COLUMBIA UNIVERSITY STUDIES IN

COMPARATIVE LINGUISTICS

EDITED BY

LOUIS H. GRAY

PROFESSOR OF ORIENTAL LANGUAGES
IN COLUMBIA UNIVERSITY

VOLUME I

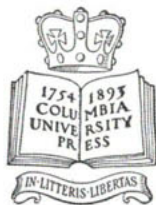INTRODUCTION TO

SEMITIC COMPARATIVE LINGUISTICS

INTRODUCTION TO
SEMITIC COMPARATIVE
LINGUISTICS

BY

LOUIS H. GRAY
PROFESSOR OF ORIENTAL LANGUAGES
IN COLUMBIA UNIVERSITY

To
RICHARD J. H. GOTTHEIL
Teacher, Colleague, Friend
In honour of his seventieth birthday

PREFACE

The purpose of this 'Introduction to Semitic Comparative Linguistics' is defined by its title. It desires neither to supplant nor to supplement existing comparative grammars of Semitic, nor does it seek to be an historical or presentational grammar of any member of that group. I have long felt, however, that the Semitic comparative grammars thus far published are too complicated, and at once too general and detailed, for beginners in this branch of linguistics; and I also believe that a comparative study based primarily upon Hebrew, the Semitic language most familiar to younger students, may aid very materially in a grasp of Semitic linguistics as a whole. For comparison with Hebrew, I have drawn, first of all, upon Arabic, which is not only the Semitic tongue best known next to Hebrew, but also appears by far the most retentive of Proto-Semitic conditions both in phonology and in morphology. What seems strange and arbitrary when Hebrew is studied as an isolated language, becomes natural and almost inevitable when compared with Arabic, Aramaic, Accadian, and other cognate dialects.

Particular attention has been given to selection of examples in illustration of every statement made; and the Bibliography, which seeks to list the principal studies which have appeared since 1875, will, it is hoped, provide references for further research on the part of the student.

While an elementary grammar may well be considered no place for presentation of personal views, I have not refrained from stating them whenever it seemed that they might advance knowledge on the subject, notably in regard to *bəγaðkəφaθ*, *šəwā*, accent, determinants, vocalic alternation, arrangement of noun-bases in logical rather than in traditional order, gender, *'ōθ: 'ēθ*, *'wāw* consecutive,' 'telic' and 'atelic' instead of 'perfect' and 'imperfect', and verbs with geminate medial (§§ 14, 33, 69-85, 91 [cf. 404], 93-7, 99 sqq., 177-90, 211, 347-51, 360 sqq., 409-12 respectively). Even if some or all of these be rejected, their rejection will scarcely impair the practical utility of the volume. Though interpretations be disproved or denied, the basal facts remain.

In great part, this book has been to me an essay in method. Primarily an Indo-Europeanist, I have sought to apply the principles of Indo-European linguistics to Semitics. Nowhere else has linguistic method been so highly developed, so severely tried, or proved so rich in results as in Indo-European; and in these pages I have sought an-

other test of its general validity by applying it to a very important linguistic family which I see no reason to believe connected with Indo-European. The method seems to me to have met this test with equal profit both for Semitic and for Indo-European. Similar procedure with regard to Dravidian and other linguistic families would almost certainly lead to results of scientific value; and a grammar of Aramaic from the comparative point of view appears to me to be among the prime *desiderata* of Semitics.

For help in my work I am indebted to more than one. First of all, to Marcel Cohen of the Ecole des langues orientales and the Ecole pratique des hautes études, who read the original draft of my manuscript, and who gave freely of his time and learning in many pleasant mornings at Viroflay; then to my own teacher Richard Gottheil and to my pupil Dr. Isaac Mendelsohn, to both of whom I owe many suggestions of value; to the Council for Research in the Humanities at this University, who enabled me to visit France in 1929 to work on this book, and who contributed liberal financial support toward its publication; to the Columbia University Press for equal generosity; to Drs. Mendelsohn and Ralph Marcus for reading the proofs; and to my wife, who voluntarily lent her technical training not only to the drudgery of preparing my copy for press, but also to its proof-reading. If at times I have not seen my way clear to follow the counsels of these very true friends, I have differed only after deep and careful consideration. For any possible errors in method, presentation, or results arising from such divergencies, I alone am responsible.

LOUIS H. GRAY

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
JANUARY 4, 1934

CONTENTS

PRINCIPAL ABBREVIATIONS

abs. = absolute

acc. = accusative

Acc. = Accadian

AJSL = *American Journal of Semitic Languages and Literatures*, 1884 sqq.

Arab. = Arabic

Aram. = Aramaic

B = Bergsträsser, *Einführung in die semitischen Sprachen*

BA = *Beiträge zur Assyriologie*, 1890 sqq.

Bib. Aram. = Biblical Aramaic

B-L = Bauer-Leander, *Historische Grammatik der hebräischen Sprache des Alten Testamentes*

Brugmann, *Grundriss* = K. Brugmann, *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen*, 2nd ed., 3 vols. (4 parts), Strasbourg, 1897-1916

BSLP = *Bulletin de la société de linguistique de Paris*, 1871 sqq.

BZ = *Biblische Zeitschrift*, 1903 sqq.

Cohen, *Système* = Cohen, *Le Système verbal sémitique et l'expression du temps*

com. = common

const. = construct

Egypt. = Egyptian

emph. = emphatic

Eth. = Ethiopic

fem. = feminine

G-B = Gesenius, *Hebräische Grammatik . . . verfasst von G. Bergsträsser*

gen. = genitive

GSAI = *Giornale della società asiatica italiana*, 1887 sqq.

Heb. = Hebrew

I-E = Indo-European

impf. = imperfect

impv. = imperative

indic. = indicative

inf. = infinitive

JA = *Journal asiatique*, 1822 sqq.

JAOS = *Journal of the American Oriental Society*, 1849 sqq.

JBL = *Journal of Biblical Literature*, 1881 sqq.

JPOS = Journal of the Palestine Oriental Society, 1920 sqq.
JQR = Jewish Quarterly Review, 1890 sqq.
JRAS = Journal of the Royal Asiatic Society of Great Britain and Ireland, 1834 sqq.
juss. = jussive
KVG = Brockelmann, *Kurzgefasste vergleichende Grammatik der semitischen Sprachen*
Mand. = Mandaean
masc. = masculine
Mesop. = Mesopotamian
Min. = Minaean
Miš. = Mišnāic Hebrew
Mod. = Modern
Mor. = Moroccan
MSLP = Mémoires de la société de linguistique de Paris, 1868 sqq.
nom. = nominative
n. s. = new series
O = O'Leary, *Comparative Grammar of the Semitic Languages*
OLZ = Orientalistische Literaturzeitung, 1898 sqq.
P = Brockelmann, *Précis de linguistique sémitique*
pass. = passive
part. = participle
perf. = perfect
pers. = person
Phoen. = Phoenician
PJAram. = Palestinian Jewish Aramaic
plur. = plural
P-S = Proto-Semitic
Pun. = Punic
REJ = Revue des études juives, 1880 sqq.
SA = South Arabic
Sab. = Sabaean
Sem. = Semitic
sing. = singular
subj. = subjunctive
SWAW = Sitzungsberichte der Wiener Akademie der Wissenschaften, historisch-philosophische Klasse, 1848 sqq.
Syr. = Syriac
Syro-Palest. = Syro-Palestinian
Talm. = Talmudic
Targ. = Targumic

Trip. = Tripolitan

Tun. = Tunisian

Vendryes, *Langage* = J. Vendryes, *Le Langage*, Paris, 1921 (Eng. transl., London and New York, 1925)

VG = Brockelmann, *Grundriss der vergleichenden Grammatik der semitischen Sprachen*

W = Wright, *Lectures on the Comparative Grammar of the Semitic Languages*

Wright, *Grammar* = W. Wright, *A Grammar of the Arabic Language*, 3rd ed. by W. R. Smith and M. J. de Goeje, 2 vols., Cambridge, 1896-8

WZKM = *Wiener Zeitschrift für die Kunde des Morgenlandes*, 1887 sqq.

Z = Zimmern, *Vergleichende Grammatik der semitischen Sprachen*

ZA = *Zeitschrift für Assyriologie*, 1886 sqq.

ZAW = *Zeitschrift für die alttestamentliche Wissenschaft*, 1881 sqq.

ZDMG = *Zeitschrift der deutschen morgenländischen Gesellschaft*, 1847 sqq.

ZS = *Zeitschrift für Semitistik*, 1922 sqq.

* = hypothetical form

⟩ = becomes

⟨ = derived from

TRANSCRIPTION

Only Arabic (with which Ethiopic coincides) and Hebrew (with which Syriac coincides, except for the vowels, recorded separately) are given here; Accadian transcription is self-evident.

I. CONSONANTS

Arabic		Hebrew	
ا	ʾ	א	ʾ
ب	b	ב	b, β
		ג	g, γ
ت	t	ת	t, θ
ث	ṯ		
ج	ǧ		
ح	ḥ	ח	ḥ
خ	ḫ		
د	d	ד	d, δ
ذ	ḏ		
ر	r	ר	r
ز	z	ז	z
س	s	ס	s
		שׂ	ś
ش	š	שׁ	š
ص	ṣ	צ	ṣ
ض	ḍ		
ط	ṭ	ט	ṭ
ظ	ẓ		
ع	ʿ	ע	ʿ
غ	ġ		
ف	f	פ	p, φ
ق	q	ק	q
ك	k	כ	k, χ
ل	l	ל	l
م	m	מ	m
ن	n	נ	n
ه	h	ה	h
ة	ḥ	ה	ḫ
و	w	ו	w
ي	y	י	y

II. Vowels

Arabic		Hebrew		Syriac	
╱	a	⎺	a	r	a
		paθaḥ furt.	ǫ		
١,آ	ā	⎺	â, o	•	ā
		⎺	ǎ		
		⎺	e	⌐ {	e
		⎺	ē		ē
		⎺	ĕ		
		⎺	ə, 0		
⎺	i	{ ⎺, ⎺	i, ī	⌐	ī
ﺳ	ī				
		⎺, ١	ō		
		⎺	ŏ		
⎺	u	{ ⎺, ١	u, ū	⌐	ū
ﻭ	ū				

INTRODUCTION TO SEMITIC
COMPARATIVE LINGUISTICS

THE SEMITIC LINGUISTIC GROUP

§ 1. The Semitic group of languages, like all other linguistic divisions, is characterised by certain regular correspondences in sounds, in inflexions, and, in the main, in syntax between its various members, whereas no such regular correspondences exist between the languages of this group and those of other linguistic families. Resemblances, and even identities, in vocabulary are of minor importance in determining linguistic affinities, since chance coincidences are not unknown, and since words are frequently borrowed by one language, or even by a whole language-group, from another, such loan-words often being so completely assimilated that they share in all subsequent mutations in phonology and morphology which take place in the adopting language or group of languages. None of the 'characteristics' commonly alleged for the Semitic group (or for other groups), e.g. triconsonantal bases, fundamental nature of the consonants as contrasted with the inflexional role of the vowels, etc., really characterises it over against all other groups in the world. Its particular regular correspondences, on the other hand, truly delimit it and contrast it with every other linguistic family.

§ 2. The Semitic languages fall into five major divisions, each with a larger or smaller number of dialects varying in antiquity, geographical extent, and historical, literary, and linguistic importance, to say nothing of the possibility (perhaps even the probability) that some members of the group may have vanished without leaving a trace behind.

§ 3. The usual classification of Semitic is East Semitic and West Semitic, the latter subdivided into (i) North-West and (ii) South-West Semitic.

§ 4. East Semitic is represented solely by Accadian (formerly—and still popularly—called Assyrian, Babylonian, or Assyro-Babylonian) with a rich inscriptional literature from the first half of the 3d millennium to the closing centuries B.C. The first of all the Semitic languages to depart from the Proto-Semitic homeland (§ 13), travelling the greatest distance of them all, passing only through areas inhabited by speakers of non-Semitic language-groups, and making its permanent home among the non-Semitic Sumerians, it underwent changes which make it, despite its antiquity, by no means the most

representative of Proto-Semitic speech. It is divided into the Assyrian and Babylonian dialects, each with the three periods of Old, Middle, and New.

§ 5. North-West Semitic is represented especially by Canaanite and Aramaic. To the Canaanite group belong (a) Old Canaanite glosses and words in Tell-el-Amarna Tablets (15th cent. B.C.), etc.; (β) Phoenician, with many inscriptions, mostly short, from the middle of the 9th cent. B.C. (but chiefly from the 5th cent.), dying out by the 2nd cent. A.D., though continued until the 6th cent. in North Africa by Punic (inscriptions and a few lines in the *Poenulus* of Plautus); (γ) Moabite (Mēša' Inscription of the 9th cent. B.C.), and (δ) Hebrew. The latter is by far the most important member of this group and the only one which has survived as a spoken language to the present day. Old Hebrew, in which the overwhelming part of the Old Testament is composed (the sole exceptions being the Aramaic passages in Gen. xxi, 47, Jer. x, 11, Dan. ii, 4b-vii. 28, Ezra iv, 8-vi. 18, vii, 12-26), was vernacular from the 2nd millennium B.C. (Song of Deborah, Judges v) until about the 4th cent. B.C., the major portion of the Old Testament dating between the 9th and 6th centuries, though Old Hebrew was written artificially as late as 100 A.D. In addition to the documents of the Old Testament, there are a couple of Old Hebrew inscriptions of the 9th and 8th (or 7th) centuries, some shards (9th cent.), seals, coins, weights, etc. Dialects existed (cf. Judges xii, 6), and the Old Testament itself shows traces of dialectic differences, though to what degree is still matter of dispute. On their return from the Exile (536 B.C.), the Jews found Aramaic the prevailing language in Palestine, and this ultimately gained supremacy. Nevertheless, Hebrew did not vanish entirely, but survived to form the basis of Talmudic Hebrew (also called Rabbinical, and even New Hebrew), the language of the Mišnā, and of the Hebrew portions of the Talmūδīm, Midrāšīm, etc., from the 2nd cent. A.D. till about the rise of Islām in the 7th cent. A.D. It then became a learned and religious language (Mediaeval Hebrew) in which much was written; and with the development of Jewish nationalism, the attempt has been made, especially in Palestine, to revive it as a vernacular (Neo-Hebrew, Modern Hebrew). To this group belongs also (ε) the language of the tablets from Ras Shamra, showing close affinities with Old Hebrew and Phoenician, but probably the independent language of this area before the Aramaean invasion in the third millennium B.C. (cf. J. Cantineau, 'La Langue de Ras Shamra,' in *Syria* xiii [1932], 164-9.)

§ 6. Aramaic is divided into Western and Eastern. The former comprises (a) Old Aramaic inscriptions (Hamā and Zinǧīrli, early 8th cent. B.C.; Nabataean, 1st cent. B.C. to 1st cent. A.D.; Palmyrene, 1st cent. B.C. to 3rd cent. A.D.; and Sinaitic, 1st to 4th centuries A.D.); (β) Biblical Aramaic (often incorrectly termed Chaldaean); (γ) an important series of papyri found in Egypt; (δ) Judaeo-Aramaic of the Targūmīm and the Palestinian Talmūδ; (ε) Christian Palestinian Aramaic (5th to 6th centuries A.D.—portions of the Bible and translations from Greek); and (ζ) Samaritan (3rd to 4th centuries A.D.—translation of, and commentary on, the Pentateuch). Formerly the *lingua franca* throughout Palestine, Syria, etc., and the language of Christ, Western Aramaic was supplanted by Arabic in the 9th cent. and it now survives only in and near Ma'lūla in the Anti-Libanus.

§ 7. The presence of Eastern Aramaic is attested in the Accadian area from the 9th cent. B.C. and is common on Accadian dockets in the 7th; in the 5th, it was similarly employed in Babylonia; and it even spread to the Upper Indus, to Cappadocia, and to Western China. Its principal documents are (a) the Judaeo-Aramaic of the Babylonian Talmūδ (*circa* 4th to 6th centuries A.D.); (β) Mandaean (7th to 9th centuries), syntactically the most valuable of all non-Jewish Aramaic dialects since its literature is original, whereas the records of the others are translations; (γ) Syriac (3rd to 14th centuries), spreading from the region of Edessa as far as Persia, but divided in the 5th cent. by politico-ecclesiastical conditions into Jacobite and Nestorian; and possessed of a very rich theological literature and of some inscriptions, the earliest from the 1st cent. A.D.; (δ) Harranian, known only from a few glosses; and (ε) modern dialects spoken in Mesopotamia (Mōṣul, Ṭūr 'Abdīn) and in the Persian area of Urmī.

§ 8. South-West Semitic is composed of North Arabic, South Arabic, and Ethiopic. The first sub-group is earliest known from 'Liḥyānian' (between the 2nd or 1st cent. B.C. and the 4th or 5th cent. A.D.) and Ṭamūdian inscriptions (of wholly uncertain date), and Ṣafāiṭic *graffiti* (probably of the first centuries A.D.). The chief member, however, is Arabic, famous as the language of the Qur'ān (based on the dialect of Mecca) and the vehicle of one of the greatest literatures of all the Orient, first attested by an inscription of A.D. 328 and spreading wherever Muḥammadanism has gone. It was divided into several dialects, none of which has survived, and has, in turn, given rise to a large number, notably Arabian (Hijāz, Najd, Yemen,

Ḥaḍramaut. Daṭina, Oman, Muscat), Iraqian (Baɣdāδ, Mōṣul, Mardin), Syro-Palestinian (Aleppo, Beirut, Damascus, Lebanon; Jerusalem, Syrian desert), Egyptian, Maltese, Libyan and Tripolitan, Tunisian, Algerian (Constantine, Algiers, Oran), Andalusian (8th to 16th centuries), Moroccan, and Ḥassānī (from Mauritania to Timbuktu).

§ 9. South Arabic is represented only by inscriptions (Minaean, Sabaean, Qaṭabānian, and Ḥaḍramautian) ranging, perhaps, from the 8th cent. B.C. to the 6th cent. A.D., and by the modern dialects of Mahrī, Qarawī (or Garwī), and Soqoṭrī.

§ 10. The Ethiopic group represents the last great Semitic migration, probably some centuries before the Christian era, and finds its closest affinities in South Arabic. It is divided into Ethiopic proper (also called Geʻez), first appearing on Aksūmite inscriptions of the 4th cent. A.D. and possessed of a fairly abundant literature (5th to 10th centuries, but artificially preserved as a learned language to the present day), and having as its linguistic successor Tigriña or Tigray (little written except as employed by the officials of the Italian colony of Eritrea); and into Tigrē (without written literature), Amharic (from the 14th cent.; strongly influenced by Cushite), Gafat, Argobba, Ḥararī, and Gurāgē.

§ 11. Semitic seems to be connected with Egyptian and its descendant Coptic (3rd to 17th centuries A.D.), and so, very possibly, with all African languages (Sudanese, Guinean, and Bantu) between the Sahara in the north and the Hottentot-Bushman group in the south; and it likewise appears to be cognate with Hamitic, which comprises the extinct Libyan (also called Numidian; several hundred short inscriptions, chiefly from the Roman period, scattered from Sinai to the Canary Islands) and the modern Berber dialects, as well as with Cushite (Beja, Afar and Saho, Somali, Galla, Agaw, and Sidama). Repeated attempts have been made to demonstrate a kinship between Semitic and Indo-European, but no cogent evidence has thus far been adduced in support of this view.

§ 12. From the material presented by the various Semitic languages and dialects enumerated above one may reconstruct, in great part, an hypothetical Proto-Semitic. The principle here followed is that, as observation shows, language tends to become simplified in the course of history, whence Classical Arabic is generally regarded as the most primitive Semitic speech extant. In reality, however, the problem is not quite so simple, for there is always the possibility, frequently demonstrable evidence, that new forms may be created.

and that whole languages of early date may have vanished. In Semitic further complications arise from the lack of vocalisation in inscriptions and manuscripts (except in Ethiopic and in such sacred texts as the Bible and Qur'ān), so that, in great part, only the consonants are certain. A form thus reconstructed is to be regarded merely as a formula from which a given phenomenon in all known Semitic languages may be derived; whether such a form once actually existed is neither affirmed nor denied; it is only tentative, and is subject to modification or cancellation in the light of subsequent investigation.

§ 13. The home of Proto-Semitic is best sought in Arabia, whence the various Semitic migrations appear to have set forth: the Accadians about the beginning of the 4th millennium B.C., the Aramaeans about 2500 B.C., the Hebrews about 1400 B.C., and the Ethiopians some centuries B.C. From what region the ancestors of the Proto-Semites came is still quite unknown, the most likely theory being that it was North Africa. Attempts to draw isoglottic lines marking identical phenomena in the various dialects would show a bewildering confusion, increased by the difficulty, if not the impossibility, of determining, in many instances, whether the identity in question has really been inherited jointly or is the result of parallel, but independent, evolution. With all due allowance for possibilities of linguistic borrowing, it is wisest to seek in such cases for some criterion afforded, perchance, by history and its ancillary sciences. Finally, one should note that the problem of the Semitic race must not be confused with that of the Semitic languages, for race and language have no necessary or inherent connexion.

PHONOLOGY

A. The Proto-Semitic Phonetic System

[*VG* i, § 35; *KVG* § 3; *P* § 40; *Z* § 4, a; *O* § 9; *B* p. 4; *B-L* i, 191, note 1; *G-B* i, §§ 14, 30.]

§ 14. Comparison of the phonetic systems of the various historic Semitic dialects shows that all sounds found in them may be derived from the following, arranged in order of articulation from the back to the front of the vocal organs:

	Plosives	Fricatives	Sibilants	Affricatives	Laterals	Rolled	Nasals	Sonants
Glottals	ʾ	h						
Pharyngals		ḥ ʿ						
Uvulars	q	ḫ ġ						
Velars	k g	(χ) (γ)		[ǧ]				a ā (ă)
Palatals		i̯	ś					i ī (e ē ĕ ə)
Palato-alveolars			š					
Emphatics	ṭ [ḍ]	ṯ ̣ ᵭ	ṣ [ẓ]					
Coronal alveolars	t d	(θ) (δ)	s z		l	r	n	
Inter-dentals		þ ð						
Labio-dentals		(φ) (β)						
Bilabials	p b	u̯					m	u ū (ō ŏ)

Where two sounds appear in one category (e.g. *k* and *g*), the first is voiceless, and the second is voiced. The sounds in parentheses are later developments peculiar to North-West Semitic and are to be

pronounced as in Modern Greek or as in Scottish *nicht*, German *Nacht;* Dutch *geen*, North German *tagen;* English *thin, then, fear,* Castillian *caba* respectively. Those in brackets are special evolutions of South-West Semitic. The þ and δ̣ would be 'emphatics' corresponding to θ and δ. The pharyngalised 'emphatics' 'are produced with the body of the tongue somewhat in the same position as for English *l*. The tongue is somewhat tense, and the tip is pressed firmly against the palate' (G. Noël-Armstrong, *General Phonetics*, 3rd ed., Cambridge, 1924, § 130). The closure for the voiceless uvular *q* 'is made by the lowest part of the velum (with the uvula) and the most backward part of the tongue'; while the voiced fricative *ġ* is obtained by voicing (i.e. setting the vocal chords in motion) the voiceless fricative [Ħ] (which seems not to occur in Semitic), for whose production 'it is only necessary to aim at *x* [χ] with the tongue in the *q* position' (ib. §§ 120, 125). The glottal plosive ' [ʔ] 'is produced by closing the glottis and releasing the closure with a sudden plosion. The effect on the ear is that of a very weak cough intended to clear a slight obstruction from the passage between the vocal chords' (ib. § 121). It occurs frequently in Danish (though with no orthographic mark), as *hunʔ* 'dog', but *hun* 'she', and often in English dialects, as [kʌʔin] 'cutting'. The pronunciation of *ḥ* is similar to that of *h* in English *aha, oho, boohoo, ahoy* [əħaː, oħou, buħuː, əħɔi]; *ḥ* appears to be 'a very strongly whispered *h*, somewhat of the nature of a "stage whisper", produced in all probability by narrowing of the false glottis'; and ' seems to be its voiced counterpart (ib. § 127). The modern pronunciation of Semitic languages, as the Ashkenazic, Sephardic, and Yemenite in Hebrew, is far from trustworthy in determining that of earlier periods: pronunciation is subject everywhere to more or less rapid changes even in relatively static communities, and such change is accelerated by migration and by the speech of the neighbouring communities. Hebrew *b, g, d* were obviously voiced plosives, since the Septuagint usually transcribes them by β, γ, δ (e.g. βάαλ = *ba'al,* Γάλγαλα = *Gilgāl,* Δάν = *Dān*), while *k, p, t* were aspirates [k', p', t'] (e.g. χάφ = *kaφ,* θάυ = *tāw*). Between vowels (including *šəwā mobile;* cf. § 33) and immediately before consonants, all, just as in Aramaic, became their corresponding fricatives [β, γ̣, δ, φ, x, θ], e.g., between vowels: *zāβaḥ* 'slaughter', Syr. *zəβaḥ* ⟨ P-S **δabaḥ-, nāγaš* 'approach', *nāδar* 'vow', *bāχāḥ* 'weep', Syr. *bəχā, ṣāφōn* 'north', *pāθaḥ* 'open', Syr. *pəθaḥ;* before plosives: *kāθaβtā* 'thou [masc.] hast written', Syr. *kəθaβt* ⟨ **katabta* ⟨ P-S **katabata* (cf. § 376), *dā'aγt* 'thou [fem.] hast been afraid,' *limmaδtā* 'thou [masc.] hast taught', *yiχtōβ* 'he will write', Syr.

neχtūβ, *'ānaφtā* 'thou [masc.] hast been angry', *maθnū* 'we have died';
before other consonants: *šiβṭō* 'his tribe': *šēβeṭ*; *'aβnō* 'his stone', Syr.
'aβneḥ: *'eβen*; *niγ'ī* 'my hurt': *neγa'*; *qēδmāḥ* 'eastward': *qeδem*;
ṣiδqī 'my righteousness': *ṣeδeq*; *śiχlō* 'his wisdom': *śeχel*; *ḥeφṣō* 'his
delight': *ḥeφeṣ*; *siφrī* 'my book', Syr. *seφr(ī)*: *sēφer*; *piθḥō* 'his gate':
peθaḥ; *noθšī* 'my uprooting': *nəθōš*. It is even possible that at one
period Hebrew had affricates like those in Swiss German *Kchind*,
German *Pferd*, English *eighth*, whence such transcriptions as Σεπφώρα
= *Ṣippōrāḥ*, ᾿Ακχώ = *'Akkō*, Ματθαθίας = *Mattiθ-yāḥ*; for though
these transcriptions are usually explained as due to Greek influence,
the combinations πφ, κχ, τθ are found in Greek only in foreign,
dialectic, reduplicated, and pet words.

B. Representation of Proto-Semitic Sounds in the
Historical Semitic Dialects

[*VG* i, §§ 45-52; *KVG* §§ 13-20; *P* §§ 50-78; *W* pp. 42-93; *Z* §§ 4 c-13, 16-25; *O* §§ 10-
20, 41-52; *B-L* i, § 14 a-n'.]

§ 15. Taking the sounds in the foregoing table in the order of
plosives and fricatives, sibilants, liquids (lateral and rolled), nasals,
and sonants ('vowels'), the chief representations of the Proto-
Semitic phonological system in the five principal groups of Semitic
dialects are as follows:

Class	P-S	Acc.	Heb.	Aram.	Arab.	Eth.
Glottal plosive	'	'	'	'	'	'
" fricatives	*h*	'	*h*	*h*	*h*	*h*
	ḥ	*ḫ*	*ḥ*	*ḥ*	*ḫ*	*ḫ*
Pharyngal "	*ḥ*	'	*ḥ*	*ḥ*	*ḥ*	*ḥ*
	ʿ	'	ʿ	ʿ	ʿ	ʿ
Uvular plosive	*q*	*q, g*	*q*	*q*	*q*	*q*
" fricative	*ġ*	'	ʿ	ʿ	*ġ*	ʿ
Velar plosives	*k*	*k*	*k*	*k*	*k*	*k*
	g	*g*	*g*	*g*	*ǧ*	*g*
" sonants	*a*	*a, e, i*	*a*[1]	*a*	*a*[2]	*a*
	ā	*ā, ē, ī*	*ō*	*ā*[3]	*ā*[4]	*ā*[5]

[1] For Heb. modifications of P-S vowels see notes to § 21.
[2]) *o* in contact with 'emphatic' sounds; often) *i* in closed syllables in Mod. Arab.
[3]) *ō* in West Syr.
[4]) *ō* in South Arabia east of Daṭina, and occasionally in other dialects.
[5]) *ō* occasionally in Tigriña.

Class	P-S	Acc.	Heb.	Aram.	Arab.	Eth.
Palatal fricative	i̯	'	y	y	y	y
” sibilant	ś	š	ś	s	š	š
” sonants	i	i	i	e[6]	i	ə
	ī	ī, ē	ī	ī[7]	ī	ī
Palato-alveolar sibilant	š	š	š	š	s	s
Emphatic plosive	ṭ	ṭ	ṭ	ṭ	ṭ	ṭ
” fricatives	þ̣	ṣ	ṣ	ṭ	ẓ	ṣ
	ð̣	ṣ	ṣ	‘	ẓ, ḍ	ḍ
” sibilant	ṣ	ṣ	ṣ	ṣ	ṣ	ṣ
Coronal alveolar plosives	t	t	t, o[8]	t, o[8]	t, o[8]	t
	d	d	d	d	d	d
” sibilants	s	s	s	s	s	s
	z	z	z	z	z	z
” liquids	l	l	l	l	l	l
	r	r	r	r	r	r
” nasal	n	n	n	n	n	n
Interdental fricatives	þ	š	š	t	ṯ	s
	ð	z	z	d	ḏ	z
Bilabial fricative	u̯	'	w, y	w, y	w	w
Labial plosives	p	p	p	p	f	f
	b	b	b	b	b	b
” nasal	m	m	m	m	m	m
” sonants	u	u	u	u[9]	u	ə
	ū	ū, ī, ē	ū	ū[10]	ū	ū
Diphthongs	ai	ay, ē, ī, ue	ay, ē	ay, ē[11]	ay[12]	ay, ē
	au	ū	aw, ō	aw, ō[13]	aw[14]	aw, ō

[6] ⟩ i or ē in Bib. Aram.
[7] ⟩ ē in East Syr.
[8] As final of fem. nouns in -a and 3rd sing. fem. perf. (see §§ 66, 375; written silent h [ḥ] in Heb. and Arab.).
[9] ⟩ ō in open accented syllables; ⟩ o and ā in shut and open accented syllables respectively in East Syr.
[10] ⟩ ō in East Syr., and occasionally in Eth.
[11] ay in accented and ē in unaccented syllables; ⟩ e in final accented open syllables.
[12] ⟩ ē in Mod. Arab. generally, but ī in North Africa, and occasionally in Egypt.
[13] aw in open syllables; ō in shut syllables in Bib. Aram. and East Syr.; ⟩ ū in shut syllables in West Syr.
[14] ⟩ ō in Mod. Arab. generally, but ū in North Africa, and occasionally in Egypt.

§ 16. Reversing the table just given, Hebrew phonology is seen to have the following correspondences in the other Semitic dialects and in Proto-Semitic (the Hebrew velar, coronal-alveolar, and bilabial fricatives—χ, γ; θ, δ; φ, β—are omitted from this list as being developed secondarily, as also in Aramaic, from their corresponding plosives; cf. § 20):

Class	Heb.	Aram.	Arab.	Eth.	Acc.	P-S
Glottal plosive	'	'	'	'	'	'
" fricative	h	h	h	h	'	h
Pharyngal fricatives	ḥ ʿ	ḥ ʿ	ḥ, ḫ ', ġ	ḥ, ḫ ʿ	', ḫ ', ʿ	ḥ, ḫ ', ġ
Uvular plosive	q	q	q	q	q, g	q
Velar plosives	k	k	k	k	k	k
	g	g	ǧ	g	g	g
" sonants	a	a, e	a, i	a, e	a, e, i	a, i, o
	ā	a, ā	a, ā	a, ā	a, e, i, ā, ē, ī	ā
	ă	a	a	a	a, e, i	a, i, u
Palatal fricative	y	y	y, w	y, w	'	i, y̆
" sibilant	ś	s	š	š	š	ś
	i	e, a	i, a	e, a	i, a, e	i, a, u
	ī	ī, a, e	ī, i	ī, e, a	ī, i, ē	ī
" sonants	e	e, a, ī	a, i, ī	e, a, ī	a, e, i, ē, ī	a, i, ī
	ē	ē, ī, ay	ī, ay	ē, ī, ay	ī, ē, ay, i, ue	ī, aị
	ĕ	e, a, u	a, i, u	e, a	e, a, i, u	a, i, u
	ə	e, a, u	a, i, u	e, a	e, a, i, u	a, i, u
Palatalo-alveolar sibilant	š	š, t	s, t̯	s, š	š	š, þ
Emphatic plosive	ṭ	ṭ	ṭ	ṭ	ṭ	ṭ
" sibilant	ṣ	ṣ, t̯, ʿ	ṣ, ẓ, ḍ	ṣ, ḍ	ṣ	s, þ, ð̣
Coronal alveolar plosives	t	t	t	t	t	t
	d	d	d	d	d	d
" " sibilants	s	s	s	s	s	s
	z	z, d	z, ḏ	z	z	z, ð

Class	Heb.	Aram.	Arab.	Eth.	Acc.	P-S
Coronal alveolar liquids	*l*	*l*	*l*	*l*	*l*	*l*
	r	*r*	*r*	*r*	*r*	*r*
" " nasal	*n*	*n*	*n*	*n*	*n*	*n*
Bilabial fricative	*w*	*w*	*w*	*w*	', *u*	*ʮ*
Labial plosives	*p*	*p*	*f*	*f*	*p*	*p*
	b	*b*	*b*	*b*	*b*	*b*
" nasal	*m*	*m*	*m*	*m*	*m*	*m*
	u	*u*	*u*	*e*	*u*	*u*
	ū	*ū, ā*	*ū, ā*	*ū, ā*	*ū, ā, ē, ĭ*	*ū*
" sonants	*o*	*u*	*u*	*e*	*u*	*u*
	ō	*ō, aw, ā,*	*ā, aw,*	*ō, aw, ā,*	*ā, ē, ĭ,*	*ā, aʮ,*
		u, ū	*u, ū*	*ē, ū*	*u, ū*	*u, ū*
	ŏ	*u*	*u*	*e*	*u*	*u*
Diphthongs	*ay*	*ay, ē*	*ay*	*ay, ē*	*ay, ē, i,*	*aɪ̨*
					ue	
	aw	*aw, ō*	*aw*	*aw, ō*	*ū*	*aʮ*

§ 17. Any investigation of Hebrew vocalism as presented in the Received Text and in grammatical studies is rendered extremely difficult from the very first by the fact that one does not know what was the vowel-system of the language at the period when it was a living vernacular except that it doubtless had the vowels *ă, ĭ, ŭ,* and probably *e, o,* and *ə,* as well as other shadings, just as in Modern Arabic, where the written vocalisation gives little hint of its real complexity. How these sounds were distributed, supposing that they actually existed, must thus far remain matter of conjecture.

§ 18. Old Hebrew ceased to be a spoken language about the 4th cent. B.C., and the Masoretic vocalisation was not reduced to writing until thirteen centuries later. The earliest systems of indicating vowels probably received their impetus from Syrian Christians confronted by the necessity of vocalising their texts of the Old and New Testaments for those living in lands of Persian speech. It was, very possibly, from the Syrian school refounded at Nisibis in the 5th cent. A.D. that Jews living in Palestine derived their inspiration to vocalise, for the earliest method of Hebrew vowel-pointing seems to have been the 'Palestinian', from which the 'Babylonian' was developed in the 6th or 7th cent. Of both these systems sufficient fragments survive to

give a fairly clear idea of their nature; and each was supralinear, using the Hebrew *matres lectionis* to indicate the vowel-sounds, just as the Syrians employed the Greek vowel-characters. From the 'Palestinian' pointing the 'Tiberian' was developed toward the end of the 8th cent., and this ultimately displaced both the others, except in South Arabia.

§ 19. The 'Palestinian' and the 'Babylonian' systems alike endeavoured to represent the pronunciations current at their periods, and the same statement holds true both of the Samaritan pointing of the Hebrew Pentateuch and of the various transcriptions in Greek and Latin letters from the time of the Septuagint to that of St. Jerome. Yet these transliterations themselves reveal changes of pronunciation, notably between the Septuagint and the *Hexapla* of Origen; and the Septuagint was the work of many hands over a period of at least three or four centuries. In any event, one has no demonstrably exact knowledge of Hebrew vocalism during the period in which it was a living tongue.

§ 20. 'Tiberian' vocalisation, unlike all the others, represents a learned attempt to carry through consistently a system based on grammatical theory. Nevertheless, some of the very divergencies found amid its general uniformity may be survivals of earlier pronunciations, so that they should not be dismissed lightly as mere 'irregularities' or 'errors'. In not a few cases the Masoretic pointing is probably a late figment, as in the place-names *Miγdōl* 'Μάγδωλον', *Qiryāθayim* 'Καριαθαίμ'. It is obvious that no accurate study of Hebrew vocalism as it actually was pronounced is as yet possible; and all investigations of it based on Masoretic pointing—or, indeed, in the present state of knowledge, on any other system or on ancient transliterations—must be conducted with much reserve. The same statement seems to hold, at least in some measure, for Hebrew consonantism, notably in case of secondary gemination (see §§ 58-60). Nevertheless, in the present state of knowledge, the conventional 'Tiberian' system, despite its many dubieties, must continue to be the point of departure.

§ 21. The tables on pages 15-18 will serve to illustrate the correspondences indicated in the tables in §§ 15-16.

§ 22. From these tables it is obvious that Acc. stands alone in changing P-S *h, ḥ, ', ġ, ẖ,* and *ẖ* to '. Only Heb. retains P-S *ś;* only Aram. represents *ð* by '*,* *þ* by *t; ð* by *d, ś* by *s;* only Arab. preserves *ġ,* changes *g* to *ǧ,* and represents *þ* and *ð* by *z, þ* by *ṭ,* and *ð* by *ḏ;* only Eth. represents *þ* by *ś (s)*. Acc., Heb., and Eth. agree against Aram.

ILLUSTRATION OF CORRESPONDENCES

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
' = '	'āḥaz	grasp	'eḥaδ	'aḫaḏa	'aḫza	'aḫāzu	'aḫaδ-
b = b	bāla'	swallow	bəla'	bala'a	bala'a	balū	bala'-
g = g	gāmāl	camel	gamlā	ǧamalu^n	gamala	gammalu	gammal-
d = d	dālāḥ	draw water	dəlā	dalā	dalawa	dalū	dalaḥ-
h = h	lahaβ	flame	šalheβ	lahabu^n	lāhb	la'bu	lahb-
w = ụ	wə	and	wə	wa	wa	ū	ḫa
z = z	zārа'	sow seed	zəra'	zara'a	zara'a	zirū	zara'-
z = δ	zāβaḥ	slaughter	dəβaḥ	ḏabaḥa	zabaḥa	zibū	δabaḥ-
ḥ = ḥ	ḥālāβ	milk	ḥaləβā	ḥalību^n	ḥalab	'alibu	ḥalab-
ḥ = ḫ	ḥāmēš	five	ḥammeš	ḫamsu^n	ḫams	ḫamšu	ḫamš-
ṭ = ṭ	bāṭal	cease	bəṭel	baṭala	baṭala	baṭālu	baṭal-
y = ỵ	yāmīn	right hand	yammīnā	yamīnu^n	yamān	'imnu	ỵamīn-
y = ỵ	yālaδ[1]	bear, beget	'īleδ	walada	walada	'alādu	ỵalad-
k = k	keleβ	dog	kalbā	kalbu^n	kalb	kalbu	kalb-
l = l	lāβēš	clothe	laβeš	labisa	labisa	labāšu	labiš-
m = m	dām	blood	dəmā	damu^n	dam	damu	dam-
n = n	nāβa'	flow	nəβa'	naba'a	naba'a	nabū	naba'-
s = s	'āsar	tie, bind	'esar	'asara	'asara	'asāru	'asar-
' = '	'āzaz	be strong	'azz	'azza	'azaza	'ezēzu	'azaz-
' = ġ	'ereβ	evening	'ereβ	ġarbu^n	'arab	'ereb	ġarb-

[1] Such words as Heb. wālāδ 'child' are probably dialectic; only wə 'and' indubitably retains original initial ụ. For the probable explanation of the apparent change cf. §§ 91, 404, 417.

ILLUSTRATION OF CORRESPONDENCES (*continued*)

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
p = p	pāθaḥ	open	pəθaḥ	fataḥa	fataḥa	pītū, patū	pataḥ-
ṣ = { ṣ	ṣārah	cry, roar	ṣərah	ṣaraḫa	ṣaraḫa	ṣarāḫu	ṣaraḫ-
ḫ̣	nāṣar	watch	nəṭar	naẓara	naẓara	naṣāru	napar-
δ̣	ṣar	enemy	'arreθā	ḍarratuⁿ	ḍar	ṣarru	ḍarr-
q = q	qārēβ	approach	qəreβ	qariba	qaraba	qarābu	qarib-
r = r	'arbaʿ	four	'arbaʿ	'arbaʿuⁿ	'arbaʿ	'arbaʿu	'arbaʿ-
ś = š	šūm, šīm	put, place	sām	šāma	šēma	šāmu	šaḏam-
š = { š	šēn	tooth	šennā	sinnuⁿ	senn	šinnu	šinn-
θ̣	šāβar	break	taβar	ṭabara	ṣabara	šabāru	ṣabar-
t = t	tēšaʿ	nine	təšaʿ	tisʿuⁿ	tesʿū	tišū	tišʿ-
a = { a²	raβ	great	raβ	rabbuⁿ	(rababa)	rabū	rabb-
ǝ³	yəθaδ	of a peg		watidiⁿ			watid-
o⁴	baʿal	owner, lord	baʿlā	baʿluⁿ	baʿl	bēlu	baʿl-
ā = aᵇ	{ kāβēδ	liver	kaβeδā	kabiduⁿ	kabd	kabittu	kabid-
	'aqrāβ	scorpion	'eqareβā	'aqrabuⁿ	'aqrab	'aqrabu	'aqrab-
δ = { aᵉ	'ăhāzanī	he hath grasped me	'eḥaδ	'aḫaḏa	'aḫza	'aḫāzu	'aḫaδ-
ǝᵗ	ḥămōr	ass	ḥəmārā	ḥimāruⁿ	SA ḤMR	'imēru	ḥimār-

1 Almost only in closed accented syllables, cf. Heb. plural *rabbānīm*.
2 In doubly closed accented internal syllables previous to the loss of their original final vowel ('Philippi's law').
3 *baʿal* < *beʿel* < *baʿl* with *a* (*e* through influence of the pharyngal.
4 In final accented and in open pre-tonic syllables.
5 Only with pharyngals.

ILLUSTRATION OF CORRESPONDENCES (continued)

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
ay = aị	laylāḥ	night	lelyā	laylatuⁿ	lēlī	līlāu	lail-[7]
aw = āu[8]	māweθ	death	mawtā	mawtuⁿ	mōt	mūtu	mayt-
i = { i[9]	'innəβēy	grapes	'enbəθā	'inabuⁿ	SA 'NB	'inbu	'inab-
a[10]	kittēβ	write much	katteβ	kattaba	kattaba	ukattab	kat(a)tab-
ī = ī[11] { mī	mī	who?	mī	mī	mī	mī	mī
'āsīr	'āsīr	captive	'assīra	'asīruⁿ		'asīru	'asīr-
{ a yeδəχem[12]	yeδəχem[12]	your hand	'īδā	yaduⁿ	'ed	'īdu	iad-
keleβ[13]	keleβ[13]	dog	kalbā	kalbuⁿ	kalb	kalbu	kalb-
e = { i[14]	yōṣerəχā	thy fashioner	(kāθeβ)	kātibuⁿ		kātibu	kātib-)
ī[15]	šemōneh	eight	təmānē	ṯamāniⁿ	samānī	šamānū	θamānī
ē = { i[16]	šēn	tooth	šennā	sinnuⁿ	senn	šinnu	šinn-
aị[17]	bēθ	house	baytā	baytuⁿ	bēt	bītu	bayt-

[7] Originally probably *laylaị-.

[8] In closed syllables aw, as 'āwel 'iniquity' beside 'awlō 'his iniquity,'

[9] Only in closed unaccented syllables, particularly in 'segolates' (cf. §§ 121-4).

[10] Only in closed unaccented syllables, particularly in case of i ⟨ ə + ə. This change is peculiar to the 'Tiberian' pointing; 'Babylonian' here most frequently shows a, as do the transcriptions of the Septuagint and St. Jerome, e.g. Μαβσαρ, Mabsar from 'Tiberian' Miβṣār.

[11] Except in unaccented final syllables, where ī e.

[12] In closed unaccented syllables.

[13] Cf. kaləβēy 'dogs' (construct); keleβ ⟨ *kaleβ ⟨ *kalb (§§ 121-2).

[14] In closed unaccented syllables.

[15] In unaccented final syllables.

[16] In open accented syllables.

[17] In unaccented syllables and those with secondary accent.

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
ĕ = { a[18]	'ĕḥōz	grasp!	'eḥaδ	'aḫaδa	'aḫza	aḫāzu	'aḫaδ-
i[18]	'ĕlōqh	God	'allāhā	'illāhu^n	SA 'LH	('ilu)	'illāh-
ə = { a[19]	zəχārīm	males	deχrā	δakaru^n	SA DKR	zikaru	δakar-
i[19]	təša'	nine	təša'	tis'u^n	tes'ū	tišu	tiš'-
u[19]	bəχōr	firstborn	buχrā	(bikru^n)	bak^wer	bukru	bukur-
u = u[20]	kullām	all of them	kul	kullu^n	k^well	kullatu	kull-
ū = ū	šum	garlic	tūmā	ṯūmu^n	sōmat	šūmu	ṯūm-
o = u[21]	'oznī	mine ear	'eδnā	'uδnu^n	'ezn	'uznu	'uδn-
ō = { ā[22]	šəmōneḥ	eight	təmānē	ṯamāni^n	samānī	šamānū	ṯamānī
ay[23]	mōθī	my death	mawtā	mawtu^n	mōt	mūtu	mawt-
u[24]	'ōzen	ear	'eδnā	'uδnu^n	'ezn	'uznu	'uδn-
ū[24]	kammōn	cummin	kammīnā	kammūnu^n	kamūn	kamūnu	kam(m)ūn-
ð = u	šibbŏlīm	ears of grain	šebbelā	sunbulatu^n	sabal	šubultu	šu(n)δul-

[18] In open pre-tonic syllables, chiefly with pharyngals.

[19] In open unaccented syllables.

[20] In closed unaccented syllables, especially before gemination.

[21] In closed unaccented syllables; 'Babylonian' pointing here retains u throughout.

[22] In accented syllables.

[23] In unaccented syllables and those with secondary accent. In kōr 'bull' (Syr. tawrā, Arab. ṯawru^n, Eth. sōr, Acc. šūru, P-S ṯaịr-) and yōm 'day' (Syr. yawmā, Arab. yawmu^n, Eth. yōm, Acc. 'umu, P-S yaụm-), etc., the unaccented form has been extended by analogy to the accented, which should be in Heb. *šaur, *yaụm, etc.

[24] In open accented syllables.

and Arab. in representing þ by ṣ and ð by z; Acc. and Heb. agree against all the rest in representing ð by ṣ and þ by š; Acc., Arab., and Eth. agree against Heb. and Aram. in representing ś by š; Heb., Aram., and Eth. agree against Acc. and Arab. in changing ǵ to ʿ; Heb. and Aram. agree against the rest in changing ḫ to ḥ and (frequently) ẉ to ị; and Arab. and Eth. agree against the rest in changing p to f.

§ 23. The Hebrew sounds in which two or more Proto-Semitic sounds have coalesced, together with the criteria for determining which of these Proto-Semitic sounds the Hebrew sound in question represents, are as follows.

§ 24. When Heb. z = Aram. d and Arab. ḏ, but z in all other Sem. dialects, it represents P-S ð. When it equals z in all other Sem. dialects, it represents P-S z.

§ 25. When Heb. ḥ = ḥ in all other Sem. dialects (except Acc., which here always has ʾ), it represents P-S ḥ. When it equals ḫ in Acc., Arab., and Eth., it represents P-S ḫ.

§ 26. The change of P-S ḫ to ḥ in Heb. seems later than the Septuagint, for this version transcribes ḫ by χ, and omits all transliteration of ḥ, e.g. Χαρράν = Ḥārān (cf. Acc. ḫarrānu), ʾΑχάζ = ʾĀḥāz (cf. Arab. ʾaḫaḏa): ʿΕζεκίας = Ḥizqīyyāhū (cf. Arab. ḥazaqa), ʾΙσαάκ = Yiṣḥāq (cf. Arab. ḍaḥiqa).

§ 27. When Heb. y = y in all other Sem. dialects (except Acc., which here always has ʾ), it represents P-S ị. When it equals w in Arab. and Eth., it represents P-S ẉ.

§ 28. When Heb. ʿ = ʿ in all other Sem. dialects (except Acc., which here always has ʾ), it represents P-S ʿ. When it equals Arab. ǵ, it represents P-S ǵ.

§ 29. It is possible, though absolute proof and disproof are alike difficult in view of the scanty evidence, that the Septuagint transcribes ǵ by γ, and omits transliteration of ʿ, as Γασίων (ʾΑσεών) = ʿEṣyōn (cf. Arab. ǵadyaʾu), γόμορ = ʿōmer (cf. Arab. ǵumaruⁿ), but ʾΑβδεμέλεχ = ʿΕβεδ Μελεχ (cf. Arab. ʿabduⁿ), βαάλ = baʿal (cf. Arab. baʿluⁿ). The fragments of the Hexapla of Origen have γ = ʿ only once in common nouns (βεγαβρώθ = bəʿaβrōθ 'against furies', Ps. vii, 7; cf. Arab. ʿabara); and St. Jerome represents ʿ only by a vowel or by o, never by g, the same being true of the Punic passages given in transliteration in the Poenulus of Plautus. It is by no means impossible that at a very early period Heb. possessed both ʿ and ǵ, and that the double transcription of ʿ in the Septuagint preserves a dim remi-

niscence of this fact. The confusion in the use of o and γ—itself a transition to the later abandonment of γ, which by that period had come to be pronounced, at least intervocalically, as a fricative with the value of *y* or (*g*)*h*[1]—shows, however, that any real trace of *ǧ* in Heb. had so long since vanished in pronunciation (if it ever existed there) that it was unrecorded in any of the North-West Sem. alphabets.

§ 30. When Heb. *ṣ* = *ṣ* in all other Sem. dialects, it represents P-S *ṣ*. When it equals *ṭ* in Aram., *ẓ* in Arab., and *ṣ* in Eth. and Acc., it represents P-S *ṭ*. When it equals ‘ in Aram., *ẓ* or *ḍ* in Arab., *ḍ* in Eth., and *ṣ* in Acc. only, it represents P-S *ð̣*.

§ 31. *ś* retains its P-S value only in Heb., corresponding to *s* in Aram. and to *š* in all other Sem. dialects.

§ 32. When Heb. *š* equals Aram. and Acc. *š*, but Arab. and Eth. *s*, it represents P-S *š*. When it equals *t* in Aram., *ṯ* in Arab., *s* in Eth., and *š* in Acc., it represents P-S *ṯ*.

§ 33. Note should also be taken of the linguistic signification of *šəwā mobile* and *šəwā quiescens*, both having the same pointing in Heb., but possessing very different values, the former denoting the sub-breve *ə*, the latter absence of any vowel.[2] Historically, as is evident from comparison with other Sem. languages, *šəwā mobile* indicates Heb. retention, in sub-breve form, of a vowel which had been full in the P-S period; *šəwā quiescens* marks vowellessness dating from that period,[3] e.g. Heb. *yeδəχem* 'your hand', Arab. *yadukum*, P-S *ǰadu-kumů*, Heb. '*ezkorəχā* 'I shall remember thee', Arab. '*aḍkuruka*, P-S *'aðkuru-kå*, as contrasted with Heb. *kāθaβtā* 'thou hast written', *yiχtōβ* 'he will write', Arab. *katabta, yaktubu*, P-S *katabta, *ǰaktubu*. One may, accordingly, lay down the principle that the series fricative + plosive (*šəwā quiescens*) denotes P-S vowellessness; fricative + fricative (*šəwā mobile*) implies the presence of a vowel in P-S.

[1] H. Thackery, *Grammar of the Old Testament in Greek*, i, Cambridge, 1909, § 7, 29-30.

[2] Similar ambiguities, but more obvious, are found in the use of the same 'Tiberian' points to indicate *i, ī; u, ū; ā, o*, and in the double value of *səγōl* in the type of *keleβ* 'dog', where the nature of the first *e* (accented) is clearly not the same as that of the second (unaccented). The *šəwā medium* found in the construct plural of '*səγōlates*', e.g. *maləχēy: məlāχīm* 'kings' (on the analogy of the type of *diβərēy: dəβārīm* 'words', where the *šəwā* is etymologically justified, cf. sing. *dāβār* ⟨ *dabar*) has no historic reason for existence (cf. singular *meleχ* ⟨ *malk*, Acc. *malku, maliku*, Arab. *malkuⁿ, maliku*).

[3] Whether a still older vowel had here been lost in the earlier stages of P-S, or whether P-S here never possessed a vowel, is a question as yet unanswered, but it seems probable, on the whole, that it had, so that P-S *katabta, *ǰaktubu* were developed from a still earlier *katabata, *ǰa/ukutubu/i (§§ 376, 371; cf. also § 20).

C. Assimilation

[*VG* i, §§ 53-80; *KVG* §§ 21-44; *P* §§ 79-131; *O* §§ 21-30, 63; *B-L* i, §§ 15-19; *G-B* i, §§ 19, 27, a.]

§ 34. Assimilation is the endeavour to harmonise two dissimilar sounds when in close contact. It may be either (*a*) progressive, when the second of such sounds is made to harmonise with the first (*n+t* ⟩ *nn*), or (*b*) regressive, when the first is assimilated to the second (*n+t* ⟩ *tt*). Normally, consonants thus affected are in immediate contact, though occasionally they may be separated by vowels (e.g. Heb. *'āβaδ*, Syr. *'əβaδ*, Arab. *'abada* 'perish': Acc. *'abātu;* Heb. *qāṭal*, Syr. *qəṭal* 'kill': Arab. *qatala*, Eth. *qatala*); vowels undergoing assimilation are usually separated by consonants.

§ 35. (*a*) Progressive:

t+h ⟩ *tt:* Heb. *gəmālattū* 'she weaned him' ⟨ **gəmālat-hū.*

n+h ⟩ *nn:* Heb. *yiqqāḥennū* 'he will take him' ⟨ **yiqqāḥen-hū.*

ṣ+t ⟩ *ṣṭ:* Heb. *niṣṭaddāq* 'we shall justify ourselves' ⟨ **niṣṭaddāq* ⟨ **nitṣaddāq* (for the metathesis see § 50).

q+t ⟩ *qṭ:* Heb. *qāṭāl*, Aram. *qəṭal* 'kill': Arab. *qatala*, Eth. *qatala.*

§ 36. (*b*) Regressive—(i) Consonants:

t+d ⟩ *dd:* Heb. *middabbĕr* 'speaking' ⟨ **mitdabbĕr.*

t+ṭ ⟩ *ṭṭ:* Heb. *yiṭṭammā* 'he will defile himself' ⟨ **yitṭammā.*

t+z ⟩ *zz:* Heb. *hizzakkū* 'make yourselves clean!' ⟨ **hitzakkū.*

t+k ⟩ *kk:* Heb. *tikkōnēn* 'she will be restored' ⟨ **titkōnēn.*

t+n ⟩ *nn:* Heb. *hinnabbə'ū* 'prophesy!' ⟨ **hitnabbə'ū.*

d+t ⟩ *tt* ⟩ *t* ⟩ *θ* (final): Heb. *'aḥaθ* 'una' ⟨ **'aḥadət* (cf. Arab. *'aḥadatu*ⁿ).

n+m ⟩ *mm:* Heb. *yimmāṣē* 'it will be found' ⟨ **yinmāṣē.*

n+g ⟩ *gg:* Heb. *yiggaš* 'he will approach' ⟨ **yingaš.*

n+l ⟩ *ll:* Heb. *yillāβēṭ* 'he will be overthrown' ⟨ **yinlāβēṭ.*

n+k ⟩ *kk:* Heb. *yikkāḥēδ* 'it will be hidden' ⟨ **yinkāḥēd.*

n+t ⟩ *tt:* Heb. *nāθattī* 'I have given' ⟨ **nātantī.*

n+p ⟩ *pp:* Heb. *'appī* 'my nose' ⟨ **'anpī* (Acc. *'appu*, Syr. *'appayyā:* Arab. *'anfu*ⁿ, Eth. *'anf*).

n+ṣ ⟩ *ṣṣ:* Heb. *hiṣṣīl* 'he hath delivered' ⟨ **hinṣīl.*

r+k ⟩ *kk:* Heb. *kikkār* 'round weight, talent' ⟨ **karkar* (Syr. *kakrā*, SA *KRKR*).

(It will be observed that in Hebrew consonantal assimilation affects particularly the alveolars, including the alveolar nasal.)

§ 37. (ii) Vowels:

a ⟩ *e* in an open syllable before *e* (of secondary development), as *keleβ* 'dog' ⟨ **kaleβ* ⟨ **kalb* (see §§ 121-2), and after *ā* such *e* ⟩ *ā*

by progressive assimilation, as Heb. *hā'āreṣ* 'the earth', but *'ereṣ* (Acc. *'erṣetu*, Syr. *'ar'ā*, Arab. *'arḍuⁿ*, SA *'RḌ*, P-S *'arȿ̌-*).

ă ⟩ *ĭ* (written *ə*) before initial *ĭ* of a following syllable, as Heb. *gəδī* 'goat' ⟨ **gĭdī* ⟨ **gadĭu* (Acc. *gadiia*, *gadū*, Syr. *gaδyā*, Arab. *ǧadyuⁿ*).

ă occasionally ⟩ *ŏ* before pharyngals and velars, e.g. Heb. *niβŏhāl* 'troubled' beside *niβahāl;* *'eššŏqāḥ* 'let me kiss' ⟨ **'anšăqāḥ* (cf. *'e'ĕβŏrāḥ* 'let me pass through' beside *'e'bərāḥ*).

ē (⟨ *ai*) ⟩ *ey* in open accented syllables when the following syllable contains *ā*, as Heb. *bāneyχā* 'thy sons', but *bənēyχem* 'your sons' (cf. Arab. *banīka*, *banīkum*).

§ 38. The reduced vowels of the Heb. proclitics *lə, bə, kə, wə* ⟨ **la, *bi, *ka, *ɣa* are assimilated before pharyngals with *ḥāṭēφs* to the full vowel corresponding to the particular *ḥāṭēφ* concerned, as Heb. *la'ăzōr* 'to help' ⟨ **lə'ăzōr* ⟨ **la'azōr* (cf. *liχtōβ* 'to write'); *bahăliχōθām* 'in their goings' ⟨ **bəhăliχōθām* ⟨ **bahalikōtām; ka'ărī* 'like a lion' ⟨ **kə'ărī* ⟨ **ka'arī* (cf. Acc. *'aria*); *we'ĕmeθ* 'and truth' ⟨ *wə'ĕmeθ* ⟨ **we'ĕmeneθ* ⟨ **ɣa'amanat* (cf. Arab. *'amanatuⁿ*).

D. DISSIMILATION

VG i, §§ 83-96; *KVG* §§ 46-58; *P* §§ 134-43; *O* §§ 31-6, 64; *B-L* i, § 21; *G-B* i §§ 20, b-c, 27, b.]

§ 39. Dissimilation is the reverse of assimilation, i.e. it is an effort to avoid repetition of the same sound or of two sounds of identical type or position by substituting for one of the sounds in question another of similar type or position. Normally such substitution is progressive, although it may be regressive; and usually, though not invariably, it affects sounds which are not immediately contiguous.

§ 40. (a) Consonants:

b ⟩ *ɣ:* Heb. *kōχāβ* 'star' ⟨ **kabkab* (Acc. *kakkabu*, Syr. *kawχəβā*, Arab. *kawkabuⁿ*, Eth. *kōkab*, P-S **kabkab-* [Mahrī *kebkīb* is probably a secondary restoration rather than a retention of the original type]).

z ⟩ *d* (before liquids): Heb. *nāδar* 'vow' beside *nāzar* (Acc. *nazāru*, Syr. *nəδar*, Arab. *nadara*, P-S **naδar-;* the P-S dissimilation would be *d : δ*).

ṣ ⟩ *ś:* Heb. *śāḥaq* 'laugh' beside *ṣāḥaq* (Arab. *ḍahiqa*, Syr. *gəheχ* by special Aram. dissimilation from **'əheχ*, P-S **ȿ̌ahak-;* Heb. *q*, as in Eth. *śahaqa*, is due to progressive assimilation, cf. § 35).

l ⟩ *n:* Heb. *yālīn* 'it will pass the night': *laylāh* 'night' (Acc. *līlātu*, Syr. *lelyā*, Arab. *laylatuⁿ*, Eth. *lēlīt*, P-S **laɩl-*).

l ⟩ *r:* Heb. *karbal* 'bemantle' ⟨ **kalbal* (or *r* ⟩ *l: *karbar?* see § 64).

§ 41. Dissimilatory disappearance of consonants, with compensatory lengthening, is frequently found in reduplicated formations, as Heb. *qīqālŏn* 'disgrace', cf. Syr. *qulqālā* 'disgrace'; Heb. *ḥăṣōṣərāh* 'clarion' ⟨ **ḥaṣarṣarat;* *ṭōṭāφāḥ* 'frontlet between the eyes' ⟨ **ṭapṭapat* (cf. also Heb. *kōχāβ*, § 40). Similarly *i̯* and *u̯* disappear in Hebrew when immediately before the kindred *ī* and *ō*, as Heb. *ṣəβā'īm* 'gazelles': *ṣəβī* (Acc. *ṣabītu*, Syr. *ṭaβiyā*, Arab. *ẓabyuⁿ*, P-S **ḫabi̯-*); Heb. *nə'ōθ* 'meadows': *nāwāḥ*.

§ 42 (b) Vowels:

u ⟩ *i* before *ō:* Heb. *šibbōleθ* 'ear of grain' ⟨ **šubbōləθ* ⟨ **šunbult-* (cf. Acc. *šubultu*, Arab. *sunbulatuⁿ*).

ū ⟩ *ī* before *ō:* Heb. *ḥīṣōn* 'outer, external': *ḥūṣ* 'the outside'.

ō ⟩ *ī* before *ō:* Heb. *rīšōn* 'first': *rōš* 'head' (cf. § 44).

āu, ū ⟩ *ī* before *ō:* Heb. *niχəhō* 'before it': *nōχah* 'in front'; *tīχōn* 'middle': *tāweχ* (*tōχ*) 'midst'; ⟩ *ē* after *ū:* Heb. *lūlē* 'unless' ⟨ **lū-lō* (cf. Arab. *lawlā*).

E. ELISION

[O §§ 73-4; B-L i, § 25.]

§ 43. In contact with vowels, *'*, *i̯*, *u̯*, and *h*, unless initial, tend to disappear, with contraction or compensatory lengthening of the vowels concerned.

§ 44. *':*

a'a ⟩ *ā:* Heb. *bāδā* 'devise', Syr. *bəδā*, but Arab. *bada'a*.

i'a ⟩ *ē:* Heb. *ṣāmē* 'be thirsty', Acc. *ṣūmu*, but Arab. *ẓami'a*, P-S **ḫami'a*.

' disappears in doubly closed syllables, with compensatory lengthening, as Heb. *rōš* 'head' ⟨ **rāš* ⟨ **ra'š* (Acc. *rēšu* Syr. *rīšā*, but Arab. *ra'suⁿ*, Eth. *re's*, P-S **ra'š-;* cf. Heb. plur. *rāšīm* ⟨ **rə'āšīm*); and also in final syllables, as Heb. *śānēθā* 'thou hast hated', Syr *sənayt*, but Arab. *šani'ta*.

§ 45. *i̯:*

ai̯a ⟩ *a:* Heb. *dān* 'judge', Acc. *dānu*, Syr. *dān*, Arab. *dāna*, P-S **dāna* ⟨ **dai̯ana* (contrast impfs. Heb. *yāδīn*, Acc. *'idīn*, Syr. *nəδīn*, Arab. *yadīnu*, P-S **i̯adi̯inu*); Heb. *bāχāh* 'weep', Acc. *bakū*, Syr. *bəχā*, Arab. *bakā*, Eth. *bakaya*, P-S **bakā* ⟨ **bakai̯a* (contrast impfs. Heb. *tiβkeḥ*, Acc. *'ibku*, Spr. *neβkē*, Arab. *yabkī*, Eth. *yebkī*, P-S **i̯abki̯u*).

ai̯ī ⟩ *ā'ī:* Heb. *ṣəβā'īm* 'gazelles' beside *ṣəβāyīm* ⟨ **ṣabai̯-īm* (cf. § 41).

i̯i ⟩ *ī:* Heb. *yāśīm* 'he set', Acc. *'išīm*, Syr. *nəśīm*. Arab. *yaśīmu*, Eth. *yeśīm*, P-S **i̯aśi̯imu*.

§ 46. *ṵ:*

aṵa ⟩ *ā:* Heb. *qām* 'stand', Syr. *qām*, Arab. *qāma*, Eth. *qōma* (cf. Acc. *kānu* 'exist, be firm', Arab. *kāna*), P-S *qāma* ⟨ *qaṵama* (contrast impfs. Heb. *yāqūm*, Syr. *nəqūm*, Arab. *yaqūmu*, Eth. *yeqūm*, P-S *ṵaqṵumu*); Heb. *dālāḥ* 'draw water', Acc. *dalū*, Syr. *dəlā*, Arab. *dalā*, Eth. *dalawa*, P-S *dalā* ⟨ *dalaṵa* (contrast impfs. Heb. *yiδleḥ*, Acc. 'idlu, Syr. *neδlē*, Arab. *yadlū*, Eth. *yedlū*, P-S *ṵadluṵu*).

aṵā ⟩ *ō:* Heb. *qōm* 'stand' (inf. abs.) ⟨ *qām* ⟨ *qaṵām* (cf. Heb. *kāθōβ*, Arab. *katābuⁿ*).

aṵi ⟩ *aịi* ⟩ *ē:* Heb. *gēr* 'sojourner', Syr. *giyyūr*, Arab. *ǧāruⁿ*, Eth. *ger*, *geyur*, P-S *gaṵir-*.

ṵa ⟩ *ō:* Heb. *māqōm* 'place', Pun. (Plautus) *macom*, Arab. *maqāmuⁿ*, P-S *maqām-* ⟨ *maqṵam-*.

ṵu ⟩ *ū:* Heb. *yāqūm* 'he will stand', Syr. *nəqūm*, Arab. *yaqūmu*, Eth. *yeqūm* (cf. Acc. 'ikūn, 'he will exist', Arab. *yakūnu*), P-S *ṵaqṵumu*.

§ 47. *h* is lost in suffixes after *a*, *ai*, *ị*, *u*, *e* ⟨ *i*, and often after *šəwā*: Heb. *qətālō* 'he killed him' ⟨ *qatal(a)-hū* (Syr. *qatleh*, Arab. *qatala-hu*); Heb. *gəmallā(y)ū* 'his camels', Syr. *gamlaw(hī)* (cf. Arab. *qaṣṣabīhi* 'of his executioners') ⟨ *gamallai-hū*; Heb. *qətaltīm* 'I killed them' ⟨ *qataltī-him* ⟨ *qataltī-humū* (cf. Arab. *qataltu-hum*); Heb. *'āβī(w)* 'his father' ⟨ *'abī-hū* (cf. Arab. *'abī-hi*); Heb. *yiqtəlēm* 'he will kill them' ⟨ *yiqtil(i)-him* ⟨ *ịaqtul(u)-humū* (cf. Arab. *yaqtulu-hum*); Heb. *bayyōm* 'by day' ⟨ *bə-ha(ị)-ịōm*.

F. HAPLOLOGY

[*VG* i, § 97; *KVG* § 59; *P* § 144; *O* §§ 70-3; *B-L* i, § 22; *G-B* i, § 20 e.]

§ 48. Haplology, the excision of one of two identical consonants closely following each other in the same word, as Gk. ἀμφορεύς ⟨ *ἀμφι-φορευς, Lat. *sēmodius* ⟨ **sēmi-modius*, Fr. *idolâtre* (Eng. *idolater*) ⟨ Lat. *idololatres* ⟨ Gk. εἰδωλολάτρης, has no absolutely certain occurrences in Hebrew, though it is found elsewhere in Semitic.

G. METATHESIS

[*VG* i, § 98; *KVG* § 60; *P* § 146; *O* § 75; *B-L* i, § 23; *G-B* i, § 20 d.]

§ 49. Metathesis is the transposition of sounds normally in contact, as Lat. *vespa*: OHGerm. *wefsa*, Eng. *wasp*; Mod. Gk. πρικός: Gk. πικρός; Span. *milagro*: Lat. *miraculum;* Eng. *griddle*: Scottish *girdle*.

§ 50. The *t* of the reflexive verb, when combined with an initial sibilant of a verbal base (in Arab. also with *ḍ*), underwent metathesis

(and assimilation; see § 35) even in P-S; Heb. *'eštammēr* 'I shall keep myself from' ⟨ **'atšammir; yistabbēl* 'it will drag itself along' ⟨ **yatsab-bil; yištā'ēr* 'he shall storm against' ⟨ **yatṣa''ir; ništaddāq* 'we shall justify ourselves' ⟨ **natṣaddaq;* Acc. *'uštakkan* 'make oneself': *šakānu* 'make' (this metathesis carried throughout all verbs of the 'Iφta'al type [= Heb. Hiθpa'ēl] in Acc.); Syr. *'eštəβī* 'be seized' ⟨ **'atšabī; 'estəβar* 'be believed' ⟨ **'atsabar; 'ezdakkī* 'be justified' ⟨ **'atzakkī; 'eṣṭəleβ* 'be crucified' ⟨ **'atṣalib;* Arab. *izdaǧara* 'drive away' ⟨ **itzaǧara; iṣṭabaǧa* 'be dipped' ⟨ **itṣabaǧa; idṭaraba* 'be troubled' ⟨ **itḍaraba* (this metathesis in all Arab. verbs of the eighth form, whence *iktataba* ⟨ **itkataba*).

§ 51. Metathesis also occurs sporadically, instances in Hebrew being: *śalmāḫ* 'mantle' beside *śimlāḫ* (cf. Arab. *šamlatuⁿ*); *tə'ālāḫ* 'water-course': Arab. *tal'atuⁿ; ruṭǎφaš* 'grow fresh': Syr. *ṭarpāšəθā* 'thin flesh', Arab. *ṭarfaša* 'be convalescent'; *gāzar: gāraz* 'cut', Arab. *ǧazara, ǧaraza,* Syr. *gəzar,* Eth. *gazara; keśeβ: keβeś* 'lamb', Acc. *kabšu,* Arab. *kabšuⁿ; 'āṣam* 'shut the eyes', Arab. *ǧamaḍa.*

H. VOCALIC PROTHESIS AND EPENTHESIS

[*VG* i, § 82; *KVG* § 45; *P* §§ 132-3; *O* §§ 65-9; *Z* § 22; *W* pp. 93-4; *B-L* i, § 20.]

§ 52. Vocalic prothesis, illustrated by Vulgar Lat. *escutum,* Span. *escudo,* Fr. *écu:* Lat. *scutum,* Ital. *scudo* 'shield' (cf. also Mišnāic *'isqūtellā* ⟨ Vulgar Lat. *escutella* ⟨ Lat. *scutella* 'dish'), is comparatively rare in Hebrew. It appears, however, in the perf., impv., and inf. of the Hiθpa'ēl and in the impv. and inf. of the Niφ'al (see §§ 321, 389), e.g. *hiθkattēβ* ⟨ **itkattib* (the *h* added by analogy with the Hiφ'il and Hoφ'al; cf. §§ 321-3) ⟨ **tkattib* ⟨ **takattiba* (cf. Arab. *takattaba*); *hikkāθēβ* ⟨ **inkatib* ⟨ **nkatib* ⟨ **nakatib* (cf. Acc. *naktib,* Arab. *inkatib*). Here belong, further, such words as *'ăziqqīm* 'fetters' beside *ziqqīm* (cf. Aram. *zəqaq* 'fetter'); *'ăβa'bū'āḫ* 'blister, boil': Talm. *be'ba',* Syr. *ba'bū'yā; 'ezrōq'* 'arm' beside *zərōq'* (Acc. *zurū,* Syr. *dərā'ā,* Arab. *dirā'uⁿ,* Eth. *mazrā'et,* P-S **ðirā'-*): *'eṣ'āδāḫ* 'armlet' beside *ṣə'āδāḫ; 'argāz* 'coffer': Arab. *riǧāzatuⁿ; 'eṣba'* 'finger', Arab. *'iṣba'uⁿ,* Eth. *'aṣbā'et,* but Syr. *ṣeβ'əθā.*

§ 53. Vocalic epenthesis, as in Ital. *biasimare* ⟨ OFr. *blasmer* (Mod. Fr. *blâmer*) 'blame', or in vulgar Eng. *umberella, chiminey,* occurs regularly in the second syllable of Heb. *'səγōlates'* (see §§ 121-4), as Heb. *keleβ* 'dog', but *kalbī* 'my dog' (Acc. *kalbu,* Syr. *kalbā,* Arab. *kalbuⁿ,* Eth. *kalb,* P-S **kalb-*); Heb. *zēχer* 'remembrance', but *ziχrī* 'my remembrance' (Acc. *zikru,* Arab. *dikruⁿ,* P-S **ðikr-*); Heb.

'ōzen 'ear', but 'oznī 'my ear' (Acc. 'uznu, Syr. 'eδnā, Arab. 'uḏnuⁿ,
Eth. 'ezn, P-S *'uδn-).

§ 54. Epenthetic a (paθaḥ furtivum) occurs in Hebrew before
final ', ḥ, and h after any long vowel except ā, as rūaḥ 'spirit', but
rūḥī 'my spirit' (Syr. rūḥā, Arab. rūḥuⁿ); zərōaʿ 'arm', but zərōʿī 'my
arm' (Acc. zurū, Syr. dərāʿā, Arab. ḏirāʿuⁿ, P-S *δirāʿ-); gāβōaḥ
'high', but plur. gəβōhīm.

§ 55. At a much later period the epenthetic vowel was i, u after
i', u' respectively, and the first vowel ⟩ ə (under Aramaic influence?),
e.g. P-S *δi'b- 'wolf' (Acc. zību, Syr. dīβā, Arab. ḏi'buⁿ, Eth. ze'b) ⟩
Heb. *zi'bu ⟩ *zi'ib(u) ⟩ *zə'ib ⟩ zə'ēβ; P-S *mu'd- 'abundance' (Acc.
mu'du) ⟩ Heb. *mú'du ⟩ *mu'úd(u) ⟩ *mə'úd ⟩ mə'ōδ. The type of Heb.
dəβaš 'honey' (Acc. dišpu [for the metathesis see § 51], Syr. deβšā,
Arab. dib(i)suⁿ, dubsuⁿ, SA DBŠ) may actually be Aramaic. The
'səγōlation' here was far younger than in the usual type of 'səγōlates'
such as Heb. meleχ.

§ 56. In closed syllables ai̯ ⟩ ai̯i and au̯ ⟩ au̯u ⟩ au̯e (usually
written āu̯e), as Heb. bayiθ 'house' beside const. bēθ (Acc. bītu, Syr.
baytā, Arab. baytuⁿ, Eth. bēt, P-S *bai̯t-); Heb. māweθ 'death' beside
const. mōθ (Acc. mūtu, Syr. mawtā, Arab. mawtuⁿ, Eth. mōt, P-S
*mau̯t-).

§ 57. Many forms usually regarded as epenthetic and often
marked with dāγēš forte dirimens may be explained as survivals of an
original vowel which normally suffered complete syncope as early as
the Proto-Semitic period. Here, perhaps, belong, e.g., Heb. 'innəβēy
'grapes' beside 'ēnāβ (Acc. 'inbu, Syr. 'enbəθā, Arab. 'inabuⁿ, P-S
*'inab-); miqqəδāš 'sanctuary' beside miqdāš (i.e. *miqdáš ⟨ *mi̯qdaš ⟨
*mi̯qadaš); qaššəθōθām 'their bows' beside qəšāθōθ (Acc. qaštu, Syr.
qeštā, Eth. qast, P-S *qašt- ⟨ *qašat-).

I. GEMINATION AND SIMPLIFICATION
[VG i, § 41 v-nn; KVG § 9 D; P § 48; Z § 14; B-L i, § 24; G-B i, § 24.]

§ 58. (a) Gemination. Secondary gemination (geminations etymo-
logically justified are not considered here) occurs when a short vowel
plus a doubled consonant corresponds to a long vowel plus a single
consonant.

§ 59. To this category belong, notably, in Hebrew hā 'the' and
māḥ 'how! what?' (see §§ 245, 252), as ham-meleχ 'the king' ⟨ *hā-malk;
maḥ-ṭōβ 'how good!' = *maṭ-ṭōβ ⟨ *mā-ṭōb, as well as the impf. with
'wāw consecutive', as way-yiχtōβ 'and he wrote' ⟨ *y̯ə-i̯aktub (cf.
§§ 67, 79, 347-48, 350-53).

§ 60. Sporadic instances of such gemination are, with *a*, Heb. *gəmallīm* 'camels' beside *gāmāl* (but Acc. *gammalu* as contrasted with Syr. *gamlā*, Arab. *ǧamalu*ⁿ, Eth. *gamala*); *pəlaggāḫ* 'stream' beside *peleγ* 'channel, canal' (cf. Acc. *palgu*, Arab. *falaǧu*ⁿ, Eth. *falag*); *muṣṣāq* 'molten' (const.) beside *mūṣāq; 'ăβaddōn* 'destruction' (cf. *ἀβαδδών*, Rev. ix, 11) beside *'ăβēδāḫ* 'thing lost'; with *i* (rare): Heb. *'issār* 'binding obligation' (Syr. *'essārā*) beside *'esərāh* 'her bond'; with *u* (regularly in nouns): Heb. *yullaδ* 'he was born' beside *yālaδ* 'he begat' (Arab. *wulida, walada*); *'ămuqqāḫ* 'profunda' beside *'āmōq* (cf. Arab. *'amāqatu*ⁿ 'depth').

§ 61. With pharyngals and *r*, which are never geminated in the Masoretic text, either a long vowel may be written instead of a short as compensation for lack of gemination; or a short vowel may be written with gemination implied (*dāγēš forte implicitum*), as, on the one hand, Heb. *bēraχ* 'bless' ⟨ **birrak* ⟨ **barraka* (Arab. *barraka*); *mē'ēn* 'refuse' ⟨ **mi"in* ⟨ **ma"ana; 'ēhar* 'delay' ⟨ **'iḫḫar* ⟨ **'aḫḫara* (Arab. *'aḫḫara*); on the other hand, Heb. *'aḫēr* 'another' beside *'ăḫērīm* ⟨ **'aḫḫir; niḫēš* 'practice augury' ⟨ **niḫḫiš* ⟨ **naḫḫaša; bi'ēr* 'burn' ⟨ **bi"ir* ⟨ **ba"ara; ni'ēṣ* 'contemn, spurn' ⟨ **ni"iṣ* ⟨ **na"aṣa; mihar* 'hasten' ⟨ **mihhar* ⟨ **mahhara*.

The Septuagint still shows gemination of *r*, as Γόμορρα = *'Ămōrāḫ*, Σάρρα = *Śārāḫ* (cf. Heb. *śārar* 'rule'), Χαρράν = *Ḥārān* (cf. Arab. *Ḥarrānu*ⁿ).

§ 62. Historically, it would appear that this gemination represents a transition-stage, due to a strong stress-accent, from an original short to a tone-long vowel in Hebrew. It seems, moreover, to have formed part of the general shifting of Hebrew and Aramaic accentuation from the first to the last syllable; and was aided, in all probability, both by the fact that the stress-accent resulted in a drawl which lengthened the vowel upon which it rested, and also by the fact that one long vowel or consonant is equal in length of time of utterance to two short (e.g. *āl* = 2 + 1 = *all* = 1 + 2 = *aal* = 1 + 1 + 1 = 3). The development of *gāmāl, gəmallīm* 'camel(s)', for instance, would seem to have been:

*gámalu ⟩ **gámmalu* ⟩ **gắmalu* ⟩ **gāmắlu* ⟩ **gāmắllu* ⟩ **gāmắlu* ⟩ *gāmắl*

*gámalīm ⟩ **gámmalīm* ⟩ **gắmalim* ⟩ **gāmắlīm* ⟩ **gāmắllīm* ⟩ *gāmallīm* ⟩ *gəmallīm*

The final stage of *gəmallīm* would have been **gəmālīm*, as in the regular Hebrew type of *nəḫāšīm* (⟨ **nəḫaššīm?*): *nāḫāš* 'serpent(s)'. The coexistence of the Hebrew types *gəmallīm* and *nəḫāšīm*, for which

no rule seems possible, appears due to inadvertent retention in the Masoretic text of the older beside the younger stage. (For the accentual problems involved, see § 76.)

§ 63. (b) *Simplification*. Simplification of etymologically justified gemination is found especially either in final position, as Heb. *raβ* 'great' (Acc. *rabu*, Syr. *raβ*, Arab. *rabbuⁿ*, P-S **rabb-*) beside plur. *rabbīm;* or in unaccented syllables before *šəwā*, as Heb. *məβaqqəšīm* 'petentes' ⟨ **məβaqqəšīm* ⟨ **mubaqqišīm* beside sing. *məβaqqēš* ⟨ **mubaqqiš* (cf. Arab. type *mukattibīna, mukattibuⁿ*).

J. Inorganic Consonants
[VG i, § 39 b-e; *KVG* § 7 Aa; *B-L* i, §§ 21 e, 80 r, 82 y.]

§ 64. The view has been advanced that the *n* in Heb. *kāmōnī* 'like me', *Šīlōnī* 'Shilonite' beside *Šīlō(h)* 'Shiloh', *Gīlōnī* 'Gilonite' beside *Gīlōh* 'Giloh', *'ăhōrannīθ* 'backwards', *qəδōrannīθ* 'mournfully' is 'euphonic', being inserted to avoid the contact of two vowels. It appears more probable, however, that the *-nī of kāmōnī* is the verbal pronominal suffix used instead of the nominal suffix *-ī* (see §§ 236, 238) to prevent hiatus, and the other instances of *(n)n* are nominal (or adjectival) formatives (cf. §§ 167-72?). The participle *məχurbāl* 'be-mantled', which has been regarded as possessing an inorganic *r* to escape gemination (⟨ **mukubbalu*), is more readily explicable as of the type *kutbat* (passive of *kitbat*, see § 316), found in *məhuspās* 'flaked, scaled', *kurbal* being dissimilated (cf. § 40) from **kulbal* or **kurbar* (cf. Acc. *karballatu* 'head-covering', Syr. *karbāləθā* 'cock's comb'). No indubitable examples of inorganic consonants seem quotable in Hebrew.

K. Pausal Forms
[VG i, § 43 c, pκ, qo, rη-θ; *KVG* § 11 bγ, eλ, fλ, gε; *B-L* i, §§ 13, 26 g-n; *G-B* i, § 29.]

§ 65. Influenced in the main by accent (cf. §§ 69-85), words in Semitic frequently assume one form when used in context with other words, and another form when standing immediately before a pause in the sentence in which they occur or at the end of a sentence.

§ 66. The 'absolute case' of the noun (§ 212-14) is, in reality, the pausal form, just as the 'construct' (§§ 77, 212-14) is a short context-form, as Heb. *hā-'iššāh ṭōβaθ-šeχel* 'the woman (was) good-understanding' (i.e. good as to her understanding). Here, too, belongs the loss of final P-S *t* in fem. nouns in *a* and in the 3rd sing. fem. perf. (written *h* in Heb. and Arab.; see §§ 15, note 1, 179, 188, 375), as Heb. *'āmāh* 'handmaid', Acc. *'amtu*, Syr. *'amā*, Arab. *'amah*, Eth. *'amat*, P-S

*'*amat-* (abs.) beside Heb. '*ămaθ*, Acc. '*amt*, Syr. '*amaθ*, Arab. '*amatu**,
P-S *'*amatu* (const.).

§ 67. In pausal forms an accented short vowel often becomes
long, as Heb. *śāβā'tā* 'thou art full' beside *śāβa'tā* (Arab. *śabi'ta*);
šāmār 'keep' beside *šāmar* (cf. Arab. *samara*), and so even contrary to
etymology, as Heb. *gān* 'garden' beside *gan* (Acc. *gannatu*, Syr.
gannəθā, Arab. *ǧannatu*ⁿ, Eth. *ganat*, P-S **gannat-*). On the other
hand, the short vowel is retained in the impf. with '*wāw* consecutive'
in the Niφ'al and Hiφ'il of verbs in *a*, as Heb. *way-yiggāmal* 'and he
was weaned': *yiggamēl; way-yaggeš* (with *maqqēφ*) 'and he brought
near': *yaggēš* (juss.); cf. also such Qals as *way-yēšeβ* 'and he sat':
yēšēβ; way-yāmoθ 'and he died': *yāmūθ, yāmōθ;* and also sporadically
elsewhere.

§ 68. In pausal forms of 'səγōlates' (§§ 121-4), the older accent is
retained as contrasted with the shifted stress in the context-forms, as
Heb. *perī* 'fruit': *pərī* (cf. Acc. *pir'u*, Syr. *pe'rā*); *ḥŏlī* 'illness': *ḥŏlī*
(cf. Acc. *ḥalū*).

<div align="center">L. ACCENT</div>

[*VG* i, §§ 42-3; *KVG* §§ 10-11; *P* § 49; *Z* § 26; *B* pp. 22, 38, 62-3, 81-2, 98, 113,
127, 162-3; *B-L* i, §§ 12-13; *G-B* i, §§ 21-2.]

§ 69. Accent is governed either by pitch (musical accent) or by
stress (expiratory accent), the former characterised by raising or
lowering the pitch of the voice in pronouncing the syllable or syllables
of a word, and the latter by the greater or less stress laid upon the
syllables involved. The two are not of necessity mutually exclusive;
the same language may (and often does) show both musical and
expiratory accentuation, each on a different syllable, in the same
word. Accent may, moreover, be either free, i.e. appearing now on one,
now on another, syllable within the inflexion of a given word; or it
may be fixed, i.e. restricted to the same syllable throughout such
inflexion. Since words are not, generally speaking, isolated entities,
but are commonly used in combination with other words to form
sentences or clauses of sentences, the accent of one word very fre-
quently affects that of the word or words connected with it by the
speaker; and, finally, distinction must be drawn between the main, or
primary, accent of a word or word-group (such primary accent not
being necessarily the original, prehistoric accent) and the secondary,
or subordinate, accent, which normally is influenced by purely
rhythmical considerations.

§ 70. In the absence of direct statements, of trustworthy tradi-
tion, or of usage in living speech, it is difficult, if not impossible, to

determine the existence of pitch-accent in any language or language-group; but the presence of stress-accent may very frequently be traced, particularly by observation of vocalic modifications of various sorts, and especially by loss or reduction of a vowel after a stressed syllable, whereas vowels which are long either by nature or by position tend to attract stress. In the case of the Semitic languages, direct evidence is found only for stress-accent, yet it appears practically certain that pitch-accent coexisted.

§ 71. In the historic period, it would seem, though much remains uncertain, that Accadian accented the last syllable, if long; but that, if this was short, it stressed the last syllable which was long either by nature or by position. In Canaanite, including both Hebrew and Aramaic, the prevailing stress was on the final syllable. Ethiopic shows a marked tendency to accent the antepenult. In Arabic the traditional stress is on the first long syllable from the end (or on the first syllable if the word contains only short vowels, excluding 'connective alif', which is purely secondary in origin, as Arab. *uktub* as contrasted with Acc. *kutub*, Heb. *kəθōβ*, Aram. *kəθoβ*, Eth. *keteb*, P-S **kutub;* Arab. *inkataba* as contrasted with Acc. *naktub(u)*, Heb. *niχtaβ*, P-S **nakataba;* cf. §§ 52, 377, 389-90). Arabic almost certainly represents conditions nearest to the final stage of Proto-Semitic (cf. § 12). The accent of a number of Semitic languages, such as Phoenician and South Arabic, is unknown; of most of them our knowledge is very imperfect, and in no case is it derived from the periods when they flourished best. The forward shift of accent in Hebrew, Aramaic, and Ethiopic most probably arose independently in their respective linguistic areas.

§ 72. In the earliest period of Proto-Semitic the accent seems to have fallen on the first syllable of the word-base both in nouns and in verbs, e.g. **gámal-* 'camel', **kátaba* 'write' (cf. §§ 62, 78). The original verb-accent on the first syllable is very clearly indicated in Hebrew verbs of the geminate medial type (see §§ 88, 409-13), as *yāʿōz* 'he will be strong', *ʾūzāḥ* 'be strong!' (Syr. *ʿazz*, Arab. *ʿazza* ⟨ **ázaza*, but Acc. *ʾezēzu*, Eth. *ʿazaza;* cf. Heb. *ham* 'be hot', Syr. *ḥam*, Arab. *ḥamma*, but also, on the analogy of *kāθaβ*, Heb. *kāφαφ* 'bend, be bowed', Acc. *kapāpu*, Syr. *kaφ*, Arab. *kaffa*) ⟨ **iá-ʿuzz* ⟨ **iá-ʿuz(u)z* and **ʿúz(u)z* respectively (**ia-ʿuzúz* and **ʿuzúz* would give in Heb. **yaʿázōz* and **ázōz*). This accent was earlier than the Canaanite change of *ā* to *ō*, which takes place only in stressed syllables, as Heb. *ʿōrərû* 'they have laid bare' ⟨ **ōrarū* ⟨ **árarū* ⟨ **árrū*.

§ 73. Determinative prefixes were similarly stressed, as *má-katabu- ⟩ *má-k(ə)tabu- (Heb. miχtāβ 'writing', Syr. maχtəβā, Arab. maktabuⁿ; cf. Heb. mal'áχ 'messenger, angel', Arab. mal'akuⁿ ⟨ *má-la'aku-); *íd-kutubu ⟩ *íd-k(ə)tubu (Heb. yiχtōβ, Arab. yaktubu); *ná-kataba ⟩ *ná-k(ə)taba (Heb. niχtaβ, Acc. naktub(u); Arab. inkataba implies a later *nkataba ⟨ *na-kátaba by analogy with kátaba); *íd-na-katibu ⟩ *íd-n(ə)-katibu (Arab. yankatibu; Heb. yikkāθēβ ⟨ *íə-nə-katíbu).

§ 74. At a later period, Proto-Semitic tended to accent syllables which were long either by nature or by position, as *íd-qayamu ⟩ *íd-qūmu (§ 46) ⟩ *ía-qûm (Heb. yāqūm, Arab. yaqūmu); *kátabtă ⟩ *katábtă (Heb. kaθáβtā, Arab. katábta).

§ 75. Canaanite (and, independently, Ethiopic) developed a tendency to shift the stress-accent from the first syllable to the penultimate, with subsequent loss of a final short vowel, e.g. *kátaba ⟩ *katába ⟩ *katáb (Heb. kāθáβ, Syr. kəθáβ, but Arab. kátaba), *gámalu 'camel' ⟩ *gamálu ⟩ *gamál (Heb. gāmál, Syr. gəmál, but Arab. ğámaluⁿ). With the loss of this final, the stress now fell upon the last syllable except, notably, in verbs with personal endings in -tī, -tā, -nū, -nā (kāθáβtī, kāθáβtā, kāθáβnū, tiχtőβnāh), in nouns, verbs, and particles with suffixed personal pronouns (e.g. śəφāθêynū 'our lips', qətaltíhū 'I killed him', 'alêyχem 'to you'), in səγōlates (§§ 121-24), e.g. kéleβ 'dog' ⟨ *kálb-, Acc. kalbu, Syr. kalbā, Arab. kalbuⁿ, Eth. kalb), and before the old accusative ending -ā, preserved with the meaning 'toward' (§ 217), as 'árṣāh 'toward the land' (cf. Arab. 'arḍaⁿ). In Hebrew the secondary accent is on the pretonic syllable; in Aramaic, on the pre-pretonic.

§ 76. The cause of the accent-shift in Hebrew, Aramaic, and Ethiopic is quite uncertain unless it was due to considerations of rhythm arising from 'construct' combinations. It would appear, however, that in the Proto-Hebrew noun a short open vowel had already been lengthened by stress-accent before this shift occurred and before the loss of final short syllables (§§ 62, 75), but before the change of P-S ā to ō (§ 72). When the accent shifted, a short open vowel in the newly accented syllable was likewise lengthened, or else the consonant was lengthened by gemination (§ 62), though the latter phenomenon survives in relatively few instances, probably because gemination had other, and much more important, significations (cf· §§ 135-40, 312-15); and the short inflexional endings then disappeared because of the stress on the preceding syllable (§ 75).

§ 77. The probable development of the accent of the Hebrew
noun has been outlined in § 75. When, however, it was used in 'con-
struct' position (cf. §§ 66, 212), it lost its own accent and, becoming
proclitic, had only a secondary accent. Consequently, its initial vowel
was reduced, if in an open syllable, to *šəwā*, while the second vowel,
now standing in a doubly closed syllable with an accent merely
secondary, was shortened, as *dabár ham-mélek* 'the word of the king'
(more strictly, 'the king-word') ultimately ⟨ *dábaru hā-málki* ⟩ Heb.
dəβár ham-méleχ. Open vowels in syllables before the pretonic pri-
mary accent are reduced to *šəwā*, as Heb. *dəβārîm* 'words' ⟨ *dabarîm* ⟨
dábarīm; diβərèẏ ham-méleχ 'the words of the king' ⟨ *dabarî ham-
mélek* ⟨ *dábarī hā-málki*.

§ 78. In verbs, which, unlike nouns, are used for the most part as
context forms (in combination with following nouns either as sub-
jects or as objects), there are marked survivals, on the one hand, of an
original stress on the first syllable; and there is evidence, on the other
hand, that not only was their accent-system developed later than that
of nouns, since their perfect shows the reduction of an open vowel to
šəwā after an open vowel lengthened under an original accent (e.g.
Heb. *kāθəβû* ⟨ *kátəbū* ⟨ *kátabū;* cf. Arab. *kátabū*), but also that their
accent was not shifted until after the disappearance of inflexional
endings in short vowels (cf. § 75). Thus one may explain such se-
quences as P-S *qátala hā-gámala* 'he killed the camel' ⟩ *qáttala hā-
gámmala* ⟩ *qátala hā-gámala* ⟩ *qátal hā-gāmála* *qátal hā-gāmálla* ⟩
qátal hā-gāmála ⟩ Heb. *qāṭál hag-gāmál*.

§ 79. In the imperfect, on the contrary, the accent-shift, because
of the lengthening of the second vowel, would seem to have taken
place before the loss of the final short inflexional ending, but later
than the change of accent-position in the noun, since in the imperfect
an open vowel is reduced to *šəwā* after an open vowel lengthened
under the original accent—a phenomenon not found in the noun—
thus explaining the sequence *ẏáqutulu hā-gámala* 'he will kill the
camel' ⟩ *ẏáqətulu hā-gámala* ⟩ *ẏəqətùlu hā-gāmála* ⟩ *ẏəqətùlu hā-
gāmála* ⟩ *ẏəqətùl hā-gāmál* ⟩ Heb. *yiqṭòl hag-gāmál*. A trace of the
original accent is preserved in the construction with '*wāw* consecu-
tive', as Heb. *way-ẏéšeβ* 'and he sat' beside *ẏéšèβ* (cf. § 67).

§ 80. The chronological order of the accent-shift in Hebrew
would seem to have been nouns, imperfects, and perfects (cf. also
§§ 351, 353, 362).

§ 81. The change of original *i* to *a* in unaccented doubly closed
syllables (§ 21, note 3) in Hebrew, as *yəθáδ hā-'óhel* 'tent-pin' beside

yāθéδ (cf. Arab. *waṭiduⁿ*) shows that the case-terminations had disappeared in disyllabic (originally trisyllabic) nouns earlier than in monosyllabic (originally disyllabic), so that, as contrasted with const. *yəθaδ*, one finds const. *ben, bin* beside abs. *bēn* 'son' (Acc. *binu*, Arab. *ibnuⁿ*, SA *BN*, P-S **bin-*).

§ 82. Hebrew final syllables in *-ā* are the result of secondary lengthening of a secondarily stressed *syllaba anceps*, since P-S *ā* ⟩ Heb. *ō* (§ 15), e.g. Heb. *'attāḥ* 'thou' (masc.) ⟨ **attá* ⟨ **ánta* (cf. § 36) ⟨ **ántă* (see § 225); *'arṣāḥ* 'toward the land' (cf. Arab. *'arḍaⁿ*).

§ 83. The treatment of original pretonic *i* varies, sometimes becoming *ē* and sometimes *ə*. Thus one has Heb. *'ēnāβ* 'grape' (Arab. *'inabuⁿ*) ⟨ **'inab-* and *ḥămōr* 'ass' (Acc. *'iméru*, Arab. *ḥimāruⁿ*) ⟨ **ḥimār-* (pretonic *u* ⟩ *ə* under like conditions, as Heb. *bərōš* 'cypress, fir' [Acc. *burāšu*], *rəḥōβ* 'broad open place' [Arab. *ruḥāb*] ⟨ **burāþ, *ruḥāb-*). The reason for the divergence of treatment seems due to the different length of vowels, *i* becoming *ē* before a tone-long in Hebrew, but *ə* before an original long, with the result that at an earlier stage both types **'inab-* and **ḥ(ə)mār-* had the same length of two *morae*, a long vowel being equivalent in time to two short (cf. § 62).

§ 84. If the syllable with the main accent is preceded by three open syllables with originally short vowels, or by a closed syllable followed by two open syllables with originally short vowels, the first (if open) and third vowels ⟩ *ə*, but the second, now being in a semiclosed syllable, is retained, as **báśarakèm* 'your flesh' (Arab. *báśarukum*) ⟩ **baśárakèm* ⟩ *bəśàrəχêm; *mízbaḥakằ* 'thine altar' (Arab. *mádbaḥaka*) ⟩ *mìzbaḥăχằ*.

§ 85. The sentence-stress in Hebrew, as in Arabic, falls on the close, with the result that special phenomena are presented by pausal forms under accent (§§ 65-8).

CHAPTER III

MORPHOLOGY IN GENERAL

[*VG* i, § 101; *KVG* § 63; *P* § 149; *B* pp. 10-11; *B-L* i, § 27; *G-B* ii, § 1.]

A. BASES

§ 86. In Semitic, as in most other linguistic families, morphology affects three categories: nouns, pronouns, and verbs. Adjectives coincide, from the morphological point of view, with nouns; adverbs, conjunctions, and prepositions are stereotyped forms of nouns; interjections, in the strict sense of the term, e.g. Heb. *'āḥ* 'ah!', *has* 'silence!', *'ī* 'woe!', fall outside consideration here as having no inflexion.

§ 87. Nouns and verbs are connected in that, for the most part, they are evolved from identical bases which are in themselves neither nominal nor verbal, and which possess only a fundamental meaning of the vaguest and most general type. By prefixing, affixing, or, much more rarely, infixing certain elements to these bases, they become nouns or verbs (Arab. *malak-a malik-uⁿ* = Lat. *rex* [⟨**reg-s*] *reg-na-vi-t*); and the meaning may further be modified by placing after such prefixed or before such affixed inflexion certain other elements, in themselves neither nominal nor verbal, called 'determinants' or 'formatives' (§ 91; cf. Lat. *can-o* 'sing', *can-t-o* 'sing loudly', *can-t-ill-o* 'sing softly', *can-t-uri-o* 'chirp', *can-t-it-o* 'sing often'). If, then, one designates the base by B, the determinant by D, and the inflexion by I, one has the following formula for a word (W):

$$(I) + (D) + B + (D) + I = W$$

§ 88. In the historic period of Semitic, the great majority of bases appear as trisyllabic, e.g. **kataba*, Heb. *kāθaβ*, but a number, mostly very primitive, are disyllabic, such as **'abu-* 'father' (Heb. *'āβ*), and there are even a few monosyllabic, notably **pu* 'mouth', **ða* 'this' (Heb. *peḥ, zeḥ*). In the earliest Proto-Semitic, trisyllabic and disyllabic bases probably existed side by side, but there seems to be some reason to believe that many trisyllabic bases were developed from earlier disyllabic by adding determinants whose meaning has utterly vanished (§ 91). Furthermore, the 'geminate medial' type of verbs (§§ 72, 409-13) is apparently an extension of a disyllabic base merely for the sake of conformity with the prevailing trisyllabic scheme (cf. Heb. *bālal* 'mix, confuse': Arab. *balla:* Syr. *balbel*, P-S **bal(a)l-* ⟨ **balala-* ⟨ **bala-la-*).

§ 89. Pronominal bases differ from the nominal-verbal type in that they very rarely develop either nominal or verbal forms.

§ 90. The question has frequently been raised whether nouns are derived from verbs, or verbs from nouns. There seems reason to hold that verbs are later than nouns in the general evolution of language (cf. § 80), and in many language-groups verbs are obviously nouns in origin.[1] So far as Semitic is concerned (and the same statement appears valid regarding Indo-European), however, it would seem that, apart from obvious deverbal nouns and denominative verbs, verbs and nouns developed from bases which were too general and vague in meaning to be either in reality.

B. DETERMINANTS

[S. T. H. Hurwitz, *Root-Determinatives in Semitic Speech*, New York, 1913.]

§ 91. As in Indo-European, the problem of the determinant, which indubitably existed, is far from easy, and the one systematic treatment of the subject needs complete revision. The following examples, however, independently drawn, of disyllabic bases made trisyllabic by wh t ap ne r 'o b. c't rr. ir.\n's .e "rr fe ir!\r̃ er'a:n: Heb. 'āmal : mālal 'languish' ($\sqrt{ML}$); Heb. gūr : yāγōr 'dread, fear': Arab. waǧira ($\sqrt{GR}$); Heb. dā'ēβ 'become faint' : dūβ 'pine away' ($\sqrt{DB}$); ḥāqāḫ : ḥāqaq 'cut in' : Arab. ḥaqqun 'crevice in ground' ($\sqrt{ḤQ}$); Heb. yāraq : rāqaq 'spit' : Arab. rayyaqa 'moisten with spittle' ($\sqrt{RQ}$); mā'as 'flow' : māsāḫ, māsas 'melt, dissolve' ($\sqrt{MS}$); Heb. 'ūr : 'ārāḫ 'be exposed' : 'ārar 'strip oneself' ($\sqrt{'R}$); Heb. gālal 'roll' : gīl 'circle, age' : galgal 'wheel' ($\sqrt{GL}$); yā'aṭ 'cover' : 'āṭāḫ 'wrap oneself' ($\sqrt{'Ṭ}$); Heb. yāṣar : ṣūr 'form, fashion' ($\sqrt{ṢR}$); būz : bāzāḫ 'despise' : Arab. bada'a ($\sqrt{Bð}$); Heb. dāχā; dāχāḫ 'crush' : dūχ : Arab. dāka : dakka 'pound, beat' : Acc. dāku (med. *ṳ*) 'kill' ($\sqrt{DK}$); Heb. līṣ 'scorn' : Arab. laṣā 'insult' ($\sqrt{LṢ}$); Heb. ṣūṣ 'peep, gaze' : Arab. ṣa'ṣa'a 'try to open eyes (puppy)' ($\sqrt{ṢṢ}$); Heb. śūr 'saw' : Arab. našara, wašara ($\sqrt{ŚR}$); Heb. tā'a' 'mock' : Arab.

---

[1] e.g. Libyco-Berber, Cushite, and Egyptian (Cohen, *Système*, § 9); African: Wolof (F. Müller, *Grundriss der Sprachwissenschaft*, Vienna, 1876-88, I, ii, 97), Vei (I, ii, 153), Somrai (I, ii, 160), Kunama (III, i, 59), Hottentot (I, ii, 12, 15), Bushman (iv, 10); Asian: Ostyak (II, i, 115-16; for Finno-Ugric generally, J. Szinnyei, *Finnisch-ugrische Sprachwissenschaft*, 2nd ed., pp. 119, 121-2, Leipzig, 1922), Aleut (Müller, II, i, 149), Tibeto-Burman (*Linguistic Survey of India*, III, i, 8, 27, 185, 192, 201, 209, 217, 308, 320, 376, 386, 456; III, iii, 17, Calcutta, 1909, 1904), Dravidian (ib. IV, iv, 294, 415, Calcutta, 1906); North American: Aleut (Müller, II, i, 173), Algonkin (II,i, 199); Central American: Chipanec (iv, 184); South American: Betoi-Yaruro (II, i, 362), Kichua (II, i, 374), Lule (II, i, 410), Yahgan (iv, 214). Cf. in general Müller, I, i, 123-8; Vendryes, *Langage*, pp. 139-40 (Eng. transl. pp. 117-18).

nataǵa 'calumniate' ($\sqrt{T\dot{G}}$); Heb. *hālax* 'go, come' : Arab. *la'aka*, *'alaka* 'send' : *'alāka* 'transmit message' ($\sqrt{LK}$); Heb. *hālā* : *hālāh* 'be weak, ill' : Arab. *halla* 'diminish' : *nahala* ($\sqrt{HL}$); Heb. *kārāh* : Arab. *'akara* 'dig' ($\sqrt{KR}$); Heb. *gāzaz* 'shear' : *gāzāh* 'cut, sever' : Arab. *ǧazza* 'shear' : *waǧaza* 'cut (discourse) short' ($\sqrt{GZ}$); Heb. *hāθaθ* 'be shattered, dismayed' : Arab. *hata* 'be broken (by anger, fear)' ($\sqrt{HT}$); Heb. *'āsas* 'press, crush, tread down' : Arab. *wa'asa* 'trample' ($\sqrt{'S}$); Heb. *dāšā* 'sprout' : Arab. *dīsatu^n* 'thick forest' : *wadasu^n* 'first plants covering ground' ($\sqrt{DŠ}$); Heb. *sāβā* : Arab. *sa'aba* 'drink deep' ($\sqrt{SB}$); Heb. *lā'at* 'cover' : *lūt* 'enwrap' : Arab. *latta* : *lāta* 'hide' ($\sqrt{LT}$); Heb. *šā'aφ* 'crush, trample' : *šūφ* 'bruise' : Arab. *nasafa* 'break and scatter' ($\sqrt{ŠP}$); Heb. *'āβaδ* : Arab. *bāda* 'perish' ($\sqrt{BD}$); Heb. *'ānaq* : *nā'aq* 'groan' : Arab. *naqqa* 'croak, cluck, miau' ($\sqrt{NQ}$); Heb. *yāβēš* 'be dry' : Arab. *basbasu^n* 'desert and uncultivated land' ($\sqrt{BŠ}$); Heb. *yānaq* 'suck' : Arab. *naqā* 'suck marrow from bone' ($\sqrt{NQ}$); Heb. *yāšaβ* 'sit': Arab. *tabba* 'seat oneself firmly' ($\sqrt{þB}$).

§ 92. Similarity of meaning has caused many bases to undergo more or less modification.[1] Thus Heb. *'āxēn* 'surely' (cf. *kēn* 'so') may derive its *ā* from *'āmēn* 'verily'; P-S *'aqrab-* 'scorpion' (Acc. *'aqrabu*, Heb. *'aqrāβ*, Syr. *'eqarəβā*, Arab. *'aqrabu^n*, Eth. *'aqrab;* cf. Arab. *aqara* 'wound'?) its *b* from such animal-names as **kalb-* 'dog', **dubb-* 'bear', **δi'b-* 'wolf', etc. (Heb. *keleβ*, *dōβ*, *zə'ēβ*, etc.); Heb. *rāmas* 'trample', if for **rāφas* (cf. Syr. *rəφas*, Arab. *rafasa* 'kick'), its *m* from *rāmaś* 'creep'; and Heb. *'āṣam* 'shut the eyes', if for **'āmaṣ* (cf. Syr. *'əmaṣ*, Arab. *ǵamada*), may be influenced by *'āṭam* 'shut' (Arab. *'atama* 'contract, stop').

C. Vocalic Alternation

§ 93. Though the existence of this phenomenon in Semitic has been noticed only briefly hitherto (*VG* i, § 42 e-f), it appears to be much more important than has thus far been supposed. Its underlying principle is that vowels are retained under a stress-accent, are prolonged under such accent if the vowel of the syllable immediately following disappears, are reduced (a diphthong in such case retaining only its second component) or disappear in an unstressed syllable. One has, accordingly, in Semitic five grades: prolonged (P), full (F), reduced (R), vanishing (V), and zero (Z), which appear as follows:

---

[1] For similar phenomena in I-E see H. Guntert, *Über Reimwortbildungen im Arischen und Allgriechischen*, Heidelberg, 1914.

	Vowel	Diphthong
P	$\bar{a}, \bar{\imath}, \bar{u}$	$\bar{a}\dot{\imath}, \bar{a}y$
F	a, i, u	$a\dot{\imath}, ay$
R	∂	$\partial i \rangle \bar{\imath}, \partial u \rangle \bar{u}$
V		$\dot{\imath}, u$
Z 1	O	∂
Z 2		O

§ 94. From this point of view, as § 97 shows, all forms of nouns and verbs in Semitic may be interpreted as various alternation-grades of a base type $*ka(\dot{\imath}/y)ta(\dot{\imath}/y)b(a) \langle *ka(\dot{\imath}a/ya)ta(\dot{\imath}a/ya)b(a)$, with the twenty-six theoretical possibilities of PP, PF, PR, PV, PZ, FP, FF . . . . ZR, ZV, ZZ 1, ZZ 2, of which twenty-one actually occur: PF, PR, PV, FP, FF, FR, FV, FZ, RP, RR, VP, VF, VR, VV, VZ, ZP, ZF, ZR, ZV, ZZ 1, ZZ 2. One may, however, explain $*ka(\dot{\imath}a/ya)ta(\dot{\imath}a/ya)$-$b(a)$ as $*katab(a)$ with the infixed determinants $-\dot{\imath}a-$ or $-ya-$ after the first or second syllable, or even after both (cf. the types of Heb. $l\bar{\imath}\S$ 'scorn' $\langle$ P-S $*la\dot{\imath}a\S a$, Heb. $d\bar{u}\chi$ 'crush' $\langle$ P-S $*dayaka$; cf. §§ 45, 46, 91), whence

$$\left.\begin{array}{l} *kata\dot{\imath}b \\ *katayb \end{array}\right\} = \text{FFZ} \quad \text{of} \quad \left\{\begin{array}{l} *kata\dot{\imath}ab \\ *katayab \end{array}\right.$$

$$\left.\begin{array}{l} *ka\dot{\imath}tab \\ *kaytab \end{array}\right\} = \text{FZF} \quad \text{''} \quad \left\{\begin{array}{l} *ka\dot{\imath}atab \\ *kayatab \end{array}\right.$$

$$\left.\begin{array}{l} *ka\dot{\imath}ta\dot{\imath}b \\ *kayta\phi b \\ *ka\dot{\imath}tayb \\ *kayta\dot{\imath}b \end{array}\right\} = \text{FZFZ} \quad \text{''} \quad \left(\begin{array}{l} *ka\dot{\imath}ata\dot{\imath}ab \\ *kayatayab \\ *ka\dot{\imath}atayab \\ *kayata\dot{\imath}ab \end{array}\right.$$

§ 95. Excluding these infixed determinants as of secondary origin, the typical Semitic base is found to be represented by $*qatal$- with the six grades—all found in Arab. qatala 'kill'—PF qātala 'fight'; FP qatālu^n 'weapon'; FF qatala 'kill'; FZ qatlu^n 'act of killing'; ZP 'a-qtālu^n 'enemies'; ZF 'a-qtala 'expose to death'.

§ 96. For bases of the type of P-S $*xa\dot{\imath}ac$, xayac (where x and c stand for any consonant), one finds, from the bases $*ta\dot{\imath}ab$- 'good', $*\acute{s}a\dot{\imath}ab$- 'hoary', $*da\dot{\imath}an$- 'judge', $*ba\dot{\imath}an$- 'son', FF Heb. $t\bar{o}\beta$ 'good' $\langle$ $*t\bar{a}b$- $\langle$ $*ta\dot{\imath}ab$-, FZ Arab. šaybu^n 'white hair', RR Heb. $d\bar{\imath}n$ 'judgement' $\langle$ $*da\dot{\imath}an$-, ZZ 1 Heb. bin, ZZ 2 Arab. i-bn 'son'.

§ 97. The representation of these grades in Semitic would be as follows, examples of those actually found being given in parentheses:

Base *xu-: P *xū- (Arab. fū 'mouth)', F *xu- (Arab. fu-muⁿ 'mouth'), R *xə- (Heb. pe̱h 'mouth'), Z *x- (Eth. 'a-f 'mouth').

Base *xac-: P *xāc-, F *xac- (Arab. ḥamuⁿ, Heb. ḥām 'husband's father'), R *xəc- (Syr. ḥəmā 'father-in-law'), Z *xc-.

Base *xai̯ac-: PP *xāi̯āc-, PF *xāi̯ac-, PR *xāi̯əc-, PZ *xāi̯c; FP *xai̯āc, FF *xai̯ac- ⟩ *xāc- (Acc. ṭābu, Heb. ṭōβ 'good'), FR *xai̯əc-, FZ *xai̯c- (Arab. šaybuⁿ 'white hair'); RP *xəi̯āc-, RF *xəi̯ac-, RR *xəi̯əc- ⟩ *xīc- (Arab. dīnuⁿ, Heb. dīn 'judgement'), RZ *xəi̯c-; ZP *xi̯āc-, ZF *xi̯ac-, ZR *xi̯əc-, ZZ 1 *xic- (Acc. binu, Heb. bēn 'son'), ZZ 2 *xc- (Arab. 'i-bnuⁿ 'son').

Base *xay̯ac-: PP *xāy̯āc-, PF *xāy̯ac-, PR *xāy̯əc-, PZ *xāy̯c-; FP *xay̯āc-, FF *xay̯ac- ⟩ *xāc-, FR *xay̯əc-, FZ *xay̯c- (Arab. ṯawruⁿ, Heb. šōr 'bull'); RP *xəy̯āc-, RF *xəy̯ac-, RR *xəy̯əc- ⟩ *xūc- (Acc. šūmu, Heb. šūm 'garlic'), RZ *xəy̯c-; ZP *xy̯āc, ZF *xy̯ac-, ZR *xy̯əc-, ZZ 1 *xuc- (Acc. mutu, Heb. mōθ 'mortal'), ZZ 2 *xc-.

Base *katab-: PP *kātāb-, PF *kātab- (Arab. 'ālamuⁿ, Heb. 'ōlām 'long time'), PR *kātəb-, PZ *kātb-; FP *katāb- (Acc. šalāmu, Heb. šālōm 'peace'), FF *katab- (Arab. ḏaqanuⁿ, Heb. zāqān 'chin, beard'), FR *katəb-, FZ *katb- (Arab. kalbuⁿ, Heb. keleβ 'dog'); RP *kətāb-, RF *kətab-, RR *kətəb-, RZ *kətb-; ZP *ktāb- (Arab. mi-zmāruⁿ, Heb. mi-zmōr 'melody'), ZF *ktab- (Arab. ma-l'akuⁿ, Heb. ma-l'āk 'messenger, angel'), ZR *ktəb-, ZZ *ktb-.

Base *katai̯b-: PP *kātāi̯b-, PF *kātai̯b-, PR *kātīb- (Syr. kārīχā 'weaver's beam'), PV *kātib- (Acc. kātilu, Heb. kōθēβ), PZ 1 *kātəb-, PZ 2 *kātb-; FP *katāi̯b-, FF *katai̯b-, FR *katīb- (Arab. 'asīruⁿ, Heb. 'āsīr 'captive'), FV *katib- (Arab. kabiduⁿ, Heb. kāβēδ 'liver'), FZ 1 *katəb-, FZ 2 *katb-; RP *kətāi̯b-, RF *kətai̯b-, RR *kətīb-, RV *kətib-, RZ 1 *kətəb-, RZ 2 *kətb-; ZP *ktāi̯b-, ZF *ktai̯b-, ZR *ktīb- (Heb. ma-ngīnāh̠ 'lampoon'), ZV *ktib- (Arab. ma-nsikuⁿ, Heb. ma-ssēχāh̠ 'molten image'), ZZ 1 *ktəb-, ZZ 2 *ktb-.

Base *katay̯b-: PP *kātāy̯b-, PF *kātaub-, PR *kātūb- (Arab. rāh̠ūluⁿ 'camel-saddle'), PV *kātub-, PZ 1 *kātəb-, PZ 2 *kātb-; FP *katāy̯b, FF *katay̯b-, FR *katūb- (Acc. batūlu, Heb. bəθūlāh̠ 'maiden'), FV *katub- (Heb. 'āsūr 'captured'), FZ 1 *katəb-, FZ 2 *katb-; RP *kətāy̯b-, RF *kətay̯b-, RR *kətūb-, RV *kətub-, RZ 1 *kətəb, RZ 2 *kətb-; ZP *ktāy̯b-, ZF *ktay̯b-, ZR *ktūb- (Arab. ma-lbūsuⁿ, Heb. ma-lbūš 'raiment'), ZV *ktub- (Arab. ma-qburuⁿ 'grave'), ZZ 1 *ktəb-, ZZ 2 *ktb-.

Base *kaįtab-: PP *kāįtāb-, PF *kāįtab-, PR *kāįtəb-, PZ *kāįtb-; FP *kaįtāb- (Arab. *hayṣaru*ⁿ 'lion'), FF *kaįtab- (Arab. *ṣaydaqu*ⁿ 'true'), FR *kaįtəb-, FZ *kaįtb-; RP *kītāb- (Arab. *ḍīrābu*ⁿ 'striking'), RF *kītab-, RR *kītəb-, RZ *kītb-; VP *kitāb- (Arab. *ḥimāru*ⁿ, Heb. *ḥămōr* 'ass'), VF *kitab- (Arab. *ḍila'u*ⁿ, Heb. *ṣēlā'* 'rib'), VR *kitəb-, VZ *kitb- (Acc. *zikru*, Heb. *zēχer* 'remembrance'); ZP *kətāb-, ZF *kətab-, ZR *kətəb-, ZZ 1 *kətb-, ZZ 2 *ktb-.

Base *kaųtab-: PP *kāųtāb-, PF *kāųtab-, PR *kāųtəb-, PZ *kāųtb-; FP *kaųtāb- (Arab. *tawrābu*ⁿ 'dust'), FF *kaųtab- (Arab. *ǧawzalu*ⁿ, Heb. *gōzāl* 'young of birds'), FR *kaųtəb-, FZ *kaųtb-; RP *kūtāb-, RF *kūtab-, RR *kūtəb-, RZ *kūtb-; VP *kutāb- (Acc. *burāšu*, Heb. *bərōš* 'cypress, fir'), VF *kutab- (Arab. *quṭamu*ⁿ 'eater'), VR *kutəb-, VZ *kutb- (Acc. *'uznu*, Heb. *'ōzen* 'ear'); ZP *kətāb-, ZF *kətab-, ZR *kətəb-, ZZ 1 *kətb-, ZZ 2 *ktb-.

Base *kaįtaįb-: PP *kāįtāįb-, PF *kāįtaib-, PR *kāįtīb-, PV *kāįtib-, PZ 1 *kāįtəb-, PZ 2 *kāįtb-; FP *kaįtāįb-, FF *kaįtaįb-, FR *kaįtīb-, FV *kaįtib-, FZ 1 *kaįtəb-, FZ 2 *kaįtb-; RP *kītāįb-, RF *kītaįb-, RR *kītīb-, RV *kītib-, RZ 1 *kītəb-, RZ 2 *kītb-; VP *kitāįb-, VF *kitaįb-, VR *kitīb- (Arab. *kibīru*ⁿ 'great,' Heb. *gəβīr* 'lord'), VV *kitib- (Arab. *'ibilu*ⁿ 'camel-herd'), VZ 1 *kitəb-, VZ 2 *kitb-; ZP *kətāįb-, ZF *kətaįb-, ZR *kətīb-, ZV *kətib-, ZZ 1 *kətəb-, ZZ 2 *ktb-.

Base *kaųtaųb: PP *kāųtāųb-, PF *kāųtaųb-, PR *kāųtūb-, PV *kāųtub-, PZ 1 *kāųtəb-, PZ 2 *kāųtb-; FP *kaųtāųb-, FF *kaųtaųb-, FR *kaųtūb-, FV *kaųtub-, FZ 1 *kaųtəb-, FZ 2 *kaųtb-; RP *kūtāųb-, RF *kūtaųb-, RR kūtūb-, RV *kūtub-, RZ 1 *kūtəb-, RZ 2 *kūtb-; VP *kutāųb-, VF *kutaųb-, VR *kutūb- (Acc. *rukūšu*, Heb. *rəχūš* 'property'), VV *kutub- (Arab. *ǧunubu*ⁿ 'strange', Heb. *šəχōl* 'bereavement'), VZ 1 *kutəb-, VZ 2 *kutb-; ZP *kətāųb-, ZF *kətaųb-, ZR *kətūb-, ZV *kətub-, ZZ 1 *kətəb-, ZZ 2 *ktb-.

Base *kaįtaųb-: PP *kāįtāųb-, PF *kāįtaųb-, PR *kāįtūb-, PV *kāįtub-, PZ 1 *kāįtəb-, PZ 2 kāitb-; FP *kaįtāųb-, FF *kaįtaųb-, FR *kaįtūb- (Arab. *ǧayṭulu*ⁿ 'thick darkness'), FV *kaįtub-, FZ 1 *kaįtəb-, FZ 2 *kaįtb-; RP *kītāųb-, RF *kītaųb-, RR *kītūb-, RV *kītub-, RZ 1 *kītəb-, RZ 2 *kītb-; VP *kitāųb-, VF *kitaųb-, VR *kitūb- (Acc. *šibūbu* 'radiance'), VV *kitub- (Amarna *kilubi*, Heb. *kəlūβ* 'basket, cage'), VZ 1 *kitəb-, VZ 2 *kitb-; ZP *kətāųb-, ZF *kətaųb-, ZR *kətūb-, ZV *kətub-, ZZ 1 *kətəb-, ZZ 2 *ktb-.

Base *kaųtaįb-: PP *kāųtāįb-, PF *kāųtaįb-, PR *kāųtīb-, PV *kāųtib-, PZ 1 *kāųtəb-, PZ 2 *kāųtb-; FP *kaųtāįb-, FF *kaųtaįb-, FR *kaųtīb-, FV *kaųtib-, FZ 1 *kaųtəb-, FZ 2 *kaųtb-; RP *kūtāįb-, RF

*kūtaib-, RR *kūtīb-, RV *kūtib-, RZ 1 *kūtəb-, RZ 2 *kūtb-; VP *kutāib-, VF *kutaib- (Arab. *kulaybu*ⁿ 'little dog'), VR *kutīb-, VV *kutib- (Arab. *du'ilu*ⁿ 'jackal'), VZ 1 *kutəb-, VZ 2 *kutb-; ZP *kətāib-, ZF *kətaib-, ZR *kətīb-, ZV *kətib-, ZZ 1 *kətəb-, ZZ 2 *ktb-.[1]

[1] In view of the facts that ə = R of a, i, u, but Z of ai, au, that i, u = V of ai, au besides being their own F, and that ī, ū may be either R of əi, əu or their own P, 114 of these 268 theoretic possibilities are ambiguous, and of the remaining 154, only 50 are here recorded, leaving 104 purely hypothetical, some of which (notably the grades in PP) are utterly impossible. To these may be added 26 equally theoretical grades Z₂P, etc., for *kaiab-, etc. (*ktāb-, etc.), all of which are likewise ambiguous.

NOUNS

A. FORMATION

[*VG* i, §§ 114-223; *KVG* §§ 75-113; *P* §§ 160-1; *Z* § 53; *O* §§ 108-20; *B* p. 14; *B-L* i, § 61; *G* §§ 81-6.]

§ 98. The great majority of Semitic noun-formations are repre-sented in Hebrew, and these Hebrew types may be classified as follows in logical order (the reverse of the traditional arrangement) from monosyllabic to disyllabic, trisyllabic, and other polysyllabic bases.[1]

1. Bases Without Formatives

a. Monosyllabic Bases

§ 99. *Type* $*xu$-. P-S $*p\bar{u}$- 'mouth', Acc. $p\bar{u}$, Heb. *peḥ*, Arab. *fū*, Eth. *'af;* P-S $*\delta a$- 'this', Heb. *zeḥ*, Bib. Aram. *dā*, Arab. *ḏū*, Eth. *ze.*

b. Disyllabic Bases

1. With a Short Vowel

§ 100. *Type* $*xac$-. P-S $*ham$- 'father-in-law', Acc. *'emu*, Heb. *ḥām*, Syr. *ḥəmā*, Arab. *ḥamu*[n], Eth. *ham.*

§ 101. *Type* $*xic$-. P-S $*šim$- 'name', Acc. *šumu*, Heb. *šēm*, Phoen. *ŠM*, Syr. *šəmā*, Arab. *ismu*[n], Sab. *SM*, Eth. *sem.*

§ 102. *Type* $*xuc$-. P-S $*mut$- 'mortal, man', Acc. *mutu*, Heb. *mōθ*, Eth. *met.*

2. With a Long Vowel

§ 103. *Type* $*x\bar{a}c$- ⟨ $*xa\ic$-, $*xa\iac$- (§§ 45, 46, 96). P-S $*ṭāb$- 'good', Acc. *ṭābu*, Heb. *ṭōβ*, Syr. *ṭāβā*, Arab. *ṭābu*[n].

§ 104. *Type* $*x\bar{\imath}c$-. P-S $*d\bar{\imath}n$- 'judgement', Heb. *dīn*, Syr. *dīnā*, Arab. *dīnu*[n].

§ 105. *Type* $*x\bar{u}c$-. P-S $*\th\bar{u}m$- 'garlic', Acc. *šūmu*, Heb. *šūm*, Syr. *tūmā*, Arab. *ṭūmu*[n], Eth. *sōmat.*

3. With a Diphthong

§ 106. *Type* $*xa\ic$-. P-S $*ša\ib$- 'old age', Acc. *šību*, Heb. *šēyβ*, Syr. *sayβāθā*, Arab. *šaybu*[n], Eth. *šībat.*

---

[1] The bases here termed 'disyllabic' and 'trisyllabic' seem actually to have been such in the earliest times, but by the end of the Proto-Semitic period they had lost their final vowel, so that the historical forms imply $*xac$-, $*katab$-, etc., ⟨ $*xaca$-, $*kataba$-, etc., with the result that they are generally called 'biliteral' and 'triliteral'.

§ 107. *Type* *xaɥc-. P-S *þaɥr- 'bull', Acc. *šūru*, Heb. *šōr*, Syr. *tawrā*, Arab. *ṯawruⁿ*, Eth. *sōr* (the entire group was almost certainly borrowed from I-E or 'Mediterranean'; cf. E. Boisacq, *Dictonnaire étymologique de la langue grecque*, p. 945, Paris, 1916).

4. With Second Consonant Geminated

§ 108. *Type* *xacc-. P-S *kapp- 'palm of the hand, sole of the foot', Acc. *kappu*, Heb. *kaφ*, Syr. *kappā*, Arab. *kaffuⁿ*; P-S *šaqq- 'sackcloth', Acc. *šaqqu*, Heb. *śaq*, Syr. *saqqā*, Eth. *šaq* (Gk. loan-word σάκκος).

§ 109. *Type* *xicc-. P-S *šinn- 'tooth', Acc. *šinnu*, Heb. *šinnō* 'his tooth', Syr. *šennā*, Arab. *sinnuⁿ*, Eth. *sen*.

§ 110. *Type* *xucc-. P-S *kull- 'all', Acc. *kullatu*, Heb. *kullō* 'all of him', Syr. *kul*, Arab. *kulluⁿ*, Eth. *kʷel*.

5. With Complete Reduplication of Base

§ 111. *Type* *xacxac-. P-S *kabkab- 'star' (§ 40), Acc. *kakkabu*, Heb. *kōχāβ*, Syr. *kawχəβā*, Arab. *kawkabuⁿ*, Eth. *kōkab*; P-S *laịlaị- 'night' (§ 21, note 7), Acc. *līlātu*, Heb. *laylāḫ*, Syr. *lelyā*, Arab. *laylatuⁿ*, Eth. *lēlīt*.

§ 112. *Type* *xacxūc-. P-S *baqbūq- 'flask', Heb. *baqbūq*, Arab. *baqbūqatuⁿ*.

§ 113. *Type* *xucxuc-. P-S *gulgul- 'skull', Acc. *gulgullu*, Heb. *gulgōleθ* (Gk. Γολγοθά).

§ 114. *Type* *xacāxic-. P-S *'arā'ir- 'juniper', Heb. *'ărō'ēr* (cf. Arab. *'ar'aruⁿ*).

§ 115. The types *xacxuc- and *xacxāc- are too ambiguous to be considered here (cf. *B-L* i, § 61, gδ, iδ). The types *xicxic-, *xicxīc-, *xucaxic-, and *xucāxic- are found sporadically in other Semitic languages, as Arab. *silsilatuⁿ* 'chain', *miḏmīḏuⁿ* 'false', *ṣumaṣimuⁿ* 'energetic', *ǧulāǧiluⁿ* 'bold'; and *xicxic-, *xicxac-, and *xicxuc̲- occur in Mišnāic, as *pilpēl* 'pepper', *pišpāš* 'wicket', *qilqūl* 'disorder'.

c. Trisyllabic Bases
1. With a Short Vowel in Both Syllables

§ 116. *Type* *katab-. P-S *garab- 'scab', Acc. *garābu*, Heb. *gārāβ*, Syr. *garəβā*, Arab. *ǧarabuⁿ*; P-S *paraš- 'horse', Heb. *pārāš*, Arab. *farasuⁿ*, Eth. *faras*.

§ 117. *Type* *katib-. P-S *kabid- 'liver', Acc. *kabittu*, Heb. *kāβēδ*, Syr. *kaβdā*, Arab. *kabiduⁿ*, Eth. *kabd*.

§ 118. *Type* *katub-. P-S *'aśur- 'decade', Heb. *'āśōr* (cf. for formation Acc. *šamuḫu* 'growing luxuriantly', Arab. *šakusuⁿ* 'hard').

§ 119. *Type *kitab-.* P-S **δila'-* 'rib', Acc. *ṣēlu*, Heb. *ṣēlāʿ*, Syr. *'elʿā*, Arab. *ḍilaʿuⁿ*.

§ 120. *Type *kutub-.* P-S **bukur-* 'first-born', Acc. *bukru*, Heb. *bəχōr*, Syr. *buχrā;* P-S **qubul-* 'front', Heb. *qəβōl* 'battering engine', Arab. *qubuluⁿ* 'front'. (The type **kitub-* is found in Amarna *kilubi*, Heb. *kəlūβ* 'basket, cage'.)

2. With a Short Vowel in the First Syllable, No Vowel in the Second

§ 121. These nouns are the so-called *səγōlates* of Hebrew, their development being, e.g. P-S **kalbu-* 'dog' ⟩ **kalb* ⟩ **kaleb* ⟩ Heb. *keleβ*. For the types represented by Heb. *dəβaš* 'honey', *zə'ēβ* 'wolf,' and *mə'ōδ* 'abundance' see § 55.

§ 122. *Type *katb-.* P-S **kalb-* 'dog', Acc. *kalbu*, Heb. *keleβ*, Syr. *kalbā*, Arab. *kalbuⁿ*, Eth. *kalb*.

§ 123. *Type *kitb-.* P-S **δikr-* 'remembrance', Acc. *zikru*, Heb. *zēχer*, Arab. *dikruⁿ;* P-S **'igl-* 'calf', Heb. *'ēγel*, Syr. *'eγlā*, Arab. *'iǵluⁿ*, Eth. *'egʷel*.

§ 124. *Type *kutb-.* P-S **'uδn-*'ear', Acc. *'uznu,* Heb. *'ōzen*, Syr. *'eδnā*, Arab. *'uḍnuⁿ*, Eth. *'ezn*.

3. With a Short Vowel in the First Syllable, a Long
Vowel in the Second

§ 125. *Type *katāb-.* P-S **šalām-* 'welfare', Acc. *šalāmu*, Heb. *šālōm*, Syr. *šəlāmā*, Arab. *salāmuⁿ*, Eth. *salām*.

§ 126. *Type *katīb-.* P-S **'asīr-* 'captive', Heb. *'āsīr*, Arab. *'asīruⁿ;* P-S **marīr-* 'bitter', Heb. *marīrī*, Syr. *marīrā*, Eth. *marīr;* P-S **ṣaǵīr-* 'little', Heb. *ṣā'īr*, Syr. *ṣə'īrā*, Arab. *ṣaǵīruⁿ* (cf. also, for formation, Acc. *talīmu* 'brother').

§ 127. *Type *katūb-.* P-S **batūl-* 'maiden', Acc. *batūlu*, Heb. *bəθūlāḫ*, Syr. *bəθūlā*, Arab. *batūluⁿ*.

§ 128. *Type *kitāb-.* P-S **ḥimār-* 'ass', Acc. *'imēru*, Heb. *ḥămōr*, Syr. *ḥəmārā*, Arab. *ḥimāruⁿ*.

§ 129. *Type *kutāb-.* P-S **burāþ-* 'cypress, fir', Acc. *burāšu*, Heb. *bərōš*, Syr. *bərōθā* (Gk. loan-word *βράθυ*); P-S **ruḥāb-* 'broad open place', Heb. *rəḥōβ*, Arab. *ruḥābuⁿ*.

§ 130. *Type *kutūb-.* P-S **rukūš-* 'property', Acc. *rukūšu*, Heb. *rəχūš*.

4. With a Long Vowel or Diphthong in the First Syllable,
A Short Vowel in the Second

§ 131. *Type *kātab-.* P-S **'ālam-* 'long time', Heb. *'ōlām*, Syr. *'āləmā*, Arab. *'ālamuⁿ*, Eth. *'ālam*.

§ 132. *Type* *kātib-. P-S *qātil- 'killing', Acc. qātilu, Heb. qōṭēl, Syr. qāṭel, Arab. qātiluⁿ, Eth. qātel.

§ 133. *Type* *kayṭab-. P-S *gayzal- 'young of birds', Heb. gōzāl, Arab. ǧawzaluⁿ (Syr., with metathesis, zuγlā).

§ 134. The types *kitib-, *kutab-, *kitūb- (cf. Acc. šibūbu 'radiance'), *kitīb-, *kītūb- are too uncertain for consideration here (cf. VG i, §§ 121, 118, 139; B-L i, §§ 61 w′′′-y′′′, aβ–dβ, sa, tβ). The type *kuṭaib- is found in Syr. 'uzaylā 'gazelle', Arab. kulaybuⁿ 'little dog'; *kātīb- in Syr. kārīχā 'weaver's beam'; *kātūb- in Syr. ḥāṣōδā 'sickle', Arab. rāḥūluⁿ 'camel-saddle'; *kaiṭab- in Arab. ṣaydaquⁿ 'true'; *kaiṭāb- in Arab. haysāruⁿ 'rending'; and *kaiṭūb- in Arab. ǧayṭūluⁿ 'thick darkness'.

5. With Geminated Middle Consonant

§ 135. While nouns with geminated middle consonants are found in the Proto-Semitic period, they apparently arose in its later stages, were probably of secondary development, and were relatively unimportant. Whether the earliest type was *kattab-, etc., or was *katataba- ⟩ *katǝtaba- ⟩ *kattab(a)-, etc., can scarcely be determined from the evidence accessible.

§ 136. *Type* *kattab-. P-S *'aiial- 'hart, stag', Acc. 'ayalu, Heb. 'ayyāl, Syr. 'aylā, Arab. 'iyyaluⁿ, Eth. hayyal.

§ 137. *Type* *kaṭṭāb-. P-S *gabbār- 'strong', Heb. gibbōr, Syr. gabbārā, Arab. ǧabbāruⁿ (cf., for formation, Acc. ḥabbātu 'robber', Eth. 'assāb 'hireling').

§ 138. *Type* *kattīb-. P-S *kabbīr- 'great', Heb. kabbīr, Syr. kabbīrā (cf., for formation, Acc. ḥabbīlu 'bad').

§ 139. *Type* *kattūb-. P-S *'ammūd- 'pillar', Heb. 'ammūδ, Syr. 'ammūδā (cf., for formation, Acc. paššūru 'bowl, dish', Arab. farrūquⁿ, 'timid').

§ 140. *Type* *kuttub-. P-S *quppud- 'porcupine', Heb. qippōδ, Syr. quppǝδā; (cf., for formation, Acc. burrumu 'woven variegatedly').

6. With Third Consonant Duplicated

§ 141. This type, represented by *katbab-, etc., ⟨ *katǝbab- ⟨ *katababa, etc., obviously developed late in the Proto-Semitic period, primarily with an iterative or intensive meaning, and was distributed only sporadically, though found in all Semitic languages.

§ 142. *Type* *katbab-. Heb. ra'ǎnān 'luxuriant', ša'ǎnān 'secure' (cf. Heb. rā'an 'be luxuriant', šā'an 'be at ease', only in Pa'lēl [§ 317]).

§ 143. *Type* *katbāb-. Heb. nahǎlōl 'pasture'.

§ 144. *Type *katbīb-*. Heb. *saɣrīr* 'steady rain' (cf., for formation, Acc. *namrīru* 'brilliance', Syr. *zahrīrā* 'radiance').

§ 145. *Type *katbub-*. Heb. *gaβnōn* 'peak'.

§ 146. *Type *katbūb-*. Heb. *na'ăṣūṣ* 'thorn-bush' (cf., for formation, Arab. *šayḫūhatuⁿ* 'old age').

§ 147. *Type *kutbab-*. Heb. *'umlal* 'feeble' (cf. Heb. Pu'lal *'umlal* 'grow feeble': *'āmāl* 'be weak' and, for formation, Arab. *duḫlaluⁿ* 'intimacy').

§ 148. *Type *katibab-*. Heb. (late) *'ămēlāl* 'feeble'.

7. With Both Second and Third Consonants Duplicated

§ 149. *Type *katabtab-*. Heb. *yəraqraq* 'greenish' (cf., for formation, Syr. *šəlamləmā* 'complete', Arab. *'arakrakuⁿ* 'strong', Tigrē *hatamtam* 'babbling').

§ 150. *Type *katabtūb-*. Heb. *hăβarbūrāḫ* 'stripe' (cf., for formation, Syr. *pərahrūḫtā* 'spark', Tigrē *'ebelbūl* 'scattered').

§ 151. *Type *katibtīb-*. Heb. *yəφēḫφīyāḫ* (Miš. and Mas. *yəφēḫ-φiyyāḫ*) 'pulchra', (cf., for formation, Eth. *hamalmīl* 'green').

§ 152. The types **kattib-*, **kattub-*, **kuttāb-*, **kuttub-*, **kuttūb-*, **katabtub-*, **katabtāb-* are too uncertain for consideration here (cf. *VG* i, §§ 146, 147, 153, 145, 157, 174, 175; *B-L* i, § 61 bɣ-cɣ, dɣ, aδ-bδ, fɣ, uɣ-zɣ, nδ, oδ). The type **kitbāb-* is found in Arab. *timlāluⁿ* 'badly clothed'; **kitbīb-* in Acc. *'irnintu* 'strength', Arab. *ziḫlīluⁿ* 'smooth', Eth. *kenšīf* 'shore'; **kutbub-* in Arab. *duḫluluⁿ* 'intimacy'; **kutbūb-* in Arab. *zuḫlūluⁿ* 'smooth'; and **kutubtub-* in Tigriña *sewunwun* 'movement'.

2. Bases With Formatives

a. *Bases With Preformatives*

1. With Preformative Vowel

§ 153. *Types *'aktab-, 'iktab-*. P-S **'arba'* 'four', Acc. *'arba'u*, Heb. and Syr. *'arba'*, Arab. *'arba'uⁿ*, Eth. *'arbā'*; P-S **'iþkāl-* 'cluster', Heb. *'eškōl*, Aram. *'iθkəlā*, Arab. *'iṭkāluⁿ*; Mišnāic has also the type **aktūb-*, as *'asqūφāḫ* 'threshold'.

§ 154. When forms with and without an initial vowel appear side by side, as Heb. *'eṣba'* 'finger', Arab. *'iṣba'uⁿ*, Eth. *'aṣbā't*, but Syr. *ṣeβ'əθā*, beside Bib. Aram. *'eṣba'*, or Heb. *'ezrōq* 'arm' beside *zərōq*, such a vowel is merely prothetic (§ 52).

2. With Preformative i̯

§ 155. *Types *i̯aktūb-, *i̯aktab-*. P-S **i̯aḥmur-* 'roebuck', Heb. *yaḥmūr*, Syr. *yaḥmūrā*, Arab. *yaḥmūruⁿ*; Heb. *yiṣhār* 'oil'.

3. With Preformatives š- and s-

§ 156. In Hebrew apparently only in *šalheβeθ* 'flame' (Syr. *šalhebbīθā*) and *šəqaʿărūrāẖ* 'hollow, depression' (very frequent in Acc., as *šulputtum* 'ruin'), and possibly in Heb. *sanwērīm* 'sudden blindness' (cf., for formation, Acc. *saẖluqtu* 'destruction', Miš. *səɣalgal* 'round').

4. With Preformative m-[1]

§ 157. *Type* *maktab-.   P-S *malʾak- 'messenger', Heb. *malʾāχ*, Arab. *malʾaku*ⁿ, Eth. *malʾak;* P-S *markab-'chariot', Acc. *narkabtu* (*n* ⟨ *m* by dissimilation before the labial), Heb. *merkāβāẖ*, Syr. *markaβəθā*, Arab. *markabu*ⁿ; P-S *maškan- 'dwelling-place', Acc. *maškanu*, Heb. *miškān*, Syr. *maškənā*, Arab. *maskanu*ⁿ.

§ 158. *Type* *maktib-.   Heb. *margēʿāh* 'repose', Arab. *margiʾu*ⁿ.

§ 159. *Type* *maktīb-.   Heb. *mangīnāẖ* 'lampoon' (cf., for formation, Syr. *maφṣīʾā* 'breach').

§ 160. *Type* *maktūb-.   Heb. *malbūš* 'raiment', Arab. *malbūsu*ⁿ (cf. also, for formation, Syr. *maχšūlā* 'offense'; this is the regular form of the passive participle of the *kataba* type in Arabic).

§ 161. *Type* *miktāb-.   Heb. *mišqōl* 'weight', Arab. *miṭqālu*ⁿ.

§ 162. The types *miktab-, *maktub-. and *maktāb- are too uncertain for discussion here (cf. *VG* i, §§ 197, 202, 199; *B-L* i, § 61 xε, yζ, eη).

5. With Preformative t-

§ 163. *Type* *taktab-.   Heb. *tōʾām* 'twin' ⟨ *tawʾam- (cf. § 21, note 23), Arab. *tawʾamu*ⁿ (cf. Arab. *wāʾama* 'agree'); Heb. *tēymān* 'south', Syr. *taymnā* (cf., for formation, Acc. *tamẖaru* 'battle', Eth. *tayfan* 'young bull').

§ 164. *Type* *taktib-.   Heb. *tašbēṣ* 'chequered work' (cf., for formation, Acc. *tašqirtu* 'falsehood').

§ 165. *Type* *taktūb-.   Heb. *tamrūr* 'bitterness' (cf., for formation, Syr. *taẖtūrā* 'flattery').

§ 166. The types *taktāb-, *taktīb- (in Hebrew probably only in words borrowed from Aramaic), and *taktub- are too uncertain for discussion here (cf. *VG* i, §§ 206-7, 209; *B-L* i, § 61 vη, wη, rη).

---

[1] The view, expressed, e.g., in *VG* i, § 195, and *B-L* i, § 61, uε, that this *m* is from the pronoun *mā 'what?' (cf. §§ 251-2; e.g. P-S *mā ʾaqāma [*bihi*] 'what he stands in' ⟩ *māqām 'place,' Heb. *māqōm*, Arab. *maqāmu*ⁿ) seems very dubious; the origin of the preformative is so obscure that it is at present best left undiscussed.

b. Bases With Afformatives

1. With Afformative -ān-

§ 167. *Type* **katbān-*. Heb. *qaδmōn* 'eastern' (cf., for formation, Acc. *šakrānu* 'drunkard', Arab. *sakrānu*ⁿ, Syr. *garbānā* 'leprous').

§ 168. *Type* **kitbān-*. Heb. *ḥešbōn* 'reckoning', Arab. *ḥisbānu*ⁿ (cf., for formation, Syr. *beṭlānā* 'cessation').

§ 169. *Type* **kutbān-*. Heb. *yiθrōn* 'advantage', Syr. *yuθrānā;* Heb. *ḥesrōn* 'deficiency', Syr. *ḥusrānā* (cf., for formation, Acc. *dulḫānu* 'disturbance', Arab. *kufrānu*ⁿ 'thanklessness').

§ 170. *Type* **katabān-*. Heb. *rə'āβōn* 'hunger' (cf., for formation, Acc. *šarraqānu* 'thief', Syr. *'aβeδānā* 'destruction', Arab. *ḥadaṯānu*ⁿ 'stroke of fate').

§ 171. *Type* **maktabān-*. Heb. *maššā'ōn* 'guile' (cf., for formation, Syr. *ma'bərānā* 'transit').

2. With Afformative -n-

§ 172. Heb. *ṣippōren* 'finger-nail' (cf. Acc. *ṣupru*, Syr. *ṭeφrā*, Arab. *zufru*ⁿ, Eth. *ṣefr,** P-S *ṯufr-*).

3. With Afformative -m-

§ 173. Heb. *śāφām* 'moustache' (cf. Acc. *šaptu* 'lip', Heb. *śāφāḥ,* Syr. *seφəθā*, Arab. *šafatu*ⁿ, and, for formation, Arab. *ṣildāmu*ⁿ 'hard').

4. With Afformative -l-

§ 174. Heb. *karmel* 'garden-land, garden-growth' (cf. Heb. *kerem*, Syr. *karmā*, Arab. *karmu*ⁿ, Eth. *kerm* 'vine[-yard]'). That this group is borrowed from Indo-European (cf. *VG* i, § 223, 1) is by no means certain; it may be of pre-Semitic origin, and deformed by popular etymology.

5. With Afformative -ī̆-, -ā̆-

§ 175. These afformatives are found in all Semitic languages, -ī̆- and -ā̆- side by side in Accadian and Ethiopic, -ā̆- alone in Aramaic, and -ī̆- alone in Hebrew and Arabic. They denote 'connexion with', 'origin from' in every conceivable sense, e.g. Heb. *Ṣōrī* 'Tyrian' (Acc. *ṣurrāya*), *'Iβrī* 'Hebrew' (cf. *'āβar* 'cross over'), *qaδmōnī* 'eastern' (cf. *qaδmōn* 'eastern'), *raγlī* 'foot-soldier' (cf. *reγel* 'foot'), *ṣiφ'ōnī* 'basilisk, adder' (cf. *ṣeφa'* 'basilisk, adder'). Compare, for formation, Syr. *Dayṣenāy* 'citizen of Dayṣān', *malkāyā* 'royal', Arab. *Miṣrīyu*ⁿ 'Egyptian', *maǧusīyu*ⁿ 'Magian', *šamsīyu*ⁿ 'solar', Eth. *nazāzī* 'comforter', *tafṣānī* 'last'.

§ 176. Afformatives in *-ūn-, ōn-, -aịn-, -aịm-, -aị-, -e-, -ē-, -ō-* are too uncertain for discussion here (cf. *B-L* i, § 61, vθ, dɩ-gɩ); but note should be made of the formatives *-ōn, -ān, -ayim* (later confused with the dual [§ 206]), *-ō, -ām, -ōm* in place-names, as Heb. *Šŏmərōn* : Bib. Aram. *Šāmərayin* 'Samaria'; *Dōθān* : *Dōθayin* (Septuagint Δωθάιμ); '*Eγlōn* : '*Ēyn* '*Eγlayim;* *Məγiddō* : *Məγiddōn;* '*Eyṭām;* *Giδə'ōm* (Septuagint Γεδάν).

B. GENDER

[*VG* i, §§ 224-7, ii, § 26; *KVG* § 114; *P* §§ 162-4; *Z* § 54; *W* pp. 131-9; *O* § 121; *B-L* i, § 62; *G* §§ 80, 122; Féghali-Cuny, *Du genre grammatical en sémitique,* Paris, 1924.]

§ 177. The Semitic languages have, in the historical period, only two genders, 'masculine' and 'feminine', which include, without reference to distinctions of sex, both animate (active) beings whether male or female, and inanimate (passive) things. In the most general terms, male animate (active) beings, or things which the primitive mind may so regard, are masculine; female animate (active) beings, or things (passive) which the primitive mind may consider female, and things inactive or inanimate (whether by primitive or by modern standards), as well as abstracts, collectives, diminutives, and pejoratives, are feminine.

§ 178. In the older period of Semitic, many 'masculine' (i.e. active) nouns show no distinction of form for male and female beings, e.g. P-S **'abu-* 'father', Acc. *'abu,* Heb. *'āβ,* Syr. *'aβā,* Arab. *'abuⁿ,* Eth. *'ab;* P-S **'umm-* 'mother', Acc. *'ummu,* Heb. *'ēm,* Syr. *'emmā,* Arab. *'ummuⁿ,* Eth. *'em;* P-S **ḥimār-* 'ass', Acc. *imēru,* Heb. *ḥămōr,* Syr. *ḥəmārā,* Arab. *ḥimāruⁿ;* P-S **'atān-* 'she-ass', Acc. *'atānu,* Heb. *'āθōn,* Syr. *'attānā,* Arab. *'atānuⁿ;* (cf. also Arab. *ḥāmiluⁿ* 'pregnant', *nāhiduⁿ* 'with swelling breasts', *'āqiruⁿ* 'sterile' [but Heb. *'āqār, 'ăqārāẖ*]).

§ 179. Side by side with the nouns denoting male beings (or those regarded as males), there appeared, as early as the Proto-Semitic period, a special characteristic for nouns denoting female beings (or those regarded as female)—the determinant *-(a)t-,* as P-S **bin-t-* 'daughter', Acc. *bintu,* Heb. *baθ* (⟨**bint-*), Arab. *bintuⁿ* beside P-S **bin-* 'son', Acc. *binu,* Heb. *bēn,* Arab. *ibnuⁿ;* P-S **'amat-* 'female slave', Acc. *'amtu,* Heb. *'ămaθ* (const.), Syr. *'amaθ* (const.), Arab. *'amatuⁿ,* Eth. *'amat;* P-S **ḏarrat-* 'rival-wife', Acc. *ṣerretu,* Heb. *ṣārāẖ,* Syr. *'arrəθā,* Arab. *ḍarratuⁿ;* and this becomes the regular way of distinguishing between masculine and feminine, as Heb. *par* 'steer', *pārāẖ* 'heifer'; *śar* 'prince', *śārāẖ* 'princess'; *Mō'āβĩ* 'Moabite',

M ō'ăβiyyāḥ 'Moabitess'; *'elem* 'young man', *'almāḥ* 'young woman'; *ṭōβ* 'bonus', *ṭōβāḥ* 'bona' (cf. Acc. *bēl* 'god', *bēlitu* 'goddess'; Syr. *malkā* 'king', *malkəθā* 'queen'; *bīš* 'malus', *bīštā* 'mala'; Arab. *maliku*ⁿ 'king', *malikatu*ⁿ 'queen'; *'aẓīmu*ⁿ 'magnus', *'aẓīmatu*ⁿ 'magna'; Eth. *negūš* 'king', *negešt* 'queen'; *lehīq* 'old man', *leheqt* 'old woman').

§ 180. The names of things inanimate or inactive (passive) from the primitive point of view, though grammatically feminine in Semitic, frequently show no difference in form from the terms for animate (active) beings, whether male or female. Such grammatical feminines are represented by Heb. *kikkār* 'round weight, talent,' *ṣāφōn* 'north', *hereβ* 'sword' (cf. Arab. *harbatu*ⁿ 'dart, javelin'; Syr. *harbā* is generally masc., rarely fem.), *'ōzen* 'ear', *neφeš* 'breath, soul'.

§ 181. Nouns of this category sometimes vary between masculine and feminine, as Heb. *dereχ* 'way, road', *lāšōn* 'tongue' (Acc. *lišānu*, Syr. *leššānā*, Arab. *lisānu*ⁿ, Eth. *lesān*), *šemeš* 'sun' (P-S **šamš-*, Acc. *šamšu*, Syr. *šemšā*, Arab. *šamsu*ⁿ [dissimilated from **samsu*ⁿ; cf. §§ 39-40]; Acc. and Aram. only masc., Arab. only fem.); Arab. *baṭnu*ⁿ 'belly' (Heb. *beṭen* only fem.), *kabidu*ⁿ 'liver' (Heb. *kāβēδ* only masc.); Syr. *sahrā* 'moon'. The 'feminine sign' is found in such words as Heb. *gəδērāḥ* 'wall' beside masc. *gāδēr* (cf. Arab. *ǵadru*ⁿ, *ǵidāru*ⁿ), *gulgōleθ* 'skull' (but Acc. *gulgullu*). Such instances of apparent instability may be due to a divergence of point of view, the same word being regarded now as 'animate' ('active, masculine'), now as 'inanimate' ('inactive, passive, fem.' = 'neuter').[1]

§ 182. Abstract nouns normally have the 'feminine sign', as Heb. *nəqāmāḥ* 'vengeance' beside masc. *nāqām* (cf. fem. Syr. *nəqaməθā*, Arab. *niqmatu*ⁿ), *'ezrāḥ* 'help' beside masc. *'ēzer* (cf. Syr. fem. *'eδarəθā* beside masc. *'eδrā*), *ṭōβāḥ* 'welfare', *gōlāḥ* 'exile(s)'.

§ 183. Diminutives, which include pejoratives, have the 'feminine sign', as Heb. *məlūnāḥ* 'hut' : *mālōn* 'lodging-place, inn, khan'; *yōneqeθ* 'twig' : *yōnēq* 'sapling'; *kippāḥ* 'frond, branch' : *kaφ* 'palm of the hand' (cf. Syr. *kappəθā* 'bowl'); *'iššeḥ* 'offering made by fire' : *'ēš* 'fire' (cf. Acc. *išātu* 'fever', Syr. *'eššāθā*, Eth. *'esāt*). Here, too, probably belong the names of weak or timid living creatures, apparently as being considered 'passive' rather than 'active', e.g. Heb. *'arneβeθ* 'hare' (Syr. *'arnəβā*, Arab. *'arnabu*ⁿ, both generally fem., though occasionally masc.), *yōnāḥ* 'dove' (Syr. *yawnā* usually fem.; cf., without 'feminine sign', Syr. *neqyā* 'sheep').

[1] The primitive Indo-European views on gender seem equally applicable to Semitic; cf. A. Meillet, 'La Catégorie du genre et les conceptions indo-européennes' in his *Linguistique historique et linguistique générale*, 2nd ed., Paris, 1926, pp. 211-29.

§ 184. Collectives, which are often difficult to distinguish from abstracts, and which are frequently equivalent to plurals (see § 193), appear without 'signs' as (a) both masc. and fem., (b) masc., (c) fem., and with 'signs' as (d) fem. To the type (a) belong Heb. *'ŏnī* 'ships, fleet', *bāqār* 'cattle' (Arab. *baqaru^n*, cf. also *baqaratu^n* 'single head of cattle'; Syr. *baqrā* is fem. only); to (b) (the great majority in Heb.) Heb. *bōser* 'sour grapes' (Arab. *busru^n*), *bə'īr* 'beasts, cattle', *zīz* 'moving creatures' (cf. Acc. *zizānu* 'reptiles'), *'ōφ* 'flying creatures' (Syr. *'awφā*), *'ayiṭ* 'bird(s) of prey', *qimmōś* 'thistles, nettles', *reχeś* 'steeds', *remeś* 'creeping creatures', *śereṣ* 'swarming creatures' (Syr. *śerṣā* 'reptiles'); to (c) Heb. *ṣ'ōn* 'small cattle', *ṣeφardēa'* 'frogs'; to (d) Heb. *bo'śāḫ* 'stinking weeds', *bəhēmāḫ* 'beast(s)', *dāγāḫ* 'fish' collectively as contrasted with *dāγ* 'a single fish', *'ăβuddāḫ* 'servants' as contrasted with *'eβeδ* 'servant', *ṣir'āḫ* 'hornets'.

§ 185. Particular interest attaches, in this connexion, to the Semitic *nomina unitatis*, which, with the 'feminine sign',[1] indicate a single specimen of the class denoted by the corresponding 'masculine' noun, e.g. Heb. *'ŏniyyāḫ* 'ship': *'ŏnī* 'ships, fleet'; *śa'ărāḫ* 'single hair' : *śē'ār* 'hair' collectively (so also Arab. *śa'[a]ratu^n* : *śa'[a]ru^n*); *šīrāḫ* 'single song' : *šīr* 'song, poem'; *ləβēnāḫ* 'brick' (Arab. *labinatu^n* 'single brick' : *labinu^n* 'brick' collectively); *dəβōrāḫ* 'bee' (cf. Arab. *dibru^n* 'swarm of bees'); *nəmālāḫ* 'ant' (Arab. *namlatu^n* 'single ant' : *namlu^n* 'ant' collectively); cf. also Arab. *baṭṭatu^n* 'one drake or duck' : *baṭṭu^n* 'duck' collectively; *dahabatu^n* 'piece of gold' : *dahabu^n* 'gold'.

§ 186. In all these four categories the 'feminine' would seem to have denoted originally not a being regarded by the primitive mind as female, but an inanimate or passive thing, not merely inactive in itself, but also quite too vague and general ('abstract' perhaps suggests too high a grade of mental development) to possess activity; the 'masculine', on the contrary, was everywhere considered as animate and active. For other 'feminine' formatives in *-ā'u-*, *-ā-*, *-ē-*, *-ī-*, *-ū-*, whose occurrence in Hebrew is not wholly free from doubt, see *VG* and *B-L*, locc. citt.

§ 187. While the various Semitic languages show, even in their earliest historical periods, a confusion in gender which doubtless existed in at least the later strata of Proto-Semitic, it would seem that the majority of 'masculines' and 'feminines' fall into the two categories of 'animate' and 'inanimate' (or 'active' and 'passive') in so far

[1] It is possible, however, that this *-t* is not the 'feminine sign,' but the demonstrative and determinant particle *-t-* (cf. § 255, note), so that, e.g., Arab. *dahabatu^n* would primarily have meant 'that (particular piece of) gold' as contrasted with *dahabu^n* 'gold (generally speaking)'.

as 'masculine' and 'feminine' do not connote beings respectively male and female. One may further have ground for supposing that the 'feminine', when not referring to objects actually female or so considered in primitive thought, may have absorbed the functions of a still earlier 'inanimate' or 'neuter' ('passive') gender. It is particularly interesting—and justly suggestive—to observe in this connexion that Indo-European likewise shows a close affinity between the neuter plural in a collective sense and the feminine singular: both end in -ā for -o- and -ā-stems (neuter and fem. respectively also in -ə—; cf. for neuters Vedic yugā́, Old Church Slav. iga 'yokes': Latin iugă, Greek δῶρα 'gifts'); the neuter plural is occasionally used as a collective singular (cf. *Iliad* xx, 268: χρυσὸς γὰρ ἐρύκακε, δῶρα θεοῖο); and in Greek, the older Avesta, and (very rarely) in the Rig-Veda a neuter plural subject takes a verb in the singular. Indeed, it was the resemblance between the Semitic 'broken plural', in form and function a singular 'feminine' noun (see § 193), and the -ā of the Indo-European feminine singular and neuter plural which led to the formulation of the view now generally held by Indo-Europeanists regarding the origin of the 'feminine' declension in their group of languages;[1] and it may also be observed that in Romance the disappearance of the Latin neuter has caused many neuter plurals to become feminine singulars, as Lat. *folia* ⟩ Ital. *foglia*, Fr. *feuille*, Span. *hoja*, etc.[2]

§ 188. Returning to Semitic, one may suggest—though proof can thus far scarcely be alleged—that the 'feminine' -t- was originally a sign, not of a true animate, active feminine, but of an inanimate, passive neuter; and that the sign of such neuters was transferred to words denoting female beings because passivity is characteristic of the female as contrasted with the activity of the male. When it was felt necessary to distinguish females from males (notably in adjectives), the old 'passive' inanimate (neuter) sign was extended to serve as a grammatical characteristic for true feminines, with the result that the new true animate feminine completely usurped the functions of the old inanimate neuter, whose original nature was entirely forgotten, surviving only as a 'grammatical feminine'.

§ 189. The question may also be raised whether the -a- which, with -t-, characterises the Semitic feminine, may not have been originally identical with that of the accusative ('passive') singular of the 'masculine' ('active') gender (§§ 199, 206), the later nominative

[1] See especially J. Schmidt, *Die Pluralbildungen der indogermanischen Neutra*, pp. 10-11, 22-3, Weimar, 1889.
[2] W. Meyer-Lübke, *Grammaire des langues romanes*, ii, Paris, 1890-1905, § 54.

and genitive 'passive' being added on the analogy of the 'active' gender, precisely as seems to have been the procedure in Indo-European.[1] The characteristic -at- was carried over into the dual, and in the plural it was lengthened to -āt-, probably on the analogy of the masculine (masc. acc. sing. -a : fem. acc. sing. -at = masc. acc. plur. -ā[na]: fem. acc. plur. -āt). It is noteworthy, finally, in view of the fact that the 'broken plural' of Semitic is really a collective singular (§ 193), that the feminine plural is inflected as a singular (-ātu, -āti, -āta as contrasted with the masc. -ū[na], -ī[na], -ā[na]; for the inflexions see §§ 201-2).

§ 190. For the Semitic system of genders the following scheme may, accordingly, be drawn:

	Animate Masculine, Feminine	Inanimate Neuter
Active case sing.	-u	—— (-at-u)
Passive case sing.	-a	-at-a
Active case dual	-au(ni)	—— (-at-au[ni])
Passive case dual	-ā(ni)	-at-ā(ni)
Active case plur.	-ū(na)	—— (-āt-u)
Passive case plur.	-ā(na)	-āt-a

C. NUMBER

[VG i, §§ 228-44; KVG §§ 115-16; P §§ 165-9; Z § 55; W pp. 145-52; O §§ 122-5; B-L i, § 63; G §§ 87-8, 123-4.]

§ 191. In the historic period, Semitic has three numbers: singular, dual, and plural. Adjectives, however, possess no dual, and the pronoun shows it only in the second and third persons in Arabic (§ 226).

§ 192. The singular denotes either (a) a single being or thing or (b) a group of beings or things regarded collectively, as (a) P-S *yad- 'hand', Acc. 'īdu, Heb. yāδ, Syr. 'īδā, Arab. yadu[n], Eth. 'ed; (b) Heb. bāqār 'cattle', Syr. baqrā, Arab. baqaru[n]; Acc. zizānu 'reptiles', Heb. zīz 'moving creatures'.

§ 193. The collective singular readily develops into a psychological plural, a phenomenon particularly frequent in South Semitic (North and South Arab., Eth.) as the so-called 'broken plural', which is treated grammatically as a feminine singular (§§ 187, 189) and normally takes its verb in the feminine singular (unless referring to distinctly male beings), not in any form of the plural. As matter

---

[1] C. C. Uhlenbeck, 'Agens und Patiens im Kasussystem der indogermanischen Sprachen', in *Indogermanische Forschungen*, xii (1901), 170-1.

of fact, the 'broken plural' is not, in origin, a plural at all, but is
really a collective singular.

§ 194. The following list gives the most certain words of this type
in Heb.: 'ēβer 'pinions' ('eβrāḫ 'pinion'), 'ĕγōz 'nuts' (Arab. ǧawzuⁿ
'nuts', ǧawzatuⁿ 'nut'), 'āzēn 'implements', 'aḥū 'reeds', 'ŏnī 'ships,
fleet' ('ŏniyyāḫ 'ship'), 'assīr 'prisoners', bo'šāḫ 'stinking weeds',
bəhēmāḫ 'beast(s)', bōser 'sour grapes' (Arab. busruⁿ), bə'īr 'beasts,
cattle', bāqār 'cattle' (Arab. baqaruⁿ, but baqaratuⁿ 'single head of
cattle'), dim'āḫ 'tears', zīz 'moving things', ṭaφ 'children', 'ăβuddāḫ
'servants', 'ōφ 'flying creatures', 'ayiṭ 'bird(s) of prey', 'ărāβ 'steppe-
dwellers', pōl 'beans', ṣ'ōn 'small cattle' (also ṣōneḫ), ṣippōr 'bird(s)',
ṣəφardēₐ' 'frogs', ṣir'āḫ 'hornets', qimmōś 'thistles, nettles', rāhiṭ
'rafters, boards'(?), reχeβ 'chariots', reχeš 'steeds', remeś 'creeping
things', šereṣ 'swarming things'. From Accadian one may cite zizānu
'reptiles', and from Syriac ḥemrā 'asses' (sing. ḥəmārā), quryā 'cities'
(sing. qərīθā).

§ 195. In Arabic and Ethiopic the 'broken plural' is developed to
such degree that it usurps in great measure the true plural of dis-
tribution. In other words, the original concept of a collective singular
has here tended increasingly to disappear, its primary connotation
being replaced by a pluralistic and distributive force.[1]

§ 196. The dual denotes two beings or things, as Acc. 'idān, Heb.
yāδayim, Bib. Aram. yəδayin, Syr. 'iδayyā, Arab. yadāni, Eth. 'edē
'two hands'. Except in Arabic, the dual tends to disappear in favour
of the plural[2] and to be used, where it survives at all, to denote ob-
jects which occur normally only in pairs, as Acc. 'uznān 'two ears',
'īnān 'two eyes', šaptān 'two lips', birkān 'two knees' (Heb. 'oznayim,
'ēynayim, śəφāθayim, birkayim), Heb. šənayim 'two', kappayim 'two
palms of the hands or soles of the feet', raγlayim 'two feet', nəḥuštayim
'brazen fetters', na'ălayim 'pair of sandals', qarnayim 'two horns',
kənāφayim 'two wings', məṣiltayim 'cymbals', melqāḥayim 'tongs,
snuffers', mōzənayim 'balance' (§ 44); Syr. saθeyn 'two se'ahs' (Heb.
sāθayim), təreyn 'two', maθeyn 'two hundred' (Heb. māθayim), 'esrīn
'twenty' (Acc. 'esrā, Heb. 'eśrīm, Arab. 'išrūna, Eth. 'esrā, P-S
*'iśrā-, dual of *'aśr- 'ten'); Eth. haqʷē 'two hips', dēdē 'door' ⟨

---

[1] Wright, *Grammar*, i, §§ 304-6. I-E knows the same phenomenon of a collec-
tive singular with plural force, as Gk. ὡς φάσαν ἡ πληθύς (*Iliad* ii, 278), Lat.
omnis Graecia . . . decoravere (Cato apud Aulus Gellius III, vii, 19), Goth. *setun
bi ina managei* 'ἐκάθητο περὶ αὐτὸν ὄχλος' (Mark iii, 32), Eng. *His Majesty's
Government are.*

[2] The same statement holds true of I-E, cf. A. Cuny, *Le Nombre duel en Grec*,
pp. 67 sqq., Paris, 1906.

*daddē ⟨ *daltē (Heb. dəlāθayim, i.e. the two leaves of the door). The dual may even be used in collections of pairs, as Heb. kol birkayim 'all knees', šēš kənāφayim 'six wings', šibʻāḥ ʻēynayim 'seven eyes'.

§ 197. The plural denotes more than two beings or things regarded, primarily, as taken distributively, collectivity being expressed originally, as noted in §§ 192, 193, 195, by the singular, as Arab. ʻabdūna 'slaves' individually ('servi') as contrasted with ʻabīduⁿ 'slaves' collectively ('servitium'), e.g. Acc. rīšū 'heads' (Heb. rāšīm), 'ilū, 'ilāni 'gods', ṣalmānu 'pictures'; Heb. ṣaddīqīm 'righteous men', zəχārīm 'males', kəsāφīm 'pieces of silver';[1] Syr. talmīδīn 'disciples', 'īδīn 'festivals'; Arab. sāriqūna 'thieves', ʻalamūna 'worlds'; Eth. qasīsān 'priests'.

§ 198. The plural may also be expressed by reduplication, as Hebrew pīφiyyōθ 'cutting edges' beside piyyōθ, mēmē 'water' beside mayim; Syr. haδhəδānē 'certain ones', daqdəqē 'little ones'; Arab. qasāqisatuⁿ 'priests'.

D. DECLENSION

[VG i, §§ 245-8, ii, §§ 30-4, 154-73, 184-8, 197-212, 225-9; KVG §§ 117-19; P §§ 170-9; Z §§ 56-7; W pp. 139-52; O §§ 126-32; B pp. 14-15, 19; B-L i, §§ 64-65; G §§ 89-91, 125-30.]

§ 199. The Semitic languages, as exemplified by Early Accadian and Classical Arabic, possessed three cases, nominative, genitive ('adnominal'), and accusative, characterised by -u, -i, and -a respectively, as Acc. šarru, šarri, šarra 'rex, regis, regem', Arab. ʻabdu, ʻabdi, ʻabda 'servus, servi, servum'.

§ 200. The dual inserts -a- before the case-ending, which, unless followed by another word, is extended by adding -ni; and the plural is formed by lengthening the case-ending of the singular, with an extension, unless followed by another word, in -na (§ 213). The origin of all these inflexions is wholly obscure (for attempted explanations cf., eg., VG i, §§ 245 a, 244, 242; B-L i, §§ 65 b, 63 c, e, h).

§ 201. The Proto-Semitic system of case-endings would seem to have been:

	Sing.	Dual	Plur.
Nom.	-u	-a-u(ni) ⟩ -au(ni)	-ū(na)
Gen.	-i	-a-i(ni) ⟩ -ai(ni)	-ī(na)
Acc.	-a	-a-a(ni) ⟩ -ā(ni)	-ā(na)

[1] Heb. plurals of the type of kəsāφīm, səφārīm 'books', qōδāšīm 'sanctuaries' from 'səγōlate' singulars keseφ, sēφer, qōδeš (cf. §§ 121-4) instead of *kaspīm, *siprīm, *qudšīm seem due rather to the analogy of dəβārīm, etc., than to be 'broken plurals' of the types *katab-, *kitab-, *kutab-.

§ 202. In the feminine, the system is somewhat different (cf. § 189):

	Sing.	Dual	Plur.
Nom.	*-at-u*	*-at-a-u(ni)* ⟩ *-atau(ni)*	*-āt-u*
Gen.	*-at-i*	*-at-a-i(ni)* ⟩ *-atai(ni)*	*-āt-i*
Acc.	*-at-a*	*-at-a-a(ni)* ⟩ *-atā(ni)*	*-āt-a*

§ 203. In the historical period this scheme is profoundly modified in the masculine (for the feminine see § 189). As regards the singular, only Early Accadian and Classical Arabic have retained the old differentiation of cases. In later Accadian the case-endings indeed survive, but in utter confusion; in Hebrew, Aramaic, and Ethiopic they appear (save for certain exceptions discussed in §§ 217-18, 220, 222) only in the singular before affixed pronouns with no seeming consciousness of their original values, with the result that the singular shows but one form in the majority of Semitic languages.

§ 204. In the dual the primitive nominative seems to have disappeared, and to have been replaced in Accadian and Arabic by the accusative, while the other dialects, including Modern Arabic, have extended the genitive to include the old nominative and accusative.

§ 205. In the plural, Accadian and Classical Arabic have retained the nominative, but have made the genitive a general oblique plural case; Ethiopic employs the accusative as the general plural; Hebrew, Aramaic, and Modern Arabic make the Proto-Semitic genitive do duty for all three original cases.

§ 206. The case-endings of the chief Semitic languages may be tabulated as follows for the masculine:

		Acc.	Heb.	Aram.	Arab.	Eth.
Nom. Sing.		*-u*	——	——	*-u*	——
Gen.	”	*-i*	——	——	*-i*	——
Acc.	”	*-a*	——	——	*-a*	——
Nom. Dual		*-ā(n)*			*-ā(ni)*	
Gen.	”	⎰ *-ē(n)*	⎰ *-ayim* ⎱ (-ayin), -ĕy	⎰ *-eyn, -ayin, -īn*	⎰ *-ay(ni)*	⎰ *-ē*
Acc.	”					
Nom. Plur.		*-ū, -ānu*			*-ū(na)*	
Gen.	”	⎰ *-āni, -ē*	*-īm (-īn), -ēy*	*-īn, -ay*	⎰ *-ī(na)*	⎰ *-ān*
Acc.	”					

§ 207. The reason for *-m-* in the Hebrew (also Phoenician and Amarna Tablets) dual and plural instead of *-n-*, as in the other

Semitic dialects, is uncertain. It may be due to the analogy of the second person perfect masculine plural of the verb (e.g. Heb. *kəθaβtem*, Arab. *katabtum*), or of the masculine plural pronouns of the second and third persons (e.g. Heb. *'attem, -kem, hēm, -hem;* Arab. *'antum[u], -kum[u], hum[u]*); or *m* and *n* may be of independent origin, but similar or identical in meaning.

§ 208. The older ending *-ayin, -īn* is also found (in addition to frequent Aramaisms in later portions of the Old Testament) in Heb. *middīn* 'carpets', *Ṣiδōnīn* 'Sidonians', *rāṣīn* 'runners', etc. (cf. Meša Inscription *MLK N* 'kings', etc.).

§ 209. The *-ē-y* of the Hebrew construct plural (§§ 212, 214) is probably due to analogy with the dual.

§ 210. The direct object is frequently indicated, especially when some obscurity might otherwise be caused or (particularly in Arabic) in connexion with prepositions, by a particle which appears in the following forms: Acc. *yāti*, Heb. *'ēθ* (with nouns), *'ōθ* (with pronouns), Punic *yth*, Syr. *yāθā* (cf. *ləyāθeḥ* 'sibi ipsi'), Arab. *'iyyā*, Eth. *kiyā*. The origin of this particle is much disputed. According to Praetorius (*ZDMG* lv [1901], 369-70), the basal form **'āti ⟩ *'āt ⟩* Heb. *'ōθ*, whereas in a closed syllable **'āti ⟩ *'at ⟩ *'it ⟩ *'eθ*, whence *'ēθ* was developed by analogy with *'ōθ; B-L* (i, § 81 j'-l'), on the other hand, suggest that *'ōθ* arises from **'āti*, the first singular perfect of **'ātā* 'come', and *'ēθ* from the corresponding imperative **'iti*.

§ 211. Apparently *'ōθ ⟨ *'ăᶙāḥ* and *'ēθ ⟨ *'ă᷃āḥ* stand to each other in the same relation as Heb. *dūš, dīš* 'tread, thresh', *kūr, kīr* 'furnace', *śūm, śīm* 'put, place', *hūm, hīm* 'make noise' (§ 404), etc. They both seem to be cognate with Syr. *yāθā* 'essence, being, self', with a weakening of meaning first to a demonstrative (cf. §§ 241-6 and the development of Heb. *nefeš* 'soul' ⟩ 'ipse'), and then to a mere accusatival sign analogous to the use of Bib. Aram. *dī*, Syr. *də*, Acc. *ša* 'that' as a genitival exponent (e.g. Bib. Aram. *šəmēh dī-'ĕlāhā* 'his name, that of God' ⟩ 'the name of God'). Like Heb. *'ăšer* (cf. § 247), these words are 'empty', i.e. originally semantemes possessed of a complete signification of their own, they have become simply morphemes, *quasi*-inflexional particles.[1]

§ 212. Semitic nouns (and adjectives) show a twofold mode of inflexion according to whether (*a*) the noun (or adjective) in question is unlimited by another noun or by a pronoun ('casus absolutus'), or

---

[1] Cf. *VG* i, § 106; ii, §§ 212, 215 (for the use of *də*, etc., §§ 164-7). For a discussion of 'full' and 'empty' words—a terminology borrowed from Chinese grammar—cf. Vendryes, *Langage* 98-100, 196-203 (Eng. transl. 83-4, 164-70).

whether (b) it is so limited ('casus constructus'). When thus limited, the construct loses its accent in favour of the limiting noun and has only a secondary accent (see § 77), the complex of limited and limiting word becoming, in reality, a *quasi*-compound, e.g. Heb. *'iššāḥ ṭōβāḥ* 'a good woman', *'iššāḥ ṭōβαθ lēβāβ* 'a woman good as to heart, a good-hearted woman', *dāβār* 'a word', *dǝβar han-nāβī* 'the word of the prophet, the prophet-word', *meleχ* 'king', *malkī* 'my king'.

§ 213. Only the dual and plural, however, show a difference of endings between the absolute and construct. The absolute shows *-ni* in the masculine and feminine dual, and *-na* in the masculine plural, which do not appear in the construct (§ 200). The general evidence of linguistics would imply that the longer form, the absolute, was the earlier.

§ 214. The difference between the absolute and construct cases in the historic Sem. languages may be tabulated as shown on page 58.

§ 215. Proto-Semitic distinguished in the singular (and feminine plural) between an indeterminate and a determinate noun by appending to the former *-m* (*-n* in Arab.), as Acc. *šarrum : šarr*, Arab. *malikun: maliku* 'a king : a particular king'.[1] This 'mimation' is perhaps present in a few words in other Semitic languages, as Heb. *ḥinnām* 'freely', *rēyqām* 'emptily', *'umnām, 'omnām* 'verily', *yōmām* (Syr. *'īmāmā*) 'by day', *šilšōm* 'day before yesterday', *piθ'ōm* 'suddenly', Eth. *gēšam* 'tomorrow'.

§ 216. As already noted (§ 203), the case-endings of the singular have disappeared in Hebrew, Aramaic, (Modern Arabic,) and Ethiopic, except for a few survivals, particularly in connexion with personal pronouns affixed to the noun and the verb (§§ 221, 367-8, 373-4).

§ 217. The accusative singular survives in Hebrew and Judaeo-Aramaic in the sense of (a) 'place toward which'[2] and (b) 'place where', as Heb. *'arṣāḥ* 'earthwards', *Bāβelāḥ* 'to Babylon', *miδbārāḥ* 'toward (at) the desert', *ṣāφōnāḥ* 'northward', *ham-mizbēḥāḥ* 'on the altar', and even, by analogy, in the plural, as *šāmaymāḥ* 'heavenward', *Kaśdīmāḥ* 'unto the Chaldaeans', *miy-yāmīm yāmīmāḥ* 'from time to time', and in the construct, as *mizrǝḥāḥ haš-šemeš* 'toward the sun-rising, toward the east'; Judaeo-Aram. *taḥtāḥ* 'beneath', *tammāḥ* 'there'.

§ 218. In a very few words (all proper names) the old nominative and genitive case-endings seem to have survived in Hebrew,

---

[1] Whether this 'mimation' is derived from *mā* 'some' (cf. § 252), as is supposed by *VG* i, § 246 C, a; *B-L* i, § 65 y, seems very uncertain.

[2] The same usage is found in I-E; cf. Brugmann, *Grundriss*, II, ii, § 525.

ABSOLUTE AND CONSTRUCT

		Acc.	Heb.	Syr.	Arab.	Eth.
Abs.	sing. masc.	katbu	kāθāβ	kəθaβ	katabu(n)	katab
Const.	,, ,,	katab	kəθaβ	kəθaβ	katabu	(katab)
Abs.	,, fem.	katabtu	kəθāβāh̬	kaθβā	katabatu(n)	katabat
Const.	,, ,,	katbat	kiθəβaθ	kaθβaθ	katabatu	(katabat)
Abs.	dual masc.	(katbān	kəθāβ̄ayim	(kaθβeyn	katabāni	(kataba
Const.	,, ,,	katbā	kiθəβā	kaθβey	katabā	
Abs.	,, fem.	katb[t]ān	*kiθəβāθayim	*kaθəβteyn	katabatāni	katabatā
Const.	,, ,,	katb[t]ā)	*kiθəβəθēy	kaθəβtey)	katabatā	
Abs.	plur. masc.	katbāni	kəθāβīm	kaθβīn	katabūna	katabān
Const.	,, ,,	katbā	kiθəβēy	kaθβay	katabū	
Abs.	,, fem.	katbāti	kəθāβōθ	kaθβān	katabātu(n)	katabāt
Const.	,, ,,	katbāt	kiθəβōθ	kaθβāθ	katabātu	

ENDINGS BEFORE PERSONAL PRONOUNS

	Heb.	Syr.	Egypt. Arab.	Eth.	P-S
Sing. 1st com.	malkī	malk(ī)	malki	negūšeya	malki-χa
,, 2nd masc.	malkəχā	malkāχ	malkak	negūšeka	malka-kā, malki-kā
,, 2nd fem.	malkēχ	malkeχ(i)	malkik	negūšekī	malki-kī
,, 3rd masc.	malkō, malkēhū	malkeḥ	malkoḥ	negūšū ⟨ *negūšehū	malka-hū, malki-hū
,, 3rd fem.	malkāh, malkehā	malkāh	malk(i)ha	negūša ⟨ *negūšehā	malka-šā, malki-šā
Plur. 1st com.	malkēnū	malkān(ā)	malkīna	negūšenā	malka-nā, malki-nā
,, 2nd masc.	malkəχem	malkəχōn	malkīkum	negūšekemū	malki-kumū, malki-kumū
,, 2nd fem.	malkəχen	malkəχeyn	malkīkum	negūšeken	malki-kinnū, malki-kinnū
,, 3rd masc.	malkām	malkəhōn	malkīhum	negūšōmū ⟨ *negūšehōmū	malka-humū
,, 3rd fem.	malkān	malkəheyn	malkīhum	negūšān ⟨ *negūšehān	malka-šinnū

though any feeling for distinction of case appears to have been for-gotten, e.g. *Pənū'ēl* ('[Having] the face of God') beside *Pənī'ēl*, *Ḥămūṭal* ('T. is [my] husband's father'; Qərē) beside *Ḥămīṭal* (Κəθῑβ).

§ 219. In connexion with these first components one must note that throughout Semitic their pre-forms have their singular case-endings in long (not short) vowels: **'abū*, **'aḫū*, **ḥamū*, **pū*, etc., apparently to make the very rare monosyllabic base (§ 99) conform to the usual disyllabic type.

§ 220. In such Hebrew constructions as the *wāw* and *yōδ com-paginis*, e.g. *bənō Ṣippōr* 'son of Ṣippōr' (later, when the original meaning of the *ō* was forgotten, used with the feminine, as *hayθō-'ereṣ* 'beast of earth', *ma'yənō-māyim* 'spring of water'), *šōχənī səneḥ* 'dweller in a thorn-bush', *bənī 'áθōnō* 'his ass's colt' (also with the feminine, as *'al-diβrāθī malkī-ṣeδeq* 'after the order of Melchizedek'), the *ō* and *ī* probably represent pronouns of the 3rd singular masculine and feminine (§ 236), *ī* here being dialectic in Hebrew (cf. Phoen. *'abdī* 'his servant').

§ 221. Before affixed personal pronouns the old case-endings of the singular may survive in Hebrew, Aramaic, Egyptian (also Syro-Palestinian) Arabic, and Ethiopic, as given in the table on page 59.[1]

In the dual and plural, the construct ending is employed throughout.

§ 222. Besides the cases already considered, Proto-Semitic ap-parently had a locative in -*ū*, of which traces survive in Acc. *šēpū'a* 'at my feet, *rittū'a* 'in my fingers', Syr. *kaddū* 'sufficiently, enough', Arab. *fawqu* 'above', *taḥtu* (Eth. *tāḥtū*) 'beneath', *qablu* 'previously', *ba'du* 'afterward', Eth. *la'lū* 'above', *qadīmū* 'aforetime', *dā'emū* 'however,' and perhaps, with 'mimation' (§ 215), Heb. *šilšōm* 'day before yesterday', *piθ'ōm* 'suddenly' (cf. Eth. *temālem* 'yesterday), without it *yaḥdāw* 'together'.[2]

---

[1] *B-L* i, §§ 29 f'-h'; 65 c-d, deny that these are case-endings, regarding them, rather, as *svarabhakti*-vowels introduced for phonetic reasons. For the Proto-Semitic forms of the affixed pronouns see §§ 236, 240.

[2] So *VG* i, § 245 h, δδ; *B-L* i, § 65 z-b', however, regard the first two Hebrew words as dialectic for -*ām* (affixed pronoun of the 3rd plural masculine), and the third as a plural with an affixed pronoun of the 3rd singular masculine.

PRONOUNS

§ 223. Pronouns form a category distinct from those of nouns and verbs in that their bases are wholly unlike those which may develop into either nouns or verbs (§ 87); and, unlike nouns and verbs, they are uninflected in Semitic. Whether the pronouns have been evolved from exclamatory particles, as is sometimes maintained, seems highly doubtful; but it would appear that they served as inflexional prefixes and suffixes for the verb (§ 239).

A. Personal Pronouns

§ 224. In Semitic, personal pronouns assume different forms according to their employment either (*a*) as independent (used only as subjects), or (*b*) as affixed as enclitics (in genitival relation to nouns [§ 221] or in objectival relation to verbs [§§367-8, 373-4] and certain particles). The two classes of independent and affixed pronouns have scarcely any etymological connexions except in the third persons, which were originally demonstrative (§ 246), not personal, in character.

1. Independent Personal Pronouns
[*VG* i, § 104, ii, §§ 149-53; *KVG* § 66; *P* § 150; *Z* §§ 27-8; *W* pp. 98-106; *O* §§ 76-80; *B* pp. 7-8; *B-L* i, § 28; *G* § 32.]

§ 225. Historically the independent pronouns appear in the chief Semitic languages, together with their implied forms in Proto-Semitic, as shown on page 62.

§ 226. Dual pronouns appear only in Classical (not Modern) Arabic, where they show no distinctions of gender and seem to be secondary formations from the plural (2nd com. *'antumā*, 3rd com. *humā*).

§ 227. For Hebrew the following developments from the Proto-Semitic forms deserve consideration. 1st sing. com.: P-S **'anā* ⟩ *'ănī* with *ă* instead of **ā* probably through Aramaic influence, and with *ī* by analogy with the affixed form -(*n*)*ī* (§ 236); in the older form *'ānōχī* ⟨ **'anākū*, **ū* ⟩ *ī* by like analogy.

§ 228. 2nd sing. masc.: *'att* ⟨ **'antā* appears thrice in the Bible.

§ 229. 2nd sing. fem.: the older form *'attī* ⟨ **'antī* appears seven times in Kəθīβ.

§ 230. 3rd sing. and plur. fem.: as in Aramaic and Arabic, P-S initial *š* has been replaced, according to the conventional explanation,

INDEPENDENT PERSONAL PRONOUNS

	Acc.	Heb.	Syr.	Arab.	Eth.	P-S
Sing. 1st com.	'anāku	'ānōχī, 'ănī	'enā	'anā	'ana	'an-ā(kŭ)
" 2nd masc.	'atta	'attāh, 'att	'att (Bib. Aram. 'antā)	'anta	'anta	'an-t-ă
" 2nd fem.	'atti	'att(ī)	'att(ī)	'anti	'antī	'an-t-ī
" 3rd masc.	šū('atū)	hū'	hū	huwa	we'etū	h-ū-'a
" 3rd fem.	šī('atī)	hī'	hī	hiya	ye'etī	š-ī-'a
Plur. 1st com.	('ă)nīnu, ('a)nīni	('ă)naḥnā (Miš. 'ănū)	('ana)ḥnan (Bib. Aram. 'ănaḥnā, Miš. 'ănan)	naḥnu (Egypt. iḥna, Trip. ḥne)	neḥna	naḥ-nă
" 2nd masc.	'attunu	'attem	'attōn (Bib. Aram. 'antūn)	'antum(ū)	'antemmū	'an-t-um-ă
" 2nd fem.	'attina	'attēn(āh)	'atteyn	'antunna	'anten	'an-t-inn-ă
" 3rd masc.	šun(u)	(h)ēm(māh)	hennōn (Bib. Aram. himmō[n])	hum(ū)	'emūntū (we'elōmū)	h-um-ă
" 3rd fem.	šin(a)	(h)ēn(nāh)	henneyn (Bib. Aram. 'innān)	hunna	'emāntū (we'elōn)	š-inn-ă

by *h* through analogy with the masculine, whereas in Accadian the masculine *h* has been replaced by *š* through analogy with the feminine.[1]

§ 231. 1st plur. com.: the older form *naḥnū* occurs only five times, being generally transformed to *'ănaḥnū* by analogy with the sing. *'ănī*.

§ 232. 2nd plur. masc.: *'attem* ⟨ **'antimū* ⟨ **antumû* owes its *e* (instead of *ō*, *ū*, as in Aramaic) to analogy with the fem.

§ 233. 2nd plur. fem.: *'attēn* (only once) and *'attēnăḥ* (four times) are evolved from **'antinna* and **'antinnā* respectively.

§ 234. 3rd plur. masc.: as in the corresponding pronoun of the 2nd plur., *hēm(māḥ)* owes its vocalism to the corresponding feminine.

§ 235. 3rd plur. fem.: *hēn* and *hēnnăḥ* (for the initial *h* see § 230) are regarded as evolved from **šinna* and **šinnā* respectively.

2. Affixed Personal Pronouns

[*VG* i, §§ 105-6, ii, §§ 174-83, 213-15; *KVG* § 67; *P* § 151; *Z* § 29; *W* pp. 94-8; *O* §§ 81-6; *B* p. 8; *B-L* i, § 29; *G* § 33.]

§ 236. Historically the affixed pronouns appear in the chief Semitic languages, together with their implied forms in Proto-Semitic, as shown on page 64.

§ 237. For Hebrew the following developments from the Proto-Semitic forms deserve consideration. The substitution of *h* for *š* in the 3rd sing. and plur. fem., like the *ē* of the 2nd and 3rd plur. masc., is due to the same analogy as that found in the corresponding independent forms (§§ 230, 232, 234), while *-nū* instead of **-nā* in the 1st plur. com. is the result of analogy with the corresponding independent form (§ 231).

§ 238. In the 1st sing. com., **-(i)ịa* is the affixed form employed with nouns and particles, and **-niịa* that used with verbs. The *-n-* of the latter has been explained as parasitic (cf. § 64, and Heb. *kāmōnī* 'like me', *kāmōnū* 'like us'), but is more probably based on analogy with the plur. **-nâ*.

§ 239. The following table shows the relations of the true personal pronouns (i.e. of the first and second persons) to the personal

---

[1] It seems more probable, however, that Proto-Semitic originally had two distinct bases for this number, one in *š* and the other in *h*, of which Accadian chose the former, and all the rest the latter, while Mahrī retains both (*he* 'he', *se* 'she'; plurals *hem*, *sen*). For this hypothesis the author is indebted to the acute suggestion of his pupil Dr. Isaac Mendelsohn that Proto-Semitic **hū'a*, **šī'a*, etc., are really composite formations from **h-ū'a*, **š-ī'a*, etc., *h-* being identical with the demonstrative **hā* (§ 245), and *š-* appearing in Heb. *šel* (late), which is composed of the demonstrative **š-* + **la* 'to', so that *šel* originally meant 'illud (est) ad'. The real Proto-Semitic bases would, accordingly, be *ụ* for the masculine, and *ị* for the feminine.

AFFIXED PERSONAL PRONOUNS

	Acc.	Heb.	Syr.	Arab.	Eth.	P-S
Sing. 1st com.	-ya, -ī, -nī	-ī, -nī	-(ī), -n(ī)	-(i)ya, -ī, -nī	-ya, -nī	-(i)ya, -niya
" 2nd masc.	-ku	-χā	-(ā)χ	-ka	-ka	-k-ā
" 2nd fem.	-ki	-χ	-(ē)χ(ī)	-ki	-kī	-k-ī
" 3rd masc.	-šū	-(h)ū, -ō(h)	-(u)hī, -eh	-hu	-hū, -ō	-h-ū
" 3rd fem.	-šā, -ši	-hā, -āh	-āh	-hā	-(h)ā	-š-ā
Plur. 1st com.	-ni, -nu	-nū	-a(n)	-nā	-na	-nā
" 2nd masc.	-kunu	-χem	-χōn	-kum(ū)	-kemmū	-k-um-ā
" 2nd fem.	-kina	-χen(āh)	-χeyn	-kunna	-ken	-k-inn-ā
" 3rd masc.	-šunu, -šun-ūti, -šun-ūši	-hem, -ām(ō), -ēmō	-hōn	-hum(ū)	-(h)ōmū	-h-um-ā
" 3rd fem.	-šina, -šin-ātu, -šin-āšim	-hēn, -ān, -hēnnāh	-heyn	-hunna	-(h)ōn	-š-inn-ā

affixes of the perfect ('telic') and imperfect ('atelic') 'tenses' of the verb in Proto-Semitic (cf. §§ 362, 376, 371 [p. 96]):

		Independent	Affixed	Perfect	Imperfect
Sing.	1st com.	'an-ā(kū)	-(i)ịa, -niịa	-kū	'a-
"	2nd masc.	'an-t-ā	-k-ā	-t-a	t-
"	2nd fem.	'an-t-ī	-k-ī	-t-ī	t-
Plur.	1st com.	naḥ-nū	-nū	-nā	n-
"	2nd masc.	'an-t-um-ū	-k-um-ū	-t-um-ū	t-
"	2nd fem.	'an-t-inna-ā	-k-inn-ā	-t-inn-ā	t-

§ 240. Because of the evidence of the verb, the suggestion has been made, with some plausibility, that the earliest Proto-Semitic forms of the personal pronouns were: sing. 1st com. *'a(kū), plur. *nū; sing. and plur. 2nd com. *tū; 3rd com. *ịū.

B. DEMONSTRATIVE PRONOUNS AND THE ARTICLE
[VG i, § 107, ii, §§ 38-41; KVG § 68; P §§ 152-6; Z §§ 30-2; W pp. 106-15; O §§ 87-97; B p. 8; B-L i, §§ 30-1; G §§ 34-5, 126, 136.]

§ 241. The only demonstrative pronouns widely represented in Semitic are, for the sing., P-S *ðī, *ðā, which seems originally to have had no distinction of gender (cf. Arab. ḏā masc., ḏī fem., as contrasted with Heb. zōθ fem., zeh masc.); and for the plur., P-S *'illa, *'illaị, *'ul(l)a.

§ 242. Historically, these are represented as follows: sing.: Heb. zeh (masc.) ⟨ *ðī, zō (fem.) ⟨ *ðā; Talm. Aram. dē(n) (masc.) ⟨ *ðī, dā (fem.) ⟨ *ðā; Arab. ḏā (masc.), ḏī, tī, tā (fem.); Eth. zĕ (masc.), zā (fem.); plur.: Heb. 'ēl ⟨ *'illa beside 'ēlleh ⟨ *'illaị; Bib. Aram. 'illēn (epicene); Arab. 'ula(y) ⟨ *'ul(l)a (epicene); Eth. 'ellū (masc.), 'ellā (fem.) ⟨ *'illa; cf. Acc. 'ullū 'is'.

§ 243. These early forms of the demonstrative pronouns were subsequently affected to some degree by the nominal declension. In the singular, *ðī, being regarded as a gen., was supplemented in part by a nom. *ðū (poetic Heb. masc. zū, Arab. ḏū, ḏī, ḏā masc., ḏātu, ḏāti, ḏāta fem.; Heb. zōθ fem.); and the plural shows Bib. Aram. 'illēn, Arab. 'ulū, 'ulī masc., 'ulātu, 'ulāti fem.

§ 244. Heb. zeh and zō occasionally serve for relative pronouns (§ 247; cf. also Eth. sing. za relative, zĕ demonstrative; plur. 'ella relative, 'ellū demonstrative), and another interchange of the two categories is seen in Arab. 'alladī 'who' (fem. 'allatī, plur. 'al'ulā) as contrasted with Heb. masc. hallāz(eh) ⟨ *hallað ⟨ *hā-'allað, fem. hallēzū probably ⟨ *halliðū ⟨ *hā-'alliðū.

§ 245. The element *hā just mentioned is not only found in such words as Arab. hāḏā 'this', hākahā 'accipe', Syr. hāḏā, hāleyn 'this, these', hāw, hānōn 'is, ei', etc., but serves in Hebrew, Phoenician, and the inscriptions of Ṣafā, Liḥyā, and Tamūd as a prefixed article, while in Aramaic it is affixed for the same purpose (e.g. Heb. ham-meleχ 'the king'; Phoen. HRBT = har-rabbat [?] 'the great lady'; Syr. malkā 'the king': maleχ 'king'). In Heb. hā ⟩ ha with gemination before the initial consonant of a following word (§ 59); but this gemination drops, often with compensatory lengthening, before pharyngals and r (e.g. *hā-meleχ ⟩ ham-meleχ, but hā-'ēm 'the mother', hā-rāqīq' 'the firmament', hā-hār 'the mountain').

§ 246. The pronouns used to denote the third persons were originally demonstratives,[1] and clear survivals of this still appear in Accadian, Hebrew, and Syriac, as Acc. 'alu šū 'this city', narkabtu šī 'this chariot'; Heb. hu' had-dāβār 'this (is) the word', hay-yōm ha-hū' 'that day', bay-yāmīm ha-hēmmāḥ 'in those days', Syr. hī saybāraθeḥ 'that fasting of his'.

C. RELATIVE PRONOUNS

[VG i, § 109, ii, §§ 366-9, 375-9; KVG § 70; P § 157; Z § 33; W pp. 116-20; O §§ 98-101; B pp. 9-10; B-L i, § 32; G §§ 36, 138; C. Gaenssle, The Hebrew Particle אשׁר, Chicago, 1915.]

§ 247. While in Heb. zeh and zō are occasionally employed as relatives (§ 244 and zū always, cf. Bib. Aram. dī, Egypt. Aram. [Elephantine Papyri] zī, Syr. də, Arab. alla-ḏī, Eth. za, etc.), any real pronoun of this category has been practically supplanted in all the earlier portion of the Old Testament by 'ăšer, a noun which originally meant 'place' (Acc. 'ašru 'place' [cf. 'ašar 'in'], Syr. 'aθar 'place', Arab. 'aṭaruⁿ, Eth. 'ašar 'footstep, mark'), and which appears only in the construct (its d may be due to Aram. influence).

§ 248. The nominal origin of 'ăšer explains the syntactic peculiarity of phrases containing it, as kol-remeś 'ăšer hū'-ḥay 'every moving thing that liveth', han-nāβī 'ăšer šəlāḥō YHWH 'the prophet whom YHWH hath sent', gōy 'ăšer ləšōnō 'a people whose tongue', 'ereṣ 'ăšer-šām haz-zāhāβ 'a land where there is gold', kol-ham-māqōm 'ăšer nāβō šammāḥ 'every place whither we shall come', hā-'ăḏāmāḥ 'ăšer luqqaḥ miš-šām 'the ground from whence he was taken'.[2]

---

[1] The same development is seen in Indo-European; see K. Brugmann, Die Demonstrativpronomina der indogermanischen Sprachen, pp. 16-17, 127-9, Leipzig, 1904.

[2] For I-E parallels cf. Mod. Gk. οἱ γυναῖκες τοῦ μ' ἐφώναξαν 'the women who called me', τὰ παιδιὰ τοῦ γνωρίζω τὴ μάννα τους 'the children whose mother I know'; Mod. West and Upper Germ. die Frau wo ich gesehen habe 'the woman whom I have seen'.

§ 249. The original nominal force of *'ăšer* is seen in such passages as *ba-'ăšer kāra' šām nāφal* 'where he bowed, there he fell', *'el-'ăšer tēləχī 'ēlēχ* 'whither thou goest, I will go'.

§ 250. In later portions of the Old Testament, however, as everywhere in the Mišnā, a real relative pronoun, originally only North Semitic, appears in *šă, še, šə* (Phoen. *'š*, Pun. [Plautus] *asse, esa*, Acc. *ša* 'who'; cf. § 230, note).

D. INTERROGATIVE PRONOUNS

[*VG* i, §§ 110-11, ii, §§ 370-4; *KVG* §§ 71-2; *P* §§ 158-9; *Z* § 34; *W* pp. 120-5; *O* §§ 102-6; *B* p. 9; *B-L* i, § 33; *G* §§ 37, 137.]

§ 251. The Proto-Semitic interrogative pronoun was **mī, *mā*, which, like the demonstrative **ðī, *ðā* (§ 241), evidently had primarily no distinction of gender, although in Hebrew the two were specialised as animate (masc.-fem.) and inanimate respectively.

§ 252. The historic forms are as follows: **mī*, Acc. *mī* intensive particle, *mīnu* 'what?', Heb. *mī*, Mod. Arab. *mīn* 'who(m)?', Eth. *mī, ment* 'what?'; **mā*, Heb. *māh* (see § 59), Syr., Arab. *mā* 'what?', Eth. *mā* intensive particle, *kamā* 'how?', and, with various extensions, Acc., Eth. *mannū*, Syr. *mān(ā), mōn*, Arab. *man* 'who?', Heb. *mazzeh* ⟨ **mā-zeh*, Targ. *māðēn*, Arab. *mā ḏā* 'what?'.

§ 253. Besides **mī, *mā*, an interrogative particle **'aį* (§ 279) also existed, as is evident from the interrogative adjectives Acc. *'ayyū*, Miš. *'ēy-zeh*, Syr. *ay-nā* (fem. *'ay-ðā*, plur. *'ay-leyn*), Arab. *'ayyuⁿ*, Eth. *'ay* 'which?' (cf. also Acc. *'ayka* 'wherever', Heb. *'ayyēh* 'where?', *'ayin* 'whence?', Syr. *'aykā* 'wherever', *'aykannā* 'how?', Arab. *'ayna*, Eth. *'aytē* 'where?').

§ 254. Indefinite pronouns, strictly speaking, do not exist in Semitic.

NUMERALS

[*VG* i, § 249, ii, §§ 189–96; *KVG* § 120; *P* §§ 180–6; *Z* 58; *B* p. 15; *B-L* i, § 79; *G* §§ 97–8, 134.]

A. CARDINALS

§ 255. In Semitic, the cardinals for 'one' and 'two' are adjectives; those from 'three' to 'ten' are abstract nouns (masculine and feminine absolute and construct) followed by the genitive plural of the persons or things numbered, but opposed in gender (i.e. if the noun is masculine, the numeral is feminine, and vice versa); in those from 'eleven' to 'nineteen' the digit precedes the decimal with a similar inversion of gender (i.e. if the persons or things numbered are masculine, the decimal is also masculine, but the digit is feminine);[1] 'twenty' is originally the dual of 'ten' (§ 196), and the other decades are plurals of the digits; 'hundred' and 'thousand' are nouns of normal types.

§ 256. In counting, the usual order is that of decreasing sequence, e.g. $4675 = 4000 + 600 + 70 + 5$; and distributives, except in Aramaic and Arabic, where nouns are employed (Bib. Aram. *taltā*, Arab. *tiltaⁿ* 'every third'), are expressed by doubling the cardinal concerned, as Heb. *šiβʻāḥ šiβʻāḥ* 'seven each', *šēš wā-šēš* 'six each'. Multiplicatives are indicated either by the masculine singular (implying the loss of a feminine noun like *paʻam* denoting 'times') or by the feminine dual, as Heb. *šeβaʻ*, *šiβʻāθayim* 'seven times'.

§ 257. The absolute forms of the digits are shown on page 69.

§ 258. 'One': Heb. *'eḥāδ* ⟨ **'aḥḥad-* (cf. § 21, note 12) is properly the pausal form as contrasted with the const. form *'aḥaδ* ⟨ **'aḥadu; 'aštēy* is used solely in combination with *'āśār, 'eśrēḥ* 'ten', and finds cognates only in Acc. *'ištēn* and, probably, Qaṭabānian *'ŠT N*. Eth. *'aḥattī* is formed by analogy with the pronoun *ye'etī* 'she' (see § 225).

§ 259. 'Two': Heb. *štayim* (⟨ **eštayim?* cf. § 52) ⟨ **šətayim* (once actually *šəθēy*) is for **šettayim* (with the vocalism of the masc. *šənayim*) ⟨ **šittayim* ⟨ **þintaị-* (cf. *G* § 97 b, note 1; *B-L* i, § 79 c);

---

[1] The reason for this apparent inversion of gender is matter of debate. The best explanation seems to be given by Barth, who holds that the ending *-tu* of the 'feminine' numeral was originally neither masculine nor feminine (cf. Acc. *šū'a-tū* 'he', *šī'a-tī* 'she', Eth. *we'e-tū* 'he', *ye'e-tī* 'she', *kel'ē-tū, kel'ē-tī* 'two' [§§ 225, 259]), *-t-* being a demonstrative and determinant element (also found, it may be suggested, in the *nomen unitatis* [§ 185]). This became confused with the 'feminine sign' *-t-* (§§179, 188); and since a feminine thus seemed to govern a masculine, the ending of the numeral was dropped, by reverse analogy, before a feminine noun, so that a masculine would appear to govern a feminine. Primarily, the numeral seems in Semitic to have been neither a noun nor an adjective, but a distinct and separate category.

ABSOLUTE FORMS OF THE DIGITS

	Acc.	Heb.	Syr.	Arab.	Eth.	P-S
1st masc.	'ēdu, 'ištēn	'eḥāḏ, 'aštēy	ḥaδ	'aḥadu"	'aḥadū	'aḥadu
,, fem.	'ettu, 'ištēnit	'aḥaθ, 'aštēy	ḥǝδā	'iḥdā'u"	'aḥatī	'aḥadtu
2nd masc.	šinā	šǝnayim	tǝreyn	iθnāni	(kel'ē[tū])	pinaḳ
,, fem.	šittā	štayim	tartēyn	iθnatāni	(kel'ētī)	pintaḳ
3rd masc.	šalāšu	šālōš	tǝlāθ	θalāṯu"	šalās	palāšu
,, fem.	šalaštu	šǝlōšāḥ	tǝlāθā	θalāθatu"	šalastū	palāšatu
4th masc.	'arba'u	'arba'	'arba'	'arba'u"	'arba'	'arba'u
,, fem.	'irbittu	'arbā'āḥ	'arbǝ'ā	'arba'atu"	'arba'atu	'arba'atu
5th masc.	ḥamšu	ḥāmēš	ḥammeš	ḥamsu"	ḥames	ḥamišu
,, fem.	ḥamištu	ḥǝmiššāḥ	ḥamšā	ḥamsatu"	ḥamestū	ḥamišatu
6th masc.	šeššu	šēš	šeθ	sittu"	sessu	šidṗu
,, fem.	šeššit	šiššāḥ	('e)štā	sittatu"	sedestū	šidṗatu
7th masc.	sību	šeβa'	šǝβa'	sab'u"	sab'ū	šab'u < *sab'u
,, fem.	sibittu	šiβ'āḥ	šaβ'ā	sab'atu"	sab'atū	šab'atu < *sab'atu
8th masc.	samānu	šǝmōneḥ	tǝmānē	ṯamāni"	samānī	pamānī < *pamaniju
,, fem.	samāntu	šǝmōnāḥ	tǝmānyā	ṯamāniyatu"	samānītū	pamānijatu
9th masc.	tišu	tēša'	tēša'	tis'u"	tes'ū	tiš'u
,, fem.	tišit	tiš'āḥ	tēš'ā	tis'atu"	tes'atū	tiš'atu
10th masc.	'ešru	'ešer, 'āšār	'ǝsar	'aš(a)ru"	'ašrū	'aš(a)ru
,, fem.	'ešertu, 'ešrit	'ǝšārāḥ, 'ešrēḥ	'esrā, 'esrē	'ašaratu, 'ašrata	'ašartū	'ašar(a)tu, 'ašratu

the Syr. forms have a dissimilatory r ⟨ n (*təreyn* ⟨ **təneyn* ⟨ *tenneyn* ⟨ **tintēn;* cf. § 40); the Eth. word is cognate with Acc. *kilaū,* Heb. *kil'ayim* 'two kinds', Arab. *kilā(ni)* 'both'.

§ 260. 'Three': in the fem. const., the abs. **þalāþatu* (Heb. *šəlōšāḥ*) ⟩ **þalāþtu,* whence Heb. const. *šəlōšeθ.*

§ 261. 'Five': the Heb. fem. abs. *ḥămiššāh* instead of **ḥămēšāh* is influenced by analogy with the regular *šiššāh* 'six' (fem.), and its const. *ḥămēšeθ* instead of the regular **ḥămeše* ⟨ **ḥamištu* has *ē* instead of *e* through analogy with the regular masc. *ḥāmēš;* Syr. shows *hammeš* instead of **həmeš* through analogy with *'arba'* 'four'.

§ 262. 'Six': from P-S **šidþu* one would expect, by Philippi's Law (§ 21, note 3), Heb. **šāš* ⟨ **šaš* (cf. § 36), the actual form *šēš* being influenced by analogy with *ḥāmēš* 'five'; the fem. const. *šēšeθ* ⟨ **šidþatu* has similarly been influenced by the corresponding form *ḥămēšeθ* 'five'.

§ 263. 'Seven': the Acc. forms *sibu, sibittu* suggest that the earliest P-S had **sab'u, *sab'atu,* their *s* being changed to *š* through analogy with P-S **šidþu, *šidþatu* 'six'.

§ 264. 'Eight': Acc. *samānu, samāntu,* instead of **šamānu, šamāntu,* have *s* instead of *š* ⟨ *þ* through analogy with *sibu, sibittu* 'seven'.

§ 265. 'Ten': except in Eth., this shows two forms, one for 'ten' only, and another for '*x*+ten': (a) 'ten' masc.: P-S **ašru,* Acc. *'ešru,* Heb. *'ešer,* Syr. *'əsar,* Arab. *'ašruⁿ,* Eth. *'ašrū;* (b) '*x*+ten' masc. P-S **'ašaru,* Heb. *'āśār,* Arab. *'ašaruⁿ;* (c) 'ten' fem.: P-S **'ašar(a)tu,* Acc. *'ešertu,* Heb. *'ăśārāh,* Syr. *'esrā,* Arab. *'ašaratuⁿ,* Eth. *'ašartū;* (d) '*x*+ten': P-S **'ašratu,* Acc. *'ešrit,* Heb. *'eśrēḫ* (probably borrowed from Aram.), Syr. *'esrē,* Arab. *'ašrata.*

§ 266. 'Eleven' to 'nineteen': for 'eleven', Heb. has the digit in the const. (masc. *'aḥaδ 'āśār,* fem. *'aḥaθ 'eśrēḫ*), as is shown (despite the ambiguity of *'aḥaδ* and *'aḥaθ,* which may be either abs. or const.) by masc. *'aštēy 'āśār, 'aštēy 'eśrēḫ;* for 'twelve' either abs. or const. may be used (masc. *šənēy[m] 'āśār,* fem. *štēy[m] 'eśrēḫ*); from 'thirteen' to 'nineteen' the masc. has the digit in the const., as *šəlōš 'eśrēḫ* 'thirteen', while the fem. has the abs., as *šəlōšāh 'āśār.*

§ 267. The decades from 'twenty' to 'ninety' are uninflected absolutes. 'Twenty', as being 'two tens', was originally a dual **'iśrā,* as is still the case in Accadian, South Arabic, and Ethiopic (*'eśrā, 'iśray, 'ešrā;* see § 196), these languages forming the other decades analogously in the dual (*šalāšā, ṯalāṯay, šalāsā* 'thirty', etc.), while elsewhere in Semitic the plural of the decades from 'thirty' on (Heb. *šəlōšīm,* Syr. *təlāθīn,* Arab. *ṯalāṯūna* 'thirty', etc.) has pluralised the original dual 'twenty' (Heb. *'eśrīm,* Syr. *'esrīn,* Arab. *'iśrūna*).

B. ORDINALS

§ 268. Semitic has ordinals only from 'first' to 'tenth', after which cardinals alone are found, as is frequently the case even in the first decade to denote years and days, e.g. Heb. *bi-šƏnaθ šālōš* 'in the third year', *ba-ḥămiššāḥ la-ḥōδeš* 'on the fifth (day) of the month'.

§ 269. As in I-E[1], the ordinal 'first' is not derived from the cardinal 'one', but from various noun-stems, as Heb. *rīšōn* by vocalic dissimilation from *rōš* 'head' (§ 42; cf. Acc. *rēštū* 'first': *rēšu* 'head'); Acc. *maḥrū: maḥāru* 'be in front'; Syr. *qaδmāyā*, Eth. *qadāmī*: Acc. *qudmu* 'front, former time', Heb. *qeδem* 'front, east', Syr. *qƏδem*, Arab., Eth. *qadama* 'precede'; Arab. *'awwalu*: Heb. *'ūlām* 'porch'.

§ 270. The other ordinals are formed from the corresponding cardinals, but from varying bases. In Accadian they are based on **katub-*, in Hebrew and Aramaic on **katīb-*, and in Arabic and Ethiopic on **kātib-* (cf. §§ 118, 126, 132).

§ 271. The ordinals from 'second' to 'tenth' are as follows:

	*katub-	**katīb-*		**kātib-*	
	Acc.	Heb.	Syr.	Arab.	Eth.
'second'	*šanū*	*šēnī*	*taryānā*	*ṭāni*[n]	*sānīt*
'third'	*šalšu*	*šƏlīšī*	*tƏlīθāyā*	*ṭālitu*[n]	*šales*
'fourth'	*ribu*	*rƏβī'ī*	*rƏβī'āyā*	*rābi'u*[n]	*rābe'*
'fifth'	*ḥanšu, ḥaššu*	*ḥămīšī*	*ḥəmīšāyā*	*ḥāmisu*[n]	*ḥāmes*
'sixth'	*šiššu*	*šiššī*	*šƏθīθāyā*	*sādisu*[n]	*sādes*
'seventh'	*sibū*	*šƏβī'ī*	*šƏβī'āyā*	*sābi'u*[n]	*sābe'*
'eighth'	*samānu*	*šƏmīnī*	*tƏmīnāyā*	*ṭāminu*[n]	*sāmin*
'ninth'	*tešū*	*tƏšī'ī*	*tƏšī'āyā*	*tāsi'u*[n]	*tāse'*
'tenth'	*'ešru*	*'ăšīrī*	*'əsīrāyā*	*'āširu*[n]	*'āser*

§ 272. For 'sixth' the regular Hebrew form would be **šƏδīšī*, but the actual form *šiššī* has been modelled on the cardinal *šēš, šiššāḥ;* Arab. *sādisu*[n] instead of **sādiṭu*[n] shows assimilation of *ṭ* to *s* because of the initial *s* (contrast the cardinal *sittu*[n] ⟨ P-S **šidθu*).

C. FRACTIONALS

§ 273. The normal Semitic type of fractional is **kutb-* (see § 124), e.g. Acc. *šuluštu* 'one-third'; Heb. *ḥōmeš*, Syr. *ḥumšā*, Arab. *ḥimsu*[n] 'one-fifth' (in Ethiopic, however, this form is, rather, multiplicative, as *šels* 'triple'). Generally speaking, fractionals are expressed in Hebrew (as in Accadian) by ordinals.

[1] Brugmann, *Grundriss* II, ii, §§ 4, 47-8.

PARTICLES

§ 274. The term 'particles' includes, with far from scientific accuracy, those miscellaneous words which cannot obviously be grouped under the great categories of nouns, pronouns, and verbs. Here belong, notably, adverbs (including words of affirmation, negation, and interrogation), prepositions, conjunctions, and interjections. In most traceable instances these words are nominal or pronominal in origin, with a few derived from verbs; but very frequently the underlying noun has vanished as such even in the Proto-Semitic period, while, on the other hand, certain nouns have developed into particles in historic times.

A. ADVERBS

1. Adverbs of Non-nominal Origin

a. Relative

§ 275. With *h-* (cf. the demonstrative article **h̄ā*, § 245): Heb. *hălōm*, Arab. *halumma* 'hither' (cf. Syr. *ləhal* 'thither'); Heb. *hēnnāh* 'hither', Arab. *hinnā* 'here'; Heb. *hēn, hinnēh* 'voici' (without *h-*, Acc. *'enna*, Syr. *'ēn*, Arab. *'inna* 'voici'); Heb. *hă* '-ne', *hălō*, 'nonne' (lit. '[is] that not [the case]?'), Arab. *(h)al* '-ne', and also Arab. *hayya* 'hither', Et. *heya* 'here'.

§ 276. With *k-*: Heb. *kōh, kāχāh* 'thus', Syr. *ləχā* 'thither', *mekkā* 'thence', Eth. *kaha(kī)* 'there'; Heb., Aram. *kə*, Arab. *ka* 'as'; Heb. *kī* 'that', Syr. *kay* 'therefore', Arab. *kay* 'in order that', Eth. *kē* 'therefore'; Heb. *kēn*, Acc. *'akanna*, Syr. *hāχannā* 'so'; Heb. *'aχ*, *'aχēn* 'surely'; Heb. *'eyχ(āh)*, Acc. *'ayka, 'ēka*, Syr. *'ayχā*, 'how? where?' (cf. Arab. *lākinna* 'not so, but'); Arab. *kayfa* 'as, how?' (without *k-*, Eth. *'efō* 'as'; without *k-ai̯-*, Heb. *pō[h]* 'here' [cf. § 292]).

§ 277. P-S **þamma* 'there, then': Heb. *šām*, Syr. *tammān*, Arab. *ṭamma* 'there'.

§ 278. P-S **'aδ* 'then': Heb. *'āz* (archaic *'ăzay*), Arab. *'id(ā)* 'then', Eth. *ye'ezē* 'now'.

b. Interrogative

§ 279. P-S **'ai̯* (cf. § 253): Heb. *'ay, 'ayyēh, 'ayin, 'ēyφōh*, *'ēyχ(āh)*, Acc. *'ayka, 'aykanna*, Syr. *'ayχā*, Arab. *'ayna*, Eth. *'aytē*

'where?'; Heb. *'ayin*, *'ēyn* 'is not' (e.g., *'ēyn rō'ānī* 'there is none that seeth me'); in origin probably a rhetorical question, 'where [is the one] seeing me? [nowhere!]').

§ 280. P-S **mā:* Heb. *māθay*, Acc. *'immati*, Syr. *'emmaθ* ⟨ **'ina mataį*, Arab. *matā* 'when?'.

c. Voluntative

§ 281. Acc. and Heb. *lū*, Arab. *lāw* 'O that!'

d. Assertional

§ 282. P-S **įišaį* 'there is': Acc. *'išu* 'est illi', Heb. *yēš*, Syr. *'īθ* ⟨ **'īš* (probably by analogy with *layθ* 'is not' ⟨ **lā 'iθay* ⟨ **lā įišaį*), Arab. *laysa* ⟨ **lā įisa* 'is not'.

e. Negational

§ 283. P-S **'alā*(?): Acc., Syr., Arab. *lā*, Heb. *lō* 'not' beside Acc. *'ul*, Heb., Arab. *'al* 'not' (Eth. *'albō* 'there is not', *'alkkō* ⟨ **'al-kō* 'not').

2. Adverbs of Nominal Origin

§ 284. Adverbs of nominal origin are, for the most part, in the accusative,[1] as Acc. *'atarta* 'mightily', Heb. *hay-yōm* 'today', *yaḥaδ* 'together' (as a noun, 'unitedness'), *mə'ōδ* 'very' (as a noun, 'abundance', cf. § 55), *kəβār* 'already', *'ūlām* (once *'ullām*) 'nevertheless', *səβīβ* 'around' (as a noun, 'surrounding area'), *šəβaʿ* 'seven times', *māḥār* 'tomorrow', Syr. *šappīr* 'beautifully', *ṭāβ* 'well', *bīš* 'badly', *sāχ* 'thoroughly', Arab. *'abadaⁿ* 'always', *ǧiddaⁿ* 'very', *šimālaⁿ* 'to the left', *kaṯiraⁿ* 'greatly', *laylaⁿ* 'at night', *yawmaⁿ* 'one day', *'al-yawma* 'today'.

§ 285. In Hebrew and Aramaic, however, the adverb generally assumes the form of the feminine (i.e., probably, the acc. neuter; cf. §§ 186-90), as Heb. *Yəhūδīθ* 'in Jewish, Jewishly', *nōrā'ōθ* 'fearfully', *niφlā'ōθ* 'wonderfully', *rīšōnāḵ* 'first(ly)', *rabbaθ* (also *raβ, rabbāḵ*) 'greatly', *šēnīθ* 'secondly'; Syr. *pa'yaθ* 'beautifully', *šəwāθ, šawyaθ* 'simultaneously', *ḥayyaθ* 'in living wise', *Yawnā'īθ* 'in Greek, Hellenically', *šappirā'īθ* 'beautifully', *ṭāβā'īθ* 'well'.

§ 286. Hebrew also employs various substitutes for adverbs. (a) Prepositional phrases like *bə-'aḥaθ-* 'once' (lit. 'in one'), *kə-'eḥāδ* 'together' (lit. 'as one'), *lə-βaδ* 'alone' (lit. 'for separation'), *mib-bayiθ* 'within' (lit. 'from house'), *'aδ-mə'ōδ* 'exceedingly' (lit. 'to abundance'; cf. § 284), *lə-māḥār* 'tomorrow' (lit. 'to the morrow'; cf. § 284), *mē-'āz*

---

[1] For similar phenomena in Indo-European see Brugmann, *Grundriss* II, ii, § 558.

'since' (lit. 'from then'; cf. § 278), 'al-kēn 'therefore' (lit. 'on so'; cf.
§ 276); cf. Arab. li-ḏālika 'therefore' (lit. 'for this'), li-mā 'why?' (lit.
'for what?'), Eth. ba-'entaze 'therefore' (lit. in this').

§ 287. (b) Stereotyped imperatives (or, possibly, infinitives abso-
lute), especially of the Hiφ'īl (see §§ 395-6), as haškēm wə-ha'ǎrēβ 'at
morning and evening' (lit. 'start early, make it evening'), harbēẖ
'greatly' (lit. 'make it great').

§ 288. (c) Sentences, as maddūǫ' 'wherefore?' ⟨ *māh yāδūǫ' 'quo
cognito?' (cf. Arab. mudrīka 'why?' ⟨ *mā yudrīka 'what makes thee
know?').

§ 289. In Accadian, abstracts with affixed personal pronouns
serve as adverbs, e.g. balṭussu ⟨ *balṭūt-šu 'in living fashion' (lit. 'his
living state'), 'ēdišu 'he alone' (cf. Syr. balḥūδaw, Eth. bāḥtītū 'he
alone' ⟨ *'in his solitude'), -iš(u) being developed from such phrases
into a mere adverbial ending, as šattišu 'annually', šēlabiš 'foxily'.

B. PREPOSITIONS

§ 290. Like the adverbs, the majority of Semitic prepositions are
nominal in origin, as is still evident in Heb. 'aḥar, 'aḥǎrēy 'after' (as a
noun, 'hinder part'), 'ēṣel 'beside' (as a noun, 'proximity'), bəlī 'with-
out' (as a noun, 'destruction'; cf. Acc. balū, balī 'without'), ba'aδ
'away from, behind' (cf. Arab. bu'duⁿ 'distance, separation,' ba'du
'after'), zūlaθ 'except' (as a noun, 'removal'), mūl, mō(')l 'before'
(as a noun, 'front'), neγeδ 'in front of', nōχah 'straight before' (cf.
nāχōǫẖ 'straight[ness]'), səβīβ 'around' (cf. § 284).

§ 291. The following prepositions are common to more than one
Semitic language: P-S *'ilaį 'to', Acc. 'ilī, Heb. 'el, 'ĕlēy, Arab. 'ilā
('ilay before affixes); P-S *'itt 'with', Acc. 'itti, Heb. 'ēθ; P-S *bi 'in',
Acc. bašu (Eth. bō) 'in him' ⟩ 'there is', Heb., Syr. bə, ba (with a by
analogy with the preposition la), Arab. bi, Eth. ba; P-S *baįn 'be-
tween', Acc. 'ina bīrīt (⟨ *'ina baįnāt), Heb. bēyn, Syr. baynay, Arab.
bayna, Eth. bayna, baynāt (cf. Heb. bēnayim 'space between two
armies', Arab. baynuⁿ 'interval'); P-S *ka 'like', Acc. kī, Heb. ke, ka,
Syr. 'a(y)χ, 'aχwāθ, Arab., Eth. ka; P-S *la 'to', Acc. lapān (Heb.
liφənēy) 'before' (lit., 'to the face of'), Heb., Syr. lə, la, Arab. li (with
i by analogy with the preposition bi), la (before affixes), Eth. la; P-S
*min 'from', Heb. min, Syr. men, Arab. min; P-S *'adaį 'up to, until',
Acc. 'adī, Heb. 'aδ, 'ăδēy, Syr. 'əδammā ⟨ *'aδaymā, Sab. 'D(Y); P-S
*'alaį 'on, upon', Acc. 'elī, Heb. and Syr. 'al, 'ǎlēy (cf. Heb. 'al 'height'),
Arab. 'alā ('alay before affixes), Eth. la'la (la'lē before affixes;
double preposition with la 'to'); P-S *'im 'with', Heb. 'im, Syr. 'am,

Arab. (with metathesis) *ma'a;* P-S **taḥtai̯* 'under', Heb. *taḥaθ,* *taḥt(ēy),* Syr. *təḥōθ(ay),* *təḥēθ, taḥtay,* Arab. *taḥta,* Eth. *tāḥta, tāḥtē.*

C. Conjunctions

§ 292. The chief conjunctions found in Hebrew in common with other Semitic languages are as follows: P-S **au̯* 'or', Acc. *'ū,* Heb. *'ō,* Syr., Arab., Eth. *'aw;* P-S **'im* 'if', Heb. *'im,* Syr. *'en,* Arab. *'im,* Eth. *'emma* ⟨ **'en-ma;* P-S **'apa* 'and also', Heb. *'aφ* (cf. also Heb. *pō[ḥ]* 'here', § 276), Syr. *'āφ,* Arab. *fa;* P-S **u̯a* 'and', Acc. *'u,* Heb. *wa, wə,*[1] Syr. *wə,* Arab., Syr. *wa;* P-S **kai̯* 'in order that', Acc., Heb. *kī,* Syr., Arab. *kay,* Eth. *kē.*

§ 293. Hebrew has, moreover, a conjunction *pen* 'lest' which is also found in North Semitic inscriptions, and which appears to be cognate with Heb. *pānāḥ,* Syr. *pənā* 'turn', Arab. *faniya* 'pass away' (cf. also Arab. *fanā'u*ⁿ 'perishability, annihilation').

D. Interjections

§ 294. Interjections are, properly speaking, mere reflex emotional exclamations with no real linguistic basis. Here belong Heb. *'ăhāh, 'ō(y), 'āḥ, 'ī, hāh, hō(y)* 'alas!', *hē* 'lo!', *he'āḥ,* 'aha!', *has* 'hush!'.

§ 295. The imperative is sometimes used, with loss of all verbal force, as an interjection, as Heb. *lēχ, ləχāḥ* 'come!', *rə'ēḥ* 'lo!', *qūmāḥ* 'up!'; and the same statement holds true for nouns, as *ḥălīlāḥ* 'far be it!' (lit., 'ad profanum').

[1] For the problem of the '*wāw* consecutive' see §§ 347-53.

CHAPTER VIII

VERBS

§ 296. The verb, whose place in Semitic morphology has already been outlined (§ 87), is characterised by mood, 'tense' (more properly 'aspect'), person, gender, and number. The basal principles of the latter two have received consideration in connexion with analogous phenomena in the noun (§§ 177-98).

§ 297. As regards the category of persons, it is enough to say that, as in Indo-European, they are three: first (giving the action or state of the speaker or speakers; *I salute you, we exist*), second (indicating the action or state of the person[s] or thing[s] addressed by the speakers; *thou salutest us, ye exist*), and third (denoting the person[s] or thing[s] of whom or of which some action or state is predicated; *he saluteth thee, they exist*) for all moods, 'tenses', genders, and numbers. The first person (probably being regarded as animate or active only; cf. § 177) is found in the masculine gender alone; and it is wholly absent from the imperative. Moods and 'tenses' will be discussed in §§ 342-57 and §§ 358-65 respectively.

§ 298. Verbs possess a number of categories ('stems') expressed by various modifications of the base (cf. §§ 87-90) both internal (vocalic alternations, gemination of the second consonant; §§ 93-7, 312-15) and external (prefixes; §§ 321-39), these defining the action as active, passive, neutral ('stative'), causative, intensive, conative, reciprocal, reflexive, iterative, terminative, etc.

§ 299. In Semitic the term 'active' includes not merely transitive verbs, but many which are intransitive (e.g. not merely *kataba* 'he wrote', but also *kaδaba* 'he lied'). The essential meaning of the active is 'to perform an action' whether directly affecting another person or thing (transitive) or not (intransitive), thus distinguishing it from the neutral, which means simply 'to be in a certain condition or state' whether complete in itself (intransitive, e.g. Heb. *kāβēδ* 'be heavy', *qāṭōn* 'be small') or incomplete (transitive, e.g. Heb. *hāφēṣ* 'find [a thing] delightful' as well as 'be delighted [with a thing]').

§ 300. The difference between 'strong' and 'weak' verbs, the former having three unchangeable consonants, the latter not, is apparent rather than real, the underlying morphology being the same in both categories (cf. also §§ 91, 403-21).

§ 301. Verb-bases (cf. §§ 87-90, 98, note 1) are mostly trisyllabic; monosyllabic bases are here unknown, but such types as

*kabkab- (§§ 340-41) seem to have been disyllabic in origin. As in other Semitic languages, certain types in Heb. are probably new formations (cf. §§ 318, 320, 336-9, 341), and here, as elsewhere, many denominatives have been created.

A. STEMS

[VG i, § 257, ii, §§ 70-3; KVG § 123; P §§ 189-97; Z § 36; W pp. 198-226; O §§ 135-43; B pp. 12-13; B-L i, § 38; G §§ 39, 43, 51-5; G-B ii, §§ 2, 14-20.]

1. Bases Without Preformatives

a. Simple Trisyllabic Bases
(*katab-, *katib-, *katub-, *kutib-, *kātab-, *kūtib-)

§ 302. Of the three types *katab-, *katib-, *katub-, the first is primarily active, while the second and third are neutral, denoting respectively transitory, accidental state or condition, and permanent, essential state or condition. The query may be raised, in view of the durative aspect of these two types, whether they may not be survivals, completely verbalised, from the same source as the Accadian 'permansive' (§ 363).

§ 303. *Type *katab-.* Proto-Semitic *ṭabaḥ- 'slaughter', Acc. ṭabāḥu, Heb. ṭāβaḥ, Syr. ṭǝβaḥ, Arab. and Eth. ṭabaḥa; P-S *naẓar- 'guard, watch', Acc. naṣāru, Heb. nāṣar, Syr. nǝṭar, Arab. naẓara, Eth. naṣara.

§ 304. *Type *katib-.* P-S *ïabiš- 'be dry', Heb. yāβēš, Syr. yǝβeš, Arab. yabisa, Eth. yabesa; P-S *šalim- 'be sound, complete', Acc. šalim, Heb. šālēm, Syr. šǝlem, Arab. salima.

§ 305. *Type *katub-.* This type is very rare, except in Arab. (e.g. ḥasuna 'be beautiful', ṭaqula 'be heavy', kabura 'be large'). In Hebrew the only occurrences are yāγōr 'be afraid' (cf. Arab. waǧira), yāχōl 'be able' (cf. Acc. 'akālu), yāqōš 'lure', qāṭōn 'be little' (cf. Syr. qǝṭan), šāχōl 'be bereaved' (cf. Targ. tǝχōl, tǝχēl, Arab. ṭakila). In other dialects the type is even more sporadic, e.g. Acc. maruṣ 'be ill'; Syr. qǝφōδ 'bristle up' (beside qǝφaδ), Mand. tǝqun 'be firm' (cf. Syr. tǝqen, Heb. tāqan), bǝṭun 'be pregnant' beside bǝṭin (cf. Syr. bǝṭen, Arab. baṭuna 'be big-bellied'); in Eth. the types *katib- and *katub- coincide.

§ 306. As has just been implied by such examples as Heb. tāqan, Syr. tǝqen, Mand. tǝqun, the three types may co-exist, not merely in different languages, but in the same one, as Heb. 'āhaβ, 'āhēβ 'love', 'āšam, 'āšēm 'offend, be guilty', dāβaq, dāβēq 'cling' (Syr. dǝβaq, dǝβeq), šāχan, šāχēn 'dwell', šāχal, šāχōl 'be bereaved'; Syr. ḥasan, ḥǝsen 'be strong'; Arab. qadama 'go first', qadima 'be returned from a journey', qaduma 'be first'; baṭana 'strike on the belly',

baṭina 'be replete with food', *baṭuna* 'be big-bellied', the differences of type corresponding to differences of connotation.

§ 307. *Type* **kutib-*. This type, the passive of **katab-*, survives in its original form only in Arabic, as *ruziqa* 'be granted', *ḥurima* 'be deprived', *ǧuʿila* 'be put', *ḍuriba* 'be beaten'. In Biblical Aramaic it appears with *ī* ⟨ *i* by analogy with the participle, e.g. *ṭərīδ* 'be driven out', *kəθīβ* 'be written', *yəhīβ* 'be given'.

§ 308. In Hebrew, **kutib-* seems to have become **kuttab-* in the perfect, with *a* ⟨ *i* by analogy with other Hebrew forms of passive meaning (see §§ 311, 318, 320, 321, 330, 341) and with a secondary gemination, apparently through confusion with the type **kuttab-* (pass. of **kittēb-*; cf. § 315); and **i̯oktab-* ⟨ **i̯uktab-* in the imperfect, with *o* ⟨ *u* by analogy with the type **i̯oktab-* (pass. of **hiktīb-*; cf. § 324).

§ 309. The criterion for distinguishing between **kuttab-* ⟨ **kutib-* as the passive of **katab-* and **kuttab-* as the passive of **kittēb-* is as follows: **kuttab-* and **i̯oktab-* are really perfect and imperfect passive Qal if (*a*) the corresponding perf. **kittēb-* either does not occur or possesses a different meaning, and if there is no corresponding impf. **i̯oktab-*; (*b*) if the corresponding impf. **i̯aktīb-* and perf. **hoktab-* do not occur. Here belong, e.g. Heb. *'ukkal, yə'ukkal* 'be devoured' ⟨ **'ukal, *yə'ukal* (cf. Arab. *'ukila, yu'kalu*), *luqqaḥ, yuqqaḥ* 'be taken' ⟨ **luqaḥ, *yulqaḥ;* the perfects *'ussar* 'be taken prisoner', *ḥuṣṣaβ* 'be hewn', *yullaδ* 'be born', *yuṣṣar* 'be formed', *nuppaḥ* 'be blown', *'ubbaδ* 'be worked', *'uzzaβ* 'be deserted', *šuggal* 'be ravished', *suṭṭaφ* 'be scoured', *šuppaχ* 'be poured out'; and the imperfects *yəḥuppaś* 'will be sought out', *yuqqam* ⟨ *yunqam 'will be avenged', *yuttan* ⟨ *yuntan 'will be given', *yuttaṣ* ⟨ *yudtaṣ 'will be broken down', *yuttaš* ⟨ *yuntaš 'will be uprooted'.

§ 310. *Type* **kātab-*. This is common in Arabic as the 'third form' (with conative, reciprocal, or terminative force), as *qātala* 'fight' ('try to kill'), *kātaba* 'write (and receive replies)', *ḥāšana* 'treat harshly' ('make another to be in a harsh plight'), and is also found, though less frequently, in Ethiopic, as *bāraka* 'bless' (also Arabic), *šāqaya* 'torture'. In North Semitic it occurs only in Hebrew, as *šōrēš* 'take root', *šōsēθī* 'I have plundered' ⟨ *šōsēθī and with *ē* ⟨ *i* ⟨ *a* by analogy with such forms as *kittēβ* and *hiθkattēβ* (cf. §§ 313, 314, 329, 332, 338-40, 402). This type must not be confused with the intensives of verbs with medial geminated consonants, such as *sōβēβ: sāβ, sāβaβ* 'surround' (see §§ 409-13).

§ 311. *Type *kŭtib-*. This passive of **kătab-* (cf. Arab. *kŭtiba: kātaba*) is excessively rare in Hebrew, as *šōraš* 'be rooted', and probably in Hos. xiii, 3, where *yəsō'ar*, rather than the *yəsō'ēr* of the text, is favoured by Septuagint ἀποφυσώμενος, Vulgate *raptus*, Pəšiṭṭā *pərah* (Eng. vers., 'driven with the whirlwind'). The *a* instead of *ē ⟨ i* is doubtless due to analogy with the passive types *kuttaβ* and *hoχtaβ* (see §§ 308, 318, 320, 321, 330, 341, 402).

b. Bases With Second Consonant Geminated
(**kattab-*, **kuttib-*)

§ 312. *Type *kattab-*. This is represented historically by Acc. *kattab*, Heb. *kittaβ*, *kittěβ*, Bib. Aram. *kattiβ*, Syr. *katteβ*, Arab. *kattaba* (Egypt. Arab. also *kattib*), and Eth. *kattaba* (§§ 391-2). Its primary meaning is intensive, but it also serves frequently to form denominatives.

§ 313. In Hebrew, one finds both *kittaβ* and *kittěβ*, as *hiššaβ* 'consider, plan', *limmaδ* 'teach', *'ippar* 'cast dust': *kibběs* 'wash', *dibběr* 'speak', *kipper* 'cover over, propitiate'; and the two types may exist side by side in the same word, as *giddal*, *giddēl* 'make great', *bēraχ*, *bērēχ* 'bless', *qiṣṣaṣ*, *qiṣṣēṣ* 'cut off'. Only *a* is found in the perfect forms *dibbartā* 'thou hast spoken', etc.; and the original *a* of the first syllable appears solely in *naššanī* 'he hath made me forget' (in paronomasia with the proper name *Mənaššeh* in Gen. xli, 51).

§ 314. Heb. *kittēβ ⟨ *kattib* (for the first *i* see § 21, note 10) has received its *ē ⟨ i* by analogy with the imperfect (cf. §§ 315, 324, 325, 329, 334, 335; similarly in Bib. Aram. and Syr.; in Egypt. Arab. *i* may be due to weakening in an unaccented syllable). One may suggest that the true Hebrew form was *kittaβ*, and that *kittěβ* was introduced under Aramaic influence, or that Proto-Semitic had both **kattab-* and **kattib-* (cf. **katab-*, **katib-* above, §§ 303-4), of which only **kattab-* survived in Arabic and Ethiopic, and **kattib-* in Aramaic, while Hebrew shows both.

§ 315. *Type *kuttib-*. This type, the passive of **kattab-*, is found only in Hebrew and Arabic, as Arab. *ḍurriba* 'be beaten violently', *kussira* 'be broken in pieces', *quttila* 'be massacred'; Heb. *hullaq* 'be divided', *suppar* 'be recounted', *qubbar* 'be buried', *lummaδ* 'be taught', *kubbas* 'be washed', *kuppar* 'be covered, atoned for' (occasionally *o* appears instead of *u* [cf. § 21, note 21], as *mə'oddām* 'reddened', *šoddəδāh* 'she hath been devastated' beside *šuddəδāh*, masc. *šuddaδ*; cf. also §§ 393-4). The *a* of Heb. *kuttaβ ⟨ *kuttib-* is by analogy with the imperfect (cf. §§ 314, 324, 325, 329, 334, 335).

Whether *kuttib- is a survival of a Proto-Semitic formation preserved only in Hebrew and Arabic, or was developed independently in each by analogy with *kutib- as a passive of *katab-, *katib-, *katub- (cf. §§ 307-9), is uncertain, though the former seems more probable.

c. Bases With First or Second Consonant Repeated
(*katkab-, *kutbat-)

§ 316. These two types are represented by the Hebrew noun zarzīφ 'dripping' and by the participle məhuspās 'scaled off', as well as, perhaps, by Heb. məχurbāl 'bemantled' (cf. §§ 64, 402).

d. Bases With Third Consonant Repeated
(*katabab-, *kutabib-)

§ 317. Type *katabab-. This type is historically represented by Heb. kiθbaβ, Aram. kaθbaβ, kaθbeβ, Arab. iktabba, Eth. katbaba (cf. also Acc. šuqamumu 'stand upright', šuqalulu 'hang', 'ušparir 'spread out', 'ušḥarir 'be still'), the meaning being durative and denominative, or, in Arabic, possession of colours or defects. The Hebrew, Aramaic, and Ethiopic forms show *katbab- ⟨ *kat(a)bab-, and the Arab. *ktabb- ⟨ *k(a)tab(a)b-. Here belong Heb. ša'ănan 'be at ease, secure', ra'ănan 'be green'; Syr. 'aβdeδ 'enslave', 'azrar 'enwrap', 'aynen 'eye'; Arab. iṣfarra 'be yellow', iswadda 'be black', i'waǧǧa 'be crooked', iḥwalla 'squint', irbaṭṭa 'be scattered, disordered', irqadda 'run quickly'; Eth. bardada 'hail', galbaba 'enwrap', gabsasa 'plaster', ḥanqaqa 'be anxious' (cf. § 402).

§ 318. Type *kutabib-. This passive of the foregoing is found only in Heb. 'umlal 'be weak, languish' with a ⟨ i as in other passives (cf. §§ 308, 311, 320, 321, 330, 341, 402).

e. Bases With Second and Third Syllable Reduplicated
(*katabatab-, *kutibatib-)

§ 319. Type *katabatab-. This type, iterative in force, is found in Hebrew only in səharhar 'throb', translated in Talmudic Aramaic by the similar form ṣəmarmar 'feel terror'; but in Ethiopic it is not uncommon, as 'anbalbala 'flame', 'aḥmalmala 'become green', 'aftaltala 'clean by rubbing' (*aktabtaba ⟨ *k[a]tab[a]taba; cf. also § 402). The twelfth form of the Arabic verb, iktautaba, may have developed by dissimilation from *iktabtaba, as iḥdaudaba 'be arched', iḥšaušana 'become very rough', i'ṣauṣaba 'be gathered together', imlaulaḥa 'be salt'.

§ 320. Type *kutibatib-. This passive of the foregoing is found only in Heb. ḥŏmarmar 'be in ferment' and ḥŏmarmar 'be reddened'

(cf. Arab. *ḥamara* 'ferment, leven', and *ḥamira* 'be red' respectively; for *a* instead of *i* see §§ 308, 311, 318, 321, 330, 341, 402).

2. Bases With Preformatives

a. *Bases With Preformative na-*
(**nakatab-*)

§ 321. The form **nakatab-* is found in Accadian, Hebrew, Arabic, and (in a few tetrasyllabics) Ethiopic, but not in Aramaic, the historical types being Acc. *'ikkatab* ⟨ **nkatab* ⟨ **n(a)katab*, Heb. *niχtaβ* ⟨ **nəkətab* ⟨ **n(a)k(a)tab-*, Arab. *inkataba* ⟨ **n(a)katab-* (cf. Moroccan Arab. *nktab*, and see §§ 389-90). The meaning is primarily reflexive, and then frequently passive, as Acc. *'ippalis* 'see', *'ikkašid* 'be forgotten', *'ippariš* 'flee', *'iššakin* 'take place'; Heb. *nišmar* 'be on one's guard', *nistar* 'hide oneself, be concealed', *niδraš* 'let oneself be consulted, sought out', *niš'al* 'ask for oneself'; Arab. *inkasara* 'be broken', *inqaṭa'a* 'be ended', *inhaṭama* 'be broken', *inhazama* 'be put to flight', *inḥada'a* 'let oneself be deceived'; Eth. *'anfara'aṣa* 'hop'.

b. *Bases With Preformative ha-*
(**hakatab-*, **hukatib-*)

§ 322. *Type *hakatab-*. This appears historically in Heb. *hiχtīβ* ⟨ **həkətib* ⟨ **hak(a)tab-*, with *i* instead of *a* most probably on the analogy of the corresponding form of verbs with medial *i̯* (e.g. *hēβīn* 'understand, discern, teach' ⟨ **həbəi̯an* ⟨ **hab(a)i̯an-*; cf. §§ 45, 419-20), Bib. Aram. *haχtēβ*, Eth. (in early inscriptions) *haktaba* (cf. §§ 395-6). The meaning is essentially causative, as Heb. *hiqdīš* 'consecrate', *hiṣdīq* 'justify', *hiχbīδ* 'make heavy, cause to be honoured', *hehšīχ* 'darken', *hiγbīr* 'confirm', *he'δīφ* 'have a surplus', *hiškīl* 'consider, prosper, teach'; Bib. Aram. *hanpēq* 'bring forth', *halbēš* 'clothe', *hašpēl* 'humble'.

§ 323. Arabic shows a few traces of the preformative *ha-* in such verbs as *harāḥa* 'give rest' ⟨ **harayaḥa* beside the usual *'arāḥa*, *harāda* 'wish' beside *'arāda*, *harāqa* 'pour out' (Heb. *hērīq*) beside *'arāqa*, *haymana* 'believe' (Heb. *he'ĕmīn*). This preformative must not be confused with the preformative *'a* in the types of Syr. *'aχteβ*, and Eth. *'aktaba*.

§ 324. *Type *hukatib-*. This passive of the foregoing appears only in Heb. *hoχtaβ*, *huχtaβ*, and Bib. Aram. *hoχtaβ*, with *a* instead of *i* on the analogy of the imperfect (cf. §§ 314, 315, 325, 329, 334, 335), as Heb. *homlaχ* 'be made king', *hušlaχ* 'be thrown'; Bib. Aram. *honḥaθ* 'be deposed', *hoθqan* 'be established' (cf. §§ 397-8).

c. Bases With Preformative ta-
(*takatab-, *takutib-, *takātab-, *taktib-, *takattab-, *takuttib-,
*takatbab-, *takabkab-)

§ 325. *Type* *takatab-. This type, with reflexive (and so, frequently, *quasi*-passive) force, seems to be found in Heb. *hiθpāqēδ* 'present oneself for enumeration', with a corresponding pass. *takutib-, in Heb. *hoθpāqaδ* 'be mustered', with *ē* ⟨ *a* and *a* ⟨ *u* respectively through analogy with their imperfects (cf. §§ 314, 315, 324, 329, 334, 335). The type would thus be cognate with Acc. *'iktatab*, Bib. Aram. (h)*iθkaθēβ*, Syr. *'eθkaθeβ*, Arab. *iktataba* (by metathesis ⟨ *itkataba;* Tun. Arab. *tktab*) ⟨ *t(a)katab-* (Arab. pass. *uktutiba*), Eth. *taktaba*, as Acc. *'iptalaḥ* 'be afraid'; Bib. Aram. *hiθgəzēr* 'be cut out', *'iθ'ăqēr* 'be uprooted'; Syr. *'eθgəβel* 'be created', *'eθpəleγ* 'be divided'; Arab. *iftaraqa*, go asunder', *iltamasa* 'search for', *iqtatala* 'fight', *irtada'a* 'be turned back'; Eth. *tanše'a* 'arise' ⟨ *tan(a)ša'a*. In Ras Shamra texts the type *k(a)tatab-, corresponding exactly to Acc. *'iktatab*, Arab. *iktataba*, is seen in *TMTḤṢ* 'thou shalt set thyself against' (cf. *THTPK* 'thou shalt overturn', inscription of Aḥīrām of Byblos, contrasted with Heb. *tiθhappēχ;* cf. also Moabite *W'LTḤM* 'and I warred'; *JRAS* 1932, p. 895). Question thus arises as to whether two distinct P-S formations should not be postulated—one in *katatab- (represented in Acc., Ras Shamra, Moabite, and Arab.), the other in *takatab- (found in Heb., Aram., Tun. Arab., and Eth.). On the other hand, infixation is otherwise unknown in the formation of either verbs or nouns in Semitic, so that it would seem more likely that *katatab- has arisen from *takatab- by metathesis (cf. § 50).

§ 326. Here, as in other types with preformative *ta-*, Hebrew (and often Biblical Aramaic) prefixes *h* by analogy with verbs with the true preformative *h-* (§§ 322-4).

§ 327. *Type* *takātab-. This type, with conative-reflexive force, is found in Hebrew, e.g., *hiθgō'aš* 'toss, reel', *hiθrō'a'* 'be broken asunder', *hiθpōrar* 'be split' (cf. § 402), but it also appears in Arab. *takātaba*, *itkātaba* (Egypt. Arab. *itkātab*, Syr. Arab. *tᵃkātab*, Mor. Arab. *tkātab* ⟨ *t[a]kātaba*), Eth. *takātaba*, as Arab. *taġāfala* 'be off one's guard, neglect', *tamāraḍa* 'feign illness'; Eth. *tasākala* 'be propitious', *tawāsaba* 'intermarry'. The type *takātib- occurs in Hebrew (§ 402).

§ 328. *Type* *taktib- ⟨ *tak(a)tib-. This may be found in Heb. *tirgaltī* 'I taught to walk', *təθaḥăreḥ* 'thou wilt hotly contend', and also in Syr. *targem* 'interpret, translate' (cf. § 402, and Arab. *tarġama* 'translate', Acc. *targumānu* 'interpreter').

§ 329. *Type *takattab-*. This type appears historically as Acc. *'uktattĭb* (with metathesis; vocalism!), Heb. *hiθkattēβ* (with *ē* ‹ *a* by analogy with the impf. [cf. §§ 314, 315, 324, 325, 334, 335], and inorganic *h* [cf. § 326]), *hiθkattaβ*, Bib. Aram. *(h)iθkattaβ*, Syr. *'eθkattaβ* ‹ **t(a)kattab-*, Arab. *takattaba*, *ĭtkattaba* (Egypt. Arab. *ĭtkattab*, Syr. Arab. *t°kattab*, Mor. Arab. *tkattab*), Eth. *takattaba* (cf. §§ 399-400). In meaning, it is the reflexive of **kattab-* (§ 312). As examples one may cite Acc. *'uptarriš* ‘ransom’, *'uktanniš* ‘assemble’; Heb. *hiθhallēχ* ‘walk about’, *hiθpallēl* ‘intercede’ (with retention of original *a*, *hiθ'annaφ* ‘be angry’, *hiθ'azzar* ‘gird oneself’); Bib. Aram. *hiθbaqqar* ‘have search made’, *hiθhabbal* ‘be destroyed’; Syr. *'eštammaš* ‘be ministered to’ (for the metathesis see § 50), *'eθbarraχ* ‘be blessed’, *'eθhassan* ‘fortify oneself’, *'estakkal* ‘understand’; Arab. *takassara* ‘be broken in pieces’, *taḥawwafa* ‘be afraid’, *ta'azzama* ‘be proud’, *tanaṣṣara* ‘become a Christian’, *tanammara* ‘become savage as a leopard’, *taṭallaba* ‘seek earnestly’; Eth. *takaddana* ‘be covered’, *taqaddasa* ‘be declared holy’.

§ 330. *Type *takuttĭb-*. This passive of the foregoing appears in Heb. **tukattaβ*, *huθkattab*, Arab. *tukuttĭba* (vocalised by analogy with other passives [see §§ 308, 311, 318, 320, 321, 330, 341, 402]; for *h* see § 326), as Heb. *huṭṭammā* ‹ **huṭṭammā* ‘be defiled’, *hukkabbas* ‹ **hut-kabbas* ‘be washed’, *huddaššənāḫ* ‹ **hutdaššənāḫ* (erroneously pointed *huddašənāḫ*) ‘be made fat’; Arab. *tutullĭba* ‘be sought earnestly’.

§ 331. *Type *takatbab-* ‹ **takatabab-* (cf. § 317). This type occurs in Hebrew only in *hištaḥăwāḫ* ‹ **tašaḥyayā* ‘prostrate oneself’, but finds parallels in Acc. *'uktabĭb*, Syr. *'eθkaθbaβ*, and Eth. *takatbaba*, as Acc. *'uštaḥrir* ‘rest’; Syr. *'eθbawrar* ‘be amazed’, Eth. *tazangʷagʷa* ‘be ridiculed’ (cf. § 402).

§ 332. *Type *takabkab-* ‹ **takabakab-* (for **kab[a]kab-* see § 340). This is found in Heb. *hiθkaβkēβ* (with *ē* ‹ *a* by analogy with the type **kittēβ*, § 314; cf. also §§ 310, 313, 329, 338-40, 402), Syr. *'eθkaβkaβ*, Arab. and Eth. *takabkaba*, as Heb. *hištaqšēq* ‘rush to and fro’, *hiθhalhēl* ‘writhe with anxiety’, *hiθmarmēr* ‘become embittered’, *hiθgalgēl* ‘roll oneself’, *hišta'ăša'* ‘delight oneself’; Syr. *'eθbalbal* ‘be confused’, *'eθza'za'* ‘be moved’; Arab. *takabkaba* ‘be overthrown’, *taǵarǵara* ‘gargle’, *tawaswasa* ‘be perplexed’, *tazalzala* ‘be agitated, tremble’; Tigrē *teqaṭqaṭa* ‘be broken’, *tekalkala* ‘surround’. The type **takābkĭb-* occurs in Heb. (§ 402).

d. Bases With Preformative š- and s-
(*šaktab-, *saktab-)

§ 333. In Hebrew, these types occur only in the Mišnā, though they are found in other Semitic languages. Like the types with preformative ha-, 'a- (§§ 322-4), they are causative in force.

§ 334. *Type *šaktab.* This is found in Acc. 'ušaktīb, Miš. šaχtēβ (for ē instead of a cf. §§ 314, 315, 324, 325, 329, 335), Syr. šaχtēβ, as Acc. 'ušapriš 'cause to fly', 'ušamqit 'throw down'; Mis. ši'bēδ 'enslave' (cf. Heb. he'ĕβīδ 'force to work like a slave'), šilhēβ 'be aflame', širbēβ 'be great'; Syr. ša'beδ 'enslave', šaḥleφ 'alter'.

§ 335. *Type *saktab-.* This type (cf. Arab. istaktaba ⟨ *sa-ta-kataba) is represented by Miš. saχtēβ (for ē instead of a cf. §§ 314, 315, 324, 325, 329, 334), Syr. saχtēβ, Min. saktab, as Miš. sargēl 'draw lines'; Syr. sarheβ 'hasten', saqbel 'oppose' (cf. Heb. hiqbīl, Arab. istaqbala), Min. saqnaya 'dedicate', sašraḥa 'make flourish'; and here, too, may belong such Arabic verbs as sadala 'let the hair hang down': dāla ⟨ *daɥala 'hang down', saḥata 'scratch off': ḥatta 'scratch', saṭaḥa 'spread out': ṭaḥā 'be spread out'.

e. Bases With Preformative n-t- and n-s-t-
(*natakātab-, *natakattab-, *natakabakab, *nasatakatab-)

§ 336. These types, all of recent formation and reflexive-passive meaning, occur only in Hebrew.

§ 337. *Type *natakātab-.* This type is found only in Mišnāic, as niθrōq 'be made empty' ⟨ *natarāɥaq-, niθrō'a' 'be broken' (cf. Heb. hiθrō'a').

§ 338. *Type *natakattab-.* This type ⟩ Heb. niθkattēβ (with ē ⟨ a by analogy with the type hiθkattēβ, § 329; cf. also §§ 310, 313, 314, 332, 339-40) occurs in Heb. nikkappēr ⟨ *niθkappēr 'be covered over, forgiven', niwwassēr ⟨ *niθwassēr 'be disciplined, corrected'; Miš. (where it practically supplants the type hiθkattēβ) niθpattaḥ 'open oneself' (Heb. hiθpattaḥ), niθkawwēn 'determine upon', niθqabbēl 'receive', niθnassāḥ 'be tempted', niθ'aṣṣēm 'quarrel', and with the usual metathesis st ⟨ ts, etc. (§ 50), nistappēγ 'be dried up', ništappāḥ 'recover one's senses'.

§ 339. *Types *natakabakab-, *nasatakatab-.* These types ⟩ Heb. niθkaβkēβ, nistaχtēβ (with ē ⟨ a by analogy with the type hiθkattēβ, § 329; cf. also §§ 310, 313, 314, 329, 338, 340), occur only in Mišnāic, as, for the former, niθgalgēl 'be rolled' (Heb. hiθgalgēl), niθnamnēm 'fall asleep'; and for the latter, ništaḥrar 'be set free', ništa'bēδ 'become a slave'.

3. Disyllabic Geminated Bases

(*kabakab-, *kubakib-)

§ 340. *Type* *kabakab-. This appears historically as Heb. kiβkēβ (with ē ⟨ a by analogy with the type kittēβ § 314; cf. also §§ 310, 313, 329, 332, 338-9), Syr. kaβkeβ, Arab. and Eth. kabkaba, as Heb. gilgēl 'roll', kilkēl 'sustain, support', šiʿāšaʿ 'comfort, delight in', ṭilṭēl 'hurl'; Syr. balbel 'confuse', garger 'drag', zaʿzaʿ 'arouse', ramrem 'raise, exalt'; Arab. ġarġara 'gargle', zalzala 'shake', ḥamḥama 'neigh', ḫašḫaša 'make rustle', waswasa 'whisper'; Eth. badbada 'be destroyed', tantana 'waver', dabdaba 'be restless' (cf. § 402).

§ 341. *Type* *kubakib-. This passive of the foregoing appears in Heb. kolkal 'be supplied with', šoʿāšaʿ 'be fondled' (for a instead of i see §§ 308, 311, 318, 320, 321, 330, 402).

B. MOODS

[VG i, § 259; KVG § 125; P §§ 199-200; Z §§ 43-44; W pp. 188-95; O § 145; B p. 18; B-L i, § 36 a-e'; G §§ 40 a, 46, 48, 58 i-l, 75 k, 106 p, 107 m-x, 108-10, 159 d; G-B ii, § 10; Cohen ch. iv; Driver §§ 44-48, 183.]

§ 342. Of all the Semitic languages, Classical Arabic shows the greatest number of moods, of which it has six: indicative, subjunctive, apocopated (jussive), energetic, cohortative (?), and imperative, appearing respectively as yaktubu (impf.), yaktuba, yaktub, yaktuban-(na), 'aktubā (?), uktub. Next come Accadian and Hebrew with five each: for the former, indicative, subjunctive (or relative), energetic, cohortative (?), and imperative ('iktub, 'iktubu, 'iktuba, 'iktuban or 'iktubana, kutub), and for the latter, indicative, jussive (apocopated), energetic, cohortative, and imperative (yiχtōβ, yaχtēβ [Hiφʿil (§§ 395-6)]; elsewhere generally coinciding in form with the imperfect, but also distinguished in the Qal of verbs with medial i̯ or u̯ (§§ 419-20), and in all forms of verbs with final -ḥ (§ 421), as yāqūm: yāqōm; yiγleḥ:[1] yiγel], yiχtəβen-, yiχtəβāḥ, kəθōβ);[2] then, with four, Bib. Aram.: indicative, jussive, energetic, and imperative (yiχtuβ, yiχtəβō [only 3 plur. masc.], yiχtəβinn- [3 sing. masc., yiχ-təβunn- 3 plur. masc.], kəθuβ); with three, Eth.: indicative, jussive, and imperative (yekateb, yekteb, keteb); and with two, Syr. and Mod. (e.g. Egypt.) Arab.: indicative and imperative (neχtoβ, kəθoβ; yiktub, 'iktub).

---

[1] The ending -eḥ in the imperfect of verbs with final -ḥ is the reduction of the diphthong ay; the e is, therefore, to be considered longer than tone-long ē.

[2] The nomenclature adopted by B-L—'affect-aorist', 'short aorist', and 'wāw-aorist'—seems to offer no appreciable advantages, and 'aorist', in particular, is liable to confusion with the somewhat different I-E aorist (cf. § 358, note).

§ 343. Of all these moods, two alone are independent: the indicative, denoting a fact; and the imperative, denoting a command. The former will be considered in the following sections; the latter (see §§ 377-80) shows a special form only in the second singular masculine (Acc. *kutub*, Heb. *kəθōβ*, Syr. *kəθoβ*, Arab. *uktub*, Eth. *keteb*); and one observes that, just as in Indo-European,[1] it is precisely the second singular masculine imperative which shows the bare base-form; in other words, the second singular masculine of the imperative is, so to say, the 'vocative' of the verb, the remaining persons assigned to this mood being based upon the subjunctive or (more probably) jussive.

§ 344. The cohortative is clearly found only in Hebrew, though it may possibly be seen in Accadian and Arabic; and it occurs chiefly in the first singular and plural (rarely in the third singular) in the forms *'eχtəβāh* ⟨ **'aktubā*, etc., as Heb. *'ešmərāh* 'let me keep', *'āqūmāh* 'let me arise', *nənattəqāh* 'let us break asunder', *yāḥīšāh* 'let him hasten', *tāβō'āh* 'let her come'. This seems to be a lengthening of the Semitic subjunctive (cf. Arab. *yaktuba*), perhaps for emphasis (cf. Arab. pausal *'aktubā*), although it is also explained as an amalgamation with an exclamation *ā*, or as a compensatory lengthening for loss of the energetic *-n-* (cf. § 355). A similar formation seems present in such Hebrew imperatives as *šomrāh* 'keep!', *miχrāh* 'sell!' (cf. Acc. *'alka* 'go!', *qiba* 'say!').

§ 345. The three dependent moods in Semitic are the subjunctive (from which the Hebrew and Arabic cohortatives appear to be derived), the jussive (or apocopated), and the energetic. Their meanings seem best retained in Arabic, which alone has kept all three. Here the subjunctive indicates an act dependent upon the statement of the previous clause, and future to it in point of time, so that it is used to express purpose, result, etc. The jussive implies a command in the third person or prohibition weaker than in an imperative; and the energetic is employed chiefly in asseverations. These moods correspond, rather roughly, to the Indo-European subjunctive, injunctive,[2] and optative respectively.

§ 346. In Hebrew (except in the Hiφ'īl; cf. §§ 395-6), Syriac, and Modern Arabic, however, the loss of the final vowel of the in-

---

[1] e.g. Gk. ἄγε, Lat. *age;* cf. Brugmann, *Grundriss* II, iii, §§ 474-8.

[2] The Indo-European injunctive, seen most clearly in Indo-Iranian, is, outwardly, the augmentless indicative of an augmented tense (generally aorist, less commonly imperfect), used in a voluntative or future sense, and also serving for all persons of the imperative except the second singular (cf. Brugmann, *Grundriss* II, iii, §§ 428-9).

flexion has caused the subjunctive and jussive to coincide in form with the imperfect (Heb. $yi\chi t\bar{o}\beta$ [but Hiφ'īl $ya\chi t\bar{e}\beta : ya\chi t\bar{\imath}\beta$], Syr. $ne\chi to\beta$ = Arab. $yaktubu, yaktuba, yaktub$).

§ 347. This coincidence has not only caused considerable confusion in Hebrew between imperfect, subjunctive, and jussive, but may also explain one of the most puzzling phenomena of Hebrew syntax, the *'wāw consecutive'*, whereby an (at least apparent) imperfect preceded by *wāw* has the force of a perfect, and a perfect, under like conditions, has the force of an imperfect, as $k\bar{\imath}$ $r\bar{a}$'$\bar{\imath}\bar{\theta}\bar{\imath}$ '$\bar{e}l\bar{o}h\bar{\imath}m$ . . . wat-$tinn\bar{a}\dot{s}\bar{e}l$ $na\varphi\dot{s}\bar{\imath}$ 'for I have seen God . . . and my life is preserved', $y\bar{e}\dot{s}\bar{e}$ . . . $w\partial$-'$\bar{a}ma\delta$ $w\partial$-$q\bar{a}r\bar{a}$ 'he will go . . . and stand and call'. Outside Hebrew, this construction is found in South Arabic (*YĠRBSM WSNKR WSF' WMSR* 'will remove and alter and destroy and take away'), in Moabite (*WYḤLPH* 'and he succeeded him', *W"S* 'and I built'), in the formulaic Phoen. *WKN* 'and it (they) shall be' of the sacrificial tariffs, in very early Aramaic (Hamāθ *WY'NNI* 'and he answered me'), and possibly in Punic (*caneth . . . iadedin = QNYTY . . . W"D'DH-N* 'may I get . . . and restore' [?], Plautus, *Poenulus* 932). Here 'and' apparently = 'so that'.

§ 348. The *'wāw consecutive'* seems to possess some degree of resemblance with the Arabic *'fa* (or *wa*) of simultaneousness', as $i\dot{g}fir$ $l\bar{\imath}$ . . . fa-'$adhula$ 'l-$\dot{g}annata$ 'pardon me . . . so that I may enter Paradise', wa-$l\bar{a}$ $tat\dot{g}aw$ $f\bar{\imath}hi$ fa-$yahulla$ '$alaykum$ $\dot{g}ada\dot{b}\bar{\imath}$ 'and do not exceed therein, lest my wrath alight upon you', $hall\bar{a}$ $tadrusu$ fa-$tahfa\dot{z}a$ 'why dost thou not study, that thou mayest learn by heart?', $m\bar{a}$ ta'$t\bar{\imath}n\bar{a}$ fa-$tuhaddit\bar{a}n\bar{a}$ 'thou never comest to us to tell us something', $l\bar{a}$ $tanha$ 'an $huluqi^n$ wa-ta'$t\bar{\imath}ya$ $mitlahu$ 'do not restrain (others) from a habit while thou practisest one like it', hal ta'$kulu$'s-$samaka$ wa-$ta\check{s}raba$ 'l-$labana$ 'dost thou eat fish while drinking milk?', this construction of *fa* (or *wa*) with the subjunctive being used in clauses of result when the preceding clause contains 'an imperative (affirmative or negative), or words equivalent in meaning to an imperative; or else it must express a wish or hope, or ask a question; or, finally, be a negative clause'.[1]

§ 349. Side by side with this is another Arabic construction in which the imperfect indicative, appended to a preceding perfect without any intervening particle, forms a secondary subordinate clause expressing (a), if referring to an act future in relation to the perfect, 'the state in which the subject of the previous perfect found himself, when he completed the act expressed by that perfect'; or

[1] Wright, *Grammar*, ii, § 15 d-e; VG ii, §§ 78 bθ; 302 c, i.

(b), if referring to an act continuing during the past time, 'the state in which the subject of the previous perfect found himself, when he did what that perfect expresses,'[1] as (a) 'atā 'ilā 'ayni mā'i^n yašrabu 'he came to a spring of water to drink', 'arsala yu'limuhu bi-ḏālika 'he sent to inform him of this'; (b) inkafa'a yaḥmadu maġdāhu 'he returned lauding his morning walk', ǧā'ū 'abāhum yabkūna 'they came to their father weeping'.

§ 350. It would seem, on the whole, that the apparent imperfect in Hebrew after 'wāw consecutive' was (a) a real imperfect when expressing concomitance or an act future to the completed act; but (b) a true subjunctive when expressing a state resultant upon the perfected state or denoting the purpose for which the perfected state exists. Hence such sentences as Heb. qāβar 'aβrāhām 'eθ-śārāh 'ištō 'el-məʿāraθ śəðēḥ ham-maχpēlāḥ . . . way-yāqom haś-śāðeḥ wə-ham-məʿārāḥ . . . lə'aβrāhām 'Abraham buried Sarah his wife in the cave of the field of Machpelah . . . so that the field and the cave . . . were made sure unto Abraham'; bə-θummī tāmaχtā bī wat-taṣṣīβēnī lə-φāneyχā lə-'ōlām 'Thou upholdest me in mine integrity, to set me before Thy face forever', appear to represent primitive constructions with subjunctives of result and purpose respectively (yāqom ⟨ *ịaqūma, etc.), the result-clauses being numerically by far more numerous.

§ 351. The sequence of perfect with imperfect after 'wāw consecutive' probably arose first, the sequence of imperfect with perfect being formed by analogy, especially as (a) the imperfect is clearly older than the perfect (cf. §§ 78-80, 361), and (b) the Semitic perfect has only the two independent moods (indicative and imperative).

§ 352. Even where, however, the apparent imperfect in Hebrew was really a subjunctive or jussive (cf. § 354), all knowledge of its origin had long since been lost, so that it was felt to be merely an imperfect indicative, thus aiding the analogical sequence of imperfect with (true) perfect after 'wāw consecutive'.

§ 353. The imperfect with 'wāw consecutive' is usually accented on the penult if an open syllable with a long vowel (yaqûm: way-yấqom). In the perfect, on the other hand, the accent is regularly advanced from the penult to the last syllable in the first and second singular masculine (but not in the first plural), while wāw has normal nominal vocalisation (kāθáβtā: wə-kāθaβtá). The accent of the imperfect, under these conditions, is best explained as retention of the original Proto-Semitic accent, with inorganic doubling of the initial preformative (cf. §§ 59, 67, 73, 79); the accent of the perfect, on the

---

[1] Wright, Grammar, ii, § 8 d-e.

contrary, shows a later, specifically Canaanite, development (cf. §§ 75-76, 78-80), with analogical shifting of stress to the last syllable, even in the first singular and second singular masculine.

§ 354. The apparent imperfect in prohibitions, as *al-tiqqaḥ* 'thou shalt not take', *'al-tišlaḥ* 'stretch not forth', is really a jussive, as is clear from such Hiφ'īls forms as *al-talšēn* 'slander not!' (imperfect **tal-šīn*), *'al-tašḥēθ* 'destroy not!' (imperfect *yašḥīθ*), *'al-tāšeβ* 'refuse not!' (imperfect *tāšīβ*); but with a real imperfect in *'al-tabbīṭ* 'look not!'[1]. The jussive likewise is frequently used after *wāw*, as *qaḥ wā-lēχ ū-θəhī 'iššāḥ* 'take (her), and go, and let her be a wife' (after imperative or cohortative), *tāšeθ-ḥōšeχ w-īhī lăylāḥ* 'make Thou darkness, and be it night' (in conditional sentences; i.e. 'if Thou shalt make darkness, it will be night'); and in the milder type of commands, as *yəhī 'ōr* 'let there be light'. All these find parallels in Arabic, as *lā tuḥzan* 'grieve not!', *lā na'ud* 'let us not return!', *'iš qani'aⁿ takun malikaⁿ* 'live contented, be thou king' (= 'and thou wilt be king'; Arab. has no *wa* in this type), *li-yaktub* 'let him write!'. Here again the jussive retains the Proto-Semitic accent on the first syllable in many instances (cf. Heb. jussive *yíγel* ⟨ **íγl:* impf. *yiγléḥ*) and the original vocalisation (*yáχteβ* ⟨ **íáktib-:* *yaχtíβ* [for *ī* in the latter, see § 322]). Very rarely, the jussive is used after prohibitive *lō*, as *lō-θōsēφ* 'add not'!

§ 355. The Semitic energetic shows two forms, **íaktuban* and **íaktubanna*, of which Hebrew and Arabic alone retain both; Accadian has only the former (*'iktuban, 'iktubana*), and Aramaic only the latter (Bib. Aram. *yəðaḥălinnanī* 'it made me afraid', *yəšamməšūnnēh* 'they ministered unto him'). In Hebrew, the type **íaktuban* appears, only with affixed pronouns, in such forms as *yō'īðennī* 'he will appoint me a time', *təβa'ăθannī* 'thou terrifiest me', *yəχabbəðānnī* 'he glorifieth me', *yišmā'ekkā* 'he will hear thee', *'ettəqenkā* 'I shall pluck thee away', *tinṣərekkāḥ* 'she will keep thee', *yahqərennū* 'he will search him out', *yiqqāḥennāḥ* 'he will take her'.

§ 356. The second type of the energetic, **íaktubanna*, may be the basis of the Hebrew affixed intensive particle -(*n*)*nā*, which is used with the cohortative (as *'ērəðāḥ-nnā* 'let me go down', *na'bərāḥ-nnāḥ* 'may we pass through'), the jussive (as *yēšeβ-nā* 'let him abide', *yō'mərū-nā* 'let them say', *təðabber-nā* 'let her speak'), the imperative (as *hippāreð nā* 'separate thyself', *'imrī-nā* 'say thou' [fem.], *sūrū nā*

---

[1] In Indo-European, prohibition is not expressed by the imperative, but by the injunctive (cf. § 345, note 1)—as was still the case in Indo-Iranian—and its surrogates, such as the aorist subjunctive in Greek, the optative ('subjunctive') in Latin, the subjunctive in Armenian, the optative in Gothic (for details cf. Brugmann, *Grundriss* II, iii, §§ 733-41).

'turn aside'), and once (Gen. xl, 14) the perfect (*wə-'ăśīθā-nnā* 'and thou shalt make'). The particle is likewise added to adverbs, conjunctions, and interjections, as *'ayyēḥ-nā* 'where?', *'im-nā* 'if', *'al-nā* 'not', *hinnēḥ-nā* 'lo', *'ōy-nā* 'woe!'.

§ 357. It would seem that such forms as *na'bərāḥ-nnāḥ* were developed from **na'burannā*, *yēśeβ-nā* ⟨ **įaśibannā*, etc., comparable directly with Arab. *yaktubanna*, and that these (like the corresponding Aramaic forms) were evolving from the type **įaktuban* by the addition of the emphatic particle *-na*.

C. TENSES

[*VG* i, §§ 258, 261, 264, ii, §§ 45 b, a; 74-9, 81-5, 324-8; *KVG* §§ 124, 129; *P* §§ 198, 208-9; *Z* § 38; *O* §§ 144, 149; *B* pp. 10-11, 17-19; *B-L* i, § 35; *G* §§ 40 a, 47 a (note), 106-7; *G-B* ii, §§ 3-9; Driver, *passim;* Cohen, espec. §§ 4-9, 16-23.]

§ 358. The ancient Semitic languages possessed at least two 'tenses', commonly called 'perfect' and 'imperfect'.[1] The term 'tense' is here, however, rather a misnomer, for the 'perfect' and 'imperfect' do not denote *time* of action or state so much as *type* of action or state—the former an action or state completed, and hence 'perfect'; the latter an action or state not completed, and hence 'imperfect'.

§ 359. The Semitic concept is more nearly paralleled by the Indo-European 'aspect',[2] or temporal quality of action, though here again Semitic shows a marked divergence from Indo-European in that the 'aspect' of the latter is primarily either 'durative' or 'momentary' (e.g. 'beat' as contrasted with 'strike'). It seems to find its closest analogues in the 'present' and 'preterite' of Finno-Ugric, the former denoting incomplete, and the latter complete, action (e.g. Vogul *minèγ-m*, *mənγə-m* 'I [am] going' ['shall go'], *minsə-m* 'I went'),[3] as well as in Kunama (e.g. *i-lab-é-na* 'it is becoming [will become] dry', *i-lăb-ke* 'it became [has become] dry') and other Sudano-Guinean languages,[4] and, in Indo-European, in the Latin division of tenses

---

[1] *B-L* call the 'perfect' and 'imperfect' 'nominal' and 'aorist' respectively; but the Indo-European aorist (cf. Brugmann, *Grundriss* II, iii, §§ 665-71) is not precisely the Semitic 'aorist', and 'nominal' is too glottogonic in implication. The current terminology is admittedly misleading.

[2] For Indo-European 'aspect' see, e.g., Brugmann, *Grundriss*, II, iii, §§ 38, 46-9, 634-45; A. Meillet, *Linguistique historique et linguistique générale*, 2nd ed., pp. 181-90, Paris, 1926; J. Vendryes, *Langage*, pp. 116-21, 129-31 (Eng. transl., pp. 98-102, 109-11).

[3] J. Szinnyei, *Finnisch-ugrische Sprachwissenschaft*, 2nd ed., pp. 119, 123-4, Leipzig, 1922 (another type of Finno-Ugric 'preterite' denoting either complete or incomplete action is not here concerned); A. Sauvageot, in A. Meillet and M. Cohen, *Les Langues du monde*, p. 170, Paris, 1924.

[4] F. Müller, *Grundriss der Sprachwissenschaft*, III, i, 61, Vienna, 1876-88 (cf. I, ii, 67, II, ii, 174, for similar phenomena in Bari and Samoyede); M. Delafosse, in Meillet-Cohen, p. 471.

into 'infectum' (present, imperfect, future) and 'perfectum' (perfect, pluperfect, future perfect.[1]

§ 360. The best terminology for the Semitic 'tenses' would seem to be the 'accompli—inaccompli' of Cohen, which may be rendered, to avoid all confusion with the established connotations of 'perfect' and 'imperfect' in Indo-European linguistics, by 'telic' and 'atelic' (actions or states).

§ 361. Of these two 'aspects', the 'atelic' is obviously older than the 'telic'. Some evidence has already been adduced (§§ 78-80; cf. §§ 351, 353) from the contrasting accentuational evolution of the two; and it is equally significant that the 'atelic' alone has moods (cf. §§ 342, 351).

§ 362. Apparently Semitic had at one time only a single 'tense', the 'atelic', which expressed action or state for past, present, and future alike. This seems to have been truly verbal. The 'telic', on the other hand, would appear to have developed later, and to have been formed by a noun of action (*katab-, *katib-, *katub-; cf. §§ 116-18) which in the third singular masculine sufficed in itself to serve as a verb, while the other persons received the appropriate personal pronouns either prefixed (in Acc., as *taktub*) or affixed (in the other languages, as Arab. *katabta;* cf. § 239), so that *katab-* meant something like 'he (is) a writer', and *katabtā* 'thy (being) a writer', etc., = 'he hath written, thou hast written', etc.[2]

[1] A. Meillet and J. Vendryes, *Traité de grammaire comparée des langues classiques*, §§ 384-90, Paris, 1924; Meillet, *Esquisse d'une histoire de la langue latine*, pp. 20-3, 2d ed., Paris, 1931.

[2] Parallels to such a construction can be cited from a number of language-groups, e.g. I-E Skt. periphrastic future *dātā̆, dātā̆si* '(he is a) giver, thou art a giver' = 'he will give, thou wilt give', and perfect *bandhayām āsa* 'he has caused to be bound'; Old Pers. *ima tya manā kartam* 'hoc (est) quod mihi factum (est)' = 'this is what I have done' ⟩ Mod. Pers. *kardam* 'I have done'; even nouns of action and agent occasionally take direct objects in the accusative, as Skt. *dātā̆ vásūni* 'giver of good things', Lat. *quid tibi nos tactiost?* 'why dost thou touch us?' (cf. Brugmann, *Grundriss* II, ii, § 527, 1). In Turkish, the past and the conditional are true verbs (*sevdim* 'I [have] loved', *sevsem* 'if I love'); the other tenses are composed of a participle and a personal form of the substantive verb, as *seviyorum* 'I love', probably ⟨ *sevi-yor-[maq]-um* 'I am the one going in loving', etc. (letter of M. Vladimir Minorsky, 23 October 1929; in all these tenses the third singular has no personal ending, the participle alone sufficing). From the languages cited in § 90, note, one may mention here, for Africa: Vei *i-ro* 'thy saying' = 'thou sayest' (cf. *i-fa* 'thy father'), Somrai *ni-koī* 'thy going' = 'thou goest' (cf. *ni-yō* 'thy camel'), Kunama *nilábke* ⟨ *ena é-lab-ke* 'thy becoming dried up' = 'thou becomest dried up' (cf. *é-wa* 'thy father'); for Asia: Vogul *manɣə-n* 'thy going' = 'thou goest' (cf. *lələ-n* 'thy soul'), Aleut *syu-gum-in* 'thy taking' = 'thou takest' (cf. *ada-n* 'thy father'), Nēwārī *chhā dā* 'thy beating' = 'thou beatest', Rai *ānā-ā yām-ta* 'by thee a striking' = 'thou strikest' (cf. *ata-n* 'thy father'), Algonkin *ki-sakiha-tok* 'my perhaps loving him' = 'perhaps I love him'; Central America: Chipanec *i-papame-*

§ 363. Besides these two 'tenses', Accadian has another, the 'permansive', its type being *kat(i)b- or *kat(u)b-, and its aspect durative. Like the 'telic', it is a nominal formation, its terminations being, except in the third singular masculine (where the simple base-form suffices), wholly pronominal, as šakin 'he is (was, will be) making', šaknat, šaknāt(ā), šaknātī, šaknāk(ū), plur. šaknū, šaknā, šaknātunū, šaknātinā, šaknānī/ū. This 'tense' does not occur in the other Semitic languages, but one may suggest that the 'neutral' verbs from the bases *katīb-, *katub- found in all those dialects (§ 302), and likewise of durative aspect, are from the same source (cf. also the Hebrew participles kāβēδ 'being heavy', qāṭōn 'being small', which in formation correspond precisely to Acc. šalim 'he is [was, will be] sound, complete', maruṣ 'he is [was, will be] ill').

§ 364. It seems evident, moreover, that, long before the Proto-Semitic period, Semitic knew the 'durative' and 'momentary' aspects (cf. Gothic gabaíran 'bear a child': baíran 'be carrying'; Lat. concipio 'grasp at once' [e.g. in the mind]: capio 'be seizing') simultaneously with the 'telic' and 'atelic'; and the very plausible hypothesis has been advanced by Cohen (p. 18) that the 'accompli', before assuming the aspect which it possesses in the historic period, was a durative analogous to the Accadian permansive.

§ 365. Except for the Accadian permansive, durative aspect was expressed in Semitic in historic times, not by a verbal form, but by a 'nominal sentence' (phrase nominale),[1] in which the predicate is a participle, as Heb. hā-'ārōn wə-yiśrā'ēl w-īhūδāḥ yōšəβīm . . . wa'δōnī yō'āβ we-'aβəδēy 'δδōnī . . . ḥōnīm 'the ark, and Israel, and Judah (are) abiding . . . and my lord Joab, and the servants of my lord . . . (are) encamping', tō'ănāḥ hū(a)-məβaqqēš mip-pəlištīm ū-βā'ēθ ha-hīy(a) pəlištīm mōšəlīm bə-yiśrā'ēl 'he (was) seeking (an occasion) from the Philistines, for at that time the Philistines (were) ruling over Israel'; Syr. 'aryā gēr besrā 'āχel 'for the lion (is always) eating meat'; Arab. 'as-samā'u munfaṭirun bi-hi 'heaven (is) being reft asunder by it', huwa qā'ilun la-kum 'he (is always) saying to thee'.

he 'thy speaking' = 'thou speakest' (cf. se-he 'thine'); South America: Yaruro ea-me 'thy willing' = 'thou wilt' (cf. itkši-me 'thy hand'), Kichua apa-n̄-ki 'thy carrying' = 'thou carriest' (cf. láma-iki 'thy llama'), Lule amaitsi-tse 'thy loving' = 'thou lovest' (cf. umue-tse 'thy mother'), Yaghan s-ušöχ-mūtū 'thy giving' = 'thou givest' (cf. sa-dāšināka 'thy cousin').

[1] Vendryes, Langage, pp. 144-6, 148-9 (Eng. transl. pp. 121-3, 125-6); B pp. 15-16.

D. Conjugation of the Strong Verb

[VG i, §§ 260, 262, 273; KVG §§ 126-7, 138; P §§ 201-5, 241; Z §§ 38-42, 44-5; W pp. 165-91; O §§ 146-9; B pp. 11-12; B-L i, §§ 40-2, 48; G §§ 44, 46-7, 57-60; G-B ii, §§ 4-5, 14 a-h.]

1. 'Atelic'

§ 366. The inflexion of this 'tense' in the chief Semitic languages is given on page 94.

§ 367. With the affixed pronoun of the first singular (-nī), these persons show the following forms in Hebrew and Aramaic (Syriac), which alone of the Semitic languages make any noteworthy change of verbal termination under such conditions:

		Hebrew	Syriac
3rd sing. masc.		$yi\chi t\partial\beta\bar{e}n\bar{\imath}$	$ne\chi t\partial\beta an(\bar{\imath})$
” ” fem.		$ti\chi t\partial\beta\bar{e}n\bar{\imath}$	$te\chi t\partial\beta an(\bar{\imath})$
2nd ” masc.		$ti\chi t\partial\beta\bar{e}n\bar{\imath}$	$te\chi t\partial\beta an(\bar{\imath})$
” ” fem.		$ti\chi t\partial\beta\bar{\imath}n\bar{\imath}$	$te\chi t\partial\beta\bar{\imath}n\bar{a}n(\bar{\imath})$
1st ” com.		($'e\chi t\partial\beta\bar{e}n\bar{\imath}$)	($'e\chi t\partial\beta an[\bar{\imath}]$)
3rd plur. masc.		$yi\chi t\partial\beta\bar{u}n\bar{\imath}$	$ne\chi t\partial\beta\bar{u}n\bar{a}n(\bar{\imath})$
” ” fem.		($ti\chi t\partial\beta\bar{u}n\bar{\imath}$)	$ne\chi t\partial\beta\bar{a}n\bar{a}n(\bar{\imath})$
2nd ” masc.		$ti\chi t\partial\beta\bar{u}n\bar{\imath}$	$te\chi t\partial\beta\bar{u}n\bar{a}n(\bar{\imath})$
” ” fem.		($ti\chi t\partial\beta\bar{u}n\bar{\imath}$)	$te\chi t\partial\beta\bar{a}n\bar{a}n(\bar{\imath})$
1st ” com.		($ni\chi t\partial\beta\bar{e}n\bar{\imath}$)	($ne\chi t\partial\beta an[\bar{\imath}]$)

§ 368. Similarly, the third singular masculine in these two groups (Heb. $yi\chi t\bar{o}\beta$, Syr. $ne\chi t\bar{o}\beta$) shows, with the affixed pronouns of all persons (cf. §§ 236-8), the following forms:

		Hebrew	Syriac
3rd sing. masc.		$yi\chi t\partial\beta\bar{e}h\bar{u}$	$ne\chi t\partial\beta e\underline{h}$, $'ne\chi t\partial\beta\bar{\imath}w(hi)$
” ” fem.		$yi\chi t\partial\beta eh\bar{a}$	$ne\chi t\partial\beta\bar{\imath}h$
2nd ” masc.		$yi\chi to\beta\partial\chi\bar{a}$	$ne\chi t\partial\beta\bar{a}\chi$
” ” fem.		$yi\chi t\partial\beta\bar{e}\chi$	$ne\chi t\partial\beta e\chi(\bar{\imath})$
1st ” com.		$yi\chi t\partial\beta\bar{e}n\bar{\imath}$	$ne\chi t\partial\beta an(\bar{\imath})$
3rd plur. masc.		$yi\chi t\partial\beta\bar{e}m$	
” ” fem.		($yi\chi t\partial\beta\bar{e}n$)	
2nd ” masc.		$yi\chi to\beta\partial\chi em$	$ne\chi t\bar{u}\beta\partial\chi\bar{o}n$
” ” fem.		($yi\chi to\beta\partial\chi en$)	$ne\chi t\bar{u}\beta\partial\chi eyn$
1st ” com.		$yi\chi t\partial\beta\bar{e}n\bar{u}$	$ne\chi t\partial\beta an$

§ 369. The Hebrew third singular masculine and feminine, second singular masculine, and first singular and plural seem to show

'ATELIC' IN SEMITIC

	Accadian 'Present'	Accadian 'Preterite'	Hebrew	Syriac	Arabic	Syro-Palestinian Arabic	Ethiopic
3rd sing. masc.	'ikatab	'iktub	yiχtōβ	neχtōβ	yaktubu	yiktub	yekateb
„ „ fem.	takatab	taktub	tiχtōβ	teχtōβ(ī)	taktubu	tiktub	tekateb
2nd „ masc.	takatab	taktub	tiχtōβ	teχtōβ	taktubu	tiktub	tekateb
„ „ fem.	takatabī	taktubī	tiχtəβī(n)	teχtəβīn	taktubīna	tiktəbī	tekatebī
1st „ com.	'akatab	'aktub	'eχtōβ	'eχtōβ	'aktubu	'iktub	'ekateb
3rd dual masc.					yaktubāni		
„ „ fem.					taktubāni		
2nd „ com.					taktubāni		
3rd plur. masc.	'ikatabū	'iktubū	yiχtəβū(n)	neχtəβūn	yaktubūna	yiktəbū	yekatebū
„ „ fem.	'ikatabā	'iktubā	tiχtōβnāh	neχtəβān	yaktubna	yiktəbū	yekatebā
2nd „ masc.	takatabū	taktubū	tiχtəβū(n)	teχtəβūn	taktubūna	tiktəbū	tekatebū
„ „ fem.	takatabā	taktubā	tiχtōβnāh	teχtəβān	taktubna	tiktəbū	tekatebā
1st „ com.	nikatab	niktub	niχtōβ	neχtōβ	naktubu	niktub	nekateb

-*i* as their final vowel as contrasted with the Arabic -*u*, while Syriac appears to have had both *i* and *a* (*neχtəβan[i]: neχtəβeḫ*). The original preformatives *ya-, ta-, na-* reappear in the Hiφ'il and Hoφ'al (§§ 395-8), as well as in the Qal of verbs with initial pharyngals, geminated medials, and medial *u̯* (*yaχtīβ, ya'ămōδ, yāsōβ, yāqūm*, etc.; §§ 408-13, 419-20).

§ 370. In the third singular feminine, all dialects show *t-* ⟨ **y-,* probably by analogy with the feminine ending -*at* of both the noun and the third singular feminine of the perfect, and the Hebrew third plural feminine was similarly formed, the original preformatives appearing very rarely, as in *ya'ămōδnāḫ* 'they shall stand up', *way-yiššarnāḫ* 'and they went straight'. In Syriac, the third singular masculine *neχtōβ* and the third plural *neχtəβūn, neχtəβān* are best explained as analogical with the first plural *neχtōβ* (similarly the first sing. in Moroccan, Tunisian, and Tripolitan Arabic: *nekteb, nuktub, nektib;* Biblical Aramaic, however, has *yiχtuβ, yiχtəβūn, yiχtəβān*).

§ 371. The Proto-Semitic inflexion of the 'atelic' would seem to have been as shown in the table on page 96.

2. 'Telic'

§ 372. The inflexion of this 'tense' in the chief Semitic languages is given on page 97.

§ 373. With the affixed pronoun of the first singular (-*nī*), these persons show the following forms in Hebrew and Aramaic (Syriac), which alone of the Semitic languages make any noteworthy change of verbal termination under such conditions:

		Hebrew	Syriac
3rd sing.	masc.	*kəθāβanī*	*kaθban(ī)*
"	" fem.	*kəθāβaθnī*	*kəθaβəθan(ī)*
2nd	" masc.	*kəθaβtanī*	*kəθaβtān(ī)*
"	" fem.	*kəθaβtīnī*	*kəθaβtīn(ī)*
1st	" com.	(*kəθaβtīnī*)	(*kəθaβtan[ī]*)
3rd plur.	masc.	} *kəθāβūnī*	*kaθbūn(ān)(ī)*
"	" fem.		*kaθbān(ī), kəθaβeynān(ī)*
2nd	" masc.	} *kəθaβtūnī*	*kəθaβtūnān(ī)*
"	" fem.		*kəθaβteynān(ī)*
1st	" com.	(*kəθaβnūnī*)	(*kəθaβnān[ī]*)

'ATELIC' IN PROTO-SEMITIC

	Sing.	Dual	Plur.
3rd masc.	ia/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$u/i$	ia/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$\bar{a}(nt)$	ia/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$\bar{u}(n\bar{a})$
" fem.	ia/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$u/i$		ia/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$(n)\bar{a}$
2nd masc.	ta/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$u/i$	ta/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$\bar{a}(nt)$	ta/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$\bar{u}(n\bar{a})$
" fem.	ta/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$\bar{\imath}(n\bar{a})$		ta/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$(n)\bar{a}$
1st com.	$'a/''u$-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$u/i$		na/u-$\left\{\begin{matrix}k(u)tub\\k(i)tib\end{matrix}\right\}$-$u/i$

'TELIC' IN SEMITIC

	Accadian 'permansive'	Hebrew	Syriac	Arabic	Syro-Palestinian Arabic	Ethiopic
3rd sing. masc.	katib	kāθaβ	kəθaβ	kataba	katab	kataba
" fem.	katbat	kāθəβāh	keθbaθ	katabat	katabat	katabat
2nd " masc.	katbāt(ā)	kāθaβtā	kəθaβt	katabta	katabt	katabka
" " fem.	katbātī	kāθaβt(ī)	kəθaβt(ī)	katabtī	katabtī	katabkī
1st " com.	katbāk(u)	kāθaβtī	keθbeθ	katabtu	katabt	katabku
3rd dual masc.				katabā		
" fem.				katabatā		
2nd " com.				katabtumā		
3rd plur. masc.	katbū	kāθəβū	kəθaβ(ū-n)	katabū	katabū	katabū
" fem.	katbā		kəθaβ(eyn)	katabna		katabā
2nd " masc.	katbātunū	kəθaβtem	kəθaβtōn	katabtum(u)		katabkemmū
" " fem.	katbātinā	kəθaβten	kəθaβteyn	katabtunna	katabtū	katabken
1st " com.	katbānī/ū	kāθaβnū	kəθaβn(-an)	katabnā	katabnā	katabna

§ 374. Similarly, the third singular masculine in these two groups (Heb. *kāθaβ*, Syr. *kəθaβ*) shows, with the affixed pronouns of all persons (cf. §§ 236-8), the following forms:

		Hebrew	Syriac
3rd sing.	masc.	*kəθāβāhū*	*kaθbeh*
” ”	fem.	*kəθāβāh*	*kuθbāh*
2nd ”	masc.	*kəθāβəχā*	*kaθbāχ*
” ”	fem.	*kəθāβēχ*	*kaθbeχ(ī)*
1st sing.	com.	*kəθāβanī*	*kaθban(ī)*
3rd plur.	masc.	*kəθāβām*	
” ”	fem.	*kəθāβān*	
2nd ”	masc.	*(kəθaβəχem)*	*kəθaβəχōn*
” ”	fem.	*(kəθaβəχen)*	*kəθaβəχeyn*
1st ”	com.	*kəθāβānū*	*kaθban*

§ 375. In Hebrew, the 3rd sing. fem. *kāθəβāḥ* ⟨ **kat(a)bat* (cf., with affixed pronoun, *kəθāβaθnī*) is formed like 'feminine' nouns in *-āḥ* ⟨ **-at* (cf. § 179). In the first singular common in Hebrew, as in Aramaic and Arabic, *t* has been substituted for Proto-Semitic *k* (preserved in Accadian and Ethiopic) by analogy with the second singular and plural (conversely, Ethiopic here has *k* for *t* by analogy with the first singular common), and *ī* for *ū* by analogy with the pronominal affix *-nī*. In the second plural masculine, Hebrew substitutes *e* for *u* by analogy with the second plural feminine; and in the latter, Arabic reverses the order by substituting *u* for *i* on the analogy of the second plural masculine. In the first plural common, Hebrew substitutes *ū* for *ā* by analogy with the independent pronoun (*'ă*)*naḥnū* 'we'.

§ 376. The Proto-Semitic inflexion of the 'telic' would seem to have been:

	Singular	Dual	Plural
3rd masc.	*kataba*	*katabā*	*katabū*
” fem.	*katabat*	*katabatā*	*katabā*
2nd masc.	*katab(a)ta*	*katab(a)tumā*	*katab(a)tumū*
” fem.	*katab(a)tī*		*katab(a)tinnă*
1st com.	*katab(a)kū*		*katab(a)nā*

3. Imperative

§ 377. The inflexion of this mood in the chief Semitic languages is shown on the opposite page.

IMPERATIVE IN SEMITIC

	Accadian	Hebrew	Syriac	Arabic	Syro-Palestinian Arabic	Ethiopic
2nd sing. masc.	kutub	kəθōβ	kəθōβ	uktub	uktub, ktūb	kəteb
„ „ fem.	kut(u)bī	kiθβī	kəθōβ(ī)	uktubī	(u)ktəbī, ktubī	kətebī
„ dual com.				uktubā		
„ plur. masc.	kut(u)bū	kiθβū	kəθōβ(ūn)	uktubū	} (u)ktəbū, ktubū	kətebū
„ „ fem.	kut(u)bā	kəθōβnāh	kəθōβ(eyn)	uktubna		kəteba

§ 378. With affixed pronouns, as in §§ 367-8, 373-4, one has:

			Hebrew	Syriac
(a)	2nd sing. masc.		$ko\theta \vartheta \beta \bar{e}n\bar{\imath}$	$k\vartheta\theta\bar{o}\beta ayn(\bar{\imath})$
"	"	fem.	$koθ\vartheta β\bar{\imath}n\bar{\imath}$	$k\vartheta\theta\bar{o}\bar{\beta}\bar{\imath}n(\bar{\imath})$
"	plur.	masc.	$ki\theta\vartheta\beta\bar{u}n\bar{\imath}$	$k\bar{o}\theta\vartheta\beta\bar{u}n(\bar{a}n)(\bar{\imath})$
"	"	fem.		$k\vartheta\theta\bar{o}\beta eyn\bar{a}n(\bar{\imath})$
(b)	3rd sing. masc.		$ko\theta\vartheta\beta\bar{e}h\bar{u}$	$k\vartheta\theta\bar{o}\beta\bar{a}y(h\bar{\imath})$
"	"	fem.	$ko\theta\vartheta\beta eh\bar{a}$	$k\vartheta\theta\bar{o}\beta eyh$
	1st	com.	$ko\theta\vartheta\beta\bar{e}n\bar{\imath}$	$k\vartheta\theta\bar{o}\beta ayn(\bar{\imath})$
	3rd plur. masc.		$ko\theta\vartheta\beta\bar{e}m$	
"	"	fem.	$(ko\theta\vartheta\beta\bar{e}n)$	
	1st	com.	$ko\theta\vartheta\beta\bar{e}n\bar{u}$	$k\vartheta\theta\bar{o}\beta ayn$

§ 379. The second singular masculine is identical in form with the verbal base, and the remaining persons with the corresponding persons of the jussive, except that the imperative has no preformatives (cf. § 343).

§ 380. The Proto-Semitic inflexion of the mood would seem to have been:

	Singular	Dual
2nd masc.	$k(u)tub, k(i)tib$	$k(u)tub\bar{a}, k(i)tib\bar{a}$
" fem.	$k(u)tub\bar{\imath}, k(i)tib\bar{\imath}$	

	Plural
2nd masc.	$k(u)tub\bar{u}, k(i)tib\bar{u}$
" fem.	$k(u)tub\bar{a}, k(i)tib\bar{a}$

4. Infinitives and Participles

[VG i, § 263, ii, §§ 81-91; KVG § 128; P §§ 206-7; W pp. 195-8; O §§ 150-1; B-L i, §§ 36 d'-l', 43, 48 y'-g'; G §§ 45, 50, 61 a-e, h, 113-6; G-B ii, §§ 11-13.]

§ 381. The infinitives and participles (verbal nouns and adjectives respectively) which appear in Hebrew are represented in the chief Semitic languages and in Proto-Semitic by the forms shown in the table on the opposite page.[1]

§ 382. For the types $*k(u)tub-$, $*katāb-$, $*kātib-$, $*katūb-$ see §§ 120, 125, 132, 127, and for $*katb-$ (Acc. pass. part. and Arab. inf.) and $*maktūb-$ (Arab. pass. part.) §§ 122, 160. With Heb. $k\bar{a}\theta\bar{o}\beta$ cf. such Arab. infinitives as ṣalāḥuⁿ 'be in good condition', fasāduⁿ 'be spoiled', dhahābuⁿ 'go away,' nafāduⁿ 'penetrate', and such Eth. participles as nagāśi 'king' ('reigning one'); with Heb. $k\bar{a}\theta\bar{u}\beta$, Acc. ba'ulāti 'sub-

---

[1] For the manifold forms of the infinitive, e.g. in Arabic and Talmudic Aramaic, see, besides the bibliography cited, Wright, Grammar, i, §§ 195-203; C. Levias, Grammar of the Aramaic Idiom contained in the Babylonian Talmud, §§ 222-3, Cincinnati, 1900.

INFINITIVES AND PARTICIPLES

	Accadian	Hebrew	Syriac	Arabic	Ethiopic	Proto-Semitic
Inf. const.		kəθōβ				k(u)tub-
„ abs.	katābu	kāθōβ	(meχtaβ)	(katbu[n])	(katābōt)	katāb-
Part. act. masc.	kātibu	kōθēβ	kāθeβ	kātibu[n]	(katābi)	kātib-
„ „ fem.	kātibtu	{ kōθəβāh / kōθeβeθ	kāθəβā	kātibatu[n]		kātibat-
„ pass. masc.	(katbu)	kāθūβ	(kəθīβ)	(ma-ktūbu[n])	ketūb	katūb-
„ „ fem.	(kātibtu)	kəθūβāh	(kəθīβā)	(ma-ktūbatu[n])		katūbat-

jects', Arab. *qabūlu*ⁿ 'go forward', *rasūlu*ⁿ 'envoy', *'arūsu*ⁿ 'bride-groom' ('wedded'), Syr. *rəḥūmṭā* 'beloved', *gənūβṭā* 'stolen goods'; with Eth. *katībōt*, Arab. *raḥīlu*ⁿ 'travel', *barīqu*ⁿ 'gleam', *'azīmu*ⁿ 'resolve'; with Syr. *kəθīβ* (cf. § 126), Heb. *'āsīr* 'captive', *māšīaḥ* 'anointed', Arab. *nasīǧu*ⁿ 'woven', *naḥīru*ⁿ 'slaughtered', *ǧarīḥu*ⁿ 'wounded'; with Syr. *meχṭaβ* (cf. § 157), Arab. *madḫalu*ⁿ 'enter', *maḥbasu*ⁿ 'imprison'.

§ 383. In the derived forms (omitting the various new types of the infinitive in Arabic and Ethiopic) the formations are: (*a*) for the infinitive:—Accadian, permansive base (§ 363); Hebrew, the base of the atelic (the absolute has *ō* except in the Hiφ'il, Hoφ'al, and Hiθpa'ēl, where it has *ē*; cf. §§ 395-400); Syriac, *k(a)t(t)ābū* (cf. §§ 125, 137) with preformative *ma-*; (*b*) for the participle:—Accadian, base of the atelic in *-i-* with preformative *mu-*; Hebrew, atelic base with preformative *ma-* (the reflexive-passive is characterised by *ā*, and the Niφ'al has no preformative); Syriac, atelic base with preformative *ma-* (passives are characterised by *a* instead of *e*); Arabic and Ethiopic, atelic base with preformative *mu-* and *ma-* respectively.

E. SYNOPSIS OF THE TYPES OF THE STRONG VERB

§ 384. Consideration has already been given to the distinction between 'active' and 'neutral' verbs (§§ 298-9) as well as to the various verb-formations (§§ 302-41), and in the foregoing section the inflexion of the simplest of these (represented by the Hebrew Qal, etc.) has been discussed. Since the remaining chief types show little that cannot readily be inferred from the principles given in previous pages, it would seem sufficient simply to summarise them as seen in the Hebrew verb, following the order conventionally adopted.

1. Qal

§ 385. The distinction between the 'active' verb and the two categories of 'neutral' verbs is maintained practically throughout.

§ 386. This material seems to imply that even the late Proto-Semitic period knew much confusion between the three types, and one may suggest that the earlier forms were as follows (those of which no traces exist being enclosed in brackets):

Telic	Atelic	Imperative	Infinitive	Active participle	Passive participle
kataba	*katubu*	*k(a)tub*	[*k(a)tūb-*]	[*kātub-*]	*k(a)tūb-*
katiba	*katabu*	*k(a)tab*	*k(a)tāb-*	[*kātab-*]	[*k(a)tāb-*]
katuba	*katibu*	*k(a)tib*	*k(a)tīb-*	*kātib-*	*k(a)tīb-*

	Accadian	Hebrew	Aramaic	Arabic	Ethiopic	Proto-Semitic
Telic a	*kataba[1]	kāθaβ	kəθaβ	kataba	kataba	kataba
" i	katiba	kāθēβ	kəθeβ	katiba	} kataba	katiba
" u	katuba	kāθōβ	Man. kəθuβ[2]	katuba		katuba
Atelic a	ʼiktub	yiχtōβ	Bib. yiχtuβ[3]	yaktubu, yaktibu	yekteb[4]	ja/uk(u)tubu/i
" i	ʼiktab	} yiχtaβ	Bib. } yiχtaβ	yaktabu	yektab	ja/uk(i)tibu/i
" u	ʼiktib			yaktubu	yekteb	ja/uk(a)tabu/i
Impv. a	katab	kəθōβ	kəθūβ	uktub	keteb	k(u)tub, k(i)tib
" i	kitib	} kəθaβ	} kəθaβ	iktib, iktab	ketab	k(a)tab
" u	kutub				keteb	k(u)tub
Inf. a	katābu	kāθōβ[5]	meχtaβ	katbⁿ	} katābōt	katūb-, katib-
" i	} katēbu	kāθaβ[6]				katib-
" u						katūb-
Act. part. a	kātibu	kōθēβ	kāθeβ	kātibuⁿ	(katābi)	katub-, kātib-
" i		kāθēβ	kəθeβ			kātab-
" u		kāθōβ[7]				kātib-
Pass. " a	katbu[8]	} kāθuβ	kəθēβ	maktūbuⁿ	} ketūb	k(a)tub-, kattb-
" i						k(a)tāb-
" u						k(a)tūb-

[1] This permansive form seems not to occur.
[2] Occasionally also in Syriac, as qəθōδ 'bristle'; cf. Targ. Aramaic dəmux 'sleep' (so also in Jewish and Christian Palestinian Aramaic).
[3] Usually yaktabu in the presence of pharyngals.
[4] Subjunctive (ind. yekateb throughout).
[5] The usual Hebrew infinitive is from the nominal type *kutub- (cf. § 120).
[6] By analogy with atelics in a.
[7] From the adjectival types *kātib-, *katib-, *katab (§§ 132, 117, 125).
[8] From the adjective type *katb- (§ 122).

§ 387. In Hebrew and Aramaic the second type has superseded the third in the atelic and imperative; in Ethiopic, the second and third have coalesced in the telic, as have the first and third in the atelic and imperative. For the earlier stages of Proto-Semitic, the infinitive and participle should, it would seem, be re-arranged as shown on the opposite page.

§ 388. If this classification be correct, it would seem that the infinitives and active participles, as well as the Aramaic passive participles, were essentially 'neutral' in their original meaning as expressing a state of being; only the passive participle was primarily 'active' as denoting the recipient of an action.

2. Niφ'al

§ 389.

	Accadian	Hebrew	Arabic	Proto-Semitic
Telic	*'ikkatab*	*niχtaβ*	*inkataba*	*nakataba*
Atelic	*'ikkatib*	*yikkāθēβ*	*yankatibu*	*ịa/unakatibu/i*
Impv.	*nak(a)tib*	*hikkāθēβ*	*inkatib*	*nakatib*
Inf. const.		*hikkāθēβ*		?
" abs.	*nak(a)tubu*	{ *niχtōβ,* *hikkāθōβ*	*inkitābu^n*	?
Part.	*mukkat(i)bu*	*niχtāβ*	*munkatibu^n*	?

§ 390. For the development of the historical forms of the telic see §§ 52, 321. The Hebrew atelic *yikkāθēβ* and impv. *hikkāθēβ* are developed from **yənkāθēβ* ⟨ **ịan(a)katib-* and *nəχāθēβ* ⟨ **n(a)katib* respectively (for the frequent Hebrew pausal form *yikkāθaβ* see § 21, note 3). The prothetic *h* in the Hebrew imperative and infinitives is due to analogy with verbs having a true preformative *h* (cf. §§ 322-4, 326). With the Hebrew inf. const. *hikkāθēβ* ⟨ **nakatib-* cf. such Arabic infinitives as *kaḏibu^n* 'lie', *ḍaḥiku^n* 'laugh', *sariqu^n* 'rob', though the Hebrew form is probably on the analogy of the atelic. The part. is formed after the telic *niχtaβ*, just as the 'neutral' participles *zāqēn* and *qāṭōn* apparently coincide with their corresponding telics.

3. Pi'ēl

§ 391. See table on page 106.

§ 392. For the telic see also §§ 312-14; the original *a* always appears in Heb. *kittaβtā* 'thou hast written', etc. The infinitive absolute is formed on the model of the corresponding Qal; and the infinitive construct and participle are by analogy with the atelic.

	Proto-Semitic	Accadian	Hebrew	Aramaic	Arabic	Ethiopic
Inf. a	[katúb-]	katābu	kāθōβ			(cf. act. part. katābī)
,, i	katāb-	katēbu				katībōt
,, u	katīb-					
Act. part. a	[kātub-]					
,, i	[kātab-]		kōθēβ	kāθeβ		
,, u	kātib-	kātibu			kātibuⁿ	
Pass. a	k(a)túb-		kāθūβ			ketūb
,, i	[k(a)tāb-]				maktūbuⁿ	
,, u	k(a)tīb-			kəθīβ		

	Accadian	Hebrew	Syriac	Arabic	Ethiopic	Proto-Semitic
Telic	'ukattab	kittēβ, kittaβ	katteβ	kattaba	kattaba	kattaba
Atelic	'ukattib	yᵊχattēβ	nᵊχatteβ	yukattibu	yekatteb	ia/ukattibu/i
Impv.	ka/uttib	kattēβ	katteβ	kattib	katteb	kattib
Inf. const.		kattēβ				?
" abs.	kuttubu	kattōβ	mᵊχattāβū	taktību"	kattābī	?
Part.	mukattibu	mᵊχattēβ	mᵊχatteβ	mukattibu"	makatteb	mukattib-

4. Pu'al

§ 393.	Hebrew	Arabic	Proto-Semitic
Telic	*kuttaβ*	*kuttiba*	*kuttiba*
Atelic	*yəχuttaβ*	*yukattabu*	*ịa/ukuttabu/i*
Impv.			(*kuttab*)
Inf. const.			?
" abs.	*kuttōβ*		?
Part.	*məχuttāβ*	*mukattabuⁿ*	*mukattab-*

§ 394. For the general formation of this type see § 315 and cf. the Hoφ'al (§§ 397-8). With the Hebrew infinitive absolute cf. such Arabic intensive adjectives as *ḥussānuⁿ* 'very handsome', *kurrāmuⁿ* 'very noble', *kubbāruⁿ* 'very large'; and with the participle cf. Syr. *məχattaβ*, Eth. *makattab*. The Arabic atelic is formed on the analogy of that of the passive of the 'first form' (=Heb. Qal), *yuktabu* ⟨ *ịa-kutabu* (cf. §§ 307-9).

5. Hiφ'īl

§ 395. See table on page 108.

§ 396. For the general formation of the type see § 322, and for the preformatives *ha-*, *'a-*, *ša-*, and *sa-* (Syr. *'akteβ*, Arab., Eth. *'aktaba;* Acc. *'ušaktab*, Miš. *šaχtēβ*, Syr. *šaχteβ*, Miš. *saχtēβ*, Syr. *saχteβ*, Min. *saktab*) see §§ 322-4, 333-5. Instead of Heb. atelic *yaχtīβ* one would expect **yaχtēβ*, as is actually found in the jussive and with 'wāw consecutive' (cf. also the impv. and inf. abs. *haχtēβ* and the 2nd and 3rd atelic fem. plur. *taχtēβnāḥ*). This *ī* seems to be by analogy with the regular atelic Hiφ'īl of verbs with medial *ụ* (§§ 419-20), as *yāqīm* (Qal *yāqūm*), cf. Arab. IV *yuqīlu*, *yusīru* (I *yaqūlu*, *yasīru*); cf. also Heb. *yāβīn* (both Qal and Hiφ'īl): Arab. I *yabīnu*, IV *yubīnu;* and as in the Pi'ēl and Hiθpa'ēl (§§ 392, 400), this vowel has been carried by analogy into the telic, though the original *a* is preserved in *hiχtaβtā*, etc. The infinitive construct and the participles likewise have an analogical *ī* instead of **haχtōβ*, **maχtēβ*, while the infinitive absolute is modelled on the imperative.

6. Hoφ'al

§ 397.	Hebrew	Bib. Aram.	Arabic	Proto-Semitic
Telic	*hoχtaβ*	*hoχtaβ*	['*uktiba*	*huk(a)tiba*
Atelic	*yoχtaβ*		*yuktabu*	*ịa/uhuk(a)tabu/i*
Impv.				(*huk[a]tab*)
Inf. const.				?
" abs.	*hoχtēβ*			?
Part.	{*moχtāβ* / *muχtāβ*}	{*maχtaβ* (Syr.) / *məhoχtaβ*}	*muktabuⁿ*]	*muhuk(a)tab-*

HIFʿIL

	Accadian	Hebrew	Biblical Aramaic	Arabic	Ethiopic	Proto-Semitic
Telic	[ʾušaktab]	hiχtīβ	haχtēβ	[ʾaktaba	ʾaktaba	ḥak(a)taba
Atelic	ʾušaktib	yaχtīβ	yəhaχtēβ	yuktibu	yākteb	ịa/uhak(a)tibu/i
Impv.	šuktib	haχtēβ	haχtēβ	ʾaktib	ʾakteb	ḥak(a)tib
Inf. const.		haχtīβ			ʾaktābī	?
„ abs.	šuktubu	haχtēβ	haχtāβāḥ	ʾiktābuⁿ	ʾaktebō(t)	?
Part.	mušaktibu]	maχtīβ	məhaχtēβ	muktibuⁿ	makteb]	məhak(a)tib-

HIΘPA'ĒL

	Accadian	Hebrew	Biblical Aramaic	Arabic	Ethiopic	Proto-Semitic
Telic	['uktattaba	hiθkattēβ	hiθkattaβ	takattaba	takattaba	takattaba
Atelic	'uktattib	yiθkattēβ	yiθkattaβ	yatakattabu	yetkattab	ja/utakatta/ibu/i
Impv.	kutattib	hiθkattēβ	hiθkattaβ	takattab	takattab	takatta/ib
Inf. const.	kutattubu	hiθkattēβ		takattubuⁿ	takattebō(t)	?
" abs.		hiθkattēβ	hiθkattaβāḥ		(takattābī)	?
Part.	muktattibu]	miθkattēβ	miθkattaβ	mutakattibuⁿ		mutakattib-

§ 398. For the general formation of the type see § 324, and cf. the Pu'al (§ 393). Besides forms in *o*, forms in *u* occur (Heb. *huχtaβ*, etc.). The infinitive is formed by analogy with that of the Hiφ'īl (§ 396). Ethiopic shows a pass. part. *maktab*.

7. Hiθpa'ēl

§ 399. See table on page 109.

§ 400. For the general formation of the type see § 329. The correspondences of Acc.-Heb. *'uktattib, kutattīb = yiθkattēβ, hiθkattēβ* as contrasted with Aram.-Arab. *yiθkattaβ, hiθkattaβ = yatakattabu, takattab* suggest that Proto-Semitic had a double form **(ịa/u)takattib-*, **(ịa/u)takattab-*, and Hebrew itself shows the latter type in the imperative and pausal atelic. As in the Pi'ēl (cf. §§ 312-14, 392), Hebrew has changed the Proto-Semitic *a* of the telic to *ē* by analogy with the atelic, though the original vowel survives in *hiθkattaβtā*, etc.; and both infinitives are vocalised on the model of the atelic. Syriac and Egyptian Arabic show *iktattab, yitkattab, itkattab* for Classical Arabic *takattaba, yatakattabu, takattab*.

8. Rare Formations

§ 401. It may be of practical convenience to give a tabular list of one example of each form of verbs of rare type (see, respectively, §§ 310, 311, 327, 330, 318, 317, 331, 340, 341, 332, 319, 320, 316, 328).

§ 402. See table on pages 111, 112, 113.

F. WEAK VERBS

[*VG* i, §§ 265-72; *KVG* §§ 130-7; *P* §§ 213-40; *Z* §§ 46-52; *W* pp. 227-85; *O* §§ 152-7; *B-L* i, §§ 49-59; *G* §§ 62-78; *G-B* ii, §§ 21-31.]

§ 403. While the 'weak verbs' (those, in Hebrew, beginning with *n*, with a pharyngal for any of the three consonants, with the second consonant [apparently] repeated to serve also as the third, and with *'a*, *ụ*, or *ị* as one of the three) present considerable practical difficulty, which is increased by the crossings of analogy, they offer so little new in principle—even verbs 'doubly weak'—that they may be discussed very briefly from the purely linguistic point of view.

§ 404. It seems significant, considering the possibility (if not the probability) that many Semitic bases were originally disyllabic (cf. §§ 88, 98, note, 301), that the same 'weak verb' occurs in more than one type, not merely in Hebrew as compared with other Semitic languages, but even within Hebrew itself (cf. § 91). Here belong, for example, Heb. *'āmal: mālal* 'languish'; *dā'ēβ* 'become faint': *dūβ* 'pine away'; *hāγāḫ: yāγāḫ* 'remove': Arab. *waǧā* 'repel'; Heb. *hāmāḫ*,

RARE FORMATIONS

		Pōlēl, Pō'ēl	Pōlal, Pō'al	Hiθpōlēl, Hiθpō'ēl
Telic	3rd sing. masc.	{ 'ŏnēn nŏδaδ	rōmam	
,,	,, ,, fem.	ḥŏlălāḫ		hiθmōṭəṭāḫ
,,	2nd ,, masc.	kŏnantā	ḥōlaltā	
,,	,, ,, fem.			
,,	ıst ,, com.	{ šŏšēθī rōmamtī	ḥōlaltī	hiθ'ōrartī
,,	3rd plur. masc.	zōrmū	šōrăšū	hiθmōγăγū
,,	,, ,, fem.			
,,	2nd ,, masc.			
,,	,, ,, fem.			
,,	ıst ,, com.			
Atelic	3rd sing. masc.	yəhŏlēl	yərō'ā'	{ yiθhŏlēl yiθgŏδaδ
,,	,, ,, fem.	təmōθēθ		tištōḥāḥ
,,	2nd ,, masc.	təχōnēn	təmōγəγenn-āḫ	tiθgŏδaδ
,,	,, ,, fem.			tiθgŏδăδī
,,	ıst ,, com.	'eqŏmēm		'eθqōṭāṭ
,,	3rd plur. masc.	yəβŏqăqū	yəhŏlalū	yiθgŏδəδū
,,	,, ,, fem.		tərōmamnāḫ	tiθmōγaγnāḫ
,,	2nd ,, masc.	tə'ŏnēnū		tiθgŏδəδū
,,	,, ,, fem.	tə'ōδēδnāḫ		
,,	ıst ,, com.			niθ'ōδāδ
Impv.	2nd sing. masc.	kŏnēn		
,,	,, ,, fem.			hiθrō'ā'ī
,,	,, plur. masc.	rōməmū		hiθqōšəšū
,,	,, ,, fem.			hiθšōṭaṭnāḫ
Inf. const.		{ mōθēθ bōšasəχem		hiθgōlēl
,, abs.		hōγō		hiθrō'ă'āḫ
Juss.				
Part.		mərōmēm	mərōmam	miθgōrēr

RARE FORMATIONS (*continued*)

				Hoθpa'al	Pu'lal	Pa'lēl	Hiθpa'lēl
Telic	3rd sing.	masc.			'*umlal*	*ša'ănan*	*hištaḥăwāḫ*
"	"	"	fem.	*huṭṭammā'āḫ*	'*umləlāḫ*	*ra'ănānāḫ*	
"	2nd	"	masc.				*hištaḥăwīθā*
"	"	"	fem.				
"	1st	"	com.				*hištaḥăwēyθī*
"	3rd plur.	masc.		*hoθpāqəδū*	'*umləlū*	*ša'ănānū*	*hištaḥăwū*
"	"	"	fem.				
"	2nd	"	masc.				
"	"	"	fem.				
"	1st	"	com.				
Atelic	3rd sing.	masc.					*yištaḥăweḫ*
"	"	"	fem.				
"	2nd	"	masc.				
"	"	"	fem.				
"	1st	"	com.				
"	3rd plur.	masc.					*yištaḥăwū*
"	"	"	fem.				
"	2nd	"	masc.				
"	"	"	fem.				*tištaḥăweynā*
"	1st	"	com.				
Impv.	2nd sing.	masc.					
"	"	"	fem.				*hištaḥăwī*
"	"	plur.	masc.				*hištaḥăwū*
"	"	"	fem.				
Inf. const.				*hukkabbēs*			*hištaḥăwōθ*
" abs.							
Juss.							*yištaḥū*
Part.					*məšōβeβeθ* (fem.)	*məṭaḥăwē* (pl.)	*mištaḥăweḫ*

RARE FORMATIONS (*continued*)

			Pilpēl, Polpal	Hiθpalpal	Pe'al'al, Po'al'al, Pu'la', Tiφ'al
Telic	3rd sing.	masc.			Pə. *səḥarḥar*
,,	,,	fem.			
,,	2nd	masc.	*kilkaltā-m*		
,,	,,	fem.			
,,	1st	com.	*gilgaltī*	*hiθmahmāhtī*	Ti. *tirgaltī*
,,	3rd plur.	masc.	*kolkəlū*	*hiθmahməhū*	Po. *ḥŏmarmərū*
,,	,,	fem.			
,,	2nd	masc.			
,,	,,	fem.			
,,	1st	com.		*hiθmahmāhnū*	
Atelic	3rd sing.	masc.	*yəχalkēl*	*yiθmahmah*	
,,	,,	fem.	*təṣaφṣēφ*	*tiθḥalḥal*	
,,	2nd	masc.			
,,	,,	fem.			
,,	1st	com.	*'ăṣaφṣēφ*	*'ešta'ăšā'*	
,,	3rd plur.	masc.	*yəša'aš'ū*	*yištaqšəqūn*	
,,	,,	fem.			
,,	2nd	masc.	*təšā'ŏšā'ū*		
,,	,,	fem.			
,,	1st	com.			
Impv.	2nd sing.	masc.			
,,	,,	fem.	*salsəleḥ*		
,,	,, plur.	masc.		*hiθmahməhū*	
,,	,,	fem.			
Inf. const.			*kalkēl*	*hiθmahmēǫh*	
,, abs.			*'ar'ēr*		
Juss.					
Part.			*məqarqar*	*miθmahmēǫh*	Pu. *məḥuspās*

hūm, hīm, hāmam 'make noise': Arab. *hamhama* 'murmur'; Heb. *ḥāqāḥ: ḥāqaq* 'cut in'; *gūr: yāγōr* 'fear, dread': Arab. *waǧira;* Heb. *'ῑφ: yā'ēφ:* Syr. *'āφ* 'be weary, faint'; *ṣūq: yāṣaq* 'pour'; *yāraq: rāqaq* 'spit': Arab. *rayyaqa* 'moisten with spittle'; Heb. *'āṭāḥ* 'wrap oneself': *yā'aṭ* 'cover'; *māsāḥ: māsas* 'melt, dissolve': *mā'as* 'flow'; *'ūr: 'ārāḥ* 'be exposed': *'ārar* 'strip oneself'; *śūṭ* 'swerve': *śāṭāḥ* 'turn aside': Arab. *šaṭṭa* 'be removed, distant'; Heb. *dāχā(ḥ)* 'crush': *dūχ:* Arab. *dāka: dakka* 'beat'; Heb. *lūq'* or *lā'a'* 'swallow': Arab. *walaǧa* 'lap up (dog)'; Heb. *'ūn* 'dwell': Arab. *ǧaniya* 'live (in a place)'; Heb. *ṣūṣ* 'peep, gaze': Arab. *ṣa'ṣa'a* 'try to open eyes (puppy)'; Heb. *šāmēm* 'be appalled': Arab. *sa'ima* 'feel disgust'; Heb. *tā'a'* 'mock': Arab. *nalaǧa* 'calumniate'; Heb. *ḥālāḥ* 'be weak, ill': Arab. *ḥalla* 'diminish': *naḥala* 'become thin'; Heb. *kārāḥ:* Arab. *'akara* 'dig'; Heb. *zāqaq* 'refine, purify': Arab. *ḍaqqa* 'assay, test'; Heb. *māqaq* 'decay': Arab. *māqa* 'perish'; Heb. *'āsas* 'press, crush, tread down': Arab. *wa'asa* 'trample'; Heb. *sāβā:* Arab. *sa'aba* 'drink deep'; Heb. *nā'aṣ* 'contemn, spurn': Arab. *nāṣā* 'flee, avoid'; Heb. *šā'aφ* 'crush, trample': *šūφ* 'bruise': Arab. *nasafa* 'break and scatter'; Heb. *yānaq* 'suck': Arab. *naqā* 'suck marrow from bone'; Heb. *yāṣar: ṣūr* 'form, fashion': Arab. *ṣāra* 'cut'; Heb. *yāšaβ* 'sit': Arab. *ṭabba* 'seat oneself firmly'; Heb. *'āβaδ:* Arab. *bāda* 'perish'; Heb. *'ālaṣ:* Arab. *laẓẓa* 'urge'; Heb. *'ānas* 'compel': Arab. *nassa: nasa'a: nāsa* 'drive cattle'; Heb. *'ānaq: nā'aq* 'groan': Arab. *naqqa* 'croak, cluck, miau'; Heb. *'āṭam:* Syr. *ṭam* 'shut'; Heb. *būs* 'trample': Syr. *bəsā* 'despise'.

§ 405. It is noteworthy that the rare Hebrew conjugations (§ 402) are found only in connexion with weak verbs, especially those with medial *u* (*i̯*) (§§ 419-420) and with geminated medial consonant (§§ 409-13), except Pōlēl for *lāšōn* 'slander' (part. *məlošənī* [Qərē]) and *šāφaṭ* 'judge, govern' (part. *məšōφəṭī* 'my opponent at law'); and Hoθpa'al for *kāβas* 'wash' (inf. *hukkabbēs*) and *pāqaδ* 'visit, muster, appoint' (perf. *hoθpāqəδū*).

1. Verbs With Initial n-

§ 406. Verbs with initial *n-* present peculiarities only in Accadian, Aramaic, and Hebrew, where the *n* disappears in the imperative (in Hebrew, usually also in the infinitive construct) and is assimilated to the following consonant when, in course of inflexion, it ceases to be initial; in Arabic and Ethiopic (except occasionally in South Arabic), such verbs are entirely regular.

§ 407. Hebrew shows this assimilation (except before pharyngals) in Qal, Niφ'al, Hiφ'īl, and Hoφ'al; in Syriac, in Pə'al, 'Aφ'el, and

'Eθtaφ'al, e.g. Heb. *nāγaš* 'approach', atelic Qal *yiggaš*, impv. *gaš*, inf. const. *gešeθ*, telic Niφ'al *niggaš*, Hiφ'il *higgīš*, Hoφ'al *huggaš*; Syr. *nəφaq* 'go out', atelic Pe'al *neppōq*, telic 'Aφ'el *'appeq*, 'Eθtaφ'al *'eθtappaq*; Acc. *naqāru* 'be otherwise', telic *'iqqur*, etc. In Hebrew, the initial consonant of *lāqaḥ* 'take' is commonly supposed to be treated similarly (but cf. Arab. *qaḥā* 'carry off'?).

2. Verbs With Pharyngals

§ 408. Verbs with pharyngals are strong outside Hebrew.

3. Verbs With Geminate Medial

§ 409. The origin of Semitic verbs with geminate medial consonant (sometimes called 'solid verbs') is not wholly clear, but a comparison of their atelic and telic with those of the strong verb, as given on page 116, may help toward an elucidation.

§ 410. It seems fairly evident that this type is evolved from an original disyllabic base by gemination of the second syllable to gain conformity with the conventional trisyllabic verb, e.g. **ịabuzu-z-u* ⟩ **ịabzu-z-u: *baza-za- = *ịakutub-u* ⟩ **ịaktubu: *katab-a.*

§ 411. So far as the telic is concerned, this seems adequate, except that the type of Heb. *bāzaz*, Eth. *ḥašaša* as contrasted with Heb. *ḥam*, Eth. *ḥamma* suggests a later development which chanced to coincide with the earlier pre-form (cf. Acc. *'išalal*), through analogy with the strong telic.

§ 412. In the atelic the type **ịabzu-zu* ⟨ **ịabuzu-zu* would give Acc. **'ibzuz* (exactly represented by the type *'išlul*), Heb. **yiβz(ōz)*, Syr. **neβz(ōz)*, Arab. **yabzu(zu)*, Eth. **yebz(ez)* (exactly represented by the types *yeḥšeš, yeḥmam*), so that only Accadian and Ethiopic retain the original formations (though the Ethiopic may be a re-creation). The historic Hebrew and Aramaic types *yāβōz, nebbōz* (⟨ **nəβōz*), Arab. *yabuzzu* ⟨ **ịabuz(z)u* (cf. Heb. atelic 3rd plur. masc. *yāsōbbū*, Bib. Aram. impv. 2nd plur. masc. *gōddū* with *ō* ⟨ *u* by analogy with the 3rd sing. masc.; contrast 3rd plur. fem. Heb. *təsubbeynāḥ*, Arab. *yabzuzna*) seem due to a development **ịabuzu* ⟩ **ịabzu* ⟩ **ịabzu-z-u* ⟩ **ịabuzzu* (by vocalic metathesis between identical consonants— *zu-z* ⟩ *uzz?*). A trace of the older form possibly survives in the type of Heb. *yissōβ, yissəβū* beside *yāsōβ, yāsōbbū*, Syr. *nessōβ* ⟨ **ịasbu-b-u* (even Heb. 2nd sing. fem. *tissōbbī*), with *ss* ⟨ *sb* (the Hebrew type is usually explained as an Aramaism, but this seems open to question).

§ 413. The only other point regarding verbs with geminate medial which need be considered here is that their intensives, though

STRONG VERBS AND SOLID VERBS

	Accadian	Hebrew	Syriac	Arabic	Ethiopic	Proto-Semitic
Atelic strong	'iktub	yiχtōβ	neχtōβ	yaktubu	yekteb	ịa/uk(u)tubu/ị
" geminate	'išlul	yāβōz, yēḥam	nebbōz	yabuzzu	yeḥšeš, yeḥmam	?
Telic strong	'ikatab	kāθaβ	kaθaβ	kataba	kataba	kataba
" geminate	išalal	bāzaz, ḥam	baz	bazza	ḥašaša, ḥamma	?

frequently of the same type as in the strong verb, often have the forms Pōlēl, Pōlal, or Hiθpōlēl (cf. § 402). Thus Heb. *hālal* 'be boastful' shows both sets complete, but with different shades of meaning: Pi'ēl *hillēl* 'praise': Pōlēl *hōlēl* 'make foolish'; Pu'al *hullal* 'be praised': Pōlal *hōlal* 'be mad'; Hiθpa'ēl *hiθhallēl* 'boast oneself': Hiθpōlēl *hiθhōlēl* 'act like a madman'. Or the Pilpēl, etc. (cf. § 402), may be used, as Heb. Pilpēl *ši'ǎša'* 'sport', Palpal *ša'ša'* 'be fondled', Hiθpalpēl *hišta'ǎša'* 'delight oneself' (Qal *šā'a'* not recorded).

4. Verbs with '

§ 414. Verbs with initial ' present little new except that ' tends to disappear in the atelic after preformatives, as P-S *ʾi̯a'ḫuðu 'will seize', Acc. 'ēhuz, Heb. *yōḥēz*, Syr. *nēḥōð*, but Arab. *ya'ḫuḏu*, Eth. *ya'aḫaz* (note, however, Arab. impv. *ḫuḏ*, and Syr. Arab. atelic *yāḫuḏ*, *yōḫuḏ*, and cf. § 44).

§ 415. Verbs with medial ' follow the usual rules for pharyngals; in Syr., ' disappears, as *nešal:* Heb. *yiš'al*, Arab. *yas'alu* 'will ask' (Mor. Arab. *sāl*, *'isāl*).

§ 416. Verbs with final ' retain it only in Arabic and Ethiopic; in Accadian and Aramaic, they coincide completely with verbs in final *i̯;* in Heb., ' is here retained only when beginning a syllable, e.g. Acc. *malū* 'be full, fill', Heb. *mālē*, Syr. *məlā*, Arab. *mala'a* (but Syr. Arab. *qirī*, *yiqrā* 'read', Mesop. Arab. *qara*, *yaqra:* Heb. *qārā*, *yiqrā*).

5. Verbs With i̯, u̯

§ 417. Verbs with *i̯* or *u̯* as one of their three consonants may be treated together. Those with initial *u̯* in Proto-Semitic are represented by verbs with initial *i̯* in Hebrew and Aramaic, as Heb. *yālað* 'bear, beget', Syr. *'īleð*, but Acc. *'ūlid*, Arab., Eth. *walada*, though this may well be a difference of determinants rather than a phonetic change (cf. §§ 91, 404).

§ 418. Initial *u̯* (but not *i̯*) vanished in the Proto-Semitic period in the imperative second singular masculine, as Heb. *haβ* 'give!', Arab. *wahaba*, *yahabu*, *hab* ⟨ *u̯(u)hab;* P-S *u̯(u)lid*, *u̯(i)lid* 'bear, beget!', Acc. *lid*, Heb. *lēð*, Syr. *'ilað* (by analogy with verbs with initial *i̯*), Arab. *lid*, Eth. *lad;* but P-S *i̯(u)baš* 'dry!' (Acc. *'ešir* 'be just!', Arab. *īsir*), Heb. *yəβaš*, Syr. *īβaš*, Arab. *ības*, Eth. *yebas*. The same phenomenon is found in the atelic (except in Accadian), as P-S *i̯au̯lidu* 'will bear, beget', Acc. *'ūlid*, Heb. *yēlēð*, Syr. *nīlað*, Arab. *yalidu*, Eth. *yelad;* but P-S *i̯ai̯basu* 'will dry' (Acc. *'ešir*), Heb. *yīβaš*, Syr. *nīβaš*, Arab. *yaybasu*, Eth. *yeybas*.

§ 419. The essential characteristics of verbs with original medial
ṷ and *i̯* result from loss of the semi-vowel, which regularly disappears
between two short vowels, or between a long and a short vowel, with
contraction of the vowels thus left juxtaposed (cf. §§ 45-6). The most
convenient means of distinguishing between the two types is ob-
servation of the atelic of the first form, as P-S *qaṷama*, *i̯aqṷumu*
'stand' (Acc. *'ikān*, *'ikūn* 'be', Arab. *kāna, yakūnu* ⟨ P-S *kaṷana*,
i̯akṷunu), Heb. *qām* (⟨ *qōm* through analogy with *qamtā* ⟨ *qāmtā* ⟨
qaṷamtā, etc.), *yāqūm*, Syr. *qām, nəqūm*, Arab. *qāma, yaqūmu*, Eth.
qōma, yeqūm; but P-S *ša̯ama*, *i̯aši̯imu*, 'put, place, set', Acc. *'išām*,
'išīm, Heb. *śām, yāśīm*, Syr. *sām, nəsīm*, Arab. *šāma, yašīmu*, Eth.
śēma, yeśīm.

§ 420. The two types coincide in Hebrew, except in the atelic
Qal, and further confusion arises from the frequent interchange of
i̯ and *ṷ* (cf. §§ 91, 404); while analogy has been active in these verbs
in all the Semitic languages, levelling their natural development to a
specious uniformity.

§ 421. Verbs with final *ṷ* and *i̯* show similar contraction (except
in Ethiopic, where the original form has been re-created); and for the
most part (except in Classical Arabic and Ethiopic) the type in *i̯* has
supplanted that in *ṷ*, as P-S *dalaṷa*, *i̯aldṷu* 'draw water', Acc.
'idli, 'idali, Heb. *dālāh, yiδleh*, Syr. *dəlā, neδlē*, Arab. *dalā, yadlū*,
Eth. *dalawa, yedlū*; but P-S *baka̯a*, *i̯abki̯u* 'weep', Acc. *'ibki*,
'ibaki, Heb. *bāχāh, yiβkeh*, Syr. *bəχā, neβkē*, Arab. *bakā, yabkī*, Eth.
bakaya, yebkī. Acc. preserves a few traces of the type in *ṷ*, as *'imnu*
'count' (but Arab. *manay-*), *'aqmu* 'burn' beside *'imni, 'aqmi*.

BIBLIOGRAPHY

This list seeks simply to record the more noteworthy treatises and studies on Comparative Semitic and Hebrew Linguistics, especially from 1875 onward, without any attempt to present a Bibliography that is technically complete.

Abel, C., *Einleitung in ein aegyptisch-semitisch-indoeuropäisches Wurzelwörterbuch*, Leipzig, 1886.

—— *Ueber Wechselbeziehungen der ägyptischen, indoeuropäischen und semitischen Etymologie*, i, ib. 1889.

Ahrens, K., 'Der Stamm der schwachen Verba in den semitischen Sprachen', in *ZDMG* lxiv (1910), 161-94.

Albert, E., 'Zur Umschrift und Aussprache von ı and ẕ', in *ZAW* xxxiv (1914), 58-63.

Albrecht, K., 'Das Geschlecht der hebräischen Hauptwörter', ib. xv (1895), 313-25; xvi (1896), 41-121.

Albright, W. F., 'Notes on Egypto-Semitic Etymology', in *AJSL* xxxiv (1918), 81-98, 215-55; *JAOS* xlvii (1927), 198-237.

Allen, E. P., 'On the Semitic Emphatic Consonants', in *Proceedings of the American Oriental Society*, xiv (1888), cviii-cxii.

Anastase, M. de St.-Elie, 'L'Article en hébreu', in *Al-Machriq*, xi (1908), 257-60.

Artrom, E. S., 'Le Influenze delle consonanti sulle vocali nei segolati maschili ebraici', in *GSAI*, n.s. i (1928), 122-45.

Barth, J., 'Assyrisches *iš*, hebräisch-aramäisches *t* als Adverbialendung', in *ZA* xxviii (1914), 307-9.

——'Beiträge zur Pluralbildung des Semitischen', in *ZDMG* lviii (1904), 431-46.

——'Beiträge zur Suffixlehre des Nordsemitischen', in *AJSL* xvii (1901), 193-208.

——'Das passive Qal und seine Participien', in *Jubelschrift zum siebzigsten Geburtstag des Dr. Israel Hildesheimer*, Berlin, 1890, pp. 145-53.

——'Die Casusreste im Hebräischen', in *ZDMG* liii (1899), 593-9.

——*Die Nominalbildung in den semitischen Sprachen*, 2nd ed., Leipzig, 1894.

——'Die Pôlēl-Conjugation und die Pôlāl-Participien', in *Semitic Studies in Memory of Alexander Kohut*, Berlin, 1897, pp. 83-93.

——*Die Pronominalbildung in den semitischen Sprachen*, Leipzig, 1913.

————*Etymologische Studien zum semitischen, insbesondere zum hebräischen Lexikon*, ib. 1893.

————'Formangleichung bei begrifflichen Korrespondenzen', in *Orientalische Studien . . . Theodor Nöldeke . . . gewidmet*, Giessen, 1906, pp. 787-96.

————*Sprachwissenschaftliche Untersuchungen zum Semitischen*, 2 parts, Leipzig, 1907-11.

————'Vergleichende Studien', in *ZDMG* xli (1887), 603-41; xlii (1888), 341-58; xliii (1889), 177-91; xlvi (1892), 684-708.

————*Wurzeluntersuchungen zum hebräischen und aramäischen Lexikon*, Leipzig, 1902.

————'Zum semitischen Demonstrativ *d*', in *ZDMG* lix (1905), 159-63.

————'Zur Flexion der semitischen Zahlwörter', ib. lxvi (1912), 94-102.

————'Zur Frage der Nominalbildung', ib. xliv (1890), 679-98.

————'Zur hebräischen und aramäischen Verbalflexion', ib. lvi (1902), 239-48.

————'Zur vergleichenden semitischen Grammatik', ib. xlviii (1894), 1-21.

————'Zwei pronominale Elemente', in *AJSL* xiii (1897), 1-13.

Bauer, H., 'Die israelitischen Personennamen im Rahmen der gemeinsemitischen Namengebung', in *OLZ* xxxiii (1930), 588-95.

————*Die Tempora im Semitischen, ihre Entstehung und ihre Ausgestaltung in den Einzelsprachen*, Berlin, 1910.

————'Einige Fälle absichtlicher Umgestaltung von Wörtern im Semitischen', in *Islamica* ii (1926), 5-10.

————'Mitteilungen zur semitischen Grammatik', in *ZDMG* lxvi (1912), 103-14. (Cf. J. Barth, ib. p. 339, and Bauer's reply, ib. pp. 475-6.)

————'Noch einmal die semitischen Zahlwörter', ib. pp. 267-70. (Cf. J. Barth, ib. p. 527; Bauer, ib. p. 787.)

————'Semitische Sprachprobleme', ib. lxviii (1914), 365-72. (Cf. Bauer, ib. pp. 596-9; lxix [1915], 561-3; T. Nöldeke, in *ZA* xxx [1916], 163-70; xxxi [1917], 401-9.)

————'Ueberreste der kanaanäischen Unterschicht in den aramäischen Sprachen', in *OLZ* xxix (1926), 801-3.

————'Zur Entstehung des semitischen Sprachtypus', in *ZA* xxviii (1914), 81-91.

————*Zur Frage der Sprachmischung im Hebräischen*, Halle, 1924.

Bauer, H., and P. Leander, *Historische Grammatik der hebräischen Sprache des Alten Testamentes*, i, ib. 1922 (abbreviated *B-L*).

Beer, G., 'Einige Bemerkungen zur hebräischen Grammatik', in *ZAW* xxxiv (1914), 54-7.

Bennett, W. H., 'Notes on the Use of the Hebrew Tenses', in *Hebraica* ii (1886), 193-208; iii (1887), 22-9.

Bergsträsser, G., 'Das hebräische Präfix ‫ש‬', in *ZAW* xxix (1909), 40-56.

——— *Einführung in die semitischen Sprachen*, Munich, 1928 (abbreviated *B*).

——— 'Mitteilungen zur hebräischen Grammatik', in *OLZ* xxvi (1923), 253-60, 477-81; xxvii (1924), 582-6.

———'Semitistisch-hebräistische Bemerkungen', in *ZS* viii (1932), 1-40.

Berry, G. R., 'Original waw in ‫ל"ה‬ Verbs', in *AJSL* xx (1904), 256-7.

——— 'Waw Consecutive with the Perfect in Hebrew', in *JBL* xxii (1903), 60-9.

Bertin, G., 'Suggestions on the Formation of the Semitic Tenses', in *JRAS* 1882, 105-18.

——— 'Suggestions on the Voice-Formation of the Semitic Verb', ib. 1883, 387-418.

Bittner, M., 'Der gemeinsemitische Ausdruck für "Zunge"—ein nomen agentis', in *WZKM* xxiii (1909), 144-50.

Blake, F. R., 'Studies in Semitic Grammar', in *JAOS* xxxv (1915), 375-85.

——— 'The Expression of Indefinite Pronominal Ideas in Hebrew', ib. xxxiv (1914), 115-228.

———'The Hebrew Hatephs', in *Oriental Studies . . . in Commemoration of the Fiftieth Anniversary of Paul Haupt*, Baltimore, 1926, pp. 329-43.

———'The Hebrew Meteg', in *JAOS* xxxii (1912), 78-102.

———'The Internal Passive in Semitic', ib. xxii (1901), 45-54.

———'The So-called Intransitive Verbal Forms in Hebrew', ib. xxiv (1903), 145-204.

———'Vocalic r, l, m, n in Semitic', ib. xxxi (1911), 217-22.

Böttcher, F., *Ausführliches Lehrbuch der hebräischen Sprache*, ed. F. Mühlau, 2 vols., Leipzig, 1866-68.

Brockelmann, C., Ägyptisch-semitische Etymologien', in *ZS* viii (1932), 97-117.

———'Beiträge zur hebräischen und zur aramäischen Grammatik', in *ZA* xiv (1899), 343-8.

——*Die Femininendung* t *im Semitischen*, Breslau, 1903. (Cf. his 'Nochmals die Endungen *û* und *ût*', in *ZA* xviii [1904], 99-100.)

——'Diminutiv und Augmentativ im Semitischen', in *ZS* vi (1928), 109-34.

——'Gibt es einen hamitischen Sprachstamm?', in *Anthropos* xxvii (1932), 797-818.

——*Grundriss der vergleichenden Grammatik der semitischen Sprachen*, 2 vols., Berlin, 1908-13 (abbreviated *VG*).

——'Haplologische Silbenellipse im Semitischen', in *ZDMG* lix (1905), 629-32. (Cf. A. Fischer, ib. lx [1906], 246-8.)

——*Kurzgefasste vergleichende Grammatik der semitischen Sprachen*, Berlin, 1908 (abbreviated *KVG*).

——'Semitische Analogiebildungen', in *ZDMG* lxvii (1913), 107-12.

——'Semitische Reimwortbildungen', in *ZS* v (1927), 6-38.

——*Semitische Sprachwissenschaft*, Berlin, 1906. (French translation by W. Marçais and M. Cohen, *Précis de linguistique sémitique*, Paris, 1910; abbreviated *P*.)

——'Zur hebräischen Lautlehre', in *ZDMG* lviii (1904), 518-24.

Brooks, W. H. S., *Vestiges of the Broken Plural in Hebrew*, Dublin, 1883.

Budde, K., 'Zur Geschichte der tiberiensischen Vokalisation', in *Orientalische Studien ... Theodor Nöldeke ... gewidmet*, Giessen, 1906, pp. 651-7.

Buhl, F., Om oprindelsen af nogle svage rødder i semitisk', in *Oversigt over det Kongelige Danske Videnskabernes Selskabs Forhandlinger*, 1901, 109-13.

Burney, C. F., 'A Fresh Examination of the Current Theory of the Hebrew Tenses', in *Journal of Theological Studies*, xx (1919), 200-14.

Cantineau, J., 'Accadien et sudarabique', in *BSLP* xxxiii (1932), 175-205.

Caspari, W., 'Ueber semasiologische Untersuchungen am hebräischen Wörterbuche', in *ZAW* xxvii (1907), 162-211.

——'Zum hebräischen Demonstrativ', in *ZS* vii (1931), 41-52.

Cazet, C., *Du mode de filiation des racines sémitiques et de l'inversion*, Paris, 1882.

——*Généalogies des racines sémitiques*, ib. 1886.

Chajes, H. P., *Beiträge zur nordsemitischen Onomatologie*, Vienna, 1901 (= SWAW cxliii, no. 4).

Christian, V., 'Das Wesen der semitischen Tempora', in *ZDMG* lxxxi (1927), 232-58. (Cf. P. Leander, ib. lxxxii [1928], 142-2; Christian ib. lxxxiii [1929], 80-1.)

———'Die deiktischen Elemente in den semitischen Sprachen', in *WZKM* xxxi (1924), 137-92.

———'Die Entstehung der semitischen Kasusendungen', in *ZS* iii (1924), 17-26.

———'Zur inneren Passivbildung im Semitischen', in *WZKM* xxxiv (1927), 263-70.

Cohen, J., *Wurzelforschungen zu den hebräischen Synonyma der Ruhe*, Berlin, 1912.

Cohen, M., 'Langues chamito-sémitiques', in Meillet and Cohen, *Les Langues du monde*, Paris, 1924, pp. 81-151; Maps 2, 4.

———*Le Système verbal sémitique et l'expression du temps*, ib. 1924 (abbreviated Cohen, *Système*).

———'Les Résultats acquis de la grammaire comparée chamito-sémitique', in *Revue des cours et conférences*, xxxv (1934), 238-52.

———'Sur les premières personnes des formes verbales à préfixe en chamito-sémitique', in *Actes du premier congrès international des linguistes*, Leiden, 1928, pp. 150-4.

———'Verbes déponents internes (ou verbes adhérents) en sémitique', in *MSLP* xxiii (1929), 225-48.

Cuny, A., 'Contribution à la phonétique comparée de l'indo-européen et du chamito-sémitique', in *BSLP* xxxii (1931), 29-53.

———'Essai sur l'évolution du consonantisme dans la période du sémitique commun', in *MSLP* xv (1909), 1-31.

———*Etudes prégrammaticales sur le domaine des langues indo-européennes et chamito-sémitiques*, Paris, 1924.

———'Indo-européen et sémitique', in *Rev. de phonétique*, 1912, 101-32.

———'La Catégorie du duel dans les langues indo-européennes et chamito-sémitiques', in *Memoires publiés par l'Académie Royale de Belgique*, II, xxviii (1930).

———'Les Mots du fonds préhellénique en grec, latin et sémitique occidental', in *Review des études anciennes*, xii (1910), 154-64.

Davies, T. W., 'The Infinitive, Especially the Infinitive Absolute, in Hebrew and Its Cognates', in *Journal of the Manchester Egyptian and Oriental Society*, 1918-19, 55-69.

Delitzsch, F., *Prolegomena eines neuen hebräisch-aramäischen Wörterbuchs*, Leipzig, 1886.

———*Studien über indogermanisch-semitische Wurzelverwandtschaft*, ib. 1873.

————*The Hebrew Language Viewed in the Light of Assyrian Research*, London, 1883.

Denio, F. B., 'The Relations Expressed by the Genitive in Hebrew', in *JBL* xix (1900), 107-13.

Dhorme, P., 'La Langue de Canaan', in *Revue biblique internationale*, n. s. x (1913), 369-93; xi (1914), 37-59, 344-72.

————'Les Formations par analogie dans le verbe hébreu', ib. iii (1906), 114-26.

Diehl, W., *Das Pronomen personale suffixum 2. und 3. pers. plur. des Hebräischen in der alttestamentlichen Ueberlieferung*, Giessen, 1895.

Dörwald, P., *Die Formenbildungsgesetze des Hebräischen*, Berlin, 1897.

Drexel, A., 'Der semitische Triliteralismus und die afrikanische Sprachforschung', in *WZKM* xxxi (1924), 219-36, 249-77; xxxii (1925), 1-30.

Drival, E. van, *Grammaire comparée des langues sémitiques et de l'égyptien*, 2nd ed., Paris, 1879.

Driver, G. R., 'The Origin of "Ḥireq Compaginis" in Hebrew', in *Journal of Theological Studies*, xxvi (1925), 76-7.

Driver, S. R., *A Treatise on the Use of the Tenses in Hebrew*, 3rd ed., Oxford, 1892.

Durand, A., 'Le Pronom en égyptien et dans les langues sémitiques', in *JA* IX, v (1895), 412-63.

Eberharter, A., 'Die hebräischen Nomina auf וֹן sprachgeschichtlich untersucht', in *BZ* xii (1914), 337-52.

————'Zu den hebräischen Nomina auf וֹי', ib. ix (1911), 113-19.

Eitan, I., 'Contribution à l'histoire du verbe hébreu (nippa'el ou nif'al intensif)', in *JPOS* i (1921), 42-7.

————'Hebrew and Semitic Particles', in *AJSL* xliv (1928), 177-205, 254-60; xlv (1929), 48-63, 130-45, 197-211; xlvi (1930), 22-50.

————'La Répétition de la racine en hébreu', in *JPOS* i (1921), 171-86.

————'Light on the History of the Hebrew Verb', in *JQR* n. s. xii (1922), 25-32.

Ember, A., Egypto-Semitic Studies, Leipzig, 1930.

————'Kindred Semito-Egyptian Words', in *Zeitschrift für ägyptische Sprache und Altertumskunde*, xlix (1911), 93-4; li (1914), 110-21; liii (1917), 83-90.

————'Notes on the Relation of Egyptian and Semitic', ib. l (1912), 86-90. (Cf. also *ZA* xxviii [1914], 13-14; *OLZ* xvii [1914], 6-7, 424.)

———'Semito-Egyptian Sound-Changes', ib. xlix (1911), 87-92.

———'Several Semito-Egyptian Particles', in *ZA* xxviii (1914), 302-6.

———*The Pluralis Intensivus in Hebrew*, Baltimore, 1905.

Erman, A., 'Das Verhältnis des Aegyptischen zu den semitischen Sprachen', in *ZDMG* xlvi (1892), 93-129.

Ewald, H., *Ausführliches Lehrbuch der hebräischen Sprache*, 8th ed., Göttingen, 1870.

Féghali, M., and A. Cuny, *Du genre grammatical en sémitique*, Paris, 1924.

Finck, F. N., *Die Sprachstämme des Erdkreises*, 3rd ed., Leipzig, 1923, pp. 24-32.

Fischer, A., 'Flüstervokale im Semitischen?', in *ZDMG* lxxi (1917), 446-7.

Flashar, M., 'Das Ghain in der Septuaginta', in *ZAW* xxviii (1908), 194-220, 303-13.

Fraenkel, S., 'Zum sporadischen Lautwandel in den semitischen Sprachen', in *BA* iii (1898), 60-86.

Frankenberg, W., *Der Organismus der semitischen Wortbildung*, Giessen, 1913.

———'Die Determination im Semitischen', in *Studien zur semitischen Philologie und Religionswissenschaft Julius Wellhausen . . . gewidmet*, ib. 1914, pp. 129-44.

Friedrich, J., 'Der Schwund kurzer Endvokale im Nordwestsemitischen', in *ZS* i (1922), 3-14.

Gaenssle, C., *The Hebrew Particle* אשר, Chicago, 1915.

Gaster, M., 'Die Unterschiedslosigkeit zwischen Pathaḥ und Segol', in *ZAW* xiv (1894), 60-4.

Gees, F. W., 'Das endschwache Zeitwort in hebräischen Eigennamen', in *AJSL* xxvii (1911), 301-11.

Gerber, W. J., *Die hebräischen verba denominativa, insbesondere im theologischen Sprachgebrauch des Alten Testaments*, Leipzig, 1896.

Gesenius, W., *Hebrew Grammar*, 28th ed.; Eng. transl. A. E. Cowley, 2nd ed., Oxford, 1910 (abbreviated *G*).

———*Hebräische Grammatik mit Benutzung der von E. Kautzsch bearbeiteten 28. Auflage von Wilhelm Gesenius' hebräischer Grammatik verfasst von G. Bergsträsser*, Leipzig, 1918 sqq. (abbreviated *G-B*).

Giebe, A., *Beobachtungen über das hebräische Adjectiv in den Psalmen in etymologischer und syntaktischer Hinsicht*, 2 parts, Naumberg, 1900-1.

Ginsberg, H. L., 'Studies on the Biblical Hebrew Verb', in *AJSL* xlvi
    (1930), 53-8, 127-38.

Gray, L. H., 'Notes étymologiques sur les "verbes faibles" en hébreu
    biblique', in *Archiv Orientálnت* v (1933), 124-30.

———'Observations on the Phonology of the bəγaδkəφaθ', to appear
    in *AJSL*.

———'The Punic Passages in the "Poenulus" of Plautus', ib. xxxix
    (1923), 73-88.

Grimme, H., 'Die jemenische Aussprache des Hebräischen und Fol-
    gerungen daraus für die ältere Sprache', in *Festschrift E. Sachau
    ...gewidmet*, Berlin, 1915, pp. 125-42.

———'Flüsterelemente in semitischen Sprachen', in *ZS* iii (1924), 1-16.

———*Grundzüge der hebräischen Akzent- und Vocallehre*, Freiburg,
    1896.

———'Semitische *P*-Laute', in *ZDMG* lxviii (1914), 259-69.

———'Theorie der ursemitischen labialisierten Gutturale. Ein
    Beitrag zur Verständigung über den Begriff Ursemitisch', ib. lv
    (1901), 407-86.

Guidi, I., 'La Pronuncia del Ṣērē', in *Verhandlungen des dreizehnten
    Orientalisten-Kongresses*, Leiden, 1904, pp. 208-10.

Gulkowitsch, L., *Die Abstraktbildungen in der hebräischen Sprachge-
    schichte, insbesondere die auf -ut*, Leipzig, 1930.

Halévy, J., 'La Désinence du pluriel dans les langues sémitiques', in
    REJ xvi (1888), 138-40.

———'L'Article hébreu', ib. xxiii (1891), 117-21.

———'Les Quadrilittères à la seconde radicale redoublée', in *JA*
    IX, xix (1902), 136-7.

———'L'Origine de la transcription du texte hébreu en caractères
    grecs dans les *Hexaples* d'Origène', ib. xvii (1901), 335-41.

Halper, B., 'The Participial Formations of the Geminate Verbs', in
    ZAW xxx (1910), 42-57, 99-126, 201-28.

Hartmann, M., *Die Pluriliteralbildungen in den semitischen Sprachen,
    mit besonderer Berücksichtigung des Hebräischen, Chaldäischen
    und Neusyrischen*, Halle, 1875.

Haupt, P., 'Assyrian Phonology, with Special Reference to Hebrew',
    in *Hebraica* i (1885), 175-81.

———'Die semitischen Sprachlaute und ihre Umschrift', in *BA* i
    (1890), 249-67.

———'Die semitischen Wurzeln QR, KR, XR', in *AJSL* xxiii
    (1907), 241-52.

———'Semitic Verbs Derived from Particles', ib. xxii (1906), 257-61.

————'Studies on the Comparative Grammar of the Semitic Lan-
    guages with Special Reference to Assyrian: The Oldest Semitic
    Verb-Form', in *JRAS* 1878, 244-52.

————'The Ending of the Semitic Genitive', in *JAOS* xlv (1925),
    311-15.

————'The Names of the Hebrew Vowels', ib. xxii (1901), 13-17.

————'Ueber die Halbvocale ṷ und ị', in *BA* i (1890), 293-300.

Hehn, J., 'Waw inversivum', in *Beiträge zur alttestamentlichen Wis-
    senschaft Karl Budde . . . überreicht*, Giessen, 1920, pp. 83-92.

Herner, S., *Syntax der Zahlwörter im Alten Testament*, Lund, 1893.

Hillel, F., *Die Nominalbildungen in der Mischnah*, Frankfort, 1891.

Hirschfeld, H., 'The Pronunciation of the Letter AYN', in *JQR* iv
    (1892), 499-502.

Holma, H., 'Zur semitisch-hamitischen Sprachverwandtschaft', in *ZA*
    xxxii (1918), 34-47.

Homburger, L., 'Les Langues africanes modernes et l'égyptien ancien',
    in *MSLP* xxiii (1929), 149-74.

————'Les Dialectes coptes et mandés', in *BSLP* xxx (1930), 1-57.

————'Notes sur quelques morphèmes communs à l'égyptien et aux
    langues négro-africaines', in *JA* ccxii (1928), 323-45.

Hommel, E., *Der musikalische Akzent des Hebräischen*, Leipzig. 1917.

Hommel, F., 'Ueber den Grad der Verwandtschaft des Altägyptischen
    mit dem Semitischen', in *BA* ii (1894), 342-58.

Huizinga, A. H., *Analogy in the Semitic Languages*, Baltimore, 1901.

Hupfeld, 'System der semitischen Demonstrativbildung', in *Zeit-
    schrift für die Kunde des Morgenlandes*, ii (1839), 124-63, 427-82.

Hurwitz, S. T. H., *Root-Determinatives in Semitic Speech*, New York,
    1913.

Hüsing, G., 'Zum Lautwert des ȥ', in *OLZ* x (1907), 467-70.

Jenrich, W., *Der pluralis fractus im Hebräischen*, Halle, 1883.

Jensen, P., 'Ausruf, Frage und Verneinung in den semitischen
    Sprachen', in *Zeitschrift für Völkerpsychologie und Sprachwis-
    senschaft*, xviii (1888), 419-30.

Joüon, P., 'Etudes de morphologie hébraïque', in *Biblica* i (1920),
    353-71.

————'Etudes de philologie sémitique', in *Mélanges de la faculté
    orientale de l'Université St-Joseph, Beyrouth*, v (1911), 355-415;
    vi (1912), 121-45.

Kahan, J., *Ueber die verbalnominale Doppelnatur der hebräischen
    Participien und Infinitive und ihre darauf beruhende verschiedene
    Konstruktion*, Leipzig [1889].

Kahle, P., 'Beiträge zur Geschichte der hebräischen Punktation', in *ZAW* xxi (1901), 273-317.

——'Das Problem der Grammatik des Hebräischen', in *Indogermanische Forschungen*, xlv (1927), 395-410.

——*Der masoretische Text des Alten Testaments nach der Ueberlieferung der babylonischen Juden*, Leipzig, 1902.

——'Die überlieferte Aussprache des Hebräischen und die Punktation der Masoreten', in *ZAW* xxxix (1921), 230-9.

——*Masoreten des Ostens. Die ältesten punktierten Handschriften des Alten Testaments und der Targume*. Leipzig, 1913.

——*Masoreten des Westens*, 2 vols., Stuttgart, 1927-30.

Kautzsch, E., *Die Aramäismen im Alten Testament*, i, Halle, 1902.

——'Die sogenannten aramaisierenden Formen der Verba ע״ע im Hebräischen', in *Orientalische Studien . . . Theodor Nöldeke . . . gewidmet*, Giessen, 1906, pp. 771-80.

Kelly, F. T., 'Some Notes on the Shewa', in *Journal of the Society for Oriental Research*, iv (1920), 82-6.

——'Stray Notes on the "A" Class Segholates', ib. v (1921), 96-9.

——'The Imperfect with Simple Waw in Hebrew', in *JBL* xxxix (1920), 1-23.

Kieckers, E., 'Der hamito-semitische Sprachstamm', in his *Die Sprachstämme der Erde*, 34-55, Heidelberg, 1931.

Klingenheben, A., 'Die Tempora Westafrikas und die semitischen Tempora', in *Zeitschrift für Eingeborenen-Sprachen*, xix (1928), 241-68.

Knudtzon, J. A., *Om det saakaldte perfektum og imperfektum i Hebraisk*, Oslo, 1889.

——'Vom sogenannten Perfekt und Imperfekt im Hebräischen', in *Actes du VIIIme congrès international des orientalistes*, Section sémitique (b), 73-83, Leiden, 1891-93.

——'Zur assyrischen und allgemein semitischen Grammatik', in *ZA* vi (1891), 299-310, 405-31; vii (1892), 33-63.

Koch, A., *Der semitische Infinitiv*, Stuttgart, 1874.

Köhler, L., 'Der hebräische Imperfekttypus jêšēb', in *OLZ* xx (1917), 172-3.

König, E., 'Das *l*-Jaqtul im Semitischen', in *ZDMG* li (1897), 330-7.

——'Der generelle Artikel im Hebräischen', in *ZAW* xliv (1926), 172-5.

——'Die Bedeutung des hebräischen קין, ib. xxxi (1911), 133-46.

——'Die Ueberwucherung des Status constructus-Gebrauchs im Semitischen', in *ZDMG* liii (1899), 521-4.

——— *Hebräisch und Semitisch. Prolegomena und Grundlinien einer Geschichte der semitischen Sprachen*, Berlin, 1901.

——— *Historisch-kritisches Lehrgebäude der hebräischen Sprache*, 2 vols. (in three parts), Leipzig, 1881-97.

——— 'Neuere Stammbildungstheorien im semitischen Sprachgebiete', in *ZDMG* lxv (1911), 709-28.

——— 'Principien und Resultate der semitischen Grammatik', ib. li (1897), 623-46.

——— 'Ueber den Lautwert des hebräischen ע', in *WZKM* xxvii (1913), 65-70.

——— 'Zur Erforschung der hebräischen Eigennamen', in *Theologisches Literaturblatt*, 1898, 249-54.

——— 'Zur Syntax der Zahlwörter im Alten Testament', in *AJSL* xviii (1902), 129-48.

——— 'Zur Verbalflexion im Semitischen', in *ZDMG* lxvi (1912), 261-6.

Könnecke, C., *Die Behandlung der hebräischen Namen in der Septuaginta*, Stargard, 1885.

Kraetzschmar, K., 'The Origin of the Notae Relationis in Hebrew', in *Hebraica*, vi (1890), 296-302.

Künstlinger, D., 'The Numeral "Two" in the Semitic Languages', in *JQR* x (1898), 462-9.

——— *Zur Theorie der Zahlwörter in den semitischen Sprachen*, Berlin, 1897.

Lagarde, P. de, *Uebersicht über die im Aramäischen, Arabischen und Hebräischen übliche Bildung der Nomina*, Göttingen, 1889 (= *Abhandlungen der königlichen Gesellschaft der Wissenschaften*, xxxv, Part 3; Index and Appendix ib. xxxvii [1891], Part 2).

Lajčiak, J., *Die Plural- und Dualendungen am semitischen Nomen*, Leipzig, 1902.

Lambert, M., 'De la formation des racines trilitères fortes', in *Semitic Studies in Memory of Alexander Kohut*, Berlin, 1897, pp. 354-62.

——— 'De la vocalisation des ségolés', in *REJ* xxxiii (1896), 18-23.

——— 'De l'emploi des suffixes pronominaux avec *noun* et sans *noun* au futur et à l'impératif', ib. xlvi (1903), 178-83.

——— 'Du passé optatif en hébreu', ib. lxxx (1925), 218-19.

——— 'L'Accent tonique en hébreu', ib. xx (1890), 73-7.

——— 'La Permutation du ה et du ו', ib. xxxiv (1897), 118-19.

——— 'La Trilitéralité des racines ע״ע et י״ע', ib. xxxv (1897), 203-12.

——— 'Le Futur qal des verbes à première radicale vav, noun ou alef', ib. xxvii (1893), 136-41.

————'Le Groupement des langues sémitiques', in *Cinquantenaire de l'Ecole pratique des hautes etudes*, Paris, 1921, pp. 51-60.

————'L'Emploi du nifal en hébreu', in *REJ* xli (1900), 196-214.

————'Les Anomalies du pluriel des noms en hébreu', ib. xliii (1901), 206-14.

————'Les Pointes voyelles en hébreu', ib. xxvi (1893), 274-7.

————'Le Vav conversif', ib. 47-62.

————'Observations sur la théorie des formes nominales de M. Barth', in *JA* VIII, xv (1890), 164-79.

————'Quelques remarques sur l'adjectif en hébreu et en arabe', in *Festschrift zum 80. Geburtstage Moritz Steinschneider's*, Leipzig, 1896, pp. 16-20.

————'Remarques sur la formation du pluriel en hébreu', in *REJ* xxiv (1892), 99-111.

————*Traité de grammaire hébraïque*, Paris, 1931 sqq.

Landsberger, B., 'Prinzipienfragen der semitischen, speziell der hebräischen, Grammatik', in *OLZ* xxix (1926), 967-76.

Leander, P., 'Das Wesen der semitischen Tempora', in *ZDMG* lxxxii (1928), 142-3.

————'Der Kampf zwischen Philippis Gesetz und dem Systemzwange in der hebräischen Sprachgeschichte', in *Le Monde oriental*, vi (1912), 185-92.

————'Die vermutete Pausaldehnung o ⟩ ā im Hebräischen', ib. iii (1909), 174-7.

————'Einige hebräische Lautgesetze chronologisch geordnet', in *Sertum philologicum Carolo Ferdinando Johansson oblatum*, Göteborg, 1910, pp. 122-30.

————'Einige hebräische Lautgesetze chronologisch geordnet', in *ZDMG* lxxiv (1920), 61-76.

————'Zur hebräischen Lautgeschichte', in *Le Monde oriental*, iv (1910), 34-8.

Levias, C., 'On the Etymology of the Term šᵉvâ', in *American Journal of Philology*, xvi (1895), 28-37.

————'Šᵉvâ and Ḥâṭēph', in *AJSL* xiii (1897), 79-80.

————'The Names of the Hebrew Vowels', in *Hebrew Union College Annual*, 1904, 138-46.

————'The Palestinian Vocalization', in *AJSL* xv (1899), 157-64.

Lewin, B., 'Die Assimilation der Paarworte in der Bibel', in *Jahrbuch der jüdisch-litterarischen Gesellschaft*, 1908, 234-42.

Lexa, F., *Comment se révèlent les rapports entre les langues hamitiques, sémitiques et la langue égyptienne dans la grammaire des pronoms*

personnels, des verbes et dans les numéraux cardinaux 1-9, n. p., n. d. [1922?].

Lindberg, O. E., *Studier öfver de semitiska ljuden w och y*, Lund, 1893.

——*Vergleichende Grammatik der semitischen Sprachen*, i (consonantism), Göteborg, 1897.

Littmann, E., '‘Ain und die emphatischen Laute', in *ZS* ii (1924), 274-5.

Maas, A. J., 'Pronominal Roots', in *Hebraica*, v (1889), 192-5.

Macdonald, D. B., 'The Interchange of Sibilants and Dentals in Semitic', in *AJSL* xv (1889), 100-4.

Margoliouth, G., 'The Supralinear Punctuation, Its Origin, the Different Stages of Its Development, and Its Relations to Other Semitic Systems of Punctuation', in *Proceedings of the Society for Biblical Archaeology*, xv (1922-23), 164-205.

Margolis, M. L., 'Notes on Semitic Grammar', in *Hebraica*, x (1894), 188-92; *AJSL* xii (1896), 197-229; xix (1903), 45-8.

——'The Place of the Word-Accent in Hebrew', in *JBL* xxx (1911), 29-43.

——'The Pronunciation of the שׁוּא according to New Hexaplaric Material', in *AJSL* xxvi (1910), 62-70.

——'Transliterations in the Greek Old Testament', in *JQR* n. s. xvi (1926), 117-25.

Meinhof, C., 'Was können uns die Hamitensprachen für den Bau des semitischen Verbum lehren?', in *Zeitschrift für Eingeborenen-Sprachen*, xii (1922), 241-75.

Meister, R., 'Zur Transkription der hebräischen Gutturale durch die Septuaginta', in *Wiener Studien*, xxviii (1907), 160-1.

Meloni, G., *Saggi di filologia semitica*, Rome, 1913.

Meriggi, P., 'Il Problema della parentela dell' indoeuropeo col semitico', in *Festschrift Meinhof*, Hamburg, 1927, pp. 416-24.

Möller, H., 'Die gemein-indogermanisch-semitischen Worttypen der zwei- und dreikonsonantigen Wurzel', in *Kuhn's Zeitschrift*, xlii (1908), 174-91.

——'Die semitischen *p*-Laute', in *ZDMG* lxx (1916), 145-63.

——'Die semitisch-vorindogermanischen laryngalen Konsonanten', in *Mémoires de l'académie royale des sciences et des lettres de Danemark*, 7me série, Section des lettres, IV, i (1917).

——*Semitisch und Indogermanisch*, i (consonantism), Copenhagen, 1906.

——*Vergleichendes indogermanisch-semitisches Wörterbuch*, Göttingen, 1911.

Montgomery, J. A., 'Alleged Intensive Noun-Formations in the
    Semitic', in *JAOS* xlvi (1926), 56-8.
——'The Nominal Prefix *n* in Some Hebrew Names', ib. xliii
    (1923), 50-1.
Moore, G. F., 'On a New Theory of the Nature of the So-called
    Emphatic Consonants in the Semitic Languages', in *Proceedings
    of the American Oriental Society,* xiii (1888), ccciv-cccvii.
Müller, A., 'Semitische Nomina. Bemerkungen zu de Lagarde und
    Barth', in *ZDMG* xlv (1891), 221-38.
Müller, D. H., 'Das Substantivum verbale', in *Orientalische Studien
    Theodor Nöldeke . . . gewidmet,* Giessen, 1906, pp. 781-6.
——'Ueber den Gebrauch des äussern Plurals masc. in den süd-
    semitischen Sprachen', in *Actes du 6ᵐᵉ congrès international des
    orientalistes,* Leiden, 1885, ii, 445-64.
——'Zur Geschichte der semitischen Zischlaute', in *Verhandlungen
    des VII. internationalen Orientalisten-Congresses,* Vienna, 1889,
    Semitic Section, pp. 228-48.
Müller, F., 'Der Dual in den semitischen Sprachen', in *SWAW* lxxix
    (1875), 449-60.
——'Die hamito-semitische Sprachstamm', in his *Grundriss der
    Sprachwissenschaft,* Vienna, 1876-88, III, ii, 224-419.
Naville, E., *Evolution de la langue égyptienne et les langues sémitiques,*
    Paris, 1920.
Nestle, E., 'Schin-Sin. Ein Beitrag zur späteren Geschichte des
    hebräischen Alphabets', in *Actes du XIᵐᵉ congrès des orientalistes,*
    Paris, 1898, Section iv, 113-16.
——'Spiritus asper und lenis in der Umschreibung hebräischer
    Wörter', in *Philologus,* lxviii (1909), 456-63.
Nix, L., 'Zur Erklärung der semitischen Verbalformen', in *ZA* x
    (1885), 174-92.
Nöldeke, T., *Beiträge zur semitischen Sprachwissenschaft,* Strasbourg,
    1904.
——'Der Dual im Semitischen', in *Zeitschrift für Völkerpsychologie
    und Sprachwissenschaft,* vii (1871), 403-11.
——*Die semitischen Sprachen,* 2nd ed., Leipzig, 1899.
——'Inkonsequenzen in der hebräischen Punktation', in *ZA* xxvi
    (1912), 1-15.
——*Neue Beiträge zur semitischen Sprachwissenschaft,* Strasbourg,
    1910.
——'Untersuchungen zur semitischen Grammatik', in *ZDMG*
    xxxvii (1883), 525-40; xxxviii (1884), 407-22.

——'Zur semitischen Pluralendung', in *ZA* xviii (1904), 68-72.

Noth, M., *Die israelitischen Personennamen im Rahmen der gemein-semitischen Namengebung*, Stuttgart, 1928.

Nyberg, H. S., 'Wortbildung mit Präfixen in den semitischen Sprachen', in *Le Monde oriental*, xiv (1920), 177-289.

Nylander, K. U., *Om kasusändelserna i Hebräiskan*, Upsala, 1882.

O'Leary, De Lacy, *Comparative Grammar of the Semitic Languages*, London, 1923 (abbreviated *O*).

Olshausen, J., *Lehrbuch der hebräischen Sprache*, Brunswick, 1861.

Oštir, K., 'Zum Verhältnis des indogermanischen *x*-Lautes zu den semitischen Kehlkopf-Lauten', in *Anthropos* viii (1913), 165-80.

Pedersen, J., 'Semiten (Sprache)', in *Reallexikon der Vorgeschichte*, ed. M. Ebert, Berlin, 1928, xii, 14-50.

Philippi, F., 'Das Zahlwort Zwei im Semitischen', in *ZDMG* xxxii (1878), 21-98.

——'Der Grundstamm des starken Verbums im Semitischen und sein Verhältnis zur Wurzel', in *Morgenländlische Forschungen . . . H. L. Fleischer . . . gewidmet*, Leipzig, 1875, pp. 71-106.

——'Die Aussprache der semitischen Consonanten ו und ׳׳', in *ZDMG* xl (1886), 639-54.

——'Die semitischen Verbal- und Nominalbildung in ihrem Verhältnis zu einander', in *BA* ii (1894), 359-89.

——'Nochmals die Aussprache der semitischen Konsonanten ו und ׳׳', in *ZDMG* li (1897), 66-104, 338-9.

——*Wesen und Ursprung des Status constructus im Hebräischen*, Weimar, 1871.

Porath, E., 'Die Passivbildung des Grundstammes im Semitischen', in *Monatsschrift für Geschichte und Wissenschaft des Judentums*, n. s. xliii (1926), 180-93, 250-60.

Porges, N., 'Ueber die Verbalstammbildung in den semitischen Sprachen', in *SWAW* lxxix (1875), 281-354.

Praetorius, F., '*Fu'ail* im Hebräischen und Syrischen', in *ZDMG* lvii (1903), 524-9.

——'Ueber das babylonische Vokalisationssystem des Hebräischen', ib. liii (1899), 181-96.

——'Ueber den Einfluss des Accentes auf die Vocalentfaltung nach Gutturalen', in *ZAW* iii (1883), 211-19.

——*Ueber den rückweichenden Accent im Hebräischen*, Halle, 1897.

——'Ueber den sogenannten Infinitiv absolutus des Hebräischen', in *ZDMG* lvi (1902), 546-50.

———'Ueber den Ursprung des Dagesch forte conjunctivum', in *ZAW* iii (1883), 17-31.

———'Ueber die aramäischen und arabischen Passivperfekta', in *ZS* ii (1924), 134-41.

———'Ueber einige Arten hebräischer Eigennamen', in *ZDMG* lvii (1903), 773-82. (Cf. ib. lxi [1907], 759.)

———'Ueber einige Pluralformen des Semitischen', ib. lvi (1902), 685-96.

———'Ueber einige weibliche Caritativnamen im Hebräischen', ib. lvii (1903), 530-4.

———'Zur hebräischen und aramäischen Grammatik', ib. lv (1901), 359-70.

———'Zur Kausativbildung im Semitischen', in *ZS* v (1927), 39-42.

Rahlfs, A., 'Zur Setzung der Lesemütter im Alten Testament', in *Nachrichten der Königlichen Gesellschaft der Wissenschaften zu Göttingen*, phil.-hist. Klasse, 1916, 315-47.

Rammelt, G., *Ueber die zusammengesetzten Nomina im Hebräischen*, Halle, 1883.

Reckendorf, H., 'Artikelhafter Gebrauch des Personalpronomens und Verwandtes im Semitischen', in *ZDMG* liv (1900), 130-6.

———'Der Bau der semitischen Zahlwörter', ib. lxv (1911), 550-9.

———'Zur Karakteristik der semitischen Sprachen', in *Actes du Xme congrès des orientalistes*, Leiden, 1897, Section II, 3-9.

Reinisch, L., *Das persönliche Fürwort und die Verbalflexion in den chamito-semitischen Sprachen*, Vienna, 1909.

———'Das Zahlwort 4 und 9 in den chamito-semitischen Sprachen', in *SWAW* cxxi (1890), no. 12.

Renan, E., *Histoire générale et système comparé des langues sémitiques*, i, 3rd ed. (all published), Paris, 1863.

Revillout, E., 'Essai sur la vocalisation hébraïque', in *Revue égyptologique*, xiii (1911), 137-58; xiv (1912), 82-7.

———'Les Voyelles en égyptien et dans les langues sémitiques', ib. xiii (1911), 134-6.

Rhodokanakis, N., 'Reduplikation und Vokaldehnung, Druck und Ton in der semitischen Nominalbildung', in *WZKM* xxix (1915), 60-73.

Rimalt, E., 'Wechselbeziehungen zwischen dem Aramäischen und dem Neubabylonischen', in *WZKM* xxxix (1932), 99-122.

Robinson, T. H., 'Some Features of the Sibilants in the Semitic Languages', in *Journal of the Manchester Egyptian and Oriental Society*, 1918-19, 81-9.

Rosenberg, H., 'Das Geschlecht der Hauptwörter in der Mischna', in *Monatsschrift für Geschichte und Wissenschaft des Judentums*, lii (1908), 206-16, 285-301, 426-34, 560-77, 673-96.
——'Notizen aus der tannaïtischen Literatur über das Geschlecht der hebräischen Hauptwörter', in *ZAW* xxviii (1908), 144-7.
——'Zum Geschlecht der hebräischen Hauptwörter', ib. xxv (1905), 325-39.
Růzička, R., *Beiträge zur Erklärung der nomina segolata im Hebräischen*, Prague, 1904.
——'Der Wiedergabe des nordsemitischen ע durch ḫ im Assyrischen als eine Parallele der Transkription von ע durch γ bei den LXX', in *Biblische Zeitschrift*, xi (1913), 342-9.
——'Die Wurzel rʿ in den semitischen Sprachen', in *ZA* xxv (1911), 114-38.
——*Konsonantische Dissimilation in den semitischen Sprachen*, Leipzig, 1909.
——'Nochmals zur Frage der Existenz des ġ im Ursemitischen', in *WZKM* xxviii (1914), 21-45.
——'Ueber die Existenz des ẕ̣ im Hebräischen', in *ZA* xxi (1908), 293-340.
——'Zur Frage der Existenz des ġ im Ursemitischen', in *WZKM* xxvi (1912), 96-106.
Sachs, H., *Die Partikeln der Mischna*, Berlin, 1897.
Sarauw, C., 'Das altsemitische Tempussystem', in *Festschrift Wilhelm Thomsen . . . dargebracht*, Leipzig, 1912, pp. 59-69.
——'Der hebräische Lokativ', in *ZA* xx (1907), 183-9.
Scerbo, F., 'Dei verbi in media *waw*', in *GSAI* xxi (1908), 111-15.
——'Dell' aleph quiescente', ib. xix (1906), 191-3.
——'Uso dell' articolo presunto errato in ebraico', ib. pp. 187-90.
——'Verbi biconsonantici in ebraico', ib. xxii (1909), 295-300.
Schaade, A., 'Zwei Studien über das grammatische Geschlecht im Semitischen', in *ZS* v (1927), 185-94.
Schlatter, A., 'Die hebräischen Namen bei Josephus', in *Beiträge zur Förderung christlicher Theologie*, xvii (1913), 117-244.
Schmidt, W., *Die Sprachfamilien und Sprachenkreise der Erde*, Heidelberg, 1926, pp. 56-62.
Schmiedl, A., 'Eine sprachvergleichende Studie', in *Monatsschrift für Geschichte und Wissenschaft des Judentums*, l (1906), 59-67.
Schreiner, M., 'Zur Geschichte der Aussprache des Hebräischen', in *ZAW* vi (1886), 213-59.
Schultze, M., *Zur Formenlehre des semitischen Verbs*, Vienna, 1886.

Schulz, A. O., *Ueber das Imperfekt und Perfekt mit* ‫ו‬ ‫קי‬ *im Hebräischen*, Kirchhain, 1900.

Schwab, M., *Les Points-voyelles dans les langues sémitiques*, Paris, 1879.

Schwabe, F., *Die Genusbestimmung des Nomens im biblischen Hebräisch*, Jena, 1894.

Segal, M. H., 'Mišnaic Hebrew and its Relation to Biblical Hebrew and to Aramaic', in *JQR* xx (1908), 647-737.

Seidel, M., '‫ו‬ as an Old Plural Ending of the Hebrew Noun', in *JAOS* xxxvii (1917), 165-7.

Sellin, E., *Die verbal-nominale Doppelnatur der hebräischen Participien und Infinitive und ihre darauf verschiedene Construktion*, Leipzig, 1889.

Sethe, K., 'Die ägyptischen Ausdrücke für "jeder" und ihre semitischen Entsprechungen', in *ZS* v (1927), 1-5.

Siegfried, C., 'Die Aussprache des Hebräischen bei Hieronymus', in *ZAW* iv (1884), 34-83.

Sievers, E., *Studien zur hebräischen Metrik*, i, Leipzig, 1901.

Speiser, E. A., 'Secondary Developments in Semitic Phonology. An Application of the Principle of Sonority', in *AJSL* xlii (1926), 145-69.

——'The Pronunciation of Hebrew according to the Transliterations in the Hexapla', in *JQR* xvi (1926), 343-82; xxiii (1933), 233-65; xxiv (1934), 9-46.

Sperber, H., 'Das Alphabet der Septuaginta-Vorlage', in *OLZ* xxxii (1929), 533-9.

Spiro, J., 'Les Origines des langues sémitiques', in *Revue de théologie et de philosophie*, xxx (1897), 144-68.

Sprengling, M., 'Zur Priorität des "Apocopatus"', in *ZDMG* lxx (1916), 542-6.

Stade, B., *Lehrbuch der hebräischen Grammatik*, i, Leipzig, 1879.

Staples, W. E., 'The Hebrew of the Septuagint', in *AJSL* xliv (1928), 6-30.

Stein, A., *Der Stamm der Hithpael im Hebräischen*, Schwerin, 1893.

Stein, S., *Das Verbum der Mischnahsprache*, Berlin, 1888.

Tegnér, E. H. W., *De vocibus primae radicalis w earumque declinatione quaestiones semiticae comparativae*, Lund, 1869.

Till, W., 'Die Zusammenhänge zwischen den ägyptischen und semitischen Personalpronomina', in *WZKM* xxxiii (1926), 236-51.

Torczyner, H., *Die Entstehung des semitischen Sprachtypus. Ein Beitrag zum Problem der Entstehung der Sprache*, Vienna, 1916.

——'Zur Bedeutung von Akzent und Vokal im Semitischen', in *ZDMG* lxiv (1910), 269-311.

——'Zur Geschichte des semitischen Verbums', ib. lxvii (1913), 645-52.

——'Zur semitischen Verbalbildung', ib. lxvi (1912), 87-93.

Toy, C. H., 'Problems of General Semitic Grammar', in *American Journal of Philology*, i (1880), 416-26.

——'Semitic Notes', ib. v (1884), 493-500.

——'The Massoretic Vowel-System', in *Hebraica*, i (1885), 137-44.

Trombetti, A., 'Delle relazioni delle lingue caucasiche con le lingue camito-semitiche e con altri gruppi linguistici', in *GSAI* xv (1902), 177-201.

——*Indogermanische und semitische Forschungen. Vorläufige Mittheilungen*, Bologna, 1897.

——'Sulla origine delle consonanti enfatiche nel semitico', in *Memorie dell' accademia delle scienze di Bologna*, hist.-phil. section, I, v (1911), 3-50.

Ulmer, F., *Die semitischen Eigennamen im Alten Testament auf ihre Entstehung und Elemente hin untersucht*. i, Leipzig, 1901.

Ungnad, A., 'Das Nomen mit Suffixen im Semitischen', in *WZKM* xx (1906), 167-83.

——*Das Wesen des Ursemitischen*, Leipzig, 1925.

——'Der hebräische Artikel', in *OLZ* x (1907), 210-11.

——'Die Bezeichnung der Verbalstämme im Semitischen', ib. ix (1906), 45-7.

——'Die gegenseitigen Beziehungen der Verbalformen im Grundstamm des semitischen Verbs', in *ZDMG* lix (1905), 766-8.

——'Die Grundform des hebräischen Artikels', ib. lxii (1908), 80-2.

——'Ueber Analogiebildungen im hebräischen Verbum', in *BA* v (1906), 233-78.

——'Zum hebräischen Verbalsystem', ib. VI, iii (1907), 55-62.

——'Zur Erklärung der hebräischen nomina segolata', in *ZA* xvii (1903), 333-43.

Uppenkamp, A., *Beiträge zur semitisch-indogermanischen Sprachvergleichung*, Düsseldorf, 1895.

Vilenčik, J., 'Welchen Wert hatte ضٜ im Ursemitischen?', in *OLZ* xxxiii (1930), 89-98.

Viscasillas y Urriza, M., 'Paralelo entre los verbos defectivos árabes y los respectivos hebreos, caldeos, siriacos y etiopes', in *Homenaje á D. Francisco Codera*, Zaragoza, 1904, pp. 51-66, 51a-61a.

Vollers, K., 'Arabisch und Semitisch. Gedanken über eine Revision der semitischen Lautgesetze', in *ZA* ix (1894), 165-217.

——'Semitische Miszellen', ib. vii (1903), 305-32.

Wächter, A., 'Israelitische Namen', in *Zeitschrift für wissenschaftliche Theologie*, xlix (1906), 153-93.

Walker, D. A., *The Semitic Negative with Special Reference to the Negative in Hebrew*, Chicago, 1896.

Weill, J., 'La Prononciation de l'hébreu prémassorétique', in *REJ* lxxxv (1928), 214-21.

Wellhausen, J., 'Ueber einige Arten schwacher Verba im Hebräischen', in his *Skizzen und Vorarbeiten*, Berlin, 1899, vi, 250-260.

Wensinck, A. J., 'Some Aspects of Gender in the Semitic Languages', in *Verhandelingen der Koninklijke Akademie van Wetenschappen te Amsterdam, Afdeeling Letterkunde*, n. s. xxvi, no. 3 (1927).

Wijnkoop, J. D., 'Hebrew Verbs with a Biliteral Stem', in *JQR* x (1898), 503-12.

Wilensky, M., 'Ein Beitrag zur Geschichte der tiberiensischen Punktation', in *ZAW* xliii (1925), 270-4.

Winckler, H., 'Bemerkungen zu dem Ersatz des Artikels durch das Pronomen', in *ZDMG* liii (1899), 525-33.

Wolfenson, L. B., 'The Pi'ēl in Hebrew', in *JAOS* xxvii (1906), 303-16.

Worrell, W. H., 'Noun Classes and Polarity in Hamitic and Their Bearing upon the Origin of the Semites', in *JPOS* i (1921), 15-21.

Wright, W., *Lectures on the Comparative Grammar of the Semitic Languages*, Cambridge, 1890 (abbreviated *W*).

Wutz, F. X., 'Die Bedeutung der Transskriptionen in der Septuaginta', in *BZ* xvi (1924), 193-213.

——*Die Transcriptionen des Hebräischen von der Septuaginta bis Hieronymus*, 2 vols., Stuttgart, 1925-33.

——'Ist der hebräische Urtext wieder erreichbar?', in *ZAW* xliii (1925), 115-19.

Yahuda, A. S., *Die Sprache des Pentateuch in ihren Beziehungen zum Ägyptischen*, i, Berlin and Leipzig, 1929.

Yellin, D., 'The Hippa'el-Nif'al Conjugation in Hebrew and Aramaic, and the Assimilation of נ in the Hitpa'el Conjugation', in *JPOS* iv (1924), 85-106.

Zetterstéen, K. V., *De semitiska Språken*, Upsala, 1914.

Zimmern, H., 'Das Verhältnis der babylonisch-assyrischen Sprache zur Hebräischen', in E. Schrader, *Die Keilinschriften und das Alte Testament*, 3rd ed., Berlin, 1902, pp. 644-53.

——'Das Verhältnis des assyrischen Permansivs zum semitischen und zum ägyptischen "Pseudoparticip" ', in *ZA* v (1890), 1-22.

——*Vergleichende Grammatik der semitischen Sprachen*, Berlin, 1898 (abbreviated *Z*).

——'Zur assyrischen und vergleichenden semitischen Lautlehre', in *ZA* v (1890), 367-98.

Zorell, F., 'Spiritus asper und lenis hebräischer Wörter und Eigennamen im Griechischen', in *Zeitschrift für katholische Theologie*, xxiv (1900), 734-8.

Zyhlarz, E., *Ursprung und Sprachcharakter des Altägyptischen*, Berlin, 1933.

INDEX OF BIBLICAL HEBREW WORDS

References are to paragraphs.

THE END