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SEQUENTIAL RECONSTRUCTION OF PROTO-AKKADIAN

by

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In memory of

GIORGIO LEVI DELLA VIDA

Master, Teacher, Friend

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PREFACE

My decision to write this monograph grew partly out of my computer-oriented work on the Amorite language, partly out of the need to revise and bring up to date my Morphology of Akkadian composed in 1952 by the Multigraph-Multilith process for didactic purposes. The direct stimulus to fulfill it was provided by the opportunity to teach a course entitled "Structure of Akkadian" at the Summer Linguistic Institute in Ann Arbor, Michigan, in 1967.

As indicated by the word "Proto-Akkadian" in the title of this monograph, the procedures of sequential reconstruction are applied here to the oldest recoverable stages of the Akkadian language. Instead of "Proto-Akkadian," I could have used the term "Proto-Semitic" in the title, not necessarily because of my belief that Proto-Akkadian corresponds to Proto-Semitic, but because the reconstruction of Proto-Akkadian to a very large measure affects that of Proto-Semitic. Nevertheless, I have kept the term "Proto-Akkadian" in the title, first, because the documentation provided in this monograph is culled mainly from Akkadian, and secondly, because of the difficulties encountered in marking certain Proto-Akkadian features as common Semitic.

The reconstruction of Proto-Akkadian is founded on my analysis of the Old Akkadian dialect, as presented in Old Akkadian Writing and Grammar (=MAD II^2; Chicago, 1961), and in Glossary of Old Akkadian (=MAD III; Chicago, 1957), wherein the oldest known sources of the Akkadian language (and therefore of any Semitic language)

are gathered and interpreted. For the correct understanding of the reconstruction of Proto-Akkadian, a general acquaintance with MAD II^2 may be deemed useful.

Crossreferences to sources and bibliographical information were kept to a minimum. For Old Akkadian, see MAD II^2, just mentioned. For general facts concerning Akkadian grammar, compare the extensive documentation in von Soden's GAG, possibly together with my review published in BO XII (1955) pp. 92-111. For comparative grammars of Semitic languages, the well-known manuals of Zimmern, Brockelmann, Moscati, and Diakonoff should be consulted.

With the exception of Old Egyptian, which I have utilized through the splendid work of Elmar Edel, Altägyptische Grammatik (2 vols., Roma, 1955-64), I have paid practically no attention to the other "Hamitic" languages. While I have nothing but admiration for the courage with which Diakonoff tackled the "Hamitic" field in his pioneering Semito-Hamitic Languages, I must confess that it was difficult, if not impossible, for me to utilize sources second-hand, and I did not have the patience and the stamina to search for widely scattered primary sources in new and badly explored fields.

My occasional references to Indo-European languages are aimed mainly at illustrating certain general features of a linguistic development. Indirectly, they serve the purpose of giving substance to my firm belief in the common ancestry of the Semitic, "Hamitic," and Indo-European languages. The application of sequential reconstruction to Indo-European languages holds great promise for the future.

This monograph deals mainly with sequential morphemes and the methods of sequential reconstruction, which are described in O.

INTRODUCTION. The individual sequential morphemes are taken up in detail in the ten following chapters.

Chapters 1-5 are dedicated to the five suffixal sequential morphemes under the headings GENDER, NUMBER, CASE / MOOD, OBJECT, and ENCLITICS.

The three prefixal sequential morphemes are so intrinsically bound up with the personal pronoun, verb, and stative that it was impossible to present them in their logical place, namely in Chapters 6-8. Instead, the first prefixal morpheme, forming part of the inflectional system, is discussed under 8.2. Personal Pronoun I, 9.2. Inflectional Morphemes, and 10. STATIVE. The second and third prefixal morphemes, representing extended stems, are discussed under 9.3. Prefixal Sequential Morphemes and 9.4. Verbal Stem.

While general questions pertaining to stem and root are taken up in Chapter 7, specific discussions will be found under 7.2. Simple Nominal Stems, 7.3. Extended Nominal Stems, 9.3. Prefixal Sequential Morphemes, and 9.4. Verbal Stem.

The main principles governing sequential reconstruction, generally, and the main results of the sequential reconstruction of Proto-Akkadian, specifically, are collected under 11. CONCLUSIONS.

The manuscript was reproduced by the photo-lithoprint process, instead of being set in type, because of the obvious typographic difficulties with certain signs and combinations of signs, such as ø, ɸ, $\overset{u}{ɸ}$, $\overset{u}{a}$, which appear by the hundreds in this monograph.

I wish to express my heartfelt gratitude to Professors Eric Hamp, Jerzy Kuryłowicz, and Gene Schramm for constructive suggestions, as acknowledged in the respective places in this monograph.

Please note the addenda to be found on pp. 229ff.

NOTES ON TRANSCRIPTION AND TRANSLITERATION

Akkadian entries are given mainly in transcription, as in kalbum, kalb+um, kalb+u+Ø+ɣ+m, very rarely in sign-by-sign transliteration, as in ka-al-bu-um.

Akkadian transcriptions are given either without morpheme boundaries, as in kalbum, or with morpheme boundaries, as in kalb+u+Ø+ɣ+m or kalb+um. The indication of full or partial morpheme boundaries depends on the context. Partial indication, as in kalb+um, is given, e.g., in the discussion of stems and suffixes. Full indication, as in kalb+u+Ø+ɣ+m, is found in the discussion of the suffixal morphemes of gender, number, case, and object.

The apparent inconsistencies in my transcriptions of Akkadian are conditioned by the relevance in a given context.

Thus in one place I write ja+mḫur+u, the posited Proto-Akkadian form, elsewhere ja+mḫur+ɣ, to show that the final u is not attested in Akkadian, and sometimes simply imḫur, as in the discussion of the syntax, where the morphemic division is irrelevant.

I usually write ʾ in Akkadian transcriptions, as in ʾa+mḫur+u, ʾamḫuru, ʾantunu, especially in the cases illustrating the connection with the morphemes ʾa or ʾan, respectively.

I regularly transcribe with i the initial phoneme in such entries as i "I," "me" or iš "to," and not ʾi or ji, because of the uncertainties surrounding the quality of the initial phoneme in Proto-Akkadian times.

I prefer the transcriptions ʾantunu to ʾa$\overset{t}{}$ttunu and janpaqidū to ja$\overset{p}{}$ppaqidū because the changes n > t or n > p and the elision of i in ʾattunu and ippaqdū, respectively, are irrelevant in the context. However, the spellings ʾa$\overset{t}{}$ttunu, ja$\overset{p}{}$ppaqidū are used occasionally.

Since sequential reconstruction yields no basis for the vocalic quantity in kalbī, šū, šī, tamḫurī, šuāti, etc., I leave it undenoted. This secondarily developed length is not a matter of either Proto-Akkadian or Proto-Semitic, but of later Semitic languages.

The semi-consonantal glides ʾ, w, and j are usually left undenoted in šuati, šiati, etc., first, because these glides are secondary, and secondly, because of uncertainties in the transcription either as šuwati, šijati or šuʾati, šiʾati.

Vocalic and consonantal quantity is denoted by : in all instances where it is desirable to segregate the morpheme of plural or plurality (intensity), as in kalb+a+:+$\underset{t}{}$u+m /kalbātum/ in contrast to kalb+a+Ø+$\underset{t}{}$u+m /kalbatum/, or in /maḫ:ir/ in contrast to /maḫir/. In all other instances I have used the traditional way of marking long consonants and vowels, as in kalbātum or maḫḫir.

Akkadian transliterations are used only where required to justify certain morphemic reconstructions.

Because of the great discrepancies between the written forms, on the one hand, and the posited or actual spoken forms, on the other, the rendering of Semitic languages other than Akkadian causes much difficulty. Only Arabic is relatively consistent in its relation between transliteration and transcription. But even here problems exist, as in the traditional transcription of Fem. ṣafrāʾu "yellow" (see 1.1), with the stress on the penult and long ā, in place of ṣáfraʾu required by the sequential reconstruction. Many more problems exist with the rendering of other Semitic languages,

especially Hebrew, with its cumbersome Massoretic tradition. Since I denote regularly the shəwa mobile, I could dispense with the denotation of the (predictable) fricative articulation of the following consonants. Despite my firm belief that the primary set of Hebrew vowels was differentiated by quality, not quantity, I have often followed tradition, partly because of typographic difficulties, in transcribing qāmeṣ as ā, instead of ɔ, and səgōl as e, instead of ɛ.

For paradigmatic usage in Akkadian I have chosen kalbum "dog" for primary nouns, and maḫārum "to receive" for verbs and verbal nouns. I have used maḫārum also for West Semitic languages, especially in contexts encompassing all Semitic languages. In some contexts this verb is replaced by qatālum "to kill."

NOTES ON CHARTS

Two kinds of charts are found in this monograph. Charts illustrating the distribution of the morphemes of gender, number, case / mood, and object are collected at the end of Chapters 1-4, respectively. All other charts are scattered within the discussions presented in the chapters. Because of differing purposes, the charts show certain differences in transcription and arrangement.

The charts at the end of the first four chapters are regularly given in the order noun, pronoun, verb, and stative. Within each group of charts dedicated to one sequential morpheme, the morpheme under examination is subdivided into two main parts. Thus all charts dealing with gender show the two morphemic subdivisions, Masc. // Fem., and the two contrasting markers, u // a/i.

Each group of charts dedicated to one sequential morpheme contains complete information pertaining to that morpheme only. Thus under gender, the given markers of the number, case, and object serve the purpose of illustration; complete information about them is to be found under the respective sequential morphemes.

The information given in parentheses under a sequential morpheme serves the purpose of a guide and is not directly relevant to the particular morpheme discussed in the chart. Thus in Charts 53ff. dedicated to the object morpheme, the relevant

information under OBJECT is noted as Gen., but the irrelevant information under GENDER, NUMBER, and CASE is noted as (Masc.), (Sg.), (Nom.), etc.

While the entry STEM in the charts denotes the simple (non-extended) stem, the entry "STEM" (in quotation marks) is used, for the sake of convenience, for all the segments before the sequential morphemes whenever the subdivision of these segments is irrelevant for the discussion of a particular sequential morpheme. Thus in Charts 12f. one finds under "STEM" such entries as ʾa+mḫur+, maḫir+ʾak+, etc.

The fifth sequential morpheme represents the enclitics and is regularly marked as "(+ma) etc." Ma illustrates the several markers which can be used in that rank, and the parentheses indicate their optional, not obligatory, character. Because of space limitations in charts, this marker is sometimes left out, as in Charts 39-42, 48, and 61-62.

SYMBOLS USED

-	in ka-al-bi	for sequence of cuneiform graphemes.
-	in Aššur-uballiṭ	for separating two elements in a name.
-	in šu and ši	for emphasizing the Masc. u // Fem. i contrast.
--	in kalb+u+Ø--	for structural limitations in morpheme sequence (no case in Voc.).
+	in kalb+i	for morpheme boundary.
:	in a:, ḫ:	for vocalic or consonantal quantity (= vocalic length, consonantal doubling).
*	in *ku	for reconstructions in Proto-Semitic (used very rarely).
Ø	in kalb+u+Ø+ɱ+m	for zero (marker Ø for Sg., in contrast to : for Pl.).
Ø	in jamḫur+u+:+ɱ+Ø	for zero (implying that mimation / nunation, sure for Proto-Semitic, is not sure for Proto-Akkadian).
/	in maḫ/rum	for zero (implying that reconstruction of i is sure for Proto-Akkadian).
/	in i/mmaḫar	for phonetic change (reconstruction of n is sure, but only m is attested in Akkadian).

/	a/i	for two markers used in one function (as in a/i markers used in Gen.).
/	in Gen./Acc.; Masc./Fem.	for one marker used in two functions (as in a marker used in Gen./Acc.).
//	in u // a; Masc. // Fem.	for contrast between two markers or morphemes (as in the contrast between the marker u of the Masc. and the a marker of the Fem.).
/ /	in /k/, /kalbī/	for phonemic transcription.
[ ]	in [ŋ], [imaŋgur]	for phonetic transcription.
[ ]	in a-na-[ku]	for transliterating completely destroyed signs.
⌈ ⌉	in a-na-⌈ku⌉	for transliterating partly destroyed signs.
< >	in a-na-<ku>	for transliterating signs omitted by the scribe.
( )	in kalb(u) šarrim	for kalbu and kalb when both attested.
( )	in māḫirū(t)(u)	for māḫirū, māḫirūt, and māḫirūtu when all three attested.
( )	in (+ma)	for enclitics used optionally.
u/a	in ja+mḫur+u/a	for ja+mḫur+a and ja+mḫur+u when both attested.

ABBREVIATIONS OF PUBLICATIONS

ARMT	G. Dossin et al., Archives royales de Mari (texts in transliteration and translation; Paris, 1950-).
Barth, Nominalbildung	Jakob Barth, Die Nominalbildung in den semitischen Sprachen (Leipzig, 1889).
Barth, Pronominalbildung	Jakob Barth, Die Pronominalbildung in den semitischen Sprachen (Leipzig, 1913).
BO	Bibliotheca Orientalis.
Brockelmann, GVG	Carl Brockelmann, Grundriss der vergleichenden Grammatik der semitischen Sprachen (2 vols., Berlin, 1908-1913).
CAD	Chicago Assyrian Dictionary (Chicago, 1956-).
CT	Cuneiform Texts from Babylonian Tablets, etc., in the British Museum (London, 1921-).
Diakonoff, SHL	I.M. Diakonoff, Semito-Hamitic Languages (Moscow, 1965).
Edel, Altägyptische Grammatik	Elmar Edel, Altägyptische Grammatik. = Analecta Orientalia 34 and 34/39 (2 vols., Roma, 1955-1964).

Fleisch, L'Arabe classique	Henri Fleisch, L'Arabe classique. Esquisse d'une structure linguistique. = Recherches publiés sous la direction de l'Institut de Lettres Orientales de Beyrouth, Tome V (Beyrouth, 1956).
Fleisch, Traité I	Henri Fleisch, Traité de philologie arabe, Vol. I. = Recherches publiés sous la direction de l'Institut de Lettres Orientales de Beyrouth, Tome XVI (Beyrouth, 1961).
Gelb, La lingua degli Amoriti	I.J. Gelb, La lingua degli Amoriti. = Accademia Nazionale dei Lincei. Rendiconti della Classe di Scienze morali ... XIII (Roma, 1958) pp. 143-164.
Gelb, Morphology of Akkadian	I.J. Gelb, Morphology of Akkadian. A Comparative and Historical Sketch (multigraphed, Chicago, 1952).
Gordon, UT	Cyrus H. Gordon, Ugaritic Textbook. = Analecta Orientalia 38 (Rome, 1965).
IJAL	International Journal of American Linguistics.
JAOS	Journal of the American Oriental Society.
JCS	Journal of Cuneiform Studies.
JNES	Journal of Near Eastern Studies.

MAD	I.J. Gelb, Materials for the Assyrian Dictionary (Chicago, 1952-). MAD II^2 = Old Akkadian Writing and Grammar (2nd ed., Chicago, 1961). MAD III = Glossary of Old Akkadian (Chicago, 1957).
Moscati, ICG	Sabatino Moscati, ed., A. Spitaler, E. Ullendorff, and W. von Soden, An Introduction to the Comparative Grammar of the Semitic Languages. Phonology and Morphology (Wiesbaden, 1964).
MRS	Mission de Ras Shamra (Paris, 1936-).
NPN	I.J. Gelb, P.M. Purves, and A.A. MacRae, Nuzi Personal Names. = Oriental Institute Publications LVII (Chicago, 1943).
RA	Revue d'assyriologie et d'archéologie orientale.
Reiner, LAA	Erica Reiner, A Linguistic Analysis of Akkadian (The Hague, 1966).
RSO	Rivista degli studi orientali.
Symbolae Kuryłowicz	Symbolae Linguisticae in Honorem Georgii Kuryłowicz = Polska Akademia Nauk. Oddział w Krakowie. Prace Komisji Językoznawstwa Nr. 5 (Kraków, 1965).

TCL	Musée du Louvre. Textes cunéiformes (Paris, 1910-).
Ungnad-Matouš, GA	Arthur Ungnad and Lubor Matouš, Grammatik des Akkadischen (4th ed., München, 1964).
von Soden, GAG	Wolfram von Soden, Grundriss der akkadischen Grammatik. = Analecta Orientalia 33 (Roma, 1952).
ZA	Zeitschrift für Assyriologie.
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft.
Zimmern, VGSS	Heinrich Zimmern, Vergleichende Grammatik der semitischen Sprachen (Berlin, 1898).

ABBREVIATIONS OF TERMS

Abl.	Ablative	GEN.	GENDER (in charts)
Abs.	Absolute	Imperf.	Imperfect
Acc.	Accusative	Impv.	Imperative
Act.	Active	Ind.	Indicative
Adj.	Adjective	Indeterm.	Indeterminative
All.	Allative	Inf.	Infinitive
B	Basic (formation)	Intrans.	Intransitive
C	Consonant	Loc.	Locative
c.	Common (in charts)	m.	Masculine (in charts)
Caus.	Causative	Masc.	Masculine
Constr.	Construct (state)	N	N (formation)
D	Doubled (formation)	Nom.	Nominative
Dat.	Dative	NUM.	NUMBER (in charts)
Dem.	Demonstrative	OBJ.	OBJECT (in charts)
Det.	Determinative	Obl.	Oblique (case)
Du.	Dual	Part.	Participle
ENCL.	ENCLITIC (in charts)	Pass.	Passive
Eth.	Ethiopic (in charts)	Perf.	Perfect
f.	Feminine (in charts)	Pers.	Person, Personal
Fem.	Feminine	Pl.	Plural
Fut.	Future	PN	Personal name
Gen.	Genitive	Poss.	Possessive

Pred.	Predicate	Stat.	Stative
Pres.	Present	Subj.	Subjunctive
Pret.	Preterit	Subst.	Substantive
Pron.	Pronoun, Pronominal	Suff.	Suffix, Suffixal
Rel.	Relative	Syr.	Syriac (in charts)
Š	Š (formation)	T	T (formation)
Sem.	Semitic (in charts)	Trans.	Transitive
Sg.	Singular	V	Vowel
St.	State		

LIST OF CHARTS

0. INTRODUCTION

0.1. Linguistic Data

Akkadian, like all other Semitic languages, has speech units composed of 1) stems (or roots, bases, etc.) and 2) affixes before and/or after the stem. We traditionally call such speech units "word classes," "form classes," "parts of speech," or simply "words." Word classes having both stems and affixes completely dominate the structure of all Semitic languages. In fact, all word classes have the stem + affix structure, with the exception of some adverbs, prepositions, conjunctions, interjections, and particles. For the discussion of the term "word," see 4.1.

A member of a word class can be simple or compound. A simple word-class member is represented by one stem, a compound word-class member by more than one stem.

Examples of a one-stem word are kalb+um "dog," kalb+ū+šu "his dogs," š+u "he," ja+mḫur+ū "they received," and ma "thus" (or the like).

Examples of a compound stem word are šamaḫ+šamm+um "sesame," ʾan+durār+um "freedom," ʾan+t+a "thou," maḫ+man "whoever," and ʾan+ʾa+k+u = /ʾanāku/ "I."

The stems can be simple or extended. A simple stem is illustrated by kalb+um "dog," or māḫir+um "recipient;" an extended stem by kalb+ān+um "dog-like" or ta+mḫīr+t+um "reception."

Stems are discussed extensively under 6. STEM AND ROOT, where

also crossreferences to other parts of this monograph will be found.

The main differences between stems and affixes are: Stems represent fixed morphemes in relation to grammar (morphology), but changeable morphemes in relation to lexicon. Affixes represent changeable morphemes in relation to grammar, and they may or may not have a lexical function. Thus the stem maḫir is a fixed morpheme in relation to morphology, but as part of the fientive verb, Pass. Part., Stat., etc., it has various functions in relation to the lexicon. Both the prefix and suffix in ja+mḫur+ū are changeable inflectional elements, but the prefix šа in ju+šа+mḫir+ū has a lexical function, being part of the extended stem +šа+mḫir+.

0.2. Sequential Morphemes

The affixes referred to above under 0.1. Linguistic Data I call "sequential morphemes." I call them "sequential" because they appear in a certain ordered sequence, which is obligatory and immutable. For some inconsistencies, apparent but not real, see 0.4. Application.

Illustrations of sequential morphemes are given in Chart 1. For the use of signs and symbols, see pp. xxif.

The sequential morphemes can be suffixal, prefixal, or both suffixal and prefixal.

The first three suffixal sequential morphemes in the nouns, pronouns, verbs, and statives, plus the first prefixal sequential morpheme in the fientive verbs denote the gender, number, and case / mood of the subject. They correspond to what normally are called "inflectional elements," which are included under declension or conjugation in our grammars.

The fourth suffixal sequential morpheme denotes the object.

PREFIXES			STEM	SUFFIXES					ATTESTED
Pron. I	Pron. II	"Modal"	STEM	GENDER	NUMBER	CASE / MOOD	OBJECT	ENCL.	
			kalb	+u	+:	+Ø	+šu	(+ma) etc.	kalbūšuma
			kalb	+a	+Ø	+$_t$u	+m		kalbatum
			š	+u	+Ø	+a	--		šua
			š	+u	+$_n$u	+Ø	--		šunu
			maḫ/r	+a	+Ø	+Ø	+Ø		maḫra(t)
			maḫ/r	+a	+:	+Ø	+šum		maḫrāšum
ja	+Ø	+Ø	+m/ḫur	+u	+:	+Ø	+šu		jamḫurūšu
ju	+š/	+ta	+m/ḫir	+u	+:	+Ø	+Ø		juštamḫirū
	šu	+Ø	+m/ḫur	+u	+Ø	+Ø	+m		šumḫurum
	šu	+t/	+maḫḫur	+u	+Ø	+Ø	+m		šutmaḫḫurum

Chart 1. Illustrations of Sequential Morphemes.

The object appears overtly in the form of pronominal suffixes, or covertly in the form of zero or m (of the mimation = n of the nunation) which signals the absence of the object.

The fifth suffixal sequential morpheme denotes the enclitics and is optional.

The second and third prefixal sequential morphemes in the fientive verbs and verbal nouns form parts of the extended stem.

As can be seen from Chart 2, the distribution of sequential morphemes varies considerably from one word class to another. Structural limitations in the distribution of sequential morphemes can be either full or partial. The first ones are marked by --, the latter by (x).

WORD CLASSES	PREFIXES			STEM	SUFFIXES				
	INFL.	STEMS (extended)		STEM (simple)					
Rank	1	2	3	STEM	1	2	3	4	5
	Pron. I	Pron. II	"Modal"		GEN.	NUM.	CASE / MOOD	OBJ.	ENCL.
Noun,									
Primary,									
Subst.	--	--	--	x	x	x	x	x	(x)
Adj.	--	--	--	x	x	x	x	(x)	(x)
Voc.	--	--	--	x	x	x	--	x	(x)
Verbal,									
Inf.	--	x	x	x	x	x	x	x	(x)
Act. Part. (Subst.)	x	x	x	x	x	x	x	x	(x)
Pass. Part. (Adj.)	--	x	x	x	x	x	x	(x)	(x)
Voc.	(x)	x	x	x	x	x	--	x	(x)
Pronoun,									
Det.	--	--	--	x	x	x	x	(x)	--
Pers.	--	--	--	x	x	x	x	--	(x)
Verb,									
Fientive	x	x	x	x	x	x	x	x	(x)
Impv.	--	x	x	x	x	x	--	x	(x)
Stative	(x)	x	x	x	x	x	x	(x)	(x)

Chart 2. Distribution of Sequential Morphemes.

Primary substantives, such as kalb+um "dog," primary adjectives, such as ṭâb+um "good," and pronouns, such as š+u "he," contain suffixes only.

Fientive verbs, such as ja+mḫur+ū "they received," juša+mḫir+ū "they caused it to be received," and Stat., such as maḫ̆r+ū "they were received," muša+mḫir+ū "they were causing it to be received," may occur with all prefixes and suffixes.

Among the verbal nouns, the Act. Part. occurs with all prefixes and suffixes, as in muša+mḫir+um "the one who caused it to be received." The first prefix mu signals the absence of the first inflectional prefix, ʾa, ta, ja, etc., in the fientive verb. Other verbal nouns, such as the Pass. Part. and Inf. in šuta+mḫur+um, and the Impv. in šuta+mḫir+ā have prefixes of rank number 2 and 3 and all suffixes.

Further illustrations of limited structure are found in the pronouns. Thus determinative pronouns cannot be followed by enclitics, and personal pronouns cannot be followed by objects. A special word class in the Semitic languages (as well as in the Indo-European languages) is formed by the Voc. of the nouns and Impv. of the verbs, which have no case / mood. This statement is not to be obscured by the fact that the Nom. is often found in the function of a Voc.

Instances of partial limited structure are marked by (x). Thus adjectives cannot be followed by an object, but take the mimation of the governing noun. Determinative pronouns take no object in the form of pronominal suffixes or mimation, but are used in Constr. St. with the nominal object, as in šu šarrim "he of the king." Statives take an object in the 1st and 3rd persons, as in taklāku+šum "I rely upon him," takil+šum "he relies upon him," but not in the 2nd person

*taklāta+šum "thou reliest upon him." Only mu of the first rank prefixes can occur in Voc. of the verbal nouns. The optional use of the enclitics is marked in the chart by (x).

As can be seen clearly from Chart 2, word classes with prefixes never occur without suffixes.

0.3. Sequential Reconstruction

The comparative method of linguistics, as successfully applied in the Indo-European field, has played a limited role in the reconstruction of the phonology and morphology of Proto-Semitic. More often than not, certain sounds and forms were reconstructed on the basis of personal, subjective evaluations, which generally resulted from equating Proto-Semitic with classical Arabic. The most disappointing, as far as I am concerned, in the comparative field of Semitics is C. Brockelmann, Grundriss der vergleichenden Grammatik der semitischen Sprachen (Berlin, 1908). The unbelievable jumble of materials and uncritical judgments accumulated in its 1,408 pages and Brockelmann's (undeserved) reputation are veritable pitfalls for the unwary and inexperienced.

One shudders to think of the reaction of a Brugmannite to Brockelmann's fantastic ideas about the Proto-Semitic case endings (GVG I pp. 459f.), taken to be ŭ, ĭ, and ă (all anceps), and derived as follows: Nom. ŭ from the pronoun hū "he" (where the simplest distributional analysis would show that the pronoun hū / šū has nothing to do with the noun); Gen. ĭ from the nisbe formation īj (where simple parallels in the Indo-European languages, such as *meios, meus from *mei, point to the reverse development); and Acc. ă from the interjection hā (where no comments are necessary).

I shall discuss in the following pages three cases of a formal reconstruction in the Semitic field. They all concern the personal pronoun; but since the personal pronoun forms part of the structure of the verb and stative, the following discussion affects much broader aspects of the morphology of Semitic languages.

a) On the basis of the personal pronouns occurring for the 2nd person Masc. and Fem., namely attunu, attina in Akkadian, ʾattem, ʾatten in Hebrew, ʾantūn, ʾantēn in Aramaic, ʾantum(u), ʾantunna in Arabic, and ʾantəmmū, ʾantən in Ethiopic, scholars have reconstructed for Proto-Semitic either ʾantumu, ʾantin(n)a (Brockelmann, GVG I p. 301; Moscati, ICG p. 105; Diakonoff, SHL p. 71), or ʾantunu, ʾantina (Zimmern, VGSS p. 59). The former reconstruction is based mainly on Arabic, the latter on Akkadian. Moscati, loc. cit., noted the distinctive vowels u // i and the consonants m // n in the two pronouns, while Zimmern, op. cit. p. 60, recognized the gender differences u // i/a and remarked that the Pl. seems to be formed by the addition of nu, na to the Sg. in this person as well as in the other persons of the personal pronoun. The question as to which reconstruction is to be favored is not difficult to answer. Zimmern and, less clearly, Moscati, find the gender differentiation in Masc. u // Fem. i/a, which agrees fully with the structure of the gender in all Semitic languages. Moscati's gender differentiation m // n, occurring in some personal pronouns of some Semitic languages, descriptively correct as it is, finds no support in the gender structure of Proto-Semitic. Furthermore, it does not fit the Pl. form of the 1st person pronoun (ʾa)naḥnu, nîn̂u, etc., "we," which--no matter what its ultimate derivation--regularly contains the consonant n (never m).* Thus n can be interpreted as part of the marker of the Pl. number, but not as a marker

of the Fem. gender. On the other hand, Zimmern's interpretation of the number as being formed by the addition of nu, na to the Sg. is part of the structure of all personal pronouns, as it agrees fully with the principle that the Pl. is formed by the doubling of the gender vowel of the Sg. This doubling is realized in two ways, by a long vowel, as in Sg. kalbum Pl. kalbūm, or Sg. kalbatum Pl. kalbātum, or by two vowels with a consonantal glide n, as in Sg. šu Pl. šunu (originally šu+nu, with a consonantal glide) or Sg. ši Pl. šina (from ši+ni). See 2.1.

b) From the occurrence of the personal pronouns of the 3rd person Sg. as šu, ši in Akkadian, hū, hī in Hebrew and Aramaic, huwa, hija in Arabic, wəʾətū, jəʾətī in Ethiopic, the reconstructed Proto-Semitic forms are given as Masc. hūʾa, Fem. šīʾa (Brockelmann, GVG I p. 303), huwa, šiya (Moscati, ICG p. 104), Masc. šūʾa, hūʾa, Fem. šīʾa, hīʾa (Zimmern, VGSS p. 59), and Masc. sū(ʾa), Fem. šī(ʾa) or sī(ʾa)? (Diakonoff, SHL p. 71). The observations which can be made immediately about the occurring pronouns are first, that šu, ši are found in Akkadian and hu, hi in other Semitic languages, and secondly, that the gender differentiation is marked by u in Masc. and i in Fem. The a of huwa, etc., originally represented the object case. The Ethiopic wəʾətū is derived from hu+a+tu, and jəʾətī from hi+a+ti. See 1.3 and 1.5.

Nevertheless, some scholars prefer to see the contrast between h // š as denoting the original gender differentiation in Proto-Semitic. The basis on which this reconstruction was made is difficult to determine. It may be founded on the existence of Masc. he, Fem. se in Mehri, a late South Arabian dialect, or on some vague recollections of the English pronouns "he" and "she," or possibly even on the scholastic precepts that anything rare and irregular (lectio difficilior in epi-

graphy!) has temporal precedence over the common and regular. The whole reconstruction breaks down when one notes that ju+ša+mḫir+u occurs in Akkadian and ju+ha+mḫir+u (and related forms) occurs in other Semitic languages. The meaning of ju+ša/ha+mḫir+u is "he (here) caused him/it (there) to be received," and ša/ha is nothing else but the Acc. of our personal pronoun šu/hu (see 8.1). Would anyone suggest that š of ša in ju+ša+mḫir+u denotes the Fem., and h of ha in ju+ha+mḫir+u the Masc.?

Thus, on the basis of the structure, the only reconstructed markers of the gender in the pronoun of the 3rd person (as well as of other pronouns) are u for the Masc. and i for the Fem. The differentiation marked by m // n in Masc. ʾantumu, Fem. ʾantina, and by h // s in Masc. he, Fem. se, is explained on a dialectal basis in 2.2.

c) Based solely on the existence of the pronominal suffix ka in kalbu+ka "thy dog" and ja+mḫuru+ka "he received thee," all the grammars of Semitic languages, without exception, posit ka as the underlying form of the 2nd person Masc. Sg. for Proto-Semitic and all Semitic and Hamitic languages. The reconstruction goes back to a time centuries ago, when only West Semitic languages such as Hebrew, Arabic, Aramaic, and Ethiopic were known. Today, with all the new evidence furnished by Akkadian and Hamitic languages, this reconstruction has no raison d'être. Note Akkadian ku+ati "thee" in Acc., ku+ašim "to thee" in Dat., Poss. Pron. ku+aum "thy," pronominal Dat. suffix kum in ja+mḫuru+kum "he received for thee," Egyptian kw and secondarily tw "thou," and related forms in other Hamitic languages, all of which show u, not a, in the Masc. pronoun. This quantitatively weighty evidence in favor of ku, not ka, in the Masc. pronoun is supported by considerations of the structure of the gender, which posits the

marker u for the Masc. and i for the Fem., as in the two other pronouns just discussed. For the above interpretation and for the derivation of ka from kúa, see 8.3.

Unhappy with the arbitrary results of the comparative method as applied to the Semitic field, and fully convinced that considerations of structure would yield a deeper insight into the manifold aspects of linguistic reconstruction, I decided in 1952 to put together my ideas in a preliminary way on paper. The resulting small monograph, Morphology of Akkadian, was reproduced by the Multigraph-Multilith process and distributed to my students and, in a limited number, also to outsiders, both students and scholars. While the term "ideal reconstruction" used there (op. cit. p. 3) is not quite appropriate, its underlying concepts of structure are as valid now as before.

The concept of structure, as I understand it, is based on two main premises: 1) structure is form, function, and position, 2) structure is total.

There is no need for me to discuss matters of form and function, which are taken care of, with varying degrees of success, in our grammars of Semitic languages.

By contrast, matters of position are rarely touched, let alone discussed. Certain obvious facts are noted, such as that the mimation occurs at the end of the noun, or that case endings appear before the pronominal suffixes. But such crucial matters of structure as the position and sequence of the morphemes of gender, number, case / mood, etc., have been uniformly passed over in all grammars and studies of Semitic languages.

Long ago I stressed the importance of position in A Study of

Writing, p. 19 by noting, e.g., that the written number 2 in 32 has a different position and consequently function (meaning) from ^{2} in 3^{2}. The matter of position (or rank, order, sequence, tactics) of individual morphemes was presented in my Morphology of Akkadian, but not as neatly as might have been desired. In 1952 I already perceived that the suffixes follow each other in a definite sequence, namely as morphemes of gender, number, case, and mimation, but for didactic purposes (see Morphology of Akkadian, p. 3) I presented them in reverse sequence. Recently, upon a fuller and more vigorous application of the principles of sequence it was possible for me to discover many important points of Semitic structure, as summarized under 11. CONCLUSIONS. This sharper view of sequential morphemes resulted from my computer-aided work on the morphology of Amorite. While the actual analytical work on sequential morphemes is the same whether for a written grammar or for computers, due to certain technical limitations, what can be put into the computers is different from what can be presented in a written grammar. It is for that reason that the sequential morphemes given in computer format in the chart in the article "On the Morpheme ān in the Amorite Language," Studies Presented to George V. Bobrinskoy (Chicago, 1967) pp. 45-48, are presented in a much more condensed form than in the present study.

Procedures involved in sequential reconstruction require two main steps, not necessarily successive. Each segment of a speech unit to be analyzed must be accounted for and its form and function determined; the markers for each segment must be denoted in their proper sequence within the speech unit.

The form kalabšuma in Masc. Nom. Sg. is normally segmented

into kalab+šu+ma, in which ma is said to stand for the enclitic, šu for the pronominal suffix, and kalab for the stem kalb, extended to kalab by means of an anaptyctic / epenthetic vowel a. Nowhere in this segmentation is the existence of the morphemes of gender, number, or case overtly indicated. But the corresponding Gen. Sg. is kalb+i+šu+ma, showing the marker i for the Gen., immediately forcing the assumption of the marker Ø for the Nom. Sg. in kalab+Ø+šu+ma. The same marker i appears partially also in the Gen. Pl. kalb+ī+šu+ma, which is replaced by the marker ū in the Nom. Pl. kalb+ū+šu+ma. This leads to two important conclusions. The first conclusion is that, in contrast to the Gen. marker i, the Nom. marker is u, thus making possible the replacement of the above kalab+Ø+šu+ma by kal(a)b+u+šu+ma in Nom. The second conclusion is that the markers of Pl. represent the same vowels, only doubled (long). Nothing in the forms discussed up to now indicates the overt existence of the Masc. marker in Akkadian.

Passing now to the Fem. Nom. Sg. kalb+at+šu+ma, we note first the overt marker at for the Fem. The existence of the marker for the Fem. Nom. Sg. immediately requires a search for the corresponding marker of the Masc. The Fem. Gen. Sg. kalb+at+i+šu+ma shows i, the marker of the Gen., following upon at, the marker of the Fem. This yields a crucial clue for sequential reconstruction, namely that the marker of case follows upon the marker of gender. The Fem. Pl. forms, Nom. kalb+āt+u+šu+ma and Gen. kalb+āt+i+šu+ma, confirm the results reached on the basis of the Masc. Pl. forms, Nom. kalb+ū+šu+ma and Gen. kalb+ī+šu+ma, namely that the markers of case are i for the Gen. and u for the Nom., and that the markers of number are short vowels for the Sg. and long vowels for the Pl. In

addition, the Fem. forms kalb+āt+u+šu+ma and kalb+āt+i+šu+ma yield another important clue of sequential value, namely that the number is formed by lengthening the vowel of gender, not of case. This requires a reconsideration of our analysis of ū in Masc. Pl. kalb+ū+šu+ma. If u stands for the Nom. and āt for the Fem. Pl. in kalb+āt+u+šu+ma, then ū in kalb+ū+šu+ma must stand for a conflation of u of the Nom. and ū of the Masc. Pl.

Certain additional features in the speech units discussed above are: The replacement of standard kalab+šu+ma by kalb+u+šu+ma, actually occurring in older Akkadian texts and in poetry; the phonetic change t+š to ss in kalbat+šuma > kalbassuma; the secondary lengthening of the vowels u and i before pronominal suffixes in kalbātūšuma and kalbātīšuma; and the interpretation of t in Fem. kalbatum, etc., as the consonantal glide secondarily introduced between the gender vowel a and the case vowel u. All these features, irrelevant in the present context, are discussed in detail in the respective chapters pertaining to gender, number, and case.

We have accounted for the different segments of the speech units analyzed above, determined their form and function, and reached certain preliminary conclusions as to their sequence within the speech units.

Once this is done, the procedures involved in sequential reconstruction require a one-by-one denotation of each segment in its proper sequence. Thus, if ātu is found to stand for the Fem. Pl. Nom., then each of the morphemes of gender, number, and case must be denoted by a marker in the sequence a+:+u, where a stands for the Fem. gender, : for the Pl. number, and u for the Nom. case. Similarly ū representing Masc. Pl. Nom. must be marked as u+:+u, where u stands

for the Masc. gender, : for the Pl. number, and ∅ for the Nom. case.

Thus we see the contrast to such traditional procedures as breaking up kalbūšuma "and his dogs" into kalb+ū+šu+ma and analyzing it as containing the stem kalb, plus ū of the Masc. Pl. Nom., plus the pronominal suffix šu, plus the enclitic ma. Procedures of sequential reconstruction result in the replacement of kalb+ū+šu+ma by kalb+u+:+∅+šu+ma, in which--as shown in Chart 1--the successive morphemes are marked as the stem kalb, plus u for the Masc. gender, plus : for the Pl. number, plus ∅ for the Nom. case, plus the object šu, plus the enclitic ma.

Determination of form, function, and sequence of individual speech segments requires starting with speech units which can be easily segmented into their component parts. This cannot easily be done with the Masc. kalbūšuma, with its immediate difficulties in the analysis of the gender and case markers, both represented by u. On the other hand, the corresponding Fem. kalbātušuma can be easily analyzed as kalb+a+:+t+u+šu+ma, in which all five sequential components after the stem can be readily recognized.

With the morphemes and markers established for one word class, such as the noun, the search for parallel morphemes and markers in other word classes such as the pronoun, verb, and stative, is necessary. This may or may not confirm the conclusions based on one word class.

All identical morphemes and markers irrespective of the word class in which they occur belong to the same structure. All other morphemes and markers belong to a different structure. Thus the Nom. u // Gen. i contrast in the instances discussed above, the Nom. u // Gen. i // Acc. a, Nom. u // Gen. a, and Nom. u // Gen./Acc. i

contrasts belong to one structure of case in the nouns. The Ind. u // Subj. a contrast in the mood of the verbs and statives also belongs to the same structure. On the other hand, the case markers iš for the Dat. and ūm for the Loc. belong to a different case structure, as do the allative / ventive mood of Akkadian or the energic of Arabic.

A few pages above I noted that the two main steps involved in sequential reconstruction are not necessarily successive. This is quite obvious. It is true, of course, that a correct analysis of a speech segment leads easily to its placement in the proper sequence, as in the case of the analysis and sequential reconstruction of kalb+a+:+$_t$u+šu+ma, discussed above. Oftentimes, however, the procedure is reversed or even circular.

The reverse procedure is illustrated by the case of m of the mimation and mu of the Act. Part. All interpretations in respect to the form and function of mimation (or nunation) in Semitic languages proposed heretofore have been wrong. It was only the positional analysis, showing that the marker of mimation in kalb+u+Ø+Ø+m occupies the same rank as the markers of the pronominal suffixes, such as šu in kalb+u+Ø+Ø+šu, that led to the correct analysis of m of the mimation as the marker signaling the absence of pronominal suffixes. The prefix mu of muštamḫirum is traditionally described as the marker of the Act. Part. The positional analysis shows that the marker mu of the Act. Part. mu+šØ+ta+mØḫir+um occupies the same rank as the inflectional markers of the fientive verb, such as ju in ju+šØ+ta+mØḫir+u. Consequently, mu of the Act. Part. serves a function parallel to that of the mimation, namely, signaling the absence of inflectional elements. These two conclusions in respect to the

function of m of the mimation and mu of the Act. Part. lead to another important conclusion. If kalbu+šu means "dog of his" and ju+šta+mḫir+u means "he caused it to be received," then kalbu+m (from kalbu+ma) should mean "dog of anyone" and mu+šta+mḫir+um should mean "anyone who caused it to be received," making probable the derivation of ma and mu from the indefinite pronoun mu, mi, ma. See 4.3.

A case of circular procedure can be illustrated by the analysis of mood and case. The form and function analysis of the mood in relation to the case is controversial. Some scholars interpret the mood as being identical with the case, others do not. The positional analysis of the mood shows that markers of the mood occupy the same rank as those of the case, thus strengthening the position defended by scholars who had proposed their identity. See 3.13.

As here developed, the five most important rules of sequential reconstruction are:

a) All morphemes occur in a certain ordered sequence. In the case of the suffixal morphemes in kalb+u+:+ɣ+šu+ma, the order after the stem is gender, number, case, object, and enclitics.

b) This order is absolute and immutable. I know of no instance of a morpheme which appears in the wrong sequential order. Among the suffixal morphemes, gender can never occur after number, nor number after case (or mood), nor case after object, nor object after enclitics. The same applies to the prefixal morphemes.

c) There is no skipping of a morpheme in sequential order. With the morpheme of case established for the noun, the markers of case must be denoted in all occurrences of the noun. Only certain structural limitations (discussed in 0.2) permit the non-marking of a morpheme, as in the instance of the Voc. of a noun, which does not

recognize case distinction.

d) Morphemes are normally obligatory, very rarely optional. Thus in the case of suffixal morphemes, the morphemes of gender, number, case (or mood), and object are all obligatory. The fifth-ranked morpheme, denoting the enclitics, is lexical and therefore optional.

e) The morpheme markers are either overt or covert. All five overt markers are recognizable clearly in kalb+a+:+t+u+m+ma /kalbātumma/ "and bitches." The covert markers are denoted in two ways: by a cross-out, as in kalb+u+:+Ø+šu+ma /kalbūšuma/ "and his dogs," where Ø denotes the disappearance of u, the posited marker of the Nom. case; or by Ø, as in kalb+u+:+Ø+Ø+ma /kalbūma/ "and dogs," where Ø denotes the absence of object (in this case, the pronominal suffix).

For general information in the field of linguistics on morpheme sequence, the following studies are useful. Charles F. Hockett, "Two Models of Grammatical Description," Word X (1954) pp. 210-234, speaks of arrangement, positions, and segmental sequence in the discussion of "Item and Arrangement" under his "IA model." H. A. Gleason An Introduction to Descriptive Linguistics (New York, 1955; rev. ed. 1961) pp. 112-116, discusses the order and sequence of morphemes, generally, and in the Turkish verb, specifically. Kenneth L. Pike, Language in Relation to a Unified Theory of the Structure of Human Behavior (Glendale, Cal., 1960) pp. 26f., stresses a combinational grammar, which is said to be based mainly on sequential relations corresponding to the earlier approaches on "the application of immediate constituents or a grammar as composed of classes of morphemes in a row." This kind of grammar is differentiated from the

"hierarchical grammar," better known under Pike's term "tagmemics" and the later "transform(ational) grammar."

For the application of sequential analysis to individual languages see the following studies: Harry Hoijer, five articles on Apachean in International Journal of American Linguistics XI-XV (1945-49), speaks of immediate constituents and definite assigned positions. William L. Wonderly, six articles on Zogue in IJAL XVII-XVIII (1951-52), has reference to sequences of items, statements of sequence, and morphological sequences. Floyd G. Lounsbury, Oneida Verb Morphology, Yale University Publications in Anthropology No. 48 (1953), refers to segmentation and position classes. D. H. Hymes, "Positional Analysis of Categories: A Frame for Reconstruction," Word XI (1955) pp. 10-23, discusses features of order or sequential order of morphemes in Athapascan languages. Velma Pickett, "Isthmus Zapotec Verb Analysis I-II," IJAL XIX (1953) pp. 292-96 and esp. XXI (1955) pp. 217-32, and idem, The Grammatical Hierarchy of Isthmus Zapotec, Supplement to Language, Language Dissertion No. 56 (1960), distinguishes two types of linguistic structures, the "external structure," based on the application of Pike's tagmemics to units of grammatical hierarchy (in the Language Dissertation), and the "internal structure," based on morpheme sequence (in the two IJAL articles). Wallace L. Chafe, eight articles on Seneca in IJAL XXVI-XXVII (1960-61), refers to order, mutually exclusive classes of morphemes, and immediate constituents. I have noted a number of other articles based on sequential analysis in scattered IJAL volumes and in Harry Hoijer and others, Studies in the Athapascan Languages (Berkeley, 1963).

I acknowledge with thanks Professor Eric Hamp's help in provid-

ing me, directly or indirectly, with references to the literature in the Amerindian field. Since I became acquainted with them long after the completion of my work, they exerted no influence upon my methods of sequential reconstruction or terminology. I am happy, however, to report that I find myself in agreement with the theoretical analysis provided by Hymes in the above cited article in Word XI. Important for the theoretical question of linguistic classification (language taxonomy) is Hymes, "Na-Dené and Positional Analysis of Categories," American Anthropologist LVIII (1956) pp. 624-638. The Amerindian literature is cited here in full to offer scholars in the ancient Near Eastern field the opportunity to check on the methods and application of sequential reconstruction, which holds such great promise for the analysis not only of agglutinative languages, such as Sumerian, but also of Hurrian, Urartian, and Elamite.

A number of further observations can be made about the studies listed above. They treat of morpheme sequence either within larger speech segments, such as utterances or sentences, which is of no interest to us here, or within smaller speech segments, such as word classes. When discussing the morpheme sequence, the authors frequently limit themselves to one class, namely the verb, neglecting other word classes. Illustrations of morpheme sequence have been applied to the Amerindian languages and to Turkish, all agglutinative (synthetic or polysynthetic) languages, in which the individual morphemes can be segmented with relative ease. Only Hymes, Word XI pp. 19f., offered some suggestions concerning the application of morpheme sequence to the structure of the finite verb in the (non-agglutinative) Indo-European languages.

In recent years several scholars have utilized methods of

morpheme sequence in the study of certain features of ancient Near Eastern Languages. T. Jacobsen, "Itallak niāti," Journal of Near Eastern Studies XIX (1960) pp. 101-116, and "The Akkadian Ablative Accusative," op. cit. XXII (1963) pp. 18-29, discussed the morpheme sequence in the moods and pronominal suffixes of the verb. He devoted a much broader study to the sequential morphemes of the Sumerian verb, entitled "About the Sumerian Verb" and published in Studies in Honor of Benno Landsberger, Assyriological Studies No. 16 (1965) pp. 71-102. In an article entitled "Die Stämme des altbabylonischen Verbums in ihrem Oppositionssystem," op. cit. pp. 111-120, D. O. Edzard discusses the sequence of certain verbal stems within the context of his oppositional system. In the only reference to morpheme sequence in the grammar, Reiner, LAA § 5.4.2.3, speaks of the "relative preference sequence of (three) verbal suffixes."

While I cannot but welcome the recent attempts to apply the principles of morpheme sequence to the structure of ancient Near Eastern languages, especially Jacobsen's serious, though cumbersome and unbelievably complicated reconstruction of the Sumerian verb, I feel obliged to express dissent. The use of such terms as "relative preference" for my "absolute" and "obligatory" is the result of the neglect of the concept of zero; and the restricted application of the sequential reconstruction to parts of the linguistic structure yields results in respect to specific markers and their sequence which are completely at odds with my own reconstruction.

In order to understand the concept of the totality of structure I shall first discuss the traditional way in which gender is treated in our grammars of Semitic languages. As an example I

shall take one of our best grammars, von Soden's Grundriss der akkadischen Grammatik (Roma, 1952).

Von Soden begins his treatment of the noun with the following statement: "Das Nomen unterscheidet Maskulinum und Femininum" (p. 74). On the next page he adds: "Das Mask. hat keine besondere Endung. Im Fem. mit Endung tritt im Sing. die Endung -t bzw. -at(-et) an den Stamm des Nomens vor die Kasusendungen." Under pronoun (pp. 40-51), certain forms of gender (and case) are listed, but not a word is said about the general structure of the gender of the pronouns. Under the fientive verb and stative (pp. 97-99), we find nothing but paradigms of conjugational elements.

Von Soden's only statement relating to structure is the first one mentioned above: "Das Nomen unterscheidet Maskulinum und Femininum." The gender structure of the pronoun, verb, and stative is nowhere considered. Had the structure of the gender of the pronoun been taken into consideration, it would have been impossible, or at least improbable, to arrive at the conclusion that the Masc. has no endings, and that the Fem. has -t or -at(-et) markers. Positively speaking, it would have been easy to see that u of kalbum is not a marker of the Nom. case, but of the Masc. gender, and that the marker of the Fem. is not -t or -at(-et), but a. This results clearly from a total consideration of the gender, not only in the noun, but also in the pronoun, verb, and stative, as shown, e.g., by the determinative pronoun Masc. šu and Fem. šat (wherein t is secondary), the verb Masc. jamḫurū and Fem. jamḫurā, and the stative Masc. maḫirū and Fem. maḫirā. See generally 1.1.

It should be clear by now that what I found most wanting in the available grammars of Semitic languages is: 1) the holistic approach

to language, namely the understanding of the totality of the linguistic structure, and 2) the recognition of the principle of order in linguistic analysis, and the concomitant realization that morphemes must follow each other in a certain obligatory and immutable sequence. It is the word "sequence" that serves as the basis for what I propose to call "sequential reconstruction."

In completing this section I should like to comment on the relative merits of the comparative method, on the one hand, and the ideal and/or sequential reconstruction, on the other. I can best compare these approaches by discussing a case of a reconstruction of a certain proto-form in Semitic languages.

The comparative method leads to the reconstruction of the 2nd person Fem. Sg. as tamḫurīna in West Semitic. The long vowel ī is written as such in the historically attested West Semitic languages, and is posited by na, which is preserved only after a long vowel. Since cuneiform writing as a rule does not indicate morpheme length, contrary to von Soden, GAG p. 98, and Ungnad-Matouš, GA p. 63, who mark tamḫurī with long ī, there is no evidence for long ī in Akkadian. Thus the reconstruction of Proto-Semitic tamḫurīna or tamḫurī, with long ī, as in Moscati, ICG p. 144, and Diakonoff, SHL p. 80, derives from West Semitic and has no validity for Proto-Semitic.

Based on sequential reconstruction, the following procedure leads to a reconstructed Proto-Akkadian and Proto-Semitic form of the 2nd person Fem. Sg.

a) Sequential reconstruction yields the following markers of the gender in Proto-Akkadian, as well as in Proto-Semitic: u for the Masc., and a or i for the Fem., all short vowels. Accordingly, tamḫuri has a short i, and the secondary development of the

long $\bar{i}$ in West Semitic is the concern of West Semitic reconstruction, not of Proto-Akkadian or Proto-Semitic.

b) Sequential reconstruction yields the following markers of the number: $\emptyset$ (i.e., zero) for the Sg. and $\underline{\cdot}$ (i.e., doubling of the vowel of the gender) for the Pl. Thus the existence of the Sg. tamḫuri posits the existence of the Pl. tamḫuri$\underline{\cdot}$, which is contrary to tamḫurā, the only form of the 2nd person Fem. Pl. attested in all Semitic languages. Consequently, by the rules of sequential reconstruction, the attested tamḫurā would have to be taken as developed secondarily from tamḫuri$\underline{\cdot}$, and marked as tamḫuri$\underline{\cdot}\bar{a}$. However, we could also reverse the procedure and argue that the existence of the Pl. tamḫurā posits the existence of the Sg. tamḫura (to be marked as tamḫura$\underline{\cdot}\bar{i}$), which in turn is not attested anywhere in Semitic languages.

c) By the rules of sequential reconstruction, the Sg. // Pl. contrast must be reconstructed either as tamḫuri // tamḫuri$\underline{\cdot}\bar{a}$ or as tamḫura$\underline{\cdot}\bar{i}$ // tamḫurā. Which of the two reconstructions is to be selected is irrelevant in the present context. (Actually, I prefer the tamḫura$\underline{\cdot}\bar{i}$ // tamḫurā solution because of the assumption that the suffixal sequential morphemes of the fientive verb correspond to those of the noun, and because $\underline{i}$ of tamḫuri can easily be explained as developed secondarily through influence of $\underline{i}$ in ʾanti "thou." The important point at issue is that by the procedures of the comparative method one could never have arrived at either of the two solutions suggested by sequential reconstruction.

In my Morphology of Akkadian p. 3 (noted p. 10) I remarked that "I have allowed myself a certain amount of ideal reconstruction which, because it is ideal, could have never corresponded to reality." This I still believe to be true in the light of our knowledge of the many

irregularities in all inflectional languages, including the Semitic ones. The forced regularity of the ideal reconstruction can hardly be applied to the stages of Proto-Akkadian or Proto-Semitic just prior to the periods of historical attestation. Still, the sequential morphemes as here reconstructed are tangible units and must have had a reality at some early stage in the history of the Semitic languages. I assume this to have been when the Semitic languages passed through an agglutinative stage, in which the regularity of the ideal / sequential reconstruction may have corresponded neatly with the rigidity of the agglutinative structure of the language. See also the end of 3.5.

0.4. Application

At the beginning of section 0.2 I stated that the order in which the eight sequential morphemes appear is obligatory and immutable. With the qualifications made in 0.2 in respect to some structural limitations, such as the optional use of enclitics or the lack of the object with the personal pronouns, there are no real exceptions in the order of sequential morphemes.

Of these eight sequential morphemes, namely five suffixal and three prefixal, the only instances which may appear to form exceptions in the sequential order occur in the suffixal morphemes.

After the primary gender differentiation of rank number 1 in Masc. šuati and Fem. šiati was lost and the two pronouns were replaced by šuati, the latter developed a secondary gender distinction in a different rank position in Masc. šâtu and Fem. šâti. See 1.5.

Beside the primary marker of the Pl. of rank number 2, such Akkadian Pl. forms as kalb+āt+u+ka, kalb+āt+ī+ka (and similarly in

Hebrew) have a secondary marker of the Pl. in the rank number 4 after the case. See 2.5.

The original marker of the object case a of rank number 3, as in šua, was reinforced by a secondary marker i, which appears in the forms šuati, šuašim, etc. See 3.7.

The primary marker of the Subj. mood u (originally a) of rank number 3, as in imḫuru "which he received" was reinforced by a secondary marker i or a, which appears with a consonantal glide n in imḫuruni, imḫuruna, or imḫurušuni. In the latter example ni occupies rank number 5 of the enclitics, and may be extended by the enclitic ma, which in this and similar cases occupies rank number 6. See 3.11.

In the above instances we find a secondary marker which, added to a primary marker, serves the purpose of strengthening the morpheme.

For the possibility that the case markers Dat. iš "to" and Loc. ūm "in" of rank number 3 were originally postpositions attached to the case markers, see 3.8. In the light of the evidence provided there in favor of the separation of the Loc. and Nom. cases on the basis of sequential reconstruction, I feel free to suggest that the two markers actually were distinguished by vocalic quantity. The marker +āh (=ḫ) denoting direction or location in Hebrew, as in haššāmajmāh "heavenwards," appears in rank number 5, after the mimation of rank number 4 and may represent an original postposition. See 3.8.

In very few instances a combination of two or even three markers may occupy the same rank. Thus the marker iš of the Dat. case plus the marker ūm of the Loc. case occupy rank number 3 in qaqqar+iš+ūm "onto the ground." See 3.8. Rank number 4 is occupied by the object, which can be represented by pronominal suffixes or by mimation. In

that rank we find one pronominal suffix, as in ʾaddin+šum "I gave to him," or as many as two or three, as in ʾaddin+ak+kum "I gave to thee," or ʾaddin+ak+kum+šu "I gave him to thee." See 4.2.*

Not to be confused with the ranking of the sequential morphemes are the markers of the extended stem, such as ān in kalb+ān+um, for which see 6. STEM AND ROOT.

It may be suggested that the first suffixal sequential morphemes to be created in the Semitic languages were those of gender and number. Next came the morpheme of case / mood, then the pronominal suffixes and mimation (=nunation), originally both probably independent, and finally the enclitics. See 3.6 and 4.3.

At the other end of the development, the first morpheme to suffer loss in the Semitic languages was mimation (=nunation), at times together with the replacement of pronominal suffixes by prepositional phrases (or the like). Next the case system came into disuse and gradually disappeared. Only the gender and number systems have never been exposed to the process of linguistic decay. (There may be some exceptions in the Hamitic languages of which I am unaware.)

From the temporal order in which the individual morphemes were first created and later decayed one may draw the conclusion that the gender and number systems formed a more integral part of the structure of the Semitic languages than the case system and mimation.

One unexpected and rather interesting by-product of the sequential reconstruction, which emerged, so to speak, automatically from the charts, is the binary system of opposites in the morphemes of gender, number, and case / mood. See 3.2. Thus under gender there is only Masc. and Fem. Under number there is Sg. and Pl., the latter being formed by doubling the gender vowel of the Sg.; the Du. is part of

another system. The Masc. structure of the case, originally diptotic, recognizes only the subject case (Nom.) and the object case (Gen./ Acc.), with the latter developing secondarily the separate Gen. and Acc. cases. Two other cases, Dat. iš and Loc. ūm, have again a different structure, probably postpositional in origin. Also mood shows clearly only the Ind. // Subj. opposites, while the several other moods of Semitic languages form part of other systems. It may be interesting to see whether the binary system of opposites, a dominant feature of the older stages of Semitic languages, is attested also in the older stages of other families of languages, for instance in Indo-European.

Chart 3 gives a bird's-eye view of the markers of gender, number, and case / mood, which are discussed in detail in the three following chapters. It serves as a guide to these inflectional morphemes, and --what is more important in the present context--offers the best illustration of the totality of structure which I can provide. Its order, symmetry, and beauty, if one will, are astonishing. The chart shows complete parallelism in the inflectional structure of the substantives, participles / adjectives, and determinative pronouns. Notwithstanding some prehistoric connections in the stem š, the structure of the determinative pronoun is completely different from that of the personal pronouns. These are all facts, not reconstructions. My connection of the suffixal morphemes of the verb and of the 3rd person of the stative with the noun, and those of the 2nd person of the stative with the personal pronoun yields a nice symmetrical picture which needs, however, stronger substantiation than can be offered in this monograph.

If I were to point out one single outstanding feature of se-

	GENDER				NUMBER			
	Masc.	Fem.	Masc.	Fem.	Sg.	Pl.	Sg.	Pl.
	u	a	u	i	ø	:	ø	$_{n}$u/i
Subst.	kalb+um	+atum			kalb+um	+ūm		
	kalb+ūm	+ātum			kalb+atum	+ātum		
Part.	māḫir+um	+ᵃtum			māḫir+um	+ūtum		
	māḫir+ūtum	+ātum			māḫir+ᵃtum	+ātum		
Det. Pron.	šu	+at			šu	+ūt		
	šūt	+āt			šat	+āt		
Pers. Pron.			šu	+i			šu	+nu
(Indep.)			šunu	+inᵃ			ši	+nᵃ
			etc.				etc.	
(Suff.)			+šuᵃ	+iᵃ			+šuᵃ	+nuᵃ
			+šunuᵃ	+inᵃa			+šiᵃ	+nᵃa
			etc.				etc.	
Verb	jamḫur+ᵃ	+ᵃ			jamḫur+ᵃ	+ū		
	jamḫur+ū	+ā			jamḫur+ᵃ	+ā		
	tamḫur+ᵃ	+ⁱᵃ			tamḫur+ᵃ	+ū		
	tamḫur+ū	+ā			tamḫur+ⁱᵃ	+ā		
Stat.	maḫir+ᵃ	+a(t)	maḫᵃrāt+ᵃ		maḫir+ᵃ	+ū	maḫᵃrāt+ᵃ	+nu
	maḫᵃr+ū	+ā	maḫᵃrāt+unu		maḫᵃr+a(t)	+ā	maḫᵃrāt+i	+nᵃ

Chart 3. Sequential Morphemes of Gender, Number,

CASE / MOOD

	Nom.	Gen./Acc.		Nom.	Gen./Acc.		Nom.	Gen.	Acc.
	u	a		u	i		u	i	a
West Semitic diptota	Pl.	kalb+ūm		+īm	Sg.	kalb+um		+im	+am
		kalbāt+um		+im		kalbat+um		+im	+am
	Pl.	māḫirūt+um		+im	Sg.	māḫir+um		+im	+am
		māḫirāt+um		+im		māḫirØt+um		+im	+am
	Pl.	šūt+Ø		+i	Sg.	š+u		+i	+a
		šāt+Ø		+i		šat+Ø		+i	+Ø
šu+Ø		+a							
ši+Ø		+a							
etc.									
---		+šu+Ø							
---		+ši+Ø							
etc.									
jamḫur+Ø		+ā u							
etc.									
maḫir+Ø		+ā u							
etc.									

and Case / Mood.

quential reconstruction, it is its simplicity. While, in this first attempt at a sequential reconstruction of a Semitic language, I could not avoid providing full evidence and arguing in extenso the points both for and against certain interpretations, future presentations can replace wordy arguments with self-explanatory charts. The charts' vertical arrangement provides full information about the morpheme class, and the charts' horizontal arrangement that about the morpheme sequence. What could be simpler than to let the charts speak for themselves?

1. GENDER

1.1. Markers of Gender: u // a/i

The rank number 1 after the stem is occupied by markers of gender, masculine and feminine. As shown in detail in Charts 5-13, the markers are distributed as follows:

				Masc.	Fem.
u // a.	Chart 5.	Subst.	Sg.	kalbum	kalbatum
			Pl.	kalbūØ	kalbātum
	Chart 6.	Part.	Sg.	māḫirum	māḫiraØtum
			Pl.	māḫirūtum	māḫirātum
	Chart 7.	Pron. Det.	Sg.	šu	šatØ
			Pl.	šūtØ	šātØ
	Chart 12.	Verb 2nd	Sg.	tamḫuraØ	tamḫuriaØ
			Pl.	tamḫurū	tamḫurā
		3rd	Sg.	jamḫuraØ	jamḫutaØ
			Pl.	jamḫurū	jamḫurā
	Chart 13.	Stat. 3rd	Sg.	maḫirØ	maḫ´ra(t)
			Pl.	maḫ´rū	maḫ´rā
u // i.	Charts 8ff.	Pron. Pers.	Sg.	ʾantaØ	ʾanti
			Pl.	ʾantunu	ʾantinaØ

		Sg.	kuati	kiati
		Pl.	kunuʸti	kinʸati
		Sg.	šu(ati)	ši(ati)
			šut	šit
			šuatu	šiati
			šâtu	šâti
		Pl.	šunu(ti)	šinʸa(ti)
Chart 11.	Pron. Suff.	Sg.	+kʸa	+kiʸ
			+kuʸm	+kiʸm
		Pl.	+kunuʸ(ti)	+kinʸati
		Sg.	+šuʸ	+šiʸ, +šʸa
		Pl.	+šunuʸ(ti)	+šinʸa(ti)
Chart 13.	Stat. 2nd	Sg.	maḫʸrāta ʸ	maḫʸrāti
		Pl.	maḫʸrātunu	maḫʸrātina ʸ

It is clear from the above that the reoccurring markers of gender are u in Masc., and a or i in Fem.

Subst., Part., and Det. pronoun exclusively use the markers u and a.

The same u and a class of markers is represented in Arabic by diptota of the type shown in Chart 4.

Masc. ʾaṣfaru Fem. ṣafrāʾu "yellow," Masc. sakrānu Fem. sakrāʸ "drunk," and Masc. ʾakbaru Fem. kubrāʸ "great" show alternation of the stems ʾaṣfar or ṣafr, sakrān or sakr, and ʾakbar or kubr, which is irrelevant here.

The sequential analysis of the Arabic forms clearly leads to

	STEM	GENDER Masc.	GENDER Fem.	NUMBER	CASE	OBJECT	MEANING
Masc.	ʾaṣfar	+u		+Ø	+ⁿ	--	"yellow"
Fem.	ṣafr		+a	+Ø	+ˌu	--	
Masc.	sakr+ān	+u		+Ø	+ⁿ	--	"drunk"
Fem.	sakr		+a	+Ø	+(j)ⁿ	--	
Masc.	ʾakbar	+u		+Ø	+ⁿ	--	"great"
Fem.	kubr		+a	+Ø	+(j)ⁿ	--	

Chart 4. Arabic Diptota.

the conclusion that while the marker of the Masc. is u in ʾaṣfar+u+Ø+ⁿ, the marker of the Fem. is a in ṣafr+a+Ø+ˌu, sakr+a+Ø+ˌju, where it is followed by semi-consonantal glides ʾ or j which precede the case ending u or ⁿ.

The Arabic Fem. class sakrāt/ⁿ is reflected also in other Semitic languages, as in the Hebrew personal name Śaraj, ᶜaštê "one," etc. See Brockelmann, GVG I pp. 412f. The long vowel ā of Arabic ṣafrāʾu, etc., cannot be interpreted in the light of sequential reconstruction, and must therefore represent a secondary development.

The indication of the semi-consonantal glide ʾ and j, visible in the Arabic writing of ṣafrāʾu and sakrāt/ⁿ, is generally omitted in my Akkadian transliterations because of the uncertainties of the cuneiform writing. Did Aššur+i+Ø+u+m and Aššur+a+Ø+u+m (on which see 7.3) yield Aššurijum (Aššurijjum), Aššurajum, or Aššuriʾum, Aššuraʾum? However, it can be taken for granted that some kind of semi-consonantal glide is implicit in all cases in which two contiguous vowels

appear in my transliterations. Thus šuati, šiati may be pronounced as šuwati, šijati, as in Arabic huwa, hija; cf. also šuwati, written šumāti = MU.MEŠ in New Babylonian. Or, they may be pronounced as šuʾati, šiʾati in line with Hebrew hūʾ, hīʾ or Ethiopic wəʾətū, jəʾətī.

For two other consonantal glides, namely n and t, see 2.2 and 3.3, respectively.

1.2. Consonant t not a Primary Marker of Feminine

An important characteristic of the u // a class of markers is the existence of the consonant t after the vowels a, ā of the Fem., as in kalbatum, māḫiratum, šatṭ, and maḫra(t) in Sg., and kalbātum, māḫirātum, and šāṭ in Pl.

Furthermore, it should be noted that the consonant t appears only between two occurring or reconstructed vowels in all instances listed above. The older stage of the stative maḫra in Sg. and maḫrā in Pl. has no t, which is characteristic of the Sg. maḫrat in later development. See 8.2.

The occurrence of t in the Masc. Pl. of Part. māḫirūtum and the determinative pronoun šūṭ is to be explained as secondarily derived from the respective Fem. māḫirātum and šāṭ. Note also the secondarily developed t in Assyrian šut "he," beside šit "she."

Already in my Morphology of Akkadian pp. 18f. the intrusive t was explained not as the original marker of Fem., but as a secondary element introduced to avoid two contiguous vowels. Put more sharply, I interpret t of kalb+a+Ø+t+u+m as a consonantal glide which was introduced between the vowel a (or ā) of the Fem. and the vowels u, i, or a of the case at the time when the normal case system was developed

in Semitic languages. For full evidence in favor of the existence of the consonantal glide t see 3.3.

The glide t is replaced by other glides (ʾ, j) in the u and a class, as exemplified in ṣafrāʾu, sakrāǰu, discussed above under 1.1.

1.3. Lack of t in Feminine

We have noted above the lack of t in the u // a class, as in Arabic Masc. ʾaṣfaru Fem. ṣafrāʾu (1.1), in the 3rd person of the Akkadian stative, as in Sg. Masc. maḫirᵘ Fem. maḫ́ra, Pl. Masc. maḫ́rū Fem. maḫ́rā (1.1 and 1.2), and of the verb, as in Sg. Masc. jamḫurᵘ Fem. tjamḫurᵃ, Pl. Masc. jamḫurū Fem. jamḫurā (1.1).

An over-all characteristic of the whole u // i class is the lack of t in the Fem., as in the personal pronoun, Masc. šu, +šu Fem. ši, +ši, +ša, and in the 2nd person of the stative.

The Fem. marker i, without t, is characteristic of a number of Arabic substantives, such as kasābi "bitch," ḫalāqi "death," gathered and discussed in Fleisch, Traité I pp. 319-324, and Brockelmann, GVG I p. 414.

1.4. General Remarks

The reconstruction here proposed posits the existence of u and a/i as markers of gender with the consonant t of the Fem. taken as a secondarily developed glide to avoid the contiguity of two vowels. Let me emphasize that this reconstruction takes account not only of the gender of the noun, but also of the pronoun, verb, and stative. In other words, the description of the gender, as here given, is not limited to certain parts of the grammar, but is based

on its total structure.

For the above reconstruction see my Morphology of Akkadian pp. 17-19 and 38-49, as well as the brief remarks in my review of von Soden's grammar of Akkadian in BO XII (1955) pp. 106f.

By contrast, all the past and present grammars of Semitic languages, descriptive and comparative / historical, have emphasized the consonant t as the main marker of the Fem. gender in the noun, taking the vowel a as a secondarily developed anaptyptic, epenthetic "Hilfsvokal." Typical in this respect is Brockelmann, GVG I p. 405: "Das wichtigste, auch dem Äg. (ZDMG 46, 97) eigene Femininzeichen ist t, das vielleicht ein demonstratives Element war." Furthermore, they have limited their description to the Fem. gender, and have avoided completely the description of gender outside of the noun. Only J. Barth, "Die diptotische Flexion," ZDMG XLVI (1892) pp. 684-708, and idem, Pronominalbildung, passim (especially pp. xiii and 14) has stressed the existence of the gender markers u and i and the lack of the consonant t in certain classes of pronouns in contrast to the noun. Unfortunately these fruitful observations have made no impact on the authors of grammars of Semitic languages.

For the relation between the u // a/i markers of the gender and those of the case, see 3.4. For the relation of the markers of gender and case to the Pers. Pron. I ju and ja, see 8.2.

1.5. Secondary Gender and Parallels

As given in Chart 10, the standard forms of the Akkadian Pers. Pron. of the 3rd person (= Dem. Pron.) are Masc. šu Fem. ši in Nom., and Masc. šuati Fem. šiati in Gen. / Acc. From the Old Babylonian period onward several changes took place, with the variations

depending on time and area. First, Fem. šiati was replaced by Masc. šuati. Then, the Gen./Acc. form šuati also was used in the Nom. function, as was the fully nominativized form (see on this term 3.12) šuatu, which was used for both genders and for all cases. Ultimately, a secondary gender differentiation developed in the Masc. š(u)atu and Fem. š(i)ati in the Middle Assyrian period. Similar development occurred at Mari in Masc. šâtu and Fem. šâti, and other variants with different degrees of vocalic contraction (e.g., ARMT VI 5:11, 13). A similar case of a secondary gender differentiation is attested in the Ethiopic pronoun Masc. wəʾətū Fem. jəʾətī, where wəʾətū is derived from huatu, and jəʾətī from hiati.

For other instances of the development of secondary (double) features cf. secondary number, as in ʾišātātum (see 2.6); secondary object case, as in Masc. šuati Fem. šiati (see 3.7), and secondary mood, as in the Subj. ša imḫuruni (see 3.11).

A noteworthy characteristic of the secondary features listed above is that in all four cases it is the second morpheme in the binary system of contrastive features that is prone to secondary development, as in the Fem.(not Masc.) gender, the Pl. (not Sg.) number, the object (not subject) case, and the Subj. (not Ind.) mood. For the binary system see above 0.3.

1.6. Further Markers of Gender

The gender contrast between Masc. ān and Fem. at exists in certain ossified forms in Akkadian and other Semitic languages, as in dan, dat "this" in South Arabic, etc., or in ištên, ištêt (from ʿaštij+ān, ʿaštij+at) "one" in Akkadian, etc. See Gelb, "On the Morpheme ān in the Amorite Language," Studies Presented to George

V. Bobrinskoy (Chicago, 1967) pp. 45-48, with reference to an important article of J. H. Greenberg in JAOS LVIII (1960) pp. 317-321.

No gender markers occur in the so-called "grammatical gender," as in ʾummum "mother" or ʾabnum "stone," and in the 1st person Pers. Pron. Sg. and Pl., in both the independent and suffixal forms, as in ʾanāku "I," nīnu "we," etc.

A completely different pair of distinctive features of gender, animate and inanimate, is exemplified in the following interrogative and indefinite pronouns:

mannum,	mīnum	quis,	quid
man+ma,	mīn+ma	quis+que,	quid+que
man+man,	men+meni	quis+quis,	quid+quid
man+mana+ma,	meni+meni+ma	quis+quis+libet,	quid+quid+libet

		GENDER		NUMBER	CASE	OBJECT ENCL.		ATTESTED
		STEM	Masc. Fem.					
Sg.	Nom. Masc.	kalb	+u	+Ø	+ø	+m	(+ma) etc.	kalbum[1]
	Fem.	kalb	+a	+Ø	+$_t$u	+m		kalbatum
	Gen. Masc.	kalb	+ø	+Ø	+i	+m		kalbim
	Fem.	kalb	+a	+Ø	+$_t$i	+m		kalbatim
	Acc. Masc.	kalb	+ø	+Ø	+a	+m		kalbam
	Fem.	kalb	+a	+Ø	+$_t$a	+m		kalbatam
Pl.	Nom. Masc.	kalb	+u	+:	+ø	+ø		kalbūø
	Fem.	kalb	+a	+:	+$_t$u	+m		kalbātum
	Gen. Masc.	kalb	+ø	+:	+i	+ø		kalbīø
	Fem.	kalb	+a	+:	+$_t$i	+m		kalbātim
	Acc. Masc.	kalb	+ø	+:	+i	+ø		kalbīø
	Fem.	kalb	+a	+:	+$_t$i	+m		kalbātim

1. The analysis of GENDER, Substantive applies to Substantive, Absolute (above), as well as to Substantive, Construct State and to Substantive with Pronominal Suffixes (listed in Charts 33-35).

Chart 5. GENDER, Substantive.

		STEM	GENDER	NUMBER	CASE	OBJECT	ENCL.	ATTESTED
			Masc. Fem.					
Sg.	Nom. Masc.	māḫir	+u	+Ø	+Ø	+m	(+ma) etc.	māḫirum[1]
	Fem.	māḫir	+a	+Ø	+$_t$u	+m		māḫirātum
	Gen. Masc.	māḫir	+Ø	+Ø	+i	+m		māḫirim
	Fem.	māḫir	+a	+Ø	+$_t$i	+m		māḫirātim
	Acc. Masc.	māḫir	+Ø	+Ø	+a	+m		māḫiram
	Fem.	māḫir	+a	+Ø	+$_t$a	+m		māḫirātam
Pl.	Nom. Masc.	māḫir	+u	+:	+$_t$u	+m		māḫirūtum
	Fem.	māḫir	+a	+:	+$_t$u	+m		māḫirātum
	Gen. Masc.	māḫir	+u	+:	+$_t$i	+m		māḫirūtim
	Fem.	māḫir	+a	+:	+$_t$i	+m		māḫirātim
	Acc. Masc.	māḫir	+u	+:	+$_t$i	+m		māḫirūtim
	Fem.	māḫir	+a	+:	+$_t$i	+m		māḫirātim

1. The analysis of GENDER, Part. applies to Part./Adj., Absolute (above), as well as to Part./Adj., Construct State and to Part./Adj. with Pronominal Suffixes (listed in Charts 36-38).

Chart 6. GENDER, Participle.

		STEM	GENDER		NUMBER	CASE	OBJECT ENCL.	ATTESTED
			Masc.	Fem.		(Gen./Subj.)		
Sg. Nom.	Masc.	š	+u		+Ø	+Ø	kalbim[1] (+ma) etc.	šu
	Fem.	š		+a	+Ø	+$_t$u	kalbim	šatØ
Gen.	Masc.	š	+Ø		+Ø	+i	kalbim	ši
	Fem.	š		+a	+Ø	+$_t$i	kalbim	šati
Acc.	Masc.	š	+Ø		+Ø	+a	kalbim	ša
	Fem.	š		+a	+Ø	+$_t$a	kalbim	*šatØ
Pl. Nom.	Masc.	š	+u		+:	+$_t$u	kalbim	šūtØ
	Fem.	š		+a	+:	+$_t$u	kalbim	šātØ
Gen.	Masc.	š	+u		+:	+$_t$i	kalbim	šūti
	Fem.	š		+a	+:	+$_t$i	kalbim	*šāti
Acc.	Masc.	š	+u		+:	+$_t$i	kalbim	šūtØ
	Fem.	š		+a	+:	+$_t$i	kalbim	šātØ

1. And older šu imḫura, younger šu imḫuru "he who received," etc.

Chart 7. GENDER, Pronoun, Determinative.

		STEM	GENDER Masc.	GENDER Fem.	NUMBER	CASE	OBJECT ENCL.	ATTESTED
Masc./Fem.	Sg. Nom.	(ʾan+)ʾa+k	--	--	+u	--	(+ma) etc.	ʾanāku[1]
	Gen./Acc.	i	--	--	+a	--		iati[2]
	Dat.	i	--	--	+a	--		iašim
	Pl. Nom.	(ʾan+)na?	--	--	+$_{n}$u	--		(ʾa)naḫna/u,[3] (ʾa)nīnu
	Gen./Acc.	ni	--	--	+a	--		niati
	Dat.	ni	--	--	+a	--		niašim

1. Nom. ʾanāku of Pers. Pron. I was replaced by i of Pers. Pron. II in obl. case. The latter pronoun occurs also in the Poss. Pron. iaum "my."
2. For secondary +ti and +šim see 3.7.
3. The reconstruction of na is questionable. This pronoun appears as (ʾa)nīnu in Akkadian and (ʾa)naḫna/u in other Semitic languages. Pl. suffix +nu was borrowed from ʾantunu, šunu, etc. Nom. ʾanīnu of Pers. Pron. I was replaced by ni of Pers. Pron. II in obl. case. The latter occurs also in the Poss. Pron. niaum "our."

Chart 8. GENDER, Pronoun, Personal, 1st Person.

	STEM	GENDER		NUMBER	CASE	OBJECT ENCL.		ATTESTED
		Masc.	Fem.					
Sg. Nom.	Masc.(ʾan+)t	+u		+Ø	+ɣ	--	(+ma) etc.	ʾantɣa[1]
	Fem. (ʾan+)t		+i	+Ø	+ɣ	--		ʾanti
Gen./Acc.	Masc. k	+u		+Ø	+a	--		kuati[2]
	Fem. k		+i	+Ø	+a	--		kiati
Dat.	Masc. k	+u		+Ø	+a	--		kuašim
	Fem. k		+i	+Ø	+a	--		kiašim
Pl. Nom.	Masc.(ʾan+)t	+u		+$_n$u	+ɣ	--		ʾantunuɣa
	Fem. (ʾan+)t		+i	+$_n$i	+ɣ	--		ʾantinɣ
Gen./Acc.	Masc. k	+u		+$_n$u	+ɣ	--		kunuɣti
	Fem. k		+i	+$_n$ɣ	+a	--		kinɣati
Dat.	Masc. k	+u		+$_n$u	+ɣ	--		kunuɣašim
	Fem. k		+i	+$_n$ɣ	+a	--		kinɣašim

1. U of ʾantu is reconstructed from the Pl. ʾantunu. Nom. ʾantu of the Pers. Pron. I was replaced by ku, etc., of the Pers. Pron. II in obl. case. The latter pronoun occurs also in the Poss. Pron. kuaum, *kiaum, kunuaum, and *kinaum.

2. For secondary +ti and +šim see 3.7.

Chart 9. GENDER, Pronoun, Personal, 2nd Person.

		STEM	GENDER	NUMBER	CASE	OBJECT	ENCL.	ATTESTED
			Masc. Fem.					
Sg. Nom.	Masc.	š	+u	+Ø	+Ø	--	(+ma) etc.	šu[1]
	Fem.	š	+i	+Ø	+Ø	--		ši
Gen./Acc.	Masc.	š	+u	+Ø	+a	--		šua(ti)[2]
	Fem.	š	+i	+Ø	+a	--		šiati
Dat.	Masc.	š	+u	+Ø	+a	--		šušim
	Fem.	š	+i	+Ø	+a	--		šišim
Pl. Nom.	Masc.	š	+u	$+_n$u	+Ø	--		šunu
	Fem.	š	+i	$+_n$i	+Ø	--		šina
Gen./Acc.	Masc.	š	+u	$+_n$u	+Ø	--		šunuti
	Fem.	š	+i	$+_n$i	+a	--		šiniati
Dat.	Masc.	š	+u	$+_n$u	+Ø	--		šunušim
	Fem.	š	+i	$+_n$i	+a	--		šiniašim

1. Pers. Pron. šu, ši, šunu, and šina occur also in the Poss. Pron. šuaum, šiaum, šunuaum, and *šinaum.

   Ass. Pers. Pron. is šut in Masc., šit in Fem.

   Middle Ass. Dem. Pron. is š(u)atu in Masc., š(i)ati in Fem.

   Mari Dem. Pron. is šâtu in Masc., šâti in Fem. (ARM VI 5:11, 13)

   Ethiopic Pers. Pron. is wəʾətū in Masc., jəʾətī in Fem.

2. For secondary +ti and +šim see 3.7.

Chart 10. GENDER, Pronoun, Personal, 3rd Person.

	STEM	GENDER Masc.	Fem.	NUM.	CASE	OBJ.	ATTESTED Gen. kalbu	Dat. imḫur	Acc. imḫur
1st Sg.	Masc/ Fem.	+i	--	--	+a	--	+i(a)	+i/am	+(n)i
Pl.	Masc/ Fem.	+ni	--	--	+a	--	+ni/a	+niašim	+niati
2nd Sg.	Masc.	+k	+u	+Ø	+a	--	+ka	+kum	+ka
	Fem.	+k	+i	+Ø	+a	--	+ki	+kim	+ki
Pl.	Masc.	+k	+u	$+_{n}$u	+a	--	+kunu	+kunušim	+kunu(ti)
	Fem.	+k	+i	$+_{n}$i	+a	--	+kina	+kinašim	+kina(ti)
3rd Sg.	Masc.	+š	+u	+Ø	+a	--	+šu	+šum	+šu
	Fem.	+š	+i	+Ø	+a	--	-ši/a	+šim	+ši/a
Pl.	Masc.	+š	+u	$+_{n}$u	+a	--	+šum	+šunušim	+šunu(ti)
	Fem.	+š	+i	$+_{n}$i	+a	--	+šina	+šinašim	+šina(ti)

Chart 11. GENDER, Pronoun, Personal, Suffixal.

	"STEM"	GENDER Masc.	Fem.	NUM.	MOOD (Ind.)	OBJ.	ENCL.	ATTESTED
Sg.1st Masc./Fem.	ʾa+mḫur	+u		+Ø	+Ø	+Ø	(+ma) etc.	ʾamḫurØ
2nd Masc.	ta+mḫur	+u		+Ø	+Ø	+Ø		tamḫurØ
Fem.	ta+mḫur		+a	+Ø	+Ø	+Ø		tamḫuri
3rd Masc.	ja+mḫur	+u		+Ø	+Ø	+Ø		jamḫurØ
Fem.	ja+mḫur		+a	+Ø	+Ø	+Ø		t jamḫurØ[1]
Pl.1st Masc./Fem.	na+mḫur	+u		+Ø	+Ø	+Ø		namḫurØ[2]
2nd Masc.	ta+mḫur	+u		+:	+Ø	+Ø		tamḫurū[3]
Fem.	ta+mḫur		+a	+:	+Ø	+Ø		tamḫurā
3rd Masc.	ja+mḫur	+u		+:	+Ø	+Ø		jamḫurū
Fem.	ja+mḫur		+a	+:	+Ø	+Ø		jamḫurā

1. Older Akkadian tamḫur, younger imḫur. Because tamḫuru is 2nd Masc., tamḫuru of 3rd Fem. must be considered as secondary.
2. Akkadian has nimḫur, other Semitic languages namḫuru.
3. Only tamḫurā, borrowed from the Du. and/or Fem. Pl., occurs in Akkadian; once, exceptionally, also tamḫurū (in tu-šá-bi-lu-nim in CT VI 34b 11). Other Semitic languages have tamḫurū.

Chart 12. GENDER, Verb.

	"STEM"	GENDER Masc.	GENDER Fem.	NUM.	MOOD (Ind.)	OBJ.	ENCL.	ATTESTED
Sg.1st Masc/Fem.	maḫir+ʾak	--		--	+u	--	(+ma) etc.	maḫ́rāku
2nd Masc.	maḫir+t	+u		+Ø	+∅́	--		maḫ́rāta∅́
Fem.	maḫir+t		+i	+Ø	+∅́	--		maḫ́rāti
3rd Masc.	maḫir+∅́	+u		+Ø	+∅́	+Ø		maḫir∅́
Fem.	maḫir+∅́		+a	+Ø	+∅́	+Ø		maḫ́ra(t)
Pl.1st Masc/Fem.	maḫir+na	--		--	+∅́	--		maḫ́rānu∅́
2nd Masc.	maḫir+t	+u		+$_{n}$u	+∅́	--		maḫ́rātunu
Fem.	maḫir+t		+i	+$_{n}$i	+∅́	--		maḫ́rātina∅́
3rd Masc.	maḫir+∅́	+u		+:	+∅́	+Ø		maḫ́rū
Fem.	maḫir+∅́		+a	+:	+∅́	+Ø		maḫ́rā

Chart 13. GENDER, Stative.

2. NUMBER

2.1. Markers of Number: Zero // Length

The rank number 2 after the stem is occupied by markers of number, singular and plural. As shown in detail in Charts 15-23, the markers are distributed as follows:

				Sg.	Pl.
Ø // ː.	Chart 15.	Subst.	Masc.	kalbum	kalbūX
			Fem.	kalbatum	kalbātum
	Chart 16.	Part.	Masc.	māḫirum	māḫirūtum
			Fem.	māḫiraXtum	māḫirātum
	Chart 17.	Pron. Det.	Masc.	šu	šūtX
			Fem.	šatX	šātX
	Chart 22.	Verb 2nd	Masc.	tamḫuraX	tamḫurū
			Fem.	tamḫuriX	tamḫurā
		3rd	Masc.	jamḫuraX	jamḫurū
			Fem.	tjamḫuraX	jamḫurā
	Chart 23.	Stat. 3rd	Masc.	maḫiraX	maḫ́rū
			Fem.	maḫira(t)	maḫ́rā
Ø // nu/i.	Charts 18ff.	Pron. Pers.	Masc.	ʾantaX	ʾantunua
			Fem.	ʾanti	ʾantinaX

		Masc.	kuati	kunuʌti
		Fem.	kiati	kinʲati
		Masc.	šu(ati)	šunu(ti)
		Fem.	ši(ati)	šinʲ^{a}(ti)
Chart 21.	Pron. Suff.	Masc.	+kuʌm, +kʌa	+kunuʌ(ti)
		Fem.	+kiʌm	+kinʲa(ti)
		Masc.	+šuʌ	+šunuʌ(ti)
		Fem.	+šiʌ, +šʲa	+šinʲa(ti)
Chart 23.	Stat. 2nd	Masc.	mahʲrātʲ^{a}	mahʲrātunu
		Fem.	mahʲrāti	mahʲrātinʲ^{a}

The markers of number are Ø in Sg., and :, that is, lengthening of the gender vowel, in Pl. The lengthened gender vowel is u in the Masc., and a or i in the Fem. The lengthening is achieved in two ways: 1) by doubling the vowel quantity, as in Sg. kalbatum, Pl. kalbātum, and 2) by doubling the vowel and introducing a consonantal glide n between the two vowels, as in Sg. šu Pl. šunu in Masc., or Sg. ši Pl. šinʲ^{a} in Fem.

That the vowel lengthened in the Pl. is that of the gender, and not of the case, can be ascertained clearly from the Fem. (but not the Masc.) of the substantives, participles, determinative pronouns, etc. Thus in Masc. Pl. kalbūʌ Sg. kalbum, it is impossible to see whether the length appertains to the vowel u of the gender or of the case, while in Fem. Pl. kalbātum Sg. kalbatum, it is clear that the length goes with the vowel a of the gender, and not with the vowel u of the case.

Substantives, participles, determinative pronouns, and verbs exclusively have the markers Ø // ː (= doubling of the vowel quantity).

Personal pronouns, both independent and suffixal, exclusively use the markers Ø // n̲u in Masc. and Ø // n̲i in Fem.

An alternation of markers Ø // ː and of Ø // n̲u/i appears in the stative.

2.2. Consonantal Glide n and Parallels

An important characteristic of the Pl. of personal pronouns, both independent and suffixal, as well as of the 2nd person of the stative, is the existence of the consonant n, as in š+u+n+u in Masc. and š+i+n+ḫ in Fem. Already in my Morphology of Akkadian pp. 41 and 61 the intrusive n was explained as a consonantal glide introduced in order to avoid two contiguous vowels.

In addition, the following evidence can be cited in favor of the existence of the consonantal glide n:

a) The standard Akkadian form iddinūnim "they gave to me" has to be interpreted as iddinū+n+im, wherein +im is the posited, although very rare, form of the standard Dat. suffix +am. For +im cf., e.g., iddinim "he gave to me" (ARMT II 96:7), beside the standard iddinam "he gave to me."

b) The unique form ša ta-qa-bi-ni-im = ša taqabbînim "which thou (Fem.) sayest to me" (Sumer XIII 99:17) clearly has the original glide n, which is elided in the standard Akkadian taqabbᵓim or taqabbîm.

c) The standard Akkadian imḫurni "he received me" is to be explained as the old Ind. imḫuru, plus the glide n, plus the Acc.

suffix +i, the latter occurring in the corresponding Old Assyrian imḫuri "he received me." The pronominal suffix +ni appears also in other Semitic languages. The Arabs called this secondary n nūnu ʾal-ʿimādi "the supporting n" or nūnu ʾal-wiqāǧati "the protecting n." See De Lacy O'Leary, Comparative Grammar of the Semitic Languages (London, 1923) p. 150. Brockelmann, GVG I pp. 52b and 307b, defines this n as originating "zur Vermeidung des Hiatus" between the vowels.

d) The Assyrian ša imḫuruni "which he received" (and other parallel forms) is to be interpreted as the original Subj. imḫuru, plus the glide n, plus the secondary Subj. in +i. The occurrence of n after a consonant in such forms of the Subj. as imḫuranni, from imḫuram+ni, is no evidence against the interpretation of n as a consonantal glide, because in the course of time ni became an enclitic which could and does appear in rank number 5. See 1.5 for the secondary Subj., and 3.11 for the enclitic function of ni.

e) The Amorite personal name ʾAǧǧa+ʾabī "where is my father?" appears also with the glide n in the form ʾAǧǧan+ʾabī. The name Bunu+taḥtun+ʾila contains the word taḥtun "below," with the glide n added to taḥtu, known in other Semitic languages. See Gelb, La lingua degli Amoriti pp. 163f.

f) In a number of cases of gentilic formations in Hebrew (as in Šīlonī "man of Šilo(h)," Gīlonī "man of Gilo(h)") and Arabic (Ṣanʿānijjun "man of Ṣanʿāʾu"), the intrusive n was plausibly explained (against other scholars) by Barth, Nominalbildung pp. 363f., as due to the hiatus. Cf. also Brockelmann, GVG I p. 52b. Also post-biblical Hebrew has Haifani "man of Haifa."

g) I leave open the question whether n or nn in Hebrew kāmōnī "like I," ʿōdēnū and ʿōdennū "still he," mimmennī "from me," etc., can be explained as secondary intrusions of n.

h) Baghdad Arabic has n as a glide in ʾabūnu (for ʾabūhu) "his father." For this and more examples in other late Arabic dialects, see Brockelmann, GVG I p. 52c.

i) Consonantal glide n appears in the Anatolian personal names Išpunaḫšu, compared with Išputaḫšu, Išpua, etc. For a discussion of these names, as well as of other consonantal glides, such as t in Išputaḫšu above, see 3.3.

Instead of the glide n of Akkadian and Aramaic Masc. and Fem. Pl. of the Pers. Pron., some West Semitic languages have m in the Masc. and n in the Fem., as in Hebrew ʾattem, ʾatten, or Arabic ʾantumu, ʾantunna. The origin of this m raises several problems which must be discussed here.

One way of explaining the m // n differentiation is to consider m as part of the Masc. marker, and n as part of the Fem. marker. I reject this interpretation unhesitatingly because I find no support for it in the gender structure of any Semitic language, and consequently of Proto-Semitic. See the discussion under 0.3.

The other possibility to consider is that the consonant m of ʾantumu (or humu) goes back to ma of the mimation. The reconstructed Pl. Masc. ʾantūma, based on ʾant+u+:+ā+ma could, theoretically, first lead to ʾantūmu, next to ʾantūnu, and then, with the loss of the length, to ʾantunu. This possibility must be rejected for several reasons. First, mimation (or nunation) is impossible in the personal pronouns, because the latter cannot take an object. See 4.3. Secondly, since the Sg. Nom. šu has the Gen./Acc. šua, the reconstructed

Pl. Gen./Acc. š/h+u+:+nu+Ø+Ø would have the Gen./Acc. marker a in the wrong position, after mimation. That this sequence is wrong is shown clearly, e.g., by the Arabic Du. form humā, reconstructed as h+u+ a:+Ø (parallel to the Du. of the noun in kalb+a+ a:+Ø+n), where a:, the marker of the Du., has the position of number, which regularly precedes the markers of case.

From the transliteration of h+u+ a:+Ø, given just above, it is evident that I take m to be a consonantal glide, parallel to n in š+u+ u+Ø and to t in kalb+a+ a:+Ø+n or kalb+a+Ø+ u+m. While the evidence in favor of the consonantal glides n and t in Semitic languages is very good (see above and 3.3), that in favor of the glide m is not.* Since the phonetic change of m > n is amply documented (see 4.3), while that of n > m is not, I hesitate to interpret m of ʾantumu as derived from n of ʾantunu. Still, I do not see any other solution.

I would explain the differentiation marked by m // n in Masc. ʾantunu Fem. ʾantina on a dialectal basis, parallel to that marked by h // s in Masc. he "he" Fem. se "she," for which see 0.3. I would posit first ʾantumu, ʾantima and hu, hi in one dialect (or language), and ʾantunu, ʾantina and su, si in another. Next, we may assume the existence of ʾantumu, ʾantina and hu, si, resulting from the influence of one dialect upon the other. Once the gender differentiation was achieved by means of two consonants, m // n and h // s, the road was open to give up the original gender differentiation by means of two vowels u // i, resulting in ʾantum(u), ʾantun(u) or hu, su (actually attested he, se).

2.3. Dissimilation

In all the cases of the Fem. Pl. +ni the vowel i appears dissimilated to a, as in ʾantini > ʾantina, mahḫrātini > mahḫrātina, šini > šina, +šini > +šina, etc. For similar cases of vocalic dissimilation in Semitic languages, cf. Arabic Du. qaṣṣābāni, qaṣṣābaini (from +na), Pl. ʾiḫwānun, ʿibdānun (Sg. ʾaḫun, ʿabdun), cited in Fleisch, Traité I pp. 155f., and Brockelmann, GVG I p. 253. See also below under 4.3.

Von Soden, GAG p. 42, cites two cases of Fem. Pl. šini (for šina) in the New Babylonian period; I know of six more cases of šini, but not one of šina, from the same late period. In addition, L. Oppenheim, Orientalia n.s. IX (1940) p. 222, pointed out the existence of Fem. Pl. iššini in TCL XIII 181:14, a late Babylonian text. One hesitates to take these spellings seriously, coming as they do from a period when short final vowels were elided. Still, the possibility that the form šini was borrowed in late Akkadian from an obscure dialect which had preserved the posited Proto-Semitic form šini cannot be completely disregarded.

2.4. General Remarks

In Morphology of Akkadian p. 14 and in my review of von Soden's grammar of Akkadian in BO XII (1955) p. 107b, I credited A. Poebel for being the first scholar to express the opinion that the Pl. is formed by lengthening the gender vowel of the Sg. This is not quite correct. In rereading the typewritten notes of Poebel's course on the comparative grammar of Semitic languages given in 1940 at the University of Chicago, I find that Poebel took -at- as the marker of Fem., u, i, a as markers of case, and believed that the Pl. was formed by lengthen-

ing these (case) vowels in the external Pl., or by lengthening any vowel in the "broken" Pl. of substantives. Furthermore, I have noted recently that Brockelmann, GVG I p. 441, refers briefly to a "lautsymbolische Dehnung" in the Fem. Pl. +āt from +at.

In the past few years a number of scholars have written on the formation of the Pl. in the noun: S. Moscati, "Il plurale esterno maschile nelle lingue semitiche," RSO XXIX (1954) pp. 28-52, esp. p. 50 incl.fn. 2; Moscati, ICG (1964) pp. 87 and 91; Diakonoff, SHL (1965) p. 65; and Reiner, LAA (1965) p. 60. In all cases the authors note with approval the principle of forming the Pl. by lengthening the vowel of the case endings, but limit their observations to the noun. The abrupt and disapproving note of W. Vycichl on the Pl. ending of the Fem. in RSO XXXIII (1958) pp. 177f. is based on a confusion of markers of case with those of gender.

What I consider to be the main contribution of my Morphology of Akkadian (1952) to the question of the formation of the Pl. is 1) the discovery that it is the gender vowel, not the case vowel, that is lengthened in the Pl., and 2) the extension of this principle from the noun to the pronoun, verb, and stative. See op. cit. pp. 13-16, esp. p. 14, and the charts for the Pers. Pron. I and II and for the verb op. cit. pp. 38f. and 44ff.

2.5. Other Markers of Plural

Not noted above are several other ways of indicating the number distinctions between Sg. and Pl.

Pl. is often indicated by a partial or full reduplication, as in

Sg. ʾaḫum Pl. ʾaḫḫū "brother," Sg. ʾalaktum Pl. ʾalkakātum "road," Hebrew Pl. meimei "waters," Syriac Pl. daqdəqē "common people" (= "little ones"). Pl. also can be indicated by a prolonged stem, as in Arabic Sg. ʾabun Pl. ʾabahātun or ʾabāʾun, Syriac ʾabāhātā or ʾabāhē "father," Arabic Sg. sanatun Pl. sanahātun or sanawātun "year," Sg. ʾilum, Hebrew Pl. *ʾilāhīm, Phoenician *ʾilānīm "god."

Characteristic of the later Semitic languages is the so-called internal (broken) Pl., derived from abstract nouns in Sg., as in Arabic Sg. baḥrun Pl. biḥārun, biḥūrun, ʾabḥārun, ʾabḥurun "sea."

The distinction between Sg. and Pl. is also indicated by different elements, as in the Pers. Pron. of the 1st person, ʾanāku "I" and ʾanaḫnu "we," ʾamḫurꝺ "I received" and namḫurꝺ "we received."

2.6. Secondary Plural

Secondary or double Pl. occurs occasionally in Akkadian Sg. ʾišatum (also ʾišum) Pl. ʾišātātum (beside išātum) "fire," Hebrew Sg. qešet (stem qaws) Pl. qəšātōt "bow." Many examples of "le pluriel d'un pluriel" culled from the Arabic language are cited in Fleisch, Traité pp. 496ff., such as Sg. baladun "lieu habité, localité," internal Pl. bilādun "lieux habités, localités," then "pays," which, understood as a Sg., received the form of an internal Pl. in buldānun. For "plurals of plurals" in Ethiopic, cf. many examples in A. Dillmann, Ethiopic Grammar (2nd ed., London, 1907) § 141, such as ʾamsāl "image" and ʾamsālāt "images."

Instead of the expected kalb+āt+u+ka in Nom. and kalb+āt+i+ka in Gen./Acc., we find in standard Akkadian the forms kalb+āt+ū+ka and kalb+āt+ī+ka in the Pl. of Fem. nouns before pronominal suffixes.

The long vowels ū and ī of the Fem. were explained by von Soden, GAG § 65k, as derived from the Masc. ū and ī, as in kalbū, kalbī. The Gen./Acc. case has ē in the Assyrian dialect, instead of ī in the standard (Babylonian) dialect. The same long vowels appear also in Masc. Pl. ending in +ūtū+, +ūtī+ (Part.) and +ānū+, +ānī+.

Traditionally, the long vowel ē in Hebrew Pl. of nouns before pronominal suffixes, as in Masc. sûsēka or Fem. sûsōtēka, is explained as derived from the oblique case of the Du. ai. See, e.g., A. Ungnad, Hebräische Grammatik (Tübingen, 1912) pp. 62f.

It is obvious that the long vowels in the Akkadian and Hebrew instances just cited must be interpreted as being of the same origin. One possible interpretation is to take the long ī/ē of Akkadian kalbātī/ēka and Hebrew sûsēka, sûsōtēka as derived from the Du. ai; the long ū of the Akkadian kalbātūka would have then originated by analogy with the oblique case. The other interpretation, which I favor, is simply to regard the long vowels as secondary Pl. On the general question of similar secondary (double) features in the gender and case see 1.5.

2.7. Dual

Still to be considered is another number distinction, namely the dual. In the early periods of Akkadian, especially Old Akkadian, the dual is used regularly with the noun. Its reconstruction is shown in Chart 14.

The Du. of the noun appears without case endings in the Constr. St., as in mer^{3}ā PN "two sons of PN" or māḫirātā kaspim "two recipients of silver," and before pronominal suffixes, as išdā+ša "her two foundations" or ^{3}aḫatā+ki "thy two sisters."

		STEM	GENDER	NUMBER	CASE	OBJECT	ENCL.	ATTESTED
				(Dual)				
Masc.	Nom.	kalb	+Ø	+a:	+Ø	+n	(+ma) etc.	kalbān
	Gen.	kalb	+Ø	+a:	+i	+n		kalbên
	Acc.	kalb	+Ø	+a/	+i	+n		kalbên
Fem.	Nom.	kalb	+a	+$_t$a:	+Ø	+n		kalbatān
	Gen.	kalb	+a	+$_t$a/	+i	+n		kalbatên
	Acc.	kalb	+a	+$_t$a/	+i	+n		kalbatên

Chart 14. Dual.

The Du. frequently occurs in the verb in the form of imḫurā for the 3rd person, both Masc. and Fem. The 2nd person of the Du. in the form of tamḫurā may be posited, but is nowhere attested.

The 3rd person Masc. of the stative is attested as marṣā "they are sick," the Fem. as šalimØtā "they are well." By the Old Babylonian period the Fem. form šalimØtā is replaced by the Masc. šalimā.

Nothing of importance concerning the structure of the Du. can be derived from the Akkadian demonstrative pronoun, Masc. Nom. ʾannijān, Gen./Acc. annîtên, Fem. Gen./Acc. ʾannijatên > annîtên, the Constr. St. of the determinative pronoun šā, and the Constr. St. of the numeral "two," Masc. šinā Fem. šin$_t$tā. Arabic and some other Semitic languages show the Du. also in the personal pronouns ʾantumā "you," humā "they," and in the parallel suffixal pronouns +tumā "you" and +humā "they."

The following observations can be made concerning the entries in Chart 14:

The markers of the Du. number are a: in Masc. and t a:, with the consonantal glide t, in Fem. For the latter see 3.3.

The gender marker of the Fem. is clearly a, as in kalbatān kalbatên.

The case marker of Gen./Acc. is clearly i in kalbēn from kalbain, and in kalbatên from kalbatain, where ai yields ê or î, depending on the dialect.

Not clear is the situation with the first u, the gender marker of the Masc., and the second u, the case marker of the Nom. As against the standard instances of kalbān and kalbatān, we also have kilallūn "both" in Nom., especially at Mari, which shows the preservation of either the gender or case vowel u. As against the standard kalbēn, there is one occurrence of a-na ma-al-ku-i-in "for the two princes" (RA XXXV p. 48 No. 23, early Mari), which shows the Masc. gender vowel u preserved in malkuīn. The Masc. gender vowel u is also preserved in širkuā, a predicate form of širkuān, in ši-ir-ku-a i-da-šu /širkuā idāšu/ "his two arms are two strings" in a text of the Old Akkadian period (MAD II^2 p. 129 and MAD III p. 285, a new interpretation).

		STEM	GENDER	NUMBER Sg.	NUMBER Pl.	CASE	OBJECT ENCL.	ATTESTED
Masc. Nom.	Sg.	kalb	+u	+Ø		+Ø	+m (+ma) etc.	kalbum[1]
	Pl.	kalb	+u		+:	+Ø	+Ø	kalbūm
Gen.	Sg.	kalb	+Ø	+Ø		+i	+m	kalbim
	Pl.	kalb	+Ø		+:	+i	+Ø	kalbīm
Acc.	Sg.	kalb	+Ø	+Ø		+a	+m	kalbam
	Pl.	kalb	+Ø		+:	+i	+Ø	kalbīm
Fem. Nom.	Sg.	kalb	+a	+Ø		$+_t$u	+m	kalbatum
	Pl.	kalb	+a		+:	$+_t$u	+m	kalbātum
Gen.	Sg.	kalb	+a	+Ø		$+_t$i	+m	kalbatim
	Pl.	kalb	+a		+:	$+_t$i	+m	kalbātim
Acc.	Sg.	kalb	+a	+Ø		$+_t$a	+m	kalbatam
	Pl.	kalb	+a		+:	$+_t$i	+m	kalbātim

1. The analysis of NUMBER, Substantive applies to Substantive, Absolute (above), as well as to Substantive, Construct State, and to Substantive with Pronominal Suffixes (listed in Charts 33-35).

Chart 15. NUMBER, Substantive.

STEM	GENDER	NUMBER	CASE	OBJECT	ENCL.	ATTESTED
		Sg. Pl.				
Masc. Nom.	Sg. māḫir	+u +Ø		+Ø	+m	(+ma) etc. māḫirum[1]
	Pl. māḫir	+u	+:	$+_t$u	+m	māḫirūtum
Gen.	Sg. māḫir	+Ø +Ø		+i	+m	māḫirim
	Pl. māḫir	+u	+:	$+_t$i	+m	māḫirūtim
Acc.	Sg. māḫir	+Ø +Ø		+a	+m	māḫiram
	Pl. māḫir	+u	+:	$+_t$i	+m	māḫirūtim
Fem. Nom.	Sg. māḫir	+a +Ø		$+_t$u	+m	māḫirØtum
	Pl. māḫir	+a	+:	$+_t$u	+m	māḫirātum
Gen.	Sg. māḫir	+a +Ø		$+_t$i	+m	māḫirØtim
	Pl. māḫir	+a	+:	$+_t$i	+m	māḫirātim
Acc.	Sg. māḫir	+a +Ø		$+_t$a	+m	māḫirØtam
	Pl. māḫir	+a	+:	$+_t$i	+m	māḫirātim

1. The analysis of NUMBER, Participle applies equally to Part./Adj., Absolute (above) as well as to Part./Adj., Construct State and to Part./Adj. with Pronominal Suffixes (listed in Charts 36-38).

Chart 16. NUMBER, Participle.

		STEM	GENDER	NUMBER Sg.	NUMBER Pl.	CASE (Gen./Subj.)	OBJECT	ENCL.	ATTESTED
Masc. Nom.	Sg.	š	+u	+Ø		+ṁ	kalbim[1]	(+ma) etc.	šu
	Pl.	š	+u		+:	+$_t$u	kalbim		šūtṁ
Gen.	Sg.	š	+ṁ	+Ø		+i	kalbim		ši
	Pl.	š	+u		+:	+$_t$i	kalbim		šūti
Acc.	Sg.	š	+ṁ	+Ø		+a	kalbim		ša
	Pl.	š	+u		+:	+$_t$i	kalbim		šūtḫ
Fem. Nom.	Sg.	š	+a	+Ø		+$_t$u	kalbim		šatṁ
	Pl.	š	+a		+:	+$_t$u	kalbim		šātṁ
Gen.	Sg.	š	+a	+Ø		+$_t$i	kalbim		šati
	Pl.	š	+a		+:	+$_t$i	kalbim		*šāti
Acc.	Sg.	š	+a	+Ø		+$_t$a	kalbim		*šatṁ
	Pl.	š	+a		+:	+$_t$i	kalbim		šātḫ

1. And older šu imḫura, later ša imḫuru "he who received," etc.

Chart 17. NUMBER, Pronoun, Determinative.

	STEM	GEN.	NUMBER Sg.	NUMBER Pl.	CASE	OBJ.	ATTESTED
Masc./Fem.Nom.Sg.	(ʾan+)ʾa+k	--	--		+u	--	ʾanāku[1]
Pl.	(ʾan+)na?	--	--		+nu	--	(ʾa)naḫna/u,[2] (ʾa)nīnu
Gen./Acc. Sg.	i	--	--		+a	--	iati[3]
Pl.	ni	--	--		+a	--	niati
Dat. Sg.	i	--	--		+a	--	iašim
Pl.	ni	--	--		+a	--	niašim

1. Nom. ʾanāku of Pers. Pron. I was replaced by i of Pers. Pron. II in obl. case. The latter pronoun occurs also in the Poss. Pron. iaum "my."

2. The reconstruction of na is questionable. This pronoun appears as (ʾa)nīnu in Akkadian and (ʾa)naḫna/u in other Semitic languages. Pl. suffix +nu was borrowed from ʾantunu, šunu, etc. Nom. ʾanīnu of Pers. Pron. I was replaced by ni of Pers. Pron. II in obl. case. The latter occurs also in the Poss. Pron. niaum "our."

3. For secondary +ti and +šim see 3.7.

Chart 18. NUMBER, Pronoun, Personal, 1st Person.

		STEM	GENDER	NUMBER	CASE	OBJECT	ENCL.	ATTESTED
				Sg. Pl.				
Masc. Nom.	Sg.	(ʾan+)t	+u	+Ø	+ɨ	--	(+ma) etc.	ʾantɨ[a][1]
	Pl.	(ʾan+)t	+u	+$_n^u$	+ɨ	--		ʾantunu
Gen./Acc.	Sg.	k	+u	+Ø	+a	--		kuati[2]
	Pl.	k	+u	+$_n^u$	+ɨ	--		kunuɨti
Dat.	Sg.	k	+u	+Ø	+a	--		kuašim
	Pl.	k	+u	+$_n^u$	+ɨ	--		kunuɨšim
Fem. Nom.	Sg.	(ʾan+)t	+i	+Ø	+ɨ	--		ʾanti
	Pl.	(ʾan+)t	+i	+$_n^{a\,\acute{}}$	+ɨ	--		ʾantinɨ[a]
Gen./Acc.	Sg.	k	+i	+Ø	+a	--		kiati
	Pl.	k	+i	+$_n^{\acute{}}$	+a	--		kinɨati
Dat.	Sg.	k	+i	+Ø	+a	--		kiašim
	Pl.	k	+i	+$_n^{\acute{}}$	+a	--		kinɨašim

1. U of ʾantu is reconstructed from the Pl. ʾantunu. Nom. ʾantu of the Pers. Pron. I was replaced by ku, etc., of Pers. Pron. II in obl. case. The latter occurs in the Poss. Pron. kuaum, *kiaum, kunuaum, and *kinaum.

2. For secondary +ti and +šim see 3.7.

Chart 19. NUMBER, Pronoun, Personal, 2nd Person.

		STEM	GENDER	NUMBER Sg.	NUMBER Pl.	CASE	OBJECT ENCL.	ATTESTED
Masc. Nom.	Sg.	š	+u	+Ø		+Ø	-- (+ma) etc.	šu[1]
	Pl.	š	+u		+$_{n}$u	+Ø	--	šunu
Gen./Acc.	Sg.	š	+u	+Ø		+a	--	šua(ti)[2]
	Pl.	š	+u		+$_{n}$u	+Ø	--	šunuØti
Dat.	Sg.	š	+u	+Ø		+a	--	šuašim
	Pl.	š	+u		+$_{n}$u	+Ø	--	šunuØšim
Fem. Nom.	Sg.	š	+i	+Ø		+Ø	--	ši
	Pl.	š	+i		+$_{n}$^{a}Ø	+Ø	--	šin^{a}Ø
Gen./Acc.	Sg.	š	+i	+Ø		+a	--	šiati
	Pl.	š	+i		+$_{n}$Ø	+a	--	šinØati
Dat.	Sg.	š	+i	+Ø		+a	--	šiašim
	Pl.	š	+i		+$_{n}$Ø	+a	--	šinØašim

1. Pers. Pron. šu, ši, šunu, and šina occur also in the Poss. Pron. šuaum, šiaum, šunuaum, and *šinaum.

2. For secondary +ti and +šim, see 3.7.

Chart 20. NUMBER, Pronoun, Personal, 3rd Person.

STEM GEN.		NUMBER Sg.	NUMBER Pl.	CASE OBJ.		ATTESTED Gen. kalbu	Dat. imḫur	Acc. imḫur
1st Masc/ Fem.	Sg.	+i	--	+a	--	+i(a)	+i/am	+(n)i
	Pl.	+ni	--	+a	--	+ni/a	+niašim	+niati
2nd Masc.	Sg.	+k	+u +Ø	+a	--	+ka	+kum	+ka
	Pl.	+k	+u +$_{n}$u	+a	--	+kunu	+kunušim	+kunu(ti)
Fem.	Sg.	+k	+i +Ø	+a	--	+ki	+kim	+ki
	Pl.	+k	+i +$_{n}$i	+a	--	+kina	+kinašim	+kina(ti)
3rd Masc.	Sg.	+š	+u +Ø	+a	--	+šu	+šum	+šu
	Pl.	+š	+u +$_{n}$u	+a	--	+šunu	+šunušim	+šunu(ti)
Fem.	Sg.	+š	+i +Ø	+a	--	+ši/a	+šim	+ši/a
	Pl.	+š	+i +$_{n}$i	+a	--	-šina	+šinašim	+šina)ti)

Chart 21. NUMBER, Pronoun, Personal, Suffixal.

	"STEM"	GEN.	NUMBER Sg.	NUMBER Pl.	MOOD (Ind.)	OBJ.	ENCL.	ATTESTED
1st Masc/Fem.	Sg.	ʾa+mḫur	+u	+Ø		+ḭ	+Ø	(+ma) etc. ʾamḫurḭ
	Pl.	na+mḫur	+u	+Ø		+ḭ	+Ø	namḫur[1]
2nd Masc.	Sg.	ta+mḫur	+u	+Ø		+ḭ	+Ø	tamḫurḭ
	Pl.	ta+mḫur	+u		+:	+ḭ	+Ø	tamḫurū[2]
Fem.	Sg.	ta+mḫur	+a	+Ø		+ḭ	+Ø	tamḫuri
	Pl.	ta+mḫur	+a		+:	+ḭ	+Ø	tamḫurā
3rd Masc.	Sg.	ja+mḫur	+u	+Ø		+u	+Ø	jamḫurḭ
	Pl.	ja+mḫur	+u		+:	+ḭ	+Ø	jamḫurū
Fem.	Sg.	ja+mḫur	+a	+Ø		+ḭ	+Ø	t ḭ jamḫurḭ[3]
	Pl.	ja+mḫur	+a		+:	+ḭ	+Ø	jamḫurā

1. Akkadian has nimḫur, other Semitic languages namḫuru.
2. Only tamḫurā, borrowed from the Du. and/or Fem. Pl., occurs in Akkadian; once also tamḫurū. Other Semitic languages have tamḫurū.
3. Older Akkadian tamḫur, later imḫur.

Chart 22. NUMBER, Verb.

	"STEM"	GEN.	NUMBER Sg.	NUMBER Pl.	MOOD (Ind.)	OBJ.	ENCL.	ATTESTED
1st Masc/Fem.	Sg. maḫir+ʾak	--	--		+Ø	--	(+ma) etc.	maḫīrāku
	Pl. maḫir+na	--	--		+Ø	--		maḫīrānaš
2nd Masc.	Sg. maḫir+t	+u	+Ø		+Ø	--		maḫīrāta
	Pl. maḫir+t	+u		+nu	+Ø	--		maḫīrātunu
Fem.	Sg. maḫir+t	+i	+Ø		+Ø	--		maḫīrāti
	Pl. maḫir+t	+i		+ni	+Ø	--		maḫīrātina
3rd Masc.	Sg. maḫir+š	+u	+Ø		+Ø	+Ø		maḫirš
	Pl. maḫir+š	+u		+:	+Ø	+Ø		maḫīrū
Fem.	Sg. maḫir+š	+a	+Ø		+Ø	+Ø		maḫīra(t)
	Pl. maḫir+š	+a		+:	+Ø	+Ø		maḫīrā

Chart 23. NUMBER, Stative.

3. CASE / MOOD

3.1. Markers of Case: u // a/i

Rank number 3 after the stem is occupied by markers of case, nominative, genitive, dative, and accusative. As shown in detail in Charts 32-48, the markers are distributed as follows:

			Nom.	Gen./Acc.
u // a. Charts 40ff.	Pron. Pers.	Sg.	(ʾanāku)	iati
		Pl.	(ʾanīnu)	niati
		Sg.	(ʾantą)	kuati
		Pl.	(ʾantunu)	kunuąti
		Sg.	šu	šuą(ti)
		Pl.	šunu	šunuąti, šuniti
Charts 45ff.	Pron. Suff.	Sg.	(*ku)	+kuą, +kąa
		Pl.	(*kunu)	+kunuą(ti)
		Sg.	(šu)	+šuą
		Pl.	(šunu)	+šunuą(ti), +šuni/a

			Ind.	Subj.
Chart 47.	Verb 1st	Sg.	ʾamḫurą	ʾamḫura
		Pl.	namḫuru	namḫura
	2nd	Sg.	tamḫurą	tamḫura

		3rd	Sg.	jamḫurʾ	jamḫura
Chart 48.	Stat.	3rd	Sg.	maḫirʾ	maḫʾra

				Nom.	Gen./Acc.
Ø // a. Chart 41f.	Pron. Pers.		Sg.	(ʾanti)	kiati
			Pl.	(ʾantinʾ)	kinʾati
			Sg.	šiti	šiati
			Pl.	šinʾ	šinʾati
	Charts 44ff.	Pron. Suff.	Sg.	(*i)	+i(a)
			Pl.	(*ni)	+niati, +niʾ, +nʾa
			Sg.	(*ki)	+kiʾ
			Pl.	(*kinʾ)	+kinʾa(ti)
			Sg.	(ši)	+šiʾ, +šʾa
			Pl.	(šinʾ)	+šinʾa(ti)

					Ind.	Subj.
Ø // Ø. Chart 47.	Verb	2nd	Sg.	Fem.	tamḫurʾ	tamḫurʾ
			Pl.	Masc.	tamḫurū	tamḫurū
				Fem.	tamḫurā	tamḫurā
		3rd	Sg.	Fem.	tamḫurʾ	tamḫurʾ
			Pl.	Masc.	jamḫurū	jamḫurū
				Fem.	jamḫurā	jamḫurā
	Chart 48.	Stat.	3rd	Sg. Fem.	maḫʾra(t)	maḫʾra(t)

		Pl.	Masc.	maḫ́rū	maḫ́rū
			Fem.	maḫ́rā	maḫ́rā
				Nom.	Gen./Acc.
u // i.	Chart 32. Pl. Subst.		Masc.	kalbūṃ́	kalbīṃ́
			Fem.	kalbātum	kalbātim
	Chart 36.	Part.	Masc.	māḫirūtum	māḫirūtim
			Fem.	māḫirātum	māḫirātim
	Chart 39.	Pron. Det.	Masc.	šūtṃ́	šūti
			Fem.	šātṃ́	šāt́

				Nom.	Gen.	Acc.
u // i // a.	Chart 32. Sg. Subst.		Masc.	kalbum	kalbim	kalbam
			Fem.	kalbatum	kalbatim	kalbatam
	Chart 36.	Part.	Masc.	māḫirum	māḫirim	māḫiram
			Fem.	māḫirátum	māḫirátim	māḫirátam
	Chart 39.	Pron. Det.	Masc.	šu	ši	ša
			Fem.	šatṃ́	šati	*šatṃ́

The list includes markers of the case and mood, since the two are identical; see 3.13. The question of the nominativization of the genitival complex ja+mḫur+a to jamḫur+u is taken up in 3.12.

For the secondary +ti in iati, etc., see 3.7.

3.2. Diptota and Triptota

The first observation which can be made from the list given above is that certain words under certain conditions are diptotic

and have two cases, namely Nom. and Gen./Acc., while others are triptotic and have three cases, namely Nom., Gen., and Acc.

Diptota with the case markers u // a appear in the Masc. of personal pronouns, both independent and suffixal; in the Masc. Sg. and the 1st person Pl. (only) of verbs; in the Masc. 3rd person Sg. of the stative; and in some classes of diptotic substantives in West Semitic languages, as in Sg. Nom. ʾaṣfaru Gen./Acc. ʾaṣfara "yellow" or in Nom. sakrānu Gen./Acc. sakrāna "drunk." For ample documentation of the diptotic declension in personal names with the extended stem in ān at Ugarit, as in Nom. Nûrānu, Burqānu, Gen./Acc. Nûrāna, Burqāna, etc., see M. Liverani, "Antecedenti del diptotismo arabo nei testi accadici di Ugarit," RSO XXXVIII (1963) pp. 131-160.

Diptota with the markers Ø (=i) // a appear in the Fem. of the 2nd and 3rd persons and the Masc./Fem. of the 1st person of personal pronouns, both independent and suffixal.

Diptota with the markers Ø (=i) // Ø (=i) occur in the Fem. Sg. and Pl. and in the Masc. Pl. of verbs and statives.

Diptota with the markers u // i are characteristic of the Pl. (not Sg.) in substantives, participles, and determinative pronouns.

Triptota with the markers u // i // a are characteristic of the Sg. (not Pl.) in substantives, participles, and determinative pronouns.

The Gen. i in *Aššur+i and the Gen. a in *Aššur+a, which can be reconstructed from the derived gentilic formations Aššurijum or Aššurajum (see 7.3), may belong to either the diptotic or triptotic class.

One interesting and important feature of the diptotic and triptotic declensions, which to my knowledge has never been noted

in grammars of Semitic languages, is that the diptotic declension completely dominates the structure of the case. Thus the triptotic declension occurs only in the Sg. of the substantives, participles, and determinative pronouns. The diptotic declension occurs in the Pl. of the substantives, participles, and determinative pronouns; in the Sg. and Pl. of the personal pronouns, verbs, and statives; in the West Semitic diptotic nouns; and in the Du. of the nouns, pronouns, verbs, and statives.

It can be demonstrated that the diptotic declension represents the earlier stage, the triptotic the later, on the basis of the following evidence:

a) Since the case markers are identical with the gender markers (see below under 3.4), and the latter distinguish only two classes, the Masc. and Fem., it is logical to assume that originally the case also had distinguished only two classes, namely the subject and object (or casus rectus and casus obliquus).

b) The binary system of opposites, the dominant characteristic of the older stage of the structure of Semitic languages, evident in the opposites Masc. // Fem. of the gender, Sg. // Pl. of the number, should be reflected also in the opposites subject // object of the case (or mood). See also 0.4.

c) Since number is formed simply by lengthening the vowel of the gender, as in Sg. Nom. kalbatum Pl. kalbātum, or Sg. Gen. kalbatim Pl. kalbātim, the lack of such correspondence in Sg. Acc. kalbatam Pl. kalbātim implies that the Sg. Acc. of the triptotic declension was developed later than the Pl. Acc. of the diptotic declension.

d) In Arabic, the diptotic declension occurs in the indefi-

nite state Nom. ʾaswadu, Gen./Acc. ʾaswada "black," but the triptotic declension occurs in the definite state Nom. ʾal-ʾaswadu, Gen. ʾal-ʾaswadi, and Acc. ʾal-ʾaswada. It is generally assumed that the definite state, with the article ʾal, is of late creation.

I note with great satisfaction that J. Kuryłowicz, L'apophonie en Sémitique (Wrocław, 1961) p. 194, also pleaded in favor of the greater antiquity of the diptotic declension. Contrast, e.g., Moscati, ICG p. 87 ad 12.37.

3.3. Consonantal Glide t and Parallels

It was pointed out under 1.2 that the consonant t occurring in the Fem. of substantives, participles, and determinative pronouns is not a primary marker of Fem., but a consonantal glide between two contiguous vowels. Thus in kalb+a+t+u+m, the consonant t is to be interpreted as a glide between the vowel a of the gender and the vowel u of the case. This glide was introduced at the time when the normal case system was developed in Semitic languages.

The following additional evidence in favor of the consonantal glide t can be adduced:

a) Below under 3.7 the consonant t of such pronouns as š+u+a+t+i is interpreted as a consonantal glide t occurring between the vowel a of the original oblique case and the vowel i of the secondary oblique case, the latter introduced when the secondary case system developed in the language.

b) The glide t before markers of the Du. in Fem., as in kalb+a+t+a:+i+n, was discussed under 2.7.

c) Several examples of a "Bindeelement t" before pronominal suffixes are listed in Barth, Pronominalbildung p. 33, such as WJQJMW-TH "und sie mögen ihn stellen" in inscriptional Aramaic.

d) The first word in Bu-za-zu-tí-iš ti-kál "rely on Buzazu" (A. T. Clay, Letters and Transactions from Cappadocia [New Haven, 1927] 59:10) has to be analyzed as the personal name Buzazu, well-known from the Cappadocian texts, plus the consonantal glide t, plus the Dat. suffix +iš. The latter is discussed below under 3.8.

e) A secondary infix t is apparent in the Nuzi personal names Bêlijutu, Ilijutu, etc., compared with Bêliju²u, Iliju²u, etc. (NPN pp. 320ff.).

f) A secondary t occurs in the Anatolian personal names Pirutaḫšu, compared with Piruaḫšu, as well as in Išputaḫšu, compared with Išpua, etc. The variant form of Išputaḫšu is Išpunaḫšu, with a consonantal glide n, fully discussed under 2.2. For the Anatolian occurrences and two varying interpretations, see Emin Bilgiç, Die einheimischen Appellativa der kappadokischen Texte . . . (Ankara, 1954) pp. 37 and 77.

g) An intrusive t between two (original) vowels appears in such French forms as il faudra-t-aller, il va-t-en ville according to H. Frei, La grammaire des fautes (Paris, 1929) p. 104. But E. Bourciez, Éléments de linguistique romane (Paris, 1930) pp. 664f., takes the t in aime-t-il, donne-t-elle not as "euphonique," but as "dû à l'action analogique des groupes tels que dort-il, vient-elle."

For semi-consonantal glides ² and j, see 1.2.

3.4. Markers of Case = Markers of Gender

The overt markers of case in the substantives, participles, and

pronouns are u for the Nom., and a and i for the Gen. and Acc. The reconstructed markers of mood in verbs and statives are u for the Ind. and a (and possibly i) for the Subj. See 3.13.

As reconstructed under 1.1, the markers of gender are u for the Masc. and a or i for the Fem. Thus it is a priori plausible that the markers of gender correspond to the markers of case / mood, and consequently that gender is identical with case / mood.

Since the case system most probably was developed later than and independently of the gender system (see 3.6), the fact that the same markers are used for both the gender and case leads to the supposition that there was some synesthesic recognition, in the language-culture patterns of the Semites, of the marker u, on the one hand, and a/i, on the other. It manifested itself in the feeling that the vowel u was strong and dominant and could be used for both the Masc. gender and the subject case (= casus rectus); while the vowels a and i were weak and dependent and could be used for both the Fem. gender and the object case (= casus obliquus).

The synesthesic feeling that both a and i represent an oblique object vowel comes best to the fore in the analysis of the oblique case of the personal pronouns, independent and suffixal, šuniti, +šuni, +šuniti, and +šunišim, listed in Charts 42 and 46. The substantive plus the pronominal suffix of the 3rd person Pl. is reconstructed as kalbu+šunu+a "dog of theirs," with the vowel a representing the oblique case of the personal pronouns. This kalbu+šunu+a is realized as kalbu+šunu in standard Akkadian and as kalbu+šuna in a few cases in Old Akkadian. But in addition to kalbu+šuna, there are also cases of kalbu+šuni in Old Akkadian, where i cannot be the result of a phonetic contraction of the u+a of kalbu+šunu+a, but

must represent replacement of one oblique vowel, namely a, by another oblique vowel, namely i.

For other cases of synesthesia, see below under 3.5 and 3.7. For a discussion of synesthesia, mainly in relation to sounds and colors, see Gladys A. Reichard, Roman Jakobson and Elizabeth Werth, "Language and Synesthesia," Word V (1949) pp. 224-233.

For the relation of markers of gender and case to Pers. Pron. I ju and ja, see 8.2.

3.5. Relation of Markers of Gender to Markers of Case / Mood

The relation of the vowels of the markers of gender (plus/minus number) to the vowels of the markers of case is shown in Charts 24-27.

The following comments are appended to the charts on the next four pages:

The vowels ū+u and ū+i are preserved with the help of the consonantal glide t in ū+$_t$u and ū+$_t$i in the Masc. Pl. of participles and determinative pronouns, as in māḫirūtum. This t glide of the Masc. was borrowed from t glide of the Fem. of substantives, participles, and determinative pronouns (see 3.3). The glide appears as a+$_t$u < a+u, a+$_t$i < a+i, a+$_t$a < a+a, ā+$_t$u < ā+u, and ā+$_t$i < ā+i. This glide appears also in a+$_t$ā < a+ā in the Du. kalbatān, kalbatain. See 2.7.

The vowels u+a and i+a are preserved with the help of semi-consonantal glides w, j, or ʾ, as in šuwa and šija or šuʾa and šiʾa. See 1.1.

The vowels i+u and a+u are preserved with the help of semi-consonantal glides j or ʾ, as in Aššurijum and Aššurajum or Aššuriʾum

	"STEM"	GENDER	NUMBER	CASE / MOOD	OBJECT	ATTESTED
u+u = u+Ø	kalb	+u	+Ø	+Ø	+m	kalbum
	š	+u	+Ø	+Ø	šarrim	šu (Rel.)
	ʾant	+u	+$_{n}$u	+Ø	--	ʾantunu
	š	+u	+Ø	+Ø	--	šu (Pers.)
	š	+u	+$_{n}$u	+Ø	--	šunu, etc.
	jamḫur	+u	+Ø	+Ø	+Ø	jamḫurØ
	maḫir	+u	+Ø	+Ø	+Ø	maḫirØ
ū+u = ū+Ø	kalb	+u	+:	+Ø	+Ø	kalbūØ
	jamḫur	+u	+:	+Ø	+Ø	jamḫurū
	maḫir	+u	+:	+Ø	+Ø	maḫrū
ū+u = ū+$_{t}$u	māḫir	+u	+:	+$_{t}$u	+m	māḫirūtum
	š	+u	+:	+$_{t}$Ø	šarrim	šūtØ (Rel.)

Chart 24. Relation of Marker u of Gender to Marker u of Case / Mood.

	"STEM"	GENDER	NUMBER	CASE / MOOD	OBJECT	ATTESTED
u+i = ɸ+i	kalb	+ɸ	+Ø	+i	+m	kalbim
	š	+ɸ	+Ø	+i	šarrim	ši (Rel.)
ū+i = ū+ɸ+i	kalb	+ɸ	+:	+i	+ɸ	kalbīɸ
ū+i = ū+$_t$i	māḫir	+u	+:	+$_t$i	+m	māḫirūtim
	š	+u	+:	+$_t$i	šarrim	šūti (Rel.)
u+a = u+a	š	+u	+Ø	+a	--	šua (Pers.)[1]
u+a = ɸ+a	kalb	+ɸ	+Ø	+a	+m	kalbam
	š	+ɸ	+Ø	+a	šarrim	ša (Rel.)[2]
	+k	+ɸ	+Ø	+a	--	jamḫurɸka[3]
	jamḫur	+ɸ	+Ø	+a	+Ø	jamḫura
	maḫir	+ɸ	+Ø	+a	+Ø	maḫɸra
u+a = u+ɸ	+k	+u	+Ø	+ɸ	--	jamḫurɸkum
	+š	+u	+$_n$u	+ɸ	--	jamḫurušunu[4]
ū+a = ū+ɸ	jamḫur	+u	+:	+ɸ	+Ø	jamḫurū
	maḫir	+u	+:	+ɸ	+Ø	maḫɸrū

1. Also in šuaš, kuati, šuati, kuaum, šuaum, kunuaum, and šunuaum.
2. Also in the Pers. Prǫn. II šɸ+a in ju+ša+mḫir.
3. Also in kalbu+šun ɸ+a.
4. Also in jamḫuru+šu +ɸ.

Chart 25. Relation of Marker u of Gender to Markers i and a of Case / Mood.

	"STEM"	GENDER	NUMBER	CASE / MOOD	OBJECT	ATTESTED
i+u = i+Ø	ʾant	+i	$+_n$i	+Ø	--	ʾantinØ^a
	š	+i	+Ø	+Ø	--	ši (Pers.)
	š	+i	$+_n$i	+Ø	--	šinØ^a
i+a = i+a	š	+i	+Ø	+a	--	šiati(Pers.)[1]
i+a = Ø+a	+n	+Ø	+Ø	+a	--	kalbuna
	+š	+Ø	+Ø	+a	--	kalbuša
	+š	+i	$+_n$Ø	+a	--	kalbušina
i+a = i+Ø	+n	+i	+Ø	+Ø	--	kalbuni
	+k	+i	+Ø	+Ø	--	kalbuki
	+š	+i	+Ø	+Ø	--	kalbuši

1. Also in iati, kiati, niati, iaum, and niaum.

Chart 26. Relation of Marker i of Gender to Markers u and a of Case / Mood.

	"STEM"	GENDER	NUMBER	CASE / MOOD	OBJECT	ATTESTED
a+u = a+Ø	jamḫur	+a	+Ø	+Ø	+Ø	jamḫura
	maḫir	+a	+Ø	+Ø	+Ø	maḫ́ra(t)
a+u = a+$_t$u	kalb	+a	+Ø	+$_t$u	+m	kalbatum
	š̌	+a	+Ø	+$_t$u	šarrim	šatØ
ā+u = ā+Ø	jamḫur	+a	+:	+Ø	+Ø	jamḫurā
	maḫir	+a	+:	+Ø	+Ø	maḫ́rā
ā+u = ā+$_t$u	kalb	+a	+:	+$_t$u	+m	kalbātum
	š̌	+a	+:	+$_t$u	šarrim	šātØ
a+i = a+$_t$i	kalb	+a	+Ø	+$_t$i	+m	kalbatim
	š̌	+a	+Ø	+$_t$i	šarrim	šati
ā+i = ā+$_t$i	kalb	+a	+:	+$_t$i	+m	kalbātim
	š̌	+a	+:	+$_t$i	šarrim	šāti
a+a = a+Ø	jamḫur	+a	+Ø	+Ø	+Ø	jamḫura
	maḫir	+a	+Ø	+Ø	+Ø	maḫ́ra(t)
a+a = a+$_t$a	kalb	+a	+Ø	+$_t$a	+m	kalbatam
	š̌	+a	+Ø	+$_t$a	šarrim	*šatØ
ā+a = ā+Ø	jamḫur	+a	+:	+Ø	+Ø	jamḫurā
	maḫir	+a	+:	+Ø	+Ø	maḫ́rā

Chart 27. Relation of Marker a of Gender to Markers u, i, and a of Case / Mood.

and Aššura'um. See 1.1.

With the loss of length in a:, the vowels a/+i are preserved in the West Semitic Du. kalbain, kalbatain, but contracted to kalbên or kalbîn and kalbatên or kalbatîn in Akkadian. See 2.7.

The vowel combinations just listed, as well as all other vowel combinations, are exposed to certain vocalic changes, as shown in the charts: ɣ+i, ɣ̃+i, ɣ+a, u+ɣ, ũ+ɣ, i+ɣ, ɨ+a, i+ɣ, a+ɣ, and ã+ɣ. Cf. also ɣ+ā and ã+ɣ in Du. kalb+ɣ+a:+ɣ+n and kalb+a+$_t$a:+ɣ+n. See 2.7.

Because it is the second vowel in these vowel combinations that is usually elided, I assume similar conditions in the combinations of identical vowels in u+ɣ, ũ+ɣ, a+ɣ, and ã+ɣ.

The various phonetic changes may be due to several causes arising from the incompatibility between certain vowels or markers. Some vowel combinations such as u+u, a+a, u+i, i+a, a+u, or a+i are resolved by having one of the vowels dropped, as in u+u > u, or u+i > i, or by the introduction of a consonantal glide between the two vowels, as u+u > utu or u+i > uti. The vowel combinations u+a and i+a are either preserved as ua and ia, or are contracted to u or a and i or a, respectively.

One important remark is needed concerning the relation of the markers of gender to those of case / mood. In such sequential reconstructions as kalb+u+Ø+ɣ+m, where the second u, that of the Nom. case, is crossed out or is described as having dropped out, I do not mean to imply that the marker u of case was actually added to the markers of gender and number. When the case system was developed, u became the marker of the Nom. case, which must be marked in its proper place by the rules of sequential reconstruction.

Actually, the original kalb+u+Ø, already containing the vowel u of the dominant Masc. gender (see 3.1), needs not another marker u to denote the dominant Nom. (subject) case. By contrast, the original kalb+a+Ø, containing the dependent vowel a of the Fem., needs and has acquired the subject marker u of the Nom., as evident in kalb+a+Ø+t+u+m. For a discussion of synesthesia, cf. also 3.4 and 3.7.

It is this discrepancy between the force of a linguistic reconstruction and reality that led me in 1952 to call the procedure "ideal reconstruction," with a further remark that "because it is ideal, it could have never corresponded to reality" (Morphology of Akkadian p. 3). See on this point the important discussion near end of 0.3.

3.6. Time of the Development of the Case System

The question arises in respect to the time of the evolution of the case system in Semitic languages. Was it developed at the same time as the gender and number systems? Or was it developed at some later date? The answer I propose is in favor of the second alternative in the basis of the following considerations:

a) The case system is represented as rank number 3 and follows ranks 1 and 2, which represent the gender and number systems. Consequently, it is possible to assume tentatively that the case system had developed later in time than the gender and number systems.

b) As shown under 3.5, the markers of gender (u // a/i) are the same as the markers of the case / mood (u // a and possibly i). It would seem very unlikely that the same markers would have

been used for both gender and case if the two systems had developed at the same time.

c) The case system, especially the Nom., is rather poorly developed in the personal pronouns, leading to the supposition that the personal pronouns preserved the caseless system of the previous periods better than the other word classes.

d) As shown by many examples listed in Gelb, MAD II^2 pp. 139ff., divine names, such as Dagān, Ḫanīš, ʾIl, month names, such as Baḫir, Ṣalūl, geographic names, such as Kakkabān, Maškan, old personal names, such as Zuqaqīp, Tizkar, Samūk, and very early Akkadian loan words in Sumerian, such as ḫaṣin "ax," šadû "mountain," šûm "garlic" (or "onion"), have no case endings whatsoever and may possibly go back to a period before the development of the case system. However, the occurrence of Fem. names (ibid.), such as Ḫibilat (geographic), ʾIllat (divine), and Ḫirišat (month), is disturbing because the final t posits the existence of Ḫibilatum, ʾIllatum, and Ḫirišatum with case endings and mimation. See 3.3. Also Amorite has similar examples in such names as Jaqar (personal), Mēdbir (personal), ʿAnat (divine), and Biśir (geographical). See Gelb, La lingua degli Amoriti § 3.2.3.1.3.*

e) The older Akkadian forms of the interrogative pronouns are caseless man "who?" and min "what?" for later mannum and mīnum (Gelb, MAD II^2 pp. 136f.).

f) Two forms of the Fem. noun in Abs. St. occur in Amorite: a full form with case endings and mimation, as in Ṭâbatum "good," Ḫakamatum "wise," or Pa-te-ḫa-tum "opened," and a form without case endings and mimation, as in Ṭâba "good," Ġazala "gazelle," or Pa-ti-ḫa "opened." See Gelb in Symbolae Kuryłowicz p. 76.

3.7. Secondary Object Case

The characteristic of personal pronouns, both independent and suffixal, is the existence of the suffixes +ti and +šim (listed in Charts 40-46) in the object case.

The suffixes +ti and +šim occur in all persons, genders, and numbers of the independent pronouns, as in iati, iašim, niati, niašim, etc. The suffixes +ti and +šim are found in the Pl. (never Sg.) of the suffixal pronouns in the Acc. and Dat. cases, attached to a verb, as in imḫur+niati, imḫur+niašim, etc. The suffix +ti never appears in the suffixal pronoun in the Gen. case attached to a noun; thus we have only kalbu+ka and kalbu+kunu, never kalbu+kuati and kalbu+kunuti.

Some important dialectal divergencies should be noted.

Forms without +ti are found in Old Akkadian šua (for šuati) and +šuni, +šunu (for +šunuti).

While Old Assyrian uses the independent pronoun in forms known from standard Old Babylonian, the usage of the suffixal pronouns is different. With the exception of +niati, all other persons in the Pl. appear without +ti in the Acc., as in imḫur+šunu "he received them." By contrast, forms with +ti regularly have the function of a Dat., as in imḫur+šunuti "he received for them."

Forms without +i are found in Old Akkadian šuaš (for šuašim), +niaš (for +niašim), and +šinat (for +šinati). Forms without +i are a regular feature of the Babylonian poetic language.

I interpret i of šuati, šiati, šuašim, šiašim, etc., as a secondary marker of the oblique case which developed in addition to the earlier and primary marker a of the oblique case in šua, etc. For parallel instances of secondary features, see 1.5.

Of the two consonantal infixes, namely t in šuati, etc., and š in šuašim, etc., the interpretation of the latter is simple.

The consonant š clearly represents the old Dat. suffix, as in kalbiš "to the dog," fully discussed below under 3.8.

The existence of mimation in the Dat. šuašim, etc., and the lack of it in the Gen./Acc. šuati, etc., cannot be satisfactorily explained. Since mimation (in rank 4) is the marker which signals the lack of pronominal suffix (also in rank 4; see 4.3), the occurrence of m with pronominal suffixes is disturbing. One might speculate that the m of the Dat. of the personal pronouns is not identical with the m of the mimation in the noun, but that it represents some ossified remains of an old pronominal suffix with a dativa1 function.

The question of the origin of the t infix in šuati, etc. is controversial. Two possible interpretations can be given.

a) The usual interpretation of t is to regard it as the nota accusativi, comparable with the dativa1 function of š. In favor of this assumption one can cite kut "thee" in Acc. and kuš "to thee" in Dat. in Agau; lack of +ti in the suffixal pronoun functioning as Gen. in kalbu+kunu never kalbu+kunuti; and the existence of +šinat already in Old Akkadian and the frequent occurrence of t without final i in Babylonian poetic language, which is characterized by many archaic features. Against this interpretation one can argue that the independent pronouns šuati, etc., are used not only for the Acc., but also for the Gen.; that pronouns functioning as Dat. never occur without š(i), while those functioning as Gen. or Acc. can appear with or without t(i); that the suffixal +šunuti, etc., are used with the function of a Dat. in Old Assyrian; and that old Akkadian, Babylonian poetic, and some dialects of Assyrian know of clear cases of vowel apocopation,

such as imḫurū+š for imḫurū+šu (in Masc.) or imḫurū+ši (in Fem.), depending on the period or dialect. This shows that the function of t cannot be restricted to the nota accusativi, but to the oblique case in general. However, even this broader interpretation of t in personal pronouns stumbles against the fact that the intrusive t appears in the feminines of substantives, participles, and determinative pronouns, as in kalbatum, māḫirʾtum, or šāt(u), in which t certainly had nothing to do with the Acc. case. For its function as a consonantal glide between two vowels, a of gender and u, i, a of case, see 1.3.

b) Thus the other interpretation of t--and the one here favored--is that of a consonantal glide. This means that t had no inherent morphemic function, but was developed secondarily as a glide between the vowels a and i, the primary and secondary markers of the oblique case.

The regular use of the consonantal glide t in the secondary object case (see just above) and in the Fem. gender (see 1.2 and 1.5) may well have resulted eventually in a synesthesic recognition of the force of the consonant t in the function of the object case and Fem. gender. Cf., e.g., the development of the West Semitic nota accusativi ʾit (= Hebrew ʾēt) and the form tamḫur of the Fem. 3rd person Sg. of the verb in Old Akkadian and elsewhere. See 9.2 end. For other cases of synesthesia, see 3.4 and 3.5.

3.8. Other Markers of Case

In addition to the Nom., Gen., and Acc. discussed above, two more cases, Dat. in iš and Loc. in um occur in Akkadian and partially in other Semitic languages.

The use of the case marker iš is illustrated in Chart 28. Note the following about the distribution of the marker iš:

The marker iš is productive only in Old Akkadian. In later periods only the adverb in iš is fully productive in different genres and areas of Akkadian. Its frequent occurrence in the poetic language must be considered an archaic feature. For Old Akkadian, see Gelb, MAD II^2 pp. 142-145; for the poetic (= "hymnisch-episch") language, see von Soden, ZA XLI (1932) pp. 90-130.

The marker iš represents a full case in the noun, as in Subst., Part./Adj., and also in Inf., as in ʾaḫāziš "for the taking" or ḫussusiš "in reminder."

A noun with the case marker iš can be followed by Pron. Suff. +ka (also +ki) and +šu (also +ša, +šunu). Apparently it is never used in the 1st person Sg. or Pl.

The marker iš is not attested after the noun in Masc. Pl. It is used after Fem. Sg. and Pl. nouns, as in šallatiš "as booty," dârijātiš (beside dârîš) "forever," ʾaḫartiš, ʾaḫrîtiš, and ʾaḫrâtaš "for the future."

The marker iš is frequently used to form adverbs and prepositions, the latter often corresponding simply to the Constr. St. of the noun.

The stem of the noun can be simple, as in qât+iš "to the hand," or extended, as in sinniš+ān+iš "like a woman."

A combination of two markers can occur either as +iš+ūm, in kirij+iš+ūm "into the orchard," qaqqar+iš+ūm "into the ground," ûm+iš+ūm "daily;" or as +iš+am, in ûm+iš+am "day by day." See Gelb, MAD II^2 p. 145.

	STEM	GEN.	NUM.	CASE	OBJ.	ATTESTED
Subst., Abs.	ʾil	+Ø	+Ø	+iš̆	+Ø	ʾiliš̆ "to the god"
Adverb	ʾaḫ	+Ø	+Ø	+iš̆	--	ʾaḫiš̆ "like a brother," "together"
	dann	+Ø	+Ø	+iš̆	--	danniš̆ "strongly"
	sinnišān	+Ø	+Ø	+iš̆	--	sinnišāniš̆ "like a woman"
Subst.,Constr.St.	kirij	+Ø	+Ø	+iš̆	Sin	kirîš̆ Sin "to the orchard of Sin"
Preposition	maḫr	+Ø	+Ø	+iš̆	ʾilišu	maḫriš̆ ʾilišu "before his god"
Subst., Pron.Suff.*	qât	+Ø	+Ø	+iš̆	+i	---
	qât	+Ø	+Ø	+iš̆	+ka	qâtiška "to your hand"
	qât	+Ø	+Ø	+iš̆	+šu	qâtišš̆u "to his hand"
Pers. Pron.	š̆	+u	+Ø	+aš̆	--	šuaš̆ "to him" (Old Akk.)
	š̆	+u	+Ø	+aš̆+im	--	šuašim "to him"
	+š̆	+u	+Ø	+aš̆+im	--	+šuašim "to him"
	š̆	+u	+$_{n}$u	+Øš̆+im	--	šunušim "to them"
	+š̆	+u	+$_{n}$u	+Øš̆+im	--	+šunušim "to them"
	+ni	--	--	+aš̆	--	+niaš̆ "to us" (Old Akk.)
	+ni	--	--	+aš̆+im	--	+niašim "to us"

Chart 28. Dative Case iš̆.

Much confusion exists, even in the Old Akkadian period, in the use of the markers iš and ūm. This is due partly to the difficulties in distinguishing such frequent occurrences as qâtušša, which developed from qâtiššu (through iš > uš), and qâtūššu, which developed from *qâtūmšu (through mš > šš).

The misunderstanding of the function of the iš and ūm markers in later periods can be recognized in the frequent use of the prepositions ina and ana before words with markers iš or ūm.

Worthy of mention, although not discussed further, are the occurrences of iša in (w)êd+iššī+ja "I alone" (also with +ka, etc.), êr+iššī+šunu "in their nakedness" (also with +ja, etc.), where the double šš cannot be explained. See von Soden, ZA XLI (1932) pp. 115ff., and GAG § 67f.*

Personal pronouns, both independent and suffixal, have the marker aš, never iš. For the secondary +im in šuašim, etc., see 3.7.

Enclitics, such as +ma, are often found used with adverbial function after the markers of the object.

Outside of Akkadian, the marker iš is rare in Semitic languages. J. Barth, ZA XXVIII (1914) pp. 307ff., pointed out that such Syriac adverbs as šapīrā'īt "beautifully," marīrā'it "bitterly," contain an element it (= 'īt), which he connected with the Akkadian iš. He also compared Hebrew 'aḥorannīt "backwards" and qədorannīt "in dirty (attire)" with Akkadian sinnišāniš "like a woman," etc.

The existence of the element iš (and variants) after a noun in Amorite has been noted by Gelb, La lingua degli Amoriti § 3.2.3.1.6, in such examples as A-ḫi-iš-tu-ia, A-ḫi-iš-du-ka, Da-di-iš-me-El, Du-du-uš-me-El. The interpretation and comparison with Akkadian iš is uncertain.

The evidence for +š or +s in the so-called Hamitic languages was gathered by von Soden, ZA XLI pp. 119f. These markers are used there apparently as postpositions, with varying functions of a Dat., Abl., or Loc.

For some possible parallels to Akkadian iš in Egyptian and other African languages, see F. Rundgren, Über Bildungen mit ʿ(ʾ)s und n-t-Demonstrativen im Semitischen (Uppsala, 1955) pp. 28ff., 33ff., and 157ff.

An +āh (= ǫh) suffix occurs frequently in Hebrew to denote direction or location, as in ʾarṣāh "to the land," haššāmajmāh "heavenwards," šəʾōlāh "to Sheol," Kaśdīmāh "to the Chaldeans." It also occurs in a noun in Constr. St., as in ʾarṣāh Miṣrajim "to the land of Egypt," midbarāh Dammāśeq "to the desert of Damascus."

That the final h in Hebrew is a full consonant and not a mater lectionis was proved by Ugaritic spellings with H, as in ʾaRṢH "earthwards," and ŠMMH "heavenwards."

The connection between the Hebrew +āh and Ugaritic +H (= ah) was discussed by E. A. Speiser, "The Terminative-Adverbial in Canaanite - Ugaritic and Akkadian," Israel Exploration Journal IV (1954) pp. 108-115. He pointed out (pp. 109f.) that the Hebrew marker is an unstressed enclitic corresponding to the prepositional particles, and concluded that ah of Hebrew and Ugaritic is related to Akkadian iš or aš not by a phonological process, but via parallels in the morphemic distribution of the š and h elements. For phonological problems affecting š, h, see 8.1.

For the time being, I prefer to omit the adduced Ugaritic and Hebrew parallels. Even if we admit the correctness of Speiser's interpretations, the fact still remains that Hebrew ah is an enclitic

which functions as a postposition placed after the inflectional elements, while Akkadian iš is a case, which must appear in the sequence-rank number three. See also below.

Since I do not know of any parallels to the borrowing of either postpositional or case elements by Akkadian from Sumerian, I prefer to leave open the question of the relationship of the Sumerian postposition èš "to" to Akkadian iš, even though the attested Sumerian allomorph iš (besides eš, aš, uš in B. Landsberger et al., Materialien zum sumerischen Lexikon IV [Roma, 1956] p. 150), sounds exactly like Akkadian iš.

We found above a full iš used in the noun; íš used in the noun, with the short vowel i elided as the result of stress, as in ûm+íš+ùm; and it (from iš) in Syriac and Hebrew adverbs based on nouns.

On the other hand, aš and áš occur in personal pronouns, both independent and suffixal, with the vowel a of áš coalescing with the vowel u of the Pl., as in š+u+u+šim. Aš is found also in ʾaḫrātaš "for the future," a noun used adverbially. For possible, though doubtful, interpretations of this unique and disturbing occurrence, cf. von Soden, ZA XLI p. 128.

Considering that iš is found in the noun and aš in the personal pronoun, it would seem plausible to assume that the marker of the Dat. case was š, with i of iš being the Gen. marker of the noun, and a of aš being the Gen. marker of the personal pronoun. For the Gen. markers, i in the noun and a in the pronoun, see above under 3.1.

On the other hand, the marker +iš appears as a true preposition iš, in which the vowel i must be considered as primary. This preposition is found in early Mari texts, dated to the time after the Third Dynasty of Ur and before the Old Babylonian period, published by R.

Jestin, RA XLVI (1952) pp. 185-202, and discussed by Gelb, RA L (1956) pp. 1-10. From over a dozen cases listed by Gelb, op. cit. pp. 4f., note the following: iš qirab mâtim "to the heart of the land," iš nakrim "to the enemy," and iš AŠGAB "for the leather-worker."

If iš is to be considered as primary, then the form aš in the pronoun may be interpreted as iš which changed to aš under the influence of a of the oblique case of the pronoun, resulting in š+u+Ø+a+š = š+u+Ø+aš. See p. 80.

For the secondary case +i in šuašim, etc., see 3.7.

We conclude by suggesting that iš was originally a preposition with the meaning "to," which, used postpositionally after the marker of gender and number, became the marker of the Dat. case. Both the preposition iš and +iš, the marker of the Dat. case, were replaced in the course of time by prepositional phrases with ana "to."

The use of the case marker ūm is illustrated in Chart 29.

Notes to ūm:

The marker ūm is productive only in Old Akkadian. Its occurrence in the later poetic language must be considered an archaic feature; see Gelb, MAD II^2 pp. 142-145; von Soden, ZA XLI pp. 90-130.

The marker ūm represents a full case of the noun, including the Subst. and Part./Adj.

A noun with the case marker ūm can be followed by Pron. Suff. +i/a, +ka (also +ki, +kunu), +šu (also +ša, +šunu), and +ni.

The marker ūm is not attested after a noun in Masc. Pl. It may occur after the Fem. Sg. noun, as in qibîtūšša "by her command," and tanittūkka "in thy glory." See von Soden, ZA XLI p. 97.

The marker ūm is frequently used to form adverbs and prepositions, the latter often corresponding simply to the Constr. St. of the noun.

	STEM	GEN.	NUM.	CASE	OBJECT	ATTESTED
Subst.,Abs.	kurr	+Ø	+Ø	+ūm	+Ø	kurrūm "per 1 kur"
Adverb	ʾal	+Ø	+Ø	+ūm	--	ʾalūm "where?"
	šaplān	+Ø	+Ø	+ūm	--	šaplānūm "below"
Subst.,Constr.St.	qirb	+Ø	+Ø	+ūm	Bâbilim	qirbūm B. "in the midst of Babylon"
Preposition	bal	+Ø	+Ø	+ūm	Dagān	balum D. "without D."
Subst.,Pron.Suff.	qât	+Ø	+Ø	+ūm	+a	qâtūʾa "in my hand"
	qât	+Ø	+Ø	+ūm	+ka	qâtūkka "in your hand"
	qât	+Ø	+Ø	+ūm	+šu	qâtūššu "in his hand"
	qibij	+Ø	+Ø	+$_t$ūm	+ša	qibîtūša "by her command"
	šaplān	+Ø	+Ø	+ūm	+šu	šaplānūššu "below him"
	ʾašr	+Ø	+Ø	+ūm	+ni	ʾašrūnni "in our place"

Chart 29. Locative Case ūm.

The stem of the noun can be simple, as in qât+ūm "in the hand," or extended, as in šapl+ān+ūm "below."

The marker ūm is never used with personal pronouns.

For the combination of two markers, iš+ūm, for possible cases of confusion between iš and ūm, and for use of enclitics, such as +ma after the markers of the object, see above under iš.

In older periods the marker ūm appears regularly either as ūm or in a form in which m is assimilated to the following consonant of the pronominal suffix, as in *qâtūm+ka > qâtūk+ka, *qâtūm+šu > qâtūš+šu, or *qâtūm+ni > qâtūn+ni. Only *qâtūm+i > qâtū+ʾa in the 1st person Sg. causes difficulties. Beginning with the Old Babylonian period, the consonant m of ūm often disappears, as in ina libbū mâtim "in the land," and warkānū "later."

Outside of Akkadian, the marker ūm is found in Arabic adverbs, as in taḥtu "beneath," baʿdu "afterwards," or, with a preposition, min taḥtu, min baʿdu; and in Ethiopic, as in tāḥtū "beneath," qadīmū "earlier," lāʿəlū "above." The adverb kadū "enough" in Syriac (and other Aramaic languages) is cited by von Soden, ZA XLI p. 118 n. 1, after C. Brockelmann, Lexicon Syriacum (2nd ed., Halle, 1928) p. 318b, as belonging here, but J. Payne Smith, A Compendious Syriac Dictionary (Oxford, 1903) p. 205a, derives kadū from kad hū.

I leave out of consideration such Hebrew adverbs as pitʾom "suddenly," ʾomnām "really," and ʿārōm "naked," because of the difficulties in establishing their original final morpheme. The element +ūmma in the paronomastic infinitive construction of the type kašādūmma akšudam "I arrived" (ARMT III 7:7f.) in Akkadian and some other Semitic languages (see E. J. Young, "Adverbial -u in Semitic," The Westminster Theological Journal XIII [1950] pp. 151-154), is certainly derived

from Ī+ma, that is, the adverbial Ī (from ai) plus the enclitic ma. This can be proved by examples of the type qatālĪ+ma in Amarna Canaanite (see William L. Moran, "The Use of the Canaanite Infinitive Absolute . . .," JCS IV [1950] pp. 169-172), as well as by eddešĪ+ma ʾepuš "I made anew," compared with eddešūm+ma ʾīpuš "he made anew." See Gelb, MAD III p. 20. Note i > u before m, as in ʾimmum > ʾummum "mother" šimum > šumum "name," in Akkadian and other Semitic languages.

Parallelism with iš suggests that ūm may have originally represented a preposition and/or a postposition. There is, however, no evidence in either Akkadian or other Semitic languages to support this suggestion.

Two main questions in respect to the marker here symbolized as ūm are: Is the vowel short or long? If the vowel is short, does the Loc. um correspond to the Nom. um?

Von Soden, GAG § 66, calls ūm "Der Lokativ-Adverbial auf -um," but considers the possibility that the vowels of the Loc. and Nom. may have been different. In ZA XLI p. 118 he writes -um and -u for Akkadian occurrences, but -ū for other Semitic languages. Moscati, ICG p. 95, states that the material at hand seems to favor a short u. Diakonoff, SHL p. 58, writes short u and connects the Loc. with the Nom. via their ergative function.

In considering the answers to these two questions, it is necessary to examine carefully the complementary-distribution patterns of the Nom. and Loc. cases, as illustrated in Chart 30.

The comparable items within the pairs need very few comments. Ka and Bâbilim represent objects in rank number 4. Mimation marks

	STEM	GEN.	NUM.	CASE	OBJECT	ATTESTED
Nom.	qirb	+u	+Ø	+ø	+ka	qirbuka "your middle"
Loc.	qirb	+u	+Ø	+ø:m	+ka	qirbūkka "in your middle"
Nom.	qirb	+u	+Ø	+ø	Bâbilim	qirbu Bâbilim "the middle of B."
Loc.	qirb	+u	+Ø	+ø:m	Bâbilim	qirbūm Bâbilim "in the midst of B."
Nom.	qirb	+u	+Ø	+ø	+m	qirbum "the middle"
Loc.	qirb	+u	+Ø	+ø:m	--	qirbūm "inside" (adverb)

Chart 30. Comparison Between Nominative and Locative.

the absence of the object in rank number 4. U is the marker of the Nom. case in rank number 3. Since both u and ūm occupy the same rank 3, the two markers must represent the case. Since they are different in shape (u and ūm) and react differently to the markers which follow them (+u+ka, but +ūø+ka; +u Bâbilim, but +ūm Bâbilim), they must represent different cases. Consequently the Loc. is not the same as the Nom.

For years I have been writing long ū in ūm of the Loc. for no other reason than to differentiate it from um of the Nom. Now, in the light of evidence provided above in favor of the separation of the Loc. and Nom. cases on the basis of sequential reconstruction, I feel free to suggest that the two markers actually were distinguished by vocalic quantity.

Non-Akkadian evidence in favor of the long vowel ū in ūm is weak. Arabic parallels with the short vowel, as in baʿdu, and the Ethiopic examples with the long vowel, as in gadīmū, yield nothing decisive.

Neither the plene spellings in Semitic writings nor our conventional ways of transliterating them necessarily indicate long vowels. Cf., e.g., our way of transliterating the Hebrew Mətū+Šelaḫ, with long ū in Mətū+, which must represent a short u of the original Mutu+ "mate of."

The Akkadian spelling conventions are of no help in settling the question of the vowel quantity in ūm or um because, in contrast to the phonemic vowel quantity, as in rabû, šamê, morphemic vowel quantity, as in kalbū, imḫurūš(u), is almost never indicated in cuneiform writing. Still, in a few cases plene spellings do occur as in li-ib-bu-ú "belonging to" (as well as li-ib-bu-ú-šu, li-ib-bu-uš-šu), ki-mu-ú "in place of" (as well as ki-mu-uk-ka), a-du-ú "now then," and a-ḫi-in-nu-ú "each separately" (see von Soden, GAG §§ 66d and 113h, and Akkadian dictionaries). Some of these spellings begin already in the Middle Babylonian and Middle Assyrian period, where, in contrast to the New Babylonian period, plene spellings indicate long vowels.

3.9. Markers of Mood: u // a

As here reconstructed, Semitic languages have two primary moods, indicative and subjunctive, characterized by the markers u // a.

The mood occurs in the fientive verb and stative (only the 3rd person). It never occurs in the imperative.

For the various aspects of vocalic incompatibility resulting from the contact between the vowel markers of the mood and those of the gender (plus number), see above under 3.5.

As described in all current (and older) grammars of Akkadian, the markers of the mood are Ø in the Ind., as in imḫur, and u in the

Subj., as in imḫuru.

The overt marker of the Ind. in Semitic languages other than Akkadian is u in Arabic, Ugaritic (Gordon, UT p. 71f.), and Amarna Old Canaanite (W. L. Moran, "Early Canaanite Yaqtula," Orientalia n.s. XXIX [1960] pp. 1-19, esp. p. 2 n. 2, p. 7 n. 3, and pp. 9f.). As for Amorite, u is found in the Ind., but only before pronominal suffixes, as in Ia-aḫ-zi-bu-ú /Jāʿzibu+hu/ (Gelb, La lingua degli Amoriti §§ 3.1.1.2.2 and 3.3.3.1).

W. Leslau discovered recently (JNES XXVI [1967] p. 123) that in some dialects of Gurage not only the imperfect but also the perfect has two markers: u, as in säbbäro "he broke," in the main perfect, and a, as in säbbärä (not translated), in the subordinate perfect and the negative perfect.* This would correspond to the u // a markers of the Ind. // Subj. in the Akkadian stative, a differentiation hitherto unattested in the perfect of West Semitic languages.

The overt marker of the Ind. in all dialects of Akkadian is Ø, as in imḫur "he received." Its reconstruction as jamḫuru, with u, is based mainly on other Semitic languages. In addition, we can provide the following supporting evidence:

a) Since the Pl. is regularly formed by lengthening the gender vowel of the Sg., the occurrence of the Pl. imḫurū and maḫīrū implies the existence of the Sg. imḫuru and maḫīru, that is, with u in the Ind.

b) The standard Babylonian form imḫurni "he received me" can be best derived from the original imḫuruni. Since the posited pronominal suffix for the 1st person is i in Akkadian (as in Old Assyrian imḫuri "he received me"), the suffix +ni can be best explained as the original i preceded by the consonantal glide n

introduced between two vowels, namely u of the reconstructed Ind. imḫuru, and i of the pronominal suffix i. For the consonantal glide n, see 2.2.

The overt marker of the Subj. in West Semitic languages is a. The Subj. is used in Arabic after certain conjunctions (prepositions) with verbs often expressing a wish or intention, as in li+jaqtula "so that he may kill," or ʾan+jaqtula "that he may kill." The instances of Ugaritic Subj. in a, as interpreted by Gordon, UT p. 72 and n. 1, were considered no more than "une survivance" by A. Herdner in Syria XXIV (1944-45) p. 117. Many good occurrences in the function of a volitive expressing wish, request, or command have been noted in Amarna Old Canaanite by W. L. Moran, "Early Canaanite Yaqtula," Orientalia n.s. XXIX (1960) pp. 1-19. Moran, op. cit. p. 12, compares the Canaanite volitive with the Hebrew cohortative. Amorite has a morpheme a in Ia-di-ḫa-El /Jădiʿ+a+ʾEl/, which possibly may be related to the volitive of Old Canaanite. The evolution of an original Subj. into a volitive or cohortative finds support in parallel instances known from the Old Babylonian dialect at Mari, such as itti šarrim lā innamru "may he not meet with the king." See A. Finet, L'Accadien des lettres de Mari (Bruxelles, 1956) pp. 262f. A similar function is found in the Latin Subj. oremus, ne deleas.

Some comments are necessary about the Hebrew cohortative in ā, which occurs in the fientive verb, as in ʾašalləḫā "may I send," and in the imperative, as in qûmā "stand up!" Scholars generally derive this ā from an of the energic I. See, e.g., A. Ungnad, Hebräische Grammatik (Tübingen, 1912) p. 114 n. 1; Georg Beer and Rudolf Meyer, Hebräische Grammatik II (Berlin, 1955) p. 13. For

occurrences of the Arabic energic I an as ā, as in ʾiḍribān or ʾiḍribā "strike!," see W. Wright, A Grammar of the Arabic Language (3rd ed., Cambridge, 1955) pp. 61f. See also below under 4.2. The other interpretation of the Hebrew cohortative is to link it with the West Semitic Subj. in a (Moran, op. cit. p. 12). The difficulty with this interpretation is that the Hebrew cohortative, occurring as it does in both the fientive verb and imperative, cannot easily be taken to represent a primary mood (case), such as the Subj., because imperatives cannot have a primary mood. Still, the fact that several languages in the Syro-Palestinian area have a Subj. in a makes it plausible to assume the existence of that morpheme also in Hebrew. I conclude, therefore, that the Hebrew marker ā is the result of a conflation of two original markers, an of the energic I and a of the Subj.

The over-all characteristic of the West Semitic Subj. is that it is nowhere employed in its full capacity, but only in some subfunctions such as a volitive, cohortative, or the like. Even in this limited capacity the Subj. is not used rigorously, but often alternates in the same general surroundings with other moods, such as the indicative or jussive.

The marker of the Subj. in standard Akkadian is u, as in šá imḫuru "which he received."

Over ten years ago I showed, on the basis of newly discovered texts, that the Old Akkadian dialect of the Diyala Region had a Subj. in a, beside the Subj. in u known from standard Old Akkadian and later dialects of Akkadian (Gelb, Old Akkadian Inscriptions in the Chicago Natural History Museum. Fieldiana: Anthropology XLIV/2 [1955] p. 190). This was the evidence presented there:

a) Šîbūt PN_1 bîtam ana PN_2 išduda "witnesses that PN_1 measured off the house for PN_2."

b) Šîbūt 1 PI še'am PN_1 ana PN_2 iddina "witnesses that PN_1 gave 1 PI of barley to PN_2."

c) In bîtim ši uš-da-a-bí-la "in the house in which I had . . ."

d) Šu ana PN addina "(various amounts of flour) which I gave to PN."

e) ŠE.ḪAR.AN PN_1 šu PN_2 in ittišu ikšura "of the ḪAR.AN-barley of PN_1 which PN_2 made good on time."

f) and g) Two more occurrences of verbs in -a, ik-su-ra and [u]?-s[á-r]í-ba, are found in broken contexts.

In addition to the reference given just above, I have discussed the Subj. in a also in Morphology of Akkadian pp. 10f. and 61, and in MAD II^2 p. 171. Scholars expressing themselves (in a qualified fashion) in favor of my interpretation are:

Jacobsen, JNES XIX p. 110 n. 12, Moscati, ICG p. 135, and Diakonoff, SHL pp. 92 and 94.

B. Kienast, in Orientalia n.s. XXIX (1960) pp. 152f. n. 2, finds that my proposed interpretation of the Subj. in a in Old Akkadian does not fit his own interpretation of the Semitic verbal system. Consequently, he rejects the possibility of the existence of the Subj. in a in Old Akkadian, preferring instead to interpret all the cases listed above as the ventive without mimation. Kienast was supported in this conclusion by G. Garbini in Studi orientalistici . . . a Francesco Gabrieli (Roma, 1964) p. 128 n. 3. The following can be said in comments to the above:

a) Not a single instance of dropping the consonant m of the ventive / allative is known from Old Akkadian. Cf. iddinam, iqîšam,

illakam, imḫurūnim, liš̆ṭurūnim, etc., in MAD II^2 p. 131 ad 1) and 2).

b) Neither the posited older ventive / allative addinam nor the younger addina are attested in any phase of the Akkadian language. While occasionally not only verba movendi but also other classes of verbs can employ a ventive / allative in the 1st person, as in aš̆puram "I sent" (A. Ungnad, Babylonische Briefe . . . [Leipzig, 1914] Nos. 43:20, 59:7, 233:31), the ventive / allative addina(m) does not occur once among thousands of occurrences of nadānum in the files of the Chicago Assyrian Dictionary. It was in fact the lack of such occurrences as addina, anaddina, addan, and anaddan that enabled Thorkild Jacobsen and myself to reach independently the conclusion that the verb nadānu in the New Babylonian period belongs to the iddin, inaddin class, not to the iddan, inaddan class, and that such occurrences as i-nam-da-aš-šu, a-nam-dak-ka-šu-nu-tu, ad-dan-ka, represent contracted inandi/aššu, anandi/akkašunutu, addi/aššu, and not inandan, anandan, addan plus the pronominal suffixes. See Gelb, MAD II^2 p. 180.

c) Under normal circumstances, addina(m) should not be taken as a ventive, but a simple Ind. plus the Dat. pronominal suffix +a(m) "to me." However, while iddina(m) "he gave to me" can and does occur, addina(m) "I gave to me" is inconceivable in administrative / legal texts.

d) The first two examples in the Diyala Region texts a) and b) cited above have the structure of a noun in Constr. St. plus the verbal clause ending in a: šîbūt PN . . . iš̆duda / iddina, "witnesses that PN measured off / gave . . ." That the verb ending in a in the Diyala Region texts represents a Subj. can be proved by examining the Old Akkadian texts from areas other than the Diyala

Region. The latter have the identical structure of a noun in Constr. St. plus the verbal clause ending in the standard Subj. marker u. Cf., e.g., šîbūt . . . PN . . . imḫaṣu "witnesses . . . that PN . . . struck" and šîbūt . . . PN . . . ûblu "witnesses . . . that PN . . . brought," cited in MAD III p. 257. The structure of a noun in Constr. St. plus verb in Subj. is paralleled by the structure of a noun in Constr. St. plus a noun in Constr. St. in Old Akkadian, as in šîbūt kušurrā'im "witnesses of the completed payment" (MAD III pp. 256f.). For a general statement on the structural identity of the verb in Subj. with the noun in Gen., see 3.13.

e) Having carefully reconsidered the evidence, I find that the Diyala Region verbs represent a Subj. in the oblique case of the type "of the king who received" (Gen.) or "the king who received" (Acc.), and not a Subj. in the subject case of the type "the king who received" (Nom.). This could possibly lead to the conclusion that the Gen./Acc. Subj. in a may have been formally different from the Nom. Subj. in u. There is nothing, however, in either Akkadian or other Semitic languages to favor this possibility. Whether interpreted as a Gen./Acc. Subj. or a general Subj., the Diyala Region verbs ending in a are to be interpreted as a Subj. and nothing else.

The following additional evidence can be adduced in favor of the existence of the Subj. in a in Akkadian:

a) In the common Old Akkadian construction, Sargon šu Enlil māḫira lā iddinušum possibly to be translated as "Sargon to whom Enlil did not give one who is an adversary," the troublesome māḫira could be explained as an ossified form of a predicate (stative) Subj. ending in -a (MAD II^2 p. 152f.).*

b) In several Mari occurrences of i-nu-ma PN il-li-ka (ARMT IX 240:4; XI 207:5; 259:4, 11, 15; 260:12, 16; 265:5), the verb illika can be explained either as standing for the true ventive illikam (as in ARMT IX 149:11) "(when PN) came" or as a Subj. in +a "(when PN) went." The choice of translation depends on whether one understands the issue of honey as being made to a person upon his arrival or upon his departure from Mari.

c) The statements of von Soden, GAG § 83a, Reiner, LAA § 5.4.2.3, and Ungnad-Matouš, GA § 59c, that the Subj. does not occur in ventive / allative must be modified. First of all, there is no reason why the ventive / allative should not occur in the Subj. Secondly, the existence of such forms as ša iddinušum "which he gave to him," with the Subj. marker u (from a), leads to the conclusion that such forms as ša iddinam "which he gave to me" also contain, overtly or covertly, the marker of the Subj. I therefore interpret iddinam as iddin+~~u~~+Ø+a+am, with the old Subj. marker a. A clear case of the Subj. is found in the unique ki tadammiqunim, in place of the expected ki tadammiqam, in Nougayrol, Revue Biblique LIX (1952) p. 246f., strophe 8:10. This is translated by Nougayrol as "quand tu auras recouvré la santé," by von Soden, Orientalia n.s. XXX (1961) p. 160, as "wenn es dir (wieder) gut geht," and by Jacobsen, JNES XXII (1963) p. 27, as "as you prosper for me here."

d) In the older Mari dialect, attested between the end of the Third Dynasty of Ur and the beginninng of the Old Babylonian period, we find two instances of a Subj. jilqaʾ+a in šá . . . il-qá-ʾà(É) and šá . . . il-qá-a "which he took" (M. Rutten, RA XXXV [1938] p. 42 No. 3 and p. 43 No. 9).

e) For a secondary Subj. in a in imḫuruna, see 3.11.

3.10. Subjunctive in i?

Beside the two Mari forms in a just listed above under d), there are some doubtful cases of a Subj. in i in in-TI-ì (op. cit. p. 42 No. 5), i-ba-al-ki-ti-šu (p. 42 No. 6), and i-la-qí-i (p. 44 No. 11b). While quite uncertain in their interpretation, these Mari cases are listed here because of the possibility that the Subj. in i also occurs in texts of later Babylonian date. Cf. ša . . . indudi "which he measured" (Kassite, unpubl.); ša . . . itanappali "which he will repay" (Kassite, unpubl., both refs. from Professor Gurney); ša . . . inaṣṣari "who will guard" (F. H. Weissbach, Babylonische Miscellen [Leipzig, 1903] p. 9 No. 1:5) and ša . . . išaṭṭari "who will write" (p. 10 iii 7; beside standard forms in u); ša ikappapi "who will bend" (O. Neugebauer, Astronomical Cuneiform Texts [Princeton, N.J., 1956] II p. 395: 15). One difficulty in suggesting the existence of the Subj. in i in these Babylonian texts is that these examples come mainly from later periods, in which the final written vowel may be irrelevant. In addition, there are occurrences of Ind. in i in texts from the Old Babylonian period on, where i often appears as a form of affectation in the speech or writing habits of women. For bibliographical information and a different interpretation, see T. Jacobsen in JNES XIX (1960) p. 111 n. 12.

For a secondary Subj. in i in imḫuruni, see 3.11.

3.11. Secondary Subjunctive in i/a

Both vowels i and a occur in Subj. of the type imḫuruni or imḫuruna, which show a secondary ni or na added to the standard Subj. imḫuru. The latter is interpreted below under 3.12 as the

nominativized form of older imḫura. The Subj. imḫuruni occurs in all periods of the Assyrina dialect, but also sporadically in Old Akkadian. The Subj. imḫuruna appears in a few cases of early and classical Old Babylonian, gathered and discussed in MAD II^2 p. 170.

The Subj. imḫuruni/a is to be explained as containing two Subj. markers, the first being u (from a) of imḫuru, and the second the final i or a, joined to the preceding u by the consonantal glide n, on which see 2.2. For similar instances of the development of secondary (double) features, see 1.5.

The Subj. marker ni eventually became an enclitic occupying rank number 5, as in šа imḫurūšu+ni, šа imḫuraⁿ/+ni, or even after a noun, in šа qâtātuⁿ/+ni "of which they are the guarantors." In such occurrences as šа imḫurū+šu+ni+ma, the enclitic ma apparently occupies rank number 6.

3.12. Nominativization and Parallels

While the occurring or reconstructed marker of the Subj. in older Akkadian and other Semitic languages is a (and possibly i), the marker of the Subj. in standard Akkadian (but nowhere else in Semitic languages) is u, as in imḫuru. This is--if I may be permitted to coin a horrible sounding term--nominativization. It is realized by the replacement of the oblique vowel a (and possibly i) of the Subj. (or Gen.) by the Nom. u. The term "nominativization" is different from "substantivation" (French "nominalisation," German "Nominalisierung"), which denotes the replacement of a verbal form by a nominal form.

A case of nominativization comparable with imḫuru (from imḫura) discussed just above is found in the rare occurrences of imḫurunu

(from imḫuruni/a), best attested in New Assyrian. Cf. Gelb in BO XII (1955) p. 109f.

For other examples of nominativization in Akkadian, cf. šuati/u, used for both genders and all cases (see 1.5); ûmaᵓ lā surrātum "I swear that these are not lies," beside ûmaᵓ lā surrātim (see below, 3.13); and standard Akkadian mâršiprum "messenger" developed from mâr+šiprim or šamaššammum "sesame?" from *šaman+šammim.

The Sumerian language uses the marker a in the Subj. of the verb, as in lu e du+a "the man who built the house." E. Sollberger, Le système verbal . . . (Genève, 1952) pp. 199f. (following A. Deimel), placed this structure under the heading "La nominalisation du complexe verbal." The same analysis is apparent in the use of the terms "die Nominalisierung" by A. Falkenstein, Das Sumerische (Leiden, 1959) pp. 35, 43, and 52, and "Satznominalisierungen" by B. Kienast in Orientalia n.s. XXIX (1960) pp. 156f.

3.13. Mood = Case

As shown in 3.1 and 3.2, the overt markers of case in nouns and pronouns are u in the subject case (= Nom.), and a or i in the object case (= oblique case or Gen./Acc. From 3.9 - 3.11 we learned that the reconstructed markers of the mood in verbs and statives are u in the Ind. and a (and rarely i) in the Subj.

Since the markers of case and mood are identical, as is their rank number 3 in the morpheme sequence, we may draw the obvious conclusion that the case of the nouns and pronouns is structurally identical with the mood of verbs and statives. Note the supporting evidence in Chart 31.

The identification of the mood with the case in Semitic languages was suggested by Gelb, Morphology of Akkadian pp. 10f. and 61, and MAD II^2 p. 171. Other scholars expressed a similar opinion. Cf. von Soden, GAG § 83a: "Subjunktiv . . . der eine Art Genetivendung des Verbum finitum ist;" and similarly in § 163c: "syntaktisch sind die Nebensätze Genetive." Diakonoff, SHL p. 91 n. 88: "the endings of the Subjunctive, -u, -a, as shown by A. P. Riftin, originally belonged to nominal constructions." G. Beer and R. Meyer, Hebräische Grammatik II (Berlin, 1955) p. 147: "Der asyndetische Attributsatz (= "der sogenannte Relativsatz") steht zu seinem Beziehungswort im ideellen Gen.-Verhältnis."

Powerful support for mood = case comes from Arabic. The Arabic language uses only one term, naṣbun, for both the Acc. of the noun and Subj. of the verb, just as it has only one term, rafʿun, for both the Nom. and Ind. See G. Jahn, Sîbawaihi's Buch über die Grammatik I (Berlin, 1895) pp. 1f. § 2 = M. Derenbourg, Le livre de Sîbawaihi I (Paris, 1881) pp. 1f. Cf. also J. Kuryłowicz in Bulletin de la Société de Linguistique de Paris XLV (1949) p. 53, and idem, Mélanges Cohen (soon to appear) p. 162. I acknowledge gratefully Prof. Kuryłowicz' kindness in providing these references.

Relying upon a fundamental analysis of the relative phrase by E. Benveniste, "La phrase relative, problème de syntaxe générale," Bulletin de la Société de Linguistique de Paris LIII (1957-58) pp. 39-54, H. Fleisch pointed out in a recent article "Phrase relative en Accadien," Mélanges de l'Université Saint-Joseph XLII (1966) pp. 247-284, esp. p. 251, that the relative phrase behaves like an adjective in relation to the antecedent and that the relative pronoun plays the role of a determinative article. Disregarding

	CASE / MOOD		OBJ.	TRANSLATION
	Nom.	Ind. Gen. Subj.		
kalb	+u		+m	"the dog"
jamḫur	+u		+Ø	"he received"
kalb		+i	+m	"of the dog"
šu		+a	--	"of him"
kalbu+k/		+a	--	"dog of thee"
sakrān		+a[1]	+Ø	"of the drunk"
jamḫur		+a	+Ø	"who received"
kalbum šu[2] šarr		+i	+m	"the dog of the king"
kalbum šu imḫur		+a	+Ø	"the dog who received"
šîbūt[3] kušurrā'		+i	+m	"witnesses of the payment"
šîbūt iddin		+a	+Ø	"witnesses which he gave"
li+Makkat		+a	+Ø	"to Mecca"
li+jaqtul		+a[4]	+Ø	"that he kill"
ištūm[5] ûm		+i	+m	"since the day"
ištūm imḫur		+a	+Ø	"since he received"
aššum[6] ṣabûm lā alāk		+i	+m	"that the army not go"
aššum[6] ṣabûm lā illak		+a	+Ø	"that the army not go"
ûma'[7] lā surrāt		+i	+m	"I swear that these are not lies"
ûma' lā imḫur		+a	+Ø	"I swear that he did not receive"

Chart 31. Comparison Between Case and Mood.

Notes to the Chart 31:

1. For the occurrence of Arabic and (partially) Ugaritic diptota with the Nom. u, Gen./Acc. a, see 3.2.
2. The Old Akkadian determinative / relative pronoun šu, ši, ša, etc., is replaced by ša in later periods.
3. For Old Akkadian structural parallels between the noun in Constr. St. plus noun in Gen., and the noun in Constr. St. plus verb in Subj., see 3.9.
4. This is the standard Subj. in classical Arabic. See 3.9.
5. The same formations occur with adī, adūm and balūm in Old Akkadian. See Gelb, MAD II^2 p. 144.
6. The two constructions are abbreviated from the Mari examples cited in MAD II^2 p. 171.
7. Ú-má la zu-ra-tim occurs four times against the single ú-má lá zu-ra-tum in Old Akkadian texts listed in MAD II^2 p. 171. The form surrātum represents the nominativization of the Gen. surrātim, for which see 3.12.

the existence of the Subj. in a in Old Akkadian (see above 3.9), Père Fleisch unhesitatingly takes the u of standard Akkadian as the primary marker of the Subj., and the a of Arabic as the secondary marker (op. cit. p. 281; also previously in Mélanges de l'Université Saint-Joseph XXVII (1947-48) pp. 39-60, esp. pp. 57f., and in an article to appear in the Brockelmann-Gedächtnisband). I have, of course, no objection to the nominal analysis of a relative clause as given by Benveniste and Fleisch, as it is apparent from the interpretation of Akkadian ša imḫur+u and Sumerian lu e du+a given above in 3.12. However, Père Fleisch' assumption of the primacy of the nominal analysis militates against the historical development of the Subj. indicated in the previous sections.

3.14. Other Moods

Beside the two primary moods with a binary structure, in which the Ind. is contrasted with the Subj., just as the Nom. (the subject case of the noun) is contrasted with the Gen./Acc. (the object case), there are several secondary "moods" in Semitic languages variously subsumed under such headings as ventive / allative, (co)hortative / volitive, energic, jussive, and imperative. All these "moods" are discussed briefly under 3.9 and 4.2. Here I list the imperative under "moods," (like the vocative under "cases") for convenience only, since I do not understand the place of the imperative and vocative within the structural framework of the language.

3.15. General Remarks on Case / Mood

In contrast to the incomplete and inadequate descriptions of gender and number in grammars of Semitic languages, the description

of case is well presented in terms of overt, external characteristics. This results mainly from the fact that the markers of case, being at or near the end of a word unit, are easier to describe than the markers of gender and number, which follow immediately upon the stem. Still, the important question of the relationship of markers of case to those of gender and number has been completely misunderstood in the Semitic field.

Several rather startling conclusions about the structure of the case / mood have been presented in this chapter. The conclusion that the case of the noun is identical with the mood of the verb was reached partly on the basis of general structural considerations (3.13), but mainly on the basis of sequential reconstruction. Sequential reconstruction shows the same markers, namely u and a/i, in the same rank, namely rank 3, used for both the case and mood (3.2 and 3.9 - 3.11). Thus all the current reconstructions of Semitic mood, positing u as the primary marker of the Subj., cannot be right. The conclusion that the markers of case / mood u and a/i of rank number 3 are identical with the markers of gender of rank number 1 (3.4) is again the result of sequential reconstruction. It has been suggested above (3.6) that the development of the gender and number system chronologically preceded that of the case / mood.

		STEM	GEN.	NUM.	CASE Nom.	Gen.	Acc.	OBJECT	ENCL.	ATTESTED
Masc.Sg.	Nom.	kalb	+u	+Ø	+Ø			+m	(+ma) etc.	kalbum
	Gen.	kalb	+Ø	+Ø		+i		+m		kalbim
	Acc.	kalb	+Ø	+Ø			+a	+m		kalbam
Pl.	Nom.	kalb	+u	+:	+Ø			+Ø		kalbūØ
	Gen.	kalb	+Ø	+:		+i		+Ø		kalbīØ
	Acc.	kalb	+Ø	+:			+i	+Ø		kalbīØ
Fem.Sg.	Nom.	kalb	+a	+Ø	+$_t$u			+m		kalbatum
	Gen.	kalb	+a	+Ø		+$_t$i		+m		kalbatim
	Acc.	kalb	+a	+Ø			+$_t$a	+m		kalbatam
Pl.	Nom.	kalb	+a	+:	+$_t$u			+m		kalbātum
	Gen.	kalb	+a	+:		+$_t$i		+m		kalbātim
	Acc.	kalb	+a	+:			+$_t$i	+m		kalbātim

Chart 32. CASE, Substantive, Absolute State.

	STEM	GEN.	NUM.	CASE Nom.	Gen.	Acc.	OBJECT ENCL. (Gen.)	ATTESTED
Masc. Sg.	Nom.	kalb	+u	+Ø			šarrim (+ma) etc.	kalb(u)[1]
	Gen.	kalb	+Ø	+Ø	+i		šarrim	kalb(i)[2]
	Acc.	kalb	+Ø	+Ø		+a	šarrim	kalbØ[3]
Pl.	Nom.	kalb	+u	+:	+Ø		šarrim	kalbū
	Gen.	kalb	+Ø	+:	+i		šarrim	kalbī
	Acc.	kalb	+Ø	+:		+i	šarrim	kalbī
Fem. Sg.	Nom.	kalb	+a	+Ø	+$_t$u		šarrim	kalbat(u)[1]
	Gen.	kalb	+a	+Ø	+$_t$i		šarrim	kalbat(i)[2]
	Acc.	kalb	+a	+Ø		+$_t$a	šarrim	kalbatØ[3]
Pl.	Nom.	kalb	+a	+:	+$_t$u		šarrim	kalbāt(u)[1]
	Gen.	kalb	+a	+:	+$_t$i		šarrim	kalbāt(i)[2]
	Acc.	kalb	+a	+:		+$_t$i	šarrim	kalbāt(i)

1. Nom. in +u attested in Old Akkadian, later Akkadian poetry, and Akkadian of Ugarit.
2. Gen. in +i in Old Akkadian and later poetry.
3. Acc. in +a not attested in Akkadian.

Chart 33. CASE, Substantive, Construct State.

	STEM	GEN.	NUM.	CASE Nom.	Gen.	Acc.	OBJECT (Gen.)	ENCL.	ATTESTED
Sg.Masc.Nom.	kalb	+u	+Ø	+Ø			+i+a	(+ma) etc.	kalb(u)i(a)[1]
Gen.	kalb	+Ø	+Ø		+i		+i+a		kalbi(ia)[2]
Acc.	kalb	+Ø	+Ø			+Ø	+i+Ø		kalbi
Fem. Nom.	kalb	+a	+Ø	$+_t$u			+i+Ø		kalbati
Gen.	kalb	+a	+Ø		$+_t$i		+i+a		kalbati(ia)[2]
Acc.	kalb	+a	+Ø			$+_t$Ø	+i+Ø		kalbati
Pl.Masc.Nom.	kalb	+u	+:	+Ø			+i+a		kalbūia
Gen.	kalb	+Ø	+:		+i		+i+a		kalbīia
Acc.	kalb	+Ø	+:			+i	+i+a		kalbīia
Fem. Nom.	kalb	+a	+:	$+_t$u			+i+a		kalbātuia
Gen.	kalb	+a	+:		$+_t$i		+i+a		kalbātiia
Acc.	kalb	+a	+:			$+_t$i	+i+a		kalbātiia

1. Standard Akkadian has kalbi. Dialectal Akkadian and Akkadian of Ugarit also has kalbu(i)a. For -a-ḫu-i on a seal, cf. JCS V 132 and similar forms in Barth, Pronominalbildung p. 38.

2. Old Akkadian has (ana) kalbi; later only (ana) kalbi(i)a.

Chart 34. CASE, Substantive, Pronominal Suffix, 1st Person Sg.

	STEM	GEN.	NUM.	CASE Nom.	Gen.	Acc.	OBJECT (Gen.)	ENCL.	ATTESTED
Masc. Sg. Nom.	kalb	+u	+Ø	+Ø			+šu+Ø	(+ma) etc.	kalb(u)šu[1]
Gen.	kalb	+Ø	+Ø		+i		+šu+Ø		kalbišu
Acc.	kalb	+Ø	+Ø			+a	+šu+Ø		kalb(a)šu[2]
Pl. Nom.	kalb	+u	+:	+Ø			+šu+Ø		kalbūšu
Gen.	kalb	+Ø	+:		+i		+šu+Ø		kalbīšu
Acc.	kalb	+Ø	+:			+i	+šu+Ø		kalbīšu
Fem. Sg. Nom.	kalb	+a	+Ø	$+_t$u			+šu+Ø		kalbat(u)šu[1]
Gen.	kalb	+a	+Ø		$+_t$i		+šu+Ø		kalbatišu
Acc.	kalb	+a	+Ø			$+_t$a	+šu+Ø		kalbat(a)šu[2]
Pl. Nom.	kalb	+a	+:	$+_t$u			+šu+Ø		kalbātušu[1,3]
Gen.	kalb	+a	+:		$+_t$i		+šu+Ø		kalbātišu[3]
Acc.	kalb	+a	+:			$+_t$i	+šu+Ø		kalbātišu[3]

1. Nom. in +u in Old Akkadian and later poetry.

2. Acc. in +a attested in Old Akkadian, later poetry, and Akkadian of Ugarit.

3. For secondary development of ū/ī in kalbātū/īšu see 2.6.

Chart 35. CASE, Substantive, Pronominal Suffix, 3rd Person Sg.

	STEM	GEN.	NUM.	CASE Nom.Gen.Acc.	OBJECT	ENCL.	ATTESTED
Masc.Sg.Nom.	māḫir	+u	+Ø	+Ø	+m	(+ma) etc.	māḫirum
Gen.	māḫir	+Ø	+Ø	+i	+m		māḫirim
Acc.	māḫir	+Ø	+Ø	+a	+m		māḫiram
Pl. Nom.	māḫir	+u	+:	$+_t u$	+m		māḫirūtum[1]
Gen.	māḫir	+u	+:	$+_t i$	+m		māḫirūtim[1]
Acc.	māḫir	+u	+:	$+_t i$	+m		māḫirūtim[1]
Fem. Sg.Nom.	māḫir	+a	+Ø	$+_t u$	+m		māḫirØtum
Gen.	māḫir	+a	+Ø	$+_t i$	+m		māḫirØtim
Acc.	māḫir	+a	+Ø	$+_t a$	+m		māḫirØtam
Pl. Nom.	māḫir	+a	+:	$+_t u$	+m		māḫirātum
Gen.	māḫir	+a	+:	$+_t i$	+m		māḫirātim
Acc.	māḫir	+a	+:	$+_t i$	+m		māḫirātim

1. Original (kalbū) māḫirū developed to māḫirūtum by analogy with (kalbātum) māḫirātum.

Chart 36. CASE, Participle, Absolute State.

	STEM	GEN.	NUM.	CASE Nom.	Gen.	Acc.	OBJECT ENCL. (Gen.)	ATTESTED
Masc. Sg.	Nom.	māḫir	+u	+Ø	+Ø		kaspim (+ma) etc.	māḫir(u)[1]
	Gen.	māḫir	+Ø	+Ø	+i		kaspim	māḫir(i)[2]
	Acc.	māḫir	+Ø	+Ø		+a	kaspim	māḫirØ[3]
Pl.	Nom.	māḫir	+u	+$_t$u			kaspim	māḫirū(t)(u)[1,4]
	Gen.	māḫir	+u		+$_t$i		kaspim	māḫirūt(i)[2]
	Acc.	māḫir	+u			+$_t$i	kaspim	māḫirūt(i)
Fem. Sg.	Nom.	māḫir	+a	+$_t$u			kaspim	māḫirØt(u)[1]
	Gen.	māḫir	+a	+Ø	+$_t$i		kaspim	māḫirØt(i)[2]
	Acc.	māḫir	+a	+Ø		+$_t$a	kaspim	māḫirātØ[3]
Pl.	Nom.	māḫir	+a	+$_t$u			kaspim	māḫirāt(u)[1,4]
	Gen.	māḫir	+a		+$_t$i		kaspim	māḫirāt(i)[2]
	Acc.	māḫir	+a			+$_t$i	kaspim	māḫirāt(i)

1. Nom. in +u attested in late poetry.
2. Gen. in +i attested in Old Akkadian and late poetry.
3. Acc. in +a not attested in Akkadian.
4. Old Akkadian has māḫirū kaspim in Masc.; therefore, presumably also *māḫirā kaspim in Fem.

Chart 37. CASE, Participle, Construct State.

	STEM	GEN.	NUM.	CASE Nom.	CASE Gen.	CASE Acc.	OBJECT (Gen.)	ENCL.	ATTESTED
Masc.Sg.Nom.	māḫir	+u	+Ø	+Ø			+šu+Ø	(+ma) etc.	māḫir(u)šu[1]
Gen.	māḫir	+Ø	+Ø		+i		+šu+Ø		māḫirišu
Acc.	māḫir	+Ø	+Ø			+a	+šu+Ø		māḫir(a)šu[2]
Pl. Nom.	māḫir	+u	+:	+$_t$u			+šu+Ø		māḫirūt(u)šu[1,3]
Gen.	māḫir	+u	+:		+$_t$i		+šu+Ø		māḫirūtišu[3]
Acc.	māḫir	+u	+:			+$_t$i	+šu+Ø		māḫirūtišu[3]
Fem. Sg. Nom.	māḫir	+a	+Ø	+$_t$u			+šu+Ø		māḫirØt(u)šu[1]
Gen.	māḫir	+a	+Ø		+$_t$i		+šu+Ø		māḫirØtišu
Acc.	māḫir	+a	+Ø			+$_t$a	+šu+Ø		māḫirØt(a)ša[2]
Pl. Nom.	māḫir	+a	+:	+$_t$u			+šu+Ø		māḫirātušu[1,3]
Gen.	māḫir	+a	+:		+$_t$i		+šu+Ø		māḫirātišu[3]
Acc.	māḫir	+a	+:			+$_t$i	+šu+Ø		māḫirātišu[3]

1. Nom. in +u attested in late poetry.

2. Acc. in +a attested in late poetry.

3. For secondary +ūšu, +išu see 2.6.

Chart 38. CASE, Participle, Pronominal Suffix.

	STEM	GEN.	NUM.	CASE Nom.Gen.Acc.	OBJECT (Gen./Subj.)	ATTESTED
Sg.Masc.Nom	š	+u	+Ø	+Ø	kalbim[1]	šu[2]
Gen.	š	+Ø	+Ø	+i	kalbim	ši
Acc.	š	+Ø	+Ø	+a	kalbim	ša
Fem. Nom.	š	+a	+Ø	+tu	kalbim	šatØ
Gen.	š	+a	+Ø	+ti	kalbim	šati
Acc.	š	+a	+Ø	+ta	kalbim	*šatØ
Pl.Masc.Nom.	š	+u	+:	+tu	kalbim	šūtØ
Gen.	š	+u	+:	+ti	kalbim	šūti
Acc.	š	+u	+:	+ti	kalbim	šūtĺ
Fem. Nom.	š	+a	+:	+tu	kalbim	šātØ
Gen.	š	+a	+:	+ti	kalbim	*šāti
Acc.	š	+a	+:	+ti	kalbim	šātĺ

1. And older šu imḫura, later ša imḫuru, "he who received," etc.

2. The full declension of this pronoun exists only in the Sargonic period; see MAD II^2 pp.133f. The full reconstruction of the cases is based on Arabic Sg. Masc. dū, dī, dā, Fem. dātu, dāti, dāta, Pl. Masc. dawū, dawī, Fem. dawātu, dawāti.

Chart 39. CASE, Pronoun, Determinative.

	STEM	GEN.	NUM.	CASE			OBJ.	ATTESTED
				Nom.	Gen. Acc.	Dat.		
Masc./Fem.Sg.Nom.	(ʾan+)ʾa+k	--	--	+u			--	ʾanāku[1]
Gen./Acc.	i	--	--		+a		--	iati[2]
Dat.		--	--			+a	--	iašim
Pl. Nom.	(ʾan+)na?	--	--	+$_n$u			--	(ʾa)naḫna/u (ʾa)nīnu
Gen./Acc.	ni	--	--		+a		--	niati
Dat.	ni	--	--			+a	--	niašim

1. Nom. ʾanāku of Pers. Pron. I was replaced by i of Pers. Pron. II in obl. case. The latter occurs also in the Poss. Pron. iaum "my."

2. For secondary +ti and +šim see 3.7.

3. The reconstruction of na is questionable. This pronoun appears as (ʾa)nīnu in Akkadian and (ʾa)naḫna/u in other Semitic languages. Pl. suffix -nu was borrowed from ʾantunu, šunu, etc. Nom. ʾanīnu of Pers. Pron. I was replaced by ni of Pers. Pron. II in obl. case. The latter occurs in the Poss. Pron. niaum "our."

Chart 40. CASE, Pronoun, Personal, 1st Person.

	STEM	GEN.	NUM.	CASE			OBJ.	ATTESTED
				Nom.	Gen. Acc.	Dat.		
Sg.Masc.Nom.	(ʾan+)t	+u	+Ø	+Ø			--	ʾantØ[a][1]
Gen./Acc.	k	+u	+Ø		+a		--	kuati[2]
Dat.	k	+u	+Ø			+a	--	kuašim
Fem. Nom.	(ʾan+)t	+i	+Ø	+Ø			--	ʾanti
Gen./Acc.	k	+i	+Ø		+a		--	kiati
Dat.	k	+i	+Ø			+a	--	kiašim
Pl.Masc.Nom.	(ʾan+)t	+u	$+_n$u	+Ø			--	ʾantunu
Gen./Acc.	k	+u	$+_n$u		+Ø		--	kunuØti
Dat.	k	+u	$+_n$u			+Ø	--	kunuØšim
Fem. Nom.	(ʾan+)t	+i	$+_n$i	+Ø			--	ʾantinØ[a]
Gen./Acc.	k	+i	$+_n$i		+a		--	kinØati
Dat.	k	+i	$+_n$i			+a	--	kinØašim

1. U of ʾantu is reconstructed from the Pl. ʾantunu. Nom. ʾantu of Pers. Pron. I was replaced by ku, etc., of Pers. Pron I in obl. case. The latter occurs in the Poss. Pron. kuaum, *kiaum, kunuaum, and *kinaum.

2. For secondary +ti and +šim see 3.7.

Chart 41. CASE, Pronoun, Personal, 2nd Person.

	STEM	GEN.	NUM.	CASE			OBJ.	ATTESTED
				Nom.	Gen. Acc.	Dat.		
Sg.Masc.Nom.	š	+u	+Ø	+Ø			--	šu[1]
Gen./Acc.	š	+u	+Ø		+a		--	šua(ti)[2]
Dat.	š	+u	+Ø			+a	--	šuašim[3]
Fem. Nom.	š	+i	+Ø	+Ø			--	ši
Gen./Acc.	š	+i	+Ø		+a		--	šiati
Dat.	š	+i	+Ø			+a	--	šiašim
Pl.Masc.Nom.	š	+u	$+_n$u	+Ø			--	šunu
Gen./Acc.	š	+u	$+_n$u		+Ø		--	šunuti[4]
Dat.	š	+u	$+_n$u			+Ø	--	šunušim
Fem. Nom.	š	+i	$+_n$i	+Ø			--	šin[a]
Gen./Acc.	š	+i	$+_n$i		+a		--	šinati
Dat.	š	+i	$+_n$i			+a	--	šinašim

1. Pers. Pron. šu, ši, šunu, and šina occur also in the Poss. Pron. šuaum, šiaum, šunuaum, and *šinaum.

2. The form šua is attested for both the Gen. and Acc. in Old Akkadian. For secondary +ti and +šim see 3.7.

3. Also šuaš in Old Akkadian.

4. Also šuniti in Old Akkadian and Old Assyrian.

Chart 42. CASE, Pronoun, Personal, 3rd Person.

	"STEM"	GEN.	NUM.	CASE Gen.Dat.Acc.	OBJ.	ENCL.	ATTESTED
Sg.Masc/Fem.Gen.	kalbu+i	--	--	+a	--	(+ma) etc.	kalb(u)i(a)[1]
Dat.	jamḫurɣ+i	--	--	+a	--		imḫuri/am[2]
Acc.	jamḫurɣ+i	--	--	+ɣ	--		imḫur(n)i[3]
Pl.Masc/Fem.Gen.	kalbu+ni	--	--	+a	--		kalbuni/a[4]
Dat.	jamḫurɣ+ni	--	--	+a	--		imḫurniašim[5]
Acc.	jamḫurɣ+ni	--	--	+a	--		imḫurniati

1. Standard Akkadian has kalbi. Dialectal Akkadian and Akkadian of Ugarit also has kalbu(i)a. For -a-ḫu-i on a seal, cf. JCS V 132 and similar forms in Barth, Pronominalbildung p. 38.
2. Reconstructed Ind. jamḫurɣ+ɣ+a+m results in standard imḫuram, once imḫurim (TCL XXIII 96:7, Mari) from jamḫurɣ+i+ɣ+m.
3. Reconstructed Ind. jamḫuru+n i+ɣ results in standard imḫurni, but imḫuri in Old Assyrian.
4. Reconstructed kalbu+ni+ɣ results in standard kalbuni, but also kalbuna, from kalbu+nɣ+a, in Old Akkadian.
5. Also +niaš in Old Akkadian.

Chart 43. CASE, Pronoun, Suffixal, 1st Person After Noun and Verb in Sg.

	"STEM"	GEN.	NUM.	CASE Gen.	Dat.	Acc.	OBJ.	ENCL.	ATTESTED
Sg.Masc/Fem.Gen.	kalbū+i	--	--	+a			--	(+ma) etc.	kalbūia
Dat.	jamḫurū+$_{n}$i	--	--		+Ø		--		imḫurūnim[1]
Acc.	jamḫurū+$_{n}$i	--	--			+Ø	--		imḫurūni
Pl.Masc/Fem.Gen.	kalbū+ni	--	--	+Ø			--		kalbūni
Dat.	jamḫurū+ni	--	--		+a		--		imḫurūniašim
Acc.	jamḫurū+ni	--	--			+a	--		imḫurūniati

1. From jamḫurū+$_{n}$i+Ø+m.

Chart 44. CASE, Pronoun, Suffixal, 1st Person After Noun and Verb in Pl.

	STEM	GEN.	NUM.	CASE Gen.	Dat.	Acc.	OBJ. ENCL.	ATTESTED
Sg.Masc.Gen.	+k	+Ø	+Ø	+a			--	(+ma) etc. kalbu+ka[1]
Dat.	+k	+u	+Ø		+Ø		--	imḫur+kum
Acc.	+k	+Ø	+Ø			+a	--	imḫur+ka
Fem. Gen.	+k	+i	+Ø	+Ø			--	kalbu+ki
Dat.	+k	+i	+Ø		+Ø		--	imḫur+kim
Acc.	+k	+i	+Ø			+Ø	--	imḫur+ki
Pl.Masc.Gen.	+k	+u	$+_n$u	+Ø			--	kalbu+kunu
Dat.	+k	+u	$+_n$u		+Ø		--	imḫur+kunušim
Acc.	+k	+u	$+_n$u			+Ø	--	imḫur+kunu(ti)
Fem. Gen.	+k	+i	$+_n$i	+a			--	kalbu+kina
Dat.	+k	+i	$+_n$i		+a		--	imḫur+kinašim
Acc.	+k	+i	$+_n$i			+a	--	imḫur+kina(ti)

1. No difference in the form of the pronoun, whether the previous noun or verb is in Sg. or Pl.

Chart 45. CASE, Pronoun, Suffixal, 2nd Person.

STEM	GEN.	NUM.	CASE			OBJ. ENCL.	ATTESTED
			Gen.	Dat.	Acc.		
Sg.Masc.Gen.	+š	+u	+Ø	+ø		-- (+ma) etc.	kalbu+šu[1]
Dat.	+š	+u	+Ø	+ø		--	imḫur+šum
Acc.	+š	+u	+Ø		+a	--	imḫur+šu[2]
Fem. Gen.	+š	+i	+Ø	+a		--	kalbu+ši/a[3]
Dat.	+š	+i	+Ø	+ø		--	imḫur+šim
Acc.	+š	+i	+Ø		+a	--	imḫur+ši/a[4]
Pl.Masc.Gen.	+š	+u	+$_n$u	+a		--	kalbu+šunu/i/a[5]
Dat.	+š	+u	+$_n$u	+ø		--	imḫur+šunu/išim[6]
Acc.	+š	+u	+$_n$u		+a	--	imḫur+šunu/i(ti)[7]
Fem. Gen.	+š	+i	+$_n$ẋ	+a		--	kalbu+šina
Dat.	+š	+i	+$_n$ẋ	+a		--	imḫur+šinašim
Acc.	+š	+i	+$_n$ẋ		+a	--	imḫur+šina(ti)

1. No difference in the form of the pronoun, whether the previous noun or verb is in Sg. or Pl.
2. But also +ša+ in standard Akkadian ju+ša+mḫir.
3. Kalbu+ša in standard Akkadian; sporadically kalbu+ši in Old Akkadian and Old Babylonian (MAD II^2 p. 129); also Akkadian of Ugarit.
4. Imḫur+ša occurs several times in Akkadian of Ugarit.
5. Kalbu+šunu in standard Akkadian; kalbu+šuni, kalbu+šuna also in Old Akkadian.
6. Imḫur+šunušim in standard Akkadian; once imḫur+šunišim in Old Akkadian.
7. Imḫur+šunuti in Old Babylonian; imḫur+šunu in Old Assyrian; imḫur+šunu, imḫur+šuni, and imḫur+šuniti in Old Akkadian.

Chart 46. CASE, Pronoun, Suffixal, 3rd Person.

		"STEM"	GEN.	NUM.	MOOD Ind.	MOOD Subj.	OBJ.	ENCL.	ATTESTED
Sg.1st Masc./Fem.	Ind.	ʾa+mẖur	+u	+Ø	+∅		+Ø	(+ma) etc.	ʾamẖur∅ u
	Subj.	ʾa+mẖur	+∅	+Ø		+a	+Ø		ʾamẖura
2nd Masc.	Ind.	ta+mẖur	+u	+Ø	+∅		+Ø		tamẖur∅ u
	Subj.	ta+mẖur	+∅	+Ø		+a	+Ø		tamẖura
Fem.	Ind.	ta+mẖur	+a	+Ø	+∅		+Ø		tamẖuri
	Subj.	ta+mẖur	+a	+Ø		+∅	+Ø		tamẖuri
3rd Masc.	Ind.	ja+mẖur	+u	+Ø	+∅		+Ø		jamẖur∅ u
	Subj.	ja+mẖur	+∅	+Ø		+a	+Ø		jamẖura
Fem.	Ind.	ja+mẖur	+a	+Ø	+∅		+Ø		jamẖurt∅
	Subj.	ja+mẖur	+a	+Ø		+a	+Ø		jamẖurt u
Pl.1st Masc./Fem.	Ind.	na+mẖur	+u	+Ø	+∅		+Ø		namẖur∅ u
	Subj.	na+mẖur	+∅	+Ø		+a	+Ø		namẖura
2nd Masc.	Ind.	ta+mẖur	+u	+:	+∅		+Ø		tamẖurū
	Subj.	ta+mẖur	+u	+:		+∅	+Ø		tamẖurū
Fem.	Ind.	ta+mẖur	+a	+:	+∅		+Ø		tamẖurā
	Subj.	ta+mẖur	+a	+:		+∅	+Ø		tamẖurā
3rd Masc.	Ind.	ja+mẖur	+u	+:	+∅		+Ø		jamẖurū
	Subj.	ja+mẖur	+u	+:		+∅	+Ø		jamẖurū
Fem.	Ind.	ja+mẖur	+a	+:	+∅		+Ø		jamẖurā
	Subj.	ja+mẖur	+a	+:		+∅	+Ø		jamẖurā

Chart 47. MOOD, Verb.

		"STEM"	GEN.	NUM.	MOOD Ind.	MOOD Subj.	OBJ.	ATTESTED
Sg.1st Masc/Fem.	Ind.	maḫir+ʾak	--	--	+u		+Ø	maḫźrāku
	Subj.	maḫir+ʾak	--	--		+Ø	+Ø	maḫźrāku
2nd Masc.	Ind.	maḫir+t	+u	+Ø	+Ø		--	maḫźrāta Ø
	Subj.	maḫir+t	+u	+Ø		+Ø	--	maḫźrāta Ø
Fem.	Ind.	maḫir+t	+i	+Ø	+Ø		--	maḫźrāti
	Subj.	maḫir+t	+i	+Ø		+Ø	--	maḫźrāti
3rd Masc.	Ind.	maḫir+ź	+u	+Ø	+Ø		+Ø	maḫir Ø
	Subj.	maḫir+ź	+Ø	+Ø		+a	+Ø	maḫźra u
Fem.	Ind.	maḫir+ź	+a	+Ø	+Ø		+Ø	maḫźra(t)
	Subj.	maḫir+ź	+a	+Ø		+Ø	+Ø	maḫźra(t)
Pl.1st Masc/Fem.	Ind.	maḫir+na	--	--	+Ø		--?	maḫźrāna u Ø
	Subj.	maḫir+na	--	--		+Ø	--?	maḫźrāna u Ø
2nd Masc.	Ind.	maḫir+t	+u	+$_n$u	+Ø		--	maḫźrātunu
	Subj.	maḫir+t	+u	+$_n$u		+Ø	--	maḫźrātunu
Fem.	Ind.	maḫir+t	+i	+$_n$i	+Ø		--	maḫźrātina a Ø
	Subj.	maḫir+t	+i	+$_n$i		+Ø	--	maḫźrātina a Ø
3rd Masc.	Ind.	maḫir+ź	+u	+:	+Ø		+Ø	maḫźrū
	Subj.	maḫir+ź	+u	+:		+Ø	+Ø	maḫźrū
Fem.	Ind.	maḫir+ź	+a	+:	+Ø		+Ø	maḫźrā
	Subj.	maḫir+ź	+a	+:		+Ø	+Ø	maḫźrā

Chart 48. MOOD, Stative.

4. OBJECT

4.1. Definition of the Object

The rank number 4 after the stem is occupied by the object, which follows the markers of gender, number, and case / mood in ranks 1, 2, and 3, respectively.

Chart 49 illustrates the object as used in the Gen. (or Subj.), Dat., and Acc. in Akkadian.

Notes to Chart 49:

Noun includes here the substantive and participle; verb includes here the fientive verb, partially also the imperative and stative.

Nouns and determinative pronouns are followed by the object, which can be represented by a noun or personal pronoun in Gen., or by a verb in Subj.; absence of the object is indicated by m in the noun. Verbs are followed by a noun or personal pronoun in Dat. or Acc.; absence of the object is indicated by ∅ in the verb. Statives behave normally like verbs. Personal pronouns are never followed by an object; see 4.3.

The Akkadian verb shows two syntactical constructions in connection with the object. One construction has the verb followed by the object in the form of a pronominal suffix, as in imḫur+šum or imḫur+šu. In all other cases, the verb follows the object. This latter construction is attested in all periods and areas of Akkadian. With other scholars I assume that the posited common Semitic sequence verb plus object must have applied originally also to Akkadian, and the

SUBJECT	OBJECT		TRANSLATION
	Gen/Subj. Dat.	Acc.	
kalbu	šarrim		"dog of the king"
kalbu	šarrišu		"dog of his king"
kalbu	+šu		"his dog"
kalbu	+m		"dog"
kalbu	jamḫura^{u}		"dog who received"
šu	šarrim		"he of the king"
šu	šarrišu		"he of his king"
šu	jamḫura^{u}		"he who received"
jamḫur/	šarriš		"he rec'd for the king"
jamḫur/	ana šarrim		"he rec'd for the king"
jamḫur/	šarrišš̌u		"he rec'd for his king"
jamḫur/	ana šarrišu		"he rec'd for his king"
jamḫur/	šuaš		"he rec'd for him"
jamḫur/	ana šuašim		"he rec'd for him"
jamḫur/	+šum		"he rec'd for him"
jamḫur/		šarram	"he rec'd the king"
jamḫur/		šarrašu	"he rec'd his king"
jamḫur/		+šu	"he rec'd him"
jamḫur/		+Ø	"he rec'd"

Chart 49. Case / Mood of the Object.

historically attested sequence object in Acc. (or Dat.) plus verb is due to the Sumerian influence. The posited verb plus object order is supported by the subject plus object order in Akkadian, as in bêlī šumī izzakar "my lord has named my name" (von Soden, GAG § 130f); in Proto-Semitic, as in ju+ša+mḫir+u "he (here; ju in Nom.) caused him (there; ša in Acc.) to be received" (see 8.1), and generally in West Semitic languages.

The prepositional phrases with ana (and the like) are presumably late. Thus šarriš "to the king" may be older than ana šarrim. Similarly šarrišu "to his king" may be older than ana šarrišu, and šuaš "to him" may be older than ana šuašim.

The object may be as short as a pronominal suffix or mimation (or nunation); it may be a noun or a verb with or without a pronominal suffix; or it may consist of linguistic segments longer than what we normally understand as a "word."

As shown in Chart 50, just as the first linguistic segment consists of a subject and object I, so object I in turn consists of a subject and object II. Object II in turn can be subdivided into subject and object III, and so on with longer linguistic segments. Each object, primary or secondary, is a linguistic segment which consists of the stem, gender, number, case (or mood), and object.

In discussing such linguistic segments as kalbum, kalbušu, kalbu wardim, kalbu wardišu, kalbu wardi šarrišu, I have intentionally avoided using the term "word." This is simply due to my inability to define it. I find Bloomfield's definition of "word" as "a minimum free form" (in Language II [1926] p. 156) or "the

SUBJECT				OBJECT I
kalbu				+m
STEM	GENDER	NUMBER	CASE	OBJECT I
kalb	+u	+Ø	+Ø	+m

kalbu	+šu				
		STEM	GENDER	NUMBER	CASE	OBJECT II
		+š	+u	+Ø	+Ø	--

kalbu				wardim
STEM	GENDER	NUMBER	CASE	OBJECT I
kalb	+u	+Ø	+Ø	wardim

STEM	GENDER	NUMBER	CASE	OBJECT II
ward	+Ø	+Ø	+i	+m

kalbu	wardi+	šu				
		STEM	GENDER	NUMBER	CASE	OBJECT III
		+š	+u	+Ø	+Ø	--

kalbu	wardi	šarri+šu				
		STEM	GENDER	NUMBER	CASE	OBJECT IV
		šarr	+Ø	+Ø	+i	+šu

Chart 50. Types of Objects.

minimum of free form" (in his Language [New York, 1933] p. 178) unsatisfactory; "minimum" makes no sense, and "word" is tautological with "free form." Writing conventions, considerations of stress units, and meanings of the words for "word" in the native language are of some help, but cannot be considered as sufficient criteria for defining words. For a recent attempt to define the term "word" ("parola") in Semitic languages, see P. Fronzaroli in Accademia Nazionale dei Lincei, Rendiconti della Classe di Scienze morali, storiche e filologiche, serie VIII, vol. XXI (1966) pp. 210-223, esp. pp. 220ff. Note also the following statement by a structural linguist: "Yet no generally accepted and satisfactory definition exists, and some linguists deny any validity to the word as a unit, relegating it to folk linguistics" (Joseph H. Greenberg, Essays in Linguistics [Chicago, 1963] p. 27).

4.2. Pronominal Suffixes

Charts 53-64 present the object in the form of pronominal suffixes in standard Akkadian. For exact morphemic interpretations, see Charts 43-46 on pronominal suffixes under 3. CASE.

The following notes illustrate the distribution and usage of the pronominal suffixes in Akkadian and other Semitic languages.

The object in Gen. (Charts 53-54) occurs in Akkadian and all other Semitic languages only with the noun, as in kalbuka "thy dog" or kalbūka "thy dogs."

The object in Dat. (Charts 55-58) appears only in Akkadian and only in the verb. The simple Dat. I (Charts 55-56) occurs in iddinam "he gave to me," iddinūnim "they gave to me," illikam "he went to me," illikūnim "they went to me."

The Dat. pronominal suffixes for the 1st person gradually came to be used in the sense of a dativus commodi or dativus ethicus, especially in the verbs of movement, which are most susceptible of this development. Thus allikam "I went for me" can be perfectly paralleled by the French je m'en vais, the Italian me ne vado, and even by the medieval vadent se, vadant sibi, sedete vobis (discussed in Einar Löfstedt, Philologischer Kommentar zur Peregrinatio Aetheriae [Uppsala, 1911] pp. 140f., ref. from Miss Erica Reiner). Also the extension of the use of the 1st person +am of allikam to cover the 2nd and 3rd persons in tallikam, illikam, etc., can be paralleled in other languages, as in Slavonic, in which se, originally only the 3rd person, is used for all persons and numbers. See discussion by Gelb in BO XII (1955) p. 109b.

The gradual evolution of the meaning "I went for me" to "I came" in verbs of movement is reflected in the origin of a mood called ventive in Akkadian. See the fundamental study by B. Landsberger, "Der Ventiv des Akkadischen," ZA XXXV (1924) pp. 113-123. This is the mood called "allative" by other scholars, such as Ungnad in his grammar and Gelb, BO XII p. 109b. From verbs of movement the use of the allative was gradually extended to verbs of other categories, where it has a vague and ill-defined force of a dativus ethicus. The formal use of this Dat. II is illustrated in Charts 57-58 and 63-64.

The m of the Dat. II is regularly assimilated to the following consonant, as in imḫuraš+šu "he received him," imḫuraš+ka "he received thee." Very rarely m is preserved, as in i-ra-dí-a-am-ku-nu-ti "he will bring to you" (Sidney Smith, Cuneiform Texts from Cappadocian Tablets . . . II [London, 1924] 4b No. 9); aṭ-ṭar-da-[a]k-kum-šu-nu-ti "I sent them to thee" (Otto Schroeder, Vorderasiatische Schriftdenkmäler

. . . . XVI [Leipzig, 1917] 71:9). The reading iṣ-ba-tu-nim-šu (H. F. Lutz, Yale Oriental Series II [New Haven, 1917] 1:20) in B. Landsberger, ZA XXXV (1924) p. 120, is to be corrected to iz-zu-úḫ-ma (collated).*

In place of the Akkadian allative / ventive am, Arabic and apparently also Ugaritic have a mood called energic I, characterized by the marker an, which appears both in the fientive verb and imperative. For the possibility of linking the Hebrew cohortative, as in ʾašallaḥā "may I send" or qûmā "stand up!", with the energic I, see above under 3.9. The marker na of an+na in the energic II of Hebrew and Arabic is of unknown origin and irrelevant in the present context.

The combination am+ni of the Akkadian Acc. II (Chart 61) corresponds to the combination an+ni, that is, energic I plus pronominal suffix, of Hebrew and Arabic. Thus Akkadian imḫuranni "he received me" finds perfect correspondence in Hebrew jəkabbədanni "he shall honor me" or in Arabic falā taḥrimanni "do not refuse me!"

The object in Acc. (Charts 59-62) is used in all Semitic languages only in the verb, as in imḫurni "he received me," imḫurūni "they received me."

Characteristic of Akkadian is the combination of the pronominal suffixes Dat. II plus Acc. I, as in aṭrudakkušu "I sent him to thee." Apparently the only forms occurring are +am+, plus the Dat. pronominal suffix +kum+ (presumably also Fem. +kim+), plus the Acc. pronominal suffixes +šu and +šunu(ti) (presumably also Fem. +ša and +šina(ti)). The case of imḫurašš̌u (and amḫurašš̌u, etc.) in Charts 61 and 63 requires a careful study.*

In place of the Akkadian Dat. II + Acc. I construction, we find in other Semitic languages the Acc. I + Acc. I construction, as in Arabic ʾaʿṭajtu+ka+hu "I gave it to thee."

4.3. Mimation

Chart 51 illustrates the main points of the distributional pattern of mimation in Akkadian.

From the comparison of kalbu šarrim and kalbu+šu with kalbu+m it is clear that rank number 4 after the stem, occupied by the object in the form of šarrim or +šu, is also occupied by +m of the mimation. Thus m appears to be the signal marking the absence of the object.

The comparison of jamḫuraṃ šarram and jamḫuraṃ+šu with jamḫuraṃ yields the same results. However, the verb jamḫuraṃ has no overt mimation, but a Ø marker to denote the absence of the object.

The structure of the pronouns is different. There is a Constr. St. of the determinative pronoun in šu šarrim, parallel to kalbu šarrim, but there can be neither a pronominal suffix nor mimation following the pronoun. The personal pronouns, either independent or suffixal, never take an object and consequently never carry mimation. Since the structure of the pronouns generally does not allow the use of the object, it is impossible to indicate the absence of the object by a Ø mark.

The consonant m of ūm is not mimation since it forms an organic part of ūm, which marks the Loc. case in rank number 3, not 4. Cf. the Loc. qirb+ṃ+Ø+ūm+ka > qirbūkka "in your midst," parallel to the Dat. case qirb+ṃ+Ø+iš+ka > qirbiška "to your middle."

The consonant m of the Dat. and Acc. cases of the personal pronoun, both independent and suffixal, is to be considered equally

"STEM"	GEN.	NUM.	CASE / MOOD	OBJECT	ENCL.	ATTESTED
kalb	+u	+Ø	+Ø	šarrim	(+ma) etc.	kalbu šarrim
kalb	+u	+Ø	+Ø	+šu		kalbušu
kalb	+u	+Ø	+Ø	+m		kalbum
jamḫur	+u	+Ø	+Ø	šarram		jamḫurØ šarram
jamḫur	+u	+Ø	+Ø	+šu		jamḫurØšu
jamḫur	+u	+Ø	+Ø	+Ø		jamḫurØ
š	+u	+Ø	+Ø	šarrim		šu šarrim
š	+u	+Ø	+Ø	--		šu (no Pron. Suff.)
š	+u	+Ø	+Ø	--		šu (no mimation)
kalbu						kalbu šarrim
šarr	+Ø	+Ø	+i	+m		
kalbu						kalbušu
š	+u	+Ø	+Ø	--		
kalbu						kalbu jamḫurā^{u}
jamḫur	+Ø	+Ø	+ā^{u}	+Ø		
kalbu						kalbu jamḫurā^{u}šu
jamḫur	+Ø	+Ø	+ā^{u}	+šu		

Chart 51. Structure of Mimation.

outside of the mimation. See 3.7. Examples are šuašim, iddin+niašim, iddin+kum, iddin+am, iddin+ak+kum, iddinū+nik+kum, iddin+ak+ka, iddinū+nik+ka, iddin+ak+kuš+šu, etc.

The formal aspect of the distribution of mimation and nunation in Semitic languages is shown in Chart 52. We shall consider first the noun and then the verb.

Overtly or covertly, the Sg. of the noun has mimation in all Semitic languages, with the exception of Arabic which has nunation.

Based on parallels in Akkadian, as in biltim > biltin, annûtim > annûtin, annijātim > annijātin, and in Indo-European languages, as in Latin donum, Greek doron, English bosom, German Busen, I suggested in Morphology of Akkadian p. 9 that the phonetic change m > n is more likely than n > m, and consequently that mimation is older than nunation.

The Pl. and Du. of the noun have mimation or nunation, with the variation m/n occurring freely even within the same dialectal area, as marked by vertical lines in Chart 52.

An important feature of the Pl. of the noun is the existence of ma in Ugaritic and Old Canaanite, and of na in Ugaritic and Arabic.

In several West Semitic languages the fientive verb and the imperative have na or n in the Pl. and ni in the Du, which follow not only the long ū and ā of the Pl. and Du., but also the (secondarily) long ī of the Fem. Sg. Only South Arabic apparently has n following a short vowel (u) of the Masc. Sg. See Maria Höfner, Altsüdarabische Grammatik (Leipzig, 1943) p. 71. In A. F. L. Beeston, A Descriptive Grammar of Epigraphic South Arabian (London, 1962) p. 23, the interpretation of the written South Arabic n, either as an of the North Arabic energic or na of the indicative, is not clear.

	NOUN			VERB		
	Sg.	Pl.	Du.	Sg.	Pl.	Du.
Akkadian	kalbum	kalbūm	kalbān	jamḫurm	jamḫurū	jamḫurā
Ugaritic	KLBm	ʾašīrūma ʾašīrīma bidalūma bidalūna	KLBM	TQTLN	JQTLN	JQTLN
Old Canaan. (EA)	KLBm	šamûma sûsīma	Nahrīma Nahrīna	jaqtulu	jaqtulūna	?
Hebrew	kalbum	sûsīm (Mêšaᶜ +n)	sûsaim (Mêšaᶜ +n)	taqtulīn	jaqtulūn taqtulāna	
Syriac	kalbum	kalbīn	kalbain	taqtulīn	jaqtulūn	
South Arabic	KLBM	KLBN	KLBN	JQTLN TQTLN	JQTLN	JQTLN
Arabic	qaṣṣābun	qaṣṣābūna	qaṣṣābāni	taqtulīna	jaqtulūna	jaqtulāni

Chart 52. Mimation and Nunation in Semitic Languages.

Two important questions concern, first, the interpretation of a in ma and na of the Pl. and Du. in the noun; and, secondly, the relation of na and n of the Pl. and Du. in the verb to the mimation and nunation of the noun.

In relation to the origin of a in ma and na of the Pl. and Du. in the noun, two possible interpretations can be offered.

One interpretation, which I held for many years, was that forms without a, namely kalbūm (or kalbūn and Du. kalbām, kalbān), were original in Proto-Semitic, but that they were extended in West Semitic by the addition of a (or i), becoming kalbūma (or kalbūna) and Du. kalbāmi, kalbāni), because of the aversion of certain West Semitic languages to stressed long vowels in a closed position. For Arabic, cf., e.g., Fleisch, L'Arabe classique pp. 17 and 84, and idem, Traité I p. 164. For secondary dissimilation in Du. *kalbāma, *kalbāna to kalbāmi, kalbāni, see 2.3.

The second interpretation, which I now definitely favor, is that a of ma in kalbūma,etc., is not secondary, but original. A priori, the temporal precedence of ma over m is indicated by the existence of sûsîma with a, in Old Canaanite, but sûsîm in (later) Hebrew. For other evidence in favor of the antiquity of ma, see below.

In taking a of ma as primary, we can justify the preservation of a after a long vowel in Pl. and Du., but its loss after a short vowel in Sg., by the aversion of some West Semitic languages to stressed long vowels in a closed position noted just above.

The answer to the question as to whether na and n in the Pl. and Du. of the verb are related to the mimation and nunation of the noun can be given in the affirmative. If mimation and nunation serve the purpose of signaling the absence of the object in the noun,

as in kalbu+m compared with kalbu+šu, then na and n should serve the same purpose in jaqtulū+na, jaqtulū+n as compared with jaqtulū+šu. Thus na and n of the verb perform the same function as m and n of the noun.

Below under 9.2 it is suggested that the verbal markers na and n were borrowed from the noun together with the case / mood, gender, and number systems.

This is the general picture of the treatment of mimation and nunation after the long vowels of the Pl. and Du.: Ø and n (the latter only in the Du. of the noun) in Akkadian; ma and na in Ugaritic, Old Canaanite, and Arabic; and na, m/n (also Ø in the verb) in Hebrew and Syriac.

Four basic conclusions have been reached in regard to the mimation and nunation in Semitic languages:

a) Mimation and nunation include the following markers:

Noun, Sg.: m, n

Pl.: ma, na, m, n

Du.: ma, na, ni, m, n

Verb, Sg.: na, n (only? in 2nd Fem.)

Pl.: na, n

Du.: ni

b) Markers with a, namely ma and na, are older than markers without a. The vowel i of ni of the Du. is derived bydissimilation from a of na.

c) M of the mimation is older than n of the nunation.

d) Mimation and nunation serve the purpose of signaling the absence of the object in the noun and verb.

The first three points add up to the main conclusion that the

original marker of the mimation / nunation was ma.

After years of fruitless attempts to explain the function of mimation (or nunation) in Semitic languages, the solution here proposed appears too simple to be true: mimation is nothing but a marker signaling the absence of certain morphemes. This conclusion, resulting solely from considerations of morpheme sequence, provides an excellent illustration of the advantages of sequential reconstruction.

Thus mimation does not represent a stop or a pause, as I once thought (Morphology of Akkadian p. 8), or a terminal / pausal form (Reiner, LAA p. 57). Nothing in the structure of Semitic languages supports the once widely held idea that mimation has an indefinite function and nunation a definite one.

There was no functional difference between the markers ma and na or m and n, or among any of the four markers. Mimation in the Sg. of a noun has the same function as nunation in the Pl. or Du. of a noun. Mimation in one Semitic language corresponds exactly to nunation in another Semitic language. Originally, neither mimation nor nunation served the functions of definite or indefinite articles in the noun. It was only in the later stages of Semitic languages, after the introduction of the definite articles, such as hal+, ʾal+, ʾan+, or +ān+, that the old markers of mimation or nunation acquired the function of indefiniteness. Thus the creation of the definite ʾal-kalbu "the dog" in North Arabic made kalbu+n indefinite, just as the definite kalb+ān+u made kalbu+m indefinite in South Arabic. The preservation of +na or +ni in Pl. or Du. in the definite noun, as in ʾal-qaṣṣābūna, ʾal-qaṣṣabaini, is due to the preceding long vowel. See my Morphology of Akkadian p. 9.

One of the greatest surprises resulting from sequential reconstruction is the discovery that also the marker mu of the Part., like mimation and nunation of nouns and verbs, signals the absence of a morpheme. Thus mu, the first-rank prefix in mu+šamḫir+um "the one who caused it to be received," is nothing else than the signal marking the absence of the first-rank prefix in the fientive verb, as in ju+šamḫir+u "he caused it to be received." See 9.3. Since ju is the subject of the verbal action, mu denotes here the absence of the subject (not of the object, as with the mimation and nunation).

The existence of markers mu and ma to denote the absence of certain morphemes raises the interesting question as to the origin of these two markers.

Taking ma and mu to be the signals marking the absence of certain morphemes, it is tempting to assume that these two markers originally represented a word with the meaning "anyone," "anybody," or "anything" (except the object or subject normally found in such and such an environment). Hence, if kalbu+šu means "dog of his" and jamḫuru+šu "he received him," kalbu+ma could mean "dog of any(body)" and jamḫuru+ma "he received any(body)." Similarly, if ju+šamḫir+u means "he caused it to be received," mu+šamḫir+um could be translated as "any(body) who caused it to be received." If this be the case, then ma should represent a word in the object case, with the vowel a of the Gen./Acc., and mu should represent the same word in the subject case, with the vowel u of the Nom. For the markers u in the Nom. and a in the Gen./Acc., dominating the case system of the Semitic languages, see 3.2.

Such a word exists in Semitic languages in two forms: 1) as the indefinite enclitic +ma (and the like), and 2) as the indefinite / interrogative pronoun mu+, mi+, ma+, with quite a few

vocalic variations in different Semitic languages. Cf. Akkadian man, min "quis," "quid," or man+ma, min+ma "quis+que," "quid+que," briefly noted under 1.6. For some ossified forms of mu in Akkadian, see von Soden, GAG § 48c. Cf. further an Akkadian personal name Mu-ni-e-pu-uš-DINGIR "what have I done, O God" in Knut L. Tallqvist, Assyrian Personal Names (Helsingfors, 1914) p. 139. For other Semitic languages, see Barth, Pronominalbildung p. 140, and generally on ma, etc., pp. 137-143 and 169-175.

My interpretation of ma of the mimation and of mu of the participles as derived from the indefinite / interrogative pronoun mu+, mi+, ma+ superficially resembles two theories set forth years ago. E. Osiander, ZDMG XX (1866) pp. 231f., followed by Brockelmann, GVG I p. 472, and other scholars, proposed that long before the creation of the definite article, the Semitic languages felt the need to express indefiniteness in the noun, which they achieved by means of the particle ma. H. Ewald, Ausführliches Lehrbuch der hebräischen Sprache (5th ed., Leipzig, 1844) p. 305, supported by H. S. Nyberg in Le Monde Oriental XIV (1920) p. 177, suggested that ma+, mi+, mu+ of the participles, nomina loci, temporis, instrumenti, and abstracta are derived from the pronoun mā "what." The following can be said in comment to the above. Early Semitic languages expressed neither definiteness (determination) nor indefiniteness (indetermination), and the original function of the mimation had nothing to do with either. The two theories were proposed without any connection between the markers of the mimation and participles. The connection with the pronoun and enclitic ma was based on intuitive judgment, without factual evidence. Positional or sequential analysis played of course no role in the two proposed theories.

		STEM	GENDER	NUM.	CASE	OBJ.	ENCL.	ATTESTED
			(Masc.)	(Sg.)	(Nom.)		Gen.	
Sg.	1st	Masc./Fem.	kalb	+u	+Ø	+ø	+i (+ma) etc.	kalbi[1]
	2nd	Masc.	kalb	+u	+Ø	+ø	+ka	kalb(u)ka
		Fem.	kalb	+u	+Ø	+ø	+ki	kalb(u)ki
	3rd	Masc.	kalb	+u	+Ø	+ø	+šu	kalb(u)šu
		Fem.	kalb	+u	+Ø	+ø	+ša	kalb(u)ša
Pl.	1st	Masc./Fem.	kalb	+u	+Ø	+ø	+ni	kalb(u)ni
	2nd	Masc.	kalb	+u	+Ø	+ø	+kunu	kalb(u)kunu
		Fem.	kalb	+u	+Ø	+ø	+kina	kalb(u)kina
	3rd	Masc.	kalb	+u	+Ø	+ø	+šunu	kalb(u)šunu
		Fem.	kalb	+u	+Ø	+ø	+šina	kalb(u)šina

1. Noun includes here the substantive and participle.

Chart 53. OBJECT, Noun, Sg., Pron. Suff., Gen.

		STEM	GENDER	NUM.	CASE	OBJ.	ENCL.	ATTESTED
			(Masc.)	(Pl.)	(Nom.)	Gen.		
Sg.	1st	Masc./Fem.	kalb	+u	+:	+Ø	+i (+ma) etc.	kalbūia[1]
	2nd	Masc.	kalb	+u	+:	+Ø	+ka	kalbūka
		Fem.	kalb	+u	+:	+Ø	+ki	kalbūki
	3rd	Masc.	kalb	+u	+:	+Ø	+šu	kalbūšu
		Fem.	kalb	+u	+:	+Ø	+ša	kalbūša
Pl.	1st	Masc./Fem.	kalb	+u	+:	+Ø	+ni	kalbūni
	2nd	Masc.	kalb	+u	+:	+Ø	+kunu	kalbūkunu
		Fem.	kalb	+u	+:	+Ø	+kina	kalbūkina
	3rd	Masc.	kalb	+u	+:	+Ø	+šunu	kalbūšunu
		Fem.	kalb	+u	+:	+Ø	+šina	kalbūšina

1. Noun includes the substantive and participle.

Chart 54. OBJECT, Noun, Pl., Pron. Suff., Gen.

	"STEM"	GENDER NUM. MOOD	OBJECT	ENCL.	ATTESTED
		(Masc.)(Sg.)(Ind.)	Dat. I		
Sg. 1st	Masc/Fem.	jamḫur +u	+Ø	+ím/+am	(+ma) etc.	imḫuri/am[1]
2nd	Masc.	jamḫur +u	+Ø	+kum		imḫurkum
	Fem.	jamḫur +u	+Ø	+kim		imḫurkim
3rd	Masc.	jamḫur +u	+Ø	+šum		imḫuršum
	Fem.	jamḫur +u	+Ø	+šim		imḫuršim
Pl. 1st	Masc/Fem.	jamḫur +u	+Ø	+niašim		imḫurniašim
2nd	Masc.	jamḫur +u	+Ø	+kunušim		imḫurkunušim
	Fem.	jamḫur +u	+Ø	+kinašim		imḫurkinašim
3rd	Masc.	jamḫur +u	+Ø	+šunušim		imḫuršunušim
	Fem.	jamḫur +u	+Ø	+šinašim		imḫuršinašim

1. In this and in the following charts the verb includes the Sg. of the fientive verb, imperative, and stative ending in Masc. ím and Fem. i or a, as in imḫuri/am, imḫuram, muḫram, muḫrim, and maḫ́ram. 2nd Fem. Sg. ta+mḫur+i+Ø+ím+n im yields standard tamḫurim, once tamḫurinim (written ta-qa-bi-ni-im in Sumer XIII 49:17).

Chart 55. OBJECT, Verb, Sg., Pron. Suff., Dat. I.

	STEM	GENDER	NUM. (Masc.)	MOOD (Pl.)	OBJECT (Ind.)	ENCL. Dat. I	ATTESTED
Sg. 1st	jamḫur	Masc./Fem.	+u	+:	+Ø	+$_{n}$im (+ma) etc.	imḫurūnim[1]
2nd	jamḫur	Masc.	+u	+:	+Ø	+kum	imḫurūkum
	jamḫur	Fem.	+u	+:	+Ø	+kim	imḫurūkim
3rd	jamḫur	Masc.	+u	+:	+Ø	+šum	imḫurūšum
	jamḫur	Fem.	+u	+:	+Ø	+šim	imḫurūšim
Pl. 1st	jamḫur	Masc./Fem.	+u	+:	+Ø	+niašim	imḫurūniašim
2nd	jamḫur	Masc.	+u	+:	+Ø	+kunušim	imḫurūkunušim
	jamḫur	Fem.	+u	+:	+Ø	+kinašim	imḫurūkinašim
3rd	jamḫur	Masc.	+u	+:	+Ø	+šunušim	imḫurūšunušim
	jamḫur	Fem.	+u	+:	+Ø	+šinašim	imḫurūšinašim

1. In this and the following charts the verb includes the Pl. of the fientive verb, imperative, and stative ending in Masc. ū and Fem. ā, as in imḫurūkum, imḫurākum, muḫrākum, muḫrākum, maḫrūkum, and maḫrākum.

Chart 56. OBJECT, Verb, Pl., Pron. Suff., Dat. I.

"STEM"	GENDER	NUM. (Sg.)	MOOD (Ind.)	OBJECT Dat. II	ENCL.	ATTESTED
Sg. 1st	Masc/Fem.	jamḫur	+u	+Ø	+am+ØØ	(+ma) etc. imḫuri/am
2nd	Masc.	jamḫur	+u	+Ø	+am+kum	imḫurakkum
	Fem.	jamḫur	+u	+Ø	+am+kim	imḫurakkim
3rd	Masc.	jamḫur	+u	+Ø	+am+šum	imḫuraššum
	Fem.	jamḫur	+u	+Ø	+am+šim	imḫuraššim
Pl. 1st	Masc/Fem.	jamḫur	+u	+Ø	+am+niašim	imḫuranniašim
2nd	Masc.	jamḫur	+u	+Ø	+am+kunušim	imḫurakkunušim
	Fem.	jamḫur	+u	+Ø	+am+kinašim	imḫurakkinašim
3rd	Masc.	jamḫur	+u	+Ø	+am+šunušim	imḫuraššunušim
	Fem.	jamḫur	+u	+Ø	+am+šinašim	imḫuraššinašim

Chart 57. OBJECT, Verb, Sg., Pron. Suff., Dat. II.

"STEM"	GENDER	NUM.	MOOD	OBJECT	ENCL.	ATTESTED
		(Masc.)	(Pl.)	(Ind.)	Dat. II	
Sg. 1st	Masc/Fem.	jamḫur	+u	+:	+Ø	+$_n$im+Ø (+ma) etc.	imḫurūnim
2nd	Masc.	jamḫur	+u	+:	+Ø	+$_n$im+kum	imḫurūnikkum
	Fem.	jamḫur	+u	+:	+Ø	+$_n$im+kim	imḫurūnikkim
3rd	Masc.	jamḫur	+u	+:	+Ø	+$_n$im+šum	imḫurūniššum
	Fem.	jamḫur	+u	+:	+Ø	+$_n$im+šim	imḫurūniššim
Pl. 1st	Masc/Fem.	jamḫur	+u	+:	+Ø	+$_n$im+niašim	imḫurūninniašim
2nd	Masc.	jamḫur	+u	+:	+Ø	+$_n$im+kunušim	imḫurūnikkunušim
	Fem.	jamḫur	+u	+:	+Ø	+$_n$im+kinašim	imḫurūnikkinašim
3rd	Masc.	jamḫur	+u	+:	+Ø	+$_n$im+šunušim	imḫurūniššunušim
	Fem.	jamḫur	+u	+:	+Ø	+$_n$im+šinašim	imḫurūniššinašim

Chart 58. OBJECT, Verb, Pl., Pron. Suff., Dat. II.

	"STEM"	GENDER NUM. MOOD	OBJECT	ENCL.	ATTESTED
	(Masc.)(Sg.)(Ind.)		Acc. I		
Sg.1st	Masc/Fem.	jamḫur	+u	+Ø +Ø	+$_{n}$i (+ma) etc.	imḫur(n)i
2nd	Masc.	jamḫur	+u	+Ø +Ø	+ka	imḫurka
	Fem.	jamḫur	+u	+Ø +Ø	+ki	imḫurki
3rd	Masc.	jamḫur	+u	+Ø +Ø	+šu	imḫuršu
	Fem.	jamḫur	+u	+Ø +Ø	+ši	imḫuršši
Pl.1st	Masc/Fem.	jamḫur	+u	+Ø +Ø	+niati	imḫurniati
2nd	Masc.	jamḫur	+u	+Ø +Ø	+kunu(ti)	imḫurkunu(ti)
	Fem.	jamḫur	+u	+Ø +Ø	+kina(ti)	imḫurkina(ti)
3rd	Masc.	jamḫur	+u	+Ø +Ø	+šunu(ti)	imḫuršunu(ti)
	Fem.	jamḫur	+u	+Ø +Ø	+šina(ti)	imḫuršina(ti)

Chart 59. OBJECT, Verb, Sg., Pron. Suff., Acc. I.

	"STEM"	GENDER NUM. MOOD	OBJECT	ENCL.	ATTESTED
		(Masc.)(Pl.)(Ind.)	Acc. I		
Sg.1st	Masc/Fem.	jamḫur +u	+: +Ø	$+_n$i	(+ma) etc. imḫurūni
2nd	Masc.	jamḫur +u	+: +Ø	+ka	imḫurūka
	Fem.	jamḫur +u	+: +Ø	+ki	imḫurūki
3rd	Masc.	jamḫur +u	+: +Ø	+šu	imḫurūšu
	Fem.	jamḫur +u	+: +Ø	+ši	imḫurūši
Pl.1st	Masc/Fem.	jamḫur +u	+: +Ø	+niati	imḫurūniati
2nd	Masc.	jamḫur +u	+: +Ø	+kunu(ti)	imḫurūkunu(ti)
	Fem.	jamḫur +u	+: +Ø	+kina(ti)	imḫurūkina(ti)
3rd	Masc.	jamḫur +u	+: +Ø	+šunu(ti)	imḫurūšunu(ti)
	Fem.	jamḫur +u	+: +Ø	+šina(ti)	imḫurūšina(ti)

Chart 60. OBJECT, Verb, Pl., Pron. Suff., Acc. I.

	"STEM"	GENDER (Masc.)	NUM. (Sg.)	MOOD (Ind.)	OBJECT Acc. II	ATTESTED
Sg.1st Masc./Fem.	jamḫur	+u	+Ø	+Ø	+am+ni[1]	imḫuranni
2nd Masc.	jamḫur	+u	+Ø	+Ø	+am+ka	imḫurakka
Fem.	jamḫur	+u	+Ø	+Ø	+am+ki	imḫurakki
3rd Masc.	jamḫur	+u	+Ø	+Ø	+am+šu	imḫuraššu
Fem.	jamḫur	+u	+Ø	+Ø	+am+ši	imḫuraššu
Pl.1st Masc./Fem.	jamḫur	+u	+Ø	+Ø	+am+niati	imḫuranniati
2nd Masc.	jamḫur	+u	+Ø	+Ø	+am+kunu(ti)	imḫurakkunu(ti)
Fem.	jamḫur	+u	+Ø	+Ø	+am+kina(ti)	imḫurakkina(ti)
3rd Masc.	jamḫur	+u	+Ø	+Ø	+am+šunu(ti)	imḫuraššunu(ti)
Fem.	jamḫur	+u	+Ø	+Ø	+am+šina(ti)	imḫuraššina(ti)

1. Ni was borrowed from n̄i of Acc. I (Charts 59-60).

Chart 61. OBJECT, Verb, Sg., Pron. Suff., Acc. II.

	"STEM"	GENDER (Masc.)	NUM. (Pl.)	MOOD (Ind.)	OBJECT Acc. II	ATTESTED
Sg.1st Masc./Fem.	jamḫur	+u	+:	+Ø	+$_n$im+ni	imḫurūninni
2nd Masc.	jamḫur	+u	+:	+Ø	+$_n$im+ka	imḫurūnikka
Fem.	jamḫur	+u	+:	+Ø	+$_n$im+ki	imḫurūnikki
3rd Masc.	jamḫur	+u	+:	+Ø	+$_n$im+šu	imḫurūniššu
Fem.	jamḫur	+u	+:	+Ø	+$_n$im+ši	imḫurūniššši
Pl.1st Masc./Fem.	jamḫur	+u	+:	+Ø	+$_n$im+niati	imḫurūninniati
2nd Masc.	jamḫur	+u	+:	+Ø	+$_n$im+kunu(ti)	imḫurūnikkunu(ti)
Fem.	jamḫur	+u	+:	+Ø	+$_n$im+kina(ti)	imḫurūnikkina(ti)
3rd Masc.	jamḫur	+u	+:	+Ø	+$_n$im+šunu(ti)	imḫurūnišsunu(ti)
Fem.	jamḫur	+u	+:	+Ø	+$_n$im+šina(ti)	imḫurūnišsina(ti)

Chart 62. OBJECT, Verb, Pl. Pron. Suff., Acc. II.

"STEM"	GENDER NUM. MOOD	OBJECT	ENCL.	ATTESTED
	(Masc.)(Sg.)(Ind.)	Dat. II +Acc. I		
Sg.1st	Masc/Fem. jamḫur	+u +Ø +Ø	+am+šu	(+ma) etc. imḫuraššu[1]
2nd	Masc. jamḫur	+u +Ø +Ø	+am+kum+šu	imḫurakkuššu
	Fem. jamḫur	+u +Ø +Ø	+am+kim+šu	imḫurakkiššu
3rd	Masc. jamḫur	+u +Ø +Ø	+am+šum+šu	*imḫuraššušššu
	Fem. jamḫur	+u +Ø +Ø	+am+šim+šu	*imḫuraššiššu
Pl.1st	Masc/Fem. jamḫur	+u +Ø +Ø	+am+niašim+šu	*imḫuranniašiššu
2nd	Masc. jamḫur	+u +Ø +Ø	+am+kunušim+šu	*imḫurakkunušiššu
	Fem. jamḫur	+u +Ø +Ø	+am+kinašim+šu	*imḫurakkinašiššu
3rd	Masc. jamḫur	+u +Ø +Ø	+am+šunušim+šu	*imḫuraššunušiššu
	Fem. jamḫur	+u +Ø +Ø	+am+šinašim+šu	*imḫuraššinašiššu

1. The distribution of the pronominal suffixes with ʾamḫur, tamḫur, imḫur, etc., needs a careful study; the same applies to Chart 64.

Chart 63. OBJECT, Verb, Sg., Pron. Suff., Dat. II + Acc. I.

	"STEM"	GENDER NUM. MOOD	OBJECT	ENCL.	ATTESTED
		(Masc.)(Pl.)(Ind.)	Dat. II +Acc. I		
Sg.1st	Masc/Fem.	jamḫur +u	+: +Ø	+$_n$im+Ø+šu	(+ma) etc. imḫurūnišš̆u[1]
2nd	Masc.	jamḫur +u	+: +Ø	+$_n$im+kum+šu	imḫurūnikkuš̆šu
	Fem.	jamḫur +u	+: +Ø	+$_n$im+kim+šu	imḫurūnikkiš̆šu
3rd	Masc.	jamḫur +u	+: +Ø	+$_n$im+šum+šu	*imḫurūniššuš̆šu
	Fem.	jamḫur +u	+: +Ø	+$_n$im+šim+šu	*imḫurūniššiš̆šu
Pl.1st	Masc/Fem.	jamḫur +u	+: +Ø	+$_n$im+niašim+šu	*imḫurūninniašiš̆šu
2nd	Masc.	jamḫur +u	+: +Ø	+$_n$im+kunušim+šu	*imḫurūnikkunušiš̆šu
	Fem.	jamḫur +u	+: +Ø	+$_n$im+kinašim+šu	*imḫurūnikkinašiš̆šu
3rd	Masc.	jamḫur +u	+: +Ø	+$_n$im+šunušim+šu	*imḫurūniššunušiš̆šu
	Fem.	jamḫur +u	+: +Ø	+$_n$im+šinašim+šu	*imḫurūniššinašiš̆šu

1. The distribution of the pronominal suffixes with ʾamḫur, tamḫur, imḫur, etc., needs a careful study; the same applies to Chart 63.

Chart 64. OBJECT, Verb, Pl., Pron. Suff., Dat. II + Acc. I.

5. ENCLITICS

The rank number 5 after the stem is occupied by the enclitics, which may occur not only after nouns, pronouns, verbs, and statives, but also after indeclinables. Such enclitics in Akkadian are, e.g., +ma, +mi, +man (or +min), and +akku. The enclitic +ni, originally a secondary subjunctive in šá imḫur+Ø+u+n+i (see 3.11) became a true enclitic particle, occupying rank number 5, as in šá illikaØ+n+ni or šá imḫurØ+u+šuni. Mimation occupies rank number 4 and can never be considered an enclitic. See 4.3.

6. STEM AND ROOT

6.1. Introductory Remarks

In analyzing individual word classes in Semitic languages, as represented by kalbum, kalbim, jamḫurū, jušamḫirū, etc., it is possible to recognize immediately that they are composed of two classes of morphemes: 1) the stems kalb+, +mḫur+, and +mḫir+, and 2) sequential morphemes before and/or after the stem.

6.2. Stem

The stem is the basic morpheme of a word without its sequential morphemes and is regularly composed of consonants and vowels.

The stem can be simple or extended.

The simple stem appears in the form STEM+ in primary nouns, as in kalb+ of kalb+um "dog" or kalb+atum "bitch;" in verbal nouns, as in maḫir+ of maḫ́r+um "received" and in miḫir+ of miḫir+ʔtum "correspondence" ("corresponding position"); in the statives, as in maḫir+ of maḫ́r+āku "I am received;" and in many classes of indeclinables, such as ʾin+ of ʾin, ʾin+a "in," ʾana (sic!) of ʾana, ʾan "to," and wišt+ of ʔišt+ūm "from" or ʔišt+ī "with."

The number of consonants in the simple stem is usually three or two, of the vowels, two or one. Simple stems with one or four (occasionally even more) consonants and with three or more vowels are rare. Certain pronouns must be reconstructed as consisting of a stem with a consonant but no vowel, as in š+ of š+u, š+uati "he,"

or in m+ of m+annum "who?" m+ĭnum "what?" A few nouns also belong to the same class, such as p+ of p+um "mouth."

The simple stem appears in the fientive verb and verbal nouns in the form +STEM+, as in +mḫur+ of ja+mḫur+ū "they received," +mḫir+ of juša+mḫir+ū "they caused it to be received."

Vowel variations occur in the stems of fientive verbs, as in +mḫur+, +mḫir+, +maḫar+, and of verbal nouns, as in maḫir+ or miḫir+. The vowels and the second or third consonants can be lengthened, as in māḫir+, maḫḫir+, or maḫirr+. Some intrusive "weak" consonants can enter the structure of the stem, as in the qajtal+ or qawtal+ stems of the West Semitic. Or a combination of some or all of these features can be found in stems, especially in the so-called internal plurals of West Semitic languages. All these variations belong to the class often called "'interlocking' (or 'intercalating' or 'discontinuous') morphemes."

The simple stem can be doubled, fully or partially, in nouns, as in Akkadian qaḍ+qad+um "head," upšāšū "spells," compared with epēšum "to do"; in pronouns, as in m+aṃ+m+an "whoever;" in verbs, as in Hebrew gōlēl "rolling," compared with gal+gal "wheel," or jeqōmēm "raises," compared with jāqûm "stands."

The simple stem of nouns may be prolonged fore and/or aft by various prefixal and suffixal elements.

The prefixes ʾa+, ta+, ša+ (or ha+ in other Semitic languages), ja+, ma+, and na+ occur in verbal nouns. They occur mainly with the vowel a, but also with i, as in ti+ or ji+, and u, as in šu+ or mu+. A combination of more than one prefix, such as šu+ta+, na+ta+, also is possible. Certain infixes, such as +ta+ or +tana+, which appear after the first syllable of the stem in Akkadian, must be treated as

original prefixes, as in other Semitic languages. All these prefixes originally represent the prefixal sequential elements of the verb. See 9.3.

The prefixes ʾa+, ʾi+ (and perhaps others) appearing in primary nouns, such as ʾa+rbaʿ+um "four," ʿa+qrab+um (from *ʾa+qrab+um; cf., e.g., Hebrew ʾAšqəlōn = Arabic ʿAsqalān) "scorpion," ʾi+krib+um "prayer," and ʾi+ṭir+um "redemption," represent secondary prothetic vowels. Cf. the Arabic imperative ʾu+qtul "kill!", beside qtul, qutul, qutl in other Semitic languages.

Suffixes occur mainly in primary nouns, as in kalb+ān+um "dog-like" or Aššur+ij+um "Assyrian," rarely in verbal nouns, as in māḫir+ān+um "the one who receives." A combination of two suffixes occurs, e.g., in šapl+ān+ij+um "lower."

A combination of prefixes and suffixes is apparent, e.g., in mu+rabbij+ān+um "the one who raises."

Of all these types of stems, simple and extended, with prefixes and suffixes, it is the suffixal extended stem, as in šapl+ān+um or Aššur+ij+um, that is our main concern, because of the potential (but not real) confusion of the markers of the extended stems with those of the sequential morphemes. For a fuller discussion of the suffixal extended stems in the noun, see under 7.3; a list of simple stems occurring in the noun is given in 7.2.

For lists and discussions of the simple stems in the fientive verb, as in ju+maḫḫir+ū, and of the prefixal extended stems in verbal nouns, as in mu+maḫḫir+um, see 9.3 and 9.4.

6.3. Root

As I check through the completed chapters of this study I note to my astonishment that I have nowhere used the term "root." Apparently it is possible to present a grammatical analysis of a language or group of languages using the term "stem" and avoiding involvement with the concept of the root.

Scholars have used the term "root" on two levels, morphological and lexical. It will be shown below that the concept of the root is unnecessary on the morphological level. When used on the lexical level, the root has a more restricted meaning than generally assumed.

In a morphological analysis of such a verbal form as ja+mḫur+ū, "they received" some scholars insist that after subtracting the sequential morphemes ja+ and +ū, the stem +mḫur+ should be further analyzed as the root morpheme mḫr plus the morpheme of the Pret. of the B formation, which can be symbolized as the pattern $C_1C_2uC_3$. Similar procedures were proposed for such a verbal form as ju+maḫḫir+ū, where +maḫḫir+ was analyzed as the root mḫr plus the pattern $C_1aC_2{:}iC_3$ for the Pret. of the D formation. This is all very questionable. There is nothing in +mḫur+ (or $C_1C_2uC_3$) and +maḫḫir+ (or maḫ:ir or $C_1aC_2{:}iC_3$) that defines them as Pret. of this or that formation; +mḫur+ occurs also in the verbal nouns na+mḫur+ of the BN formation, šu+mḫur+ of the BŠ formation, etc., while +maḫḫir+ is found also in the Part. mu+maḫḫir+ of the D formation, etc. The fact is that the meaning of these formations and patterns can be ascertained only in a detailed study of the stem, both nominal and verbal; and their exact morphological function in either the noun or the verb can be detected only from the analysis of the stems in

conjunction with the sequential morphemes. This being the case, the concept of the consonantal root has no place in a morphological analysis. See also Reiner, LAA pp. 54f.

The concept of the root, with its lexical and semantic connotations, is utilizable in lexicographical studies and in dictionaries.

The root appears in the form of both consonants and vowels in primary nouns, pronouns, and some indeclinables, as in the root kalb "dog" of kalb+um "dog" or kalb+ānum "dog-like," the root ʾab "father" of ʾab+um "father," or ʾabb+ū, ʾab+āʾū "fathers," and the root wišt "inside" of ꬹišt+ūm "from" or ꬹišt+Ī "with."

The root appears in the form of consonants only in verbs, and nouns derived from verbs, as in the root mḫr "receive" of ja+mḫur+ū "they received," juša+mḫir+ū "they caused it to be received," maḫār+um "to receive," māḫir+um "recipient," ta+mḫīr+ꬹtum "reception," etc. The same goes for the roots bl "carry," kn "be firm" (or wbl, kwn, depending on the reconstruction).

Regularly in the past, less so in recent times, the consonantal structure of the Semitic root has been taken for granted. Founded on the Arabic model, the noun kalb+um "dog" is said to be based on a consonantal root klb, just as the fientive verb ja+mḫur+ū "they received" or the verbal noun māḫir+um "recipient" are traced back to the root mḫr. This is not simply questionable; this is wrong.

The difference between the root of the primary nouns, pronouns, and some indeclinables, on the one hand, and of the verbs and the verbal nouns, on the other, is clear and absolute in the older stages of Semitic languages, especially Akkadian.

The root kalb has no morphemic alternants; no kilb, or kulb, no ʾaklab are possible in the system. All the phonetic variations

to which the vowels of primary nouns and indeclinables are subjected are phonetically conditioned. Thus ra³šum "head" or ʿal "upon" can and must become in the course of time rêšum or el(i), respectively, because of the proximity of certain laryngeal consonants. Dámiqum "good" will become dámqum because of stress conditions. Kalbum "dog" can acquire a secondary anaptyctic vowel i in kalibum because of the proximity of the "syllabic" consonant l. Only in the later, West Semitic, languages have the primary nouns acquired morphemic alternants, each with a specific morphemic function, thus making possible the amalgamation of the roots of primary nouns with those of the verbs and verbal nouns in West Semitic.

On the other hand, the root mḫr of the verbs and verbal nouns can be realized in a number of stems, with vowels varying both qualitatively and quantitatively, and consonants varying quantitatively, each variation denoting a different morphemic function. The varying vowels appear in +mḫur+ of ja+mḫur, +mḫir+ of jušа+mḫir+ū, māḫir+ of māḫir+um, etc. The varying consonants are shown in maḫḫir+ of ju+maḫḫir+ū, māḫir of māḫir+um, etc. The structure of the verbal root applies to Semitic languages in all their historical stages.

This clear-cut distinction between the two kinds of Semitic roots, consisting of consonants and vowels in primary nouns, pronouns, and some indeclinables, and of consonants only in verbs and nouns derived from verbs, has never been understood and realized in the past and present grammars of Semitic languages. See Gelb in BO XII (1955) p. 105a.

7. NOUN

7.1. Introductory Remarks

Under the noun we include here primary substantives and adjectives and verbal nouns, such as participles, adjectives, and infinitives.

Since the noun is amply discussed in the first four chapters of this monograph, the present chapter will be limited to the listing and brief discussion of the nominal stems, simple and extended.

7.2. Simple Nominal Stems

The list of simple stems given in Chart 65 illustrates the different vocalic patterns occurring in Akkadian. For the distribution and function of these patterns, see von Soden, GAG §§ 54ff. Additional patterns can doubtless be found in other Semitic languages.

7.3. Extended Nominal Stems

The aim of the list given in Chart 66 is to provide a rather complete sampling of suffixes used in the extended nominal stems in Akkadian. Many more types of extended stems are to be found in other Semitic languages, especially in the internal plurals of West Semitic.

I learn from Dr. Gene Schramm that extended piling of suffixes is possible in modern Hebrew, as in na^{c}ar+ūt+i$\underline{j}$+ūt.

A note of warning is necessary in respect to a possible confusion of suffixes of the extended stems with sequential morphemes.

qatl	qatal	*qātal	qattal	qattāl	qatāl	qatall
kalbum	rapšum		ʾajjalum	šarrāqum	maḫārum	kaparrum
kalbatum	rapaštum		šapparum	nappāḫum	halāktum	šašallum
marʾum	zak(a)rum		gammalum	qarrādum		paḫallum
marʾatum	qatil	qātil	qattil	*qattīl	qatīl	qatill
šamšum	maḫirum	māḫirum	zammirum		maḫīrum	pasillum
šamšatum	maḫirtum	ʿāribum	raqqidum		salīmum	talimmatum
malkum			qabbirum		ḫasīsum	
malkatum	qatul	*qātul	qattul	qattūl	qatūl	qatull
wardum	šamḫum		maḫḫurum	makkūrum	baṭūlum	rašubbum
	šamuḫtum		(Ass.)	paššūrum	karūbum	namurratum
	marṣum		barrumum		šarūrum	šaqummum

qitl	qital	*qītal	qittal	*qittāl	qitāl	qitall
ʾimmum	šikarum		pinnarum		kišādum	pilakkum
ziʾbum	zik(a)rum		qinnazum		tihāmtum	pilaqqum
nišrum					ḫimārum	
tirḫatum						
	qitil	*qītil	qittil	*qittīl	qitīl	qitill
	gimrum		ṣiḫḫirum		kilīlum	gimillum
	gimirtum		ʾimmirum		qibīrum	šibirrum
	šipṭrum					šikinnum
	qitul	*qītul	*qittul	qittūl	qitūl	qitull
	qirbum			sikkūrum	sinūnum	pisurrum
				biṣṣūrum	sinūntum	ziqurratum
					birūrum	

qutl	*qutal	*qūtal	*quttal	quttāl	qutāl	qutall
ʾuznum				ʾummārum?	qurādum	ḫušaḫḫum
puqdatum				qummālum?	ḫurāṣum	kutallum
tubqum					buqāqum	šuḫarratum
	*qutil	*qūtil	*quttil	quttīl	qutīl	qutill
				ḫunnīnum	šurīpum	buṣinnum
				ṣummīrtum	kurībum	supinnum
					purīdum	
	qutul	*qūtul	quttul	*quttūl	qutūl	qutull
	lub(u)šum		muḫḫurum		rukūbum	ḫubullum
	lubuštum		(Bab.)		kulūlum	kunukkum
	šuq(u)lum		burrumum		qubūrum	kurummatum

Chart 65. Simple Nominal Stems.

Thus in Arabic plurals san+ah+ātun or san+aw+ātun "years," +ah+ and +aw+ do not represent sequential morphemes, but are parts of the extended stem.

For the use of prefixes in the extended stems of the verb, see 9.3.

Notes to Chart 66:

1) The suffix ān is one of the most productive suffixes in Semitic languages; see the brief remarks under 1.5 and 3.2. In contrast to Akkadian, where Masc. forms in +ān+um cannot have Fem. in +ān+at+um, Arabic has both, as in Masc. ʿurjānun, Fem. ʿurjānatun "naked."

2) For an interpretation of the secondary Pl. morpheme ān+ū, ānu, ān in Akkadian and other Semitic languages, see Gelb in BO XII (1955) p. 107 and above under 2.5.

3) Personal names ending in +at+ān+u (without mimation) and much more frequently in +at+ān (without the other sequential morphemes) are known from Amorite. The Hebrew nouns nəḥūštān, liwjatān (from lawij+at+ān), and perhaps others probably belong here.

4) The so-called "gentilic" of Semitic languages is derived from the Gen. of the noun. Thus Aššur+ij+um represents the stem Aššur, plus the Gen. marker i, plus the glide j (or ʾ) before the secondary sequential morphemes. Similarly, Aššur+aj+um is derived from a Gen. *Aššur+a, with the Gen. marker a.

5) As interpreted under 1.2, the Masc. Pl. of the Part. māḫir+ūt+um is derived secondarily from the corresponding Fem. māḫir+āt+um. On the analogy of the Latin neuter Pl. of the Adj. bona "good (things)" used in a substantivized sense as "goods," we view ūt of the Part. as marking secondarily Fem. abstract

SUFFIX	STEM	GENDER	NUMBER	CASE	OBJECT	ATTESTED
+ān+	šapl+ān	+u	+Ø	+Ø	+m	šaplānum [1]
	kalb+ān	+u	+:	+Ø	+Ø	kalbānū [2]
	mu+rabbij+ān	+u	+Ø	+Ø	+m	murabbijānum
+ān+ij+	šapl-ān+i	$+_{j}u$	+Ø	+Ø	+m	šaplānijum
	Ṣarp+ān+i	$+_{j}a$	+Ø	$+_{t}u$	+m	Ṣarpānîjjatum
+at+ān+	Ṣûr+at-ān	+u	+Ø	+Ø	+Ø	Ṣûratānu [3]
+ij+	Aššur+i	$+_{j}u$	+Ø	+Ø	+m	Aššurijum [4]
+aj+	Aššur+a	$+_{j}u$	+Ø	+Ø	+m	Aššurajum [4]
+at+ij+	ra$^{\flat}$š+at+i	$+_{j}u$	+Ø	+Ø	+m	rêštijum
+ūt+	iššakk+u	$+_{w}a$	+Ø	$+_{t}u$	+m	iššakkūtum [5]
	iššakk+u	$+_{w}a$	+:	$+_{t}u$	+m	iššakkuwātum [5]
+at+ūt+	aḫ+at+ūt	+u	+Ø	+Ø	+m	aḫatūtu [6]
+ūt+ān+	rašij+ūt+ān	+u	+Ø	+Ø	+m	rašûtānu [7]
+ā$^{\flat}$+	ḫuluqq+ā	$+_{,}u$	+Ø	+Ø	+m	ḫuluqqā$^{\flat}$um [8]

Chart 66. Extended Nominal Stems.

nouns, as in šarrūtum "kingdom," "kingship." The formation šarrūtum may have been reinterpreted in Sg. as *šarruatum (or *šarruwatum, with the glide w), as posited by the Pl. form šarruātum (or šarruwātum), exemplified in Old Akkadian iššakkuātim, written PA.TE.SI-gu-a-tim, "provinces," "governorships" (Gelb, MAD III p. 75). Note also the Old Assyrian mer'utum "daughter" in Sg., but mer'u(w)ātum "daughters" in Pl. In later periods only ūt is used in Sg., while the Pl. is not attested in this abstract formation.

6) Normally the marker ūt for abstract nouns is attached to stems not followed by the Fem. marker, as in aḫ+ūt+u "sisterhood," not aḫ+at+ūt+u. However, aḫ+at+ūt+u, mâr+at+ūt+u "daughtership," and kall+at+ūt+u "daughter-in-law-ship" are attested in the Middle Babylonian dialect of Nuzi.

7) The word rašûtānu "debtor" occurs only in the New Babylonian period.

8) The muḫurrā'um formation, on which see von Soden, GAG § 56o, begins to appear in the Old Akkadian period (Gelb, MAD II^2 p. 155) and represents the only extended stem with ' in Akkadian. Much additional evidence is to be found in the formations of West Semitic internal plurals.

8. PERSONAL PRONOUN

8.1. Introductory Remarks

The lists and discussions in this chapter treat of the personal pronouns proper, both independent and suffixal, and of the personal pronominal elements occurring in the verb and stative.

For the sequential morphemes denoting gender, number, and case, see the full documentation and discussion under personal pronouns in the first three chapters of this monograph.

As regularly presented in the past and current grammars of Akkadian, the independent personal pronoun appears in different forms in the subject and oblique cases (casus rectus and obliquus, respectively). The forms of the subject case are given as anāku, attā, attī, šū, šī, nīnu, attunu, attina, šunu and šina; those of the oblique case as jâti, kâti, kâti, šuāti, šiāti, niāti, kunūti, kināti, šunūti, and šināti. See, e.g., von Soden, GAG § 41f. The subject forms of the 1st and 2nd persons are said to occur as suffixes in the stative (§ 42b) and as prefixes in the fientive verb (§ 75e). The object forms are noted as occurring as pronominal suffixes (§ 42) and possessive pronouns (§ 44). The personal pronouns of the 3rd person, šū, šī, šunu and šina are said to be anaphoric in origin (§ 41b). Nothing is said about the origin of the ja+, ji+, ju+ prefixes in the verb and suffixes in the stative.

This is generally the picture of the personal pronouns which is found also in grammars of other Semitic languages and in compara-

tive grammars of Semitic languages.

A note of warning is necessary about the formal and functional aspects of the pronoun šu in Akkadian. It appears as šu, ši, šunu, and šina for the personal and demonstrative pronoun, as in šu imḫur "he received" or kalbum šu "this dog;" and as šu, šat, šūt, and šāt for the determinative, relative, and indefinite pronoun, as in kalbum šu šarrim "the dog of the king," šarrum šu imḫuru "the king who received," or šu imḫuru "whoever received."

Of no concern to us in this study is the question of the original sibilants of the 1) personal, 2) demonstrative, and 3) determinative, relative, and indefinite pronouns, which show great variations both in Old Akkadian and other Semitic languages.

What is important is the relation of š (or s), appearing in some Semitic languages, to h (or ʾ), found in other Semitic languages, as in the personal pronoun šu and hu, or +šu and +hu (similarly for Fem. and Pl.), and in the causative ju+ša+mḫir+u and ju+ha+mḫir+u. At times, both š/s and h/ʾ occur in the same language, as in the ʾistaqtala and ʾaqtala formations of Arabic, and the personal pronouns he "he" and se "she" of modern Mehri, spoken in South Arabia. E. A. Speiser, Israel Exploration Journal IV (1954) pp. 108-115 (and previously in JAOS LVI [1936] pp. 23ff.), assumed that, since the phonetic change š to h is unknown in Semitic languages, the occurrences with š or h reflect two original and different pronouns, namely šu and hu, and similarly in the elatives šuqtul and haqtal, and in Akkadian šumma "if" and Ugaritic HM (pp. 112f.). This apparently is also the position of Moscati, ICG pp. 104f. On the other hand, Diakonoff, SHL pp. 21, 58, 71f., 75, etc., operates with

one phoneme, symbolized as $\underline{s}$, which "has not been preserved in any historically known Semito-Hamitic languages, with the possible exception of the most ancient stage of Old Akkadian" (p. 21, with reference to my MAD II^2 pp. 34ff.). This is the phoneme which is realized as $\underline{h}$ in certain Semitic and Hamitic languages, according to Diakonoff. Without going into the intricate problems of the sibilants, let it suffice to state--with all due caution--that I have for years maintained the position favored by Diakonoff. Similar conclusions were drawn apparently by F. Rundgren, Über Bildungen mit $\underline{\check{s}}$ und n-t-Demonstrativen im Semitischen (Uppsala, 1955) pp. 121 and 144. For another phonological problem affecting $\underline{\check{s}}$, $\underline{h}$, see 3.8.

Some years ago Speiser noted in an instructive article entitled "Studies in Semitic Formatives," JAOS LVI (1936) pp. 22-46, esp. in the section "The 'Causative' Conjugation" on pp. 23-33, that the causative $\underline{ju+\check{s}a+mḫir+u}$ (or $\underline{ju+ha+mḫir+u}$, etc., in other Semitic languages) contains two prefixal elements, namely $\underline{ju}$, the origin of which he left unexplained, and $\underline{\check{s}a}$ (or $\underline{ha}$), which he connected with the personal pronoun $\underline{\check{s}u}$ (or $\underline{hu}$). Speiser translated Akkadian $\underline{u\check{s}abnî}$ as "he caused to build," implying "that A had ordered or induced B to build (a house)." He failed to draw the natural conclusion that A should represent the subject and B the object, and insisted that both A and B represent two distinct subjects (p. 29). Relying on some unclear connections with the Arabic "pronoun of separation" or "pronoun of support," he reinterpreted the word $\underline{u\check{s}abnî}$ as "A orders (wishes, etc.) that B build a house" or "A orders, B builds the house" (p. 30). The vowel $\underline{a}$ of his second subject element, $\underline{\check{s}a}$, must have been a source of some concern to Speiser, but he brushed it aside with the statement that a correct interpretation of the vowel $\underline{a}$ "would presuppose deeper

insight into proto-Semitic phonology than we can possibly claim at present" (p. 31 n. 25).

Notwithstanding some misgivings expressed above, Speiser's stimulating article exerted strong influence on my thinking on the subject. In Morphology of Akkadian p. 48 I analyzed ju+šа+mḫir+u as consisting of "ju 'he (here),' plus šа/sa/ha 'him (there),' plus mḫir 'receive'". Thus I realized: 1) that ju and šа do not represent two subject cases on equal footing, but that ju stands for the subject case and šа for the object case; and 2) that ju may represent the "here-deixis," and šа the "there-deixis" in the two pronouns of the 3rd person. Partly in accordance with A. Goetze's observation in The Laws of Eshnunna (New Haven, 1956) p. 135, "as with all Š forms accompanied by only one object, the meaning is passival," I would now translate ju+šа+mḫir+u as "he (here) caused him (there) to be received." The second pronoun "him" can stand also for "it" or "her." From 3.5 we know that Masc. šu+a yields šа (as well as šua and šu), just as Fem. ši+a yields šа (as well as šia and ši). The syntactic structure and the sequence, subject (Nom.) + object (Acc.), is standard in Semitic. See 4.1. Thus B. Kienast's interpretation of the causative as ja-šu-qatil (or ja-hu-qatil) in an article entitled "Der Präfixvokal u im Kausativ und im D-Stamm des Semitischen" published in Münchener Studien zur Sprachwissenschaft Heft 11 (1957) pp. 104-108, is completely unacceptable to me.

Several considerations, based mainly on the realization of the importance of the pronoun ju in the structure of the verb and stative, led me to the reconstruction of two original personal pronouns, Pers. Pron. I and Pers. Pron. II, as shown in Morphology of Akkadian pp.

38f. and 46, and below under 8.2 and 8.3. The sequence of the Pers. Pron. I and II is given in reversed order in this monograph to conform with the sequence of ju(Pers. Pron. I)+šu(Pers. Pron. II)+mḫir+u, discussed above.

Since I consider the reconstruction of the two personal pronouns one of the most important contributions of my Morphology of Akkadian, the realization of what limited influence it exerted on scholars who have had at their disposal a copy of my Morphology is quite disappointing. Moscati, ICG pp. 102-113, follows the traditional path in every respect; Diakonoff, SHL pp. 69-77, while recognizing personal pronouns of type I and II, proposes a reconstruction which differs decisively from my own.

After a careful restudy of the manifold questions pertinent to the two personal pronouns, I find little doubt remaining about the reconstruction of Pers. Pron. II, and so, I hope, eventually, will others. Complete acceptance of my reconstruction of Pers. Pron. I will, in all likelihood, depend on how scholars view my reconstructions based on the pronouns of the 3rd person, ju and ja.

8.2. Personal Pronoun I

As shown in Chart 67, Pers. Pron. I is attested in Akkadian as 1) independent pronouns with ʾan+, 2) as prefixes in the fientive verb, and 3) as suffixes in the stative. This pronoun appears in all Semitic languages and it can largely be reconstructed also in Hamitic.

The element ʾan of the independent pronoun occurs in the Akkadian demonstrative pronoun ʾannijum, ʾannijātum, ʾannijūtum, ʾannijātum "this (here)," opposed to ʾammijum, etc., "that (there)"

		INDEPENDENT		AFFIXAL	
		RECONSTRUCTED	ATTESTED	PREFIXAL IN VERB	SUFFIXAL IN STATIVE
Sg.	1c.	*(ʾ)a	ʾan+a(+ku)	ʾa+mḫur+u	maḫir+āku
	2m.	*tu	ʾan+t^{a}/	t^{a}/+mḫur+u	maḫir+t^{a}/
	2f.	*ti	ʾan+ti	t^{a}/+mḫur+i	maḫir+ti
	3m.	*ju	*ʾan+ju	j^{a}/+mḫur+u	maḫir+/u
	3f.	*ja	*ʾan+ja	^{t}ja+mḫur+/^{u}	maḫir+/a
Pl.	1c.	*na	ʾan+nanu?	na+mḫur+u	maḫir+na
	2m.	*tunu	ʾan+tunu	t^{a}/+mḫur+ū	maḫir+tunu
	2f.	*tini	ʾan+tin^{a}/	t^{a}/+mḫur+/^{ā}	maḫir+tin^{a}/
	3m.	*jū	*ʾan+jū	j^{a}/+mḫur+ū	maḫir+/ū
	3f.	*jā	*ʾan+jā	ja+mḫur+ā	maḫir+/ā

Chart 67. Personal Pronoun I.

in Assyrian and to ʾullijum, etc. (attested ullûm) "that (there)" in Babylonian. The secondary doubling of the consonant is attested also in mannum "who?" from man. For ʾannijum see also the end of this section.

Parts of Chart 67 pertaining to the verb and stative differ in detail from Charts 69 and 80 under the verb (9.2) and the stative (10), because of the different aims of these charts.

The following discussion will begin with notes to the reconstructed independent pronoun.

The First Person. The pronoun ʾa appears as ʾa in ʾa+mḫur+u of the verb and in ʾan+ā of the pronoun in Arabic, etc., but as ʾa+ku of ʾan+ʾa+ku in ʾanāku, etc., and of maḫir+ʾa+ku in maḫrāku in Akkadian, etc. ʾA becoming ā is regular, with the possible exception of ʾannaku, reconstructed from the Assyrian ʾannuku (with vowel harmony), written clearly an-nu-ku in R. F. Harper, Assyrian and Babylonian Letters VI (Chicago, 1902) No. 555 rev. 9 (but also a-na-ku in line 8 = standard ʾanāku). Ku of ā+ku represents some ossified pronominal element of the 1st person Sg. (as in Latin ego, cuneiform Hittite ammuk). Forms without +ku occur in ʾanā of Arabic, etc. I do not know of Old Babylonian ana, cited in Moscati, ICG p. 103; if the spelling a-na is attested the reconstruction to a-na-<ku> should be considered. The vowel i of Hebrew ʾᵃnī and ʾānōk+ī is derived from i of the 1st person of the Pers. Pron. II.

The reconstruction of the personal pronoun of the 1st person Pl. as na is based on na+mḫur+u in the verb and maḫir+na in the stative. The attested forms of the independent pronoun in Semitic are (ʾa)naḫnu and (ʾa)naḫna. The laryngeal ḫ may have influenced

the change from naḫnu to nênu, nînu in Akkadian. The form ʾan+nanu?, as reconstructed on the chart, consists of the original na plus nu borrowed from ʾan+tunu. The intrusive ḫ cannot be explained. The interpretation ʾan+ʾa+nu, in which ʾa+nu is taken as the Pl. of ʾa (proposed in my Morphology of Akkadian pp. 44 and 48), cannot be retained because of the existence of na+mḫur+u in Arabic, with short u, not ū.

The Second Person. The Sg. pronoun tu of ʾan+tu is reconstructed from the Pl. ʾan+tu+nu. Since the Pl. is regularly formed by prolonging the gender vowel of the Sg., u+nu in the Pl. ʾan+t+u+nu (from ʾan+t+u+n u, see 2.1) presupposes u in the Sg. ʾan+t+u. It is hard to judge how seriously to take the unique occurrence of attu, written at-tu$_4$ in a lexical text (CT XIX 6, K. 11155 ii 6 = 12, K.4143:4, beside šu-u "he"). Masc. personal pronouns everywhere else have the vowel u. For parallels cf. Sg. š+u, k+u, Pl. š+u+nu, k+u+nu in Pers. Pron. II (8.3).

The Fem. ti is formed with the vowel i, as expected. Cf. Sg. š+i, k+i, Pl. š+i+na, k+i+na in Pers. Pron. II (8.3).

The Third Person. Ju with j in ju+ša+mḫir+u, ju+maḫḫir+u (and ju+bil+u) occuring or reconstructed in West Semitic languages, can now be proved for Old Akkadian and consequently for common Semitic. See MAD II^2 pp. 164f.

The Masc. Sg. of the stative has Ø in historical Akkadian, as in maḫir, but its reconstruction as maḫir+u is posited by the corresponding Pl. maḫir+ū. Amorite has u, as in Haddu+râm+u "Haddu is high above," but also um (parallel to un in the Pred. St. of nouns in Arabic), Ø (as in Akkadian), and a (of the West Semitic perfect). See Gelb in Symbolae Kuryłowicz pp. 76f. The written Egyptian

pseudo-participle ends in w or j. See also 10. STATIVE.

The only recorded marker of the Fem. Sg. of the stative (or nominal predicate) in the grammars of Akkadian and other Semitic languages is at (and secondarily a, as in Hebrew). Contrariwise, the existence of the common Semitic Pl. form maḫir+ā posits the existence of the corresponding Sg. maḫir+a. This can now be proved by the evidence collected and discussed by Gelb in Symbolae Kuryłowicz pp. 74 and 76. In contrast to at of standard Akkadian, many personal names, especially in the Old Akkadian period, have a, as in Ši+ṭâb+a "she is good" and Eštar+damḳ+a "Eštar is good." The Amorite evidence shows only a (never at) in the predicate position, as in ʾUmmī+ṭâb+a "my mother is good" and Dašur+a+ʿAštar "ʿAštar is old."

On the basis of the generally recognized interpretation of maḫir+āku "received am I," maḫir+ta "received art thou," etc., it would seem natural to interpret maḫir+u as "received is he," and maḫir+a "received is she," leading to the possibility that the final u and a originally represent the personal pronouns of the 3rd person, Masc. and Fem. respectively.

The assumption that the marker u of the stative represents an original personal pronoun is not so farfetched when one notes the widespread use of the pronominal copula in Semitic languages. Cf. annuku anniju šulmānu šut "this tin is 'payment'" or almattu šit "she is a widow" in Middle Assyrian, ṣaddīq hū Jahwē "Jahwe is just" or ʾattā hū malkī "thou art my king" in Hebrew, and similarly in other Semitic languages. See B. Hartmann, "Zur Kopula im Hebräischen," Oudtestamentische Studien XIV (1965) pp. 115-121. Even more instructive in this connection is the Akkadian construction of the type nêšu ša ṣêrišu "the lion of the (sic, not 'his')

steppe," where +šu represents the original pronoun šu used as a copula.

The question is whether the markers u and a of the stative correspond to the Pers. Pron. ju (and ja), which we found above in the causative forms of ju+ša+mḫir+u, or whether they are simply markers of the gender and case of the noun. The answer which I would propose is that the markers u and a of the stative, gender, and case are of identical origin, all being derived from the Pers. Pron. ju and ja. As amply illustrated under 1.1, the markers of gender are u for the Masc. and a/i for the Fem. As shown under 3.4, the markers of case, u for the Nom. and a/i for the Gen. and Acc., are identical with the markers of gender. The evidence that the markers of case were introduced into the system at a different date and later than the markers of gender was presented under 3.6. If the reconstructed ju and ja of the stative (or predicate) is to be taken as the Pers. Pron., it would seem natural to suggest that the nouns kalb+u in Masc. and kalb+a in Fem. are to be reinterpreted as original kalb+ju "dog + he" and kalb+ja "dog + she," respectively.

This interpretation of the Nom. case morpheme as derived from the pronoun ju differs from that of Philippi apud Brockelmann, GVG I § 245a, who proposed to derive the Nom. ending from the pronoun hū "he." Charts 67-68, illustrating the distribution of the Pers. Pron. I and II (or any other charts pertaining to personal pronouns), show that the Pers. Pron. I ju, occurring in the verb and probably in the stative, has nothing to do with the Pers. Pron. II hu (or šu in other Semitic languages). The latter is found only in the function of an independent and suffixal pronoun.

In hunting for additional support in favor of the existence of the pronouns ju, ja, I found the following possible, but quite uncertain, evidence:

As noted above, the Egyptian pseudo-participle ends not only in w, but also in j in the 3rd person, and this j reappears quite regularly in other persons of the pseudo-participle. Considering the difficulties with the vocalization and irregularities of the w and j signs in the Egyptian writing (see, e.g., Edel, Altägyptische Grammatik I pp. 62-66, esp. pp. 64f., for the j+w and w+j combinations), it would seem preposterous to make any suggestions as to the linguistic form of the 3rd person of the Egyptian pseudo-participle. Still, the question should be posed: can the Egyptian spellings be interpreted as ju, which would correspond to the original ju posited above for the Proto-Semitic stative?

At the beginning of 8.2 we had occasion to refer to the existence of the demonstrative pronoun ʾannijum "this" in Akkadian. The unprejudiced way to analyze this pronoun is as ʾan+i+u+m, that is, the deictic element ʾan "here," plus the Gen. i, plus u(m) which nominativizes the genitival complex, as in Aššurijum "Assyrian" from Aššur+i+u+m (for which see 7.2). On the other hand, since ʾan means "here" and ju means originally "he (here)" (see above), it may be possible to suggest that ʾannijum goes back to ʾan+ju, just as ʾannija(tum) may go back to ʾan+ja, and similarly for the Pl. However, we face difficulties with this interpretation in explaining ʾammijum and ʾullijum as derived from ʾam+ju and ʾul+ju, meaning "there + he (here)," which is obviously impossible. The difficulty could be obviated only by assuming that the "here" meaning of the Pers. Pron. I ju, ja was lost by the time the fully adjectival de-

monstrative pronouns ʾannijum, ʾammijum, and ʾullijum were created.

No matter how we interpret the origin of the suffix of the 3rd person of the stative, there is no doubt that the suffixes u, a, ū, and ā no longer represent the original Pers. Pron. I, but are simple markers of gender, number, and case in the noun. In that function the same markers are used also in the suffixes of the 2nd person of the stative and the fientive verb. The markers i and presumably ī in the 2nd person of the Fem. are to be taken as allomorphs of the Fem. a and ā. See Chart 67.

For a further discussion of ju and its ju, ji, ja allomorphs, see 9.2.

8.3. Personal Pronoun II

As shown in Chart 68, the Pers. Pron II is used as an independent and suffixal pronoun.

The Nom. forms of the independent Pers. Pron. II, here reconstructed as *i, *ku, etc., are nowhere to be found in the grammars of Akkadian, of other Semitic languages, or in comparative grammars, with the exception of šu, ši, etc., which is regularly assigned to what I call Pers. Pron. I. The existence of the Nom. forms *i, *ku, etc., can be a priori posited on the basis of the occurring forms of Pers. Pron. II in the Gen./Acc. and Dat. and of the Poss. Pron. Their reconstruction can be further strengthened by the following evidence:

The Hebrew Pers. Pron. for the 1st. person Sg. has two forms ʾānōkī (Amarna written a-nu-ki), which corresponds to our Pers. Pron. I, and ʾ^{a}nī, composed of ʾan, discussed under Pers. Pron. I, plus i of Pers. Pron. II.

Old Egyptian has the following forms of the Pers. Pron., which

		INDEPENDENT				SUFFIXAL		
		Nom.	Gen./Acc.	Dat.	Poss.	Gen. kalbu	Acc. jamburu	Dat. jamburu
Sg.	1c.	*i	i+ati	i+ašim	i+aum	+i(a)	+iØ +niØ	+ʲam +iØm
	2m.	*ku	ku+ati	ku+ašim	ku+aum	+kʲa	+kʲa	+kuØm
	2f.	*ki	ki+ati	ki+ašim	*ki+aum	+kiØ	+kiØ	+kiØm
	3m.	šu	šu+ati	šu+ašim	šu+aum	+šuØ	+šuØ	+šuØm
	3f.	ši	ši+ati	ši+ašim	ši+aum	+šʲa +siØ	+šʲa +siØ	+šiØm
Pl.	1c.	*ni	ni+ati	ni+ašim	ni+aum	+niØ	+niati	+niašim
	2m.	*kunu	kunu+Øti	kunu+Øšim	kunu+aum	+kunuØ	+kunuØ(ti)	+kunuØšim
	2f.	*kini	kinʲ+ati	kinʲ+ašim	*kinʲ+aum	+kinʲa	+kinʲa(ti)	+kinʲašim
	3m.	šunu	šunu+Øti	šunu+Øšim	šunu+aum	+šunuØ +šunʲa	+šunuØ(ti)	+šunuØšim
	3f.	šini	šinʲ+ati	šinʲ+ašim	*šinʲ+aum	+šinʲa	+šinʲa(ti)	+šinʲašim

Chart 68. Personal Pronoun II.

can be used both in the subject and object cases, according to Edel, Altägyptische Grammatik I pp. 75-79:

Sg.	1c.	wj, wjj, and jw	Pl.	1c.	*n
	2m.	kw and tw		2c.	tn
	2f.	tm and tn			
	3m.	sw		3c.	sn
	3f.	sj			

The crucial point connected with the Egyptian spellings is: do the spellings kw, sw, sj stand for ku, su, si (or secondarily kū, sū, sī), and therefore for the original subject (Nom.) case, which was used secondarily also for the object case? Or do these spellings stand for kuwa, suwa, sija, and therefore for the original object case, which was used secondarily also for the subject case?

The Egyptian spellings kw and tw clearly indicate the vowel u for the Masc. form of the 2nd person. The same vowel u occurs also in the independent pronouns ku+ati, ku+ašim, and ku+aum, and in the suffixal Dat. pronoun +kum in jamḫuru+kum of Akkadian. In addition to this factual evidence in favor of ku, the occurring and reconstructed evidence shows the marker u for the Masc. (and i for the Fem.) in all the persons of the Pers. Pron. I and II which have gender distinctions, that is, the 2nd and 3rd persons of both Sg. and Pl. On the other hand, the vowel a is found in the suffixal pronoun +ka in kalbu+ka and jamḫuru+ka. My interpretation of ka as going back to kya is based on such evidence as ju+šya+mḫir+u, šya (Det. Pron.) kalbyam, etc., gathered under 3.5.

Based solely on the existence of ka in kalbu+ka and jamḫuru+ka, all the grammars of Semitic languages, without any exception, posit ka (and not ku) as the underlying form for Proto-Semitic and all

Semitic and Hamitic languages. Indicative of the general trend on this question is B. Kienast's opinion (expressed in Akten des Vierundzwanzigsten Internationalen Orientalisten-Kongresses München [Wiesbaden, 1959] p. 255) that the u of ku, in kuati, kuaum, etc., is derived secondarily and by analogy from the u of šu, in šuati, šuaum, etc.

The reconstruction of the Masc. Pers. Pron. for the 2nd person as ka, based solely on ka in kalbu+ka and jamḫuru+ka, overlooks the weighty evidence in favor of ku to be found in Akkadian and Egyptian (and other Hamitic languages, not recorded here). The reconstruction of ka goes back traditionally to the fathers of Semitic studies centuries ago, when only West Semitic languages were known, and has no raison d'être in the light of the new evidence. See also above pp. 9f.

8.4. General Discussion

Some general remarks are needed about the mutual relations of Pers. Pron. I and II.

There is a clear consonantal differentiation in the Pers. Pron. I and II in the 2nd and 3rd persons between tu and ku (and similarly for Fem. and Pl.) and ju and šu (and similarly for Fem. and Pl.). But we note certain phonetic similarities in the 1st person between ʾa and i in Sg. and na and ni in Pl. Thus ʾa and na of Pers. Pron. I may represent dialectal variations of i and ni of Pers. Pron. II, respectively.

It might be suggested that the original distinction between the here-deixis of Pers. Pron. I and the there-deixis of Pers. Pron. II, fairly well provable for ju, šu of the 3rd person, and possible, but not provable, for tu, ku of the 2nd person, did not apply to the 1st

person.

In historically attested usage, the independent Pers. Pron. I ju was replaced by the Pers. Pron II šu, and all the differentiations between the here-deixis and there-deixis were lost. At the same time, a redistribution of the two pronouns took place. Pers. Pron. I was used only as the independent pronoun in the subject (Nom.) case. Pers. Pron. II was used as the independent pronoun in the object case (Gen., Acc., Dat.) and in the secondarily derived Poss. Pron., as well as in the suffixal pronoun.

9. VERB

9.1. Introductory Remarks

In any verbal form we can easily recognize certain affixes surrounding the stem. Thus in a verbal form such as ju+šá+ta+mḫir+ū, we recognize affixes in the form of prefixes (ju, šá, ta) and suffixes (ū). Both the prefixes and suffixes represent sequential morphemes, each of which has a specific function. Of all these verbal affixes, the first of the prefixes, namely ju (and all others of the same order), and the first of the suffixes, namely ū (etc.), are called inflectional morphemes and are discussed below under 9.2. The second and third (and others of the same order) of the prefixal sequential morphemes are discussed under 9.3. The discussion of the simple verbal stem in the fientive verb and verbal nouns will be taken up under 9.4.

9.2. Inflectional Morphemes

The inflectional morphemes occur in the fientive verb and imperative. Those occurring in the fientive verb are illustrated in Chart 69. This chart of the verb differs in several details from Chart 67 under Pers. Pron. I (8.2) because of the different aims of the two charts. The imperative appears without the first prefixal morpheme.

In Morphology of Akkadian (1952) pp. 53-56 I proposed, with some hesitation, a reconstruction of the verbal inflectional morphemes. Almost from the beginning, the system which I proposed there appeared to me to contain so many questionable points, that in distri-

	RECONSTRUCTED	ATTESTED	
		AKKADIAN	OTHER SEMITIC
Sg. 1c.	ʾa+mḫur+u	ʾa+mḫur+ø	ʾa+mḫur(+u)
2m.	tu+mḫur+u	ta+mḫur+ø	ta+mḫur(+u)
2f.	ti+mḫur+i	ta+mḫur+i	ta+mḫur-ī(+na)
3m.	ju+mḫur+u	ja+mḫur+ø	ja+mḫur(+u)
3f.	ja+mḫur+a	t ø ja+mḫur+ø	ta+mḫur(+u)
Pl. 1c.	na+mḫur+u	ni+mḫur+ø	na/ni+mḫur(+u)
2m.	tu+mḫur+ū	ta+mḫur+ā	ta+mḫur+ū(+na) ta+mḫur+na
2f.	ti+mḫur+ī	ta+mḫur+ā	ta+mḫur+ā(+na) ta+mḫur+na
3m.	ju+mḫur+ū	ja+mḫur+ū	ja+mḫur+ū(+na)
3f.	ja+mḫur+ā	ja+mḫur+ā	ja+mḫur+ā(+na) ja/ta+mḫur+na

Chart 69. Fientive Verb.

buting copies of that monograph I felt obliged to add a note of warning about the weakness of my verbal reconstruction.

Even now, after repeated efforts over many years, I have not succeeded in reconstructing one single system of inflectional morphemes which I feel could stand the test of time. Therefore, instead of proposing one controversial system, what I prefer to present below is the several steps which may have taken place in the evolution of the Proto-Semitic verbal system over a long span of time.

As noted above, the verbal inflectional morphemes consist of the first prefix and the first suffix.

Various possibilities in the development of the prefixes and suffixes are indicated in Chart 70, a to g.

I assume that in the first stage differences in number, but not necessarily those of gender and mood / case, must have been denoted. The differences are marked by six different pronouns, ʾa, ta, ja, na, x, and y, as shown under a. Remnants of this stage are the prefixes of the 1st person, ʾa "I" and na "we," which lack gender and case differentiations in all phases of Semitic languages.

The first prefix to develop a marker of gender and number may have been that of the 3rd person, ju, ja, jū, and jā, as indicated under b. The best evidence is to be found in the gender and number differentiations in the 3rd person of the stative (see 8.2 and Chart 67) and in the noun (see 8.2).

The creation of full gender and number differentiations is shown under c and d. In contrast to ju, ja, jū, and jā of the 3rd person of the stative, with the gender markers u for Masc. and a for Fem., and the number markers, Ø for Sg. and the doubling of

	Sg.					Pl.			
	1st	2nd		3rd		1st	2nd		3rd	
		Masc.	Fem.	Masc.	Fem.		Masc.	Fem.	Masc.	Fem.
a)	ʾa	ta		ja		na	x		y	
b)	ʾa	ta		ju	ja	na	x		jū	jā
c)	ʾa	tu	ti	ju	ja	na	tū	tī	jū	jā
d)	ʾa	tu	ti	ju	ja	na	tunu	tini	jū	jā
e)	ʾa..u	tu..u	ti..i	ju..u	ja..a	na..u	tū..ū	tī..ī	jū..ū	jā..ā
f)	ʾa..u	tu..u	ti..i	ju..u	ja..a	na..u	tu..ū	ti..ī	ju..ū	ja..ā
g_1)	ʾa..u	ta..u	ta..i	ja..u	ta..u	na..u	ta..ū	ta..ā	ja..ū	ja..ā
g_2)	ʾi..u	ti..u	ti..i	ji..u	ti..u	ni..u	ti..ū	ti..ā	ji..ū	ji..ā
g_3)	ʾu..u	tu..u	tu..i	ju..u	tu..u	nu..u	tu..ū	tu..ā	ju..ū	ju..ā

Chart 70. Inflectional Morphemes.

the gender vowel for Pl., the 2nd person of the stative has u (not attested, but posited by the personal pronoun ʾantunu) for Masc. and i for Fem. I leave it undecided as to whether the 2nd person had a tū and tī type of Pl. by analogy with the 3rd person (as shown under c), or tunu and tinȧ as actually attested in the pronouns ʾantunu and ʾantinȧ and in the stative maḫir+tunu and maḫir+tinȧ (as shown under d).

In the four stages discussed up to now we have operated with a verbal system in which the inflectional elements were denoted only by prefixes. Remnants of this suffix-less verb are reflected in later years in some persons of the jussive of Arabic and other West Semitic languages, as in ʾa+mḫur, ta+mḫur, ja+mḫur, and na+mḫur.

Since the jussive, like imperative, cannot and does not indicate the mood / case differentiations, it would seem natural to assume that the mood / case of the fientive verb is of later creation.

The creation of the mood / case in the fientive verb was achieved by taking over the suffixes denoting case, together with gender and number, from the noun. The connection between the sequential morphemes of the noun and verb can be illustrated by Arabic qaṣṣāb+un and ja+qtul+u, qaṣṣāb+a/in and ja+qtul+a, qaṣṣāb+ūna and ja+qtul+ūna, qaṣṣāb+īna and ta+qtul+īna, or qaṣṣāb+āni and ja+qtul+āni.

In many West Semitic languages the verb has na or n in the Pl. and ni in the Du. following upon the preceding long vowels, as in the examples just above. This na or n represents the nunation in the verb, which marks the absence of the object and corresponds to the mimation / nunation of the noun, for which see 4.3.

The processes by which the suffixes of the noun and pronoun entered the structure of the verb (e), with the subsequent

loss of the length in the prefixes of the Pl. (f), and the secondary differentiation of the prefixal vowels (g_1-g_3) are all matters of speculation and will not be discussed here. The latter reflects Barth-Ungnad's law of vowel differentiation in the prefixes ju, ji, ja and in the stem, as in the transitive ja+mḫur+u, ja+šbir+u, ja+rgum+u and the intransitive-stative ji+šlam+u, ju+mraṣ+u. Equally left aside is the question of the prefixal vowel differentiation shown in ju of the D and Š formations, but ja (ji, ju) of the B formations. Barth-Ungnad's law is operative in Ugaritic, Hebrew, Aramaic, and possibly Amorite. Secondary levellization of ju, ji, ja to ja (or the like) can be found in all Semitic languages, especially in Arabic; levellization to ji (i) took place in Akkadian.

The following notes are added to the discussion of the forms of the suffixes in the fientive verb: The expected u occurs correctly in the Masc. forms ʾa+mḫur+u, ta+mḫur+u, and ja+mḫur+u in Sg., and in ta+mḫur+ū and ja+mḫur+ū in Pl. The 1st person Pl. na+mḫur+u (as in Arabic), with u, not ū, shows that na is not a Pl. form of ʾa of the Sg., but an independent pronoun. All the variations and difficulties in respect to suffixes are found in the Fem. forms. Because of the 2nd person Sg. form ta+mḫur+i, with i, the expected 2nd person Pl. should be ta+mḫur+ī, with ī; instead, the latter occurs only as ta+mḫur+ā. Because of the 3rd person Fem. Pl. ja+mḫur+ā, the expected Sg. should be ja+mḫur+a; it is however, ta+mḫur+u in Arabic, with the u suffix nowhere else attested in the Fem., and with the ta prefix, which must have come from the noun. See 3.7.

9.3. Prefixal Sequential Morphemes

In respect to the three fundamental aspects of a grammatical analysis, form, function, and position, my concern in this section is partly with form, but above all with position (sequence). Matters of function, well treated in grammars of Semitic, will not be discussed here.

The following four charts illustrate the fientive verb (71-73) and verbal nouns (74). The entries in the charts pertaining to the fientive verb are presented in two different orders. Two charts (71-72) show the B formations separately from the D formations. The third chart (73) brings the B and D formations together; this was done mainly to illustrate the conclusion that D formations represent partial doubling of B formations, as discussed below under 9.4. The imperative of all formations corresponds to the Pret. without the prefixal inflectional element; it is not illustrated here. The reconstruction of the verbal nouns is given in Chart 74; they have the identical order of prefixal sequential morphemes as the fientive verb, except for the omission or replacement of the prefixal inflectional element.

The following explanatory notes to the charts are necessary:

The symbols "Pres." and "Pret." should not be taken too seriously. They can stand for either the tense (present and preterit) or the aspect (imperfective and perfective). See 9.4.

The normal assimilation of the consonant n to the following consonant in Akkadian is not marked in Charts 71-72, first, in

		PREFIXES			STEM	ATTESTED	
		Pron. I	Pron. II	"Modal"		Akkadian	Other Semitic
B	Pres.	ja	+Ø	+Ø	+máḫar	jamáḫḫar	jəmaḫḫər (Eth.)
	Pret.	já	+Ø	+Ø	+maḫ^{u}ár	jáma^{u}ḫar	jamḫuru
BN	Pres.	ja	+n/	+Ø	+máḫar	jan/máḫḫar	---
	Pret.	já	+n/	+Ø	+maḫ^{i}ár	ján/maḫ^{i}ar	janmaḫiru
BNT	Pres.	ja	+n/	+ta	+máḫar	jan/tamáḫḫar?	---
	Pret.	já	+n/	+ta	+m/ḫar	ján/tam/ḫar	ʾe^{t}tamḫar? (Syr.)
BNTN	Pres.	ja	+n/	+tana	+máḫar	jan/tanamáḫḫar?	---
	Pret.	já	+n/	+tana	+maḫar	ján/tanam/ḫar	---
BT	Pres.	ja	+Ø	+ta	+máḫar	jamtáḫḫar	jətmaḫ(ḫ?)ər (Eth.)
	Pret.	já	+Ø	+ta	+maḫar	jámtaḫar	jətmaḫar (Eth.) jatmaḫiru
BTN	Pres.	ja	+Ø	+tana	+máḫar	jamtanáḫḫar	---
	Pret.	já	+Ø	+tan/	+maḫar	jámtan/ḫar	---
BŠ	Pres.	ju	+šа	+Ø	+m/ḫar	jušam/ḫar	(jāmaḫər [Eth.])
	Pret.	ju	+šа	+Ø	+m/ḫir	jušam/ḫir	jumḫiru jamḫir
BŠT	Pres.	ju	+š/	+ta	+m/ḫar	juš/tam/ḫar	jāstamaḫər? (Eth.)
	Pret.	ju	+š/	+ta	+m/ḫir	juš/tam/ḫir	jastamaḫiru
BŠTN	Pres.	ju	+š/	+tana	+m/ḫar	juš/tanam/ḫar	---
	Pret.	ju	+š/	+tana	+m/ḫir	juš/tanam/ḫir?	---

Chart 71. Prefixal Sequential Morphemes, Fientive Verb, B Formations.

		PREFIXES			STEM	ATTESTED	
		Pron. I	Pron. II	"Modal"	Akkadian		Other Semitic
D	Pres.	ju	+Ø	+Ø	+maḫḫar	jumaḫḫar	(jəmēḫər [Eth.])
	Pret.	ju	+Ø	+Ø	+maḫḫir	jumaḫḫir	jumaḫḫir
DN	Pres.					---	---
	Pret.					---	---
DNT	Pres.					---	---
	Pret.					---	---
DNTN	Pres.					---	---
	Pret.					---	---
DT	Pres.	ju	+Ø	+ta	+maḫḫar	jumtaḫḫar	(jətqētal [Eth.])
	Pret.	ju	+Ø	+ta	+maḫḫir	jumtaḫḫir	jatamaḫḫar hitmaḫḫer
DTN	Pres.	ju	+Ø	+tana	+maḫḫar	jumtanaḫḫar	---
	Pret.	ju	+Ø	+tan/	+maḫḫir	jumtan/ḫḫir	---
DŠ	Pres.	ju	+š/	+Ø	+maḫḫar	juš/maḫḫar	(jāmēḫər [Eth.])
	Pret.	ju	+š/	+Ø	+maḫḫir	juš/maḫḫir	jāmaḫḫər (Eth.)
DŠT	Pres.	ju	+š/	+ta	+maḫḫar	juš/tamaḫḫar	(jāstamēḫər [Eth.])
	Pret.	ju	+š/	+ta	+maḫḫir	juš/tamaḫḫir	jāstamaḫḫər (Eth.)
DŠTN	Pers.	ju	+š/	+tan/	+maḫḫar	juš/tan/maḫḫar?	---
	Pret.	ju	+š/	+tan/	+maḫḫir	juš/tan/maḫḫir?	---

Chart 72. Prefixal Sequential Morphemes, Fientive Verb, D Formations.

	PREFIXES			STEM		ATTESTED (Akkadian)	
	Pron. I	Pron. II	"Modal"	Pres.	Pret.	Pres.	Pret.
B	ja	+Ø	+Ø	+maḫḫar	+m<u>u</u>ḫ<u>u</u>r	jamaḫḫar	jamḫur
D	ju	+Ø	+Ø	+maḫḫar	+maḫḫir	jumaḫḫar	jumaḫḫir
BN	ja	+n<u>i</u>	+Ø	+maḫḫar	+maḫ<u>i</u>r	jammaḫḫar	jammaḫir
DN				---	---	---	---
BNT	ja	+n<u>i</u>	+ta	+maḫḫar	+m<u>i</u>ḫar	jattamaḫḫar?	jattamḫar
DNT				---	---	---	---
BNTN	ja	+n<u>i</u>	+tana	+maḫḫar	+maḫir	jattanamaḫḫar?	jattanamḫar
DNTN				---	---	---	---
BT	ja	+Ø	+ta	+maḫḫar	+maḫar	jamtaḫḫar	jamtaḫar
DT	ju	+Ø	+ta	+maḫḫar	+maḫḫir	jumtaḫḫar	jumtaḫḫir
BTN	ja	+Ø	+tana	+maḫḫar	+maḫar	jamtanaḫḫar	jamtaḫḫar
DTN	ju	+Ø	+tana	+maḫḫar	+maḫḫir	jumtanaḫḫar	jumtaḫḫir
BŠ	ju	+š<u>a</u>	+Ø	+m<u>a</u>ḫar	+m<u>i</u>ḫir	jušamḫar	jušamḫir
DŠ	ju	+š<u>i</u>	+Ø	+maḫḫar	+maḫḫir	jušmaḫḫar	jušmaḫḫir
BŠT	ju	+š<u>i</u>	+ta	+m<u>a</u>ḫar	+m<u>i</u>ḫir	juštamḫar	juštamḫir
DŠT	ju	+š<u>i</u>	+ta	+maḫḫar	+maḫḫir	juštamaḫḫar	juštamaḫḫir
BŠṬN	ju	+š<u>i</u>	+tana	+m<u>a</u>ḫar	+m<u>i</u>ḫir	juštanamḫar	juštanamḫir?
DŠṬN	ju	+š<u>i</u>	+tana	+maḫḫar	+maḫḫir	juštammaḫḫar?	juštammaḫḫir?

Chart 73. Prefixal Sequential Morphemes, Fientive Verb, B and D Formations.

	STATIVE		ACTIVE PARTICIPLE	
	Akkadian	Other Semitic	Akkadian	Other Semitic
B	maḫi/u/ar	maḫa/i/ur	māḫir	māḫir
BN	nam/ḫur	nimḫar ʾinmaḫara	mun/maḫir	munmaḫir
BNT	/itam/ḫur	ʾet/tamḫar? (Syr.)	mun/tam/ḫir	met/tamḫar? (Syr.)
BNTN	*/itanam/ḫur?	---	*mun/tanam/ḫir?	---
BT	*tam/ḫur > mit/ḫur, mitaḫ/r	tamaḫra ʾimtaḫara, ʾetqəber	*mutamaḫir > mumtaḫir	mutmaḫir
BTN	*tanam/ḫur > mitan/ḫur	---	*mutan/maḫir > mumtan/ḫir	---
BŠ	šam/ḫur šum/ḫur	ʾamḫara	mušam/ḫir	mumḫir
BŠT	*šatam/ḫur šutam/ḫur	ʾistamḫara	muš/tam/ḫir	mustamḫir
BŠTN	*šatan/m/ḫur? šutan/m/ḫur	---	*muš/tan/m/ḫir?	---
D	maḫḫur muḫḫur	maḫḫara	mumaḫḫir	mumaḫḫir
DT	*tamaḫḫur > *mataḫḫur, mutaḫḫur	tamaḫḫara	*mutamaḫḫir > mumtaḫḫir	mutamaḫḫir
DTN	*tanamaḫḫur > *matan/ḫḫur, mutan/ḫḫur	---	*mutanamaḫḫir > mumtan/ḫḫir	---
DŠ	*šamaḫḫur šumaḫḫur	ʾamaḫḫara ʾasmaḫḫara (Amh.)	muš/maḫḫir	? (Eth.)
DŠT	*šat/maḫḫur šut/maḫḫur	ʾastamaḫḫara	muš/tamaḫḫir	mastaqattəl
DŠTN	*šatan/maḫḫur *šutan/maḫḫur	---	*muš/tan/maḫḫir	---

Chart 74. Prefixal Sequential Morphemes, Verbal Nouns.

order to avoid the clutter of unnecessary details, and secondly, because this assimilation is unknown in many other Semitic languages. Thus the charts have janámaḫḫar (BN), and not jaḿmaḫḫar. The latter, assimilated forms of Akkadian, are given correctly in Chart 73.

The original stress of such reconstructed forms as jánatamaḫar is marked in occurring forms as jánatamaḫḫar (BNT) with the same stress, even though the stress must have changed to the penult in ittámḫar. This was done because of the difficulty in marking the changed stress on the charts.

The difficulties with the stress and the doubling of consonants in Ethiopic (Gəʿəz) prevented me from citing some pertinent illustrations in the charts. From G. R. Castellino, The Akkadian Personal Pronouns . . . (Leiden, 1962) p. 129, I learn that Amharic has ʾasmaḫḫara, jasmaḫḫər in DŠ.

For additional explanatory notes on Chart 74, see 9.4.

My reconstruction of the verbal formations of Akkadian and other Semitic languages shows no relation to the charts usually found in grammars of Semitic languages, much less to such traditional schemes as given by the Hebrew Qal, Nifʿal Piʿel, etc., or the Arabic Qatala, Qattala, Qātala, etc. The reconstruction here proposed is based on the sequential reconstruction of the prefixal morphemes.

The charts are intended to cover Akkadian as well as other Semitic languages. They include mainly paradigmatic formations, although such secondary formations as qātala, qawtala of West Semitic have been omitted. Many more non-paradigmatic formations, especially in verbal nouns, but also in the fientive verb, could be added to the charts. For the verbal nouns, cf., e.g., in Akkadian maḫīrum "price" ("received things"), tamḫarum "battle," taqrībtum "offering," šapšaqum

"trouble," naplasum "glance"; for the fientive verb, cf., e.g., utaškin, litaškin at Mari (ARMT XV p. 260), putqudāta at Ugarit (MRS IX p. 35:6), and the nitqaṭṭel formation in (mainly late) Hebrew.

My use of the terms "paradigmatic" and "non-paradigmatic" should not lead scholars to assume that I believe in this distinctive use of the terms. "Paradigmatic" means what is usually and traditionally found in the sections on paradigms in grammars. "Non-paradigmatic" means what is not found in paradigms, but in the main body of grammars, often in obscure places, and at times qualified by such terms as "exceptions," "abnormalities," etc. Some scholars are willing to go even further than that, as can be gathered from the proposal that "the ŠD form should be deleted altogether from the grammars and dictionaries" (Speiser, Orientalia n.s. XXVII [1958] p. 25). In reaction against the peculiar attachment to paradigms--artificial, haphazard, and so contrary to the concept of structure as they are--I have been collecting materials for years for a planned "Non-paradigmatic Grammar of Akkadian." As an example of what I have in mind, I refer to my discussion in BO XII (1955) p. 106a, where I treat the adjectives (and statives) such as qirbum, ṣiḫrum, etc., and qurbum, qudmum, etc., as being of the "non-paradigmatic" miḫir and muḫur formations respectively. This is in contrast to von Soden, who interprets these words as qerbum, qorbum, etc., and derives them via his nefarious "Vokalfärbungen" from the original qarbum, etc.

The following pages are devoted to the discussion of the prefixal sequential morphemes.

As here reconstructed, the prefixal morphemes of the fientive

verb appear in three ranks. See Chart 75.

Rank 1	Rank 2	Rank 3	
Pron. I	Pron. II	"Modal"	STEM
ju, ji, ja	+na	+ta+	B, BN, BNT, BT
ju, ji, ja	+na	+tana+	BNTN?, BTN
ju	+šˇa	+ta+	BŠ, BŠT, D, DT, DŠ, DŠT
ju	+šˇa	+tana+	BŠTN, DTN, DŠTN?

Chart 75. Ranking of Prefixal Sequential Morphemes.

Rank number 1 is occupied by markers ʾa, ta, ja, etc., which represent the first of the inflectional elements of the fientive verb. All these markers go back ultimately to what I call Pers. Pron. I. For the discussion of the 3rd person marker ju "he (here)," see 8.2. The development of the allomorphs ju, ji, ja is secondary and is dependent on the vowel classes (a, i, u) of the verbal stem, in accordance with the rules established by Barth and Ungnad. See 9.2. Only ju, with the subject vowel u, is attested in the Š and D formations.

The same rank number 1, which is occupied by the inflectional elements of the fientive verb, as in ju+šˇ+ta+mḥir+u "he caused it to be received," is occupied also by mu of the Act. Part., as in mu+šˇ+ta+mḥir+um "the one who caused it to be received." It is obvious therefore that mu of the Part. is the marker which signals the absence of the first inflectional element of the fientive verb. Note further that mu contains the vowel u of the subject case (Nom.), which corresponds exactly to u of ju of the fientive verb, where,

too, it denotes the subject of the action or state. See also 4.3.

For a similar case of a zero signal see 4.3, where m of the mimation was found, via sequential reconstruction, to be the marker which signals the absence of the object. See also ibid. for a possible explanation of the origin of mu and m.

Rank number 2 is occupied by the markers na or ša.

The form of the marker na is not fully established. Only n appears in the fientive verb, while na, ni, ʾin, and n occur in verbal nouns (Chart 74). Stress conditions may have resulted in na > ná, as in ša > šá and ta > tá. The marker na may represent an old pronoun, with some reflexive or passival function, later lost in Semitic. Its original status as a pronoun is deduced from the fact that na occupies the same rank number 2 as the marker ša, which is certainly a personal pronoun.

In accordance with the analysis of ju+ša+mḫir+u as ju "he (here)," plus ša "him (there)," plus mḫir "receive," plus the suffix u (for which see 8.1), the infix ša of the Š formation is taken to represent originally an independent pronoun, which I have classified as Pers. Pron. II. This is the morpheme which appears as sa, ha, or ʾa in other Semitic languages. The most common function of the Š formation is that of the causative.

Rank number 3 is occupied by the markers ta and tana.

The form of the marker ta (not t) can be ascertained by the preserved ta in such forms as ittamḫar (BNT) and uštamḫar (BŠT). In Akkadian (and occasionally in other Semitic languages) the marker ta appears in BT not as a prefix, but as an infix immediately after the first syllable of the verbal stem. The same is true of ta in DT and of the marker tana (discussed below) in BTN

and DTN occurring in Akkadian only. The manifold uses of the T stem, in its reflexive, reciprocal, passival, separative, and temporal functions, cannot be discussed here.

The form of the marker tana (not tan) can be seen from such forms as ittanamḫar (BNTN) and uštanamḫar (BŠTN). See my critical comments about von Soden's "tan-Stamm" in BO XII (1955) p. 110a. Whatever the prehistoric origin of the marker tana may be, this marker cannot be analyzed as ta+na and taken to be composed of ta, a third-rank marker, plus na, a fourth-rank marker. Since this na never appears without ta, it is impossible to reconstruct a fourth-rank na in ja+na+Ø+na+maḫar or ju+ša+Ø+na+maḫar. Distributionally, tana is of equal rank with ta, and both occupy rank 3. The tana marker is apparently found only in Akkadian, where it is normally used in an iterative, frequentative function.

The form of the marker ta and the function of ta (and, because of ranking, also of tana), require further study. It may very well turn out that ta appears in some ossified manifestations of a pronoun in other Semitic languages. For the time being, I call the third prefixal morpheme before the stem "modal."

9.4. Simple Verbal Stem

This section concerns the simple verbal stem, as it appears without the sequential morphemes in the fientive verb (Charts 71-73) and in verbal nouns (Chart 74).

For a number of explanatory notes to Charts 71-74, see above under 9.3. Some additional notes to Chart 74 are necessary here.

Chart 74 is divided into two main parts. The first part illustrates the stative or perfect in West Semitic languages. No

account has been taken of the Inf. in the charts, since the Inf. generally corresponds to the Stat. plus the suffixal sequential morphemes. The second part illustrates the active participle. For the sake of brevity imposed by the charts, the Part. is shown without the suffixal sequential morphemes.

Instead of maḫur, the Akkadian Stat. has miḫur in mitaḫur (Babylonian) or mitaḫar (Assyrian) in BT and similarly in BTN.* The vowel i is found also in the imperative of certain intransitive, or originally intransitive, verbs with a reflexive-reciprocal function, as in kilaʾ "stop!," limad "learn!," and šimaʿ "listen!," in contrast to the fully transitive ṣabat "seize!," šaʾal "ask!," etc. See Gelb in BO XII (1955) p. 110a. In all Š formations of the Akkadian Stat. the Assyrian dialect has ša, while the Babylonian dialect has šu; similarly in D, DT, and DTN formations Assyrian has maḫḫur, etc., while Babylonian has muḫḫur, etc. In all cases the Assyrian formations, with the vowel a, correspond to the posited Proto-Semitic formations.

Chart 76 presents in a condensed form the simple stem without the sequential morphemes. Stress is marked either on the penult or as far from the end as possible; see also Chart 77.

Since the object of this study is primarily sequential morphemes, I must keep my remarks about the stems to a minimum and let the charts speak for themselves. I shall start the discussion with the fientive verb, to be followed by that of verbal nouns.

The B, BN, BNT, BNTN?, BT, and BTN formations have different stem vowels, a, i, u, as well as different inflectional elements, ja, ji, ju, which were noted above under 9.2 in the discussion of the Barth-Ungnad law. The stem is identical for both the Pres. and

1) FINITE VERB:

PRESENT	PRETERIT	FORMATIONS
máḫ/i/ur	'm(a)ḫa/i/ur	B, BN, BNT, BNTN?, BT, BTN
'maḫar	'maḫir	BŠ, BŠT, BŠTN
máḫ:ar	máḫ:ir	D, DT, DTN, DŠ, DŠT, DŠTN?

2) VERBAL NOUNS:

STATIVE	PARTICIPLE	FORMATIONS
máḫa/i/ur	má:ḫir	B
'm(a)ḫu/ar	'maḫir	BN, BT, BTN
'm(a)ḫu/ar	'maḫir	BNT, BNTN?, BŠ, BŠT, BŠTN?
máḫ:u/ar	máḫ:ir	D, DT, DTN, DŠ, DŠT, DŠTN?

Chart 76. Simple Verbal Stems.

Pret., with the following exceptions: 1) The first vowel of the stem, namely a,* is elided everywhere in the Pret. of the B formation, as in já+pqid+u, já+sbat+u, já+mhar+u; 2) the second vowel of the a-vowel class of stems "ablauts" to u in the Pret. of the B formation, as in já+mhur+u, and to i in the Pret. of the BN formation, as in jána+mhir+u

My reconstruction of the Pres. // Pret. stems discussed above is shown in Chart 77. I assume that the original distinction between Pres. and Pret. in the B+ formations lay in the stress. The stress was on the first syllable of the stem in the Pres., as in ja+páqid+u or jana+páqid+u, and as far from the end as possible in the Pret., as in já+paqid+u or jána+paqid+u. This led to two developments: 1) The doubling of the second consonant of the stem everywhere in the Pres., as in ja+páqqid+u, jaDa+páqqid+u, and ja+ptáqqid+u; 2) and the elision of the vowel a in the Pret., as in B já+pqid+u and BT já+ptaqid+u (but not in BN jáDa+paqid+u).

The next two classes of stems in Chart 76, namely 'mahar and 'mahir in BŠ, BŠT, BŠTN, and máhhar and máhhir in D, DT, DTN, DŠ, DŠT, DŠTN?, are differentiated by the latter having the second consonant of the stem doubled, as in ju+máhhar+u, ju+máhhir+u, contrasted with júša+mhar+u, júša+mhir+u. This characteristic doubling in the D stems appears clearly in the evidence gathered in Chart 73.

These two classes of stems have the following characteristics in common: 1) In contrast to the B+ stems, discussed above, they show no vowel-class differentiations; 2) they all have ju (and not the ja, ji prefixes) as the inflectional prefix; and 3) in contrast to

	PRESENT	PRETERIT
B	ja +páqid +u	já +pəqid +u
BN+	janə+páqid +u	jánə+paqid +u
BT+	ja +ptáqid+u	já +ptaqid+u
B	ja +rágum +u	já +rəgum +u
BN+	janə+rágum +u	jánə+ragum +u
BT+	ja +rtágum+u	já +rtagum+u
B	ja +ṣábat +u	já +ṣəbat +u
BN+	janə+ṣábat +u	jánə+ṣabat +u
BT+	ja +ṣtábat+u	já +ṣtabat+u
B	ja +máḫar +u	já +məḫər +u (u)
BN+	janə+máḫar +u	jánə+maḫər +u (i)
BT+	ja +mtáḫar+u	já +mtaḫar+u

Chart 77. Present and Preterit.

regular B+ stems, in which Pres. // Pret. differentiation is marked by stress, the BŠ+ and D+ stems regularly have a in the Pres., as in jušamḫaru, jumaḫḫaru, and i in the Pret., as in jušamḫiru, jumaḫḫiru. This a // i differentiation is apparent also in the B+ formations of the ablaut class of verbs, as in jubbal, jillak, jiddan, jizzaz in Pres., and jûbil, jillik, jiddin, jizziz in Pret.

Passing now to the verbal nouns in Chart 76, we note first that the B stem has a Stat. with different vowels a, i, u, in accordance with the Barth-Ungnad law, as in wašab, zaqin, and maruṣ. The Part. of B is uniformly māḫir.

The other stems require very few comments. The Stat. generally has the vowel u in Akkadian, as in ša+maḫḫur, ša+maḫḫur. The Act. Part. uniformly has the vowel i in the second position, as in mu+ša+maḫḫir+um, mu+maḫḫir+um. The doubling of the second consonant is characteristic of all D formations.

Some observations about Arabic verbal stems are necessary: 1) Where Akkadian has u in the stems maḫur, maḫḫur, as in namḫur, šamḫur, maḫḫur, Arabic and some other Semitic languages have a in the stems maḫar, maḫḫar, as in ʾinmaḫara, ʾamḫara, maḫḫara. 2) In all except B formations Arabic has the vowel i in the stem maḫir of the Act. Part., as in mutmaḫirun, munmaḫirun, but the vowel a in the stem maḫar of the Pass. Part., as in mutmaḫarun, munmaḫarun. The same vowel variations affect the Act. and Pass. of the fientive verb in Arabic.

Relying on the Akkadian evidence and disregarding as irrelevant in the present context the doubling of the middle consonant of the stem, a number of conclusions can be drawn about the distribution of the various stem vowel classes, as shown in Chart 78.

	a	i	u
	maḫar	maḫir	maḫur
	Neutral	Punctual	Durative
Stat. (B)	(maḫar) wasab	paqid	ragum
Pres. (B, BN, BT+)	jamaḫḫar	japaqqid	jaraggum
Pret. (B, BN, BT+)	jamaḫḫar	japaqid	jaragum
Stat. (all except B)			namaḫur
Pass. Part. (all except B)			namaḫurum
Inf. (all except B)			namaḫurum
Pres. (all except B, BN, BT+)	jumaḫḫar		
Pret. (all except B, BN, BT+)		jumaḫḫir	
Act. Part. (all except B)		mumaḫḫirum	

Chart 78. Vowel Classes in Simple Stems.

Based on the Stat. of B, the two Akkadian "tenses," namely Pres. and Pret., have the following vowel differentiations in the B, BN, BT+ formations: a for the neutral action, i for the punctual action, and u for the durative action.

The fientive verb and verbal nouns of other formations yield different results. The vowel a is used in the Pres. jumaḫḫar; i in the Pret. jumaḫḫir and Act. Part. mumaḫḫirum; and u in the Stat. namḫur, Pass. Part. namḫurum, and Inf. namḫurum.

Further conclusions are: 1) The stem maḫar of the a vowel class denotes a neutral action in the Pres.; 2) the stem maḫir of the i vowel class denotes a punctual action in the Pret. and Act. Part., and consequently the perfective aspect; 3) the stem maḫur of the u vowel class denotes a durative action in the Stat., Pass. Part., and Inf., and consequently the imperfective aspect.

Worded differently, the same conclusions are: 1) In the fientive verb, the Proto-Akkadian "Pres./Fut." had a neutral aspect, which presumably was neutral in respect to the tense; the "Pret." had a perfective aspect, which could well lead to the Pret. tense of later Akkadian. 2) In the verbal nouns, the Act. Part. denoted the perfective aspect, and the Pass. Part. the imperfective aspect.

It is obvious that the West Semitic Pres./Fut. aspect / tense of jumaḫḫiru, jumḫiru and the Perf. aspect / tense of maḫḫara, ʾamḫara do not agree with the above conclusions, and should therefore be judged as secondary developments which took place in West Semitic languages.

The above conclusions were drawn simply by reading Chart 78, showing the distribution and function of the stem vowel classes, and without being influenced by the various theories concerning

the aspect / tense in Semitic languages. The question as to how these conclusions compare with current theories will be left unanswered here. I shall let other scholars weigh the evidence and provide the answers.

10. STATIVE

Beside "paratactic" phrase constructions of the type "subject I + subject II," as in "Sargon, the king," "Sargon, the good," "Sargon good," "good Sargon," the Semitic languages have standard nominal sentences of the type "subject I is subject II," in which subject II is a predicate, as in "Sargon is king," or "Sargon is good," or "he is good." Stative is a nominal sentence in which subject I can be a noun of any class, while subject II is a personal pronoun.*

The structure of the stative is shown in Chart 79.

Subject I in Akkadian can be a primary noun, primary adjective, or an active or passive participle. We have thus šarr+āku "king am I," zaqīn+āku "old am I," māḫir+āku "recipient am I," or maḫīr+āku "received am I."

Subject I has no gender, number, or case. Thus there is šarr+āku, but no šarrat+āku, there is šarr+ānu, but no šarrū+ānu. Šarr+āku means both "king am I" and "queen am I," and šarr+ānu means "king are we" and "kings are we." In the latter case, the obvious meaning "kings" can be derived from subject II. In other cases, the Masc. or Fem. gender of subject I is in doubt, as in labb+āku "lion am I" or "lioness am I."

Subject II is originally Pers. Pron. I, which is fully discussed under 8.2. As such, it has clearly defined gender (except for the 1st person) and number, for which see the first two chapters of this monograph. The case / mood, discussed under 3.9, appears covertly in most instances.

	SUBJECT I				SUBJECT II			
	STEM I	GEN.	NUM.	CASE	STEM II	GEN.	NUM.	CASE / MOOD
Sg.1st Masc./Fem.	maḫir	--	--	--	+ʾak	--	--	+u
2nd Masc.	maḫir	--	--	--	+t	+u	+Ø	+Ø
Fem.	maḫir	--	--	--	+t	+i	+Ø	+Ø
3rd Masc.	maḫir	--	--	--	+j	+u	+Ø	+Ø
Fem.	maḫir	--	--	--	+j	+a	+Ø	+Ø
Pl.1st Masc./Fem.	maḫir	--	--	--	+na	--	--	+Ø
2nd Masc.	maḫir	--	--	--	+t	+u	$+_{n}u$	+Ø
Fem.	maḫir	--	--	--	+t	+i	$+_{n}i$	+Ø
3rd Masc.	maḫir	--	--	--	+j	+u	+:	+Ø
Fem.	maḫir	--	--	--	+j	+a	+:	+Ø

Chart 79. Structure of the Stative.

For the suggestion that the original personal pronouns ju "he" and ja "she" of the 3rd person of the stative, after developing to u and a, respectively, became markers of the subject and object cases in the noun, see 8.2.

The important link between the stative and the noun, indicated above, is counterbalanced by the observation that the 3rd person of the Stat. is found with the Dat. pronominal suffixes, which occur only in the verb. Thus maḫr+am (from maḫ/r+Ø+am), meaning "received is he for me," is paralleled by imḫur+am (from ja+mḫur+Ø+am), meaning "he received for me." Since there is no kalb+am (from kalb+Ø+am) "dog is he for me," the occurrence of the Stat. with the Dat. pronominal suffixes links the Stat. with the verb.

As indicated by the term "subject," the subject II should denote the subject case, namely the Nom. This is shown clearly by the Nom. case of the nouns in predicate in Arabic, as well as in Amorite. For the latter, cf. e.g., Haddu+râ m +u "Haddu is high above" and Qâm+u+ma+ʾEl "ʾEl is truly standing up" (Gelb in Symbolae Kuryłowicz p. 77). Akkadian has maḫir in the Pred. St., but maḫir+u in Sg. is posited because of the Pl. maḫir+ū. See also above under 8.2.

The secondary change of the subject case u to the object case a in Old Akkadian (as in ʾAḫī+ṭâb+a "my brother is good") and in Amorite (as in ʾAbī+ṭâb+a "my father is good"), and the further evolution of the tenseless Stat./Pred. of Akkadian to a full tense, namely perfect, in West Semitic (first, partially, in Amorite, later in Hebrew, Ugaritic, Arabic, etc.) is fully discussed by Gelb in Symbolae Kuryłowicz pp. 72-80.

The formal aspect of the Stat./Perf. in Akkadian and other Semitic languages is illustrated in Chart 80. The analogical changes

	RECONSTRUCTED	ATTESTED		
		AKKADIAN	OTHER SEMITIC LANGUAGES	
			Arabic+	Ethiopic
Sg. 1c.	maḫir+āku	maḫ/r+āku	maḫir+ʔu	maḫir+ku
2m.	maḫir+ta	maḫ/r+āta	maḫir+ta	maḫir+ka
2f.	maḫir+ti	maḫ/r+āti	maḫir+ti	maḫir+ki
3m.	maḫir+ʃu	maḫir+a	maḫir+a	maḫir+a
3f.	maḫir+ʃa	maḫ/r+a(t)	maḫir+at	maḫir+at
Pl. 1c.	maḫir+na	maḫ/r+ānu/i	maḫir+na/nu	maḫir+na
2m.	maḫir+tunu	maḫ/r+ātunu	maḫir+tun/mu	maḫir+kumu
2f.	maḫir+tina	maḫ/r+ātina	maḫir+tina	maḫir+kina
3m.	maḫir+ʃū	maḫ/r+ū	maḫir+ū	maḫir+ū
3f.	maḫir+ʃā	maḫ/r+ā	maḫir+ā maḫir+na	maḫir+ā

Chart 80. Stative in Semitic Languages.

are indicated in the chart by arrows. Please note that some Arabic, Ethiopic, etc., suffixes are cited in the chart in a partially reconstructed form.

The vowel ā of Akkadian maḫir+āta, etc., comes by analogy from ā of maḫir+āku, where it was original. The dropping of ā in maḫir+tu of Arabic, etc., was influenced by the ā-less forms of maḫir+ta, maḫir+ti, etc. The same development is found in Ethiopic maḫir+ku, where ā dropped out by analogy with maḫir+ka, maḫir+ki, etc. The k > t change in the 1st person of maḫir+tu of Arabic, etc., was caused again by analogy with t of the 2nd person, but k persists in dialectal Arabic, as in walad+ku "I bore" or raʾaj+ku "I saw"; see C. Rabin, Ancient West-Arabian (London, 1951) pp. 51f. The Ethiopic k in maḫir+ka, maḫir+ki, etc., of the 2nd person comes from the k of maḫar+ku of the 1st person. For similar dialectal parallels, cf. balṭ-āka "thou art alive," etc., in Akkadian (Gelb, BO XII p. 108b, with additions to von Soden, GAG § 75b).

11. CONCLUSIONS

1. Linguistic Data. Akkadian, like all other Semitic languages, has word classes composed of stems and affixes before and/or after the stem. Word classes having both stems and affixes completely dominate the structure of all Semitic languages. Affixes are found mainly in nouns (including substantives, adjectives, and participles), pronouns, verbs, and statives. Affixless word classes are represented mainly by adverbs, prepositions, conjunctions, interjections, and particles. See 0.1.

2. Sequential Morphemes. All affixes are called here "sequential morphemes." They are called "sequential" because they appear in a certain ordered sequence. See 0.2.

3. Sequential Reconstruction. The procedures followed in the analysis of the sequential morphemes are subsumed under what is called here "sequential reconstruction." The two main steps in the sequential reconstruction are: each segment of a speech unit to be analyzed must be accounted for and its form and function determined; the markers for each segment must be denoted in their proper sequence within the speech unit. The two steps are not necessarily successive. See 0.3.

4. Order of Sequential Morphemes. The order of the sequential morphemes is absolute and immutable. I know of no instance of a morpheme which appears in the wrong sequential order.

Among the suffixal morphemes, gender can never occur after number, nor number after case (or mood), nor case after object, nor object after enclitics. The same applies to the prefixal morphemes. See 0.3.

5. Consecutiveness of the Sequential Order. There is no skipping of a morpheme in sequential order. The morpheme of gender cannot be skipped before the morpheme of number, and the morphemes of gender and number cannot be skipped before the morpheme of case (or mood). Once the morphemes of number or case are established for a certain word class or its subdivision, the existence of the morphemes of gender, etc., whether overt or covert, must be accounted for and marked appropriately. See 0.3.

6. Structural Limitations. Structural limitations within certain word classes result in non-occurrence of certain morphemes. Thus the personal pronouns ʾanāku "I" and nīnu "we" have no gender distinctions, and the number distinctions are indicated not by morphological, but lexical features. In contrast to the nominal kalbu+ka "dog of thee" (or kalbu+m "dog," in the absence of the suffixal pronoun), independent pronouns can have no object, as there is no šu+ka "he of thee" (and therefore no šu+m). Vocatives and imperatives, for obvious reasons, have no case or mood distinctions. See 0.3.

7. Inconsistencies. Certain apparent, but not real, inconsistencies in the sequential order are found in instances when a secondary marker is added to a primary marker for the purpose of strengthening the morpheme. For illustrations, see below No. 35.

8. Obligatory and Optional Morphemes. Morphemes are

normally obligatory, very rarely optional. Thus in the case of suffixal morphemes, the morphemes of gender, number, case (or mood), and object are all obligatory. The fifth-ranked morpheme, denoting the enclitics, is lexical and therefore optional. See 0.3.

9. Overt and Covert Markers. The morpheme markers are either overt or covert. All five overt markers are recognizable clearly in kalb+a+:+t+u+m+ma /kalbātumma/ "and bitches." The covert markers are denoted in two ways: by a cross-out, as in kalb+u+:+Ø+šu+ma /kalbūšuma/ "and his dogs," where Ø denotes the disappearance of u, the posited marker of the Nom. case; or by Ø, as in ja+mḫur+u+:+Ø+Ø+ma /jamḫurūma/ "and they received," where Ø denotes the absence of object (in this case, the pronominal suffix). See 0.3.

10. Classes of Sequential Morphemes. There are eight sequential morphemes, five of which are suffixal and three prefixal. This is the order in which they are discussed below. The eight classes of sequential morphemes are illustrated in Chart 81. See also Chart 1 and 0.2.

11. Suffixal Sequential Morphemes. The five sequential morphemes denote gender, number, case (or mood), object, and enclitics, and occur in all inflected word classes, that is, in nouns, pronouns, verbs, and statives.

12. Gender. Rank number 1 after the stem is occupied by markers of gender, u for Masc. and a/i for Fem. Examples: kalb+u+Ø+Ø+m "dog," š+u+Ø+Ø "he" in Masc.; kalb+a+Ø+t+u+m "bitch," š+i+Ø+Ø "she" in Fem. See 1.1. The consonant t is not a part of

	PREFIXAL			STEM	SUFFIXAL				
Rank (Sequence)	1	2	3	STEM	1	2	3	4	5
Function (Meaning)	Pron. I	Pron. II	"Modal"	STEM	GEN.	NUM.	CASE MOOD	OBJ.	ENCL.
Form (Markers)	ja etc.	ša na	ta tana	STEM	u a/i	Ø :	u a/i	šu etc.	ma etc.
Examples				kalb	+u	+Ø	+Ø	+m	+ma
				kalb	+a	+:	$+_t$i	+šu	+Ø
	ja	+Ø	+Ø	+mahḫar	+u	+Ø	+Ø	+ka	+ma
	ju	+šØ	+ta	+mØḫir	+u	+:	+Ø	+Ø	+Ø

Chart 81. Classes of Sequential Morphemes.

the Fem. marker, but a consonantal glide introduced secondarily between the vowel of gender and that of case. See 3.3 and below No. 17. No t appears in the Fem. of personal pronouns, verbs, and statives. See 1.3. For the relation of markers of gender to markers of case, see 3.4 and below No. 19. For a suggestion that both markers of the gender and case ultimately go back to the Pers. Pron. I ju, ja, see 8.2.

13. Number. Rank number 2 after the stem is occupied by markers of number, zero for Sg. and length for Pl. Examples: kalb+u+Ø+Ø+m, kalb+a+Ø+$_t$u+m, š+u+Ø+Ø, š+i+Ø+Ø in Sg.; kalb+u+:+Ø+Ø, kalb+a+:+$_t$u+m, š+u+$_n$u+Ø, š+i+$_n\overset{a}{i}$+Ø in Pl. See 2.1.

14. Consonantal Glides n and m. The intrusive n in the Pl. of personal pronouns š+u+$_n$u+Ø, š+i+$_n\overset{a}{i}$+Ø, and the intrusive m in the West Semitic Pl. h+u+$_m$u+Ø and Du. h+u+$_m$ā:+Ø are interpreted as consonantal glides secondarily introduced between two vowels. See 2.2.

15. Dissimilation. The change from šini to šina, kini to kina, etc., is interpreted by dissimilation, attested, e.g., in Arabic qaṣṣābāna > qaṣṣābāni. See 2.3.

16. Case. Rank number 3 after the stem is occupied by markers of case, u for Nom. and a/i for Gen./Acc. Examples: kalb+u+Ø+ɣ+m, kalb+a+Ø+t+u+m, š+u+Ø+ɣ in Nom.; kalb+ɣ+Ø+i+m, kalb+a+Ø+t+i+m in Gen.; kalb+ɣ+Ø+a+m, kalb+a+Ø+t+a+m in Acc.; š+u+Ø+a, š+i+Ø+a in Gen./Acc. See 3.1.

17. Consonantal Glide t. The consonant t in kalbatum, etc., is not a part of the Fem. marker, but a consonantal glide introduced secondarily between the vowel of gender and that of case. See above No. 12.

18. Diptotic and Triptotic Declensions. Quantitatively speaking, the diptotic declension dominates completely the structure of the case. Other evidence shows that the diptotic declension represents the older stage, the triptotic the younger. See 3.2.

19. Markers of Case = Markers of Gender. Markers of case, u and a/i, in rank number 3, are the same as markers of gender, u and a/i, in rank number 1. See 3.4 and No. 12 above.

20. Time of the Development of the Case System. Since rank-3 case follows rank-1 gender in the sequence, it is a priori plausible to assume the later development of the case system. For supporting evidence see 3.6. and below No. 30.

21. Synesthesia. Since the markers of case are identical with the markers of gender, it may be possible to assume some synesthesic recognition, in the language-culture patterns of the Semites, of the force of the vowel u as strong, dominant, and masculine, and of the vowels a and i as weak, dependent, and feminine. See 3.4.

22. Mood. Rank number 3 after the stem is occupied by markers of mood, u for Ind. and a (and perhaps i) for Subj. Examples: ja+mḫur+u+Ø+u, maḫ/r+u+Ø+Ø in Ind.; ja+mḫur+Ø+Ø+a, maḫ/r+Ø+Ø+a in Subj. See 3.1, 3.9, and 3.10.

23. Nominativization. The change of the Subj. jamḫura to jamḫuru is realized by the replacement of the oblique vowel a of the Subj. by the Nom. vowel u. See 3.12.

24. Mood = Case. Since the markers of mood are identical with those of case, and both mood and case appear in the same rank number 3, the obvious conclusion to be drawn is that mood is case. See 3.13.

25. Object. Rank number 4 after the stem is occupied by the object, which appears as pronominal suffixes, nouns or verbs in oblique case or mood, or mimation. Examples: kalb+u+Ø+Ø+šu "his dog," ja+mḫur+u+Ø+Ø+šu "he received him," kalb+u+Ø+Ø šarrim, "dog of the king," kalb+u+Ø+Ø jamḫura "dog which he received," kalb+u+Ø+Ø+m, ja+mḫur+u+Ø+Ø+Ø, ja+mḫur+u+:+Ø+na. See 4.1.

26. Markers of Mimation. The overt markers of mimation (or nunation) are ma, na, ni, m, and n in different Semitic

languages. They all go back ultimately to ma. See 4.3.

27. Function of Mimation. Since mimation (nunation) occupies the same rank number 4 as any object in oblique case or mood, I define mimation as the signal marking the absence of the object. Examples: kalb+u+Ø+Ø+m, kalb+u+:+Ø+ma, kalb+Ø+a:+Ø+n, beside kalb+u+Ø+Ø+šu, kalb+u+:+Ø+šu, kalb+Ø+a+:+Ø+šu; ja+mḫur+u+:+Ø+na, ja+mḫur+Ø+a:+Ø+ni beside ja+mḫur+u+:+Ø+šu, ja+mḫur+Ø+a:+Ø+šu.

28. Origin of Markers ma and mu. The marker ma (and its descendants na, ni, m, n) of mimation and nunation and the marker mu of the Act. Part. (No. 38) are derived from the indefinite / interrogative pronoun mu, mi, ma "anybody," "anything." See 4.3.

29. Enclitics. Rank number 5 after the stem is occupied by enclitics, which may occur not only after nouns, pronouns, verbs, and statives, but also after indeclinables. Examples: kalb+u+Ø+Ø+m+ma "and dog," man+ma, "whoever." The use of enclitics is lexical, and therefore optional. See 5. ENCLITICS.

30. Order of Creation of Suffixal Sequential Morphemes. It may be suggested that the first sequential morphemes to be created in the Semitic languages were those of gender and number. Next came the morpheme of case or mood, then the pronominal suffixes and mimation (= nunation), both probably independent (not suffixal) originally, and finally the enclitics. See 0.4, 3.6, and 4.3.

31. Order of Decay of Suffixal Sequential Morphemes. At the other end of the development, the first morpheme to suffer loss in Semitic languages was mimation (= nunation), at times

together with the replacement of pronominal suffixes by prepositional phrases (or the like). Next the case system fell into disuse and gradually disappeared. Only the gender and number systems have never been exposed to the process of linguistic decay. See 0.4.

32. Order of Importance of Suffixal Sequential Morphemes. From the temporal order in which certain morphemes were first created and later decayed one may draw the conclusion that the gender and number systems formed a more integral part of the structure of Semitic languages than the case system and mimation. See 0.4.

33. Binary Structure. The system manifests itself in the existence of pairs of opposites, as in Masc. // Fem. of gender; Sg. // Pl. of number; Nom. // Gen./Acc. of case; and Ind. // Subj. of mood. See 0.4 end and 3.2.

34. Non-Binary Structure. Several structural formations developed separately from and (probably) later than the binary formations. Such are the Du. number, the differentiation of the Gen. and Acc. cases, the creation of the Dat. and Loc. cases and of the various secondary moods. See 0.4 and, in greater detail, 1.6, 2.5, 3.2, 3.8, and 3.14.

35. Double Features. A secondary marker added to a primary marker serves the purpose of strengthening the morpheme, as in the gender Masc. šuatu Fem. šiati (and the like), and similarly in Ethiopic Masc. wəʾəṯū Fem. jəʾəṯī, from huatu, hiati; in the Pl. number ʾišātātum beside ʾišātum; in the object case Masc.

šuati Fem. šiati; and in the Subj. mood imḫuruni (from jamḫurani) beside imḫuru (from jamḫura). See 0.4 and 1.5.

36. Prefixal Sequential Morphemes. The three sequential morphemes denote the Pers. Pron. I, Pers. Pron. II, and "Modal," and occur only in verbs and verbal nouns.

37. First Prefixal Sequential Morpheme. Rank number 1 before the stem is occupied by markers ʾa, ta, ja, etc., which form part of the inflectional system of the fientive verb. The prefixes are derived from the Pers. Pron. I ʾan+ʾa+ku, ʾan+ta, etc. Examples: ʾa+Ø+Ø+mḫur+u, ta+Ø+Ø+mḫur+u, ju+ša+ta+mḫir+u. See 8.2 and 9.3.

38. Marker mu of the Act. Part. The same rank number 1 before the stem, which is occupied by the inflectional elements of the fientive verb, is also occupied by the marker mu of the Act. Part. Thus mu is the marker signaling the absence of the subject of the fientive verb. Example: mu+šamḫir+um "the one who caused it to be received" and ju+šamḫir+u "he caused it to be received." See 9.3. For a parallel instance of m of the mimation, which marks the absence of the object, see above Nos. 26ff.

39. Second Prefixal Sequential Morpheme. Rank number 2 before the stem is occupied by markers na and ša (or ha in other Semitic languages), which form part of the prolonged stem in N and Š formations in verbs and verbal nouns. The marker ša (or ha) certainly goes back to Pers. Pron. II; the origin of the marker na is unknown. Examples: ju+šØ+ta+mḫir+u, ša+ta+mḫur+um, ja+tØ+ta+mḫar+u, Øi+ta+mḫur+um. See 9.3.

40. Third Prefixal Sequential Morpheme. Rank number 3 before the stem is occupied by markers ta and tana, which form part of the prolonged stem in T and TN formations in verbs and verbal nouns. The origin of the two markers is unknown. Examples: jamtaḥharu from ja+Ø+ta+maḥhar+u, jamtanaḥharu from ja+Ø+tana+maḥhar+u, mitaẖẖurum from tana+mẖur+um. See 9.3.

41. Stem. Stem is the basic morphological unit of a word without its sequential morphemes, and is regularly composed of consonants and vowels. Examples: stem kalb+ of kalb+um "dog," maḥir+ of maḥir+um "received," +maḥir+ of juša+mẖir+ū "they caused it to be received," ʾin+ of ʾin, ʾin+a "in." See 6.2.

42. Root. Root is the basic semantic and lexical unit of a word. The root appears in the form of both consonants and vowels in primary nouns, pronouns, and some indeclinables, as in the root kalb "dog" of kalb+um "dog" and kalb+ānum "dog-like," or in the root wišt "inside" of wišt+ūm "from" and wišt+Ī "with." The root appears in the form of consonants only in verbs and verbal nouns, as in the root mḥr "receive" of ja+mḥur+ū "they received" and mu+maḥḥir+um "recipient." See 6.3.

43. Personal Pronouns I and II. Two Pers. Pron. are distinguished: Pers. Pron. I, ʾa, tu, ti, ju, ja, etc., occurring in the independent pronoun, as prefixes in the verb, and as suffixes in the stative; and Pers. Pron. II, i, ku, ki, šu, ši, etc., occurring in the independent and suffixal pronouns. See 8.2 and 8.3.

44. Determinative Pronoun. In its structure of gender, number, and case, the determinative / relative / indefinite

pronoun, Masc. šu Fem. šat, is identical with the substantive and participle / adjective, and is completely different from the personal pronoun, Masc. šu Fem. ši. See 0.4 and Chart 3.

45. Inflectional Verbal Elements. It is suggested that while the prefixes ʾa+, ta+, ja+, etc., formed the original inflectional elements in the verb, the suffixes +u, +i, +ū, +ā, etc., were introduced secondarily into the verbal system from the noun. See 9.2.

46. Vowel Classes in B Formations. The vowels a, i, and u of the various B formations (B, BN, BT, etc.) denote different actions: a in wašab denotes neutral action; i in paqid denotes punctual action; and u in ragum denotes durative action. See 9.2, 9.3, and 9.4.

47. Present and Preterit in B Formations. Strong evidence exists that the difference between the Pres. and Pret. in all B formations (B, BN, BT, etc.) originally lay in stress and nothing else. Examples: ja+páqid+u, ja+ṕaqid+u, ja+ptáqid+u in Pres.; já+paqid+u, já+ṕaqid+u, já+ptaqid+u in Pret. Later developments consist of the doubling of the middle consonant of the stem in the Pres., as in ja+páqqid+u, and of the optional elision of the first vowel of the stem in the Pret., as in já+pqid+u. See 9.4.

48. Present and Preterit in D and Š Formations. Stems maḫar in Š and maḫḫar in D are used for the Pres.; stems maḫir in Š and maḫḫir in D are used for the Pret. Examples: juša+maḫar+u, ju+maḫḫar+u in Pres.; juša+maḫir+u, ju+maḫḫir+u in Pret. See 9.4.

49. Vowel Classes in Verbal Nouns. The vowel u is characteristic of the Stat., Pass. Part., and Inf., as in na+mḫur and na+mḫur+um; the vowel i is characteristic of the Act. Part., as in mu+maḫḫir+um, parallel to ju+maḫḫir+u. See 9.4.

50. Action, Aspect, and Tense. The conclusions based on the distribution and function of the stem vowels a, i, and u, as discussed under Nos. 46-49 are: the Pres./Fut. denotes a neutral action; the Pret. and Act. Part. denote a punctual action, and consequently a perfective aspect; and the Stat., Pass. Part., and Inf. denote a durative action, and consequently an imperfective aspect. See 9.4.

ADDENDA

Places in the monograph to which the respective addenda are attached are marked by an asterisk.

P. 7. I learn from C. Meinhof, Die Sprachen der Hamiten (Hamburg, 1912) pp. 62 and 77ff., that Hausa has mu and +mu for the personal pronoun of the 1st person Pl. See also the addendum to p. 53.

P. 26. Since the pronominal suffixes have a definite sequence, obviously it is possible in a detailed study of certain ranks to subdivide them into sub-classes, as, e.g., into the rank number 4a, 4b, and 4c of pronominal suffixes. See 4.2.

P. 53. In the meantime, I have discovered two possible pieces of evidence in favor of the consonantal glide m. One concerns mu and +mu, the Hausa pronoun of the 1st person Pl., where Semitic languages have only +nu; see the addendum to p. 7. And the other concerns +mu, the Hebrew, Punic, etc., pronominal suffix of the 3rd person Masc. Sg., instead of the expected +hu. It has been noted some time ago that Hebrew uses the suffix +mō (from +humu) not only for Pl., as in ʾelōhēmō "their gods" but also for Sg., as in pānêmō "his face," kappêmō "his hands," or ʿālêmō "upon him"; c.f., e.g., Hans Bauer and Pontus Leander, Historische Grammatik der hebräischen Sprache... (Halle a. S., 1918) p. 253. James G. Février, JA 1951 p. 6, idem, RA XLVI (1952) pp. 222f., idem, JA 1966 pp. 306f., pointed out that the Sg. suffix +M occurs also in the Punic ʾŠTM "his wife," BNM = binim "his son," LMLKM "of his reign," etc. J. Friedrich, Phönizisch-punische Grammatik (Roma, 1951) p. 47 including note 1, originally took the occurrences of the pronominal suffix +M in Sg. as "irrig," but changed his mind in ZDMG CVII

(1957) p. 291 in favor of Février's interpretation. W. F. Albright, The Proto-Sinaitic Inscriptions and Their Decipherment (Cambridge, Mass., 1966) pp. 33ff., and previously in Anatolian Studies VI (1956) p. 81 including note 36, added substance to the interpretation of the Sg. suffix +M by comparing it with +mu found occasionally in the cuneiform transliterations of West Semitic names; accordingly, Albright interprets the Ugaritic and Phoenician name ʿBDʾLM as "ʿAbdi-ilimu" (= ʿAbd+ʾili+mu). All the scholars listed above left the origin of the Sg. pronominal suffix +M, +mu, +m unexplained. I would interpret the intrusive m in ʾili+mu as a consonantal glide developed secondarily from ʾili+wu, where w represents a semi-consonantal glide appearing side by side with j in ʾLJ = ʾili+ju or ʾ in ʾLʾ = ʾili+ʾu, in place of the original ʾLH = ʾili+hu. The time and area distribution of the glides and the question of the ammissibility of the final vowel u is of no concern to us in this study.

P. 84. It is interesting to note that quite a few gentilic names at Mari occur without case endings and mimation, as in At-ma-a-i beside Atmum, Ḫu-um-za-ni-i beside Ḫumzān, Ia-mu-ut-ba-la-i beside Jamût-baʿl(um), Mi-iš-la-na-i beside Mišlān, Nu-um-ḫa-i beside Numḫā, etc.

P. 90. An ununderstandable +iš after a verb occurs in su-ma i-la-ga-iš$_x$(LAM+KUR) /šumma illakā+iš/ "if (the two fugitives) come" in a text of the Old Akkadian period (MAD II^2 p. 132 and MAD III p. 38).

P. 99. Cf. also the assumed difference between the original Ind. maḫiru and Subj. maḫira in the Akkadian stative, noted on p. 104.

P. 104. Cf. also the difference between the Ind. in u, as in säbbäro, and the Subj. in a, as in säbbärä, in the Gurage perfect, noted on p. 99.

P. 137. Cf. also ṭur$_4$-dam-šu-nu-tí "send them to me" (TCL XIX 53:38).

P. 137. Since I do not know of any cases of Dat. I + Acc. I, such as iddiḫ+kuš+šu, "he gave him to thee," I am forced to interpret iddinaššu

"he gave him to me" not as Dat. I + Acc. I iddin+aš+šu, but as Dat. II + Acc. I iddin+aš+šu.

P. 203. The vowel i of the stative mitḫur, instead of maṭḫur, appears also in the imperative mitḫar in BT and similarly in BTN.

P. 205. The original vowel a of the stem is preserved in the imperative of the verbs primae laryngalis, as in ʾakul "eat!," halik "go!," and ʿarub "enter!," as well as in the verbs tarû "take away!," and taṣiʾ "go out!"; see Gelb in BO XII (1955) p. 111a note to § 105g.

P. 211. Cf. also the instructive article of Giorgio Buccellati, "An Interpretation of the Akkadian Stative as a Nominal Sentence," JNES XXVII (1968) pp. 1-12, which appeared too late to be utilized in this monograph.

INDICES

a) Terms and Topics

b) Authors