

Giorgio Buccellati

A Structural Grammar of Babylonian

Harrassowitz Verlag · Wiesbaden

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Buccellati, Giorgio:

A structural grammar of Babylonian / Giorgio Buccellati.

– Wiesbaden : Harrassowitz, 1996

ISBN 3-447-03612-5

© Otto Harrassowitz, Wiesbaden 1996

This work, including all of its parts, is protected by copyright.

Any use beyond the limits of copyright law without the permission of the publisher is forbidden and subject to penalty. This applies particularly to reproductions, translations, microfilms and storage and processing in electronic systems.

Printing and binding by MZ-Verlagsdruckerei GmbH, Memmingen

Printed on permanent/durable paper.

Printed in Germany

ISBN 3-447-03612-5

to Mons. Luigi Villa
and Mons. John V. Sheridan

PREFACE

The purpose of this grammar is to provide a description of Babylonian which may serve both as a systematic theoretical statement of the structure of the language, and as a guide towards a better understanding of the textual record. The two major methodological concerns which have guided my effort may be summed up as follows. On the one hand, I have been especially mindful of the need to validate each category on the basis of explicit formal criteria. This applies not only to categories introduced here and at variance with common Assyriological tradition (e.g., in the treatment of the so-called irregular verbs); it also applies to well established categories which I have inherited from that tradition, but for which I have nevertheless sought to provide a fresh formal justification (e.g., the verbal tenses or the subjective/objective genitive). The second major concern has been to seek a validation of structural perceptions by looking at how they yield a better understanding of the texts, which are the only remaining cultural embodiment of this particular linguistic system. Wide ranges of meaning are embedded in grammatical mechanisms, and their full effect cannot be gauged on purely contextual grounds, i.e., through ad hoc conclusions from individual texts viewed in isolation. The discussion of such diverse topics as the notional value of verbal forms, the expression of action and condition, or the role of emphasis – all illustrate how much more insight a structural or distributional analysis of the language may ultimately yield at the level of textual exegesis.

More specifically, the overall goals and limitations of my endeavor may be spelled out as follows.

(1) The *linguistic methodology* employed aims at obtaining a coherent view of the linguistic system of Babylonian in its inner structure with an emphasis on evaluating the distributional validity of each and every grammatical class (whether traditionally accepted in Assyriology or proposed afresh here). Thus the term “structural” in the title implies (a) a rigorous definition of each class in its relationship to other classes, (b) a consistent differentiation between formal and notional categories, and (c) an understanding of the language as a living and organic system. Not taking established terms or concepts for granted, I make a serious effort at articulating in a structurally explicit manner what I perceive to be valid insights in the traditional understanding of grammar. Only where such an under-

standing is, in my opinion, at variance with the inner logic of the grammatical system, do I propose alternate interpretations; and only where accepted terminology seems to be specifically misleading, or where a non-English term has become part of common usage, do I introduce new terms. In either case, I have explained in detail my reasons for doing so whenever the occasion presents itself.

(2) There are, in fact, a number of *differences with respect to previous works on Akkadian grammar*, which are far-reaching because they affect a variety of levels of analysis, of which I will mention here two in particular. (a) The first pertains to specific phenomena, such as the following. There are certain categories which are radically altered in their understanding and are presented within a new setting, such as the allocation of the weak verbs to morphophonemics. Other categories are analyzed in ways that cut across established classifications, such as the personal inflection of the verb, whose consonantal component is allocated to external inflection, while the vocalic component is allocated to internal inflection. Some categories are dropped altogether, e.g., the permansive as a tense of the verb (the pertinent forms are re-interpreted as a special form of nominal sentence; for the perfect see presently). New categories are introduced which are generally not found in grammatical treatments, e.g., the category of emphasis, here treated as a special type of adjunct. (b) The second major difference pertains to the inclusion of levels of analysis previously neglected, such as the following. A proper articulation of the system of internal inflection allows, *inter alia*, for a more rigorous definition of the concept of root and the consequent exclusion of primary nouns and loanwords from nominal derivation. The concept of morphophonemics leads to the recognition of a normal level of patterning for phenomena otherwise considered anomalous, such as the so-called irregular verbs. A careful distinction between formal and notional levels of analysis brings new light to categories which have otherwise been described in a vague and impressionistic way, e.g., the distinction between action and condition. A syntactical analysis centered on the sentence rather than on inflectional categories opens the way for a new understanding of such varied phenomena as nominalization, hendiadys, or coordination.

(3) As will be clear from even a cursory look at the volume, neither do I follow, nor do I presume to make a contribution to, any particular school of *theoretical linguistics*. In particular, it may be noted that the term "structural" employed in the title refers simply to my concern for rigorous formal analysis, in a sense that might also be described as "distributional." The former term ("structural") refers to the linguistic system viewed as an organic whole, the latter ("distributional") refers to the method used in breaking down this system by identifying patterns of recurrence among its component parts. While I have tried to utilize basic concepts of contemporary linguistics, I have couched my presentation in a rather traditional style. Accordingly, I have refrained from using any highly specialized formalization, in the belief that the basic foundations and principles of linguistic theory have

a validity of their own which transcends specific formalizations, so that it should be feasible, in a case such as mine, to employ the former without applying the latter. In this respect my grammar is not as advanced as the groundbreaking work by ERICA REINER, who first brought the full impact of modern linguistics to bear on the study of Akkadian. (In a more autobiographic vein, I would like to acknowledge my personal debt to her, since I sat as a student in her classes using as our textbook what were then the proofs of her *Linguistic Analysis*.)

(4) As for the objection that modern linguistic methods are not suited for *dead languages* in general, and thus for Babylonian in particular, the following qualifications are in order. It is true, on the one hand, that the lack of living speakers prevents us from verifying unequivocally the possibility or non-possibility of given grammatical constructions. Yet it must be understood that while there are no living speakers today, they obviously existed at a certain point in the past; in other words, to the extent that the language was a living organism in the past, it can still be understood as such today. To this end, we must reckon with a set of filters which stand between us and this living organism, in particular the scribal medium and the size and nature of the textual inventory. We can cope with these two filters through the application of graphemic criteria for the former, and sampling procedures for the latter. If so, while we cannot tap directly the living competence of native speakers, we can arrive inferentially at adequate equivalents. Distributional analysis is a major factor in this process: given a sizable textual corpus, the patterned recurrence, or non-recurrence, of given classes to form specific distributional arrays is the most significant of these equivalents. Note in this respect how the statement of non-occurrence is a particularly important result of a linguistic analysis dependent on living informants: their competence is trusted in excluding the possibility of certain phenomena, i.e., in documenting their non-occurrence. Such a statement acquires its significance in function of a-priori structural considerations which prompted the question in the first place. For a dead language with a vast corpus of extant texts, such as Akkadian, electronic data processing can serve as the functional equivalent of a living informant in that it allows unlimited capillary access to even the most daunting amount of data, as long as these are properly structured. In my own work, I have benefited from a preliminary data bank of Old Babylonian data, so structured (see below, Introduction, 0.2).

(5) I have already referred a few times, in this preface, to a *grammatical tradition*, and I will do so often again within the course of the book. By this I mean the commonly accepted principles and categories, for which I feel that no particular bibliographical reference is necessary (though references will be given in a companion volume about which see presently). I generally refer to such a tradition when my presentation is at variance with it; when I wish to raise some objections to a common understanding of grammatical phenomena, even if I go along with it; when I articulate an explicit explanation for statements which are otherwise ac-

cepted as axioms. I hope it is clear from each specific instance where this occurs, as well as from the overall tone of my argumentation, that I do this out of the greatest respect for this tradition, and without any eagerness to espouse what is different only for the sake of novelty at any cost. The constant effort, which I trust will be apparent, to explain my reasons for choosing a different option should attest to the seriousness with which I have considered all alternatives – witness, for instance, the decision to retain the verbal category of the perfect in order to allow for more reflection on the reasons which, as they stand now, indicate to me that such a category should in fact be abandoned. Similarly, one should note how I have often proposed a fresh definition for traditional terms which appear to have been accepted and repeated in a somewhat unreflected way: this, too, should indicate with what care I have weighed the received wisdom before departing from it. Not that it could have been otherwise, considering the incalculable contributions of this tradition, as embedded especially in the monumental work by WOLFRAM VON SODEN. Thus, while I am aware as to how radically different, and admittedly controversial, some of the positions advanced here might be, I would like for them to be understood within the continuum of the tradition, rather than in antagonism to it.

(6) *Bibliographical references* are kept to a minimum. Besides meeting the obvious need to provide textual citations,¹ they are generally meant to provide support for special and unusual points that are made in the text. No attempt is made here to offer a systematic bibliographical apparatus for each grammatical category discussed. Because of the size that such a documentation entails, if given in an exhaustive manner, I have chosen to place such information in a separate volume, which will appear at a later date. Entitled *A Critical Review of Akkadian Grammatical Studies*, it contains a comprehensive annotated bibliography of studies on both Babylonian and other dialects of Akkadian, with an introductory chapter that gives a history of the discipline, and a detailed topical index sorted by grammatical categories in the same sequence as the one followed here. In this topical index one will find a systematic and exhaustive bibliographical coverage of each subject presented in this grammar, whether or not the particular opinion represented by each bibliographical entry has been dealt with in the corresponding section of the grammar. In this sense the topical index provides a full-fledged supplement to the data presented here, with the addition of points of detail which are omitted from the present book. By thus separating the fuller scholarly apparatus from the main body of the grammar I have been able to retain a more discursive style in my presentation, which I hope may contribute to the readability of my text. By the same token, the scholarly apparatus to be provided in the companion volume will be

¹ References are given only for passages which are non-paradigmatic and which exhibit some unique feature. References for passages which can easily be located in the dictionaries are omitted. Forms within paradigms are not necessarily attested and are often generated on an *ad hoc* basis.

both more comprehensive and more fully documented than if relegated to footnotes given in this volume. It should be noted that in the grammar I have not given references to the companion volume, since the latter follows exactly the same sequence of topics as the former, so that cross-references may be assumed as automatic.

(7) It is hoped that this grammar may serve a *pedagogical purpose* and be utilized by students in the process of learning Akkadian. Though the book is obviously not an elementary introduction, it must be said that beginning students in Akkadian are not normally at an elementary stage either. Akkadian is studied only at the University level, where the study of grammar should entail more than just familiarity with a minimum of rules meant as an aid for a quick reading of the texts. The deeper the understanding of the linguistic structure, the firmer is our control on textual analysis, and the more finely tuned our sensitivity for the nuances of expression. In this light, a grammatical study is not only a key for deciphering a coded text, but also a diapason for training our inner ear to the life that still breathes in the texts. These can then be shown to be, in truth, not dead but only dormant. I should also note that relatively more attention than usual is given here to a definition of terms, and more space to a discursive type of argumentation. As for terminology, I have endeavored to explain in some detail even standard terms (e.g., verbal aspect or tense): my concern is not so much for nomenclature as for the underlying conceptual structure, for which after all the terms serve but as a label. As for argumentation, I have sought to communicate some of the heuristic function of grammatical research, where other grammars tend to offer a more deictic presentation of rules and data: this is partly because of the novelty of some of the conclusions, and partly because it seems pedagogically instructive to carry the students through a given line of grammatical reasoning rather than just presenting them with the resulting conclusions. My personal experience, and that of my students, in using various versions of this grammar in my own Akkadian classes has been very positive, and if circumstances will warrant it, it may be desirable to publish in the future a workbook which would include the exercises, drills and other instructional aids I have been using in my classes in support of this grammar.

(8) While I have kept formal linguistic notation to a minimum, the degree of substantive formalization may appear excessively algebraic to some – see, for instance, the presentation of the verbal patterns, where I have taken the concept of matrix to its logical consequences. The major argument in defense of my choice is the one already proposed, namely that this approach seemed best suited to arrive at a rigorous definition of the structural system of the language. But there is a secondary argument, which has in fact influenced my thinking even though there is no overt trace of it in this work. As conceived, my approach lends itself to the development of programming rules for the purposes of an *electronic grammar of Akkadian*, i.e., a set of programs which interpret the textual data on the one hand, and

can generate, on the other, specific forms in response to stated parameters. I have in fact tested this possibility with some preliminary programs which parse verbal forms, including those from weak roots, both actively and passively; for these I have used as algorithms the rules formulated in the grammar. Further work along these lines will prove that, far from being just a curiosity, this use of the grammar is effective in testing the consistency of the grammatical system, generating forms in simulation of living speakers, and serving the needs of practical pedagogical use.

A first draft of this grammar was completed in 1970, and some early versions have been circulated to various colleagues and have been used over the years in class instruction. For their comments on specific points I wish to thank the students who have followed my classes (several of whom are credited in the body of the text for their specific contributions). In particular, for their assistance in the final stages of proofreading, I wish to acknowledge the contribution of ROGER B. GOOD, RAJU KUNJUMMEN, DANA M. REEMES, MIKI YOKOYAMA, and especially of CHANG BAE LEE. From among the colleagues who have contributed comments on earlier versions I wish to thank especially JOHN B. CALLENDER +, THORKILD JACOBSEN +, ALAN S. KAYE, WILLIAM L. MORAN and THOMAS G. PENCHOEN. Most particularly it was I. J. GELB + who not only commented on specific points of my text, but also shared with me his keen insights on Akkadian grammar and on the variety of linguistic methods that could be applied to it.

Financial support has been provided by the Research Committee of the Academic Senate of the University of California, Los Angeles, which, through its enlightened and generous policy, has made it possible for me to rely over the years on the sustained assistance of a number of graduate students. Support for the electronic analysis of cuneiform texts, of which this grammar is in some ways an offshoot, has been provided by the National Endowment for the Humanities Grant RO 6291-72-153; by the UCLA Campus Computing Network; and by the Packard Humanities Institute. Support for the publication of this volume has been provided by IIMAS – The International Institute for Mesopotamian Area Studies. To all of these institutions goes my heartfelt gratitude.

This volume is dedicated to two mentors and friends who have followed my personal growth stretching back in time even further than the beginning of my work on the grammar. Over the years, they were unfailing in pointing to the permanence of values, unfailing at the same time in their search for openness to changes in perception – ever a reminder of how the coherence of the journey is inextricably bound with the kaleidoscopic drifting of the landscape.

La dedica a Mons. Luigi Villa riflette in particolare il profondo legame che mi ha associato a lui negli anni della mia prima formazione universitaria e che si è venuto sempre più intensificando pur con le intervenute distanze di tempo e di spazio – un legame che tanto più mi nutre alle radici quanto più meditato è il ripensamento dei valori da lui additati e personificati

TABLE OF CONTENTS

Symbols	xxix
Abbreviations	xxx
References	xxxi
Introduction.....	1
0.1 A historical sketch of Akkadian.....	1
0.2 Babylonian within Akkadian	3
0.3 Textual data.....	4
0.4 Writing and language.....	5
0.5 A structural approach	7
0.6 Synchrony and diachrony.....	9

PHONOLOGY

Part I. The Phonemes

Chapter 1 Phonemic Inventory.....	15
1.1 Phonemics and phonetics	15
1.2 Consonants.....	17
1.3 Vowels.....	19
1.4 Length	19
1.5 Stress	21
1.6 A note on phonetic realizations.....	23
Chapter 2 Distributional Classes.....	24
2.1 Word initial	24
2.2 Word final.....	26
2.3 Word medial	26

2.4	Vocalic clusters	26
2.5	Summary.....	28
2.6	Syllabic structure	28
2.7	A note on syllabic length	29

Part II. Phonological Change

Chapter 3	Types of Phonological Change.....	31
Chapter 4	Free Variation	32
Chapter 5	Excursus on Historical Development.....	34
5.1	Rearrangement of phonemic inventory.....	34
5.2	Rearrangement of phonemic distributional classes.....	36

MORPHOLOGY

Chapter 6	Morphological Processes	43
6.1	Internal inflection	43
6.2	External inflection.....	44
6.3	Word composition.....	45
6.4	Reduplication.....	49
6.5	Survey of boundary types: the word	50

Part I. Internal Inflection

Chapter 7	Interdigitation.....	53
-----------	----------------------	----

Section A. The Root

Chapter 8	Nature of the Root.....	57
8.1	The root as a morpheme	57
8.2	The root as a lexeme.....	59
8.3	"Reality" of the root	59

Chapter 9 Structure of the Root.....	61
9.1 The verbal-(nominal) root	61
9.2 The nominal root: the system of numerals	62
9.3 Incompatibility of the radicals	66
Chapter 10 Historical Excursus on the Unmotivated Noun	69
10.1 Unmotivated nouns: primary nouns and loanwords	69
10.2 Denominative verbs	70
10.3 Historical reality of primary nouns	72
10.4 Remarks on the structure of primary nouns	73
 Section B. Patterns from Strong Triradical Roots	
Chapter 11 Nominal Patterns	77
Chapter 12 Verbal Patterns	79
12.1 Nominal and verbal patterns.....	79
12.2 The system of coordinates.....	80
Chapter 13 Verbal Patterns: Consonantism	82
13.1 The coordinate system and the paradigm	82
13.2 A note on the format of the paradigm.....	84
13.3 A note on terminology.....	84
13.4 A note on compound stems	86
13.5 The case against the "perfect": formal considerations.....	87
Chapter 14 Verbal Patterns: Vocalism	88
14.1 Introductory	88
14.2 First vowel	88
14.3 Last vowel.....	89
14.4 Root vowel.....	90
14.5 General vocalic shift $a > e$	91
14.6 A divergent interpretation of morphemic boundaries.....	92
14.7 Review of non-predictable vocalic elements.....	93
Chapter 15 Historical Excursus on the Vocalism of the Verbal Patterns.....	95
15.1 Original first vowel a of finite forms in the B and N stems	95
15.2 Original morphological value of root vowel.....	96

Chapter 16 Verbal Patterns: Notional Categories	97
16.1 Formal characteristics and notional categories	97
16.2 Verbal and deverbal nouns: nouns of subject and description	98
16.3 Verbal nouns and finite forms	100
16.4 Stems	106
16.5 The case against the “perfect”: notional considerations	108
16.6 A simplified overview of the stem system	112
Chapter 17 The Triradical System as a Whole	114
17.1 Correlations within the matrix	114
17.2 The verbal paradigm	114
17.3 A note on alternative patterns	121
17.4 A note on the permansive	121
17.5 A note on the template used in the paradigm	122
17.6 The complete verbal-deverbal paradigm	123

Section C. Patterns from Strong Quadriradical Roots

Chapter 18 Correlations to Triradical Roots	127
Chapter 19 The Quadriradical System	129
19.1 The two groups of quadriradical roots	129
19.2 An alternative interpretation of Group I	132
19.3 A note on notional categories	132

Part II. External Inflection

Section A. The Noun

Chapter 20 Types of Nominal External Inflection	133
20.1 Denominal affirmatives	133
20.2 States of the noun	134
20.3 Substantives and adjectives	135
20.4 Sequential configuration of elements of external inflection	136
20.5 Derivation and inflection	136
20.6 A note on periphrastic derivation	137

Chapter 21 Denominal Affirmatives.....	139
21.1 Structural considerations.....	139
21.2 Nouns of description.....	140
21.3 Substantives.....	140
21.4 Adjectives.....	142
21.5 Onomastic derivation.....	143
21.6 A note on a possible prefixal affirmative.....	144
Chapter 22 The Inflection of the Normal State.....	145
22.1 The primary system.....	145
22.2 The alleged plural <i>-ānu</i>	148
22.3 Mimation.....	148
22.4 The dual.....	149
22.5 A note on the historical development of the primary system.....	150
22.6 The secondary case system: locative, terminative and gerundive.....	151
22.7 A note on the historical development of the secondary cases.....	153
22.8 Special forms.....	154
Chapter 23 The Inflection of the Construct State.....	156
23.1 Concepts and terms.....	156
23.2 The primary system.....	157
23.3 The dual.....	159
23.4 The secondary case system: locative, terminative and gerundive.....	159
23.5 Construct state in <i>-a(m)</i>	161
23.6 Special forms.....	161
Chapter 24 The Inflection of the Absolute State.....	163
24.1 The inflectional markers.....	163
24.2 Inflection of cardinal numerals.....	163
Chapter 25 The Inflection of the Predicative State.....	165
25.1 The inflectional markers.....	165
25.2 A note on the interpretation of gender/number markers.....	166
25.3 Predicative state and permansive or stative.....	167
25.4 The base.....	168
Chapter 26 Notional Categories.....	169
26.1 Context-free categories: affirmatives.....	169
26.2 Context-free categories: number, gender.....	169

26.3 Context-free categories: secondary cases.....	170
26.4 Context-bound categories: primary cases.....	173

Section B. The Verb

Chapter 27 Inflection for Person, Gender and Number	175
27.1 The basic system.....	175
27.2 Special forms.....	176
Chapter 28 Modal Inflection.....	178
28.1 Introductory	178
28.2 The subjunctive.....	179
28.3 The desiderative	180
28.4 Historical note on the desiderative	183
28.5 The ventive	184
28.6 Asseverative and prohibitive	185
28.7 Summary of the moods.....	187
Chapter 29 Notional Categories.....	188
29.1 Introductory	188
29.2 Reference to subject (person, number, gender).....	189
29.3 Reference to adjunct of motion (ventive)	190
29.4 Definition of syntactical role (subjunctive).....	192
29.5 Attitude of speaker (summons).....	192

Section C. The Pronoun

Chapter 30 Types of Pronominal Inflection.....	195
30.1 Morphological vs. syntactical considerations.....	195
30.2 Limited nominal inflection.....	196
30.3 Inflection with nunation.....	198
Chapter 31 The Personal Pronoun.....	200
31.1 The two sets of bases	200
31.2 Inflection for gender and number	201
31.3 Inflection for case.....	202
31.4 A note on secondary stress with pronominal suffixes.....	205
31.5 The paradigm.....	205

31.6 Special forms.....	208
31.7 The anaphoric pronoun	209
31.8 A note on syntactical distribution.....	210
Chapter 32 Notional Categories.....	212

Section D. Invariables and Recapitulation

Chapter 33 Morphological Invariability and Classes of Invariables	215
33.1 Types of juncture.....	215
33.2 Traces of inflection.....	216
33.3 Vestigial inflection: particles (prepositions and conjunctions)	216
33.4 Occasional inflection: proper names.....	217
33.5 Full invariables: adverbs, enclitics and interjections.....	218
Chapter 34 Recapitulation of Types of External Inflection	219

MORPHOPHONEMICS

Chapter 35 Morphophonemic Alternations.....	223
35.1 Nature of morphophonemic alternations.....	223
35.2 A note on historical development	224
35.3 Regressive and progressive length	225

Part I. Alternations Conditioned by Internal Inflection

Chapter 36 Pattern and Root as Conditioning Factors	229
---	-----

Section A. Alternations Affecting Patterns (Strong Roots)

Chapter 37 Alternation Affecting the Vocalism of the Patterns.....	231
Chapter 38 Alternations Affecting the Consonantism of the Patterns.....	232
38.1 The deverbal pattern MAPRAS.....	232
38.2 The verbal patterns of the perfect and the T(N) stems.....	232
38.3 The N stem.....	234

Section B. Alternations Affecting Roots and Patterns (Weak Roots)

Chapter 39 The Notion of Weak Radical.....	235
39.1 The weak radical as a set of alternating realizations.....	235
39.2 The environment as a discriminant among alternatives.....	236
39.3 A note on geminate roots.....	237
39.4 A note on terminology.....	237
Chapter 40 Patterns from Triradicals with Weak First Radical.....	240
Chapter 41 Patterns from Triradicals First Aleph.....	242
41.1 Derivational rules.....	242
41.2 External inflection of selected forms.....	243
41.3 Systemic deviations.....	244
41.4 Vocalic shift <i>a</i> > <i>e</i>	244
41.5 Lexical deviations.....	245
Chapter 42 Patterns from Triradicals First Nun.....	246
42.1 Derivational rules.....	246
42.2 External inflection of selected forms.....	247
42.3 Systemic deviations.....	248
42.4 Lexical deviations.....	248
Chapter 43 Patterns from Triradicals First Waw.....	249
43.1 Triradical and biradical realizations.....	249
43.2 A historical note on vocalism.....	249
43.3 The triradical system: derivational rules.....	250
43.4 External inflection of selected forms.....	251
43.5 Systemic deviations.....	252
43.6 The biradical subsystem.....	252
43.7 External inflection of selected forms.....	253
Chapter 44 Patterns from Triradicals Middle Weak.....	255
44.1 Derivational rules.....	255
44.2 Systemic deviations in the realization of patterns.....	257
44.3 Systemic deviation in the choice of patterns.....	258
44.4 Lexical deviations and historical remarks.....	258
44.5 External inflection of selected forms.....	258

Chapter 45 Patterns from Triradicals Final Weak.....	260
45.1 Derivational rules.....	260
45.2 External inflection of selected forms.....	261
45.3 Lexical peculiarities.....	263
Chapter 46 Patterns from Triradicals Double Weak.....	264
46.1 Introductory.....	264
46.2 Triradicals first Aleph and final weak (ʔC:).....	264
46.3 Lexical deviations for triradicals first Aleph and final weak.....	265
46.4 Triradicals first Nun and middle weak (N:C).....	266
46.5 Triradicals first Nun and final weak (NC:).....	267
46.6 Triradicals first Waw and middle weak (W:C).....	267
46.7 Triradicals first Waw and final weak (WC:).....	268
46.8 Triradicals middle Aleph and final weak (Cʔ:).....	269
Chapter 47 Patterns from Quadriradicals Single Weak.....	270
47.1 Introductory.....	270
47.2 Quadriradicals middle weak (Group I).....	270
47.3 Quadriradicals final weak (Group II).....	271
Chapter 48 Patterns from Quadriradicals Double Weak.....	272
48.1 Derivational rules.....	272
48.2 Systemic deviations.....	274
48.3 Alternative patterns.....	274

Section C. Paradigms and Correlations in Pattern Formation

Chapter 49 Paradigms from Weak Roots.....	275
49.1 Paradigms from triradicals first Aleph.....	276-277
49.2 Triradicals first Nun.....	278-279
49.3 Triradicals first Waw.....	280-281
49.4 Triradicals middle weak.....	282-283
49.5 Triradicals final weak.....	284-285
49.6 Triradicals first Aleph and final weak.....	286
49.7 Triradicals first Nun and middle weak.....	287
49.8 Triradicals first Nun and final weak.....	288
49.9 Triradicals first Waw and final weak.....	289
49.10 Quadriradicals double weak.....	290

Chapter 50 Correlations in the Realization of Weak Radicals	291
50.1 Introductory	291
50.2 Correlations of realizations by environment.....	291
Chapter 51 Correlations in Pattern Formation	293
51.1 Verbal patterns	293
51.2 Nominal patterns.....	293

Part II. Alternations Conditioned by External Inflection

Chapter 52 Introductory	307
-------------------------------	-----

Section A. Alternations Affecting Phonemes in Contact at Morphemic Boundary

Chapter 53 Alternations Affecting Consonants.....	309
53.1 Introductory	309
53.2 Dental followed by postfixal <i>t</i>	310
53.3 Labial or nasal followed by enclitic <i>m</i>	310
53.4 Dental followed by suffixal <i>k</i> or <i>ʃ</i>	311
53.5 Dental or fricative followed by suffixal <i>ʃ</i>	311
53.6 Postfixal <i>m</i> followed by pronominal suffix	312
Chapter 54 Alternations Affecting Vowels	314

Section B. Alternations Affecting Syllabic Structure (Phonotactics)

Chapter 55 At Morphemic Boundary with Vowel	315
55.1 Apheresis.....	315
55.2 Contraction.....	317
Chapter 56 At Morphemic Boundary with \emptyset	318
56.1 Outside of the construct state.....	318
56.2 The construct state.....	318

SYNTAX

Chapter 57 Minimal Units.....	323
57.1 Syntactical structure.....	323
57.2 Immediate constituents.....	324
57.3 Graphic notation – modern	326
57.4 Graphic notation – ancient	327
57.5 A note on substitution tests.....	328
57.6 A note on syntactical paradigms.....	329
57.7 Major and minor constituents.....	330
57.8 Sentence, clause, phrase	331
57.9 A note on discourse analysis.....	332
Chapter 58 Distributional Classes.....	334
58.1 Limitations on correlation of constituents	334
58.2 The operative factors	335
Chapter 59 Surface and Deep Structure.....	340
59.1 The notions of surface and deep structure.....	340
59.2 Correlations between deep and surface structure.....	341
59.3 Intonation	343
Chapter 60 Excursus on Historical Development.....	345

Part I. Constituent Structure

Chapter 61 Introductory.....	347
Section A. Inflectional Correlations: Government	
Chapter 62 Introductory.....	349
Chapter 63 Subject and Predicate: Discord.....	350
63.1 Subject.....	350
63.2 Predicate.....	350
63.3 Nominal sentence and permansive.....	352

63.4 Verbal and nominal predicates.....	354
63.5 A note on substantives and adjectives	355
63.6 A note on determination and referentiality	355
63.7 A note on the predicative complement	358
Chapter 64 Subject and Predicate: Concord.....	360
Chapter 65 Predicate and Complements.....	362
65.1 Complements and transitivity	362
65.2 Simple complement (“direct object”).....	364
65.3 Indefinite object (“internal accusative”)	365
65.4 Objective clause	366
65.5 Direct speech	366
65.6 A compound complement (“indirect object”)?	367
65.7 Direct object embedded in verbal form	368
Chapter 66 Predicate and Adjuncts	369
66.1 Formal structure.....	369
66.2 Nominal adjunctivation.....	370
66.3 Subordinate adjunctivation.....	374
66.4 Constraints on the use of tenses.....	376
66.5 Coordinate adjunctivation (hendiadys)	377
66.6 Embedded adjunctivation.....	380
66.7 Undifferentiated adjunctivation (paronomastic adjunct).....	382
66.8 Undifferentiated adjunctivation (emphasis)	383
66.9 Emphasis: notional typology	385
66.10 A note on ambiguity.....	389
 Section B. Sequential Correlations: Word Order	
Chapter 67 Absolute Positions	391
67.1 Absolute and relative positions.....	391
67.2 Contact sequences	391
67.3 Sentence (and clause) final.	393
67.4 Sentence initial.....	395
Chapter 68 Relative Positions.....	396

Section C. Semantic Correlations: Feature Analysis

Chapter 69 Syntax and Lexicon	397
Chapter 70 Feature Inventory.....	400
70.1 Nouns: notional categories.....	400
70.2 Formal correlation to verbs: partial restrictions	401
70.3 Formal correlation to verbs: total restrictions.....	402
70.4 Action and condition: notional categories.....	403
70.5 Action and condition: formal criteria	405
70.6 A note on analytical vs. analogical definitions.....	408
70.7 A note on the permansive of transitive fientives.....	409
70.8 Dimension of the action: punctual and durative	411
70.9 Correlations between semantic and morphological criteria	412

Part II. Transformations

Chapter 71 Introductory.....	415
71.1 Concepts and terms.....	415
71.2 A note on the use of transformations.....	416
71.3 Criteria of organization	416

Section A. Individual Constituents

Chapter 72 Introductory.....	419
Chapter 73 Transformations Affecting Process	421
73.1 Interrogative.....	421
73.2 Negative	421
73.3 Potential.....	422
73.4 Unrealizable potential	422
73.5 Causative and factitive	423
Chapter 74 Transformations Affecting Elements Other than Process.....	425
74.1 Passive.....	425
74.2 Imperative and desiderative.....	427
74.3 Performative.....	427

Section B. Nominalization

Chapter 75	Introductory.....	429
75.1	Types of nominalizing transformation.....	429
75.2	Nominalization proper: types of deep structure.....	430
75.3	Nominalization proper: types of surface structure.....	431
Chapter 76	Relative Clauses.....	436
76.1	Attributive and consecutive clauses.....	436
76.2	Government and concord in relative clauses.....	437
Chapter 77	Noun Phrases with Predicate as Head.....	440
77.1	Types 1-3: predicate and subject (subjective genitive).....	440
77.2	Type 4: stative plus adjunct (limitative, superlative, partitive).....	442
77.3	Type 5: intransitive plus adjunct (locative).....	444
77.4	Type 6: transitive plus complement (objective).....	445
Chapter 78	Noun Phrases with Subject as Head.....	446
78.1	Types 7a-9a: subject and predicate (attribution).....	446
78.2	Types 7b-9b: subject and predicate (potential); the case against the so-called "attributive genitive".....	447
78.3	Type 9c: subject and infinitive.....	449
78.4	Types 10-11: subject and adjunct.....	449
78.5	Type 12: subject and complement (possessive).....	451
Chapter 79	Noun Phrases with Complement as Head.....	453
79.1	Type 13a: complement and predicate (potential).....	453
79.2	Type 13b: complement and predicate (infinitive phrase).....	453
79.3	Type 13c: complement and predicate (attributive).....	454
79.4	Type 13d: complement and predicate (subjective).....	455
79.5	Type 14: complement and adjunct (datival).....	455
79.6	Type 15: complement and subject (possessive; agentive).....	456
Chapter 80	Noun Phrases with Adjunct as Head.....	457
80.1	Type 16-18: adjunct and predicate (potential).....	457

Chapter 81 Government and Agreement in Noun Phrases	458
81.1 Head and modifier	458
81.2 Attribution and apposition	458
81.3 Attribution with cardinal numerals as modifiers.....	460
81.4 Anticipatory emphasis	460
81.5 Government with multi-place noun phrases.....	461
Chapter 82 Word Order in Noun Phrases and Clauses	465
82.1 Contact sequences.....	465
82.2 Attributional chains.....	466
82.3 Appositional phrase with determinative pronoun as head.....	467
82.4 Relative order within attributional chains.....	468
82.5 Word order in clauses.....	470
Chapter 83 Review of Nominalization Types	471
83.1 Index by notional categories	471
83.2 Surface ambiguity	471

Section C. Conjoining

Chapter 84 Introductory	473
84.1 Subordination and coordination.....	473
84.2 Reversibility and irreversibility.....	474
Chapter 85 Reversible Sequences	476
85.1 Surface reversibility: disjunctives.....	476
85.2 Deep reversibility: cumulatives and adversatives	477
Chapter 86 Irreversible Sequences.....	478
86.1 Introductory	478
86.2 Conjunction before first sentence: conditionals	478
86.3 Conjunction after the first predicate: virtual subordination	479

Section D. Deletion

Chapter 87 Introductory	483
-------------------------------	-----

Chapter 88 Sentence Level.....	485
88.1 Subject.....	485
88.2 Complement.....	486
88.3 Predicate.....	486
Chapter 89 Transform Level.....	488
89.1 Object deletion with causatives	488
89.2 Agentive deletion with passives	488
89.3 Subject, object or predicate deletion with nominalization	488
89.4 Pronoun deletion with attributive clauses	489
89.5 Constituent deletion with conjoined sentences and phrases.....	491
89.6 Particle deletion with conjoined sentences	493
89.7 Preposition deletion within nominalization	494
89.8 Sentence deletion with subordinate clauses: oath formulae.....	494
Glossary of Grammatical Terms	497
Texts Cited.....	501
Index of Akkadian Words.....	503
Subject Index.....	505

SYMBOLS

- C any consonant (upper case letters stand for sets of alternating realizations)
- V any vowel
- I *i/a*, see below, 14.2
- ʔ ʔ/:/∅, see below, 41.1 ← upper case notation for aleph
- N n/:/∅, see below, 42.1 ℰ upper case ~ "ayn"
- W w/ʔ/:/∅, see below, 43.3
- / root vowel u/a
- \ root vowel i/a
- : upper case notation for length (subsuming set of realizations)
- ⌢ length expressed segmentally (and referring to the phoneme that precedes)
- ⌣ length expressed segmentally (and referring to the phoneme that follows)
- length expressed segmentally (and referring to the phoneme that precedes)
- # word boundary
- { } morphemic transcription (when explicitly marked)
- // phonemic transcription (when explicitly marked)
- | | equivalent of [] for graphemic, sign by sign transliteration
- [] (1) *graphemically*: sign by sign transliteration; (2) *palaeographically*: a break in the original text; (3) *morphemically*: form not attested. – Generally, the symbol is omitted in case one, since sign by sign transliteration is normally apparent from the context. When an explicit notation is needed, I use in this grammar the symbol | |.
- * non existence of a given form (given after the asterisk), whether the form is reconstructed or it is structurally excluded
- (1) *graphemically*: sign boundary in sign by sign transliteration; (2) *morphemically*: morpheme boundary (also given as +); (3) *occurring alone in a cell of a chart or diagram*: absence of a given phenomenon
- + (1) *within words*: morpheme boundary (also given as -); (2) *occurring alone in a cell of a chart or diagram*: presence of a given phenomenon
- ~ (1) alternative realization (normally understood in the sense that something can be rewritten as something else, see for example below, 41.3); (2) correlation of forms, e.g., when a form is derived from another (see, e.g., 10.2)
- >, < (1) *in historical reconstructions*: direction of change; (2) *in syntax*: direction of transformation from kernel sentence to transform

ABBREVIATIONS

acc	accusative	N(tn)	N(tn) stem
B(tn)	B(tn) stem	NA	Neo-Assyrian
cf.	compare	NB	Neo-Babylonian
cm	common	nmb	number
cnst	construct	nom	nominative
cnstrnt	construent	nrm	normal
D(tn)	D(tn) stem	OA	Old Assyrian
dev.	deviation	OAKk	Old Akkadian
DN	divine name	OB	Old Babylonian
encl.	enclitic	part.	participle
ex.	example	perf.	perfect
fem	feminine	pers.	person
fm	feminine	PN	personal name
gen	genitive	pres.	present
gend.	gender	pret.	preterite
GN	geographical name	prtcpl	participle
gnd	gender	s.v.	sub voce
Imp	imperative	SB	Standard Babylonian
Inf	infinitive	sec.	secondary
LB	Late Babylonian	Š(tn)	Š(tn) stem
masc	masculine	vadj	verbal adjective
MB	Middle Babylonian	wr.	written, writing
ms	masculine	WSem	West Semitic

REFERENCES

Standard abbreviations for Assyriological series and journals are those used in the *Chicago Assyrian Dictionary (CAD)* and the *Akkadisches Handwörterbuch (AHw)*, and are not repeated here; they are used in the grammar especially for textual citations. Here one will find the references to other publications cited in abbreviated form in this grammar; they pertain to specific points raised in the grammatical discussion. It must be stressed that these references are very selective since they were chosen to serve only the ad hoc needs of the argumentation. Hence, this must in no way be regarded as a regular bibliography. Such a bibliography will be found instead, as already explained in the preface, in a companion volume to be published separately at a later date under the title, *A Critical Review of Akkadian Grammatical Studies*.

ARO, J.

- 1961 *Die akkadischen Infinitivkonstruktionen*. "Studia Orientalia," 20, Helsinki.
- 1963 "Präpositionale Verbindungen als Bestimmungen des Nomens im Akkadischen," *Or.* NS 32, 395-406.
- 1964 *Die Vokalisierung des Grundstammes im Semitischen Verbum*. "Studia Orientalia," 31, Helsinki.

BUCCELLATI, G.

- 1972 "On The Use of the Akkadian Infinitive after *ša* or Construct State," *JSS* 17, 1-29.
- 1976 "On the 'Attributive' Genitive in Akkadian," *Afroasiatic Linguistics* 3, 19-27.
- 1976 "The Case Against the Alleged Akkadian Plural Morpheme *-ānu*," *Afroasiatic Linguistics* 3, 28-30.
- 1988 "The State of the 'Stative'," in Y. L. Arbeitman (ed.), *Fucus. A Semitic/Afrasian Gathering in Remembrance of Albert Ehrman*, "Current Issues in Linguistic Theory," 58. Amsterdam, 153-189.
- 1990 "On Poetry - Theirs and Ours," in T. Abusch, J. Huehnergard, P. Steinkeller (eds.), *Lingering over Words: Studies in Ancient Near Eastern Literature in Honor of William L. Moran*. "Harvard Semitic Studies" 37. Atlanta, 105-134.

CASTELLINO, G.

- 1962 *The Akkadian Personal Pronouns and Verbal System in the Light of Semitic and Hamitic*, Leiden. (Part One of the volume had already been published in *MIO* 5, 1957, 185-218.)

DIĀKONOFF, I. M.

- 1991-92 *Proto-Afrasian and Old Akkadian. A Study in Historical Phonetics*. Princeton: Institute for Semitic Studies.

EDZARD, D. O.

- 1978 "Zu den altbabylonischen Präpositionen *itti* und *gadum*," B. HRUŠKA and G. KOMORÓCZY (eds.), *Festschrift Lubor Matouš I*, Budapest, 69-89.

FABER, A.

- 1985 "Akkadian Evidence for Proto-Semitic Affricates," *JCS* 37, 101-7.

FLEISCH, H.

- 1966 "Phrase relative en Accadien," *Mélanges de l'Université de St. Joseph* 42, 347-84.

GEERS, F. W.

- 1965 "The Treatment of Emphatics in Akkadian," *JNES* 4, 65-67.

GELB, I. J.

- 1960 "The Origin of the West Semitic *qatala* morpheme," *Symbolae Linguisticae in Honorem Georgii Kurylowicz*, Wrocław, 72-80.
 1961 *Old Akkadian Writing and Grammar*, *MAD* 2, Chicago, 2nd edition.
 1969 *Sequential Reconstruction of Proto-Akkadian*. "Assyriological Studies," 18, Chicago.
 1970 "Comments on the Akkadian Syllabary," *Or.* N.S. 39, 516-46.

GOETZE, A.

- 1946 "Sequence of Two Short Syllables in Akkadian," *Or.* N.S. 15, 233-37.

GOODNICK-WESTENHOLZ, J.

- 1971 *Some Aspects of Old Babylonian Syntax as Found in the Letters of the Period*, Ph.D. Dissertation: University of Chicago.

HEIMPEL, W. and G. GUIDI

- 1969 "Der Koinzidenzfall im Akkadischen," *XVII Deutscher Orientalistentag vom 21. bis 27. Juli 1968 in Würzburg*, *ZDMG Suppl.* 1/1, 148-52.

HETZRON, R.

- 1969 "The Evidence for Perfect **yaqtul* and Jussive **yaqt'ul* in Proto-Semitic," *JSS* 14, 1-21.

HUEHNERGARD, J.

- 1986 "On the Verbless Clause in Akkadian," *ZA* 76, 218-49.
- 1987 "'Stative,' Predicative Form, Pseudo-Verb," *JNES* 47, 215-32.

JACOBSEN, Th.

- 1960 "*Ittallak niāti*," *JNES* 19, 101-116.
- 1963 "The Akkadian Ablative Accusative," *JNES* 22, 18-29.

KAHN, G.

- 1988 *Studies in Semitic Syntax*, "London Oriental Series," 38, Oxford.

KIENAST, B.

- 1957 "Verbformen mit Reduplikation im Akkadischen," *Or.* N.S. 26, 44-50.
- 1961 "Weiteres zum R-Stamm des Akkadischen," *JCS* 15, 59-61.
- 1963 "Das System der zweiradikaligen Verben im Akkadischen," *ZA* 55, 138-55.

KNUDSEN, E. E.

- 1961 "Cases of Free Variants in the Akkadian q phoneme," *JCS* 15, 84-90.
- 1969 "Spirantization of Velars in Akkadian," in W. Röllig (ed.), *Lišān miḥurti: Festschrift Von Soden*, Neukirchen, 147-56.

KRAUS, F. R.

- 1987 *Sonderformen Akkadischer Parataxe: Die Koppelungen*, "Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen," Afd. Letterkunde, N.R. 50,1, Amsterdam.

LANDSBERGER, B.

- 1929 "Prinzipienfragen der semitischen, speziell der hebräischen Grammatik," *OLZ* 29, 967-76.

LEONG, T. F.

- 1994 *Tense, Mood and Aspect in Old Babylonian*, Ph. D. Dissertation, Los Angeles: UCLA.

MALONEY, J. F.

- 1981 *The T-Perfect in the Akkadian of Old-Babylonian Letters, with a Supplement on Verbal Usage in the Code of Hammurapi and the Laws of Eshnunna*, Ph. D. Dissertation, Cambridge: Harvard University.

MATOUŠ, L. and K. PETRACEK

- 1956 "Beiträge zur akkadischen Grammatik: I. Die Liquiden in ihrem Verhältnis zum Vokal im Assyrischen," *Ar. Or.* 24, 1-14.

REINER, E.

- 1964 "The Phonological Interpretation of a Subsystem in the Akkadian Syl-labary," *Studies Presented to A. Leo Oppenheim*, Chicago, 167-80.
 1966 *A Linguistic Analysis of Akkadian*. "Janua Linguarum, Series Practica," 21, The Hague.

ROWTON, M. B.

- 1962 "The Use of the Permansive in Classic Babylonian," *JNES* 21, 233-303.

SPEISER, E. A.

- 1952 "The 'Élative' in West-Semitic and Akkadian," *JCS* 6, 81-92 (= *Oriental and Biblical Studies*, Philadelphia 1967, 465-93).
 1953 "The Terminative-Adverbial in Canaanite-Ugaritic and Akkadian," *Eretz Israel* 3, 63-66 (= *IEJ* 4, 1954, 108-115 = *Oriental and Biblical Studies*, Philadelphia 1967, 494-505.).

STAMM, J. J.

- 1939 *Die akkadische Namengebung*, MVAG 44, Leipzig; reprinted Darmstadt 1968.

UNGNAD, A.

- 1903-4 "Zur Syntax der Gesetze Hammurabis," *ZA* 17, 353-378; 18, 1-67.
 1906 *Babylonisch-Assyrische Grammatik*, München (1926², 1949³).

VEENHOF, K. R.

- 1986 "Two Akkadian Auxiliary Verbs. *Leʾūm* 'to be able' and *muʾāʾum* 'to want'," H. L. J. Vanstiphout et al. (eds.), *Scripta Signa Vocis. Studies Presented to J. H. Hospers*, Groningen, 235-51.

VON SODEN, W.

- 1932-33 "Der hymnisch-epische Dialekt des Akkadischen," *ZA* 40, 163-227; 41, 90-183, 236.
 1948 "Vokalfärbungen im Akkadischen," *JCS* 2, 291-303.
 1952 *Grundriss der akkadischen Grammatik*. "Analecta Orientalia" 33. Roma. 2nd edition 1969 ("An. Or." 33/47).
 1960 "Status Rectus-Formen vor dem Genitiv im Akkadischen und die sogenannte uneigentlich Annexion im Arabischen," *JNES* 19, 163-71.
 1968 "Die Spirantisierung von Verschlusslauten im Akkadischen. Ein Zwischenbericht," *JNES* 27, 214-220.

INTRODUCTION

0.1 A historical sketch of Akkadian

The schematic maps reproduced on the following page provide a brief visual synopsis of the development of Akkadian and of the main dialectal classifications within it. "Akkadian" is the term used to cover the entire span of time from the middle of the third millennium to the time of Christ. The oldest period is known as "Old Akkadian": it is the language spoken under the kings of the Sargonic dynasty, and it is very closely related to the language spoken at Ebla, which several scholars consider a form of Old Akkadian.

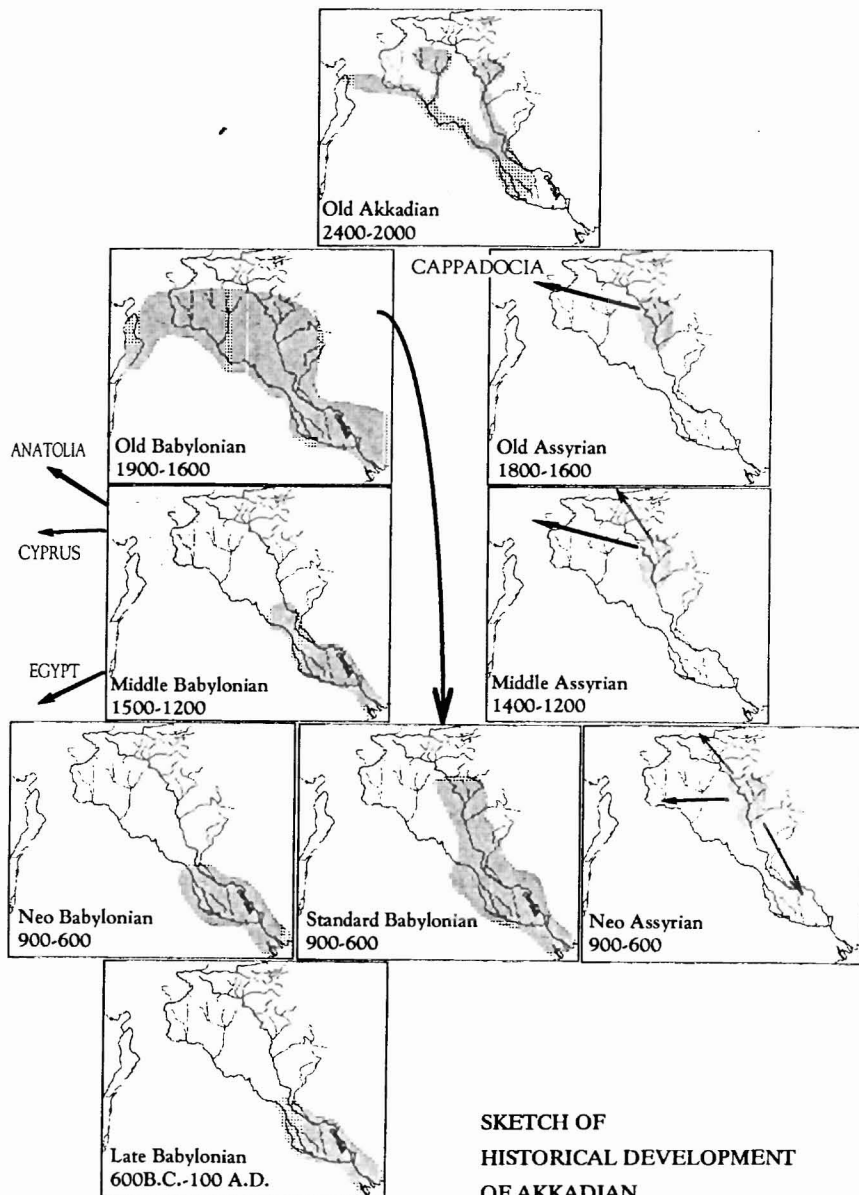
The period around 2000 B.C. marks a sharp break in the linguistic tradition of Mesopotamia. This is especially evidenced by the emergence of two clearly differentiated dialects – Assyrian in the North and Babylonian in the South, in the West and at times also in the North. Old Assyrian is perhaps more closely related to Old Akkadian, although there is also a definite continuity between Old Akkadian and Old Babylonian. From now on, the two main strands run a parallel course, both divided in three parallel periods, identified respectively as Old, Middle and Neo-. Throughout its development, Assyrian remained more clearly restricted within well defined geographical confines: the triangle formed by the Tigris, the lower Zab and the Zagros mountains. Even the Old Assyrian texts found in Cappadocia, while outside this area in geographical terms, belong squarely within it in linguistic terms, since they were written by merchants who were only temporarily absent from their homeland. Babylonian, on the other hand, is a much more cosmopolitan language, being spoken over a much wider area, especially in the Old Babylonian period, and being used also by the Assyrians as a cultural language. It is remarkable to note, in the light of such a widespread diffusion, how relatively minor the internal variations are within Old Babylonian itself.

At the time of Middle Babylonian, a version of Akkadian is also used in the West; many of the texts were found in the Egyptian capital known by its modern name of Amarna: it is a poorly written type of Akkadian, which reflects inadequate training of non-Akkadian speaking scribes, especially in texts written in the capitals of petty local kingdoms in Syria.

Standard Babylonian is the term used for a revival of some aspects of Old Babylonian in the literary texts of the Assyrian empire. Many of the major works of lit-

erature, such as Gilgamesh or the Enuma Elish, and the political texts known as royal inscriptions, are written in this form of Akkadian, a revival of what was perceived as the classical form of the language.

Late Babylonian, on the other hand, is the language written at a time when Akkadian was no longer a spoken language, after it had been replaced by Aramaic.



0.2 Babylonian within Akkadian

As indicated in the title of this grammar, we will limit the scope of our inquiry to Babylonian. I use the generic term “Babylonian” to refer essentially to Old Babylonian and its survivals in other Babylonian dialects of later periods, in particular Standard Babylonian. Either Old Babylonian as such, or Babylonian in the extended meaning, is generally viewed as the classical dialect of Akkadian.¹ This is partly due to the impact of extra-linguistic considerations, such as the cultural significance of the textual output of that period, and partly to the very fact that the archaizing imitations of Old Babylonian in the later periods attest to a certain normative character, or at least a certain linguistic influence of the dialect as felt even in antiquity. While such a meaning of the term “Babylonian” taken to refer to common strands in a continuous linguistic development is in common practice, its use in the present context requires some explanation.

I should stress in the first place that it is not my goal to produce a reference grammar of Old Babylonian or, even less, of “Babylonian” in the broader sense of the term – meaning by this a grammar that includes an exhaustive philological documentation of the textual corpus which underlies the linguistic analysis.² The examples provided are meant to illustrate the linguistic understanding of given phenomena, not to document the spread of their chronological or geographical range. In practice, I will generally choose Old Babylonian examples in the first place, and Middle or Standard Babylonian examples either in addition to Old Babylonian examples, or in place of them whenever they are either the only or the better ones available.

Since the term “Babylonian” does not refer to a dialect spoken over a restricted period of time, how can it properly be the object of a synchronic, structural

¹ Rowton, e.g., uses the term “classic” Babylonian to refer to just such a concept, see ROWTON 1962 “Permansive”, p. 234.

² I have undertaken a different effort along these lines, namely an electronic analysis of cuneiform texts, from a graphemic, morphological and syntactical point of view. This project originated in 1968 with one of the first major grants from the National Endowment for the Humanities aimed at developing the application of electronic data processing and analysis to textual corpora. It is still active, and it is ultimately meant to provide a categorized rendition of various corpora, where a vast documentary body of data can be scanned electronically for pertinent linguistic phenomena – the closest equivalent to a “living” informant for a “dead” language. A few volumes and disks have appeared, and others on graphemics, morphemics and syntax are in different stages of preparation. For a recent status report on the project see G. BUCCELLATI, “Cybernetica Mesopotamica,” in E. M. COOK (ed.), *Sopher Mahir: Northwest Semitic Studies presented to Stanislav Segert*, (= *Maarav*, 5-6), 1990, pp. 23-32. – I will refer occasionally to a sample corpus of 219 letters from the royal chancery of Babylon under Hammurapi and his successors. In its current form, this data base includes 13,274 words as text occurrences and 2,594 words as lexical items.

analysis? Why not limit the scope of the research more specifically to "Old" Babylonian? In my understanding, the term "Babylonian" refers to a linguistic system which includes *kat'exochēn* the dialects of the Old Babylonian period, but also, in addition, its survivals in later periods. The wide chronological span which subsumes data here treated as synchronic may be surprising. But, as I will stress presently (0.6), "synchrony" does not mean "contemporaneity"; rather, it refers to the essential need for the component elements of a system to co-function in structurally defined ways, if that system is to retain its identity. In point of fact, even the Old Babylonian "dialect" of the Old Babylonian period is not a synchronic monolith, because significant dialectal variations obtain for a period of some four centuries over a region that spans from Southwestern Iran to Western Syria. No effort is made here to differentiate systematically between these various dialects and sub-dialects, precisely because it is assumed that Babylonian as such represents a coherent linguistic system of its own.

In practice, it may be noted, the very term "Akkadian" is often equated with the notion of Babylonian that I have just outlined, partly because of the notion that Old Babylonian and its survivals represent the classical stage of the language, as mentioned above. When a typical Akkadian form is cited in the literature, it is normally the Old or Standard Babylonian form, to which divergent forms may be contrasted from Old Akkadian, Assyrian or Neo-Babylonian: emblematic in this respect is the practice followed in the two major Akkadian dictionaries, in which the entry words are generally given in the Old Babylonian form in *AHW* and in the Standard Babylonian form in *CAD*. In this grammar, too, I will generally speak of "Akkadian" when the phenomena envisaged apply across the board.

0.3 Textual data

From the point of view of the relationship between spoken and written language, we may perhaps best distinguish three levels in the textual tradition. (A) Letters are the texts which most closely represent the spoken language of the day. They were dictated to a scribe, and retain much of the flavor of direct speech, although even the letters are filtered through the routine of scribal writing habits. (B) The literary texts in a broad sense contain a more reflexive approach to the written medium: the language is more refined, sophisticated, cultured, and hence less closely linked to normal speech. (C) The administrative and scientific texts (e.g., contracts or rituals) are highly formulaic in nature, and thus one more degree removed from actual speech. Like all forms, they developed a style which, although responsive to the rules of grammar, is nevertheless more static, conservative and rigid.

From the point of view of the scribes, we may also distinguish three major types. (A) Scribes of the royal chancery were responsible for political texts (normally in the form of display inscriptions), literary and scientific texts kept in the royal libraries, diplomatic correspondence, treaties and administrative texts. (B) Scribes of the temple schools were responsible for religious texts used in the cult (e.g., rituals, hymns, incantations), literary and scientific texts, and administrative texts. (C) Private scribes handled almost exclusively letters and administrative matters.

From the point of view of form, the typology is much too rich for even a brief overview. Only two points may be mentioned by way of example. Poetic texts are numerous, and while the rules of metric control are not well understood, there can be little doubt that a real distinction obtained between normal discourse (prose) and one which is more highly channeled (poetry). The other example is the so-called scientific literature, which is characterized by the presence of an "if" clause: a case is stated in the conditional form, and its consequence, or resolution, is stated as the main sentence; this simple stylistic device allows for an easy flow of the argumentation, which is the hallmark of all scientific reasoning.

The content of the textual tradition is also extremely rich and complex, and need not occupy us here, since its bearing on a linguistic description of Akkadian is more tenuous.

The rules and exemplification used in this grammar are of a sufficiently generalized import that they may be taken to apply to the broad range of texts mentioned above, exclusive primarily of poetry.

0.4 Writing and language

Akkadian is a dead language in the precise sense that no living speaker exists today or has existed since the time when modern analysis of this particular language started in the last century. Our knowledge of it is not based on living informants, but has rather been derived almost entirely through the medium of written sources (the only exception being that some of our information, particularly with regard to phonology, has been obtained inferentially from parallels with "living" languages). The writing system itself was meant to convey the language in its full reality, but it remains an opaque medium, which cannot be taken at face value. This is true of many other systems, such as the one used for English, which can hardly be called a transparent medium. Not that the English writing system is inadequate: as a system it is adequate, because it renders the language fully and coherently. But there are only a few one-to-one correspondences between the graphic symbols and the sounds of the language, and as a result a correct reading requires the application of a great number of rules. Akkadian presents similar dif-

faculties, though for different reasons. The question is: how is it possible to discover such rules for Akkadian if the lack of living informants prevents an independent control of the written evidence? The answer is twofold.

In the first place, internal criticism can show both inconsistencies and regularities in the writing system, which may allow a reasonably good insight into the real significance of certain graphic notations. For instance, the *same* Akkadian word may be written differently as *ip-pa-ar-ra-as* and *i-pa-ra-as*. This could be taken to mean that Akkadian has long and simple consonants in free variation: but such a conclusion is ruled out by various considerations (not to be given here) of a phonological and morphological nature. The better conclusion is that consonantal length, though present and contrastive in the language, may or may not be represented in the writing. When not represented graphically, it has to be read into the text through the knowledge of the phonological and morphological structure of the language. In the case given above, both forms should be read *ipparras*.³

The second most effective guide in the effort at attaining to the language behind the writing, is the comparison with living languages which are related to Akkadian, namely the various Semitic languages spoken today chiefly in Southwestern Asia and North Africa. Comparative considerations are especially important in phonological matters, since no inference can be made as to articulation on the basis of an internal analysis of the script and the textual data. Clearly, our description of the phonemic inventory cannot be done purely on the basis of the cuneiform material, but presupposes a comparative and historical approach as an indispensable prerequisite. For example, the reading of 𒀭 𒍪 as *a-ab*, and its interpretation as /ʔab/ "father of" is based on the correlation with the word ʔab "father (of)," in Arabic, Hebrew, etc., and on the observation that such reading and meaning fits equally well all other occurrences of 𒀭 𒍪 (where these two signs can be isolated as constituting a single word). Note that while the *meaning* "father of" could also be obtained from the context or from an ancient translation in a non-Semitic language, it is only the correlation with known Semitic languages which allows a *phonological* analysis establishing the reading ʔab and more precisely the articulatory nature of ʔ as glottal stop, *a* as back low vowel, *b* as labial voiced stop. In addition, occasional transcriptions of isolated Akkadian words in other ancient scripts (e.g., Greek) are also of some value for a thorough reconstruction of the phonological structure of Akkadian.

In some ways, then, it is possible to reach behind the writing system and perceive linguistic reality as expressed by graphic symbols. Yet the fact remains that

³ In my understanding, graphemics is the study of the systematic correlations between the phonemic dimension of a language and its graphic embodiment. As such it extends beyond the identification of specific values for given signs, and it includes especially rules of correlation such as the one just stated above. In this grammar I refrain altogether from a discussion of graphemics, which I have treated most recently in "The Ebla Electronic Corpus: Graphemic Analysis," in *Actes du Colloque International de l'Histoire et l'Archéologie de la Mohafazat d'Idlib* = AAAS 40 (1990) 8-26.

our understanding of the language is largely based on a set of assumptions regarding the nature of the Akkadian writing system. In this grammar we will dispense with any comparative and historical argumentation aimed at showing the validity of such assumptions; they are simply taken for granted. It may be noted that, in this respect, there is general agreement among scholars, and that nothing in this grammar will be introduced that is based on a controversial understanding of the writing phenomena. It should also be stressed that while there is reasonable certainty as to the accuracy of phonemic, grammatical and semantic analysis, the details of articulatory phonetics are only approximate, and may in some cases be considerably at variance with actual pronunciation in ancient times. Thus, the classification of phonemes which follows is based on articulatory considerations obviously not because articulation can be verified empirically, but simply because it is assumed on distributional and comparative grounds.

In this grammar we will follow Gelb in using the term “transliteration” for a sign by sign (or a graphemic) rendering of the cuneiform script, and the term “transcription” for a phonemic rendering of individual words. Transliteration will normally be represented graphically by syllables in italics linked by a hyphen, e.g., *i-pa-ra-as*, transcription by a connected word in italics, sometimes enclosed between virgules, e.g. *iparras* or */iparras/*.

0.5 A structural approach

The description of Babylonian given here aims at providing an understanding of the structure of the language as such, and not only a key to the reading of texts. In other words, my goal is to provide not a phrasebook with ‘how-to’ explanations, but rather a description of the language viewed as a system, through which one can in turn shed light on individual texts. At first, this may seem like needless acrobatics in which one indulges at one’s own peril instead of adhering closely to the texts. But I hope to show that there is merit to this approach, and that far from leading us into a rarefied and sterile atmosphere of self-serving abstruseness, it increases our real understanding of the expressive mechanisms – and thus of course of the texts which are our only conduit of expression and meaning.

In the first place, any language has an internal structure of its own which is worthy of independent study. There is an almost aesthetic quality to an appreciation of the architectural qualities of a linguistic system, which is truly a living organism. And if we try to do justice to the language as an autonomous entity, we can “learn” it more fully and in greater depth: we will then avoid two pitfalls which we may call the “straight-jacket” and the “ad hoc” approaches. The straight-jacket method is one which presupposes a language as having some kind of logical priority, and models other languages to conform to it; whether this assumed priority is

attributed to Latin or English, it will in any case do injustice to the language we are trying to study, and suffocate, as it were, its authentic characteristics. The ad hoc method is one which prescind from systematic theory, and explains a language in function of one or another specific text: this approach seems more satisfying at first, but may end up in a morass of unrelated details which seriously lessen our explanatory powers.

The present grammar is structurally oriented in the specific sense that it looks at Babylonian on its own terms, as an autonomous entity: our presuppositions are all in function of the language as a living organism, with its own internal constraints, rules and peculiarities. The key procedure, in this method, is to identify what are normally called "distributional classes." These are groups of phenomena which can be shown to have the same functions in different contexts: for instance a preposition will be defined as such not because it can be translated with an English preposition, but because it occurs regularly in the language with a certain class of words and not another. For instance, the two words */ina imur/* cannot co-occur in this sequence in Akkadian (just as their counterpart "in he saw" cannot co-occur in English), whereas the two words */ina bitim/* do co-occur (just as their English counterpart "in the house"). We can say, then, that words with the same distribution as */ina/* belong to one and the same class, namely a class which admits co-occurrence with words like */bitim/* but not co-occurrence with words like */imur/*. Words are thus "distributed" into well specified formal "classes," that is, they fall into distributional classes which can be so identified in formal terms.

A correlative notion to distributional classes is that of mutual exclusivity among such classes. In terms of the above example we can say that */ina/* and */imur/* are mutually exclusive because one is not found to replace the other in any known context. Wherever we find */ina/* or another word belonging to the same class, we cannot find */imur/* or another word of the same class: thus the sequence */imur bitim/* is impossible in the language.

A structural approach is especially important in the case of "dead" languages, i.e., languages for whom there are no living informants – like Akkadian. Here we can only rely on the internal consistency of the linguistic phenomena observed, without the benefit of independent verification in answer to specific questions. When we say that something is impossible in the language, we mean to say that it is inconsistent with everything that has been observed in the known texts. The validity of such a statement depends not only on the size of the textual sample on which it is based, but also on the stringency of the structural analysis: the more accurate we are in our understanding of structural affinities and incompatibilities, the safer our conclusions will be with regard to the possibility or impossibility of given linguistic phenomena.

A criticism which has been raised against attempts such as mine is that one merely restates the obvious in different terms. In one respect, this may indeed be

expected to be the case. Ironically, it may be said that the sum total of all possible sentences in a language *is* a grammar, too – but so unwieldy as to be meaningless. A “re-statement,” then, is useful because it accounts more effectively for classes of phenomena, or, alternatively, because it articulates in explicit terms correlations which are present only implicitly in the data. The value of a grammar is to be found in the degree of simplicity and comprehensiveness of such re-statement.

Another criticism is that new terms and new formalizations are considered as needlessly complex and abstract, as if they were adopted to make up for an actual lack of understanding. For my part, I have seriously striven to introduce only such elements of either terminology or formalization as are truly needed for the definition of genuine structural relationships. In its pejorative connotation, “jargon” is to language what “bureaucracy” is to society – a parasitic superstructure which suffocates the organism it is supposed to serve. Such jargon I try to avoid. But the reverse is also true. Since there is a tendency to attribute substantive, rather than nominal, valence to labels, it is important that labels be as close as possible to the reality which they are meant to define. Such jargon I do introduce. For these reasons, I pay more attention than one might expect to a justification of terminology and formalizations. I obviously do not mean to preempt the work of general linguists who can explain such matters better and more fully. I only wish to show that there is substance to such terms and schemes as I have chosen. This seems especially useful since at times a certain amount of lip service is paid to jargon, in such a way that, for instance, “phoneme” may stand for nothing more than a “letter,” or “grapheme” for “cuneiform sign.”

While I follow a strict structural method in the grammatical presentation of the language, room can be made in the practice of teaching for a more inductive approach. What matters is to be able to keep the levels of analysis separate: in other words, when studying the language as a language, we must be mindful of its internal structure rather than of its empirical embodiment in given textual passages; but in order to read the texts, we can and must use our own intuition, bypassing or short circuiting, whenever useful, theoretical considerations.

0.6 Synchrony and diachrony

Another fundamental concept is the difference between a synchronic and a diachronic description of the language. A diachronic description views the language in its becoming, i.e., as it unfolds through various historical stages: a phenomenon is explained in terms of its chronological antecedents and presuppositions, it is viewed as the result of a set of conditions and in turn as a precondition for further development.

A synchronic description, on the other hand, views the language as a working system, in terms of the logical connections of its component parts, and regardless of how they have come into being through time. Synchrony is not a small slice of temporal development, it is rather a logical system viewed outside of any temporal development.

An analogy may help to explain these concepts more clearly. The assembly chart of any mechanical tool details the interconnections among the constituent parts of the tool in a purely synchronic way, i.e., as a logical system. It ignores the issue of temporal development (i.e., it ignores diachrony) in many different ways: for instance, it ignores the question of how and when the various component pieces were manufactured, who invented them, whether they were all in stock at the time this particular tool was produced and marketed, it even ignores, overtly, the question of which pieces must be mounted first and which last (although this is in fact implied by the diagrammatic position of the lines which show how the pieces go together). Note that all of these issues are of real interest for a fuller understanding of the tool itself: the quality of a given model may well have been influenced by what component parts were already in stock, so that a particular design improvement may have been foregone for the sake of economy – a “historical” fact which might explain a particular structural flaw in our hypothetical mechanical tool. But a structural description of the tool, i.e. its assembly chart, works at other levels of significance and explanation than a historical justification: the user just wants to know how to change a part, and to that end he only needs to know how *all* existing parts fit together.

That is precisely what we will attempt to do in this grammar: we will study the question as to how *all* the known parts of Babylonian fit together, we will try to reconstruct the assembly chart of a real organism as it existed at a given point in time in the past. Note the last comment: we must deal with a specific “model,” as in the case of a tool’s assembly chart, not with an abstract, universal type. And the particular model which we will choose is Babylonian in the sense described above (0.2). It should be clear that our choice to give here a synchronic presentation is in no way to be understood as belittling the value of a historical presentation. A historical, or diachronic, study is fully justified and in fact very important; it is simply that we must keep levels of analysis rigorously distinct, and that here we choose to analyze only the synchronic dimension.

It is important to understand the difference between “synchrony” and “contemporaneity.” I already stressed that synchrony is not a thin slice of diachrony – it is for the same reason that synchrony is not simply a statement about two things which exist at the same point in time. Note how tricky etymology would be in this respect: etymologically, synchrony (Greek “with” + “time”) is in fact identical to contemporaneity (Latin “with” + “time”). But consider the following example, taken from English. The two sentences “he doesn’t” and “he don’t” are indeed

contemporary, since they are both spoken and understood by currently living speakers. But they are not *synchronic*, because they do not co-occur as part of the same speaker's dialect: whoever says "he doesn't" would not say "he don't" (except quoting or imitating another speaker).⁴ We can say that the two sentences, "he doesn't" and "he don't," occupy the same slot in the same distributional class, hence, they are mutually exclusive, and not allowed within the same synchronic system.

The analogy we have just proposed may also serve to illustrate another aspect which was discussed above, namely the concept of a structural approach. The mechanical tool of our analogy is obviously intended to be used for a specific utilitarian purpose. Similarly, one might argue, a language is a tool used to convey a message: hence one expects to have rules of operation (how to speak it or how to read a text) and only secondarily may an interest arise in the "assembly" chart (the structural make-up of the language). After all, most human beings speak one or more languages without any real knowledge of their structure. This is true: it is what is called "linguistic competence," which is different from linguistic theoretical awareness. In the case of a dead language like Akkadian, however, the lack of living informants makes it imperative to develop some degree of linguistic sophistication even in order to obtain a low level understanding of the texts: one cannot profitably use a Berlitz school approach to the study of cuneiform. Language may certainly be viewed as a tool, but an infinitely more delicate and subtle one than a mechanical tool, and a serious knowledge of its operational capabilities requires a real understanding of the "assembly chart," even for utilitarian purposes.

⁴ Of course, the same *physical* speaker might utter both phrases if he speaks, on different occasions or different contexts, both dialects – much as the two phrases "he doesn't" and "il ne fait pas" may be physically uttered by the same (bilingual) speaker, but remain nevertheless portions of two distinct languages, i.e. two distinct synchronic systems.