and grammatical functions. For example, in the case of the verb "to eat" the basic configuration is the one when the AGENT role is assigned to the Subject grammatical function, while the PATIENT to the Object:

(3.15) John has eaten the bean

(3.16) The bean has been eaten by John

In passives like (3.16), this basic configuration has been changed, instead of AGENT, it is the PATIENT role that is assigned to the Subject. (3.16), therefore, is considered to be a derived, nonbasic configuration. (3.16) furthermore can be said to be different in two respects: (i) the former subject is backgrounded, it does not agree with the verb any more and is marked with *by* preposition; (ii) the former object is foregrounded and it is the former object that triggers agreement on the verb. Foley and van Valin presents many examples from various languages which prove that backgrounding and foregrounding are independent functions.⁵⁹ It is thus possible that there are languages in which a passive function solely either as a backgrounding device or as a foregrounding device.

The Sumerian passive we described in 3.4 is a backgrounding passive. It is characterized by the complete demotion of the Agent which results in the disappearance of the Agent marker before the *hamtu* verbal base.

3.5.3 Sumerian derived voice

In 3.4 above, we proposed *pace* Wilcke that in the verbal forms we consider as passive, the slot after the base contains an element construed with the Subject. This assumption seems to repeat the traditional understanding of Sumerian, according to which, intransitive and passive forms can not be distinguished. The traditional interpretation, however, states that since passive and intransitive verbal forms can not be distin-

⁵⁹See Foley -- van Valin (1984), "Chapter 4."; (1985), pp. 299-335.

guished formally, the category passive is not existing in Sumerian. By contrast, in our understanding, the Subject of intransitive verbs and the Subject of passive verbs different because the latter acquired its Subject function through a change or remapping of the basic configuration of a transitive verb. Consider Shibatani's characterization of the prototypical passive:

- "a. Primary pragmatic function: Defocusing of agent.
- b. Semantic properties:
 - (i) Semantic valence: Predicate (agent, patient).
 - (ii) Subject is affected.
- c. Syntactic properties:
 - (i) Syntactic encoding: agent --> 0 (not encoded)
patient --> subject
 - (ii) Valence of P[redicate]: Active = P/n
Passive = P/n-1
- d. Morphological property:
 - Active = P
 - Passive = P[+ passive]⁶⁰

After a comparison of the features of Sumerian backgrounding passive with Shibatani's list, one can state that the only lacking property is the morphological marking.⁶¹ The traditional interpretation seems to gain strong support precisely by this fact. We think, however, that one should rather ask the following question: What characteristic of Sumerian makes it possible the lack of a specifically passive morpheme? Our preliminary answer to this question makes use of the results of Chapter 1. and 2. and follows a line of arguing similar to that of Faarlund (1988). According to Faarlund, in languages where semantic and pragmatic functions are encoded by different grammatical devices, there is no need for a morpho-syntactic process, like passive or antipassive. If we assume, as it is implied by the results of the first two chapters, that Sumerian encodes pragmatic functions with word order, than Sumerian can also be a point in case.

⁶⁰Shibatani (1985), p. 837.

⁶¹Notice, as we have already mentioned, that we will explain the use of **ba-** in passive forms as a result of the affectedness of the passive subject. Cf. 4.3.3. We would also like to mention here that Sumerian causative behaves similarly to passives from the point of view of morphological marking. The causative form of an intransitive verb will behave as a common transitive verb. In the casusative form of a transitive verb the formal Agent (causee) will be cross-referenced by a locative infix (-ni- or -bi-) and the causer will become the Agent. Thus, similarly to passive, no specifically causative morpheme can be identified. Yet nobody would state that there is no causativity in Sumerian.

Thus we would like to account for the characteristics of Sumerian backgrounding passive as follows: In Sumerian, backgrounding and foregrounding are associated with two different sorts of grammatical changes. Backgrounding is brought about by the deletion of Agent marker before the verbal base. The Subject function assigned to the former Object signals that the Subject is not agentive. We call this process passive because, as far as we can judge on the basis of our data, every transitive verb can be subjected to it.⁶² Foregrounding (i.e. assignment of pragmatic salience) is signalled by moving a constituent to the beginning of the sentence. This process, called topicalization is not marked on the verb, therefore, no morphological marker is needed to signal that the pragmatic salience is assigned to another constituent. Foregrounding is a process independent of the backgrounding passive. Constituents of a sentence can be foregrounded without demoting the Agent by the backgrounding passive. The main objective of Chapter 5. will be to describe the role word order alteration plays in foregrounding.

3.5.4 Another backgrounding device

There is one more construction in Sumerian which seems to function as a backgrounding device. Consider the following example:

- (3.17) [19] é hur-saġ-gin₇ im-mú-mú-ne (Cyl A 21:19)⁶³
 lit. 'they enlarged the temple like a mountain'
 = 'The temple was enlarged like a mountain'

⁶²Another solution would be to refer to the verbal forms concerned as middle or ergative in the following sense:

- 1/a The sun melted the ice.
- 1/b The ice melted.
- 2/a Someone bribed the bureaucrats.
- 2/b Bureaucrats bribes easily.

(Examples are from Keyser -- Roeper (1984), p. 381 ((2)a,b; (3)a,b). Keyser and Roeper call sentence pairs like 1. *ergative*. In contrast to the Sumerian examples, however, ergative verbal forms do not imply that there is an agent involved. What set apart *middle* sentence pairs like 2. both from the Sumerian and from the *ergative* examples is that middle sentences are generic sentences, "state propositions that are held to be generally true. They do not describe particular event in time" (Keyser -- Roeper, op. cit., 384). Middle sentences furthermore require an adverb. Unlike ergative verbs, middle verbal forms imply an agent.

⁶³See also Cyl A 21:13-22:8; Cyl A 26:28-27:1.

The noticeable feature of this line is that they contain a 3rd person plural *maru* verbal form but there is no possible candidate for a 3rd person plural subject. Falkenstein treats these forms under the heading "Der Plural bei unbestimmtem Subjekt"⁶⁴ and translates the forms with *man* as subject.⁶⁵ Using a third person plural verbal forms to express a passive like meaning is a common device in various languages.⁶⁶ Foley and van Valin refer to Lakhota (Siouan, North America), Keenan mentions Kru, Russian, and modern Hebrew. Hungarian also makes use of this construction:

- (3.18) Ellopták a kocsimat
 steal-past-they the car-my-acc.
 'My car has got stolen'.

In this sentence, the subject can not occur. If there is an overt subject, the sentence loses its passive-like meaning:

- (3.19) Ök ellopták a kocsimat
 they steal-past-they the car-my-acc.
 'They have stolen my car.'

In the Sumerian sentences concerned, a third person plural subject is never mentioned.

3.6 Infixes of slot Nr. 3 and 1

Those infixes which play important role in forming the passive concerned can be found in two slots: slot Nr. 1 and the slot before it. In the following we give the description of these infixes. There are three basic slots before and after the verb base in Sumerian:

⁶⁴Falkenstein (1950), p. 153-4 (§ 110b 1 b).

⁶⁵Cf. Falkenstein -- von Soden (1953), pp. 158-9.

⁶⁶Cf. Keenan (1985), pp. 247-8: "It appears ... that languages without passives have somewhat more grammaticized means for expressing functional equivalents of basic passives. Perhaps the most common means is to use an active sentence with an 'impersonal' third plural object. By impersonal here we mean simply that the third plural element is not understood to refer to any specific group of individuals. ... The field worker should note that this functional equivalent to passive is commonly used in languages which have fully productive basic passives."

(3.20) 3 + 1 + base + 2

The distribution of elements in slot Nr. 1 and 2 has been described above. Slot Nr. 3 can be occupied by two sets of elements: the locative infixes and the infixes marking the second object of compound verbs or the causee of causative forms. We will call the second group O₂ infixes and will consider only the singular forms. Although the traditional descriptions treat the two sets as one we will treat them separately because, in our view, there exist passive forms which can contain members of both sets.⁶⁷ The singular 3rd person forms of the O₂ infixes are homophonous with the forms of the locative infixes. In the followings only these homophonous forms will be treated.

The locative infix is construed with a NP case-marked by a locative **-a**. The O₂ infix is construed either with the causee of a causative clause or with the second object of a compound verb. If the referent of the NP is animate, the NP is marked by an **-ra**; if the referent is inanimate, by an **-e**.⁶⁸ Some verbs can show idiosyncrasy and in some cases the inanimate second object gets marked by an **-a**. Slot Nr. 3 can be occupied by either of the two infixes. In slot Nr. 3, they have the form **-ni-** or **-bi-**. In the case of the locative infix the difference between **-ni-** and **-bi-** seems to be the difference between Locative and Allative.⁶⁹ In the case of the O₂ infix **bi-** refers to inanimate or collective plural NPs; **ni-** refers to animate NPs. There is, however, a morphological restriction which is effective in the case of both sets: If there is any element (except of **-m-**) in the prefix chain before a locative or O₂ infix occupying slot Nr. 3, then it will have the form **-ni-** regardless the animacy of the NP's referent or the nature of adverbial relation. If an **-m-** appears before **bi-** it will have the form **-mi-**.⁷⁰ If the slot Nr. 1 is empty, both the locative and the O₂ infix can move into it. In

⁶⁷See the examples in **3b.i.**' and **3b.ii**' below.

⁶⁸See Jacobsen (1965), p. 93¹⁶.

⁶⁹See Wilcke (1988), p. 35.

⁷⁰Our understanding is at variance with Postgate's view, who treats the forms beginning with **mi-ni-** as being derived from ***bi-ni-** (see Postgate (1971), pp. 21-22 (4.3-4.4)). Foxvog, when listing the various forms of ventive elements, does not attach any importance to the difference between **mu-ni-** and **mi-ni-** (Foxvog (1974), pp. 54-5). Falkenstein seems to trace back the difference to the different functions of **-ni-**: "**mi-ni**' tritt dagegen - wenigstens nach den vorliegenden Belegen - nicht ein, wenn **-ni-** das Lokativ-Terminativinfix der 3. sg. 'persönlich' darstellt...". Black, conversely, sees the cause of the difference in the different functions that **mu-** can fulfill. Describing the various forms of the ventive element in the OBG texts he states: "It is essential to make the point that it is quite clear from the paradigms that this **mu-** is regarded as a separate element from the conjugation prefix **mu-**, which is formally distinguished from it by having a variant form occurring before **-ni-**, **mi-** (cf. [OBGT] VI 109, 127, 193). The **-m-** which is set against ventives never occurs in this form" (Black (1991), p. 26). Wilcke's view on this matter seems to be similar: "Die angeführten Belege für das Verbum **ku₄** lassen auch auf Bedeutungsunterschiede schließen: im Falle von **mu-ni-ku₄**- wird stets etwas in den Bereich des

this slot, they can show up the forms **-n-** or **-b-**. A slot Nr. 3 omitted by an O₂ infix can be filled again with a locative infix (see examples of the type **3b.i.**' and **3b.ii**'').

3.7 Examples of backgrounding passive

1. * $_ + A + \text{base}_h + O \rightarrow _ + _ + \text{base}_h + S$

- (3.21) [5] \checkmark sul zid lú igi mu-bar-ra-zu nam-ti mu-na-sud (Cyl A 3:5)
'For the right young man at whom you have looked the life will be made long'⁷¹
- (3.22) [18] uru- \checkmark sè ì-du-e giskim- \checkmark gu₁₀ h \checkmark é-sag₅ (Cyl A 3:18)
'I am going to the city, may my portents be made favourable'
- (3.23) [14] na ga-ri na-ri-gu₁₀ h \checkmark é-dab₅ (Cyl A 6:14)
'Let me give advises, may my advises be taken'
- (3.24) [3] \checkmark sul zid lú igi mu- \checkmark ši-bar-ra-ne [4] nam-ti mu-na-sud (Cyl B 2:3-4)
'For the right young man at whom they have looked the life will be made long'
- (3.25) [16] sig₄ [] [17] nam dùg h \checkmark é-tar [18] sig₄ é-ninnu nam h \checkmark é-tar
[19] nam dùg h \checkmark é-tar (Cyl B 20:16-19)⁷²
'Brickwork []! May a good fate be determined! Brickwork of Eninnu!
May the fate be determined, may a good fate be determined!'
- (3.26) [18] sig₄ nam h \checkmark é-tar [19] sig₄ é-ninnu nam dùg h \checkmark é-tar (Cyl B 21:18-19)
'Brickwork! May the fate be determined! Brickwork of Eninnu!
May a good fate be determined!'

Sprechers hineingebracht; bei mi-ni-ku₄- ist das nich der Fall" (Wilcke (1988), p. 28⁹⁷).

⁷¹Cf. St A 3:5-4:2: [5] \checkmark nin-tu [6] ama di \checkmark gir-re-ne-ke₄ [7] gù-dé-a [1] lú-é-dù-a-ka [2] nam-ti-la-ni mu-sud "N, the mother of gods has made the life of Gudea the architect long" which implies that life is made long by god and consequently an intransitive translation is not exact. Cf. also 4.3.5.

⁷²I list these examples here because although **nam -- tar** is a compound verb but in this and the following examples it does not have a second object. This is apparent from Cyl B 20:15: **sig₄ é-ninnu-ka nam im-[mi-ib-]tar-[re]** where the second object are case marked by an **-a**. **sig₄ é-ninnu** must be thus in vocative.

- (3.27) [7] [gù]-dé-a dumu ^vd^vnin-gis-zi-da-ka [8] nam-ti ḥa-mu-ra-sud (Cyl B 24: 7-8)
Gudea, son of N, may the life be made long for you!
- (3.28) [20] KA.KA-ni ḥé-kés^v (St B 1:20)
'May his words be unheard'
- (3.29) [30] u₄ 7-àm še la-ba-àra (St B 7:30)
'For seven days grain was not ground'
- (3.30) [6] gu₄-gin₇ [7] u₄-ne-na ḥé-gaz [8] am-gin₇ [9] á huš-ni-a ḥé-dab₅
(St B 9:6-9)
'like an ox let him be killed immediately,
and like a bull let him be seized by his terrible arms'
- (3.31) [15] mu-ni é diḡir-ra-na-ta [16] dub-ta ḥé-em-ta-gar (St B 9:15-16)
'May his name from the temple of his god and from the tablets be taken away'
- (3.32) [18] gù-dé-a [19] lú-é-dù-a-ka [1] nam-ti-la-ni ḥé-sud (St C 3:18-4:1)
'Gudea the temple-builder, may his life be made lasting'
- (3.33) [16] numun-a-ni ḥé-til [17] bal-a-ni ḥé-kud⁷³ (St C 4:16-17)
'May his seed be made to come to an end, may his reign be cut off'
- (3.34) [3] gù-dé-a [4] lú-é-dù-a-ka [5] nam-ti-la-ni [6] ḥé-sud (St P 5:3-6)
Gudea, the architect, may his life be made long!

⁷³Cf. nam ḥé-ma-ku₅-e (St C 3:12).

2. * L + A + base_h + O --> _ + L + base_h + S

2.i. L = -b-

(3.35) im-ma ì-fb-gi-in (MVN 13, 172) [c1.13]⁷⁴

'It is affirmed on the tablet'

(3.36) k^visib(-PN) (i-)fb-ra [c1.15-17]⁷⁵

'The seal (of PN) is impressed on it (i.e. the tablet)'

(3.37) im é-gal-ka ì-fb-sar (AUCT 1, Nr. 867:8) [c1.18]

'These are recorded on the tablet of the palace'

(3.38) kù-bi šu-na/ne-ne a-ab-si [c1'.01-03]

'The price is filled in his/their hands'

(3.39) [15] a-šà UŠ ùnu ù KAM.KAM-ba [16] lú-ib-gal ì-fb-gub
[17] lú la-ba-an-da-^vgub^v (TCS 1. Nr. 148:15-16) [c1.14]

'To the field of US the herdsman and ..., Luibgal is detailed
and nobody else is detailed there with him'

2.ii. L = -n-

(3.40) sig₄ nam tar-ra ^vg^vis^vù-šub-ba ma-an-gál (Cyl A 5:7)

'A brick the fate of which has been decided was put for me in a mold'

(3.41) [19] tu₁₅ an-na h^vé-da-a-gi₄ [20] a ki-a h^vé-da-a-gi₄ (St B 9:19-20)

'May the clouds be send back into the sky,
may the waters be send back into the earth'

⁷⁴The numbers in square parentheses are Wilcke's numbering in Wilcke (1988).

⁷⁵See Wilcke (1988), p. 20-21⁷⁸⁻⁷⁹ and Yoshikawa (1987) for occurrences. An equivalent active sentence sounds: **Ur-du₆-kù k^visib bí-ra** (NATN 589:8) (Wilcke, op. cit., 21⁸¹). The Locative infix must refer to the tablet onto which the seal is impressed.

(3.42) bal-a-na še-ǵar hé-ǵál (St B 9:22)⁷⁶
 'May famine be imposed on his reign'

3. * O₂ + A + base_h + O --> _ + O₂ + base_h + S

3a O₂ = the causee of a causative form

3a.i O₂ = -b-

(3.43) en-GN más-e íb-pàd⁷⁷
 'the en-priest of GN was revealed by the omen-kid'

(3.44) sig₄ nam tar-ra saǵ mu-ši-lb-fl (Cyl A 1:15)⁷⁸
 'the brick the fate of which had been decided
 was made to raise head towards him (= Gudea)'

(3.45) é kù dù-dè gú-bi mu-ši-lb-zi (Cyl A 1:16)
 'For building the holly temple the neck was made raised
 towards him (= Gudea)'

⁷⁶We consider hé-ǵál as a defective writing of *hé-en-ǵál.

⁷⁷See Wilcke (1988), p. 41¹⁴⁰ for occurrences. The underlying transitive sentence must sound: *más-e(A) en(O) íb-pád "the omen kid reveals/shows the en-priest". In the causative form más becomes the causee and since it is inanimate it will be marked by a terminative-locative -e: *e-ne más-é en bí-pád (see St B 3:14 sig₄ máš-e bí-pád) "He made the omen-kid to reveal the en-priest". In the passive form of the causative verb the causer gets backgrounded, the agent marker falls out and bí- moves into slot Nr. 1 so the -b- before the base will refer to the causee. Similar causatives are: ^{ǵis}eren-bi tùn gal-e im-mi-kud (Cyl A 15:22) "he made the great axe to cut the cedars" and gù-dé-a en nin-ǵir-su-ke₄ šà kù-ge bí-pád (Cyl A 23:22-23) "Lord Ningirsu made the heart reveal (= envisaged) Gudea" (Cf. Cyl A 27:23; Cyl B 13:6 = (4.49)).

⁷⁸Notice that the previous lines use a marû base. Since the present article focuses on grammatical analysis, we have translated the compound verb saǵ -- fl as "to raise head" because otherwise it would be difficult to translate when it comes with the phrase an-sè. But we consider it as an idiomatic expression which have both a literal and a metaphoric meaning, therefore it can also mean "to be outstanding or prestigious", with an-sè "to be very outstanding or prestigious". Cf. 5.3.1.

- (3.46) ^dnin-ǵiś^v-zi-da eger-bé íb-ús (St G 2:9-10)⁷⁹
 'Their back was made to be just before N.
 = N. followed them'
- (3.47) me-lám huś^v-bi an-né im-ús (Cyl A 9:16)⁸⁰
 'The sky was made to be just above its terrible glory
 = its terrible glory reached the sky'
- (3.48) é kur gal-àm an-né im-ús (Cyl B 1:6)
 'The sky was made to be just above the mountain-like temple
 = the mountain-like temple reached the sky'
- (3.49) ^dlamma śa₆-ga-ni eǵer-né im-ús (Cyl B 2:10)
 'His back was made to be just before his good protecting spirit
 = His good protecting spirit followed him'

⁷⁹The peculiarity of the verb **ús** in the meaning "to reach" is that the NP which is reached gets marked by an **-e** and is construed with O₂-infix in the verbal prefix chain. With other words it behaves exactly like a causative verb. The underlying transitive sentence then may sound: *eǵer-bé ^dN. íb-ús "their back led (was just before) ^dN.". The causative forms sounds *lú eǵer-bé ^dN. bí-ús "someone made their back to be lead (be just before) ^dN. (see St. F 3:14-5; 18-9; 4:3-4; 7-8; 12-3 where I would translate the verbs as "he made Xs to lead the ... animals)). However strange this interpretation may sound its correctness is supported by the following lines: [16] ur-saǵ é gibil-na ku₄-ra-àm [17] en ^dnin-ǵír-su-ra ǵiśbun dūg mu-na-ni-íb-ǵál [18] an zà-gal-la mu-na-tuś [19] an-ra ^den-líl im-ma-ni-ús [20] ^den-líl-ra [21] ^dnin-maǵ mu-ni-ús (Cyl B 19:16-21) "For the warrior who just entered his new temple / for N., he presented a good feast / [nex to him] An was seated on a seat of honor / He made An to be followed by Enlil, and made Enlil to be followed by Ninmah". The **-ra** in these clauses is construed with a **-ni-** in the prefix-chain. So it must be the **-ra** referring to the animate causee and consequently the verbs should be interpreted as causative forms. St G 2:9-10 differs only in marking the causee with an **-e**. Since the causee here is inanimate the use of **-e** is totally justified.

⁸⁰In my understanding **-m-** includes two morphemes in this and the following two examples: **-m-** and **-b-**. Wilcke states about the the Gudea texts: "Sie zeigen aber die komplementäre Verteilung der **im-** und **im-mi-(ni-íb)-Präfixketten**" (Wilcke (1988), p.44.). I analyse **im-mi-** (without commenting on the status of **i-**) as containing an **-m-** and a **bi-** (see the forms Cyl A 4:25-5:3 vs. Cyl A 5:22-3; Cyl A 6:4 where **bi-** refers either to a O₂ or the a NP in locative case). In a verbal form where slot Nr. 1 is not occupied by an A, a **-b-** can fill that slot: Cyl A 5:3 **su im-mi-du₈** vs. Cyl A 5:4 **im-ǵá-ǵá** (here **-b-** = O). I assume the presence of **-m-** before **-b-** in **im-ǵá-ǵá** too. Between (3.46) and (3.47) the difference is the lack and presence of **-m-** respectively.

3a.ii O₂ = -n-

3b O₂ = second object of a compound verb

3b.i O₂ = -b-

(3.50) [17] sá-du₁₁-na [18] é^dnin-ǵír-su-ka-ta [19] inim hé-íb-gi₄ (St B 1:17-19)
'May the regular offering (of the ensi) be withdrawn from Ningirsu's temple!'

(3.51) [3] tur du₁₁-ga-zu maḥ du₁₁-ga-àm su ba-a-ši-íb-ti (Cyl A 7:3)
'What you softly said will be accepted as loudly spoken'

(3.52) [6] ḡis^vù^v-sub kug si íb-sá (Cyl A 5:6)
'A holly brick mold was prepared'

(3.53) [6] ... igi-bé si íb-sá (Cyl A 20:6)
'Their (the grain seeds') outlook was favorable'

(3.54) [3] im siki-ba-ke₄ [4] gù ba-dé (TCS 1 Nr. 149:3-4)
'The tablet of wool-rations has been called for'

(3.55) [24] nam-lú-u₁₈ [25] ú-šim-gin₇ [26] šu dagal ha-mu-dab₆-dug₄
(Luzag. 1 3:24-26)
'May the people like the grass be multiplied during my reign (lit., with me)'

(3.56) [27] ubur-an-na-ke₄ [28] si ḥa-mu-dab₆-sá (Luzag. 1 3:27-28)
'May the heavenly udder be prepared during my reign (lit., with me)'

(3.57) [14] á-ág-gá a-sà-ga [15] a-na bí-du₁₁-ga [15] šu hé-eb-du₇
(TCS 1, Nr. 109:14-16)
'What I have commanded concerning the field should be executed'

(3.58) [13] ḡis^v-bi si hé-ab-sá⁸¹ (TCS 1, Nr. 219:11)
'The wood should be prepared'

⁸¹See Sollberger (1966), p. 163 (583) for marû forms (base_m-e).

3b.i.' - a locative occupies slot Nr. 3 omitted by O₂

- (3.59) [2] ṽlagas¹-¹e¹ me gal-la [saḡ] an^ṽsè mi-ni-fb-fl (Cyl A 1:2)⁸²
'Lagas has been made supremely exalted (lit., to raise head until the sky) in great offices'
- (3.60) [23] é-e ḥur-saḡ-gin₇ an ki-a saḡ an^ṽsè mi-ni-fb-fl (Cyl A 21:23)
'the temple, like a mountain, has been made supremely exalted (lit., to raise head until the sky) everywhere'
- (3.61) [25] é-ninnu sig₄ ke-en-gi-rá-ka ḥi-li mu-ni-fb-du₈-du₈ (Cyl A 21:25)
'Eninnu was made to be full with allure among the brickworks of Sumer'
- (3.62) [3] é-e me gal-la saḡ mi-ni-fb-fl [4] ní me-lám-ma ṽsu mi-ni-fb-du₇ (Cyl B 16:3-4)
'The house has been made to raise the head in great offices, it has been completed in awe and glory'

3b.ii O₂ = -n-

- (3.63) [11] dub-ba-né ṽsu ḥé-bar (TCS 1 Nr. 129:11)⁸³
'His tablet should be released'
- (3.64) [3] dam lugal-gu₄-e-ra [4] ṽsu ḥé-bar (TCS 1 Nr. 254:3-4)
'The wife of L. should be released'

⁸²Cf. 4.1 (A.ii.) and fn. 13. See also 5.3.1. about the role of an^ṽsè in this construction. Cf. (4.44) [22] ḡiš-gána abzu-gin₇ kur-kur-ra saḡ ba-ni-fb-fl-ne (Cyl A 21:22) 'They made it (= the temple) exalted among all the countries like the *kiškanu* in the *Abzu*'. This sentence uses the backgrounding device described in 3.5.4. Thus, it is likely to be translated as 'The temple was exalted ...' We consider this example to be in favour of our passive analysis. The difference between using *ḥamtu* and using *marû* stem can be related to their perfective and imperfective meaning respectively.

⁸³See Sollberger (1966), pp. 103f. (97) for *marû* forms (base_m-e).

- (3.65) sá an-dug₄ ka-si-id¹ (OBGT 9:105)
 'he is reached'

3b.ii' - a locative occupies slot Nr. 3 omitted by O₂

- (3.66) [23] é-a nam-ísib-ba¹ šu mi-ni-du₇ [24] éš-bar kíġ mí mi-ni-dug₄
 (Cyl B 5:23-24)⁸⁴
 'In the house the purification has been completed,
 the portent seeking has been taken care of'

3.8 Overview

The main objective of this chapter was to justify the existence of the grammatical category of passive in Sumerian. We dismissed the earlier descriptions which refused its existence for two reasons. First, they rejected passivity in Sumerian by referring to its ergativity but they were not aware of the distinction between morphological and syntactic ergativity. Therefore their conclusion can not be considered as substantiated. Second, they identified passivity with its morphological features in some Indo-European languages. Therefore, passivity and intransivity has become indistinguishable in their account. After Klaiman, we understood passive as a syntactic process which changes a verb's basic configuration of semantic roles and grammatical functions. On the basis of this definition, we described a backgrounding passive in Sumerian. The function of this passive is to background or defocus the Agent of transitive verbs. It results in the disappearance of the marker referring to Agent from the prefix-chain and brings into existence a derived intransitive verb. As far as the lack of specifically passive morpheme is concerned, we suggested that this feature of Sumerian is the consequence of its ability to foreground any constituents by moving them into sentence initial position. Thus, unlike English, backgrounding and foregrounding are associated with two different grammatical changes encoded by different grammatical devices in Sumerian. Our description has not accounted for the often attested use of prefix **ba-** in passive verbal forms. It is the next chapter that attempts to give an explanation for this controversial phenomenon.

⁸⁴Cf. the corresponding active form: ^dnanše dumu eridu^{ki}-ke₄ éš-bar kíġ-ġe₂₆ mí ba-ni-dug₄ (Cyl A 20:16) that is O₂ + A + base_h + O. I suppose a defective writing in the case of both verbs: **mi-ni-in-du₇**, **mi-ni-in-dug₄**.

4. The prefix **ba-**

4.0 Preliminaries

We have seen in the previous chapter that in many forms that we classified as passive there appears a **ba-** element in the verbal prefix-chain. Some author have even proposed that it is this **ba-** that carries the passive meaning of the forms concerned.¹ Our opinion is at variance with this assumption. The main objective will be to arrive at a characterization of the prefix **ba-** that can explain most of its various usages. First, we list the types of verbal forms in which it can occur. Later, we review the earlier descriptions about the function of **ba-** and make an assessment of their appropriateness. Finally, an attempt will be made to establish that one of the functions of **ba-** is marking the middle voice in Sumerian. Moreover, we will argue that **ba-** prefix of the passive forms functions as a middle prefix.

4.1 Typical contexts of the prefix **ba-**

A.

i. **ba-** can be construed with a NP which is case-marked by a locative-terminative **-e**:

(4.1) [10] é-e lugal-bé gù ba-dé (Cyl A 1:10)
'For the temple_i, its_i lord called'

(4.2) [20] ur-saġ níg-du₇-e gù ba-a-dé (Cyl A 8:20)
'Warrior! You have called for things which are appropriate'

¹Cf. 3.1.2.

- (4.3) [7] an-sè^v tu₁₅-a-e gù ba-dé (Cyl A 11:7)
'To the heavens I will call for rain'

The same verb is very common with the dative infix, when it means "to speak to, to call".

- (4.4) [1] é-a dù-ba mul kù-ba[2] gù ma-ra-a-dé (Cyl A 6:1-2)
'He spoke to you about the holy star of the building of the house'

With **ba-**, the verb seems to have a slightly different meaning, namely "to call for something, claim, want".²

- (4.5) [18] mu-bi-e an-zà-ta kur-kur-re gú im-ma-si-si [19] má-gan me-luh-ha
kur-bi-ta im-ma-ta-e₁-dè (Cyl A 9:18-19)³
'To its (= the temple's) name, all the countries, even from heaven's border,
will gather; Magan and Meluhha will come down from their countries'

- (4.6) [24] ùġ-e zì-sà-ġál ù-ma-sum (Cyl A 11:24)
'When it gives vigour to the people'

- (4.7) [8] é-e im-ma-gen [9] kiri₄ su im-ma-ġál (Cyl A 18:8-9)
'He (= Gudea) went to the temple, and saluted it'

The same verbs use the Sg. 3rd Ps. dative infix **-na-** when the participant concerned is animate:

- (4.8) [14] ub-su-kin-na-ka mu-na-ġen kiri₄ su mu-na-ġál (Cyl A 8:14)
'In the Ubshukina, he (= Gudea) went to him (= Ningirsu) and saluted him'

²Cf. Sollberger (1966), p. 107 (s.v. de wr. DÉ, 1B); TCS 1, Nr. 111:3-5: [3] érin en-na [4] ur-mes-e gù ba-dé-a [5] hé-na-ab-sum-mu 'Let him give him the troops that were asked for by Urmes'; Nr. 149:3-4 ((3.54) above).

³**-ma-** is considered to be the allomorph of **ba-** after an **-m-** morpheme.

- (4.9) [23] *dusu kù mu-fl ù-šub-e im-ma-gub* (Cyl A 18:23)
 He lifted up the holly basket and placed it at the brick mold'
- (4.10) [3] *ù-šub mu-dúb sig₄ hád-dè ba-šub* (Cyl A 19:3)
 'He (= Gudea) shook the brick mold and put it out to dry'
- (4.11) [19] *ba-ba₆ nin dumu-šag an-na-ke₄* [20] *ì šim erin-na ba-ni-sù*
 (Cyl A 20:19-20)
 'Baba, lady, the foremost child of An has sprinkled it (= the brick)
 with cedar oil perfume'
- (4.12) [6] *a-mir-e še ba-sum* (Cyl A 20:6)
 He (= Gudea) casted grain into ... water'
- (4.13) [16] *nanše dumu eridu^{ki}-ke₄ eš-bar kíḡ-ḡe₂₆ mí ba-ni-dug₄* (Cyl A 20:16)
 'Nanse took care of the portent seeking for it (= the temple)'
- (4.14) [21] *é-e en ba-gub la-gal ba-gub* [22] *me-e šu si im-ma-sá*
 [23] *a-nun-na ù di-dè im-ma-šu₄-šu₄-ge-és* (Cyl A 20:21-23)
 'To the temple, *en*-priest was detailed, *lagar*-priest was detailed.
 They put in order the *mes* for it (= the temple). The Annunaki-gods have
 lined up to admire it (= the temple)'
- (4.15) [17] *é mu-dù ḡis-e im-ma-ru* (Cyl A 21:17)
 'He (= Gudea) was building the temple. He ... to wood'
- (4.16) [16] *hur-sag nu₁₁ bábbar-ra-gin₇* [17] *ù-di-dè ba-gub* (Cyl A 24:17)
 'He made it (= the temple) stand for being admired
 like a white alabaster mountain'
- (4.17) [23] *u₄-sar gibil an-na gub-ba-gin₇* [24] *gù-dé-a é nin-ḡír-su-ka*
 [25] *ù-di-dè ba-gub* (Cyl A 24:23-25)
 'Gudea made Ningirsu's temple stand for being admired
 like the new-moon on the sky,

- (4.18) [16] ka-tar-ra-bi [17] kur-re ba-ti (Cyl A 29:16-17)
'Its (= the temple's) glory reached to the highland'
- (4.19) [11] ^da-nun-na u₆ di-dè im-ma-^šsu₄-^šsu₄-ge-^šés (Cyl B 1:11)
'The Annunaki-gods lined up to admire it (= the temple)'
- (4.20) [15] énsi-ke₄ dingir uru-na-ke₄ rá-zu im-ma-bé (Cyl B 1:15)
'The ensi was praying to the gods(!) of his city'
- (4.21) [10] ùg ba-^šgar-^šgar kalam ba-re₇ (Cyl B 1:10)
'The people ... to it (=the temple), the country came to it (= the temple)'
- (4.22) [16] é ninda gu₇-bé ninda ba-an-daḥ [17] kin-nisig udu-KU-bé
udu im-ma-a-daḥ (Cyl B 1:16-17)
'For the temple's bread meal, he added more bread,
for its afternoon meal of mutton, he added more sheeps'
- (4.23) [15] ì-^hi-nun-na ki ba-ni-sù (Cyl B 3:15)
'He (= Gudea) sprinkled the floor with precious oil for it (= the temple)'
- (4.24) [1] é-e ^dasar-re ^šsu si ba-sá (Cyl B 4:1)
'The temple, Asar performs the maintenance for it'
- (4.25) [3] lugal ^den-ki-gé eš-bar kíḡ ba-an-sum (Cyl B 4:3)
'King Enki provided the portent seeking for it (= the temple)'
- (4.26) [4] ^dnin-urudu isib maḥ eridu^{ki}-ga₁₄-ke₄ [5] na-izi ba-ni-si (Cyl B 4:4-5)
'Ninurudu, the chief isib-priest of Eridu has filled it (= the temple)
with incense'
- (4.27) [6] nin garza kal-la-ke₄ ^dnanše šir kug dug₄ zu é-e ba-an-dug₄ (Cyl B 4:6)
'The lady of the foremost cult, Nanse, versed in singing holly songs
sang some to it (= the temple)'

- (4.28) [8] i-ma-al-an-na-ke₄ [9] ubur si ba-ni-fb-sá (Cyl B 4:8-9)
'For the heavenly cow, the udder is prepared'
- (4.29) [1] ur-saḡ^d nin-ḡír-su é-a mi-ni-ku₄-ku₄ [2] é-a lugal-bi im-ma-ḡen
(Cyl B 5:1-2)
'Warrior Ningirsu was entering the temple. The lord of the temple
has come to it (= temple)'
- (4.30) [1] tin bur gal-la im-ma-dé [2] é-ninnu UL-ME-UL-re₇ gú im-ma-gur-re
(Cyl B 6:1-2)
'He (= Gudea) was pouring large jars of wine for it (= Eninnu);
for the Eninnu, he heaped up ...'
- (4.31) [19] ^dnin-ḡír-su-ke₄ uru-ni [20] laḡas^{ki}-e tuš^{ki} ki dūg ba-sum (Cyl B 14:19-20)
'Ningirsu gave (?) to his city, Lagas'
- (4.32) [12] uru-e ^dutu-gin₇ [13] ki-sa-ra im-ma-ta-a-è (Cyl B 18:12)
'Like Utu, he (= Gudea) came out from the horizon for the city'
- (4.33) [21] ḡù-dé-a [22] alan-e [23] inim im-ma-sum-mu (St B 7:21-23)
'Gudea were saying to the statue'
- (4.34) [55] ki-a-naḡ-e ḡa-ba-gub (St B 7:55)
'Let it be placed to the watering place'
- (4.35) [21] èn-du KA-KÉŠ-rá-ḡu₁₀ [22] mu-ḡu₁₀ ù-ta-ḡar [23] mu-ni ba-ḡá-ḡá
(St B 8:21-23)
'[who] removes my name from my hymn collection and
then adds his own name to it'
- (4.36) [9] anše^{su} sakkan_x(AMA.GAN)-a [10] dūr-KAS₄-bi [11] ^{su} im-ma-ba
(St F 4:9-11)
He released the stallion after the she-ass'

(4.37) [2] nam-sita-e ba-gub (St M 3:2)
'It (= the statue) is erected for praying'

(4.38) [1] lú-umma^{ki}-ke₄ [2] é-ki-bír-ra-ke₄ [3] izi ba-sum [4] an-ta-sur-ra
[5] izi ba-sum (Ukg. 16, 1:1-5)⁴
'The Ummaite set fire on the Ekibira. He set fire on the Antasura'

The function of **ba-** in these examples is similar to that of **-na-**, the Sg. 3rd Ps. and **-ne-**, the Pl. 3rd Ps. dative infix. **-na-** and **-ne-** refers to animate NPs, while **ba-** is construed with inanimate or collective plural NPs. Similarly, it often happens that the NP construed with the **ba-** is not overtly present in the clause. But this is no exceptional at all in Sumerian. The dative infix **-na-** behaves similarly in this respect as well. One can find many examples in the statues and votive inscriptions of Gudea where the **-na-** refers to a NP which occurs overtly only at the very beginning of the text.⁵

When enumerating the the semantic range of the dative infix, Gragg set up the following classes of verbs. Except of f., the forms with **ba-** can be classified into similar classes. Animate should be substituted with inanimate or collective plural in the definitions.

a. verbs of giving (4.6, 12, 22, 25, 31, 33, 35, 38)

b. verbs of speaking (4.20, 27)

c. verbs of motion: "When the goal of an act of motion is animate being, the verb almost always takes a dative complement..."⁶ (4.5, 7 (Cyl A 18:8), 9, 10, 15, 18, 29, 36)

d. verbs of "action towards": "The dative is used also with verbs denoting not a spatial motion up to an object, but an action directed toward, or having an intentionality toward an animate being"⁷ (4.1-3, 7 (Cyl A 18:9), 16, 17, 28, 37)

e. position with respect to: "to indicate position with respect to an animate being"⁸ (4.14 (Cyl A 20:21), 34)

⁴See also Ent. 28, 2:36-37; 29, 3:20:21; Ukg. 16, 4:5-6, 5:9-10, 6:2-3.

⁵See e.g., St D 1:1-4 (NP marked by dative case) --> 2:6, 8, 10, 12; 3:5, 7, 10; 4:1; 5:10 (verbal prefix-chains containing **-na-** that must be interpreted as referring to the NP at the beginning of the Col. 1.

⁶Gragg (1973), p. 89.

⁷ibid., p. 90.

⁸ibid.

f. verbs of emotion: "those verbs which use the dative to indicate that the subject has some effect on the emotions/sensitivity of an animate"⁹

g. verbs of doing for ("ethical dative"): "any verb signifying a consciously undertaken, goal directed activity, may be said to be done for the benefit of some individual(s), in which case the verbs takes a dative complement"¹⁰ (4.11, 13, 14 (Cyl A 20:22), 23, 24, 26, 32)

ii.

- (4.39) [8] a-ǵu₁₀ šà-ga^v su ba-ni-dug₄ (Cyl A 3:8)
'You implanted my semen into the womb'
- (4.40) [19] ǵis^vgigir-bi kù-NE za-gìn-na su ù-ma-ni-tag [20] ti mar-uru₅-a utu-gin₇ ì-é
[21] an-kára á nam-ur-saǵ^v-ka mí ù-ma-ni-dug₄ (Cyl A 6:19-21)
'When you have decorated the chariot with ...-silver and lapis lazuli,
and equipped it (= the chariot) with arrows that are to fly out like sunbeam
from the quiver and with the *enkara*-weapon, the arm of heroism'
- (4.41) [15] ti-ra-ás^v abzu-gin₇ [16] nam-nun-na ki im-ma-ni-ǵar (Cyl A 10:15-16)
'He founded Tiras like the Abzu in princeship'
- (4.42) [26] ki-ba^v ǵistarán-gin₇ di uru-ǵe₂₆ si ba-ni-íb-sá-e (Cyl A 10:26)
'On that place, I will decide my city's lawsuits'
- (4.43) [20] làl ì-nun ì-hi-nun-na al im-ma-ni-tag (Cyl A 18:20)
'He (= Gudea) hoed it (= (?)) with honey, ghee and oil'
- (4.44) [22] ǵis^v-gána abzu-gin₇ kur-kur-ra saǵ^v ba-ni-íb-íl-ne (Cyl A 21:22)
'it (= the temple) was exalted among all the countries
like the *kiskanu* in the *Abzu*' (lit., they made it (= the temple) to raise
head ...)'¹¹

⁹ibid.

¹⁰ibid., p. 91.

¹¹Cf. 3.5.4.

- (4.45) [1] gù-dé-a[✓] se-er-zi an-na-ka [2] su-tag ba-ni-dug₄ (Cyl A 28:1-2)
'Gudea decorated it (= the temple) with heavenly splendour'
- (4.46) [5] sim zid i-hi-nun-ka mí ba-ni-ib-e-ne (Cyl A 22:5)
'They (= the white cedar timbers) were treated with good perfume and precious oil galore' (lit., they treated them (= the white cedar timbers) with ...) ¹²
- (4.47) [17] mu-bi mu-ru digir-re-ne-ka [18] gù-dé-a énsi lagas[✓]ki-ke₄
[19] pa è ba-ni-a (Cyl A 26:17-19)
'Gudea, the ensi of Lagash had their names appeared among (those of) gods'
- (4.48) [18] [...] [22] [23] ní-gu[✓] digir-re-ne-kam [24] làl i-nun-na kí-g ba-ni-ak
(Cyl B 3:18-24)
'He (= Gudea) prepared the [various foods], like the meals of gods, with honey and ghee'
- (4.49) [6] ^dnin-gír-su-ke₄ èš numun i-a[✓] šà-ge ba-ni-pàd (Cyl B 13:6)
'Ningirsu has envisaged (lit., made the heart reveal ¹³) a sanctuary among germinating seeds'
- (4.50) [7] ama ^dnanse sig₄ ki lagas[✓]ki-ka [8] mí zid ba-ni-in-dug₄ (Cyl B 13:7-8)
'Mother Nanse cared truly for it (= the temple) among the brickworks of Lagash'
- (4.51) [8] temen-bi [9] i-ir-nun-ka [10] su-tag ba-ni-dug₄ (St C 3:8-10) ¹⁴
'He anointed its (= the temple's) foundation with fine scented oil'

¹²Cf. 3.5.4.

¹³Cf. Chapter 3. fn. 77.

¹⁴See also St E 3:13-15; St F 3:3-5.

- (4.52) [13] [√]sà-ba ní(g-mí-ús-sá [14] ^dba-ba₆ [1] nin-a-na-ke₄ [2] si ba-ni-sá-sá
(St D 2:13-3:2)
'Within it, he (= Gudea) prepared the wedding gifts of Baba, his lady'
- (4.53) [12] gu₄ [√]su₄-dul₄-la [13] si ba-ni-sá-sá (St F 3:12-13)
'He (= Gudea) put the oxen into yoke'
- (4.54) [9] [√]sà-ba gi-gun₄ [10] [√]sim ^gis[√]eren-na mu-na-ni-dù (St D 2:9-10)
'Within it (= the temple) he built the Gigun with scented cedar'

The shared characteristic of the examples in this subsection is that every sentence contains a compound verb. In the prefix-chain of compound verbs the second object is usually cross-referenced by a second object infix (O₂) (e.g.: **bi-** or **-ni-**)¹⁵:

- i. O₂ + A base_{hamtu} + O
ii. O₂ + O base_{maru} + S

The second object NP is case-marked with **-ra/-e** depending on whether the referent of the NP is animate or inanimate. But in these examples this slot is already filled with a locative infix construed with a NP case-marked by an **-a**. It can be relevant that many of the NPs casemarked by **-a** refer to a kind of material with which a given action was carried out. The interpretation that **ni-** refers to these NPs and not to the "real" objects of the actions (like e.g.: ^gis[√]**gigir** "chariot" (4.40); **temen** "foundation" (4.51)) is supported by (4.54). In the case of compound verbs the object-marker cross-references the nominal part of the compound verb. In (4.54), the verb is not compound, consequently the object marker behind the *hamtu*-base is construed with the "real" object (**gi-gun₄**). It is also worth referring here to examples (3.59-62). In these sentences, slot Nr. 3 is also occupied with a locative infix but since there is one participant less than in the sentences of **A.ii.**, it is prefixed with **mu-** instead of **ba-**.¹⁶Thus, the function of **ba-** in **A.ii.** seems to be that of marking a second

¹⁵See 3.6.

¹⁶Even if one should not accept our passive analysis of (3.59-62), this statement must be valid because, according to the other solution, the NP case-marked with **-e** is the Subject. It entails that, for example, the verb **saḡ -- íl** has no second object, that is, the number of core participants is only 2 compared to 3 (Agent, Object, Second-Object) of the verbal forms in **A.ii.**

object when the usual slot for marking this participant is already filled. The large number of verbal form with prefixes **ba-ni-** in the Gudea corpus receives a natural explanation through our interpretation.¹⁷ Our texts does not allow us in every case to establish with certainty how these third objects are case-marked. Forms like **temen-bi**, ^g**gigir-bi**, and **níg-mí-ús-sá** ^d**ba-ba**₆ **nin-a-na-ke**₄ imply an **-e** but exclude a locative **-a**. (4.11) and (4.23) look very similarly to those of **A.ii**. Since these verbs are not compound and the context of the sentences allows interpreting **ba-** as a kind of inanimate dative prefix we listed the examples concerned in **A.i.** The function of **ba-** in these examples is thought to be similar to Gragg's function **g** above.

iii.

- (4.55) xyz na-ba mu-^vše₃ im-ma-sa₄¹⁸
'He gave "xyz" as name to this stone'
- (4.56) [12] an lugal dí^vgír-re-ne-ke₄ [13] ^dnin-^vgír-su lugal išib an-na
[14] mu-^vsè mu-sa₄ (Cyl A 10:12-14)¹⁹
'An, the king of gods gave "Ningirsu the king, the isib-priest of An"
as name to me'
- (4.57) alan-na-(ni-)^vsè mu-tu xyz mu-^vsè mu-na-sa₄ é...-a mu-na-ni-ku₄²⁰
'He (= Gudea) had it (= the stone) fashioned to a/his statue.
xyz, he gave it as name for her/him (= a goddess/god). He brought it into
the ...-temple for her/him (= a goddess/god)'
- (4.58) [24] a-ga tukul lá ká mē-ba [25] ur-sa^vg seg₉ sa^vg-6 sa^vg-ar-bi
[26] im-ma-ab-dab₅-bé (Cyl A 25:24-26)²¹
'In the hall where the weapons are hanged, in its battle gate,
he (= Gudea) installed(?) the warrior, ... the six-headed wild ram'

¹⁷Cf. 4.2.2.

¹⁸See Cyl A 23:12, 18, 24, 29; 24:3, 7.

¹⁹See also Cyl A 10:1-5.

²⁰See St A 3:2-4:4; St B 7:12-20; St C 3:16-4:4; St D 3:17-4:10; St E 8:19-9:5; St H 2:7-3:8; St I 5:1-8; St K 1:4-11; St M 2:7-3:5; St N 3:2-7; St O 2:5-3:5; St P 5:1-8; St Q 2:2-7.

²¹For similar sentences see Cyl A 25:27-26:14:14.

- (4.59) [20] pisan ù-sub-ba-ka [21] ġis ba-ħur [22] KA.AL-ka [23] ùri ba-mul
 (St C 2:20-23)²²
 'He (= Gudea) made a drawing on the brick-mold shed, he made stamp(?)
 shine like emblem'

B. ba- occurs often in passive verbal forms. The most often quoted examples of this function are the Ur III year-names. There can exist two versions of the same year-name: one with an agent case-marked by an ergative **-e** and one without an overt agent. In the first case the verbal prefix chain begins with a **mu-**, while the clauses without agent contain a verbal form beginning with **ba-**:

- (4.60) mu ^damar-^dsuen lugal-e ur-bi-lum^{ki} mu-ħul (AS 3)
 'The year when AS, the king destroyed Urbilum'

 mu ur-bi-lum^{ki} ba-ħul
 'The year when Urbilum was destroyed'

Similar forms occur in the Gudea-texts:

- (4.61) [10] ùsan la-ba-sìg [11] kus^vá-si la-ba-sìg (St B 4:10-11)
 'Whip was not lashed, lash was not struck'

 (4.62) [30] u₄ 7-àm se la-ba-àra (St B 7:30)
 'For seven days grain was not ground'

 (4.63) [47] alan-na [48] inim-sè im-ma-dab₅ (St B 7:47-48)
 'It was taken as text on the statue (?)'

There are many examples of this usage in legal documents:

²²See also St E 3:1-4; St F 2:12-15.

- (4.64) [10] igi énsi-ka-sè^v [11] ba-gi-in (NG 48:10-11)²³
 'This was established before the eyes of the ensi'

In these examples **ba-** is not construed with any NP in the clause.

C. There are several verbs the prefix-chain of which typically contains the prefix **ba-**:

- úš^v "to die"
 (4.65) na-ba ba-úš (NG 138:5)²⁴
 'Naba has died'

When the verb means "to kill" it occurs with **mu-**:

- (4.66) énsi-bi mu-úš^v (Ean. 2, 4:14-15; 3, 4:18-19)
 'He killed its (the city's) ensi'

The case of **úš^v** is not similar to that of the passive forms in **B**. The verbs in **B** describe a situation which assumes more than one participant before the passivization. For example, in the case of **gi-in** there must be an "establisher" and something which is "established". In the passive form the "establisher" gets backgrounded and there remains only one participant. In the case of **úš^v** "to die", the verb assumes even originally only one participant, namely the "one who dies". It must also be emphasized that solely the verb's intransitivity does not explain either the presence of **ba-** since there are many intransitive verbs which do not demand regularly its use. The point is that the presence of **ba-** is neither the consequence of a passivization nor due to the verb's being intransitive but it must have something to do with the meaning of the verb. The assumption that the intransitivity is not a decisive factor in the case of **úš^v** "to die" is supported by the existence of transitive verbs that typically occur with **ba-**. The compound verb **su -- ti^v** "to receive" is a case in point:

²³For more examples see Falkenstein (1956-57), III., pp. 114-115 (s.v. gi-in).

²⁴For **ba-** forms of the verb **úš^v/ug₇** see also NGU 7:15; 80:13; 183:13'; Nik. 7, 1:4, 3:2; Nik. 14, 2:1, 5:9, 6:2; Nik. 162, 1:2; BIN 8:385, 1:4, 2:3; VS 14:39 (=AWL 22), 1:5; VS 25:56 (=VAT 4481), 4:1; DP 138, 1:3, 2:2, 4, 3:3, 5, 12, 4:5, 12, 14, 6:4, 6, 8:3, 9:6; DP 218, 5:8; DP 409, 4:2; DP 448, 2:1; DP 482, 6:2; DP 602, 1:2, 8, 2:2.

- (4.67) [21] lugal-a-né sískur rá-zu-ni gù-dé-a-ás [22] en ^dnin-ǵír-su-ke₄ ^Ysu ba-^Yši-ti
(Cyl A 2:21-22)²⁵
'His king, lord Ningirus has accepted his offer and pray'
- (4.68) [34] il-le [35] nam-énsi [36] umma^{ki}-a [37] ^Ysu e-ma-ti
(Ent. 28, 3:34-37, 29, 4:24-27)²⁶
'Il took the *ensiship* of Umma'

Similarly to the examples of **B.**, it is not possible to connect **ba-** with a particularly case-marked NP in the clause.

D.

i.

- (4.69) [7] u4-ba énsi-ke₄ kalam-ma-na zi-ga ba-ni-ǵar (Cyl A 14:7)²⁷
'On that day, the ensi imposed levy on his country'

Compare the prefix-chain of the following two verbal forms:

- (4.70) [16] im-ru-a ^dnin-ǵír-su-ka-ka [17] zi-ga mu-na-ǵál (Cyl A 14:16-17)
'He (= Gudea) imposed levy on the clan of Ningirsu for him (= Ningirsu)'

²⁵See also Cyl A 4:2; 7:3; B 3:3-4.

²⁶For ^Ysu ba-ti see also Ukg. 1, 7:1'-3'; Edzard (1968), p. 225 (s.v. **su-ti**); BIN 8:352 (= SR 35), 2:4, 3:5, 10, 8:5; DP 26, 2:1; DP 31 (= SR 31), 2:5, 10, 15, 19, 6:8, 15; DP 32 (= SR 32), 2:3', 3:1, 9, 16, 4:7, 13, 5:2, 7, 12, 16, 8:9; DP 122, 3:1; DP 123, 4:2; DP 124, 4:7; DP 125, 4:6; DP 126, 4:6; DP 130, 13:8; DP 159, 7:5, 10; DP 178, 2:2; DP 179, 2:5; DP 180, 2:4, 3:1; DP 182, 2:2; DP 183, 3:3; DP 185, 2:3; DP 186, 2:5; DP 189, 3:1; DP 220, 5:1', 9:4; DP 322, 2:5; DP 493, 2:10, 3:6; DP 497, 2:2; DP 544, 1:6, 2:4, 5; Nik. 71, 2:1, 3:1; Nik. 77, 3:1; Nik. 90, 3:5; Nik. 127, 2:2; Nik. 131, 3:6, 4:5; Nik. 134, 2:2; Nik. 135, 2:6; Nik. 137, 1:4, 2:3; Nik. 221, 2:4; Nik. 222, 2:3; [Nik. 225, 3:3]; Nik. 229, 2:1; Nik. 237, 2:2; Nik. 254, 3:3; Nik. 317 (= SR 33), 1:12, 2:13, 18, [3:5], 3:1', 8'; RTC 16 (= SR 43), 2:7, 3:2; 52, 7:1; TSA 9, 1:6, 2:4, 3:4; VS 14:7 (= AWL 16), 1:5, 3:1; VS 14:11 (= AWL 27), 2:1, 4; VS 14:58 (= AWL 19), 2:3; VS 14:75 (= AWL 62), 4:4; VS 14:83 (= AWL 63), 3:1; VS 14:88 (= AWL 25), 1:4; VS 14:105 (= AWL 125), 3:3; VS 14:137 (= AWL 66), 1:6, 2:3, 3:5; VS 14:180 (= AWL 126), 6:2, 7:1; VS 25:8 (= VAT 4414), 12:6; VS 25:60 (= VAT 4485), 2:1; VS 25:94 (= VAT 4815), 2:3, 3:2; VS 25:95 (= VAT 4818), 1:4, 2:3, 3:1.

²⁷See also Cyl A 14:8-13. Cf. Lugalbanda 1:23 en-e uru^{ki}-a-ni zi-ga₁₄ ba-ni-ǵar; Curse of Agade 101 éren-na-ni zi-ga ba-ni-ǵar.

- (4.71) [21] im-ru-a ^vnanše-ka [22] zi-ga mu-na-gál (Cyl A 14:21-22)
 'He (= Gudea) imposed levy on the clan of Nanshe for her (= Nanshe)'

One can notice that in the sentences where there is an animate participant involved (Nanshe, Ningirsu), the prefix-chain contains **mu-**. In (4.68) the imposed levy is connected with the whole country and the verb is prefixed with **ba-**. It is possible therefore that (4.68) should also be put in **A.i.**

ii.

- (4.72) [11] inim ^vnanše-e mu-na-du₁₁-ga-aš [12] saḡ sig ba-^vsi-ḡar (Cyl A 7:11-12)
 He (= Gudea) bent his head before the words that Nanshe spoke to him'
- (4.73) [14] inim dug₄-ga ^vnin-ḡír-su-ka-sè [15] saḡ sig ba-^vsi-ḡar (Cyl A 12:14-15)
 He (= Gudea) bent his head before the words uttered by Ningirsu'
- (4.74) [10] inim lugal-ni [11] ^vnin-ḡír-su-ke₄ [12] e-na-dug₄-ga [13] ba-dab₅
 (Ukg. 4, 8:10-13; Ukg. 5, 7:23-26)
 He (= Urukagina) understood what his king, Ningirsu told him'
- (4.75) [16] pisan ù-^vsub-ba-^vsè más ba-^vsi-ná (Cyl A 13:16)
 He laid omen kid to the brick-mold sheds'
- (4.76) [18] KA.AL-bi-^vsè igi zid ba-^vsi-bar (Cyl A 13:18)
 'He (= Gudea) looked at the ? favourably'
- (4.77) [4] KA.AL im^vdu₅-rí-na-ba-^vsè [5] igi zid ba-^vsi-bar (Cyl A 19:4-5)
 'He (= Gudea) looked favourably at the (?) of its oven'
- (4.78) [2] ^vnin-hur-sag-ke₄ igi zid ba-^vsi-bar (Cyl B 13:2)
 'Ninhursag looked at it (= the temple) favourably'

- (4.79) [38] níḡ-gi-gi-na [39] ḏnanṣe [40] ḏnin-ḡír-su-ka-ṣè [41] èn im-ma-si-tar
(St B 7:38-41²⁸)
'He (= Gudea) studied the laws of Nanshe and Ningirsu'
- (4.80) [5] pi-lu₅-da [6] ḏba-ba₆ [7] nin-a-na-ṣè [8] èn im-ma-si-tar (St E 2:5-8)
'He (= Gudea) studied the rites of Baba, his lady'
- (4.81) [20] dur₉ḡr-bi pirig kas₄-e pà-da [21] im-ma-si-la₂-la₂ (Cyl A 7:20-21)
'He (= Gudea) harnessed the donkey (called) Pirigasepada
to it (= the chariot)'

In these examples the NP case-marked with terminative **-ṣè** is inanimate. If the referent of the NP is animate, the prefix-chain begins with **mu-**:

- (4.82) [3] ḏen-líl-e en ḏnin-ḡír-su-ṣè igi zid mu-si-bar (Cyl A 1:3)²⁹
'Enlil looked advantageously at Ningirsu'

iii.

- (4.83) [13] é-níḡ-ga-ra-na kīsib bí-kúr [14] ḡis im-ma-ta-ḡar (Cyl A 7:13-14)
'He (= Gudea) broke the seal on his storehouse and obtained wood from it'
- (4.84) [26] da bad-a-ḡu₁₀ lú la-ba-ta-è (Cyl A 9:26)
'No-one can escape from my wide opened arms'
- (4.85) [14] ùzug-ga ní-ḡál lú-GI.AN [15] uru-ta ba-ta-è (Cyl A 13:14-15)
He made the sexually unclean, the terrified, the (?) leave the city'
- (4.86) [6] ḡù-dé-a 2-kam-ás uru-kù-[ta] im-ma-[ta]-è (Cyl A 18:6)
'Gudea left Urukug second time'

²⁸See also Cyl B 18:4-5.

²⁹See also Cyl A 23:16-17; B 2:3; St C 2:11-13; St O 3:2-3.

- (4.87) [13] pisan ù-sub-ba-ta sig₄ ba-ta-íl (Cyl A 19:13)
He (= Gudea) lifted out the brick from the brick-mold shed'
- (4.88) [15] ḡis-ká-na-ta ba-ta-díib (Cyl A 21:15)
'... (?)'
- (4.89) [13] gù-dé-a é ḏnin-ḡír-su-ka [14] ḏutu-gin₇ DUGUD-ta ba-ta-è
(Cyl A 24:13-14)
'Gudea made the temple of Ningirsu come out from the clouds like the sun'
- (4.90) [16] múš-da-ma lú kíḡ aka-àm [17] é-ta ba-ta-è (Cyl B 3:16-17)
'He (= Gudea) made the (?), who are workers, leave the house'
- (4.91) [2] eme níḡ-hul-da inim ba-da-kúr (Cyl B 18:2)
'From the evil speaking tongue the word was removed'
- (4.92) [10] sà lú 3600 x 60-ta [11] ḡsu-ni ba-ta-an-dab₅-ba-a (St B 3:10-11)
'[when] he (= Ningirsu) took him (= Gudea) by hand from among 210,000 people'
- (4.93) [12] énsi-ke₄ uru mu-kù [13] izi im-ma-ta-lá (Cyl A 13:12-13)³⁰
'The *ensi* purified the city, he carried around fire within it.'

iv.

- (4.94) [15] me ḏnin-ḡír-su-ka [16] ba-ni-íib-lá-a (St B 1:15-16)
'(the *ensi*) who diminishes the me of Ningirsu'
- (4.95) [9] sá-du₁-bi ba-ni-íib-lá-a (St K 2:9-10)
'who diminishes its (= the statue's) regular offerings'
- (4.96) [11] sá-du₁-bi lú la-ba-ni-lá-e (St E 9:11-12)
'Nobody should diminish its (= the statue's) regular offering'

³⁰See also St B 3:12; St E 2:21-22.

- (4.97) [19] níġ-ba-ġá <inim> [20] ba-a-gi₄-gi₄-da (St B 8:19-20)
'(the ensi) who is to withdraw my gifts'

v.

- (4.98) [29] ġù-dé-a-ni ġis^v ba-TUKU-àm [21] lugal-a-né sískur rá-zu-ni ġù-dé-a-ás^v
[22] en ^dnin-ġír-su-ke₄ ^vsu ba-^vsi-ti (Cyl A 2:20-22)³¹
'Having heard his plea, his king, lord Ningirus has accepted his (= Gudea's)
offer and pray'

vi.

- (4.99) [3] ġi₆-ġi₆ ba-an-dib (Cyl A 8:3)
'During the nights, he (= Gudea) ...?(the temple)
- (4.100) [29] ù-te-àm é-libir-ra-ás^v rá-zu-a ba-ġen (Cyl A 17:29)
'At the evening, he (= Gudea) went away to the old temple praying'
- (4.101) [24] énsi-ke₄ ^dġá-tùm-du₁₀-sè^v ki-ná-a-ni ba-de₆ (Cyl A 2:24)
'The ensi took away his bed place to Gatumdu'
- (4.102) [26] ^všer₇-da é-ba im-ma-an-gi₄ (Cyl A 12:26)
'The guilty has (been) returned to its house'
- (4.103) [7] ... [9] ħur-saġ má-ad-ga-ta ... [11] ġù-dé-a en ^dnin-ġír-su-ra
[12] im-ma-na-ús (Cyl A 16:7-12)
'Gudea made [various materials] from the mountain Madga arrive to
Ningirsu'
- (4.104) [3] níġ-érim é-ba im-ma-an-gi₄ (Cyl B 18:3)³²
'The evil has (been) returned back to its house'

³¹See also Cyl A 3:29-4:2; B 3:2-4.

³²Cf.: [36] níġ-érim é-bi-a [37] im-mi-gi₄ (St B 7:36-37) 'I returned the evil to
its house'.

- (4.105) [22] é-ninnu ^danzu^{mu}sen bábbar-sè [23] gù-dé-a sig-ta ba^v-si-gen
 [24] nim-sè u₅ bí-du₁₁ [25] nim-ta ba^v-si-gen sig-sè u₅ bí-du₁₁
 (Cyl A 17:22-25)
 'Towards Eninnu, the white *anzu*-bird ...(?)'
- (4.106) [1] ^dlamma kur-kur-ra dug₄-ga-ne-ne a mah_h é-a [2] lú ú lá-ba-ab-lá-e
 (Cyl B 2:1-2)
 'Protecting spirit of all countries! Their commmand is flood that nobody
 can ...(?) away (?)'
- (4.107) [6] mu gibil an-na im-ma-gub itu é-ba ba-a-ku₄ (Cyl B 3:6-7)
 'A new year took its stand in the heavens, a month entered its house
 (= it has finished)'

vii.

- (4.108) [5] sipa zi gù-dé-a húl-la-gin₇ [6] im-ma-na-ni-ib-^ggar (Cyl A 14:5-6)³³
 'It pleased Gudea, the righteous shepherd'³⁴

viii.

We could not classify the following examples:

- (4.109) [21] énsi-ke₄ uru-na lú dili-gin₇ [22] na-de₅ ba-ni-gar (Cyl A 12:22)
 'The ensi gave advises to his city as to one man'
- (4.110) [8] gù-dé-a [9] sipa zid-sè kalam-ma ba-ni-pà-da (St B 3:8-9)³⁵
 '[when] he (= Ningirsu) chose Gudea to righteous shepherd in the country'

³³See also Cyl A 17:28; 20:4, 12.

³⁴Cf. CAD S, I, p. 156 (s.v. *šakānu* 11, I 2'): húl-la-gin_x im-ma-ni-ib-^ggar = *kīma hūdūtīm it-ta-ās-ka-an-šum* (YOS 9 36 i 28 (Sum.) = CT 37 2 i 31 (Akk. Samsuiluna)). Cf. also Enmerkar and Ensuhkesdanna 163: en-ra húl-la-gin_x im-ma-na-ni-ib-gar. This line proves that Gudea is case-marked with a dative case -ra.

³⁵It is possible that the text should be emended to *gù-dé-a sipa zid-sè kalam-ma [sà-ge] ba-ni-pà-da '[when] he (= Ningirsu) envisaged Gudea as righteous shepherd in the country'. In this case (4.110) would belong to A.ii.

- (4.111) [18] u₄ d^{ba}-ba₆ [19] nin-a-né [20] šà kù-ga ba-an-pà-da-a (St E 1:18-20)
'When Baba, his lady has chosen out him (= Gudea)'
- (4.112) [10] énsi é-ninnu dù-ra [11] gù-dé-ar inim-ġar-bi lú-ù nu-ma-ni-gar
(Cyl A 13:10-11)
'Gudea, the ensi who is building the Eninnu was not made by anybody to ...(?)'
- (4.113) [19] an-ra d^{en}-líl im-ma-ni-ús [20] d^{en}-líl-ra [21] dⁿⁱⁿ-mah_u mu-ni-ús
(Cyl B 19:19-21)
'An was followed by Enlil, Enlil was followed by Ninmah'
- (4.114) [11] kalam-ma u₄ mu-gál é-ninnu d^{suen} ù-tu-da [12] saġ im-ma-da-ab-sá
(Cyl B 3:11-12)
'It was bright in the country. Eninnu and the [light] omitted by Suen were competing with each other'
- (4.115) [23] šár-ùr á-zi-da lagaš^{ki}-a [24] tukul a-ma-ru lugal-la-na-šè
[25] tùn im-ma-bar (Cyl A 15:23-25)
'He (= Gudea) carved out from them (= timbers) the Sarur, the foremost in Lagash, his lord's flood-storm weapon'
- (4.116) [53] kin-ġá lú nu-ba-ġá-ġá (St B 7:53)
'It (= the statue) was not put ...(?)'³⁶
- (4.117) [22] ... bára ġír-nun-na ki di ku₅-ba [23] ú-a lagaš^{ki} gu₄ gal-gin₇
á ba-líl (Cyl A 22:22-23)
'On the dais at Girmun, on the place of judgments, the provider of Lagash has lifted its horns like a big bull'
- (4.118) [21] ùri-bi dára kug abzu-gin₇ [22] si ba-mul-mul (Cyl A 24:21-22)
'He (= Gudea) ...(?) its emblem like the holy stag of the Abzu'

³⁶This clause might be an example of the passive use of **ba-**.

- (4.119) [9] ^vsu si sá-a- $\tilde{g}u_{10}$ an kù-ge ù-a ba-zi-ge (Cyl A 10:9)
'Holy An wakes up from sleeping at my stretching forth the hand(?)'
- (4.120) [1] nin- $\tilde{g}u_{10}$ ba-zi-ge [2] nam-ti ba (St E 9:1-2)
'My lady, you have risen, grant life'

4.2 Previous descriptions' of ba-

4.2.1 Poebel

Poebel³⁷ ascribes two basic functions to the **ba-**: reflexive ("Reflexivbedeutung") and directional ("dimensionale Bedeutung"). His understanding of reflexivity is, however, rather broad since he states that the prefix

"eine bestimmte Reflexivbeziehung der Verbalform ausdrückt. Diese kann ... in jeder Art dimensionaler Zurückbeziehung auf das Subjekt der Verbalform bestehen, also beispielsweise die Ideen 'für sich', 'zu sich', 'von sich aus' usw. darstellen, u.z. hängt es dabei ganz von der Natur des betreffenden Verbums, bez. von dem Sprachgebrauch ab, welche der verschiedenen Nüancen der Reflexividee im Einzel fall in den Vordergrund der Bedeutung treten soll."³⁸

In another part of his grammar, he states that the **ba-** expresses only a sort of "dativisch-reflexive" but not "akkusativische" meaning.³⁹ Poebel refers to the regular use of **ba-** in the case of passive forms but makes the point that

"die Passividee nicht eigentlich durch das Präfix ba- begründet wird, sondern durch das Intransitivthema, wie ja tatsächlich auch bereits die einfachen nichtreflexiven das Intransitivthemen **i-LAL**, **i-b-LAL** und **i-n-LAL** ..., zu welchen **ba-LAL**, **ba-b-LAL** und **ba-n-LAL** die Medialformem darstellen, Passivebedeutung haben".⁴⁰

³⁷Poebel (1923), pp. 243-250 (§§ 598-612).

³⁸ibid., p. 243-4 (§ 598).

³⁹ibid., p. 102 (§ 281).

⁴⁰ibid., p. 248 (§ 606).

Similarly, he states that the meaning of **ba-** does not include the concept of intransitivity either: "... keineswegs das Präfix **ba-** die Intransitividee (etwa durch eine akkusativisch-reflexive Bedeutung begründet".⁴¹ Poebel connects the directional meaning of the prefix with its reflexive function:

"Neben der Reflexividee wird durch das Präfix **ba-** zum mindesten in vielen Fällen auch die Idee 'darauf', 'dazu', 'daran' usw. ausgedrückt, also die gleiche dimensionale Idee, die durch das nichtmediale Präfix **bi-** zum Ausdruck gebracht wird..."⁴²

Poebel thus seems to take the prefix's reflexive function as primary and basic. Poebel apparently regards **ba-** in its reflexive function as a middle prefix. Thus he associates middle voice with a sort of reflexivity. This interpretation of middle explains that Poebel can not account for the regular use of **ba-** in passive verbal forms.

4.2.2 Falkenstein

Falkenstein's description is based on his morphological analysis of **ba-**:

"Es zerlegt sich in das pronominale Element **-b-** der 3. sg. 'sächlich' und das richtungsanzeigende Infix des Lokativs **-a-**, ist somit mit der Grundform des Lokativinfixes der 3. sg. 'sächlich' identisch."⁴³

He points out that: "das Präfix **ba-** Lokative, Lokative-Terminative und vereinzelt auch Terminative des nominalen Satzteils aufnimmt"⁴⁴ (see **A.i-ii.** and **A.iii.** and **D.vi.** above) but most of his examples demonstrating the occurrence of **ba-** with an NP case-marked by the locative **-a** contain the prefix-chain **ba-ni**.⁴⁵ Falkenstein's theory faces difficulties when it tries to account for these forms as it is realised by Falkenstein himself:

⁴¹ibid., p. 246 (§ 604).

⁴²ibid., p. 248 (§ 608).

⁴³Falkenstein (1949), p. 190 (§ 61).

⁴⁴Falkenstein (1950), p. 183 (§ 116).

⁴⁵Cf. **4.1 (A.ii.)** above.

"Bei der Verbindung *ba-ni* könnte ... eine pleonastische Setzung des Lokativ-Terminativinfixes vorliegen. Möglicherweise wird aber der Verweis auf einen Lokativ oder Lokativ-Terminativ allein durch das infigierte *-ni-* besorgt, sodass dem Präfix *ba-* eine andere Bedeutung innewohnt"⁴⁶

Without the *ba-ni-* forms the preponderance of *ba-* prefixes construed with a locative-terminative *-e* would certainly be more obvious and it would be easier to recognize the connection of *ba-* and the Sg. 3rd Ps. animate dative infix *-na-*. This recognition is missing from Falkenstein's description, instead he contrasts *ba-* with the prefix typically preceding *-na-*, that is, with *mu-*.⁴⁷ The forms which are listed in D.ii. (*ba-^Ysi-*) and D.iii. (*ba-t/da-*) can not be explained either if one accepts the locative meaning of *ba-*, since even the covert presence of two NPs with locative and terminative or ablative case-marker respectively can not be assumed in the examples concerned. Hence Falkenstein derives them from **b-^Ysi* and **b-ta-* respectively where the *-b-* is the Sg. 3rd Ps. inanimate pronominal element. This explanation, however, does not account for the examples of *š^Yu ba-^Ysi-ti* (see C. above) since the NP case-marked by *-š^Ye* is animate. Consequently, Falkenstein assumes that it is the locative *ba-* that precedes the *-si-* in the case of *š^Yu ba-^Ysi-ti*.⁴⁸ Falkenstein too recognizes the use of *ba-* in passive forms. He calls this use of the prefix "Sonderfall", thus seems to consider it unconnected with its other uses.⁴⁹

4.2.3 Sollberger

Sollberger draws a clear distinction between two uses of the prefix *ba-*. In its first function, he describes it as the 3rd Ps. Sg. and Pl. inanimate dative infix.⁵⁰ Unlike us (see A.i. above), he thinks the locative *-a* to be the case-mark of the NP construed with *ba-*. In its second use, Sollberger associates the prefix both with the middle and with the passive voice:

⁴⁶Falkenstein (1950), p. 185 (§ 116).

⁴⁷Cf. Falkenstein *ibid.*, pp. 183-4 (§ 116a3).

⁴⁸*ibid.*, pp. 184-5 (§ 116a5).

⁴⁹He tries to lead back, at least diachronically, even this use of the prefix to "einen Lokativ anzeigenden *ba-*" (Cf. *ibid.*, p. 186₄).

⁵⁰Sollberger (1952), pp. 70-76.

"le préfixe *ba-* donne au complexe verbal la valeur d'un *moyen*, parfois aussi, mais plus rarement, celle d'un *passif*."⁵¹

He does not explain what he exactly means by middle but judging from the translations and the short commentaries he gives, his understanding of middle voice resembles Poebel's reflexive interpretation. Consequently, he considers the passive and the middle uses of the prefix **ba-** as two unconnected functions. Sollberger also remarks that one can not establish a one-to-one correspondence between the presence of **ba-** and the middle or passive meaning respectively. Regarding the dative use of **ba-**, although functionally the classification of **ba-** as inanimate dative infix without doubt correct, one could raise as an objection that there is no attestation of a verbal form in which two different (dative and middle or passive) **ba-** prefixes would occur in one prefix-chain (***ba-ba-**).

4.2.4 Jacobsen

Jacobsen ascribes three functions to the prefix **ba-**.⁵² The first use can be called separative:

"mark of location of the occurrence denoted by the verb inside relevant area, not that of speech situation, for example **ba-gen**: *it-ta-lak*, 'he went away, ' that is, into some area not here"⁵³

We would like to assign a similar function to **ba-** in the examples of **D.iii** and **vi**. Jacobsen's second function recognizes the parallel use of **ba-** with **-na-**, the Sg. 3rd Ps. and **-ne-**, the Pl. 3rd Ps. dative infix (cf. **A.i.**): "In functional overlap **ba-** occurs as specific indication of more remote dative third person neuter".⁵⁴ Finally, in its third use, "the prefix **ba-** often carries connotations of time, 'there/then' denoting a degree of distance in time".⁵⁵ The three characterizations apply to different levels of grammatical description. In a rather

⁵¹ibid., p. 158 (3222).

⁵²Jacobsen (1965), p. 82-83. Unlike us, Jacobsen does not treat **-ma-** as a variation conditioned by the phonetical environment. Consequently, he gives a separate characterization of this element (ibid., pp. 80-82).

⁵³ibid., p. 82. It is this use of **ba-** that seems to be pertinent to the Old Babylonian Grammatical Texts. In these texts, the **ba-** forms are equated with the t-theme of Akkadian verbs. (Cf. Black (1991²), pp. 27-30.

⁵⁴ibid., p. 83.

⁵⁵ibid.

abstract level, the first and the third states something about the meaning of a verb form. The second one refers to a use in which **ba-** is construed with a case-marked NP in the sentence.

4.2.5 Postgate

Postgate's analysis of **ba-** is in fact a careful critic of Falkenstein's position. Concerning Falkenstein's analysis of the forms **ba-t/da** and **ba-si** his main points are the following:

"... to make ***b-si** and ***b-ta**- initial elements in a verbal complex would mean placing a (compound - i.e. pronominal + dimensional element) dimensional infix at the head of a finite verb, which goes against the nature of the infix, and should be avoided if at all possible. ... it seems that the form **la-ba-ta-é** (Cyl. A ix.26) proves that **ba-ta-** is not merely a writing of ***b-ta-**, since it would have been quite possible to write ***labta.è** as ***la-ab-ta-è**."⁵⁶

About Falkenstein's main assumption, namely the basic locative meaning of **ba-**, he concludes that

... it seems preferable to avoid positing a dimensional (and specifically locative) sense for **ba-** in the prehistory of Sumerian, and to admit that **ba-** is *not* used to express in the verbal complex a relationship represented (outside it) by a noun with dimensional suffix."⁵⁷

We can not agree with the second part of this last statement since, in our view, the examples of **A.i-iii**. imply a different conclusion. Postgate also attempts to give his own formulation about the function of **ba-**:

"If we ignore the idea that **ba-** must refer to an inanimate word, and concentrate on the the suggestion [by Falkenstein] that **mu-** requires a person (other than the verbs's subject) on whom the action has an effect, we can see that certain usages of **ba-** can be very nicely attributed to the circumstances that no such person is involved. This applies to those case where an intransitive verb is introduced by **ba-**, such as **ba-hul**, **ba-DU**; in each of these cases the **ba-** can be seen as showing that the subject of the verb is the only animate (and possibly even inanimate) party affected by the action"⁵⁸

⁵⁶Postgate (1971), p. 18 (2.4.2).

⁵⁷ibid., pp. 18-19 (2.4.3).

⁵⁸ibid., p. 25 (6.2).

In connection with the active/passive year-name pairs (Cf. (4.60) in **B.** above), he adds to this explanation that "[in these year-names] the distinction [between **mu-** and **ba-**] may therefore be between the presence or absence of more than one animate participant in the action".⁵⁹ The correctness of Postgate's the starting point, namely Falkenstein's interpretation of **mu-**⁶⁰, is disputable, but the the author's own solution seems to us even more unsubstantiated. What Postgate here says seems us to be equal to state that **mu-** marks transitivity (the presence of two participants) and **ba-** marks intransitivity (the presence of only one participant). Moreover, in the case what he states about year-names, he seems to overlook that the only participant of the passive form of the verb **hul** "to destroy" can by no means be animate.

4.2.6. Thomsen

Thomsen also recognizes a relation between **ba-** and the dative infixes:

"/ba-/ alone may also occur as a sort of case prefix with inanimate or plural (i.e. collective) reference, parallel to the dative **mu-na-...** or **mu-ne-...** with animate reference."⁶¹

Regarding the examples of **D.ii.** and **D.iii.** she states that "/ba/ is preferred before case prefixes referring to inanimate beings".⁶² In the case of forms in which there is no directional infix following the **ba-** prefix she contrast **ba-** with **mu-**:

"/mu-/ is preferred with animate and agentive subjects, that means that /mu-/ occurs mostly in transitive forms. /ba-/ is preferred when the subject is inanimate and/or non-agentive, i.e. most often in intransitive/one-participant verbal forms."⁶³

⁵⁹ibid., p. 25²¹.

⁶⁰Without a detailed analysis of **mu-**, one could point out that there are many transitive verbs with inanimate object which regularly contain the prefix **mu-** (e.g. **dù** "to build").

⁶¹Thomsen (1984), p. 179 (§ 344).

⁶²ibid., p. 178 (§ 342).

⁶³ibid., p. 179 (§ 345).

Unfortunately, many of her examples demonstrating this observation belong to our type **A.i.**⁶⁴, illustrating thus the parallel use of **ba-** and the dative infixes. Consequently, her statement has more or less no basis. Passive forms (examples of **B.** above) are also meant to be described by the last statement but she emphasize the point again later:

"/ba-/ has been called a 'passive prefix' because of its frequent occurrence in one-participant forms. As explained above this use of /ba-/ depends on its inanimate/non-agentive reference, and it has nothing to do with the category 'passive'.⁶⁵

It is not entirely clear from Thomsen's wording what is exactly meant by inanimate/non-agentive reference of **ba-**. In a transitive *hamtu* conjugation the same the inanimate/non-agentive vs. animate/agentive distinction is expressed by choosing between **-b-** and **-n-** as markers construed with the Agent.⁶⁶ She does not explain either that why, in one case, it is the animacy of a (directional) object, in another case, it is that of the subject that seems to be decisive in choosing **ba-**. In other words, it is not apparent in her description what kind of grammatical category is expressed by the distinction concerned. Thomsen's description, moreover, oversimplifies the problem of **ba-** in many respects. She tries to trace the different usages of the prefix to one basic distinction of agentive/animate on one hand and non-agentive/inanimate on the other hand. As it has been showed in 4.2 the prefix **ba-** occurs in many different contexts, accordingly one should consider more factors when making statements. She disregards many ideas of her predecessors without even mentioning them and/or giving a better explanation (cf. e.g., Poebel's reflexivity, Sollberger's middle interpretation, Jacobsen's separative use⁶⁷). Her use of inadequate examples has already been mentioned.

⁶⁴Example No. 394 = (3.1), 397 = (4.6), 398 = (4.9), 399 = (4.5), 402.

⁶⁵ibid., p. 183 (§ 348).

⁶⁶Cf. *níg maš-gi₆-ke₄ ma-ab-de₆-a-ǵá* (Cyl A 1:27) 'What the nightly vision conveyed to me' where **-b-** before the base refers to an inanimate NP case-marked with an ergative **-e**.

⁶⁷She interprets the **ba-** forms of the OBG T texts as corresponding to Akkadian t-perfect (ibid., p. 183 (§384)). Since the publication of her grammar J.A. Black has argued convincingly that these forms are in fact examples of t-themes (Black (1991²), pp. 27-30.

4.2.7 Yoshikawa

In one of his articles⁶⁸, Yoshikawa attributes a role in the "valency-change system" of Sumerian to the prefix **ba-**. His starting point is the observation that **ba-** and the dative infix do not seem to occur together in verbal prefix-chains. Then, he states:

The prefix **ba-** does not denote the passive, but the reflexive as one of its functions. The beneficiary expressions, that is, the expressions containing a beneficiary, as a rule requires an agent. In the case where an agent is not mentioned, the beneficiary is not mentioned either."⁶⁹

On the basis of these assumptions he analyzes the above (in **B.**) mentioned year-name pairs (**ba-hul** vs. **mu-hul**) as follows:

... the prefix **ba-** ... [in these cases] simply indicates the reduction of the agentive **-e** and, as a natural result, of the beneficiary/indirect object. ... In other words, the Sumerian used derivational morphology to indicate the omission of an indirect object, that is, valency-reduction."⁷⁰

According to Yoshikawa, the occurrence of **ba-na-** forms in Ur III documents is possible because:

in Ur III period the beneficiary/dative infix can be used even where no agentive phrase is present, since the existence of some person or thing bringing about the situation is implied by the context or in the text."⁷¹

Our analysis is at variance with Yoshikawa's. Regarding the seemingly complementary distribution of **ba-** and **-na-** we would like to explain it by referring to our function **A.i-ii**. It is this use of **ba-**, in which its function is akin to that of **-na-**, that gives a natural explanation for Yoshikawa's observation, which, therefore can not be used for attributing functions to the **ba-** prefix of passive forms since, at least, functionally the two **ba-** prefixes must be dif-

⁶⁸Yoshikawa (1992).

⁶⁹ibid., p. 397.

⁷⁰ibid., p. 398.

⁷¹ibid., pp. 399-400.

ferentiated. The **ba-na-** forms of the Ur III documents are passive verbal forms, consequently the co-occurrence of **ba-** and **-na-** is possible in these form. They are therefore in favour of our explanation.

4.2.8 Common failures of earlier theories on **ba-**

Although it would be possible to mention some other studies touching upon **ba-**, we think that this brief review fairly represents the scope of opininons regarding the prefix.⁷² There is one basic distinction which seems to occur in most of the descriptions above (Poebel, Sollberger, Jacobsen, Thomsen). According to this, one can distinguish between functions in which **ba-** is construed with a case-marked NP and functions when the prefix adds something to the verb's meaning and there is no NP cross-referenced with the **ba-**. The use of **ba-** in passive verbal forms is thought to be connected with the latter sort of function. There seems to be, however, no consensus about the exact role of **ba-** in these forms. The common feature in the explanations of a number of scholars (Poebel, Postgate, Thomsen, Yoshikawa) is that they lead back the appearance of **ba-** to a function independent from passivity. What allows then the use of **ba-** in the passive form is that the meaning it carries happens to be compatible with the meaning of passive. The recurrent feature is the non-agentive, agentless, or inanimate character of both the meaning of **ba-** and that of passive forms. These explanations are, however, unsatisfactory, for two reasons. On the one hand, one could mention many examples in which the verb shows one of these characteristics and yet it uses another prefix (cf. the passive forms in Chapter 3. without **ba-**). On the other hand, it is also possible to quote examples in which none of the characteristics above can be attributed to the verb, yet it uses the **ba-** prefix (cf. e.g. (4.67); D.iv.).

4.3 The middle **ba-**

4.3.1 The three main uses of **ba-**

On the basis of the examples in 4.1, we will distinguish three basic uses of the prefix **ba-**:

⁷²Cf. e.g.: Christian (1957), pp. 78-85; Yoshikawa (1978); Attinger (1993), pp. 280-284 (3.2.5.6.).

i. What is common in the examples of **A.** is that the prefix is construed with a case-marked NP. This NP, however, does not have to be present overtly in every case as is usually allowed in Sumerian. In **A.i.** and **A.ii.**, the NP is case-marked with a locative-terminative **-e**; less often, in **A.iii.** with a locative **-a**. The function of **ba-** in **A.i.** is more or less similar to that of the dative infix.

ii. It is possible to identify a function of **ba-** when it marks that the movement or action denoted by the verb proceeds away from the speaker. We would like to attribute this function to the **ba-** prefixes of the examples in **D.vi.** We suggest that the occurrence of **ba-** before the ablative infix **-ta-** is also due to this function (**D.iii.**).

iii. In its third function, the prefix **ba-** is associated with the middle voice. We assign this function to the **ba-** prefixes in **B.** and **C.**. In the following subsection, we will argue in favor of this assumption.

4.3.2 Middle voice in current linguistic theory

In Klaiman (1991) the middle/active alternation is referred to as basic voice. The following considerations are behind the label:

"The choice of active vs. middle verbal marking correlates with no necessary alternation in the semantic roles linked to grammatical relations or core nominal positions in the structure of a clause. Accordingly, active/middle systems are of a distinct type from derived voice systems. Since rules of derived voice relating basic structural configurations to nonbasic or derived configuration seem inappropriate to their analysis ... , they are referred to as basic voice systems."⁷³

Klaiman surveys the basic voice system of three languages or rather language groups: Fula (a member of the West Atlantic group of Niger-Congo), Tamil (a Dravidian language of South India), and Indo-European.⁷⁴ The functions expressed by middle voice in these languages show noticeable similarity, although each language has its own idiosyncrasies. Klaiman makes a distinction between differential and primary functions of middle. The primary functions of middle are associated with verbs that can be

⁷³Klaiman (1991), p. 24.

⁷⁴In the following we will repeat only the main points of Klaiman's study. The reader is referred to the study itself for a detailed representation of the arguments leading to the results.

inflected only in this voice (*media tantum*). The differential functions apply to verbs that inflects in either, active or middle, voice. According to Klaiman, the most important differential middle function is to express the affectedness of the subject. This means that "the middle, in opposition to the active, encodes situations having principal effects upon the referent of the nominal which the verb assigns as subject".⁷⁵ This middle function is present in each of the languages surveyed. In Indo-European languages, the middle is also associated with neuter verbs as a differential function.⁷⁶ As its most important primary function, the middle expresses deponency. This means that *media tantum* verbs usually express "physical states or mental dispositions presupposing the subject's animacy and control".⁷⁷

Klaiman's observations regarding the relation of reflexivity and middle are also worth mentioning here. According to Klaiman, "the two categories, reflexive and middle, characteristically overlap in only a few functions".⁷⁸ These functions, however, do not include reflexives in which the referent of the core arguments is identical (e.g., John like himself).⁷⁹ In Greek, for example, the middle expresses reflexives "in which one core referent in an identity relation with the subject comprises either the latter's body or body part"⁸⁰ (e.g., *Louomai* "I wash myself"). Finally, we would like to refer to one more type of reflexivity marked by middle in some languages. Consider the following Fula examples:

- (4.121) a. 'o res -ii dũm
 he deposit General Past **ACTIVE** it
 'He set it down, deposited it on the ground'
- b. 'o res -ake dũm
 he deposit General Past **MIDDLE** it
 'He put it on deposit (for his own future use)⁸¹

⁷⁵ibid., p. 92. A rather similar definition is provided by Lyons: "The implications of middle (when it is in opposition with the active) are that the 'action' or 'state' affects the subject of the verb or his interests" (Lyons (1968), p. 373).

⁷⁶The term neuter verb refers to verb like e.g., *bend*. The characteristic of these verbs that they can be used in both transitive and intransitive constructions (John bent the stick/The stick bent). The middle voice is associated with their intransitive construction.

⁷⁷Klaiman, op. cit., p. 45.

⁷⁸ibid., p. 104.

⁷⁹For a similar distinction in Sumerian recognized by Poebel see 4.2.1 above.

⁸⁰ibid., p. 88.

⁸¹The examples are from Klaiman op. cit., p. 62. ((20)a,b).

In these examples the subject acts for his own benefit or in his own interest. This reflexive is referred to as indirect while the reflexive in which the subject act his own body are called direct by Klaiman.

4.3.3 Middle voice in Sumerian

Turning back to the examples of **B.** and **C.**, we think that it is possible to characterize the function of **ba-** in these sentences as middle. In the case of **úš** "to die", it is the subject of verb that is affected by the action. When the verb means "to kill", that is, when the affected participant is the object, the verbal prefix-chain begins with **mu-**. The same relates to the verb **su - ti** "to receive". That this verb almost invariably occurs with the **ba-** prefix receives a natural explanation in the meaning of the verb: in the action denoted by the verb it is the "receiver" that is affected becoming the owner of certain goods or other things. It is possible to emphasize another aspect of the same action, namely that certain goods have changed their owner (the object of the transaction is affected). For this purpose, Sumerian typically uses the passive form of **sum** "to give". Regarding the passive forms of **B.**, in this case, the function of middle **ba-** is naturally compatible with the meaning of passivity, since the subject of a passive verbal form is typically the original affected participant, that is, the object. This means that (*pace* Poebel) we assume that it is not the case that **ba-** gives a reflexive meaning to a passive form but **ba-** signs that Subject of the passive form is affected.⁸² This situation is not exceptional:

"Indo-Europeanists concur that a formal passive did not exist in the protolanguage. Rather, in the protolanguage there occurred one non-active voice; its meanings or values included the expression of the passive semantic function."⁸³

⁸²Since there are passive verbal forms without **ba-**, there must be passive forms in which the Subject is not affected. One could predict that this must be the case in the passive form of compound verb, where grammatically the nominal part of the compound verb becomes Subject. We will examine the validity of this prediction in 4.3.4. Note that **ba-** seems to mark the affectedness of both the Agent and the Subject. The prefix **ba-** thus treats Agent and Subject alike which can be considered as another nominative-accusative trait of Sumerian.

⁸³Klaiman, op. cit., p. 84.

Later, in connection with Greek and Sanskrit passive forms with middle inflection, Klaiman states:

[In these forms,] the middle does not directly express passive meaning; rather, the semantic function or functions it encodes happen to be compatible with the meaning of the passive. As noted above, passive meaning may involve subjectivization of a logical nonsubject, typically the notional undergoer or affected participant in the denoted action.⁸⁴

We have not interpreted some of the examples in D. yet. We left the interpretation of these examples after having established the function of **ba-** as expressing middle voice. Concerning D.ii., we quoted Falkenstein, who derives **ba-si** from ***b-la**.⁸⁵ We would like to suggest that, except of (4.75) and (4.81), the **ba-** of these sentences is the middle **ba-**. In (4.72) and (4.73), the meaning of the verb implies that Gudea's ensuing activity is the consequence of Nanshe's and Ningirsu's speech respectively. Thus the situation has its principal effect on the Subject, Gudea, but not on the Object of the verb, Nanshe's speech. In (4.74), the situation is similar.⁸⁶ In (4.79) and (4.80) again, the situation implies that the study of the laws and rites respectively exerts influence on the Subject of the verb.

Examples (4.76-8) can be contrasted with (4.82). It is usually assumed (Cf. 4.2.6) that the prefix-chain contains **mu-** in (4.82) because the referent of the NP case-marked with the terminative **-se** is animate. In our view, it is also possible to explain this prefix alternation in terms of active vs. middle. Consider that when somebody looks at an object favourably, then it implies that the Subject has come to like it. By contrast, when a god looks at somebody, the situation implies that the Object, the person in question will be treated advantageously in the ensuing future. In connection with the examples of D.iv., recall the indirect reflexive in 4.3.2. Examples (4.94-97) allow the interpretation that the subject acts for his own benefit.

⁸⁴ibid., p. 85. Cf. Lyons (1968), pp. 373-374 (8.3.2) for a similar interpretation of the Indo-European data.

⁸⁵Cf. also Attinger (1993), p. 280 (3.2.5.6.1 (§ 181)): "Que {b + a} at {b + da/si/ta} soient incompatibles n'est pas étonnant si l'on songe que dans les séquences ba-da/si/ta, {b + a} semble 'remplacer' - fonctionnellement! - l'él. pron. {b}."

⁸⁶The presence of **ba-** in (4.97) of D.v. could also be explained as expressing that the plea has its affect on Ningirsu. Jacobsen, for example, translates the clause concerned as passive: "His cry having been heard, / his master, Lord Ningirsu, / accepted from Gudea his prayer and plea" (Jacobsen (1987), p. 390).

4.3.4 Passive verbal forms without **ba-**

It has already been noticed that there exist passive verbal forms without the **ba-** prefix. If our theory about the use of middle **ba-** in passive forms is tenable, we should be able to account for these examples. On the basis of the examples in 3.7 three type of passives without **ba-** can be established.

i. The verb form contains the animate dative infix **ma-**, **-ra-**, **-na-** (3.21, 24, 27, 40). In the case of these forms, one can assume that the passive Subject is not the participant affected by the situation since there is another participant involved towards whom the action can be directed.⁸⁷ Consider, for example, (3.21) repeated here as (4.123)

(4.122) [5] sul zid lú igi mu-bar-ra-zu nam-ti mu-na-sud (Cyl A 3:5)
'For the right young man at whom you have looked
the life will be made long'

In this case, although **nam-ti** "life" becomes the grammatical Subject, it is the ^Y**sul zid** "young man" who is affected.

ii. Passive precative forms typically does not have **ba-**. A precative form, as being a wish, implies that the action denoted by the verb should happen in the future. It could be pertaining that, in Classical Greek, passive has distinct inflexions in the future tense.

iii. Passive compound verbs are usually not prefixed with **ba-** (3.44, 45, 52, 53, 59-62, 65, 66). Since in the case of compound verbs the nominal part of the verb becomes the grammatical subject, this finding supports our theory. It could be also relevant that the nominal constituent of a compound verb is not referential.⁸⁸

Some particular cases also need explanation. In (3.38 = 4.123), the persons referred to by the possessive enclitic attached to ^Y**su** "hand" are the locus of affectedness.

(4.123) kù-bi su-na/ne-ne a-ab-si
'The price is filled in his/their hands'

Similar arguments can be raised in the case of (3.35, 36, 37).

⁸⁷The existence of verbal prefix-chains like **ba-na-** does not disprove our statement. The choice between the form containing **ba-** and the form without **ba-** reflects the intention of the speaker.

⁸⁸See also 5.3.1.

4.4 Overview

This chapter attempted to find an explanation for the use of **ba-** prefix in passive forms. For this purpose, we had to review all the various uses of **ba-**. We have distinguished three main uses. In its first use, the prefix **ba-** is construed with a case-marked NP. In its second use, the prefix expresses that the action or movement denoted by the verb proceeds away from the speaker. We claimed that it is its third function that is associated with its use in some passive forms. We identified this function as to mark middle voice in Sumerian. After Lyons and Klaiman, the main function of middle was defined as to express the affectedness of the grammatical subject (A, S). We claimed that the **ba-** is used in passive forms because the function of middle **ba-** is naturally compatible with the meaning of passivity, since the Subject of a passive verbal form is typically the original affected participant, that is, the Object. This interpretation allowed us to explain the passive forms which do not contain **ba-**. We found three main types of these form in the Gudea texts: (i) passive forms containing a dative infix, (ii) precative passives, (iii) passives of compound-ing verbs.

5. Foregrounding in Sumerian

5.0 Preliminaries

In the preceding chapters, we have examined two areas of Sumerian grammar. First, we described a construction called anticipatory genitive and stated that it comes about through topicalization. Second, we tried to prove that there exists a backgrounding passive in Sumerian. Contrary to what is traditionally assumed, we stated that the lack of specifically passive morpheme and the ergative agreement pattern of the *hamtu*-base do not entail that passivity is not a pertaining grammatical category of Sumerian. We argued that since the traditional description can recognize passivity only in terms of its morphological marking, it fails to ask an important question, namely what allows Sumerian to dispense with the morphological marking of its role-remapping voice. This chapter presents some more arguments in favour of our preliminary explanation to the problem. On the basis of our findings in the first two chapters, we assumed earlier that Sumerian does not need a passive morpheme because the language is capable to foreground a constituent solely by putting it into sentence initial position. We will pursue the assumption that foregrounding is coded in Sumerian by word order. We will also draw a parallel between the foregrounding device of Philippine languages called pragmatic voice by Klaiman and the possibility to mark the altered pragmatic salience of constituents solely by word order in Sumerian. Before addressing, however, the problem of word order, the first part of the chapter considers the controversial issue of syntactic ergativity in Sumerian since our proposals regarding this matter are connected with our other assumptions on Sumerian grammar. We will investigate syntactic ergativity of Sumerian both in Dixon's and Marantz's understanding of the term. We will claim that the syntactic ergativity in the Dixonian sense cannot be interpreted in Sumerian. As far as Marantz's Ergativity Hypothesis is concerned, we will suggest that Sumerian is more likely to be a nominative language.

5.1 Syntactic ergativity in Sumerian

5.1.1 Syntactic ergativity in linguistic theory

In Chapter 3., we argued that, beside morphological ergativity, syntactic ergativity should also be considered when one examines passivity in Sumerian.¹ There exists, however, two, in a certain extent different understandings of syntactic ergativity: one advocated by Dixon and another by Marantz.² Consider the following diagram:

<u>deep-structure</u> (level of universal syntactic-semantic functions)	A	S	O
<u>shallow-structure</u> (level of derived functions) (Table 1.)	A	S	O

Table 1. represents Dixon's model. It assumes two levels of syntactic structure: deep- and shallow structure. The latter can be derived from the former by such transformations like passive and antipassive. In this theory, syntactic ergativity is defined in terms of pivot.³ Languages in which certain syntactic rules operate on an S/O pivot are classified as syntactically ergative languages. Dixon thus interprets syntactic ergativity at the level of grammatical functions (A, S, O). In Dixon's account "PASSIVE places the deep O NP in surface S function, and marks the deep NP with an oblique case / preposition / etc. (this NP can be deleted)"; "ANTIPASSIVE places the deep A NP in surface S function, and marks the deep O with an oblique case / preposition / etc. (this NP can be deleted)".⁴ He states furthermore that

"it is thus generally true (but as a conclusion, not as a premiss) that passive operates in languages that are morphologically and syntactically nominative / accusative, and that antipassive will be found predominantly in languages that have some measure of ergativity at the syntactic and morphological levels".⁵

¹Cf. Chapter 3. fn. 2.

²For the former, see Dixon (1979); for the latter, see Marantz (1984), Levin (1987), Huber (1989-90), Spencer (1991), pp. 262-275; for both, see Dixon (1987), Larsen (1987).

³For the term, cf. 3.5.1.

⁴Dixon (1979), p. 119.

⁵ibid.

Table 2. and 3. outlines Marantz's theory called Ergativity Hypothesis (henceforth, EH):⁶

	<u>nominative</u>	<u>ergative</u>
<u>D-subject</u>	AGENT	PATIENT
<u>D-Object</u>	PATIENT	AGENT
(Table 2.)		

semantic roles

D-structure relations

(= level of logical subject and object)

S-structure relations

(= level of grammatical functions)

(Table 3.) (--- = ergative, ... = nominative)

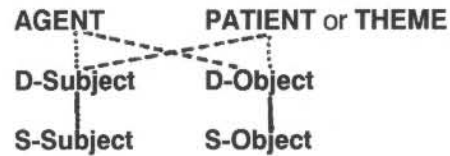


Table 3. illustrates the active construction in ergative and nominative languages respectively. According to the EH, a language can choose between two patterns of semantic role assignment. In nominative languages, AGENT is assigned to the D-Subject, while PATIENT or THEME to the D-Object. In ergative languages, however, it is the AGENT that is assigned to the D-Object and PATIENT or THEME to the D-Subject (cf. Table 2.). Thus in Marantz's account, syntactic ergativity is interpreted as a particular type of semantic role assignment at the level of D-structure relations.

As far as the case-marking is concerned, Marantz assumes two types of case-marking paradigm. In type A paradigm, S and A are marked similarly, both are unmarked, while O is marked. In type B paradigm, S and O are unmarked, while A is marked. The two types of case-marking paradigm combined with the two language types (ergative vs. nominative) provides the following typology of languages:⁷

	<u>nominative</u>		<u>ergative</u>	
	<i>A</i>	<i>B</i>	<i>A</i>	<i>B</i>
<u>Subject</u>	NOM	NOM(ABS)	NOM(ABS)	NOM
<u>Agent</u>	NOM	ACC(ERG)	NOM(ABS)	ACC
<u>Object</u>	ACC	NOM(ABS)	ACC(ERG)	NOM

(Table 4.)

⁶We follow Levin's account of Ergativity Hypothesis because it makes necessary to introduce less new terms and concepts than the description with Marantz's original terms would need.

⁷The typology permits the existence of split-ergative language as well: "Many languages employ both the A and B case marking paradigms, with the choice between the two conditioned by context or the character of the NP to be case marked" (Marantz (1984), p. 197).

Morphologically ergative languages are the nominative type languages with type B case-marking; an ergative language with type A case-marking appears to be nominative.

In this model, a passive construction "involves a derived intransitive use of a transitive verb where the S-subject is the D-object of the verb and the D-subject is expressed in an oblique case if at all"⁸; and an anti-passive construction involves a derived intransitive use of a transitive verb where the S-subject is the D-subject of the verb and the D-object is expressed in an oblique case if at all.⁹

"Since the difference [between nominative and ergative languages] involves the the association of semantic roles with D-structure grammatical relations, languages of both types should have the same syntax, that is the same relationship between D-structure and S-structure grammatical relations. Any syntactically defined construction that is found in an accusative language ought to be found in an ergative language."¹⁰

Consequently, the definition of passive covers both the passive of nominative languages and the construction of ergative languages that is called anti-passive in Dixonian terms, since according to Marantz, in a syntactically ergative language with type B case marking, the construction traditionally called anti-passive must be reinterpreted as passive. Dyirbal, for example, is considered to be an ergative language in Marantz's sense, using a type B case-marking in the case of third person NPs. Consider (5.1) and (5.2):¹¹

(5.1) balam wuđu baŋgul yaŋaŋgu ɟaŋganu
 THERE-ABS fruit-ABS THERE-ERG man-ERG eat-NFUT
 THER-NOM fruit-NOM THERE-ACC man-ACC eat-NFUT
 "man eats fruit"

(5.2) bayi yaɟa ɟaŋgaymaŋiŋu baɟum wuđuɟu
 THERE-ABS man-ABS eat-REFL-NFUT THERE-DAT fruit-DAT
 THERE-NOM man-NOM eat-REFL-NFUT THERE-DAT fruit-DAT
 man eats fruit"

⁸Levin (1987), p. 24.

⁹Cf. Marantz (1984), pp. 200-1 ((6.2) and (6.3)).

¹⁰Levin (1987), p. 19.

¹¹The examples are from Levin (1987), p. 26 ((16); (17)). The second line of glosses reflects the analysis in terms of the EH.

(5.2) is traditionally labelled as anti-passive. Marantz considers this construction as passive on the basis of the following analysis: Since Dyirbal is a syntactically ergative language, AGENT is assigned to the D-object. In a passive construction D-object becomes the S-subject and the D-subject will be marked by an oblique case. In accordance with type B case-marking, S-subject will be unmarked (ABS or NOM). The state of affairs in (5.2) corresponds exactly to this description.

The EH also makes predictions regarding control construction such as (5.3) which is analyzed as (5.4) in GB:

(5.3) Hannes convinced Steve to leave Mary

(5.4) Hannes convinced Steve [PRO to leave Mary]¹²

Since PRO in this control construction is considered to be the S-subject, therefore in nominative languages, PRO must be associated with the AGENT role, while in ergative languages, with the PATIENT role. In other words, in a nominative language, (5.3) should be interpreted as it is Steve that will leave Mary, while in ergative languages (5.3) must mean that it is Mary that will leave Steve, whatever the morphology of a particular language on the surface would imply.¹³

5.1.2 Previous claims on Sumerian

The general approach of studies on Sumerian grammar rarely goes beyond morphological ergativity. Thomsen, for example, claims that "Sumerian is a so-called ergative language. This means that the intransitive subject is treated in the same manner as the transitive object".¹⁴ Her ensuing description, however, makes it clear that she means

¹²PRO is one of the non-overt NPs posited by the GB theory. A non-overt NP is "an NP which appears to be syntactically active, hence syntactically represented, but which has no overt manifestation" (Haegeman (1991), p. 237). PRO is characterized by the features [+ anaphor, + pronominal].

¹³One could ask the question whether Dixon's and Marantz's models classify the same languages as ergative in each case. Since according to Marantz, the Dyirbal topic chains, which were used to prove Dyirbal's ergativity by Dixon, "cannot serve as conclusive evidence that Dyirbal is ergative" (Marantz (1984), p. 199), the answer seems to be in the negative.

¹⁴Thomsen (1984), p. 49 (§ 38).

merely morphological ergativity. Despite hinting at the phenomenon of syntactic ergativity¹⁵ she appears to have forgotten to pursue the problem any further, although both Michalowski and Aldern had already commented on the subject.

Michalowski and Aldern examine the syntactic ergativity of Sumerian in the Dixonian understanding of the term. Michalowski's starting point is the observation that syntactically ergative languages usually have an anti-passive construction. His conclusion on the Sumerian data implies a negative stance on the issue: "Although it is too early to state this unequivocally, one suspects that Sumerian is an ergative language without anti-passive rules".¹⁶ Saying that "one wonders whether this is a sufficient criterium for placing Sumerian among the morphologically ergative group",¹⁷ Alderen, rightly, seems to be skeptical about the usefulness of Michalowski's basis. She refers to Anderson (1976) which suggests that more tests (coordination, subordination, participial relativization, raising) must be used for ascertaining syntactic ergativity. Although Alderen claims that "it would be very interesting to try to apply these tests to Sumerian"¹⁸ her conclusion that Sumerian "syntax seems to behave more objectively than ergatively"¹⁹ is not based on results gained by applying the advocated tests. It solely repeats Michalowski's suggestion the basis of which has been questioned by Alderen herself.²⁰

Huber attempts to tackle the problem by applying the above briefly summarized Ergativity Hypothesis to Sumerian data. He tries to analyze Sumerian constructions which are presumably equivalent to control constructions of English. As an effect of the inconsistency of the Sumerian data, Huber resorts to ad hoc speculations which, as he himself admits, "recht erzwungen scheinen mag".²¹ However, the source of the inconsistency of data, in our view, is Huber's defective analysis of Sumerian. Although, he

¹⁵ibid., p. 51 (§ 42): "This 'split ergativity' is no uncommon phenomenon, in fact no ergative language is entirely ergative in both syntax and morphology."

¹⁶Michalowski (1980), p. 101.

¹⁷Aaldern (1982), p. 39.

¹⁸ibid., p. 40.

¹⁹ibid., p. 43.

²⁰Aaldern's other "argument" saying that "Anderson himself claims ergative syntax for Dyrbal and Hurrian. Sumerian would then be only morphologically ergative - a conclusion shared by Michalowski" (op. cit. p. 40) is an example of how linguistics must not be applied to solve problems of Sumerian grammar. Since Anderson does not even mention Sumerian in his paper the logic behind this way of arguing seems to be that if an author writing on a linguistic feature does not mention Sumerian among the languages having that feature than Sumerian necessarily must be characterized with the possible opposite value of the feature.

²¹ibid., p. 68.

applies a syntactic theory, namely Chomsky's GB to Sumerian, yet he is not able to differentiate between grammatical functions and their morphological marking.²² Be it said in Huber's excuse, however, that grammatical functions in Sumerian have not been studied yet in syntactic terms. In conclusion, he is not able to classify Sumerian in terms of the four language types above. The analysis of Sumerian makes him conclude that "Zumindest scheint die (morphologische) Kasusmarkierung von NPs im Sumerischen durch semantische und nicht durch strukturelle Relation bedingt zu sein..."²³ and "Wenigstens scheint es hier keinen Zusammenhang zwischen morphologischen Kasus und der Position in Strukturbaum zu geben".²⁴ In the light of these statements one could wonder whether it would not be more useful to get rid of the underlying assumption of Huber's paper, namely, that Sumerian is a syntactically configurative language. Huber's failure to classify Sumerian in a clear-cut way therefore could be considered as a result even though this outcome was not Huber's original intention.²⁵

²²He, for example, assumes the identity of locative-terminative and ergative -e solely on the basis of their form and does not even consider their distribution and function.

²³ibid., p. 76.

²⁴ibid., p. 77.

²⁵One must agree with Huber when he warns that "falsches Textverständnis seitens des Untersuchenden kann leicht zu falschen Schlüssen führen" (op. cit., p. 65). Although it does not effect the "negative results" of the paper but many of Huber's interpretations must be questioned: I. In his examples (21)a, (21)b and (25) he interprets the forms **mušen-né**, **gud-de₆**, and **uḡ-e** as having an ergative case-mark. But, in my view, it is more likely that these forms are in fact marked by second-object (loc.-term.) case as being the causee of an underlying causative construction. Huber himself mentions this possibility later (p. 71). But the problem is that all his speculations on pp. 66-70 are based on the ergative understanding. II. In (33)c (p. 71) he characterizes the Sumerian causative construction of transitive verbs as "NP₂-e(ERG)_i NP₃-e(LOK-TERM)_k/-ra(DAT)_i ninda-O(ABS)_i mu-ni(LT)_k/-na(DAT)_i-n_i-gu₇-O_i 'NP₂ ließ NP₃ Brot essen. (wörtl. etwa: NP₂ aß Brot bei (=durch) NP₃)". This description is obviously wrong because an animate causee marked by **-ra** must be co-referenced by a second-object (loc.) infix **-ni-** in verbal prefix chain and not by a dative **-na-**. III. He states that in (36) (p. 72) "Verbum gi₄ 'zurückkehren' schwer (oder müßig?) zu entscheiden, ob Interpretation (a), (b) oder (c) (oder anders) vorliegt." His (36) is Eanatum 2, 6:6-8 **elam kur-ra-na bi-gi₄**. The interpretations are (a) Elam ist in sein Land zurückgekehrt; (b) Elam hat sich in sein Land zurückkehren lassen (bzw. zog sich zurück); (c) Elam wurde in sein Land zurückkehren gelassen (bzw. zurückgeschickt) (von jemandem). In my view, none of these proposed interpretations is acceptable. The form **bi-gi₄** must have an A marker before the base, otherwise it would look as ***ib-gi₄**. So it must be a transitive form, namely a causative of an intransitive verbal form. The subject is Eanatum from I. 6. So the lines must be translated as "[He (=Eanatum)] made Elam return to his country". We will analyze this passage latter in detail in the main text when we will argue against the interpretation of Steible (1982) which is more or less similar to Huber's. For the time being let us only mention that Cooper's translation must be based on a grammatical analysis similar to ours since he translated the excerpt concerned as "He [=Eanatum] drove the Elamite back to his own land" (Cooper (1986), p. 42 (La 3.5)). Cf. also Wilcke (1990), p. 483: "Vor Eannatum erzitterte Elam; er ließ (den) Elam(ter) in sein Land zurückkehren. Kis erzitterte vor ihn."

5.1.3 Sumerian in terms of Marantz's Ergativity Hypothesis

One could wonder whether the passive proposed by us in Chapter 3. has relevance to the problem of Marantz-type syntactic ergativity in Sumerian. Since Sumerian common nouns are marked clearly according an ergative pattern, Sumerian either a nominative type B or an ergative type B language. In the former case, it is only morphologically ergative; in the later case, its syntax is ergative as well. Consider the following diagram:

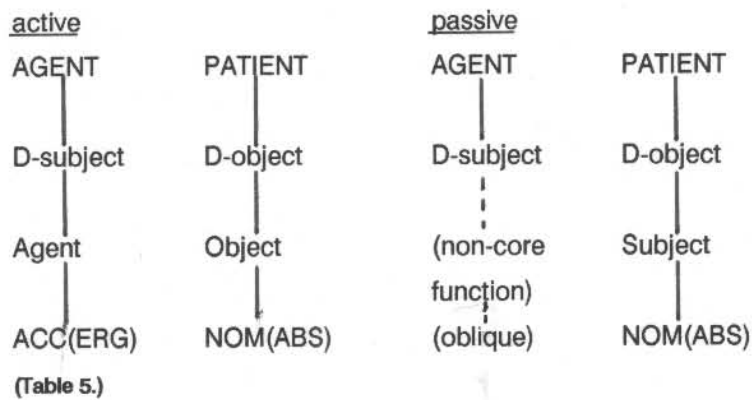
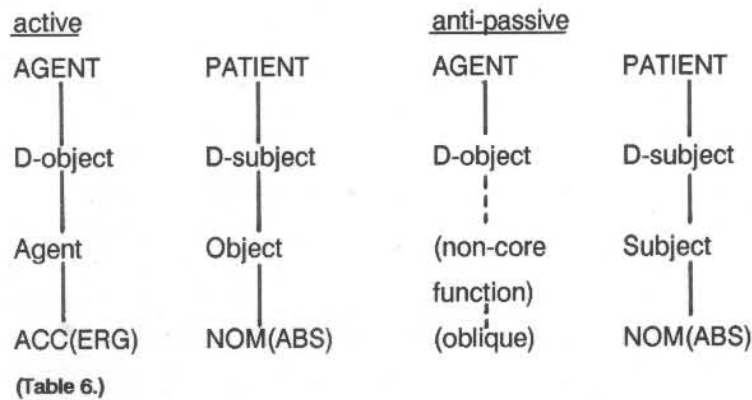


Table 5. shows that Sumerian must be a nominative language with type B case-marking (a morphologically ergative language), because only in this case comes about the actual distribution of Sumerian case-markers. Unfortunately, the question cannot be decided so easily. Consider another diagram:



The conclusion to be drawn from Tablet 6. is the converse of the one inferred on the basis of Tablet 5. Tablet 6. suggests that Sumerian is an ergative type B language. Needless to say that passive and anti-passive is understood in this context as the EH defines it.²⁶ Our findings repeat Marantz's point who states about a reverse situation that

"it should be clear that the fact that a verb form in a given language can be analyzed as a passive under the assumption that the language is ergative does not provide evidence that the language is in fact ergative. The verb form could be an antipassive and the language a nominative-accusative type B language".²⁷

A rather weak argument in favor of Sumerian's being an ergative type B language is Marantz's statement, saying that "Since antipassivization is marked within the current theory, the theory leads one to expect to find antipassivization in fewer languages than passivization, which produces completely unmarked verbs. In fact, antipassivization is extremely rare among the world's languages".²⁸ To settle the problem of syntactic ergativity in the sense of the EH thus needs other sorts of arguments. Such arguments could come from the analysis of control-like constructions and lexical reflexives as it is shown by Marantz and Levin.²⁹ The study of the Sumerian equivalents of these construction (should they exist at all) in syntactic terms is badly needed; a reliable analysis, however, is not available for the time being.

5.1.4 Sumerian in terms of Dixon's syntactic ergativity

As far as the Dixonian understanding of syntactic ergativity concerns, in our opinion, Sumerian cannot be characterized as syntactically ergative language, but for different reasons than those of Michalowski and others, because we do not mean by saying this that it would be an accusative language either. Syntactic ergativity vs. accusativity, as

²⁶See 5.1.1.

²⁷Marantz (1984), p. 201.

²⁸ibid., p. 150. The Sumerian data brought up and analyzed incorrectly by Huber do not seem to exclude the assumption that Sumerian is a nominative language.

²⁹Since passive and anti-passive construction cannot provide decisive evidence about the type of a particular language, it is the lexical reflexives that can prove the actual existence of ergative languages in the sense of the EH and therefore justify Marantz's theory. See ibid., pp. 211-18 and Levin (1987).

it is understood by Dixon, presupposes that there exists a position or constituent type at the level of grammatical functions (A, S, O) which is prominent in terms of morphosyntax. In English this constituent is the subject (A, S); in Dyirbal, a syntactically ergative language, it is the constituent marked by the absolutive case (S, O).³⁰ What matters is whether this presupposition is valid in the case of every language and particularly of Sumerian. To answer this question one should ask another one before, namely: What does it mean that a constituent is the subject of a clause? Keenan's influential paper asks exactly this simple question when it attempts "to provide a definition of the notion 'subject of' which would be universally valid in the sense that it would allow us to identify subjects of arbitrary sentences from arbitrary languages".³¹

Nevertheless, it is Schachter's analysis of Tagalog (a Philippine language) that lent importance to the research on subject properties. In two articles,³² Schachter demonstrates that "Philippine languages appear to divide the syntactic properties of the subject between the topic and actor".³³ This finding, as he states, "has significant insights to offer. For the syntactic properties of the Philippine topic and actor can be shown to follow to an appreciable extent from their SEMANTIC properties. And the syntactic properties of SUBJECTS can be shown to follow from THEIR semantic properties as well, once the set of subject properties is analyzed into its proper components, through use of the convenient prism provided by Philippine languages".³⁴ Using the Philippine data, Schachter classifies the subject properties into two groups: reference-related (correlated with the topic) and role-related (correlated with actor) properties.

In the following we will follow Shibatani's account of Philippine languages³⁵ because of his significant contribution to the study initiated by Schachter. Shibatani provides some more properties in addition to Schachter's list and also has some new suggestions concerning the status of subject in Philippine and other languages. But before

³⁰Cf. 3.5.1.

³¹Keenan (1976), p. 332. Keenan produces a so called Subject Properties List which presents four major categories of subject properties : A. Autonomy; B. Casemarking; C. Semantic Role; D. Immediate Dominance.

³²Schachter (1976), (1977).

³³Schachter (1977), p. 279.

³⁴ibid., p. 280 (capitals by Schachter).

³⁵Shibatani (1988).

presenting Shibatani's main results let us show some basic characteristics of Philippine languages.³⁶ In Philippine languages the verbal predicates include markers referring to a participant of the clause marked as topic:

- (5.5) *Ni-hatag si Juan sa libro sa bata*
 AF-give TOP(ACT) GOAL OBL
 'Juan gave the book to the child'
- (5.6) *Gi-hatag ni Juan ang libro sa bata*
 GF-give ACTOR (TOP)GOAL OBL
 'Juan gave **the book** to the child'
- (5.7) *Gi-hatag-an ang bata ni Juan sa libro*
 DF-give (TOP)RECIP ACTOR GOAL
 'Juan gave **the child** the book'
- (5.8) *I-hiwa ang kutsilyo sa manggani Maria*
 IF-cut (TOP)INST GOAL ACTOR
 'Maria cut the mango with **the knife**'

For a detailed description of Philippine languages one is referred to Shibatani's and Schachter's papers with references to the literature. For our purposes the four examples above are enough to demonstrate the most important characteristic of Philippine languages, namely the possibility to mark any but only one constituent of (almost) every clause as topic.

Unlike Schachter, Shibatani suggests that there are three nominal classes that are subject-like in Philippine languages: a. non-topic actors (Cf. (5.6), (5.7), (5.8)); b. non-actor topics; c. actor-topics (Cf. (5.5)). He advocates a prototype approach for describing the Philippine situation. According to this, the prototypical subject in Philippine languages is the nominal class which exhibits the full range of subject properties, namely the actor-topic. The subject properties are the following:

- "a. Semantic properties:
 Agent (A)
 Referential/definite (T)
- b. Formal (morphological) property:
 Marked by *ang* (or its equivalent form) (T)

³⁶All the Philippine examples are Cebuano and come from Shibatani (1988). Translations and notations are from this paper as well. In the translations the participant bolded corresponds to the topic of the clause. (AF = Actor focus; GF = Goal focus; DF = Directional focus; IF = Instrumental focus).

c. Syntactic properties:

- Triggers verbal focus marking (T)
- Relativizable (T)
- Can be questioned directly (T)
- Floats quantifier³⁷ (T)
- Functions as a controller and as a gap in the *samtang*[while]-clause (T)
- Raised out of the *nga* subordinate clause (T)
- Functions as a controller and as a gap in the coordinate structure and in the complement clause (T)(A)
- Can be made a sentence initial topic (T)(A)
- Deleted in imperatives (A)
- Controls reflexives (A)³⁸

Thus, in Shibatani's account, the prototypical subject combines two distinct types of saliency or prominence. The semantic role of actor is considered to be more prominent than any other roles, such as patient or recipient. The topic, however, is pragmatically the most prominent. But in Philippine languages it is possible that the different prominences are assigned to different constituents without demoting any of them (Cf. e.g. (5.6) above where the actor is *Juan* but the topic is the goal argument).³⁹ This finding could also influence our understanding of subject in more familiar languages such as English in which "the two prominent categories largely coincide, and when they not, as in a passive clause, agent prominence is lost or at least substantially diminished as a result of agent defocusing".⁴⁰ After all these observations, Shibatani's conclusion regarding the typology of Philippine languages should not take anybody by surprise: "As a whole, Philippine languages are found not to typologize straightforwardly either as accusative or ergative ...".⁴¹

In our view, there is a trait of Philippine-type languages which could be especially interesting from the perspective of Sumerian grammar, namely their voice system. The system called by many Philippinists voice correspond to the verbal focus-marking

³⁷Quantifier floating refers to the following phenomenon:

- a. All the children went to school.
- b. The children all went to school.

In English only the quantifier of subject can be floated.

³⁸*ibid.*, p. 125 ((49)). Properties marked by (T) are shared by topics; those marked by (A) are shared by actors. Properties marked by (T)(A) can be shared by either.

³⁹In English, for example, the agent gets demoted in a passive sentence by disappearing or by being marked by an oblique case.

⁴⁰*ibid.*, p. 119.

⁴¹*ibid.*, p. 135.

system that we have characterized very briefly and far from exhaustively above. For a more detailed description of Philippine voice systems the reader is referred to Shibatani (1988) and Klaiman (1991). Our immediate interest lies in the effect that the Philippine data have on the general understanding of voice.

Klaiman (1991) is a significant attempt to understand the common characteristics of voices like English passive and Tagalog pragmatic voice. As we have already mentioned, Klaiman distinguishes three types of voice systems: basic, derived, information-salience or pragmatic voice systems. In her account

"derived voice system amounts to a strategy for encoding the alternating assignments of different arguments of a verb to a single structural position, that of subject. Subject, moreover, cross-linguistically outranks alternative statuses of the same order (such as object, indirect object, oblique and so forth) in regard to a variety of formal properties ... Similarly, in systems with another kind of derived voice, antipassive, the core nominal status to which nominals are alternately assigned is the absolutive; and in these systems, it is the absolutive that manifests an analogous sort of superiority over other nominal statuses of the same order, such as ergative.⁴²

In Philippine-type languages, there is no subject relation comparable to the English one marked by nominative case or to the relation marked by absolutive case in Dyirbal. In these languages "voice alternations do not reassign nominals among relational statuses, i.e. among subject and nonsubject positions, but rather are sensitive to the information structure of the clause or sentence".⁴³ But there is a common characteristic of both systems, namely "that wherever voice alternations occur, they encode alternative assignments of arguments to positions which have superior ranking at some grammatically significant level of organization, be it that of relational structure, information structure or some other level".⁴⁴

⁴²Klaiman (1991), p. 261.

⁴³ibid., p. 262.

⁴⁴ibid., pp. 262-3. If this interpretation of voice is tenable, then voice systems can be diagnostic in determining which level or levels of grammatical analysis play prominent roles in the organization of a certain language. For example, even if somebody knew only the description of the derived voice system of English, (s)he would be able to predict that the level of grammatical functions have a paramount role in English grammar.

It is this sense that the possibility to encode the pragmatic salience of constituents by word order in Sumerian could be called voice. The obvious difference between the Philippine-type languages and Sumerian lies in the coding device. In other words, in Philippine type languages, pragmatic salience is encoded by case-marking and verbal prefixing; in Sumerian, by word order.

5.1.5 Subject and topic in Sumerian

The credit given to the notion of subject in its English- or German-like understanding has an apparent effect on the way some scholars analyze Sumerian. A clear example of this effect is Steible's interpretation of the passage from Eannatum 2 which has been shown to be misunderstood by Huber.⁴⁵ We think that it is worth looking further into the structure of this excerpt and of its immediate context more carefully.

- (5.9) [6] é-an-na-túm-da [7] elam saġ[!] e-dab₆-sìg
 [8] elam kur-ra-na bi-gi₄ [9] kiš^{ki} [sag] e- dab₆ -sìg
 [10] lugal aksak^{ki} [11] kur-ra-na[!](=KI) bi-gi₄
 (Eanatum 2, 6:6-11)

Steible translated the passage as follows: "Vor E'annatum hat Elam gezittert; Elam hat sich in sein Land zurückgezogen; Kis hat vor (ihm) gezittert; der König von Aksak hat sich in sein Land zurückgezogen".⁴⁶ His commentary to 6:6-8 gives the following explanation for the translation: "Gegen E. Sollberger, IRSA 59 bringt die hier vorliegende Übersetzung zum Ausdruck, daß kein Wechsel des Subjekts zwischen Z. 7-8 und Z. 9 erkennbar ist".⁴⁷ In the following note on 6:8;11 he adds that "Die Bedeutung von gi₄ mit Lokativ 'sich in etwas zurückziehen' ist hier der ebenso möglichen Wiedergabe 'er (=E'annatum) hat (den König von Aksak/Elam)^{sic!} zurückgeschlagen, zurückgewiesen' ... vorgezogen, um einen Subjektwechsel zu vermeiden".⁴⁸ In our opinion, Steible's translation and commentaries are disputable for several reasons. Firstly, the translation does not correctly take account of the verb form **bi-gi₄**, as we have already argued about when criticizing Huber. Secondly,

⁴⁵Cf. fn. 25 above.

⁴⁶Steibel (1982), I., p. 150.

⁴⁷ibid., II., p. 69 (note 16).

⁴⁸ibid., II., p. 69 (note 17).

and in this case more importantly, the logic behind his translation and commentaries is flawed in taking for granted that Sumerian syntax must be organized in a similar way as German or English syntax. (5.10) represents Steible's translation⁴⁹:

- (5.10) (l. 6-7.) NP¹_{com} NP²_{erg} verb_{tr.}
 (l. 8.) NP²_{abs} NP_{loc} verb_{intr.}
 (l. 9.) [NP¹_{com}] NP³_{erg} verb_{tr.}
 (l. 10-11) NP⁴_{abs} NP_{loc} verb_{intr.}

His comments suggest that he wanted to avoid a translation which would look as:

- (5.11) (l. 6-7.) NP¹_{com} NP²_{erg} verb_{tr.}
 (l. 8.) [NP¹_{erg}] NP²_{abs} NP_{loc} verb_{tr.}
 (l. 9.) [NP¹_{com}] NP³_{erg} verb_{tr.}
 (l. 10-11) [NP¹_{erg}] NP⁴_{abs} NP_{loc} verb_{tr.}

that is: "Elam trembled before Eanatum; He drove the Elamite back to his own land. Kish trembled before Eanatum; He drove the king of Akshak back to his own land".⁵⁰ What Steible's analysis implies is that it is only constituents with the grammatical function of subject⁵¹ that could be shared among successive clauses in Sumerian; should the common participants have different functions in the subsequent clauses, it would be unusual and has to be "erkennbar" in some way. His analysis does not take account of the position of the participant marked by comitative in l. 6, namely that it precedes the grammatical subject. It does not explain either why **elam** should occur in l. 8, being the case that it also functions as subject in l. 7. Moreover, it breaks up a discourse unit into almost dissociated clauses.

We wonder what would happen if one assumes that in the case of (5.11) there is a level of grammatical analysis on which the participant NP¹ performs a similar role in all the four clauses concerned:

⁴⁹The participants in square brackets stand for so called empty pronouns (understood but not overt constituents). Empty pronouns will be dealt with below in detail (Cf. 5.2.1).

⁵⁰Cooper (1986), p. 42 (La 3.5).

⁵¹He means both A and S by subject.

- (5.12) (l. 6-7.) NP¹_{com}(Topic) NP²_{erg} verb_{tr}.
 (l. 8.) [NP¹_{erg}](Topic) NP²_{abs} NP_{loc} verb_{tr}.
 (l. 9.) [NP¹_{com}](Topic) NP³_{erg} verb_{tr}.
 (l. 10-11) [NP¹_{erg}](Topic) NP⁴_{abs} NP_{loc} verb_{tr}.

We must emphasize that, in the case of Ean 2 6:6-11, this assumption is supported by the grammatical analysis of the verb form **bi-gi**₄ as a transitive verbal form.

The conclusion we would like to draw on the basis of Philippine-type languages takes up the suggestion we made in 3.5.3, namely that if in Sumerian, Agent and Subject grammatical functions, as we assume, are not associated with pragmatic salience, then there is no prominent constituent similar to English Subject or Dyrbal Absolute in Sumerian. Consequently, Sumerian syntax is neither accusative neither ergative in the Dixonian sense of the term.

5.2 Pro-drop in Sumerian

5.2.1 Pro-drop in linguistic theory

Apart from possible theoretical considerations like the one presented above, a verification of a Dixon-type ergative trait of Sumerian syntax is doomed to failure because Sumerian belongs to languages which are characterized as pro-drop languages.⁵² This entails that the various tests frequently used for determining syntactic ergativity cannot be applied to Sumerian because it is not possible to tell whether the lack of a given participant is due to syntactic or to pragmatic or semantic factors.

The term pro-drop comes from Chomsky's Government and Binding theory and originally referred solely to the zero pronominalization of the Subject in clauses containing a finite verb. The first obvious question concerning the pro-drop phenomenon relates to the linguistic feature(s) or parameter(s) which allow(s) languages to have finite sentences without an overt subject. One type of explanation concerning the obvious difference between languages like English and Italian which allows clauses without an overt subject makes use of the notion recoverability. This explanation is based on the observation:

⁵²Cf. Attinger (1993), p. 152 (§ 94).

"that the possibility of pro drop in a language often correlates with the existence in it of a rich inflectional morphology, in particular a rich system of agreement. According to this theory, ..., Italian and Spanish allow a pronoun to drop from the subject position of a tensed clause because there is a rich system of verb subject agreement in these languages. The agreement marking on a verb is rich enough to determine, or recover, the content (i.e. reference) of a missing subject; therefore, such a missing subject is allowed".^{53;54}

The 'Taraldsen generalization' seems to be borne out by Sumerian not only in the case of subject but of other participants. Any NP the case-mark of which has a corresponding element in the prefix-chain can be missing from a clause. There are two nominal cases in Sumerian which are not represented in the prefix-chain: the genitive and the equative. In the case of the equative the lack of ample examples hinder a definitive statement but as far as the genitive is concerned it is clear that Sumerian does not allow a NP in genitive case to be missing: an overt pronoun must always be present⁵⁵:

⁵³Huang (1984), pp. 534-5. This observation and the explanation deduced from it goes back to Taraldsen (1978). Since I had no access to this work my description follows Huang's.

⁵⁴The explanation solely in terms of agreement however is bound to run into difficulties because of the existence of languages like e.g. Chinese in which moreover the object also could be missing. In Chinese there is no subject or object agreement and yet it seems to be a pro-drop language. Jaeggli and Safir suggest another explanation which seems to overcome the problems caused by the languages like Chinese. They offer the *Null Subject Parameter*: "Null subjects are permitted in all and only languages with morphologically uniform inflectional paradigms" (Jaeggli -- Safir (1989), p. 29.). They define morphological uniformity as: "An inflectional paradigm **P** in a language **L** is morphologically uniform iff **P** has either only underived inflectional forms or only derived inflectional forms" (ibid., p. 30). According to the authors, this parameter correctly predicts that English cannot be a pro-drop language while Chinese must have that feature. Unfortunately, there seems to be no explanation why this parameter should be valid and the authors do not have any explanation either: "Unfortunately we do not have any answer to the natural question that arises; we have no explanation to offer as to why (42) [= *Null Subject Parameter*] should be a property of natural languages" (ibid. p. 41, fn. 20). In Huang's account of Chinese the missing objects are in fact zero-topics but not zero-pronouns; that is to say, only topicalized objects can be dropped. He connects this characteristic of Chinese to a so called 'discourse-oriented vs. sentence-oriented' parameter. According to this parameter English is classified as 'sentence-oriented' which explains why English finite sentences always must contain subject and object.

⁵⁵This finding is not as natural as it could seem to be. According to Li -- Thompson (1979), in Chinese even the possessive pronoun could be missing from a clause (Cf. e.g. (1)g in ibid., p. 313.).

- (5.13) [14] é-a ní-gal-bi [15] kalam-ma mu-ri [16] ka-tar-ra-bi
 [17] kur-re ba-ti (Cyl A 29:14-17)
 'The house, its great awe settles upon the country.
 Its glory reached the highland'

In (5.13) *é* "temple" is referred to by an overt pronoun, despite the fact that it is topicalized in the previous line. Cf. also (5.17) below, in which case the obligatory presence of a possessive enclitic in l. 11 is still more striking inasmuch as there is no overt element referring to *é* in the previous lines.

5.2.2 Empty pronouns in Sumerian

In the following we will give up using the term pro-drop because of its theoretical burden. Instead we will use the term empty pronoun (henceforth, EP). We understand the notion of EP merely as a technical aid which helps to describe the phenomenon that in Sumerian there are, in most cases, two options for a participant to be present in a finite clause: i. as an overt NP or pronoun; ii. as a participant marked supposedly only by elements of the verbal prefix-chain. Our main interest lies in the circumstances and conditions which license the use of EPs in Sumerian.

The first important question which arises is that whether there is any kind of structural constraint on the occurrence of EPs as it happens in the case of English where in various structures only the subject can be missing.⁵⁶ In Sumerian the use of EPs seems to be more widespread as the following examples will reveal:

- (5.14) [12] zaḥ-gi-bar a gal-la dù-a-me [13] zì sà mu-sì-ni-gál
 (Cyl A 3:12-13)
 '([You]_i), who are ...-wheat planted at high water)_i,
 provide [me] with life'
- (5.15) [13] é-níg-ga-ra-na kí-sib bí-kúr [14] ġis im-ma-ta-ġar
 (Cyl A 7:13-14)
 '[He]_i broke the seal on his_i storehouse_j,
 [he]_i obtained wood from [it]_j'

⁵⁶See examples (3.11-14).

- (5.16) [22] \check{su} -nir ki \check{ag} -ni mu-na-d \check{m} [23] mu-ni im-mi-sar
(Cyl A 7:22-23)
'[He_i] manufactured his_j beloved emblem_k [for him_j]
and [he_i] wrote his_j name [on it_k.]'
- (5.17) [8] \acute{e} lugal-na zi-d \acute{e} - $\acute{e}s$ mu-d \acute{u} [9] sipa zi g \acute{u} -d \acute{e} -a
an ki im-da-mu₂ [10] u₄-sakar gibil-gin₇ men b \acute{i} -fl
[11] mu-bi kur-s \acute{a} -s \acute{e} (12) pa b \acute{i} - \acute{e} (Cyl A 24:8-12)
'[He_i] has built his_j king's temple_j faithfully;
the trustworthy shepherd, Gudea_i made [it_j] grow with heaven
and earth; [he_i] made [it_j] wear a crown like the new
moon; [he_i] made its_j name reach the innermost mountains'
- (5.18) [24] \acute{e} nsi-ke₄ $\check{g}\acute{a}$ -t \acute{u} m-du₁₀-s \acute{e} ki-n \acute{a} -a-ni ba-de₆
[25] ninda $\check{g}\acute{i}s$ b \acute{i} -tag a-s \acute{e} d₇ \grave{i} -d \acute{e} [26] k \acute{u} $\check{g}\acute{a}$ -t \acute{u} m-du₁₀-ra
mu-na- $\check{g}\acute{e}$ n (Cyl A 2:24-26)
'The ensi_i took his sleeping place to G.; [he_i] offered
bread, and [he_i] poured fresh water; [he_i] went to Holy G.'

In most of the examples above the first sentence contains an overt NP with which a latter EP is co-referent. One can notice that there seems to be no restriction concerning the case of these EPs in the successive sentences:

- (5.14) [12] O_i(Abs.) [head of a rel. clause] -> (zah-gi-bar a gal-la d \acute{u} -a-me)_i(Erg.)
(5.15) [13] \acute{e} -n \check{g} -ga-ra-na_j(Loc.) -> [14] O_j(Abl.)
(5.16) [22] \check{su} -nir ki \check{ag} -ni_k (Abs.) -> [23] O_k(Loc.)
(5.17) [8] \acute{e} lugal-na_j(Abs.) -> [9] O_j(Abs.) -> [10] O_j(Loc.-Term.)
(5.18) [24] \acute{e} nsi-ke_{4i}(Erg.) -> [25] O_i(Erg.) -> [25] O_i(Erg.) -> [26] O_i(Abs.)

This finding seems to imply that the licensing of EPs in Sumerian has rather something to do with pragmatic factors instead of strict syntactic constraints. EPs in Sumerian behave as pronouns in English as it can be seen from the translations. Therefore, the infixes of the prefix-chain are not agreement markers in the classical sence. Rather they seem to be bound or cliticized pronouns.

As far as the circumstances and conditions which allow the use of EPs in Sumerian are concerned an obvious condition appears to be the referential definiteness. Since "a speaker marks an NP as definite when he assumes that the hearer can uniquely identify the referent of the NP"⁵⁷ an EP must be definite without doubt, otherwise a clause containing EPs would be unintelligible for the hearers/readers. The lack of an element functioning as definite article in Sumerian could be related to the use of EPs. An EP also appears to be referential, that is it must refer to an actual entity in the world. Non-referential NPs seem to be not missing from the sentence:

- (5.19) [25] igi hús-a-^Ygú₁₀ kur-re nu-um-íl
 [26] da bad-a-^Ygú₁₀ lú la-ba-ta-è (Cyl A 9:25-26)
 'No country can bear my terrible look
 no-one can escape from my wide opened arms'

The word **lú** cannot be replaced by an EP because in that case the hearer/reader would automatically look for a possible referent from the previous discourse. It is the distinction between referential and non-referential that seems to play a role in allowing constituents to move out from a relative clause:

- (5.20) [60] alan [61] gù-dé-a [1] énsi [2] lagas^Yki-ka
 [3] lú é-ninnu [4] ^dnin-^Ygír-su-ka [5] in-dù-a
 [6] lú é-ninnu-ta [7] im-ta-ab-è-è-a (St B 7:60-8:7)
 '(the statue of Gudea, the ensi of Lagas, the man who
 built Ningirsu's Eninnu), anybody who removes [it]_i from the Eninnu'

In (5.20) the head of the second relative clause, **lú**, is a non-referential NP. The construction referring to Gudea's statue, however, is definite and referential, in other words, it outranks the head in terms of discourse prominence. Finally, an EP must also carry a given piece of information that is it must refer to "a participant already established in the discourse".⁵⁸ Table 7. summarizes the pragmatic features of EPs.⁵⁹

⁵⁷Foley -- van Valin, op. cit., p. 284.

⁵⁸ibid., p. 286.

⁵⁹In the case of overt NPs, either from the opposite features can be valid.

	Overt NP	EP
definite	yes	yes
indefinite	yes	no
referential	yes	yes
non-referential	yes	no
given	yes	yes
non-given	yes	no

(Table 7.)

What all these features amounts to is that an EP must have a rather high prominence in terms of discourse or pragmatics. The same does not always hold in terms of semantic saliency. Consider, for example, (5.17) where in Cyl A 24:9 the actor is present in the clause but the patient (=object) is an EP. In other words, the two kinds of prominence are assigned to different participants. In the case of (5.17) it is also noticeable that although in l. 8 the subject (= Gudea) is an EP, in l. 9 it is referred to by an overt NP. Of course, one should not forget that the Gudea-text is a poetic text.⁶⁰ But a not improbable interpretation, which takes into account pragmatic factors, could result in a translation different from the one provided in (5.17):

- (5.21) 'He_i has built his king's temple faithfully; it was made to grow with heaven and earth by the trustworthy shepherd, Gudea_i; it was made to wear a crown like the new moon by him; its name was made to reach the innermost mountains by him'

Unfortunately, one cannot avoid demoting the actor in English by marking it with an oblique case with the result that the sentences could sound clumsy in this way. It might be that our proposed interpretation in this particular case is not plausible, but the main point suggested still does appear to hold, namely that in Sumerian, discourse and semantic prominence can be assigned to different constituents without morphosyntactic changes on the verb form. This assumption repeats the point we made in 3.5.3.

⁶⁰But cf. (5.6) where **elam** occurs in l. 8 despite its appearance in the previous line. In this case too the pragmatic prominence is assigned to another participant, namely to the actor (= Eanatum).

5.3 Topical NPs in Sumerian

5.3.1 The position of non-referent constituents

Before considering the role of word order, we should again refer to the limitations of studying Sumerian grammar. Beside word order, many languages use intonation and stress for coding pragmatic features. One should be aware that, as a consequence of the writing system, this suprasegmental level is completely lost for us. Thus we could perceive only information packaging devices coded by word order and there might be many of such devices not even noticed.

Recall that in 2.1 above, in connection with topicality, we referred to the information status of constituents. It was assumed that the information status of NPs depends both on inherent and on contextual properties and that constituents with a different information status are likely to be topics in a different extent. In Chapter 2., the morphologically marked anticipatory genitive made it easy to notice an alternation of word order. In the case of constituents other than definite genitive constructions, it is more difficult to make categorical statements on word order yet one can recognize some tendencies.

The first construction worth mentioning is the compound verb (henceforth, CV). Sumerian CV consists of a verbal base and a NP, which is usually cross-referenced as the Object. The nominal and the verbal constituent form a semantic unit. A satisfying definition of CVs, however, has not yet been proposed because CVs are not different from other transitive verbs in terms of morphological marking.⁶¹ There is one peculiarity of CVs

⁶¹Cf. Sollberger (1952), pp. 41-42. According to Postgate, "the most specific criterion for distinguishing a compound verb from a 'simple' one is the position of the noun with which the verb is compounded" (Postgate (1974), p. 35 (4.1.1)). Then he adds that "there are obviously phrases or usages where the simple verb verges on the compound, and it is impossible in all cases to make a definite decision" (ibid., pp. 35-36 (4.1.2)). Thomsen's description reflects similar uneasiness: "Grammatically the compound verbs do not differ substantially from other verbs. The object of the compound verb usually stands immediately before the verb, or possibly separated by ... [an] adjective or adverb ... This is of course the normal position of the object, but with other verbs the word order is more free. The criterion whether a verb must be considered as compound verb is fairly vague, it is usually not based entirely on grammatical reasons, but rather on the meaning of the verb" (Thomsen (1984), p. 269 (§ 528)). Both authors seem to be stuck by the lack of morphological peculiarity of compound verbs. As it can be inferred from the main text, in this case too, there exists a level of grammatical description on which the definition is possible. If Sumerian were a living language it would be easy to test whether a given verb is compound. Speakers should be asked to put an adjective after the noun standing in front of a verb. If it is interpreted as an adverb modifying the predicate, the construction Noun + verb is a compound verb.

that could be especially interesting in connection with topicality in Sumerian: the nominal constituent of a CV is characteristically non-referential. The function of adjectives put after the Noun also evinces this. These adjectives do not modify their head, namely the Noun, they function as adverbs modifying the verb. Cf., for example, (4.77) = (5.22):

- (5.22) [2] ^dnin-^hur-sa^g-ke₄ igi zid ba-si-bar (Cyl B 13:2)
'Ninhursag looked at it (= the temple) favourably'

The adjective **zid** "right, true" functions here as an adverb.⁶² The nominal constituent of CVs characteristically cannot move from their position in front of the verbal form. In other words, it cannot be topicalized. This finding implies that, in Sumerian sentence, the nearer a NP is to the verb the less topical it is. In the case of CVs, one could raise as an argument against our interpretation that the position of the nominal constituent is the consequence of its forming a semantic unit with the verb. However, there are other sort of examples in favour of our suggestion. Consider the following examples:

- (5.19=23) [25] igi ^hus-a-^gu₁₀ kur-re nu-um-fl [26] da bad-a-^gu₁₀ lú la-ba-ta-è
(Cyl A 9:25-26)
'No country can bear my terrible look no-one can escape
from my wide opened arms'
- (5.24) [17] ^gis^gu-za gub-ba-bi lú nu-kúr-e (Cyl B 23:17)
'Nobody will change the thron set up for it'
- (5.25) [5] ^dusu-bi munus-e nu-fl (St B 4:5)
'No women carried its (= the temple) corvee basket'

The common characteristic of these sentences is that the subject stands immediately before the verb. We think that, like in the case of CVs, here the subjects' position is also due to their being non-referential.

⁶²Consequently, in sentences like, for example (3.59) [2] ^lagaš - e me gal-la [sa^g] an-sè mi-ni-lb-fl (Cyl A 1:2) 'Lagas has been made to raise head until the sky in great offices', **an-sè** can not function either as sentence adverb (e.g., "until the sky"). It must modify the verb.

- (5.26) [5] ki-sur-ra [6] lagas^vki-ka [7] lú di tuku [8] ki-nam-érim^vsè
 [9] lú nu-DU (St B 5:5-10)
 Among the borders of Lagash, no litigant made anybody to go to
 the place of oath-taking.

In (5.26), the non-referential object (or rather the causee of an intransitive verb) is placed before the verb. It is preceded by a sentence adverb and a generic subject.

- (5.27) [17] é-ǵá ní gal-bi kur-kur-ra mu-ri [18] mu-bi-e an-zà-ta kur-kur-re gú
 im-ma-si-si [19] má-gan me-luh_h-ha kur-bi-ta im-ma-ta-e₁₁-dè (Cyl A 9:17-19)
 'My temple, its great awe settles upon the country, to its (= the temple's)
 name, all the countries, even from heaven's border, will gather; [to it
 (= its name)] Magan and Meluhha will come down from their countries'

In (5.27), in l. 17, the NP **é-ǵá** "of my temple" is the rectum of an AG. It stands at the beginning of the sentence, therefore it is topicalized. In l. 18, the topicalized NP **mu-bi-e** "to its name" is case-marked with a locative-terminative **-e**. It refers to the temple in the previous line and is cross-referenced with a **ba-** in the verbal prefix-chain. The Subject of the clause **kur-kur-re** is an indefinite, plural NP. It stands next to the nominal constituent of the compound verb **gú -- si** and is preceded by an expression which is case-marked with the ablative **-ta** and functions as a sentence adverb. In the subsequent line, the topic remains the same but is only referred to by the prefix **ba-** in the prefix-chain. The Subject of the sentence is two proper nouns. This seems to result in an alternate word order compared to the preceding clause, since in l. 19, the Subject comes before the NP in ablative case.

5.3.2 Topical constituents in sentence initial position

In the previous subsection, we considered examples in which the position of a constituent was due to its being less topical. In the following examples, it is the clause initial position of constituents that can be related to their information status. First consider again (5.9=28):

- (5.28) [6] é-an-na-túm-da [7] elam saġ^l e-dab₆-sìg
 [8] elam kur-ra-na bi-gi₄ [9] k^lis^{ki} [sag] e- dab₆ -sìg
 [10] lugal aksak^{ki} [11] kur-ra-na^l(=KI) bi-gi₄
 (Ean. 2, 6:6-11)

In l. 6. of this example, the NP case-marked with a comitative **-da** stands in a clause initial position. As we have argued above, the same participant remains the most topical constituent in the subsequent clauses. Consequently, it is referred to only by a bound pronoun or agreement marker.⁶³ There are more examples in which the most topical constituent is marked by the sentence initial position:

- (5.29) [14] é-a ní-gal-bi [15] kalam-ma mu-ri [16] ka-tar-ra-bi [17] kur-re ba-ti
 [18] é-ninnu ní-bi kur-kur-ra túg-gin₇ im-dul₄ [1] é lugal-bi ħi-li-a ì-dù
 [2] ^dnin-gis^v-zi-da-ke₄ [3] ki gal-la bí-dù [4] gù-dé-a énsi
 lags^{ki}-ke₄ [5] temen-bi mu-si (Cyl A 29:14-30:5)

The temple, its great awe settles upon the country, its glory reached the highland. Eninnu, its awesomeness like garment covered all the lands. The temple was built in jubilation by its king. It was built on a great place by Ningishzida. Gudea, the ensi of Lagash filled up its foundation terrace'

In ll. 29:14-18 of (5.29), the topicality of the words **é** and **é-ninnu** results in an anticipatory genitive putting them into sentence initial position. We assume that in l. 29:16 the topic remains the same because it can be referred to by a pronominal enclitic. In l. 30:1, the topicality of the Object **é** "temple" is marked again by its sentence initial position. In the subsequent lines, the topic remains the same and is referred to by bound pronouns (in l. 30:3 by an agreement marker, in l. 30:5 by a possessive enclitic). The topicality of **é** "temple" in l. 30:1 is also reflected by the NP **lugal-bi** "its king". The alternate wording could be ***é-ni lugal ħi-li-a ì-dù** 'the king built his temple in jubilation'. This option is not only theoretical:

⁶³Cf. the scale (2.7) in 2.1.1.

- (5.30) [8] u₄ ^dnin-ǵír-su [9] lugal-a-ni [10] é ki-áǵa-ni [11] é-ninnu
 [12] mu-na-dù-a (St G 6:8-12)
 'When for Ningirsu, his king, he (= Gudea) built
 his (= Ningirsu's) beloved temple, the Eninnu'

How can we thus account for the difference between **é / lugal-bi** 'the temple / its king' and **lugal / é-ni** 'the king / his temple'? Our suggestion is that the different wordings reflect the relative topicality of the two NPs. When it is the king that is specified in respect of its relation to the temple (**lugal-bi**), the temple is more topical as in the case of I. 30:1 in (5.29).⁶⁴ In the converse case, as in (5.30), it is the king that is more topical.⁶⁵

The topicality of the NP **é** "temple" is marked by sentence initial position in the following example as well:

- (5.31) [1] é-e ^dasar-re ^vsu si ba-sá [2] ^dnin-ma-da-ke₄ na-ri mi-ni-ǵar
 [3] lugal ^den-ki-gé eš-bar kíǵ ba-an-sum [4] ^dnin-urudu ^visib maḥ
 eridu^{ki}-ga₁₄-ke₄ [5] na-izi ba-ni-si (Cyl B 4:1-5)
 'The temple, Asar performed the maintenance for it. Ninmadak
 gave advises concerning it. King Enki provided the portent seeking
 for it. Ninurudu, the chief isib-priest of Eridu has filled it with incense'

In II. 4:2-5, the temple is referred to solely by elements of the prefix-chain. In (5.32), the second object precedes the Agent:

- (5.32) [16] gù-dé-a en ^dnin-ǵír-su-ke₄ [17] igi zid mu-si-bar (Cyl A 23:16-17)
 'Gudea, lord Ningirsu looked advantageously at him'

Compare (5.32) with (5.33) = (4.82):

- (5.33) [3] ^den-lil-e en ^dnin-ǵír-su-sè igi zid mu-si-bar (Cyl A 1:3)
 'Enlil looked advantageously at Ningirsu'

16:7. ⁶⁴Cf. also (4.1) = Cyl A 1:10, 9:13, 17:20, 27:22; (2:16) = (4:29) = Cyl B 5:1-2,

⁶⁵Cf. also St B 7:26; E 2:9, 16, 6:8-12, 13-17; G 5:3-7; Gudea 37, 57, 75.,

In the case of (5.33), in the subsequent lines of the texts, Enlil but not Ningirsu remains the topic. In the following example again, the second object is in the sentence initial position:

- (5.34) [1] gù-dé-a en ^dnin-^gír-su-ke₄ [2] nam dùg mu-ni-tar (Cyl A 24:1-2)
 'Gudea, lord Ningirsu decided fate favourably for him'

One can also mention the numerous votive and statue inscriptions beginning with a NP in dative case as examples of topicalization. In the subsequent sentences, these texts contain many verbal forms with a dative infix in their prefix-chain. The referent of this infixes correspond to that of the text initial NP. The following examples also contain topicalized NPs case-marked with the dative case **-ra**:

- (5.35) [18] gù-dé-a sà ^dnin-^gír-su-ka [19] ud-dam mu-na-è (Cyl A 12:18-19)
 'For Gudea, the intention of Ningirsu was clear like the daylight'

- (5.36) [13] énsi é-ninnu dù-ra [14] ní^g gal-gal-e^v su mu-na-ab-íl
 (Cyl A 16:13-14)
 'For the ensi, builder of Eninnu, great things offered themselves'

Since the sentence initial position of these NPs is not obligatory, one must conclude that their position is the consequence of their pragmatic function.⁶⁶

5.4 Overview

The first part of the chapter addressed the problem of syntactic ergativity in Sumerian. We considered syntactic ergativity both in the sense used by Dixon and in terms of the EH. As far as the former is concerned, we proposed that this understanding of syntactic ergativity is not pertinent to Sumerian, because the language does not have a constituent as prominent in morphosyntactic terms as, for example, the subject (A/S) in English. In Sumerian, similarly to the Philippine-type languages, pragmatic and semantic salience can be assigned to different constituents without such morpho-syntactic

⁶⁶See, e.g., St B 6:65-89; (4.103) = Cyl A 16:7-12) for examples where the NP in dative case follows the Agent or the Object or both.

processes as passive or anti-passive. Regarding the ergativity of the EH, we noticed that the passive construction proposed in Chapter 3. can provide evidence neither in favour nor against the classification of Sumerian as syntactically ergative. Nevertheless, a nominative type B analysis seems to be more probable. We concluded that only the study of control constructions and/or lexical reflexives could decide the problem once for all.

In addition to Chapter 2., the findings of the second part of the chapter, provided more evidences in favour of our assumption about the encoding of pragmatic functions. We examined verbal forms with non-referent constituents. The common characteristic of these forms was that non-referential NPs tend to occupy a position near to the verb. Other sentences with pragmatically salient constituents demonstrated an opposite tendency: topical NPs can be found in a sentence initial position.⁶⁷ On the basis of these findings, we concluded that Sumerian cannot be considered as a language with free word order. The order of various constituents before the verb depends on and therefore codes their pragmatic salience and is not associated with the syntactic functions, which are coded by the case-markers.

⁶⁷Cf. Falkenstein (1959), p. 51 (§ 36b): "Die betonteste Stelle ist der Satzanfang, je weiter ein Glied davon entfernt zu stehen kommt, desto geringer ist der auf ihm liegende Nachdruck." Falkenstein terms like "betonteste Stelle", "Nachdruck" cannot be considered as linguistic terms, since neither their function nor their exact meaning is defined.

6. Conclusions

6.1.1 The present study aimed to show that pragmatic functions play such significant role in the grammar of Sumerian that certain characteristics of the language can be accounted for only by referring to them. The two phenomena of Sumerian grammar treated in connection with pragmatic functions are the anticipatory genitive and the lack of a specifically passive morpheme.

Chapter 1. describes the Sumerian genitive construction. First, we applied the X-bar theory of recent generative grammar to Sumerian noun phrases and generative constructions. This application had the following results: (i) Sumerian possessive suffixes are in complementary distribution with noun phrases, i.e. syntactically they should be regarded as words. (ii) In contrast to earlier views, the genitive marker shares its rank with other cases. As a consequence of (i), it was established that possessive suffixes are in fact enclitics. The same was proposed about the plural marker and the various case-markers. It was also claimed that problems concerning the definition of *word* in Sumerian can be realized and dealt with, although not solved unanimously, if one recognizes the clitic status of these three elements.

Taking Jagersma's "compounding genitive" as a starting point, we ascertained the existence of two basic types of genitive constructions in Sumerian. We proposed to call these two types definite and indefinite genitive respectively. The terms come from a grammar of Turkish and our proposal based on formal and functional similarities. As far as the formal characterization is concerned, the similarity lies in that indefinite genitives result in a word-level category (N) in both languages as opposed to definite genitives which are phrases (NP). Regarding the function, indefinite genitives are used to express a sort of attribution, while definite genitives mark possession both in Turkish and in Sumerian.

In Chapter 2., we described the anticipatory genitive. We claimed that, formally, AG is a left dislocation of the rectum of a definite genitive. The function of AG was identified as topicalization, that is the rectum of AG becomes the topic or one of the topics

of the sentence. In connection with various hierarchies in terms of information statuses of NPs, we demonstrated that AG comes into being because the regens of the genitive construction occupies a less prominent position on a hierarchy than the rectum.

6.1.2 Chapter 3. describes a backgrounding passive in Sumerian. The function of this passive is to defocus or background the former Agent. The backgrounding manifest itself in the disappearance of the Agent and its marker from the sentence and the verbal prefix-chain respectively. At the same time, the former Object becomes the Subject of a derived intransitive verbal form. We pointed out that our analysis coincides only seemingly with the traditional understanding of passive in Sumerian. According to the latter, there are no passive only intransitive verbal forms in Sumerian because the Object and the Subject is marked with the same set of suffixes on the *hamtu* verbal base and because the lack of a specifically passive morpheme. We raised as an argument against this interpretation that intransitivity is only one of the many corollaries of passivization and that, being biased towards morphology, the traditional descriptions fail to take into account other levels of grammatical description. Having found that, in terms of semantic and syntactic properties, Sumerian passive is similar to the defocusing passives of other languages, we pointed out that, instead of denying the existence of passive in Sumerian, one should explain what other characteristics of the language allow it to dispense with the morphological marking of the passive. We suggested that the lack of a specifically passive morpheme can be explained in the following way: Passivization in many languages (e.g., English) corresponds to two independent functions, namely backgrounding and foregrounding. But in Sumerian, backgrounding and foregrounding are associated with two different sorts of grammatical changes. Backgrounding is brought about by deletion of the Agent marker before the verbal base. The Subject function assigned to the former Object signals that the Subject is not agentive. Foregrounding (i.e. assignment of pragmatic salience), however, is signalled by moving a constituent to the beginning of the sentence. This process, called topicalization is not marked on the verb, therefore, no morphological marker is needed to signal that the pragmatic salience is assigned to another constituent.

The main objective of Chapter 4. was to characterize the various uses of the prefix **ba-** because this prefix occurs very often in passive forms. The earlier descriptions can be said unsatisfactory in two respects. First, although many of the descriptions connects the prefix **ba-** with a particular feature of the verb or its participants (non-agentive,

intransitive), yet they can not tell why other verbal forms with similar characteristics typically do not use the prefix. Second, no attempt was made to explain why it is the case that there are passive forms without **ba-**. Our description distinguished three uses of **ba-**:

i. The prefix is construed with a case-marked NP. In most cases, this NP is case-marked with a locative-terminative **-e**; less often, with a locative **-a**. In the former case, the function of **ba-** is more or less similar to that of the dative infix but the referent of the cross-referenced NP must be inanimate. We also found examples of compound verbs in which the slot of O_2 infixes is occupied with a locative infix. In this case, it is the **ba-** that is construed with the second object of the compound verb. This NP is also case-marked with a terminative-locative **-e**.

ii. It is possible to identify a function of **ba-** when it marks that the movement or action denoted by the verb proceeds away from the speaker. We suggested that the occurrence of **ba-** before the ablative infix **-ta-** is also due to this function.

iii. In its third function, the prefix **ba-** is associated with the middle voice. Following Lyons and Klaiman, we assumed that the most important function of middle voice is to express the affectedness of the grammatical subject (A, S). We claimed that the **ba-** is used in passive forms because the function of middle **ba-** is naturally compatible with the meaning of passivity, since the Subject of a passive verbal form is typically the original affected participant, that is, the Object.

Regarding the passive forms without **ba-**, we identified three types of passive verbal forms which do not use the prefix:

i. The verbal form contains the animate dative infix. In the case of these forms, one can assume that the passive Subject is not the participant affected by the situation since there is another participant involved towards whom the action can be directed.

ii. Passive precative forms typically does not have **ba-**. A precative form, as being a wish, implies that the action denoted by the verb should happen in the future. It could be pertaining that, in Classical Greek, passive has distinct inflexions in the future tense.

iii. Passive compound verbs are usually not prefixed with **ba-**. In compound verbs the nominal part of the verb becomes the grammatical subject, but since it is not referential, it can not be affected either.

In the first part of Chapter 5., we considered the problem of syntactic ergativity in Sumerian. There exist two different understanding of syntactic ergativity. Dixon interprets it at level of grammatical functions. In his account, syntactic ergativity entails that

certain syntactic rules of a given language operates on an S/O pivot. We investigated the Dixonian sense of ergativity in Sumerian from the perspective of the Philippine-type voice system. In Philippine languages, there is no constituent equivalent to the Subject of English. The subject properties are divided between the topic and the actor. Consequently, these languages cannot be classified either as accusative nor as ergative in terms of syntax. We suggested that a similar state of affairs exists in the case of Sumerian because, in this language also, pragmatic and semantic salience can be assigned to different constituents without morphological marking. It was mentioned that the verification of the ergative trait of Sumerian syntax is also hindered by the fact that Sumerian is a pro-drop language. In Sumerian, any constituent cross-referenced by an element of the verbal prefix-chain can be missing from the sentence.

The other interpretation of syntactic ergativity was proposed by Marantz. In this theory, called Ergativity Hypothesis, syntactic ergativity refers to a particular pattern of semantic role assignment. In an ergative language, it is the PATIENT semantic role that is assigned to the deep-structure Subject. In this sense of ergativity, Sumerian is more likely to be a nominative language, although the final solution to this problem can be achieved only by an investigation of Sumerian non-finite verbal forms in syntactic terms.

In the last part of the chapter, we presented more examples in favour of our assumption that Sumerian is not a language with free word order. We concluded that the word order of Sumerian sentences is associated with the pragmatic salience of their nominal constituents.

7. Appendix: Statue C of Gudea

In the following we will analyse Statue C of Gudea. The emphasis of our analysis will be on those features of the text which are associated with fore- and backgrounding. For this purpose, we will apply Givón's method for measuring the topicality of particular participants. First, we will quantify some features of the text in Givón's terms. Later, we will relate the results to formal characteristics of the text (e.g., word order, lack of overt NPs).

In Givón's understanding, the topicality of a given constituent is related to the "accessibility" or "predictability" of its referent. The following factors are supposed to affect the accessibility of a referent to the hearer:

- "a. Referential Distance from the previous mention in the discourse (*memory decay*)
- b. Referential Complexity of the directly-preceding discourse environment (*other potential referents*)
- c. Semantic Information ('redundancies') from inside the clause (*ruling out other potential referents*)
- d. Thematic Information ('redundancies') from the preceding discourse (*ruling out other potential referents*)"¹

According to Givón both Referential Distance (henceforth, RD) and Potential Interference (henceforth, PI) can be easily quantified. Both measures assay, however, "the *anaphoric* topical property of 'predictability'"². Givón suggests that topic importance can also be measured cataphorically, meaning that "one can presumably asses a referent's importance in the discourse by measuring how long a referent *persists* once it had been introduced".³ This measure will be referred to as Topic Persistence (henceforth, TP). In the following, we will consider only RD and TP. In the case of RD,

"one measures the gap of absence - in number of clauses - between the present occurrence and the last preceding occurrence of the topic. More continuous, important or "topical" will exhibit on the average

¹Givón (1988), pp. 247-248.

²*ibid.*, p. 248.

³*ibid.*

smaller RD values, with the highest topic-continuity value being, by definition, 1. ... Presumably, it correlates with the hearer's - and speaker's - difficulty in identifying the topics and assigning coreference relations".⁴

In the case of TP,

"one measures the number of contiguous subsequent clauses in which NP remains a semantic argument of the clause, following the present occurrence. More continuous, important "topical" participants will exhibit on the average larger TP values, with the lowest topic-continuity value being, by definition, 0".⁵

The text of Statue C will be broken up into the following units:

1. (= 1:1-6) [1] ^dnin-giš^v-zi-da [2] dingir gù-dé-a [3] énsi [4] lagaš^vki [5] lú é-an-na [6] in-dù-a-kam
2. (= 2:1-3) [1] ^dinanna [2] nin kur-kur-ra [3] nin-a-ni
3. a. (= 2:4-10) [4] gù-dé-a [5] mu gi₁₆-sa [6] énsi [7] lagaš^vki [8] lú é-ninnu [9] ^dnin-ġír-su-ka [10] in-dù-a
- b. (= 2:11-13) [11] u₄ ^dinanna-ke₄ [12] igi nam-ti-ka-ni [13] mu-šì-bar-ra-a
- c. (= 2:14-21) [14] gù-dé-a [15] énsi [16] lagaš^vki [17] ġéš^vtu dagal-a-kam [18] ir₁₁ nin-a-ni [19] ki ág-àm [20] pisan ù-sub-ba-ka [21] ġiš^v ba-ħur
4. (= 2:22-23) [22] KA-AL-ka [23] ùri ba-mul
5. (= 3:1-2) [1] im-bi ki dadag-ga-a [2] im-mi-lu
6. (= 3:3-5) [3] sig₄-bi [4] ki sikil-a [5] im-mi-du₈
7. (= 3:6) [6] uš^v-bi mu-kù
8. (= 3:7) [7] izi im-ta-lá
9. (= 3:8-10) [8] temen-bi [9] i-ir-nun-ka [10] šu tag ba-ni-du₁₁
10. (= 3:11-13) [11] é ki ág-ġá-ni [12] é-an-na šà ġír-su^{ki}-ka [13] mu-na-ni-dù
11. (= 3:14-15) [14] kur má-gan-ki-ta [15] na⁴esi im-ta-e₁₁
12. (= 3:16-17) [16] alan-na-ni-šè [17] mu-tu
13. a. (= 3:18-4:1) [18] gù-dé-a [19] lú é dù-a-ka [1] nam-ti-la-ni ħé-sù

⁴Cooreman -- Fox -- Givón (1984), p. 7.

⁵ibid.

- b. (= 4:2) [2] mu-šè mu-na-sa₄
 14. (= 4:3-4) [3] é-an-na-ka [4] mu-na-ni-ku₄
 15. a. (= 4:5-6) [5] lú é-an-na-ta [6] íb-ta-ab-è-è-
 b. (= 4:7) [7] íb-ze-re-a
 c. (= 4:8) [8] mu-sar-a-ba šu bí-íb-ùr-a
 d. (= 4:9-12) [9] ^dinanna [10] nin kur-kur-ra-ke₄ [11] saġ-gá-ni ukkin-na
 [12] nam h́é-ma-ku₅-e
 16. (= 4:13-15) [13] ġis^vgu-za gub-ba-na [14] suh^vus-bi [15] na-an-gi-né
 17. (= 4:16) [16] numun-a-ni h́é-til
 16. (= 4:17) [17] bal-a-ni h́é-ku₅

1. Ningiszida is the (personal) god of Gudea, the *ensi* of Lagash that built the Eanna.
2. For Inanna, the Lady of all countries, his mistress.
3. a. Gudea, whose name endures, the *ensi* of Lagash that built the Eninnu,
 b. when Inanna cast looks of life at [him]
 c. Gudea, *ensi* of Lagash who is of great wisdom, who is a servant loved by his mistress, made drawing on the frame of the brick-mold.
4. [he] made the stamp? shine like emblem.
5. [he] mixed its (= the Eanna's) clay (/the clay) in pure place.
6. [he] moulded its brick (/the brick) in clean place
7. [he] purified its foundation.
8. [he] carried fire around.
9. [he] anointed its foundation (/the foundation) with fine scented oil.
10. [He] built up her beloved temple, the Eanna in midst of Girsu [for her].
11. From the mountain Magan, [he] brought down diorit.
12. [He_i] fashioned [it] into his_i own statue
13. a. "Gudea, the temple-builder, let his life be made long-lasting" b. [he] gave [it = the statue] as name [for her = Inanna]
14. [he] brought [it] into the Eanna [for her].
15. a. The man who removes [it] from the Eanna, b. tears [it] out, c. and erases its inscription, d. let Inanna, the lady of all countries curse his head in the assembly.

16. The throne erected for him, [she] should not make firm its base.

17. Let his seed come to an end.

18. Let his reign be cut off.⁶

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
Gudea																		
RD	N	-	N	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-
TP	-	-	11	10	9	8	7	6	5	4	3	2	1	0	-	-	-	-
Inanna																		
RD	-	N	1	-	-	-	-	-	-	7	-	-	3	1	1	1	-	-
TP	-	1	0	-	-	-	-	-	-	0	-	-	3	2	1	0	-	-
Eanna																		
RD	N	-	-	-	N	1	1	1	1	1	-	-	-	-	-	-	-	-
TP	-	-	-	-	5	4	3	2	1	0								
esi-stone																		
RD	-	-	-	-	-	-	-	-	-	-	N	1	-	-	-	-	-	-
TP	-	-	-	-	-	-	-	-	-	-	1	0	-	-	-	-	-	-
statue																		
RD	-	-	-	-	-	-	-	-	-	-	-	N	1	1	1	-	-	-
TP	-	-	-	-	-	-	-	-	-	-	-	3	2	1	0	-	-	-
remover																		
RD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	1	1	1
TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	1	0

(Table 1.) (N = New)

1:1-6: The first column (1. = 1:1-6) of the inscription does not belong to the main text of the statue. Its arrangement on the back of Statue C sets it apart even graphically.

2:4-21: According to Steible's commentary to the text, the inscription "beginnt mit zwei vorausgestellten Kasus pendentibus"⁷ (1. and 2.a.). Steible's term (casus pendens) covers more or less the same phenomenon as our left dislocation, except that his account treats it as unconnected to other areas of Sumerian grammar.⁸ Since Steible is not aware of the level pragmatic functions, he is not able to explain the function of left-dislocation either.

⁶Pronouns in square brackets stand for participants referred solely by an element of the verbal prefix-chain

⁷Steible (1991), II, p. 38.

⁸Cf. *ibid.* 38; 39: "Der erste Kasus pendens (Kol. 2:1-3) findet seine Erklärung darin, daß er zunächst im Temporalsatz (Kol. 2:11-13) als Agentiv in verkürzter Form (Kol. 2:11 ^dinanna-ke₄) aufgenommen wird..."; Der zweite Kasus pendens (Kol.2:4-10) stellt einerseits das gemeinsame Subjekt aller Hauptsätze der eigentlichen Inschrift dar (bis Kol. 4:4), wird aber im Temporalsatz (Kol. 2:11-13) andererseits als (logisches) Objekt begriffen."

In our view the NP referring to Gudea (3.a.) is left-dislocated from 3.b. which is formally a relative clause and functions as an adverb of the sentence that ends in 2:21. The same phenomenon can be observed in other texts of Gudea. Consider, for example (7.1) = (1.28) and (7.2) = (5.20)

(7.1) [39] gù-dé-a [40] énsi [41] lagas^vki-ka [42] lú inim-ni íb-kúr-a (St B 8:39-42)
'G., the *énsi* of Lagash, the man who changes his words'

(7.2) [60] alan [61] gù-dé-a [1] énsi [2] lagas^vki-ka
[3] lú é-ninnu [4] ^dnin-ǵír-su-ka [5] in-dù-a
[6] lú é-ninnu-ta [7] im-ta-ab-è-è-a (St B 7:60-8:7)⁹
'(the statue of Gudea, the *énsi* of Lagas, the man who built Ningirsu's Eninnu), anybody who removes [it]_i from the Eninnu'

In the case of (7.1), the left-dislocation is an AG at the same time. Consequently, it can also be discerned morphologically. In the case of (7.2) and 3.a.,b. the left-dislocated constituents are the arguments of the verb, therefore they are referred to only by elements of the verbal prefix-chain. From Table 1., it must be clear that Gudea is the most important topic of the text. The left-dislocation of 3.a is associated with its introduction as new topic at the beginning of the text. The same device is used in the case of 15.a.-c. that we also consider an AG. The would-be sinner becomes the main topic of the text from 4:5 on. Left-dislocation thus encodes new (that is not predictable) and important topics in Statue C. Predictable topics are referred to either by possessive pronouns or by elements of the verbal prefix-chain.¹⁰

2:1-3: As far as 2. is concerned, its status is less clear. The following observations can, however, be mentioned. In 10. Inanna is referred to by a possessive enclitic (-ni of é ki áǵ-ǵá-ni "her beloved temple") and by a dative infix (-na- of mu-na-ni-dù) of the verbal prefix-chain. As we have earlier claimed these devices are used for encoding predictable topics. The identification of the referent of these pronominal elements should be the consequence of a previous mention of the goddess Inanna. Since in 3.b., the word

⁹Cf. 5.2.2.

¹⁰We have already mentioned in 5.2.1 above that the element of the verbal prefix chain should most likely be considered as bound or cliticized pronouns.

^dinanna-ke₄ is embedded in a relative clause from which the NP referring to Gudea is left-dislocated, hence it is an unlikely candidate for being the antecedent of pronominal elements seven sentences later. It is therefore 2. at the very beginning of the main text that must serve as antecedent. The distance of this NP from 10. and its case-marking, however, exclude an explanation according to which 2., for example, would be the left-dislocated rectum of a genitive construction *é ki áǵ-ǵá ^dinanna nin kur-kur-ra nin-a-na. In our view, 2. should be considered as a sort of title of the statue inscription. In our translation above, its separation from the succeeding part of the text reflects this interpretation. The dative case-marking of the NP is proved, for example, by Statue B:

- (7.3) [1] ^dnin-ǵír-su [2] ur-sáǵ kal-ga [3] ^den-líl-lá-ra (St B 2:1-3)
 'For Ningirsu, the mighty hero of Enlil'

2:17-18: In Steible's interpretation 3.c. contains two "Nominalsätze" which "markieren einen Einschub, der mit diesem Stillmittel den vorausgehenden Temporalsatz (Kol. 2:11-13) und die folgenden Hauptsätze (Kol 2:20ff.) inhaltlich verbindet".¹¹ 2:17 and 2:18-19 consist of a nominal phrase and an enclitic copula. They correspond to such English sentences like: "John is tall" or "John is a good tailor". In our view, there exist another way to analyze them in the context concerned, namely they can be considered as relative clauses (henceforth, RC) with a nominal predicate. In Sumerian, an RC is an NP which consist of a head and an adjectivized clause with a finite verb:

- (7.4) lú é-ninnu ^dnin-ǵír-su-ka in-dù-a (St C 2:8-10)
 lú [é-ninnu ^dnin-ǵír-su-ka in-dù] -a
 head clause adjectivizer

Similarly to predictable topics, the head of the RC is referred to only by pronominal elements in the clause. The case-mark of the RC=NP follows the adjectivized clause as it follows from the general structure of Sumerian NP:¹²

¹¹Steible, *ibid.*, p. 39.

¹²Cf. 1.1.4.

- (7.5) [3] alan gù-dé-a [4] énsi [5] lagas^vki [6] lú é-ninnu [7] in-dù-a-ke₄ (St B 1:3-7)
 statue gudea ensi Lagash man Eninnu built.adjectivizer.gen.loc-term
 'the statue of Gudea, the *ensi* of Lagash, who built the Eninnu'

Since "a phrase ending with the enclitic copula is ... a full sentence similar to those ending with a finite verb"¹³, we can see no reason to exclude the possibility that there can exist relative clauses with a predicate containing a phrase ending with the enclitic copula. In this case too, the predicate becomes adjectivized. Consider (7.6):

- (7.6) [20] é-ninnu me-bi gal-gal-la-àm [21] igi mu-na-ni-^ggar (Cyl A 1:20-21)
 'He (= Ningirsu) showed him (= Gudea) an Eninnu the *mes* of which are great'

The second object of (7.6) is a RC with a nominal predicate: **é-ninnu**_{head} [me-bi gal-gal-la-àm]. Since **é-ninnu** is the rectum of a genitive construction (***me é-ninnu** "the *mes* of Eninnu") it is referred to by a possessive enclitic in the adjectivized clause. One could raise against our analysis the lack of the adjectivizing **-a**. The lack of this suffix is, however, the consequence of another characteristic of the enclitic copula, namely that it "terminates the form or the clause, and no other suffix normally follows".¹⁴ Consider also (7.7):

- (7.7) [10] igi zid bar-ra ^vdnanse-kam [11] ^vden-lil-lá lú sà-ga-na-kam
 [12] énsi [sà-ge pàd-da] ^vdnin-^ggir-su-ka-kam [13] gù-dè-a unu₆ maḥ-a tu-da
 [14] ^vd^ggá-tùm-du₁₀-ga-kam [15] ^vd^gnisaba é-^ggestu-ke₄ [16] ^vgál mu-na-tag₄
 (Cyl A 7:10-16)
 'For the one who is looked upon favourably by Nanse and is a man of Enlil's heart; for the *ensi* who was envisaged by Ningirsu; for Gudea who was born in a lofty abode by Gatumdu, Nisaba opened the house of understanding'

¹³Thomsen (1984), p. 276. (§ 542).

¹⁴Thomsen, *ibid.*, p. 275 (§ 541).

This example contains four RCs the referent of which is the same person, Gudea (7:10-14). The first two are headless RC.¹⁵ The expressions *igi zid bar-ra* ^dnanše, *šà-ge pàd-da* ^dnin-ǵír-su-ka, *unu₆ maḥ-a tu-da* ^dǵá-tùm-du₁₀-ga are adjective phrases regarding their distribution.¹⁶ *d*en-líl-lá lú *šà-ga-na* is NP, an AG the rectum of which (*d*en-líl-lá) is left-dislocated.¹⁷ The structure of these RCs looks as follows:

(7.8) [head [NP or AP + copula].adjectivizer.dat

Particularly interesting is in (7.6) that the four RCs or at least the last one should be marked with a dative case as it is required by the prefix-chain of the finite verb (*ǵál mu-na-tag₄*). This example shows clearly that an enclitic copula "conceals" somehow the suffixes attached to an RC. In conclusion, we would like to analyze St C 2:17 and 2:18-19 as two adjectivized nominal predicate. Their head is 2:14-16 *ǵù-dé-a / énsi / laǵas^{ki}* "Gudea, the *ensi* of Lagash".

3:1-12: The referent of the *-bi* possessive enclitic is not indisputable in these lines. Being pronominal element, it must refer to a predictable participant. The most likely candidate for being a referent (= *é-an-na*), however, occurs only in 3:12 first time in the main text of the Statue. What does make it possible to identify the referent of the *-bi* earlier? One possible solution could be that this *-bi* does not have referent at all. In this case, its function would be similar to the function of *-bi* attached to numerals.¹⁸ In other words, it would function as a definite article in the lines concerned.¹⁹

The other solution would retain the possessive enclitic status of *-bi*. The identification of a referent, however, does not always need an antecedent in the text itself. Consider, for example, the sentences (7.9) and (7.10):

¹⁵For headless RCs, see Keenan (1985b).

¹⁶Cf. 1.1.4.

¹⁷Cf. 1.4.1.

¹⁸See 1.4.2.

¹⁹This analysis would imply that II. 2:20-3:10 describe the phases of a building ritual. The description of a ritual well-known to the potential reader allows the use of elements making definite an NP. For an interpretation of some parts of the Gudea texts as a description of a building ritual, see e.g. Römer (1984).

- (7.9) The President has visited the Church.
 (7.10) Show me Hungary on the map.

The NPs "the president" and "the map" stand with a definite article. It implies that the referents of these NP is supposed to be identifiable by the hearer/reader. In the former case, somebody living in the USA is able to identify the referent without mentioning the President earlier. In the latter case, one can imagine a situation in which a teacher pointing to the map with his hand asks one of his pupils to show the country. In our view, the latter case can be relevant to our text. From 4:5-7, we learn that the statue must have been set up in the Eanna itself. Its text therefore can refer to the Eanna with only a pronoun in a clause in which the building of the temple concerned is depicted. The bracketed NPs of our translation in the lines concerned reflects the former solution about the status of **-bi**. In the case of this analysis, Eanna occurs only in **10.** as new constituent (see Table 1. above).

4:9-12: In this clause, Inanna is referred to with a full NP although in the previous sentences, being an important, predictable topic, she was referred by pronominal elements. In our view, the relevant feature of text is the introduction of a new, important participant in 4:1-8 (**15.a.-c.**). Its coding device (AG) tells us that it becomes the main topic of the subsequent part of the inscription. Similar phenomenon has been described earlier. Consider (7.11) and (7.12)

- (7.11) [8] é lugal-na zi-dè-és^v mu-dù [9] sipa zi gù-dé-a
 an ki im-da-mu₂ (Cyl A 24:8-9)²⁰
 'He_i has built his king's temple faithfully; it was made
 to grow with heaven and earth by the trustworthy
 shepherd, Gudea_i

- (7.12) [6] é-an-na-túm-da [7] elam sag^m e-dab₆-sig
 [8] elam kur-ra-na bi-gi₄ (Eanatum 2, 6:6-8)²¹
 'Elam trembled in front of Eanatum. He (= Eanatum)
 drove Elam back to its country'

²⁰Cf. 5.2.2 (5.17) and (5.21).

²¹Cf. 5.1.5 and 5.3.2 (5.9 = 5.28).

In (7.11), Gudea is referred to with an element of the verbal prefix-chain in the first clause but with a full NP in the second. In the case of the elements referring to the "temple", the use of coding devices shows an opposite order. Characteristically, it is the "temple" that continues to be the main topic in the text. In (7.12), from the two participants of the first clause, Eanatum is encoded with a bound pronoun in the second clause. The less topical Elams is referred to with a full NP. In the subsequent text, Eanatum remains more topical. In conclusion, the use of a full NP in the case of Inanna in **15.d.** must reflect the change of the main topic of Statue C.

Index of quoted texts

AUCT 1, Nr. 867:8	= 3.37		
Gudea		Cyl. A 10:12-14	= 4.56
Cyl. A 1:2	= 3.59	Cyl. A 10:15-16	= 4.41
Cyl. A 1:3	= 4.82; 5.33	Cyl. A 10:26	= 4.42
Cyl. A 1:10	= 4.1	Cyl. A 11:7	= 4.3
Cyl. A 1:11	= 2.10	Cyl. A 11:10-11	= 2.13
Cyl. A 1:15	= 3.44	Cyl. A 11:24	= 4.6
Cyl. A 1:16	= 3.45	Cyl. A 12:14-15	= 4.73
Cyl. A 1:20-21	= 7.6	Cyl. A 12:18-19	= 5.35
Cyl. A 2:20-22	= 4.98	Cyl. A 12:22	= 4.109
Cyl. A 2:21-22	= 4.67	Cyl. A 12:26	= 4.102
Cyl. A 2:24-26	= 5.18	Cyl. A 13:10-11	= 4.112
Cyl. A 2:24	= 4.101	Cyl. A 13:12-13	= 4.93
Cyl. A 3:5	= 3.21; 4.122	Cyl. A 13:14-15	= 4.85
Cyl. A 3:6-14	= 3.23	Cyl. A 13:16	= 4.75
Cyl. A 3:8	= 4.39	Cyl. A 13:18	= 4.76
Cyl. A 3:12-13	= 5.14	Cyl. A 14:5-6	= 4.108
Cyl. A 3:18	= 3.22	Cyl. A 14:7	= 4.69
Cyl. A 5:4	= 2.11	Cyl. A 14:16-17	= 4.70
Cyl. A 5:6	= 3.52	Cyl. A 14:21-22	= 4.71
Cyl. A 5:7	= 3.40	Cyl. A 15:23-25	= 4.115
Cyl. A 5:18	= 2.17	Cyl. A 16:7-12	= 4.103
Cyl. A 6:1-2	= 1.29; 4.4	Cyl. A 16:13-14	= 5.36
Cyl. A 6:5	= 2.12	Cyl. A 17:11	= 1.26
Cyl. A 6:19-21	= 4.40	Cyl. A 17:17	= 1.25; 2.14
Cyl. A 7:3	= 3.51	Cyl. A 17:22-25	= 4.105
Cyl. A 7:4-6	= 2.22; 2.29	Cyl. A 17:29	= 4.100
Cyl. A 7:10-16	= 7.7	Cyl. A 18:6	= 4.86
Cyl. A 7:11-12	= 4.72	Cyl. A 18:8-9	= 4.7
Cyl. A 7:13-14	= 4.83; 5.15	Cyl. A 18:20	= 4.43
Cyl. A 7:20-21	= 4.81	Cyl. A 18:23	= 4.9
Cyl. A 7:22-23	= 5.16	Cyl. A 19:3	= 4.10
Cyl. A 8:3	= 4.99	Cyl. A 19:4-5	= 4.77
Cyl. A 8:14	= 4.8	Cyl. A 19:13	= 4.87
Cyl. A 8:20	= 4.2	Cyl. A 20:6	= 3.53; 4.12
Cyl. A 8:21	= 2.30	Cyl. A 20:9-11	= 2.19
Cyl. A 9:3	= 2.30	Cyl. A 20:16	= 4.13
Cyl. A 9:16	= 3.47	Cyl. A 20:19-20	= 4.11
Cyl. A 9:17-19	= 5.27	Cyl. A 20:21-23	= 4.14
Cyl. A 9:17	= 1.10; 2.18	Cyl. A 21:15	= 4.88
Cyl. A 9:18-19	= 4.5	Cyl. A 21:17	= 4.15
Cyl. A 9:25-26	= 5.19; 5.23	Cyl. A 21:19	= 3.17
Cyl. A 9:26	= 4.84	Cyl. A 21:22	= 4.44
Cyl. A 10:9	= 4.119	Cyl. A 21:23	= 3.60
		Cyl. A 21:25	= 3.61
		Cyl. A 22:5	= 4.46
		Cyl. A 22:22-23	= 4.117
		Cyl. A 23:12	= 4.55
		Cyl. A 23:16-17	= 5.32
		Cyl. A 23:18	= 4.55
		Cyl. A 23:24	= 4.55
		Cyl. A 23:26-27	= 2.34

Cyl. A 23:29 = 4.55
 Cyl. A 24:1-2 = 5.34
 Cyl. A 24:3 = 4.55
 Cyl. A 24:7 = 4.55
 Cyl. A 24:8-12 = 5.17
 Cyl. A 24:8-9 = 7.11
 Cyl. A 24:13-14 = 4.89
 Cyl. A 24:17 = 4.16
 Cyl. A 24:21-22 = 4.118
 Cyl. A 24:23-25 = 4.17
 Cyl. A 25:24:26 = 4.58
 Cyl. A 26:17-19 = 4.47
 Cyl. A 28:1-2 = 4.45
 Cyl. A 29:14-17 = 5.13
 Cyl. A 29:14-18 = 2.15
 Cyl. A 29:14-30:5 = 5.29
 Cyl. A 29:16-17 = 4.18
 Cyl. A 30:15-16 = 2.20
 Cyl. B 1:6 = 3.48
 Cyl. B 1:10 = 4.21
 Cyl. B 1:11 = 4.19
 Cyl. B 1:15 = 4.20
 Cyl. B 1:16-17 = 4.22
 Cyl. B 2:1-2 = 4.106
 Cyl. B 2:10 = 3.49
 Cyl. B 3:3-4 = 3.24
 Cyl. B 3:11-12 = 4.114
 Cyl. B 3:15 = 4.23
 Cyl. B 3:16-17 = 4.90
 Cyl. B 3:18-24 = 4.48
 Cyl. B 4:1-5 = 5.31
 Cyl. B 4:1 = 4.24
 Cyl. B 4:3 = 4.25
 Cyl. B 4:4-5 = 4.26
 Cyl. B 4:6 = 4.27
 Cyl. B 4:8-9 = 4.28
 Cyl. B 5:1-2 = 2.16; 4.29
 Cyl. B 5:23-24 = 3.66
 Cyl. B 5:23 = 2.21
 Cyl. B 6:1-2 = 4.30
 Cyl. B 13:2 = 4.78; 5.22
 Cyl. B 13:6 = 4.49
 Cyl. B 13:7-8 = 4.50
 Cyl. B 14:19-20 = 4.31
 Cyl. B 16:3-4 = 3.62
 Cyl. B 18:1 = 2.28
 Cyl. B 18:2 = 4.91
 Cyl. B 18:3 = 4.104
 Cyl. B 18:12 = 4.32
 Cyl. B 19:19-21 = 4.113
 Cyl. B 20:16-19 = 3.25

Cyl. B 21:18-19 = 3.26
 Cyl. B 23:17 = 5.24
 Cyl. B 24:7-8 = 3.27
 Cyl. B 24:12-13 = 2.27
 Cyl. B 24:12 = 1.24
 St A 3:2-4:4 = 4.57
 St A 3:4-4:3 = 2.33
 St B 1:1-20 = 3.1
 St B 1:3-7 = 7.5
 St B 1:15-16 = 4.94
 St B 1:17-19 = 3.50
 St B 1:20 = 3.28
 St B 2:1-3 = 7.3
 St B 3:8-9 = 4.110
 St B 3:10-11 = 4.92
 St B 4:5 = 5.25
 St B 4:10-11 = 4.61
 St B 5:5-10 = 5.26
 St B 7:12-20 = 4.57
 St B 7:21-23 = 4.33
 St B 7:30 = 3.29; 4.62
 St B 7:38-41 = 4.79
 St B 7:47-48 = 4.63
 St B 7:53 = 4.116
 St B 7:55 = 4.34
 St B 7:60-8:7 = 5.20; 7.2
 St B 8:19-20 = 4.97
 St B 8:21-23 = 4.35
 St B 8:39-9:9 = 2.5
 St B 8:39-42 = 1.28; 7.1
 St B 9:6-9 = 3.30
 St B 9:15-16 = 3.31
 St B 9:19-20 = 3.41
 St B 9:22 = 3.42
 St B 9:27-30 = 2.26
 St C **Appendix**
 St C 2:8-10 = 7.4
 St C 2:20-23 = 4.59
 St C 3:8-10 = 4.51
 St C 3:16-4:4 = 4.57
 St C 3:18-4:1 = 3.32
 St C 3:18-4:2 = 2.25
 St C 4:5-17 = 2.9
 St C 4:16-17 = 3.33
 St D 2:9-10 = 4.54
 St D 2:12-3:2 = 4.52
 St D 3:17-4:10 = 4.57
 St E 1:18-20 = 4.111
 St E 2:5-8 = 4.80
 St E 8:19-9:5 = 4.57
 St E 9:1-2 = 4.120

St E 9:11-12	= 4.96	TCS 1, 129:11	= 3.63
St E 7:22-8:15	= 2.8	TCS 1, 149:3-4	= 3.54
St F 3:12-13	= 4.53	TCS 1, 148:15-16	= 3.39
St F 4:9-11	= 4.36	TCS 1, 219:11	= 3.58
St G 2:9-10	= 3.46	TCS 1, 254:3-4	= 3.64
St G 6:8-12	= 5.30		
St H 2:7-3:8	= 4.57	TSA 31 ii 4	= 1.13
St I 5:1-8	= 4.57		
St K 1:4-11	= 4.57	Ukg. 4, 8:10-13	= 4.74
St K 2:9-10	= 4.95	Ukg. 5, 7:23-26	= 4.74
St M 2:7-3:5	= 4.57	Ukg. 16, 1:1-5	= 4.38
St M 3:2	= 4.37		
St N 3:2-7	= 4.57	VAT 4861 vi 1	= 1.14
St O 2:5-3:5	= 4.57		
St P 5:1-8	= 4.57		
St P 5:3-6	= 3.34		
St Q 2:2-7	= 4.57		
Ean. 2, 4:14-15	= 4.66		
Ean. 2, 6:6-11	= 5.9; 5.28		
Ean. 2, 6:6-8	= 7.12		
Ean. 3, 4:18-19	= 4.66		
Ent. 28, 3:34-37	= 4.68		
Ent. 29, 4:24-27	= 4.68		
Ent. 35, 8:3-7	= 1.27		
Luzag. 1 3:24-26	= 3.55		
Luzag. 1 3:27-28	= 3.56		
MVN 13, 172	= 3.35		
NG 48:10-11	= 4.64		
NG 113, 37-38	= 1.32		
NG 117, 20-21	= 1.31		
NG 138:5	= 4.65		
OBGT 6:82-84	= 3.5		
OBGT 6:160-162	= 3.4		
OBGT 8:37-39	= 3.6		
OBGT 8:52-55	= 3.7		
OBGT 9:79-81	= 3.8		
OBGT 9:105-107	= 3.10		
OBGT 9:105	= 3.65		
OBGT 9:128-129	= 3.9		
STH 1:52 iii 1-2	= 1.13		
Sulgi 52, 6	= 1.30		
Sulgi P Sec.b l.9	= 1.7		
TCS 1, 109:14-16	= 3.57		

References

- Aalderen, van C.T. (1982), 'Some Observations on Ergativity and Sumerian.' *Orientalia Lovaniensia Periodica* 13, pp. 25-44.
- Ali, Fadhil A. (1964), *Sumerian Letters: Two Collections from the Old Babylonian Schools*. (Diss., University of Pennsylvania, No. 64-10343) Pennsylvania.
- Anderson, Stephen R. (1976), 'On the Notion of Subject in Ergative Languages.' In Li, Charles N., Ed. (1976), pp. 1-23.
- Andrews, Avery (1985), 'The Major Functions of the Noun Phrase.' in Shopen, Timothy, Ed., (1985), I., pp. 62-154.
- Attinger, Pascal (1985), 'Les préfixes absolutifs de la première et de la deuxième personne singulier dans les formes *maru* ergatives.' *ZA* 75, pp. 161-178.
- Attinger, Pascal (1993), *Eléments de linguistique sumérienne. La construction de du₁₁/e/di "dire"* (Orbis Biblicus et Orientalis. Sonderband). Fribourg, Suisse: Editions Universitaires / Göttingen: Vandenhoeck & Ruprecht.
- Bickerton, Derek (1990), *Language & Species*. Chicago -- London: The University of Chicago Press.
- Black, Jeremy A. (1989), 'The Babylonian Grammatical Tradition: The First Grammars of Sumerian.' *Transactions of the Philological Society* 87, pp. 75-99.
- Black, Jeremy A. (1991), *Sumerian Grammar in Babylonian Theory* (Studia Pohl: Series Maior, 12). Roma: Editrice Pontificio Istituto Biblico (2nd, revised edition).
- Blake, Barry J. (1990), *Relational Grammar* (Croom Helm Linguistic Theory Guides). London -- New York: Routledge.
- Brown, Gillian -- Yule, George (1983), *Discourse Analysis* (Cambridge Textbooks in Linguistics). Cambridge, etc.: Cambridge University Press.
- Chafe, Wallace L. (1976), 'Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View.' In Li, Charles N., Ed. (1976), pp. 25-55.
- Christian, Viktor (1957), *Beiträge zur sumerischen Grammatik* (Österreichische Akademie der Wissenschaften. Phil.-hist. Klasse. Sitzungsberichte, 231, II.). Wien: R.M. Rohrer.
- Cole, Peter -- Sadock, Jerrold M., Eds. (1977), *Grammatical Relations* (Syntax and Semantics, 8). New York, etc.: Academic Press.
- Comrie, Bernard (1986), 'On Delimiting Cases.' In Brecht, Richard D. -- Levine, James S., Eds. (1986), *Case in Slavic*. Columbus, OH: Slavica, p.86-106.
- Comrie, Bernard (1988), 'Passive and Voice.' In Shibatani, Masayoshi, Ed. (1988), pp. 9-23.
- Comrie, Bernard (1991), 'Form and Function in identifying cases.' In Plank, Frans, Ed., *Paradigms: The Economy of inflection* (Empirical Approaches to Language Typology, 9). Berlin -- New York: Mouton de Gruyter, pp. 41-56.
- Cooper, Jerrold S. (1986), *Sumerian and Akkadian Royal Inscriptions, I: Presargonic Inscriptions* (The American Oriental Society. Translation Series, 1). New Haven, Connecticut: The American Oriental Society.
- Cooreman, A. -- Fox, B. -- Givón, T. (1984), 'The Discourse Definition of Ergativity.' *Studies in Language* 8, pp. 1-34.
- Croft, William (1990), *Typology and Universals* (Cambridge Textbooks in Linguistics). Cambridge, etc.: Cambridge University Press.

- Diakonoff, I.M. (1965), *Semito-Hamitic Languages. An Essay in Classification* (Languages of Asia and Africa). Moscow: Nauka.
- Diakonoff, I.M. (1976), 'Ancient Writing and Ancient Written Language: Pitfalls and Peculiarities in the Study of Sumerian.' In AS 20, pp. 99-121.
- Dixon, R.M.W. (1979), 'Ergativity.' *Language* 55, pp. 59-138.
- Dixon, R.M.W. (1987), 'Studies in Ergativity. Introduction.' *Lingua* 71, pp. 1-16.
- Edzard, Dietz O. (1959), 'Fragen der sumerischen Syntax.' *ZDMG* 109, pp. 235-252.
- Edzard, Dietz O. (1968), *Sumerische Rechtsurkunden des III. Jahrtausends, aus der Zeit vor der III. Dynastie von Ur* (Bayerische Akademie der Wissenschaften. Phil.-Hist. Kl. Abh., N.F., 67. Veröffentlichungen der Kommission zur Erschliessung von Keilschrifttexten, Serie A, 4. Stück). München: Verlag der Bayerischen Akademie der Wissenschaften.
- Edzard, Dietz O. (1971), 'hamtu, marû and freie Reduplikation beim sumerischen Verbum.' *ZA* 61, pp. 208-32.
- É. Kiss, Katalin (1987), *Configurationality in Hungarian* (Studies in Natural Language and Linguistic Theory, 3). Budapest: Akadémiai Kiadó / Dordrecht, etc.: D. Reidel Publ. Co.
- É. Kiss, Katalin (1992), 'Az egyszerű mondat szerkezete' [The Structure of Simple Sentences] In Kiefer, Ferenc, Ed., *Strukturális magyar nyelvtan, I: Mondattan*. Budapest: Akadémiai Kiadó, pp. 79-177.
- É. Kiss, Katalin (forthcoming), 'Discourse-Configurational Languages. Introduction.' In K. É. Kiss, Ed. (forthcoming), *Discourse-Configurational Languages* (Oxford Series in Comparative Syntax). Oxford: OUP. [Quoted after the manuscript.]
- England, Nora C. (1988), 'Mam Voice.' In Shibatani, Ed. (1988), pp. 525-545.
- Faarlund, Jan Terje (1988), 'A Typology of Subjects.' In Hammond, Michael, et al., Eds. (1988), pp. 193-207.
- Falkenstein, Adam (1949), *Grammatik der Sprache Gudeas von Lagas, I: Schrift- und Formenlehre* (AnOr 28). Rome.
- Falkenstein, Adam (1950), *Grammatik der Sprache von Gudeas von Lagas, II: Syntax* (AnOr 29). Rome.
- Falkenstein, Adam (1956-57), *Die neusumerischen Gerichtsurkunden, I-III* (Bayerische Akademie der Wissenschaften. Phil.-Hist. Kl. Abh., N.F., 39, 40, 44. Veröffentlichungen der Kommission zur Erschliessung von Keilschrifttexten, Serie A, 2. Stück, 1-3). München: Verlag der Bayerischen Akademie der Wissenschaften.
- Falkenstein, Adam (1959), *Das Sumerische* (Handbuch der Orientalistik, I. Abt., 2. Bd., 1/2 Abschn., Lief. 1). Leiden: E.J. Brill.
- Falkenstein, Adam (1966), *Die Inschriften Gudeas von Lagas, I* (Analecta Orientalia, 30). Roma: Pontificium Institutum Biblicum.
- Falkenstein, Adam -- von Soden, Wolfram (1953), *Sumerische und akkadische Hymnen und Gebete* (Die Bibliothek der alten Welt). Zürich -- Stuttgart: Artemis-Verlag.
- Foley, William A. -- van Valin, Robert D., Jr. (1984), *Functional Syntax and Universal Grammar* (Cambridge Studies in Linguistics, 38). Cambridge, etc.: Cambridge University Press.
- Foley, William A. -- van Valin, Robert D., Jr. (1985), 'Information Packaging in the Clause.' In Shopen, Timothy, Ed., (1985), I., pp. 282-364.
- Foxvog, Daniel A. (1974), *The Sumerian Votive*. Diss., University of California, Berkeley.
- Foxvog, Daniel A. (1975), 'The Sumerian Ergative Construction.' *OrNS* 44, pp. 395-425.

- Givón, Talmy, (1976), 'Topic, Pronoun, and Grammatical Agreement.' In Li, Charles N., Ed. (1976), pp. 151-85.
- Givón, Talmy (1983), 'Topic Continuity in Discourse: An Introduction.' In Givón, Talmy, Ed., (1983), pp. 1-41.
- Givón, Talmy (1988), 'The Pragmatics of Word-order: Predictability, Importance and Attention.' In Hammond, Michael, et al., Eds. (1988), pp. 243-284.
- Givón, Talmy, Ed. (1979), *Discourse and Syntax* (Syntax and Semantics, 12). New York, etc.: Academic Press.
- Givón, Talmy, Ed., (1983), *Topic continuity in Discourse: A Quantitative Cross-Language Study* (Typological Studies in Language). Amsterdam -- Philadelphia: J. Benjamins Publ. Co. 1983.
- Goddard, Cliff (1982), 'Case Systems and Case Marking in Australian Languages: A New Interpretation.' *Australian Journal Of Linguistics* 2, pp. 167-96.
- Gragg, Gene B. (1973a), *Sumerian Dimensional Infixes* (Alter Orient und Altes Testament. Sonderreihe). Kevelaer: Verlag Butzon & Bercker / Neukirchen-Vluyn: Neukirchener Verlag.
- Gragg, Gene B (1973b), 'Linguistics, Method and Extinct Languages.' *OrNS* 42, pp. 78-96.
- Haegeman, Liliane (1991), *Introduction to the Government and Binding Theory*. Oxford -- Cambridge, MA: B. Blackwell.
- Hammond, Michael -- Moravcsik, Edith -- Wirth, Jessice, Eds. (1988), *Studies in Syntactic Typology* (Typological Studies in Language, 17). Amsterdam -- Philadelphia: John Benjamins Publishing Company.
- Hayes, John L. (1990), *A Manual of Sumerian Grammar and Texts* (ARTANES, 5). Malibu: Undena.
- Hayes, John L. (1991), 'Some Thoughts on the Sumerian Genitive.' *ASJ* 13, pp. 185-194.
- Hopper, Paul J. -- Traugott, Elizabeth Closs (1993), *Grammaticalization* (Cambridge Textbooks in Linguistics). Cambridge, etc.: Cambridge University Press.
- Huang, C.-T. James (1984), 'On the Distribution and Reference of Empty Pronouns.' *Linguistic Inquiry* 15, pp. 531-574.
- Huber, Christian (1989-90), 'Ergative Sprachen in der GB-Theorie und einige Überlegungen um Sumerischen.' *Wiener Linguistische Gazette* 45-46, pp. 53-78.
- Jacobsen, Thorkild (1965), 'About the Sumerian Verb.' *AS* 16, pp. 71-102.
- Jacobsen, Thorkild (1973), 'Notes on Sumerian Genitive.' *JNES* 32, pp. 161-66.
- Jacobsen, Thorkild (1987), *The Harps that once... Sumerian Poetry in Translation*. New Haven -- London: Yale University Press.
- Jacobsen, Thorkild (1988), 'The Sumerian Verbal Core.' *ZA* 78, pp. 161-220.
- Jaeggli, Osvaldo A. (1986), 'Passive.' *Linguistic Inquiry* 17, IV, pp. 587-622.
- Jaeggli, Osvaldo -- Safir, Kenneth J. (1989), 'The Null Subject Parameter and Parametric Theory.' In Jaeggli, Osvaldo -- Safir, Kenneth J., Eds. *The Null Subject Parameter* (Studies in Natural Language and Linguistic Theory, 15). Dordrecht -- Boston -- London: Kluwer Academic Publishers, pp. 1-44.
- Jagersma, Bram (1992), 'Some Observations on Word Order in Noun Phrases.' Unpubl. paper presented at the 3rd meeting of the Sumerian Grammar Discussion Group in Oxford, 1-3 July 1992.
- Keenan, Edward L., (1976), 'Towards a Universal Definition of "Subject".' In Li, Charles N., Ed. (1976), pp. 303-33.
- Keenan, Edward L. (1985a), 'Passive in the World's Languages.' In Shopen, Timothy, Ed., (1985), I., pp. 243-281.

- Keenan, Edward L. (1985b), 'Relative Clauses.' In Shopen, Timothy, Ed., (1985), II., pp. 141-170.
- Keyser, Samuel Jay -- Roeper, Thomas (1984), 'On the Middle and Ergative Constructions in English' *Linguistic Inquiry* 15, pp. 381-416.
- Klaiman, M.H. (1991), *Grammatical Voice* (Cambridge Studies in Linguistics, 59). Cambridge, etc.: Cambridge University Press.
- Klein, Jacob (1983), 'The Capture of Agga by Gilgames (GA 81 and 99).' *JAOS* 103, pp. 201-204.
- Kramer, Samuel Noah (1949), 'Gilgamesh and Agga.' *American Journal of Archaeology* 54, 1-18.
- Larsen, Thomas W. (1987), 'The Syntactic Status of Ergativity in Quiché.' *Lingua* 71, pp. 33-59.
- Levin, Beth (1987), 'The Middle Construction and Ergativity.' *Lingua* 71, pp. 17-31.
- Lewis, G. (1967), *Turkish Grammar*. Oxford: Oxford University Press.
- Li, Charles N., Ed. (1976), *Subject and Topic*. New York -- San Francisco -- London: Academic Press, Inc.
- Li, Charles N. -- Thompson, Sandra A. (1976), 'Subject and Topic: A New Typology of Language.' In Li, Charles N., Ed. (1976), pp. 457-489.
- Li, Charles N. -- Thompson, Sandra A. (1979), 'Third-Person Pronouns and Zero-Anaphora in Chinese Discourse.' In Givón, Talmy, Ed. (1979), pp. 311-335.
- Lyons, John (1968), *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Marantz, Alec (1984), *On the Nature of Grammatical Relations* (Linguistic Inquiry Monographs, 10). Cambridge, MA -- London: The MIT Press.
- Mel'cuk, I. (1973), 'On the Possessive Forms of Hungarian Noun.' In Kiefer, Ferenc -- Ruwet, N., Eds., *Generative Grammar in Europe*. Reidel: Dordrecht
- Michalowski, Piotr (1980), 'Sumerian as an Ergative Language, I.' *JCS* 32, pp. 86-103.
- Oberhuber, Karl (1982), 'Zum "Passivum" im Sumerischen.' in W. Meid, et al., Hrsg., *Sprachwissenschaft in Innsbruck. Arbeiten von Mitgliedern und Freunden des Instituts für Sprachwissenschaft der Universität Innsbruck aus Anlaß der fünfzigjährigen Bestehens des Instituts im Jahre 1978 und zum Gedenken an die 25. Wiederkehr des Todestages von Hermann Ammann am 12. September 1981* (Innsbrucker Beiträge zur Kulturwissenschaft. Sonderheft, 50). Innsbruck: Amoe, pp. 129-134.
- Oberhuber, Karl (1990), *Innsbrucker Sumerisches Lexikon, I, 1: Sumerisches Lexikon zu "George Reisner, Sumerisch - babylonische Hymnen nach Thontafeln griechischer Zeit (Berlin 1896)" und zu verwandten Texten* (Innsbrucker Beiträge zur Kulturwissenschaft, Sonderheft 70). Innsbruck: Verlag des Instituts für Sprachwissenschaft der Universität Innsbruck.
- Poebel, Arno (1923), *Grundzüge der sumerischen Grammatik* (Rostocker orientalistische Studien, 1). Rostock: Selbstverlag.
- Poebel, Arno (1926) 'Sumerische Untersuchungen II.' *ZA N.F.* 3 (27), pp. 161-176; 245-272.
- Poebel, Arno (1947) *Miscellaneous Studies* (Assyriological Studies, 14). Chicago, Illinois: The University of Chicago Press.
- Postgate, J.N. (1974), 'Two Points of Grammar in Gudea.' *JCS* 26, pp. 16-54.
- Radford, Andrew (1988), *Transformational Grammar. A First Course* (Cambridge Textbooks in Linguistics). Cambridge: CUP.

- Römer, Wilhelm H. Ph. (1984), "Studien zu Texten Gudeas von Lagaš. Teil 1: Die aus Anlaß des Baues des neuen Eninnu vom Stadtfürsten Gudea von Lagaš durchgeführten Riten." *Jahrbuch für Anthropologie und Religionsgeschichte* 5 (1984), pp. 57-110.
- Schachter, Paul (1976), 'The Subject in Philippine Languages: Topic, Actor, Actor-Topic, or None of the Above?' In Li, Charles N., Ed. (1976), pp. 491-518.
- Schachter, Paul (1977), 'Reference-Related and Role-Related Properties of Subject.' In Cole, Peter -- Sadock, Jerrold M., Eds. (1977), pp. 279-306.
- Shibatani, Masayoshi (1985), 'Passives and Related Constructions: A Prototype Analysis.' *Language* (61), pp. 821-48.
- Shibatani, Masayoshi (1988), 'Voice in Philippine Languages.' In Shibatani, Masayoshi, Ed. (1988), pp. 85-142.
- Shibatani, Masayoshi, Ed. (1988), *Passive and Voice* (Typological Studies in Language, 16). Amsterdam -- Philadelphia: John Benjamins Publishing Company.
- Shopen, Timothy, Ed., (1985), *Language Typology and Syntactic Description, I-III*. Cambridge, etc.: CUP.
- Sjöberg, Åke W. -- Bergmann, Eugen, (1969), *The Collection of Sumerian Temple Hymns* (Texts from Cuneiform Sources, 3). Locust Valley, N.Y.: J.J. Augustin Publ.
- Sollberger, Edmond (1952), *La système verbal dans les inscriptions "royales" présargoniques de Lagaš*. Genève.
- Sollberger, Edmond (1966), *The Business and Administrative Correspondence under the Kings of Ur* (Texts from Cuneiform Sources, 1). Locust Valley and New York: J.J. Augustin.
- Spencer, Andrew (1991), *Morphological Theory. An Introduction to Word Structure in Generative Grammar*. Oxford -- Cambridge, MA: B. Blackwell.
- Steible, Horst (1982), *Die altsumerischen Bau- und Weihinschriften, I-II* (Freiburger Altorientalische Studien, 5). Stuttgart: F. Steiner Verlag.
- Steible, Horst (1991), *Die neusumerischen Bau- und Weihinschriften, I-II* (Freiburger Altorientalische Studien, 9, I-II). Stuttgart: F. Steiner Verlag.
- Szabolcsi, Anna (1981), 'The Possessive Construction in Hungarian: A Configurational Category in a Non-Configurational Language.' *Acta Linguistica Academiae Scientiarum Hungaricae* 31, pp. 261-89.
- Szabolcsi, Anna (1983), 'The Possessor that Ran away from Home.' *The Linguistic Review* 3, pp. 89-102.
- Taraldsen, T. (1978), 'On the NIC, Vacuous Application, and the That-trace Filter.' Indiana University Linguistic Club, Bloomington.
- Thomsen, Marie-Louise (1984), *The Sumerian Language. An Introduction to its History and Grammatical Structure* (Mesopotamia, 10). Kobenhavn: Akademisk Forlag.
- Wierzbicka, A (1981), 'Case marking and Human Nature.' *Australian Journal of Linguistics* 1, pp. 43-81.
- Wilcke, Claus (1988), 'Anmerkungen zum 'Konjugationspräfix' /i/- und zur These vom "silbischen Charakter der sumerischen Morpheme" anhand neusumerischer Verbalformen beginnend mit i-lb-, i-im- und i-in-.' *ZA* 78, I, pp. 1-49.
- Wilcke, Claus (1990), 'Orthographie, Grammatik und literarische form. Beobachtungen zu der Vaseninschrift Lugalzaggesis (SAKI 152-156).' In T. Abusch -- J. Huehnergard, Eds., *Lingering over Words. Studies ... W.L. Moran* (Harvard Semitic Studies, 37). Atlanta, Georgia: Scholars Press, 455-504.
- Yoshikawa, Mamoru (1978), 'Sumerian Ventive and lensive.' *OrNS* 47, pp. 461-482.

- Yoshikawa, Mamoru (1987), 'What "kisib^v /b-ra" means.' *ASJ* 9, pp. 293-302.
- Yoshikawa, Mamoru (1992), 'A Sumerian Genitival Construction in Terms of "Status Constructus".' *ASJ* 14, pp. 403-406.
- Yoshikawa, Mamoru (1992), 'The Valency-Change System in the Sumerian Verbal Prefixes.' *ASJ* 14, pp. 395-402.
- Zwicky, Arnold M. (1977), *On Clitics*, Bloomington: IULC.
- Zwicky, Arnold M. (1985), 'Clitics and Particles.' *Language* 61, pp. 283-305.
- Zwicky, Arnold M. -- Pullum, Geoffrey K.. (1983), 'Cliticization vs. Inflection: English *n't*.' *Language* 59, pp. 502-13.