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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

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SEMITIC COMPARATIVE
LINGUISTICS

BY
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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 *bəγadkəφab*, *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

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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, *Systeme* = 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. Berg-
strässer*
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. = Sabaeen
 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	א
ب	ב
ت	ג
ث	ד
ج	ה
ח	ו
ט	ז
כ	ח
ק	ט
ל	י
מ	כ
נ	ל
ה	מ
ה	נ
ו	ה
ז	ו
י	ז
פ	פ
ק	ק
כ	כ
ל	ל
מ	מ
נ	נ
ה	ה
ה	ה
ו	ו
י	י

TRANSCRIPTION

II. VOWELS

Arabic		Hebrew		Syriac			
ا	a	א	a	ܐ	a		
		פֶּאָהֻּ	furt.				
آ, إ	ā	אָ	ā, o	ܐܘܐ	ā		
		אַ	ā				
		אֵ	e	ܐܘܝܐ	e		
		אֵי	ē			ܐܘܝܐ	ē
		אֵי	ē				
		אֶ	ē				
		אֹ	o, o				
ي	i	י, יֵי	i, ī	ܐܘܝܐ	i		
ي	ī						
		יֵי	ō				
		יֵי	ō				
و	u	ו, וֵי	u, ū	ܐܘܘܐ	ū		
و	ū						

INTRODUCTION TO SEMITIC
COMPARATIVE LINGUISTICS

CHAPTER I

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 3^d millennium to the closing centuries B.C. The first of all the Semitic languages to depart from the Proto-Semitic homeland (§ 13), traveling 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 (α) 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 Talmūḏim, Midrāšim, 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 Zingīrli, 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 Targūmim 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, Tūr 'Abdīn) and in the Persian area of Urmī.

§ 8. South-West Semitic is composed of North Arabic, South Arabic, and Ēthiopic. 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 Tamūdian inscriptions (of wholly uncertain date), and Šafāitic 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,

Hadramaut, Daḡina, Oman, Muscat), Iraqian (Baydāḡ, 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 Hassānī (from Mauritania to Timbuktu).

§ 9. South Arabic is represented only by inscriptions (Minaean, Sabaeen, Qatabānian, and Hadramautian) ranging, perhaps, from the 8th cent. B.C. to the 6th cent. A.D., and by the modern dialects of Mahri, Qarawī (or Garwī), and Soqotri.

§ 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 Ge'ez), 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, Harari, 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.

CHAPTER II
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	'	h						
Pharyngals		ħ						
Uvulars	q	ʕ ǧ						
Velars	k g	(x) (ɣ)		[ʔ]				a ā (ǰ)
Palatals		ç	š					i ī (e ē ē̃ ə)
Palato- alveolars			ʃ					
Emphatics	ṭ [ḍ]	ḅ ḏ	ṣ [z]					
Coronal alveolars	t d	(θ) (ð)	s z		l	r	n	
Inter- dentals		ḥ ḏ						
Labio- dentals		(f) (β)						
Bilabials	p b	ʙ					m	u ū (ō ǝ)

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 p and $\text{\textcircled{p}}$ 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 g is obtained by voicing (i.e. setting the vocal chords in motion) the voiceless fricative [ʁ] (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 *hun?* 'dog', but *hun* 'she', and often in English dialects, as [$k\Lambda?in$] 'cutting'. The pronunciation of h is similar to that of h in English *aha*, *oho*, *boohoo*, *ahoy* [$\text{\textcircled{h}}ia:$, $\text{\textcircled{h}}iou$, $\text{\textcircled{h}}iu:$, $\text{\textcircled{h}}i:$]; h 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. $\beta\acute{a}a\lambda = ba'al$, $\Gamma\acute{\alpha}\lambda\gamma a\lambda a = Gilg\acute{a}l$, $\Delta\acute{\alpha}n = D\acute{a}n$), while k , p , t were aspirates [k' , p' , t'] (e.g. $\chi\acute{\alpha}\varphi = ka\varphi$, $\theta\acute{\alpha}v = t\acute{a}w$). Between vowels (including $\text{\textcircled{w}}$ mobile; cf. § 33) and immediately before consonants, all, just as in Aramaic, became their corresponding fricatives [β , γ , δ , φ , x , θ], e.g., between vowels: $z\acute{\alpha}\beta a\text{\textcircled{h}}$ 'slaughter', Syr. $z\acute{\alpha}\beta a\text{\textcircled{h}}$ < P-S * $\text{\textcircled{d}}aba\text{\textcircled{h}}$ -, $n\acute{\alpha}\gamma a\acute{s}$ 'approach', $n\acute{\alpha}\delta ar$ 'vow', $b\acute{\alpha}\chi\acute{\alpha}\text{\textcircled{h}}$ 'weep', Syr. $b\acute{\alpha}\chi\acute{\alpha}$, $\text{\textcircled{s}}\acute{\alpha}\varphi\acute{o}n$ 'north', $p\acute{\alpha}\theta a\text{\textcircled{h}}$ 'open', Syr. $p\acute{\alpha}\theta a\text{\textcircled{h}}$; before plosives: $k\acute{\alpha}\theta a\beta t\acute{\alpha}$ 'thou [masc.] hast written', Syr. $k\acute{\alpha}\theta a\beta t$ < * $katabta$ < P-S * $katabata$ (cf. § 376), $d\acute{\alpha}'a\gamma t$ 'thou [fem.] hast been afraid', $l\acute{i}m\acute{m}a\delta t\acute{\alpha}$ 'thou [masc.] hast taught', $y\acute{i}\chi t\acute{o}\beta$ 'he will write', Syr.

neχtūβ, 'ānaφtā 'thou [masc.] hast been angry', *maθnū* 'we have died'; before other consonants: *śiβtō* 'his tribe': *šēβet*; 'aβnō 'his stone', Syr. 'aβneh: 'eβen; *niγ'i* 'my hurt': *neγα*'; *qēdmāh* 'eastward': *qedem*; *šidqī* 'my righteousness': *šedeq*; *śiχlō* 'his wisdom': *śeχel*; *heφšō* 'his delight': *hēφeš*; *siφrī* 'my book', Syr. *seφr(i)*: *sēφer*; *piθhō* 'his gate': *peθah*; *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* = *Šippōrāh*, 'Ακχώ = 'Akkō, *Ματθαθίας* = *Mattiθ-yāh*; 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	<i>h</i>	'	<i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>
	— <i>ħ</i>	<i>ħ</i>	<i>ħ</i>	<i>ħ</i>	<i>ħ</i>	<i>ħ</i>
Pharyngal "	<i>ħ</i>	'	<i>ħ</i>	<i>ħ</i>	<i>ħ</i>	<i>ħ</i>
	'	'	'	'	'	'
Uvular plosive	<i>q</i>	<i>q, g</i>	<i>q</i>	<i>q</i>	<i>q</i>	<i>q</i>
" fricative	— <i>ǰ</i>	'	'	'	<i>ǰ</i>	'
Velar plosives	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>
	— <i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>ǧ</i>	<i>g</i>
" sonants	<i>a</i>	<i>a, e, i</i>	<i>a</i> ¹	<i>a</i>	<i>a</i> ²	<i>a</i>
	— <i>ā</i>	<i>ā, ē, ī</i>	<i>ō</i>	<i>ā</i> ³	<i>ā</i> ⁴	<i>ā</i> 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 Daḡina, and occasionally in other dialects.

⁵ } *ō* occasionally in Tigrīna.

Class	P-S	Acc.	Heb.	Aram.	Arab.	Eth.
Palatal fricative		'	y	y	y	y
Palatal sibilant	—	š	š	š	š	š
Palatal sonants		i	i	e ⁶	i	ə
		ī, ē	ī	ī ⁷	ī	ī
Palato-alveolar sibilant	—	š	š	š	s	s
Emphatic plosive		t	t	t	t	t
Emphatic fricatives	—	ḫ	ḫ	ḫ	z	ḫ
	—	ḏ	ḏ	ḏ	z, d	d
Emphatic sibilant		š	š	š	š	š
Coronal alveolar plosives	—	t	t, o ⁸	t, o ⁸	t, o ⁸	t
	—	d	d	d	d	d
Coronal alveolar sibilants		s	s	s	s	s
		z	z	z	z	z
Coronal alveolar liquids		l	l	l	l	l
		r	r	r	r	r
Coronal alveolar nasal		n	n	n	n	n
Interdental fricatives	—	ḥ	š	š	t	s
	—	ḏ	z	z	d	z
Bilabial fricative		w	w, y	w, y	w	w
Labial plosives	—	p	p	p	f	f
		b	b	b	b	b
Labial nasal		m	m	m	m	m
Labial sonants		u	u	u	u ⁹	ə
		ū	ū, ī, ē	ū	ū ¹⁰	ū
Diphthongs		ai	ay, ē, ī, ue	ay, ē	ay, ē ¹¹	ay, ē
		au	ū	aw, ō	aw, ō ¹³	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 d 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	<i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>	'	<i>h</i>
Pharyngeal fricatives	<i>ħ</i> '	<i>ħ</i> '	<i>ħ, ʕ</i> ' ' <i>g</i>	<i>ħ, ʕ</i> '	' ' ' '	<i>ħ, ʕ</i> ' ' <i>g</i>
Uvular plosive	<i>q</i>	<i>q</i>	<i>q</i>	<i>q</i>	<i>q, g</i>	<i>q</i>
Velar plosives	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>	<i>k</i>
	<i>g</i>	<i>g</i>	<i>ǵ</i>	<i>g</i>	<i>g</i>	<i>g</i>
	<i>a</i>	<i>a, e</i>	<i>a, i</i>	<i>a, e</i>	<i>a, e, i</i>	<i>a, i, o</i>
" sonants	<i>ā</i>	<i>a, ā</i>	<i>a, ā</i>	<i>a, ā</i>	<i>a, e, i,</i> <i>ā, ē, ī</i>	<i>ā, ʾ</i>
	<i>ā</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a, e, i</i>	<i>a, i, u</i>
Palatal fricative	<i>y</i>	<i>y</i>	<i>y, w</i>	<i>y, w</i>	'	<i>i, ʃ</i>
" sibilant	<i>š</i>	<i>s</i>	<i>š</i>	<i>š</i>	<i>š</i>	<i>š</i>
	<i>i</i>	<i>e, a</i>	<i>i, a</i>	<i>e, a</i>	<i>i, a, e</i>	<i>i, a, u</i>
	<i>ī</i>	<i>ī, a, e</i>	<i>ī, i</i>	<i>ī, e, a</i>	<i>ī, i, ē</i>	<i>ī</i>
" sonants	<i>e</i>	<i>e, a, ī</i>	<i>a, i, ī</i>	<i>e, a, ī</i>	<i>a, e, i,</i> <i>ē, ī</i>	<i>a, i, ī</i>
	<i>ē</i>	<i>ē, ī, ay</i>	<i>ī, ay</i>	<i>ē, ī, ay</i>	<i>ī, ē, ay,</i> <i>i, ue</i>	<i>ī, aī</i>
	<i>ě</i>	<i>e, a, u</i>	<i>a, i, u</i>	<i>e, a</i>	<i>e, a, i, u</i>	<i>a, i, u</i>
	<i>ə</i>	<i>e, a, u</i>	<i>a, i, u</i>	<i>e, a</i>	<i>e, a, i, u</i>	<i>a, i, u</i>
Palatalo-alveolar sibilant	<i>š</i>	<i>š, t</i>	<i>s, t</i>	<i>s, š</i>	<i>š</i>	<i>š, ʃ</i>
Emphatic plosive	<i>ṭ</i>	<i>ṭ</i>	<i>ṭ</i>	<i>ṭ</i>	<i>ṭ</i>	<i>ṭ</i>
" sibilant	<i>š</i>	<i>š, t</i>	<i>š, z, d</i>	<i>š, d</i>	<i>š</i>	<i>š, ʃ, ʔ</i>
Coronal alveolar plosives	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>
	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>
" " sibilants	<i>s</i>	<i>s</i>	<i>s</i>	<i>s</i>	<i>s</i>	<i>s</i>
	<i>z</i>	<i>z, d</i>	<i>z, d</i>	<i>z</i>	<i>z</i>	<i>z, ʔ</i>

Class	Heb.	Aram.	Arab.	Eth.	Acc.	P-S
Coronal alveolar liquids	<i>l</i>	<i>l</i>	<i>l</i>	<i>l</i>	<i>l</i>	<i>l</i>
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
" " nasal	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
Bilabial fricative	<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>ʷ, u</i>	<i>ʷ</i>
Labial plosives	<i>p</i>	<i>p</i>	<i>f</i>	<i>f</i>	<i>p</i>	<i>p</i>
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
" nasal	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>
	<i>u</i>	<i>u</i>	<i>u</i>	<i>e</i>	<i>u</i>	<i>u</i>
	<i>ū</i>	<i>ū, ā</i>	<i>ū, ā</i>	<i>ū, ā</i>	<i>ū, ā, ē, ī</i>	<i>ū</i>
" sonants	<i>o</i>	<i>u</i>	<i>u</i>	<i>e</i>	<i>u</i>	<i>u</i>
	<i>ō</i>	<i>ō, aw, ā,</i> <i>u, ū</i>	<i>ā, aw,</i> <i>u, ū</i>	<i>ō, aw, ā,</i> <i>ē, ū</i>	<i>ā, ē, ī,</i> <i>u, ū</i>	<i>ā, ay,</i> <i>u, ū</i>
	<i>ǒ</i>	<i>u</i>	<i>u</i>	<i>e</i>	<i>u</i>	<i>u</i>
	<i>ay</i>	<i>ay, ē</i>	<i>ay</i>	<i>ay, ē</i>	<i>ay, ē, i,</i> <i>ue</i>	<i>ay</i>
Diphthongs	<i>aw</i>	<i>aw, ō</i>	<i>aw</i>	<i>aw, ō</i>	<i>ū</i>	<i>ay</i>

§ 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 *ā, ī, ū*, 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', *Qiryāthayim* '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*, *h*, ' , *ǵ*, *ǰ*, and *ʁ* to ' . Only Heb. retains P-S *ś*; only Aram. represents *ḥ* by ' , *ḥ* by *t*; *ḥ* by *d*, *ś* by *s*; only Arab. preserves *ǵ*, changes *g* to *ǵ*, and represents *ḥ* and *ḥ* by *z*, *ḥ* by *t*, and *ḥ* by *d*; only Eth. represents *ḥ* 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	'aḥada	'aḥza	'aḥāzu	'aḥaδ-
b = b	bāla'	swallow	bəla'	bala'a	bala'a	balū	bala'-
g = g	gāmāl	camel	gamlā	ḡamalu ⁿ	gamala	gammalu	gamal-
d = d	dālāḥ	draw water	dəlā	dalā	dalawa	dalū	dalaḡ-
h = h	lahaβ	flame	šalheβ	lahabu ⁿ	lāhb	la'bu	lahb-
w = w	wə	and	wə	wa	wa	ū	wa
z = {	zāra'	sow seed	zəra'	zara'a	zara'a	zirū	zara'-
	zāβaḥ	slaughter	dəβaḥ	dabaḥa	zabaḥa	zibū	δabaḥ-
h = {	ḥālāβ	milk	ḥaləβā	ḥalibu ⁿ	ḥalab	'alibu	ḥalab-
	ḥāmēš	five	ḥammeš	ḥamsu ⁿ	ḥams	ḥamšu	ḥamš-
t = t	bāṭal	cease	bəṭel	baṭala	baṭala	baṭālu	baṭal-
y = {	yāmīn	right hand	yammīnā	yamīnu ⁿ	yamān	'imnu	jamīn-
	yālaδ ¹	bear, beget	'īleδ	walada	walada	'alādu	yalad-
k = k	keleβ	dog	kalbā	kalbu ⁿ	kalb	kalbu	kalb-
l = l	lāβēš	clothe	ləβeš	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-
	'ereβ	evening	'əreβ	ḡarbu ⁿ	'arab	'erēb	ḡarb-

¹ Such words as Heb. *wālāδ* 'child' are probably dialectic; only *wə* 'and' indubitably retains original initial *w*. 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
$p = p$	<i>pāθaḥ</i>	open	<i>pəθaḥ</i>	<i>fataḥa</i>	<i>fataḥa</i>	<i>pītū, patū</i>	<i>pataḥ-</i>
$\xi = \begin{cases} \xi \\ \beta \\ \delta \end{cases}$	<i>šāraḥ</i>	cry, roar	<i>šəraḥ</i>	<i>šaraḥa</i>	<i>šaraḥa</i>	<i>šarāḥu</i>	<i>šaraḥ-</i>
	<i>nāšar</i>	watch	<i>nəšar</i>	<i>našara</i>	<i>našara</i>	<i>našāru</i>	<i>našar-</i>
	<i>šar</i>	enemy	<i>'arrəθā</i>	<i>ḍarratuⁿ</i>	<i>ḍar</i>	<i>šarru</i>	<i>ḍarr-</i>
$q = q$	<i>qārēβ</i>	approach	<i>qərəβ</i>	<i>qariba</i>	<i>qaraba</i>	<i>qarābu</i>	<i>qarib-</i>
$r = r$	<i>'arba'</i>	four	<i>'arba'</i>	<i>'arba'uⁿ</i>	<i>'arbā'</i>	<i>'arba'u</i>	<i>'arba'-</i>
$\acute{s} = \acute{s}$	<i>šūm, šīm</i>	put, place	<i>sām</i>	<i>šāma</i>	<i>šēma</i>	<i>šāmu</i>	<i>šajam-</i>
$\check{s} = \begin{cases} \check{s} \\ \beta \end{cases}$	<i>šēn</i>	tooth	<i>šennā</i>	<i>sinnuⁿ</i>	<i>senn</i>	<i>šinnu</i>	<i>šinn-</i>
	<i>šāβar</i>	break	<i>təβar</i>	<i>tabara</i>	<i>sabara</i>	<i>šabāru</i>	<i>βabar-</i>
$t = t$	<i>tēša'</i>	nine	<i>təša'</i>	<i>tis'uⁿ</i>	<i>tes'ū</i>	<i>tīšu</i>	<i>tiš'-</i>
$a = \begin{cases} a^2 \\ i^3 \\ o^4 \end{cases}$	<i>raβ</i>	great	<i>raβ</i>	<i>rabbuⁿ</i>	(<i>rababa</i>)	<i>rabū</i>	<i>rabb-</i>
	<i>yəθaδ</i>	of a peg		<i>watidiⁿ</i>			<i>yatid-</i>
	<i>ba'al</i>	owner, lord	<i>ba'lā</i>	<i>ba'luⁿ</i>	<i>bā'l</i>	<i>bēlu</i>	<i>ba'l-</i>
$\bar{a} = a^5$	<i>{kāβēδ</i>	liver	<i>kaβəδā</i>	<i>kabiduⁿ</i>	<i>kabd</i>	<i>kabittu</i>	<i>kabid-</i>
	<i>{'agrāβ</i>	scorpion	<i>'eqarəβā</i>	<i>'agrabuⁿ</i>	<i>'aqrab</i>	<i>'agrabu</i>	<i>'aqrab-</i>
$\check{a} = \begin{cases} a^6 \\ i^6 \end{cases}$	<i>'āḥāzanī</i>	he hath grasped me	<i>'eḥaδ</i>	<i>'aḥaḍa</i>	<i>'aḥza</i>	<i>'aḥāzu</i>	<i>'aḥaḍ-</i>
	<i>ḥāmōr</i>	ass	<i>ḥəmārā</i>	<i>ḥimāruⁿ</i>	SA ḤMR	<i>'imēru</i>	<i>ḥimār-</i>

² Almost only in closed accented syllables, cf. Heb. plural *rabbānīm*.

³ In doubly closed accented internal syllables previous to the loss of their original final vowel ('Philippi's law').

⁴ *ba'al* (< **be'el* (< **ba'l* with *a* (< *e* through influence of the pharyngal.

⁵ In final accented and in open pre-tonic syllables.

⁶ Only with pharyngals.

ILLUSTRATION OF CORRESPONDENCES (continued)

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
<i>ay = a_i</i>	<i>laylāḥ</i>	night	<i>lelyā</i>	<i>laylatuⁿ</i>	<i>lēlīt</i>	<i>līlātu</i>	<i>lail-⁷</i>
<i>aw = āw⁸</i>	<i>māweθ</i>	death	<i>mawtā</i>	<i>mawtuⁿ</i>	<i>mōt</i>	<i>mūtu</i>	<i>mayt-</i>
<i>i = { i⁹ a¹⁰</i>	<i>'innəβēy</i>	grapes	<i>'enbəθā</i>	<i>'inabuⁿ</i>	SA 'NB	<i>'inbu</i>	<i>'inab-</i>
	<i>kittēβ</i>	write much	<i>katteβ</i>	<i>kattaba</i>	<i>kattaba</i>	<i>ukattab</i>	<i>kat(a)tab-</i>
<i>ī = ī¹¹</i>	<i>{ mī</i>	who?			<i>mī</i>	<i>mī</i>	<i>mī</i>
	<i>{ 'āsīr</i>	captive	<i>'assīra</i>	<i>'asīruⁿ</i>		<i>'asēru</i>	<i>'asīr-</i>
	<i>{ yedəχem¹²</i>	your hand	<i>'īdā</i>	<i>yaduⁿ</i>	<i>'ed</i>	<i>'īdu</i>	<i>jad-</i>
<i>e = { a i¹⁴ ī¹⁵</i>	<i>{ keleβ¹³</i>	dog	<i>kalbā</i>	<i>kalbuⁿ</i>	<i>kalb</i>	<i>kalbu</i>	<i>kalb-</i>
	<i>{ yōšerəχā</i>	thy fashioner	<i>(kāθeβ</i>	<i>kātibuⁿ</i>		<i>kātibu</i>	<i>kātib-</i>
<i>ē = { i¹⁶ a_i¹⁷</i>	<i>{ šēn</i>	tooth	<i>šennā</i>	<i>sinnuⁿ</i>	<i>senn</i>	<i>šinnu</i>	<i>šinn-</i>
	<i>{ bēθ</i>	house	<i>baytā</i>	<i>baytuⁿ</i>	<i>bēt</i>	<i>bītu</i>	<i>baīt-</i>

⁷ Originally probably **lailai-*.

⁸ In closed syllables *aw*, as *'āwel* 'iniquity' beside *'awlō* 'his iniquity'.

⁹ Only in closed unaccented syllables, particularly in 'səγōlates' (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. *Máβσαρ*, *Mabsar* from 'Tiberian' *Miβsār*.

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.

ILLUSTRATION OF CORRESPONDENCES (*continued*)

Sound	Heb.	Meaning	Aram.	Arab.	Eth.	Acc.	P-S
ǝ =	a^{18}	'ēḥōz	'eḥaḏ	'aḥada	'aḥza	'aḥāzu	'aḥaḏ-
	i^{18}	'ēlōqḥ	'allāhā	'illāhu ⁿ	SA 'LH	('ilu)	'illāh-
ə =	a^{19}	zəḥārīm	deḥrā	ḏakarū ⁿ	SA DKR	zīkaru	ḏakar-
	i^{19}	təša'	təša'	tis'u ⁿ	tes'ū	tīšu	tiš'-
u = u ²⁰	u^{19}	bəḥōr	buxrā	(bikru ⁿ)	bak ^w er	bukru	bukur-
	u^{20}	kullām	kul	kullu ⁿ	k ^w ell	kullatu	kull-
ū = ū	šūm	garlic	tūmā	tūmu ⁿ	sōmat	šūmu	ḥūm-
o = u ²¹	'oznī	mine ear	'eḏnā	'uḏnu ⁿ	'ezn	'uznu	'uḏn-
	\bar{a}^{22}	šəmōneh	təmānē	ṭamāni ⁿ	samānī	šamānū	ḥamānī
ō =	$a\check{u}^{23}$	mōṭī	mawtā	mawtu ⁿ	mōt	mūtu	mayt-
	u^{24}	'ōzen	'eḏnā	'uḏnu ⁿ	'ezn	'uznu	'uḏn-
ō = u	\bar{u}^{24}	kammōn	kammūnā	kammūnu ⁿ	kamūn	kamūnu	kam(m)ūn-
	u	šibbōlīm	šebbeltā	sunbulatu ⁿ	sabal	šubultu	šu(n)bul-

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 šōr 'bull' (Syr. *tawrā*, Arab. *ṭawruⁿ*, Eth. *sōr*, Acc. *šūru*, P-S *ḥayr-*) and yōm 'day' (Syr. *yawmā*, Arab. *yawmuⁿ*, Eth. *yōm*, Acc. *'ūmu*, P-S *ḥaym-*), etc., the unaccented form has been extended by analogy to the accented, which should be in Heb. *šawr, *yawm, etc.

²⁴ In open accented syllables.

and Arab. in representing β by ς and δ by z ; Acc. and Heb. agree against all the rest in representing δ by ς and β by $\acute{\varsigma}$; Acc., Arab., and Eth. agree against Heb. and Aram. in representing $\acute{\varsigma}$ by $\acute{\varsigma}$; Heb., Aram., and Eth. agree against Acc. and Arab. in changing \acute{g} to $'$; Heb. and Aram. agree against the rest in changing \hbar to h and (frequently) μ to \acute{i} ; 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. \underline{d} , but z in all other Sem. dialects, it represents P-S δ . When it equals z in all other Sem. dialects, it represents P-S z .

§ 25. When Heb. $h = \hbar$ in all other Sem. dialects (except Acc., which here always has $'$), it represents P-S h . When it equals \hbar in Acc., Arab., and Eth., it represents P-S \hbar .

§ 26. The change of P-S \hbar to h in Heb. seems later than the Septuagint, for this version transcribes \hbar by χ , and omits all transliteration of \hbar , e.g. $\text{Xαρράν} = \text{Hārān}$ (cf. Acc. $\hbararrānu$), $\text{Ἀχάζ} = \text{Āhāz}$ (cf. Arab. $'ahāda$): $\text{Ἐζεκίας} = \text{Hizqīyyāhū}$ (cf. Arab. \hbarazaqa), $\text{Ἰσαάκ} = \text{Yiṣhāq}$ (cf. Arab. $\acute{d}\hbariqa$).

§ 27. When Heb. $y = \mu$ in all other Sem. dialects (except Acc., which here always has $'$), it represents P-S \acute{i} . When it equals w in Arab. and Eth., it represents P-S μ .

§ 28. When Heb. $' = '$ in all other Sem. dialects (except Acc., which here always has $'$), it represents P-S $'$. When it equals Arab. \acute{g} , it represents P-S \acute{g} .

§ 29. It is possible, though absolute proof and disproof are alike difficult in view of the scanty evidence, that the Septuagint transcribes \acute{g} by γ , and omits transliteration of $'$, as $\text{Γασίων} (\text{Ἀσεών}) = \text{'Eṣyōn}$ (cf. Arab. $\acute{g}adya'u$), $\text{γόμορ} = \text{'ōmer}$ (cf. Arab. $\acute{g}umaru^n$), but $\text{Ἀβδεμέλεχ} = \text{'Eβεδ Meleχ}$ (cf. Arab. $'abdu^n$), $\text{βαάλ} = \text{ba'al}$ (cf. Arab. $ba'lu^n$). The fragments of the *Hexapla* of Origen have $\gamma = '$ only once in common nouns ($\text{βεγαβρώθ} = \text{bē'abrōθ}$ 'against furies', Ps. vii, 7; cf. Arab. $'abara$); and St. Jerome represents $'$ 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 $'$ and \acute{g} , and that the double transcription of $'$ in the Septuagint preserves a dim remi-

niscence of this fact. The confusion in the use of \circ and γ —itself a transition to the later abandonment of γ , which by that period had come to be pronounced, at least intervocally, as a fricative with the value of y or $(g)h^1$ —shows, however, that any real trace of \dot{g} 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. $\text{š} = \text{š}$ in all other Sem. dialects, it represents P-S š . When it equals t in Aram., z in Arab., and š in Eth. and Acc., it represents P-S p . When it equals ʿ in Aram., z or d in Arab., d in Eth., and š in Acc. only, it represents P-S ḫ .

§ 31. ś retains its P-S value only in Heb., corresponding to \underline{s} in Aram. and to $\underline{\text{š}}$ 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., \underline{t} in Arab., s in Eth., and š in Acc., it represents P-S p .

§ 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. yēdaxem 'your hand', Arab. yadukum , P-S *jadu-kumā , Heb. 'ezkoraxā 'I shall remember thee', Arab. 'adkuruka , P-S *aḏkuru-kā , as contrasted with Heb. kāḥaḥtā 'thou hast written', yixtōḥ 'he will write', Arab. katabta , yaktubu , P-S *katabta , *jaktubu . 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 , \bar{i} ; u , \bar{u} ; \bar{a} , o , and in the double value of səyōl in the type of keleḥ '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 'səyōlates', e.g. malaxēy : malaxīm 'kings' (on the analogy of the type of dibārēy : dibārīm 'words', where the šəwā is etymologically justified, cf. sing. dābār (*dabar) has no historic reason for existence (cf. singular meleḥ (*malk , Acc. malku , maliku , Arab. malku^n , maliku^n).

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 , *jaktubu were developed from a still earlier *katabata , *ja/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. yiqqāhennū 'he will take him' < *yiqqāhen-hū.

$ʃ+t$ $ʃt$: Heb. niʃtaddāq 'we shall justify ourselves' < *niʃtaddāq < *niʃaddāq (for the metathesis see § 50).

$q+t$ qt : Heb. qāṭāl, Aram. qəṭal 'kill': Arab. qatala, Eth. qatala.

§ 36. (b) Regressive—(i) Consonants:

$t+d$ dd : Heb. middabbēr 'speaking' < *mitdabbēr.

$t+t$ tt : Heb. yiṭṭammā 'he will defile himself' < *yiṭṭammā.

$t+z$ zz : Heb. hizzakkū 'make yourselves clean!' < *hitzakkū.

$t+k$ kk : Heb. tikkōnēn 'she will be restored' < *titkōnēn.

$t+n$ nn : Heb. hinnabbə'ū 'prophecy!' < *hitnabbə'ū.

$d+t$ tt t θ (final): Heb. 'aḥaθ 'una' < *'aḥadət (cf. Arab. 'aḥadatuⁿ).

$n+m$ mm : Heb. yimmāšē 'it will be found' < *yinmāšē.

$n+g$ gg : Heb. yiggaš 'he will approach' < *yingaš.

$n+l$ ll : Heb. yillāβēt 'he will be overthrown' < *yinlāβēt.

$n+k$ kk : Heb. yikkāhēd 'it will be hidden' < *yinkāhēd.

$n+t$ tt : Heb. nāṭattī 'I have given' < *nātantī.

$n+p$ pp : Heb. 'appī 'my nose' < *'anpī (Acc. 'appu, Syr. 'appayyā; Arab. 'anfuⁿ, Eth. 'anf).

$n+ʃ$ $ʃʃ$: Heb. hiʃṣīl 'he hath delivered' < *hiṣṣīl.

$r+k$ 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 \bar{a} such e \bar{a}

by progressive assimilation, as Heb. *hā'āreš* 'the earth', but *'ereš* (Acc. *'eršetu*, Syr. *'ar'ā*, Arab. *'arḍu**, SA *'RḌ*, P-S *'arḥ-*).

ā) ɪ (written ə) before initial ɟ of a following syllable, as Heb. *gəḏī* 'goat' < **gīdī* < **gadīu* (Acc. *gadiia*, *gadū*, Syr. *gaḏyā*, Arab. *ḡadyu**).

ā occasionally) ɔ before pharyngals and velars, e.g. Heb. *niβḏhāl* 'troubled' beside *niβəhāl*; *'eššəqāh* 'let me kiss' < **'anšəqāh* (cf. *'e'ēβōrāh* 'let me pass through' beside *'e'bərāh*).

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

§ 38. The reduced vowels of the Heb. proclitics *lə*, *bə*, *kə*, *wə* < **la*, **bi*, **ka*, **ya* are assimilated before pharyngals with *hātēφ*s to the full vowel corresponding to the particular *hātēφ* concerned, as Heb. *la'āzōr* 'to help' < **lə'āzōr* < **la'azōr* (cf. *liχtōβ* 'to write'); *bahālīχōḏām* 'in their goings' < **bəhālīχōḏām* < **bahalīkōtām*; *ka'ārī* 'like a lion' < **kə'ārī* < **ka'arī* (cf. Acc. *'aria*); *wə'ēmeθ* 'and truth' < *wə'ēmeθ* < **we'ēmeneth* < **ya'amanat* (cf. Arab. *'amanatu**).

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) *u*: Heb. *kōχāβ* 'star' < **kabkab* (Acc. *kakkabu*, Syr. *kawχəβā*, Arab. *kawkabu**, 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. *nāḏar* 'vow' beside *nāzar* (Acc. *nazāru*, Syr. *nəḏar*, Arab. *naḏara*, P-S **naḏar-*; the P-S dissimilation would be *d* : *ḏ*).

š) *s*: Heb. *šāḥaq* 'laugh' beside *šəḥaq* (Arab. *ḏaḥīqa*, Syr. *gəḥeχ* by special Aram. dissimilation from **'əḥeχ*, P-S **ḏəḥak-*; Heb. *q*, as in Eth. *šəḥaqa*, is due to progressive assimilation, cf. § 35).

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

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. *qīqālōn* 'disgrace', cf. Syr. *qulqālā* 'disgrace'; Heb. *ḥšōšārāḥ* 'clarion' < **ḥašaršarat*; *tōtāφāḥ* 'frontlet between the eyes' < **taptapat* (cf. also Heb. *kōχāβ*, § 40). Similarly *ḫ* and *ʁ* disappear in Hebrew when immediately before the kindred *ī* and *ō*, as Heb. *šəβā'īm* 'gazelles': *šəβī* (Acc. *šabītu*, Syr. *taβiyā*, Arab. *zabyu*°, P-S **ḫabī-*); Heb. *nə'ōḥ* 'meadows': *nāwāḥ*.

§ 42 (b) Vowels:

u > *i* before *ō*: Heb. *šibbōleḥ* 'ear of grain' < **šubbōlēḥ* < **šunbult-* (cf. Acc. *šubultu*, Arab. *sunbulatu*°).

ū > *ī* before *ō*: Heb. *ḥīšōn* 'outer, external': *ḥūš* 'the outside'.

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

āu, *ū* > *ī* before *ō*: Heb. *nīχəḥō* 'before it': *nōχəḥ* '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, *'*, *ḫ*, *ʁ*, and *h*, unless initial, tend to disappear, with contraction or compensatory lengthening of the vowels concerned.

§ 44. *'*:

a'a > *ā*: Heb. *bādā* 'devise', Syr. *bəḏā*, but Arab. *bada'a*.

i'a > *ē*: Heb. *šāmē* 'be thirsty', Acc. *šūmu*, but Arab. *zami'a*, P-S **ḫami'a*.

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

§ 45. *ḫ*:

aḫa > *a*: Heb. *dān* 'judge', Acc. *dānu*, Syr. *dān*, Arab. *dāna*, P-S **dāna* < **daḫana* (contrast impfs. Heb. *yādīn*, Acc. *'idīn*, Syr. *nəḏīn*, Arab. *yadīnu*, P-S **ḫadīnu*); Heb. *bāχāḥ* 'weep', Acc. *bakū*, Syr. *bəχā*, Arab. *bakā*, Eth. *bakaya*, P-S **bakā* < **bakaḫa* (contrast impfs. Heb. *tiβkeḥ*, Acc. *'ibku*, Syr. *neβkē*, Arab. *yabkī*, Eth. *yebkī*, P-S **ḫabkīu*).

aḫī > *ā'ī*: Heb. *šəβā'īm* 'gazelles' beside *šəβāyīm* < **šabaḫ-īm* (cf. § 41).

ḫī > *ī*: Heb. *yāšīm* 'he set', Acc. *'išīm*, Syr. *nəšīm*, Arab. *yašīmu*, Eth. *yešīm*, P-S **ḫašīmu*.

§ 46. *q*:

aq̄a > *ā*: Heb. *qām* 'stand', Syr. *qām*, Arab. *qāma*, Eth. *qōma* (cf. Acc. *kānu* 'exist, be firm', Arab. *kāna*), P-S **qāma* < **qayama* (contrast impfs. Heb. *yāqūm*, Syr. *nəqūm*, Arab. *yaqūmu*, Eth. *yeqūm*, P-S **īaqūmu*); Heb. *dālāh* 'draw water', Acc. *dalū*, Syr. *dālā*, Arab. *dalā*, Eth. *dalawa*, P-S **dalā* < **dalaqa* (contrast impfs. Heb. **yīdleh*, Acc. 'idlu, Syr. *neḏlē*, Arab. *yadlū*, Eth. *yedlū*, P-S **īadluqu*).

aq̄ā > *ō*: Heb. *qōm* 'stand' (inf. abs.) < **qām* < **qayām* (cf. Heb. *kāthōβ*, Arab. *katābu*ⁿ).

aq̄i > *ai* > *ē*: Heb. *gēr* 'sojourner', Syr. *giyyūr*, Arab. *ǧāru*ⁿ, Eth. *ger*, *geyur*, P-S **gayir*-.

qa > *ō*: Heb. *māqōm* 'place', Pun. (Plautus) *macom*, Arab. *maqāmu*ⁿ, P-S **maqām*- < **maqam*-.

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

§ 47. *h* is lost in suffixes after *a*, *ai*, *ī*, *u*, *e* < *i*, and often after *šawā*: Heb. *qəṭālō* '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') < **gamallaī-hū*; Heb. *qəṭaltīm* 'I killed them' < **qatalti-him* < **qatalti-humū* (cf. Arab. *qataltu-hum*); Heb. 'āβī(w) 'his father' < **abī-hū* (cf. Arab. 'abī-hi); Heb. *yiqṭəlēm* 'he will kill them' < **yiqṭil(i)-him* < **īaqtul(u)-humū* (cf. Arab. *yaqtulu-hum*); Heb. *bayyōm* 'by day' < **bə-ha(ī)-īōm*.

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-φορεύς*, 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. *πικρός*: 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 *ḏ*), underwent metathesis

(and assimilation; see § 35) even in P-S; Heb. 'eštammēr 'I shall keep myself from' < *'atšammir; yistabbēl 'it will drag itself along' < *yatsabbil; yistā'ēr 'he shall storm against' < *yatśa''ir; ništaddāq 'we shall justify ourselves' < *natšaddaq; 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; 'eštəleβ 'be crucified' < *'atšalīb; Arab. izdağara 'drive away' < *itzağara; ištabağa 'be dipped' < *itšabağa; idtaraba 'be troubled' < *itdaraba (this metathesis in all Arab. verbs of the eighth form, whence iktataba < *itkataba).

§ 51. Metathesis also occurs sporadically, instances in Hebrew being: *šalmāh* 'mantle' beside *šimlāh* (cf. Arab. *šamlatu*ⁿ); *tə'alāh* 'water-course': Arab. *tal'atu*ⁿ; *ruṭāfaš* 'grow fresh': Syr. *ṭarpāšəθā* 'thin flesh', Arab. *ṭarfaša* 'be convalescent'; *gāzar*: *gāraz* 'cut', Arab. *ğazara*, *ğaraza*, Syr. *gəzar*, Eth. *gazara*; *kešəβ*: *keβeš* 'lamb', Acc. *kabšu*, Arab. *kabšu*ⁿ; 'āšam 'shut the eyes', Arab. *ğamaða*.

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 'āziqqīm 'fetters' beside *ziqqīm* (cf. Aram. *zəqaq* 'fetter'); 'āβa'bū'āh 'blister, boil': Talm. *be'ba'*, Syr. *ba'bū'yā*; 'ezrōq' 'arm' beside *zərōq*' (Acc. *zurū*, Syr. *dərā'ā*, Arab. *dirā'u*ⁿ, Eth. *mazrā'et*, P-S **dirā'-*): 'eš'ādāh 'armlet' beside *šə'ādāh*; 'argāz 'coffer': Arab. *riğāzatu*ⁿ; 'ešba' 'finger', Arab. 'išba'u'ⁿ, Eth. 'ašbā'et, but Syr. *šeβ'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. 'səyōlates' (see §§ 121-4), as Heb. *keleβ* 'dog', but *kalbī* 'my dog' (Acc. *kalbu*, Syr. *kalbā*, Arab. *kalbu*ⁿ, Eth. *kalb*, P-S **kalb-*); Heb. *zəxer* 'remembrance', but *ziχrī* 'my remembrance' (Acc. *zikru*, Arab. *dikru*ⁿ, P-S **ḏikr-*); Heb.

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

§ 54. Epenthetic *a* (*paṭaḥ furtivum*) occurs in Hebrew before final ' , *h*, and *h* after any long vowel except *ā*, as *rūqḥ* 'spirit', but *rūhī* 'my spirit' (Syr. *rūhā*, Arab. *rūḥuⁿ*); *zərōq* 'arm', but *zərō'ī* 'my arm' (Acc. *zurū*, Syr. *dərā'ā*, Arab. *ḏirā'uⁿ*, P-S *'ḏirā'-); *gāβōqḥ* '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 *'ḏi'b- 'wolf' (Acc. *zību*, Syr. *dīβā*, Arab. *ḏi'buⁿ*, Eth. *ze'b*) > Heb. *'zī'bu > *'zi'ib(u) > *zə'ib > zə'ēβ; P-S *'mu'd- 'abundance' (Acc. *mu'du*) > Heb. *'mū'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. *melex*.

§ 56. In closed syllables *aḯ* > *aḯi* and *aḯ* > *aḯu* > *aḯe* (usually written *āye*), as Heb. *bayiθ* 'house' beside const. *bēθ* (Acc. *bītu*, Syr. *baytā*, Arab. *baytuⁿ*, Eth. *bēt*, P-S *'bayt-); Heb. *māweθ* 'death' beside const. *mōθ* (Acc. *mūtu*, Syr. *mawtā*, Arab. *mawtuⁿ*, Eth. *mōt*, P-S *'mawt-).

§ 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-); *miqqəḏāš* 'sanctuary' beside *miqdāš* (i.e. *'miqdāš < *'miqdaš < *'miqadaš); *qaššəθōḥām* 'their bows' beside *qəšāθōḥ* (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 etymologically 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-melex* 'the king' < *'hā-malk; *maḥ-tōβ* 'how good!' = *'maḥ-tōβ < *'mā-tōb, as well as the impf. with 'wāw consecutive', as *way-yiχtōβ* 'and he wrote' < *'yā-ḵaktub (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*); *pəlaggāḥ* 'stream' beside *peley* 'channel, canal' (cf. Acc. *palgu*, Arab. *falaǧu*ⁿ, Eth. *falag*); *muṣṣāq* 'molten' (const.) beside *mūṣāq*; 'āβaddōn 'destruction' (cf. ἀβαδδών, Rev. ix, 11) beside 'āβēdāḥ 'thing lost'; with *i* (rare): Heb. 'issār 'binding obligation' (Syr. 'essārā) beside 'esərāḥ 'her bond'; with *u* (regularly in nouns): Heb. *yullaḏ* 'he was born' beside *yālaḏ* 'he begat' (Arab. *wulida*, *walada*); 'āmuqqāḥ 'profunda' beside 'āmōq (cf. Arab. 'amāqatuⁿ '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; 'ēḥar 'delay' (< *iḥḥar < *aḥḥara (Arab. 'aḥḥara); on the other hand, Heb. 'aḥ'ēr 'another' beside 'āḥ'ērīm (< *aḥḥir; niḥ'ēš 'practice augury' (< *niḥḥiš < *naḥḥaša; bi'ēr 'burn' (< *bi''ir < *ba''ara; ni'ēš 'contemn, spurn' (< *ni''iṣ < *na''aša; miḥar 'hasten' (< *miḥhar < *mahhara.

The Septuagint still shows gemination of *r*, as Γόμορρα = 'Āmōrāḥ, Σάρρα = Šārāḥ (cf. Heb. *sārar* '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. $\bar{a}l = 2 + 1 = all = 1 + 2 = aal = 1 + 1 + 1 = 3$). The development of *gāmāl*, *gəmallīm* 'camel(s)', for instance, would seem to have been:

*gāmalu > *gāmmalu > *gāmalu > *gāmālu > *gāmāllu > *gāmālu >
gāmāl

*gāmalīm > *gāmmalīm > *gāmalīm > *gāmālīm > *gāmāllīm > gām-
allīm > gəmallīm

The final stage of *gəmallīm* would have been **gəmalīm*, as in the regular Hebrew type of *nəḥāšīm* (< **nəḥaššīm*?): *nəḥāš* 'serpent(s)'. The coexistence of the Hebrew types *gəmallīm* and *nəḥāšīm*, 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. *rabbu*ⁿ, P-S **rabb-*) beside plur. *rabbīm*; or in unaccented syllables before *šawā*, as Heb. *məβaqqəšīm* 'petentes' (< **məβaqqəšīm* < **mubaqqišīm* beside sing. *məβaqqēš* < **mubaqqiš* (cf. Arab. type *mukattibīna*, *mukattibu*ⁿ).

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', 'āhōrannīθ 'backwards', *qəḏōrannīθ* '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 *məħuspās* 'flaked, scaled', *kurbal* being dissimilated (cf. § 40) from **kulbal* or **kurbar* (cf. Acc. *karballatu* 'head-covering', Syr. *karbālēθā* '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 tōβaθ-šexel* '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. 'amaḥ, Eth. 'amat, P-S

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

§ 67. In pausal forms an accented short vowel often becomes long, as Heb. *sāβā'tā* 'thou art full' beside *sāβa'tā* (Arab. *šabi'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. *ğannatuⁿ*, 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': *yaggeš* (juss.); cf. also such Qals as *way-yēšēβ* 'and he sat': *yēšēβ*; *way-yāmōθ* '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*); *hōlī* 'illness': *hōlī* (cf. Acc. *halū*).

L. ACCENT

[*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 frequently 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 tradition, 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 *yā'ōz* 'he will be strong', *'ūzāh* 'be strong!' (Syr. *'azz*, Arab. *'azza* < **'ázaza*, but Acc. *'ezēzu*, Eth. *'azaza*; cf. Heb. *ham* 'be hot', Syr. *ham*, Arab. *hamma*, but also, on the analogy of *kāθaβ*, Heb. *kāφαφ* 'bend, be bowed', Acc. *kapāpu*, Syr. *kaφ*, Arab. *kaffa*) < **'á-'uzz* < **'á-'uz(u)z* and **'úz(u)z* respectively (**'ia-'uzúz* and **'uzúz* would give in Heb. **ya'ázōz* and **'ázōz*). This accent was earlier than the Canaanite change of *ā* to *ō*, which takes place only in stressed syllables, as Heb. *'ōrərú* '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. *maktabu*ⁿ; cf. Heb. *mal'āχ* 'messenger, angel', Arab. *mal'aku*ⁿ < **má-la'aku-*); **íá-kutubu* > **íá-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*); **íá-nakatibu* > **íá-n(ə)-katibu* (Arab. *yankatibu*; Heb. *yikkāθēβ* < **íə-nə-katibu*).

§ 74. At a later period, Proto-Semitic tended to accent syllables which were long either by nature or by position, as **íá-qayamu* > **íá-qūmu* (§ 46) > **íá-qúm* (Heb. *yāqūm*, Arab. *yaqūmu*); **kátabā* > **katábtā* (Heb. *kāθáβtā*, Arab. *katábtā*).

§ 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. *gəməl*, but Arab. *ǧámalu*ⁿ). 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*, *tiχtōβnāh*), in nouns, verbs, and particles with suffixed personal pronouns (e.g. *šəφāθēynū* 'our lips', *qətalitihū* 'I killed him', *'alēyχem* 'to you'), in *səγōlates* (§§ 121-24), e.g. *kéleβ* 'dog' < **kálb-*, Acc. *kalbu*, Syr. *kalbā*, Arab. *kalbu*ⁿ, Eth. *kalb*), and before the old accusative ending *-ā*, preserved with the meaning 'toward' (§ 217), as *'áršāh* 'toward the land' (cf. Arab. *'arḍa*ⁿ). 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 'construct' 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 **dabār ham-mélek* 'the word of the king' (more strictly, 'the king-word') ultimately < **dābaru hā-málki* > Heb. *dəβār ham-méleχ*. Open vowels in syllables before the pretonic primary accent are reduced to *šəwā*, as Heb. *dəβārīm* 'words' < **dabarīm* < **dābarīm*; *diβərēy ham-méleχ* 'the words of the king' < **dabarī ham-mélek* < **dābarī hā-málki*.

§ 78. In verbs, which, unlike nouns, are used for the most part as context forms (in combination with following nouns either as subjects 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. *kāθəβū* < **kātəbū* < **kátəbū*; cf. Arab. *kátəbū*), 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 sequences as P-S **qātala hā-gāmala* 'he killed the camel' > **qāttala hā-gāmmala* > **qātala hā-gāmala* > **qātal hā-gāmāla* > **qātal hā-gāmālla* > **qātal hā-gāmāla* > Heb. *qāṭal haq-gāmāl*.

§ 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 **iàqutulu hā-gāmala* 'he will kill the camel' > **iàqətulu hā-gāmala* > **iəqətūlu hā-gāmāla* > **iəqətūlu hā-gāmāla* > **iəqətūl hā-gāmāl* > Heb. *yiqṭōl haq-gāmāl*. A trace of the original accent is preserved in the construction with 'wāw consecutive', as Heb. *way-yēšəβ* 'and he sat' beside *yēšəβ* (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 *yəθàð hā-'ðhel* 'tent-pin' beside

yāθēδ (cf. Arab. *watidu*ⁿ) 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. *ibnu*ⁿ, 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.) < *attā < *ánta (cf. § 36) < *ántā (see § 225); 'aršāḥ 'toward the land' (cf. Arab. 'arḏaⁿ).

§ 83. The treatment of original pretonic *i* varies, sometimes becoming *ē* and sometimes *ə*. Thus one has Heb. 'ēnāβ 'grape' (Arab. 'inabuⁿ) < *'inab- and ḥāmōr 'ass' (Acc. 'imēru, Arab. ḥimāruⁿ) < *ḥimār- (pretonic *u* > *ə* under like conditions, as Heb. bərōš 'cypress, fir' [Acc. burāšu], rəḥōβ 'broad open place' [Arab. ruḥāb] < *burāp, *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 semi-closed syllable, is retained, as *bāšarakēm 'your flesh' (Arab. bāšarukum) > *bašarakēm > bəšārəχém; *mizbahakā 'thine altar' (Arab. mádbahaka) > mizbahăχā.

§ 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!', ḥas '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-u*ⁿ=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. *kāṭab*, but a number, mostly very primitive, are disyllabic, such as **'abu-* 'father' (Heb. 'āβ), and there are even a few monosyllabic, notably **pu* 'mouth', **ḏa* '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 what appear to be determinants seem fairly certain: Heb. 'āmal : mālal 'languish' (√ML); Heb. gūr : yāγōr 'dread, fear': Arab. waḡira (√GR); Heb. dā'ēβ 'become faint' : dūβ 'pine away' (√DB); ḥāqāḥ : ḥāqaq 'cut in' : Arab. ḥaqquⁿ 'crevice in ground' (√HQ); Heb. yāraq : rāqaq 'spit' : Arab. rayyaqa 'moisten with spittle' (√RQ); mā'as 'flow' : māsāḥ, māsas 'melt, dissolve' (√MS); Heb. 'ūr : 'ārāḥ 'be exposed' : 'ārar 'strip oneself' (√R); Heb. gālal 'roll' : gāl 'circle, age' : galgal 'wheel' (√GL); yā'aṭ 'cover' : 'āṭāḥ 'wrap oneself' (√T); Heb. yāšar : šūr 'form, fashion' (√SR); būz : bāzāḥ 'despise' : Arab. baḍa'a (√Bḍ); Heb. dāḫā; dāḫāḥ 'crush' : dūḫ : Arab. dāka : dakka 'pound, beat' : Acc. dāku (med. ṽ) 'kill' (√DK); Heb. līš 'scorn' : Arab. lašā 'insult' (√LS); Heb. šūš 'peep, gaze' : Arab. ša'sa'a 'try to open eyes (puppy)' (√SS); Heb. šūr 'saw' : Arab. našara, wašara (√SR); 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: Beto-Yaruro (II, i, 362), Kichua (II, i, 374), Lule (II, i, 410), Yahgan (iv, 214). Cf. in general Müllier, I, i, 123-8; Vendryes, *Langage*, pp. 139-40 (Eng. transl. pp. 117-18).

nataġa 'calumniate' (\sqrt{TG}); Heb. *hālaχ* 'go, come' : Arab. *la'aka*, 'alaka 'send' : 'alāka 'transmit message' (\sqrt{LK}); Heb. *hālā* : *hālāh* 'be weak, ill' : Arab. *halla* 'diminish' : *naħala* (\sqrt{HL}); Heb. *kārāh* : Arab. 'akara 'dig' (\sqrt{KR}); Heb. *gāzaz* 'shear' : *gāzāh* 'cut, sever' : Arab. *ġazza* 'shear' : *waġaza* 'cut (discourse) short' (\sqrt{GZ}); Heb. *hāθaθ* 'be shattered, dismayed' : Arab. *ħatā* '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'aṭ* 'cover' : *lūt* 'enwrap' : Arab. *latṭa* : *lāṭa* '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. *ṭabba* 'seat oneself firmly' (\sqrt{PB}).

§ 92. Similarity of meaning has caused many bases to undergo more or less modification.¹ Thus Heb. 'āχēn 'surely' (cf. *kēn* 'so') may derive its *ā* from 'āmēn 'verily'; P-S *'aqrab- 'scorpion' (Acc. 'aqrabu, Heb. 'aqrāβ, Syr. 'eqarəβā, Arab. 'aqrabuⁿ, Eth. 'aqrab; cf. Arab. *aqara* 'wound'?) its *b* from such animal-names as *'kalb- 'dog', *'dubb- 'bear', *'di'b- 'wolf', etc. (Heb. *keleβ*, *dōβ*, *zə'ēβ*, etc.); Heb. *rāmas* 'trample', if for *'rāφas (cf. Syr. *rəφas*, Arab. *rafasa* 'kick'), its *m* from *rāmaš* 'creep'; and Heb. 'āšam 'shut the eyes', if for *'āmaš (cf. Syr. 'əmaš, Arab. *ġamaḍa*), may be influenced by 'ātam 'shut' (Arab. 'aṭama '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 Altgriechischen*, Heidelberg, 1914.

	Vowel	Diphthong
P	$\bar{a}, \bar{i}, \bar{u}$	$\bar{a}\bar{i}, \bar{a}\bar{u}$
F	a, i, u	ai, au
R	\emptyset	$\bar{a}i \rangle \bar{i}, \bar{a}u \rangle \bar{u}$
V	} O	i, u
Z ₁		\emptyset
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 $*ka(i/u)ta(i/u)b(a)$ ($*ka(ia/ua)ta(ia/ua)b(a)$), with the twenty-six theoretical possibilities of PP, PF, PR, PV, PZ, FP, FF ZR, ZV, ZZ₁, ZZ₂, 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, ZZ₁, ZZ₂. One may, however, explain $*ka(ia/ua)ta(ia/ua)-b(a)$ as $*katab(a)$ with the infixed determinants $-ia-$ or $-ua-$ after the first or second syllable, or even after both (cf. the types of Heb. $\bar{l}\bar{a}\bar{s}$ 'scorn' < P-S $*laia\bar{s}a$, Heb. $\bar{d}\bar{u}\bar{\chi}$ 'crush' < P-S $*dayaka$; cf. §§ 45, 46, 91), whence

$$\begin{array}{l}
 *kata\bar{i}b \\
 *kata\bar{u}b
 \end{array}
 \left. \vphantom{\begin{array}{l} *kata\bar{i}b \\ *kata\bar{u}b \end{array}} \right\} = \text{FFZ} \text{ of } \left\{ \begin{array}{l} *kata\bar{i}ab \\ *kata\bar{u}ab \end{array} \right.$$

$$\begin{array}{l}
 *ka\bar{i}tab \\
 *ka\bar{u}tab
 \end{array}
 \left. \vphantom{\begin{array}{l} *ka\bar{i}tab \\ *ka\bar{u}tab \end{array}} \right\} = \text{FZF} \text{ " } \left\{ \begin{array}{l} *ka\bar{i}atab \\ *ka\bar{u}atab \end{array} \right.$$

$$\begin{array}{l}
 *ka\bar{i}ta\bar{i}b \\
 *ka\bar{u}ta\bar{u}b \\
 *ka\bar{i}ta\bar{u}b \\
 *ka\bar{u}ta\bar{i}b
 \end{array}
 \left. \vphantom{\begin{array}{l} *ka\bar{i}ta\bar{i}b \\ *ka\bar{u}ta\bar{u}b \\ *ka\bar{i}ta\bar{u}b \\ *ka\bar{u}ta\bar{i}b \end{array}} \right\} = \text{FZFZ} \text{ " } \left\{ \begin{array}{l} *ka\bar{i}ata\bar{i}ab \\ *ka\bar{u}ata\bar{u}ab \\ *ka\bar{i}ata\bar{u}ab \\ *ka\bar{u}ata\bar{i}ab \end{array} \right.$$

§ 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 $q\bar{a}tala$ 'fight'; FP $qat\bar{a}lu^n$ 'weapon'; FF $qatala$ 'kill'; FZ $qatlu^n$ 'act of killing'; ZP $'a-q\bar{t}\bar{a}lu^n$ 'enemies'; ZF $'a-q\bar{t}ala$ 'expose to death'.

§ 96. For bases of the type of P-S $*xaiac$, $xayac$ (where x and c stand for any consonant), one finds, from the bases $*\bar{t}aiab-$ 'good', $*\bar{s}aiab-$ 'hoary', $*dai\bar{a}n-$ 'judge', $*bai\bar{a}n-$ 'son', FF Heb. $\bar{t}\bar{o}\bar{\beta}$ 'good' < $*\bar{t}\bar{a}b-$ < $*\bar{t}aiab-$, FZ Arab. $\bar{s}aybu^n$ 'white hair', RR Heb. $\bar{d}\bar{i}n$ 'judgement' < $*d\bar{a}i\bar{a}n-$, ZZ₁ Heb. $\bar{b}in$, ZZ₂ Arab. $i-\bar{b}n$ '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. *fū-mu* 'mouth'), R **xə-* (Heb. *peḥ* 'mouth'), Z **x-* (Eth. 'a-f' 'mouth').

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

Base **xaiac-*: PP **xāiāc-*, PF **xāiac-*, PR **xāiəc-*, PZ **xāic*; FP **xaiāc*, FF **xaiac-*) **xāc-* (Acc. *tābu*, Heb. *ṭōḅ* 'good'), FR **xaiəc-*, FZ **xaiç-* (Arab. *šaybu* 'white hair'); RP **xəiāc-*, RF **xəiac-*, RR **xəiəc-*) **xīc-* (Arab. *dīnu*, Heb. *dīn* 'judgement'), RZ **xəic-*; ZP **xīāc-*, ZF **xīac-*, ZR **xīəc-*, ZZ 1 **xic-* (Acc. *binu*, Heb. *bēn* 'son'), ZZ 2 **xc-* (Arab. 'i-bnu' 'son').

Base **xayac-*: PP **xāyāc-*, PF **xāyac-*, PR **xāyəc-*, PZ **xāyc-*; FP **xayāc-*, FF **xayac-*) **xāc-*, FR **xayəc-*, FZ **xayç-* (Arab. *ṭawru*, Heb. *šōr* 'bull'); RP **xəyāc-*, RF **xəyac-*, RR **xəyəc-*) **xūc-* (Acc. *šūmu*, Heb. *šūm* 'garlic'), RZ **xəyc-*; ZP **xūāc*, ZF **xūac-*, ZR **xūəc-*, ZZ 1 **xuc-* (Acc. *mutu*, Heb. *mōṭ* 'mortal'), ZZ 2 **xc-*.

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

Base **kataib-*: PP **kātāib-*, PF **kātaib-*, PR **kātīb-* (Syr. *kārīχā* 'weaver's beam'), PV **kātīb-* (Acc. *kātīlu*, Heb. *kōṭēḅ*), PZ 1 **kātəb-*, PZ 2 **kātb-*; FP **katāib-*, FF **kataib-*, FR **katīb-* (Arab. 'asīru', Heb. 'āsīr 'captive'), FV **katīb-* (Arab. *kabidu*, Heb. *kāḅēḍ* 'liver'), FZ 1 **katəb-*, FZ 2 **katb-*; RP *kətāib-*, RF **kətaib-*, RR **kətīb-*, RV **kətīb-*, RZ 1 **kətəb-*, RZ 2 **kətb-*; ZP **ktāib-*, ZF **ktaib-*, ZR **ktīb-* (Heb. *ma-ngīnāḥ* 'lampoon'), ZV **ktīb-* (Arab. *ma-nsiku*, Heb. *ma-ssēḫāḥ* 'molten image'), ZZ 1 **ktəb-*, ZZ 2 **ktb-*.

Base **kataub-*: PP **kātāub-*, PF **kātaub-*, PR **kātūb-* (Arab. *rāḥūlu* 'camel-saddle'), PV **kātub-*, PZ 1 **kātəb-*, PZ 2 **kātb-*; FP **katāub-*, FF **kataub-*, FR **katūb-* (Acc. *batūlu*, Heb. *bəṭūlāḥ* 'maiden'), FV **katub-* (Heb. 'āsūr 'captured'), FZ 1 **katəb-*, FZ 2 **katb-*; RP **kətāub-*, RF **kətaub-*, RR **kətūb-*, RV **kətub-*, RZ 1 **kətəb-*, RZ 2 **kətb-*; ZP **ktāub-*, ZF **ktaub-*, ZR **ktūb-* (Arab. *ma-lbūsu*, Heb. *ma-lbūš* 'raiment'), ZV **ktub-* (Arab. *ma-qburu* 'grave'), ZZ 1 **ktəb-*, ZZ 2 **ktb-*.

Base **kaḡtab-*: PP **kāḡtāb-*, PF **kāḡtab-*, PR **kāḡtəb-*, PZ **kāḡtīb-*; FP **kaḡtāb-* (Arab. *hayṣāru* 'lion'), FF **kaḡtab-* (Arab. *ṣaydaqū* 'true'), FR **kaḡtəb-*, FZ **kaḡtīb-*; RP **kūtāb-* (Arab. *ḡrābu* 'striking'), RF **kūtab-*, RR **kūtəb-*, RZ **kūtīb-*; VP **kitāb-* (Arab. *ḡmāru*, Heb. *ḡmōr* 'ass'), VF **kitab-* (Arab. *ḡlā'u*, Heb. *ṣēlā* 'rib'), VR **kitəb-*, VZ **kitīb-* (Acc. *zikru*, Heb. *zēḡer* 'remembrance'); ZP **kətāb-*, ZF **kətab-*, ZR **kətəb-*, ZZ₁ **kətīb-*, ZZ₂ **ktīb-*.

Base **kaḡtab-*: PP **kāḡtāb-*, PF **kāḡtab-*, PR **kāḡtəb-*, PZ **kāḡtīb-*; FP **kaḡtāb-* (Arab. *tawrābu* 'dust'), FF **kaḡtab-* (Arab. *ḡwzalu*, Heb. *ḡōzāl* 'young of birds'), FR **kaḡtəb-*, FZ **kaḡtīb-*; RP **kūtāb-*, RF **kūtab-*, RR **kūtəb-*, RZ **kūtīb-*; VP **kutāb-* (Acc. *burāṣu*, Heb. *bərōṣ* 'cypress, fir'), VF **kutab-* (Arab. *qutamu* 'eater'), VR **kutəb-*, VZ **kutīb-* (Acc. 'uznu, Heb. 'ōzen 'ear'); ZP **kətāb-*, ZF **kətab-*, ZR **kətəb-*, ZZ₁ **kətīb-*, ZZ₂ **ktīb-*.

Base **kaḡtaḡb-*: PP **kāḡtāḡb-*, PF **kāḡtaḡb-*, PR **kāḡtīb-*, PV **kāḡtīb-*, PZ₁ **kāḡtəb-*, PZ₂ **kāḡtīb-*; FP **kaḡtāḡb-*, FF **kaḡtaḡb-*, FR **kaḡtīb-*, FV **kaḡtīb-*, FZ₁ **kaḡtəb-*, FZ₂ **kaḡtīb-*; RP **kītāḡb-*, RF **kītaḡb-*, RR **kītīb-*, RV **kītīb-*, RZ₁ **kītəb-*, RZ₂ **kītīb-*; VP **kitāḡb-*, VF **kitāḡb-*, VR **kitīb-* (Arab. *kībīru* 'great,' Heb. *ḡṣīr* 'lord'), VV **kitīb-* (Arab. 'ibīlu 'camel-herd'), VZ₁ **kitəb-*, VZ₂ **kitīb-*; ZP **kətāḡb-*, ZF **kətaḡb-*, ZR **kətīb-*, ZV **kətīb-*, ZZ₁ **kətəb-*, ZZ₂ **ktīb-*.

Base **kaḡtaḡb-*: PP **kāḡtāḡb-*, PF **kāḡtaḡb-*, PR **kāḡtūb-*, PV **kāḡtūb-*, PZ₁ **kāḡtəb-*, PZ₂ **kāḡtīb-*; FP **kaḡtāḡb-*, FF **kaḡtaḡb-*, FR **kaḡtūb-*, FV **kaḡtūb-*, FZ₁ **kaḡtəb-*, FZ₂ **kaḡtīb-*; RP **kūtāḡb-*, RF **kūtaḡb-*, RR **kūtūb-*, RV **kūtūb-*, RZ₁ **kūtəb-*, RZ₂ **kūtīb-*; VP **kutāḡb-*, VF **kutaḡb-*, VR **kutūb-* (Acc. *rukūṣu*, Heb. *rəḡṣ* 'property'), VV **kutūb-* (Arab. *ḡunubu* 'strange', Heb. *ṣəḡōl* 'bereavement'), VZ₁ **kutəb-*, VZ₂ **kutīb-*; ZP **kətāḡb-*, ZF **kətaḡb-*, ZR **kətūb-*, ZV **kətūb-*, ZZ₁ **kətəb-*, ZZ₂ **ktīb-*.

Base **kaḡtaḡb-*: PP **kāḡtāḡb-*, PF **kāḡtaḡb-*, PR **kāḡtūb-*, PV **kāḡtūb-*, PZ₁ **kāḡtəb-*, PZ₂ **kāḡtīb-*; FP **kaḡtāḡb-*, FF **kaḡtaḡb-*, FR **kaḡtūb-* (Arab. *ḡaytūlu* 'thick darkness'), FV **kaḡtūb-*, FZ₁ **kaḡtəb-*, FZ₂ **kaḡtīb-*; RP **kītāḡb-*, RF **kītaḡb-*, RR **kītūb-*, RV **kītūb-*, RZ₁ **kītəb-*, RZ₂ **kītīb-*; VP **kitāḡb-*, VF **kitāḡb-*, VR **kitūb-* (Acc. *ṣībūbu* 'radiance'), VV **kitūb-* (Amarna *kilubi*, Heb. *kəlūṣ* 'basket, cage'), VZ₁ **kitəb-*, VZ₂ **kitīb-*; ZP **kətāḡb-*, ZF **kətaḡb-*, ZR **kətūb-*, ZV **kətūb-*, ZZ₁ **kətəb-*, ZZ₂ **ktīb-*.

Base **kaḡtaḡb-*: PP **kāḡtāḡb-*, PF **kāḡtaḡb-*, PR **kāḡtīb-*, PV **kāḡtīb-*, PZ₁ **kāḡtəb-*, PZ₂ **kāḡtīb-*; FP **kaḡtāḡb-*, FF **kaḡtaḡb-*, FR **kaḡtīb-*, FV **kaḡtīb-*, FZ₁ **kaḡtəb-*, FZ₂ **kaḡtīb-*; RP **kūtāḡb-*, RF

**kūtaḡib-*, RR **kūtīb-*, RV **kūtīb-*, RZ₁ **kūtəb-*, RZ₂ **kūtḡb-*; VP **kutāḡib-*, VF **kutaḡib-* (Arab. *kulaybu*ⁿ 'little dog'), VR **kutīb-*, VV **kutīb-* (Arab. *du'ilu*ⁿ 'jackal'), VZ₁ **kutəb-*, VZ₂ **kutḡb-*; ZP **kətāḡib-*, ZF **kətaḡib-*, ZR **kətīb-*, ZV **kətīb-*, ZZ₁ **kətəb-*, ZZ₂ **ktḡb-*.¹

¹ In view of the facts that $\varnothing = R$ of a, i, u , but Z of a_i, a_u , that $i, u = V$ of a_i, a_u besides being their own F , and that \bar{i}, \bar{u} may be either R of $\varnothing_i, \varnothing_u$ 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 Z_2P , etc., for **kəḡḡab-*, etc. (**ktāb-*, etc.), all of which are likewise ambiguous.

CHAPTER IV

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 represented 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 **pū-* 'mouth', Acc. *pū*, Heb. *peḥ*, Arab. *fū*, Eth. 'af; P-S **ḏa-* 'this', Heb. *zeḥ*, Bib. Aram. *dā*, Arab. *ḏū*, Eth. *ze*.

b. Disyllabic Bases

1. With a Short Vowel

§ 100. Type **xac-*. P-S **ḥam-* 'father-in-law', Acc. 'emu, Heb. *ḥām*, Syr. *ḥamā*, Arab. *ḥamu*ⁿ, Eth. *ḥam*.

§ 101. Type **xic-*. P-S **šim-* 'name', Acc. *šumu*, Heb. *šēm*, Phoen. *ŠM*, Syr. *šamā*, 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 **xāc-* (< **xaiac-*, **xayac-* (§§ 45, 46, 96). P-S **ṭāb-* 'good', Acc. *ṭābu*, Heb. *ṭōβ*, Syr. *ṭāβā*, Arab. *ṭābu*ⁿ.

§ 104. Type **xīc-*. P-S **dīn-* 'judgement', Heb. *dīn*, Syr. *dīnā*, Arab. *dīnu*ⁿ.

§ 105. Type **xūc-*. P-S **pūm-* 'garlic', Acc. *šūmu*, Heb. *šūm*, Syr. *tūmā*, Arab. *ṭūmu*ⁿ, Eth. *sōmat*.

3. With a Diphthong

§ 106. Type **xaiç-*. P-S **šaiḅ-* 'old age', Acc. *šību*, Heb. *šēyβ*, Syr. *sayβāθā*, Arab. *šaybu*ⁿ, Eth. *šibat*.

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 *xayc-*. P-S **paṣr-* 'bull', Acc. *šūru*, Heb. *šōr*, Syr. *tawrā*, Arab. *ṭawru*ⁿ, Eth. *sōr* (the entire group was almost certainly borrowed from I-E or 'Mediterranean'; cf. E. Boisacq, *Dictionnaire 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. *kaḥ*, Syr. *kappā*, Arab. *kaffu*ⁿ; P-S **šaqq-* 'sackcloth', Acc. *šaqqu*, Heb. *šaq*, Syr. *saqqā*, Eth. *šaq* (Gk. loan-word *σάκκος*).

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

§ 110. *Type *xucc-*. P-S **kull-* 'all', Acc. *kullatu*, Heb. *kullō* 'all of him', Syr. *kul*, Arab. *kullu*ⁿ, Eth. *k^wel*.

5. With Complete Reduplication of Base

§ 111. *Type *xaxac-*. P-S **kabkab-* 'star' (§ 40), Acc. *kakkabu*, Heb. *kōχāβ*, Syr. *kawχəβā*, Arab. *kawkabu*ⁿ, Eth. *kōkab*; P-S **laḵlaj-* 'night' (§ 21, note 7), Acc. *līlātu*, Heb. *laylāḥ*, Syr. *lelyā*, Arab. *laylatu*ⁿ, Eth. *lēlūt*.

§ 112. *Type *xaxūc-*. P-S **baqbūq-* 'flask', Heb. *baqbūq*, Arab. *baqbūqatu*ⁿ.

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

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

§ 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. *silsilatu*ⁿ 'chain', *midmīdu*ⁿ 'false', *šumašimu*ⁿ 'energetic', *ḡulāḡilu*ⁿ 'bold'; and **xicxic-*, **xicxac-*, and **xicxuc-* 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. *ḡarabu*ⁿ; P-S **paraš-* 'horse', Heb. *pārāš*, Arab. *farasu*ⁿ, Eth. *faras*.

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

§ 118. *Type *katub-*. P-S **'ašur-* 'decade', Heb. *'āšōr* (cf. for formation Acc. *šamuḥu* 'growing luxuriantly', Arab. *šakusu*ⁿ 'hard').

§ 119. Type *kitab-. P-S *ḏila'- 'rib', Acc. *ṣēlu*, Heb. *ṣēlā'*, Syr. *'el'ā*, Arab. *ḏila'u*ⁿ.

§ 120. Type *kutub-. P-S *bukur- 'first-born', Acc. *bukru*, Heb. *bəχōr*, Syr. *buxrā*; P-S *qubul- 'front', Heb. *qəβōl* 'battering engine', Arab. *qubulu*ⁿ 'front'. (The type *kitab- 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'ōd* 'abundance' see § 55.

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

§ 123. Type *kitb-. P-S *ḏikr- 'remembrance', Acc. *zikru*, Heb. *zēχer*, Arab. *ḏikru*ⁿ; P-S *'igl- 'calf', Heb. *'ēyel*, Syr. *'eγlā*, Arab. *'iγlu*ⁿ, Eth. *'eg*ⁿ *el*.

§ 124. Type *kutb-. P-S *'uḏn- 'ear', Acc. *'uznu*, Heb. *'ōzen*, Syr. *'eḏnā*, Arab. *'uḏnu*ⁿ, 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. *šālāmā*, Arab. *salāmu*ⁿ, Eth. *salām*.

§ 126. Type *katīb-. P-S *'asīr- 'captive', Heb. *'āsīr*, Arab. *'asīru*ⁿ; P-S *marīr- 'bitter', Heb. *mərīrī*, Syr. *marīrā*, Eth. *marīr*; P-S *šaḡīr- 'little', Heb. *šā'īr*, Syr. *šə'īrā*, Arab. *šaḡīru*ⁿ (cf. also, for formation, Acc. *talīmu* 'brother').

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

§ 128. Type *kitāb-. P-S *ḥimār- 'ass', Acc. *'imēru*, Heb. *ḥāmōr*, Syr. *ḥamārā*, Arab. *ḥimāru*ⁿ.

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

§ 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. *'ālāmā*, Arab. *'ālamu*ⁿ, Eth. *'ālam*.

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

§ 133. Type **kaṭtab-*. P-S **gaṭzal-* 'young of birds', Heb. *gōzāl*, Arab. *ḡawzalu*ⁿ (Syr., with metathesis, *zuḡlā*).

§ 134. The types **kitīb-*, **kutab-*, **kitūb-* (cf. Acc. *šibūbu* 'radiance'), **kitīb-*, **kitūb-* are too uncertain for consideration here (cf. *VG* i, §§ 121, 118, 139; *B-L* i, §§ 61 w'''-y''', aβ-dβ, sa, tβ). The type **kutaḡb-* is found in Syr. '*uzaylā* 'gazelle', Arab. *kulaybu*ⁿ 'little dog'; **kātīb-* in Syr. *kārīḡā* 'weaver's beam'; **kātūb-* in Syr. *ḡāšōḡā* 'sickel', Arab. *rāḡūlu*ⁿ 'camel-saddle'; **kaḡtab-* in Arab. *ṡaydaqu*ⁿ 'true'; **kaḡtāb-* in Arab. *ḡaysāru*ⁿ 'rending'; and **kaḡtūb-* in Arab. *ḡaytūlu*ⁿ '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-* > **katataba-* > **kattab(a)-*, etc., can scarcely be determined from the evidence accessible.

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

§ 137. Type **kattāb-*. P-S **gabbār-* 'strong', Heb. *gibbōr*, Syr. *gabbārā*, Arab. *ḡabbāru*ⁿ (cf., for formation, Acc. *ḡabbātu* 'robber', Eth. '*assāb* 'hireling').

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

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

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

6. With Third Consonant Duplicated

§ 141. This type, represented by **katbab-*, etc., (< **katābab-* < **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'ānān* 'luxuriant', *ša'ānān* 'secure' (cf. Heb. *rā'an* 'be luxuriant', *šā'an* 'be at ease', only in Pa'lēl [§ 317]).

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

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

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

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

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

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

7. With Both Second and Third Consonants Duplicated

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

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

§ 151. *Type *katibtīb-*. Heb. *yəφēḥφīyāḥ* (Miš. and Mas. *yəφēḥφīyyāḥ*) 'pulchra', (cf., for formation, Eth. *ḥamalmūl* 'green').

§ 152. The types **kattīb-*, **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 bγ-cγ, dγ, aδ-bδ, fγ, uγ-zγ, nδ, oδ). The type **kitbāb-* is found in Arab. *ṭimlālu* 'badly clothed'; **kitbīb-* in Acc. *'irnintu* 'strength', Arab. *ziḥlīlu* 'smooth', Eth. *kenfīf* 'shore'; **kutbub-* in Arab. *duḥlulu* 'intimacy'; **kutbūb-* in Arab. *zuḥlūlu* 'smooth'; and **kutubtub-* in Tigrīña *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'u*, Eth. *'arbā*; P-S **'īpkāl-* 'cluster', Heb. *'eškōl*, Aram. *'iθkālā*, Arab. *'iḥkālū*; Mišnāic has also the type **aktūb-*, as *'asqūφāḥ* 'threshold'.

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

2. With Preformative *i*

§ 155. *Types *iaktūb-*, **iaktab-*. P-S **iḥmūr-* 'roebuck', Heb. *yahmūr*, Syr. *yahmūrā*, Arab. *yahmūru*; Heb. *yīshār* 'oil'.

3. With Preformatives š- and s-

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

4. With Preformative m-¹

§ 157. Type **maktab-*. P-S **mal'ak-* 'messenger', Heb. *mal'āḫ*, Arab. *mal'aku*ⁿ, Eth. *mal'ak*; P-S **markab-* 'chariot', Acc. *narkabtu* (*n* < *m* by dissimilation before the labial), Heb. *merkāβāḥ*, Syr. *markaβeθā*, Arab. *markabu*ⁿ; P-S **maškan-* 'dwelling-place', Acc. *maškanu*, Heb. *miškān*, Syr. *maškənā*, Arab. *maskanu*ⁿ.

§ 158. Type **maktib-*. Heb. *margē'āḥ* 'repose', Arab. *marǧi'u*ⁿ.

§ 159. Type **maktīb-*. Heb. *mangīnāḥ* 'lampoon' (cf., for formation, Syr. *maφšī'ā* '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. *mitqālu*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. *tō'ām* 'twin' < **taw'am-* (cf. § 21, note 23), Arab. *taw'amu*ⁿ (cf. Arab. *wā'ama* 'agree'); Heb. *tēymān* 'south', Syr. *taymnā* (cf., for formation, Acc. *tamḥaru* 'battle', Eth. *tayfan* 'young bull').

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

§ 165. Type **taktūb-*. Heb. *tamrūr* 'bitterness' (cf., for formation, Syr. *taḥtūrā* '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 'aqāma [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 Affirmatives

1. With Affirmative -ān-

§ 167. Type **katbān-*. Heb. *qadmōn* '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. *beḥlānā* 'cessation').

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

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

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

2. With Affirmative -n-

§ 172. Heb. *šippōren* 'finger-nail' (cf. Acc. *šupru*, Syr. *ṣepṣā*, Arab. *zufṣu*ⁿ, Eth. *šefr*, * P-S *pufr-*).

3. With Affirmative -m-

§ 173. Heb. *šāφām* 'moustache' (cf. Acc. *šaptu* 'lip', Heb. *šāφāḥ*, Syr. *seφəḥā*, Arab. *šafatu*ⁿ, and, for formation, Arab. *šildāmu*ⁿ 'hard').

4. With Affirmative -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 Affirmative -ī-, -āi-

§ 175. These affirmatives are found in all Semitic languages, -ī- and -āi- side by side in Accadian and Ethiopic, -āi- alone in Aramaic, and -ī- alone in Hebrew and Arabic. They denote 'connexion with', 'origin from' in every conceivable sense, e.g. Heb. *Šōrī* 'Tyrian' (Acc. *šurrāya*), *Iβrī* 'Hebrew' (cf. 'āβar 'cross over'), *qadmōnī* 'eastern' (cf. *qadmōn* 'eastern'), *raγlī* 'foot-soldier' (cf. *reγel* 'foot'), *šif'ōnī* 'basilisk, adder' (cf. *šepa* 'basilisk, adder'). Compare, for formation, Syr. *Dayšenāy* 'citizen of Daysān', *malkāyā* 'royal', Arab. *Miṣrīyu*ⁿ 'Egyptian', *mağusīyu*ⁿ 'Magian', *šamsīyu*ⁿ 'solar', Eth. *nazāzī* 'comforter', *tafšānī* 'last'.

§ 176. Afformatives in *-ūn-*, *ōn-*, *-aīn-*, *-aīm-*, *-aī-*, *-e-*, *-ē-*, *-ō-* are too uncertain for discussion here (cf. *B-L* i, § 61, vθ, dt-gt); 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. *Šōmārōn* : Bib. Aram. *Šāmārayin* 'Samaria'; *Dōthān* : *Dōthayin* (Septuagint *Δωθάιμ*); *'Eylōn* : *'Ēyn* *'Eylayim*; *Məyiddō* : *Məyiddōn*; *'Eytām*; *Gidə'ōm* (Septuagint *Γεδάμ*).

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. *'abu*ⁿ, Eth. *'ab*; P-S **umm-* 'mother', Acc. *'ummu*, Heb. *'ēm*, Syr. *'emmā*, Arab. *'ummu*ⁿ, Eth. *'em*; P-S **himār-* 'ass', Acc. *imēru*, Heb. *ḥāmōr*, Syr. *ḥāmārā*, Arab. *ḥimāru*ⁿ; P-S **atān-* 'she-ass', Acc. *'atānu*, Heb. *'āthōn*, Syr. *'attānā*, Arab. *'atānu*ⁿ; (cf. also Arab. *ḥāmilu*ⁿ 'pregnant', *nāhidu*ⁿ 'with swelling breasts', *'āqīru*ⁿ 'sterile' [but Heb. *'āqār*, *'āqārāḥ*]).

§ 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. *bintu*ⁿ beside P-S **bin-* 'son', Acc. *binu*, Heb. *bēn*, Arab. *ibnu*ⁿ; P-S **amat-* 'female slave', Acc. *'amtu*, Heb. *'āmaθ* (const.), Syr. *'amaθ* (const.), Arab. *'amatu*ⁿ, Eth. *'amat*; P-S **ḡarrat-* 'rival-wife', Acc. *ḡerretu*, Heb. *ḡārāḥ*, Syr. *'arrəḡā*, Arab. *ḡarratu*ⁿ; and this becomes the regular way of distinguishing between masculine and feminine, as Heb. *par* 'steer', *pārāḥ* 'heifer'; *sar* 'prince', *sārāḥ* 'princess'; *Mō'āβī* 'Moabite',

Mō'āβiyyāh 'Moabites'; '*elem* 'young man', '*almāh* 'young woman'; *ṭōβ* 'bonus', *ṭōβāh* 'bona' (cf. Acc. *bēl* 'god', *bēlitu* 'goddess'; Syr. *malkā* 'king', *malkəθā* 'queen'; *bīš* 'malus', *bīštā* 'mala'; Arab. *maliku* 'king', *malikatu* 'queen'; '*aẓīmu* 'magnus', '*aẓīmatu* '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,' *šāφōn* 'north', *hereβ* 'sword' (cf. Arab. *ḥarbatu* 'dart, javelin'; Syr. *ḥarbā* 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*, Eth. *lesān*), *šemeš* 'sun' (P-S **šams-*, Acc. *šamšu*, Syr. *šemšā*, Arab. *šamsu* [dissimilated from **samsu*]; cf. §§ 39-40); Acc. and Aram. only masc., Arab. only fem.); Arab. *baṭnu* 'belly' (Heb. *beṭen* only fem.), *kabidu* 'liver' (Heb. *kāβēd* only masc.); Syr. *sahrā* 'moon'. The 'feminine sign' is found in such words as Heb. *gəḏērāh* 'wall' beside masc. *gāḏēr* (cf. Arab. *ḡadru*, *ḡidāru*), *gulḡoleθ* 'skull' (but Acc. *gulḡullu*). 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. *nəqāmāh* 'vengeance' beside masc. *nāqām* (cf. fem. Syr. *nəqaməθā*, Arab. *niqmatu*), '*ezrāh* 'help' beside masc. '*ēzer* (cf. Syr. fem. '*eḏarəθā* beside masc. '*eḏrā*), *ṭōβāh* 'welfare', *ḡōlāh* 'exile(s)'.

§ 183. Diminutives, which include pejoratives, have the 'feminine sign', as Heb. *məlūnāh* 'hut' : *mālōn* 'lodging-place, inn, khan'; *yōneqeθ* 'twig' : *yōnēq* 'sapling'; *kippāh* '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*', both generally fem., though occasionally masc.), *yōnāh* '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. 'ōnā 'ships, fleet', bāqār 'cattle' (Arab. baqaruⁿ, cf. also baqaratuⁿ 'single head of cattle'; Syr. baqrā is fem. only); to (b) (the great majority in Heb.) Heb. bōser 'sour grapes' (Arab. busruⁿ), bə'ir 'beasts, cattle', ziz 'moving creatures' (cf. Acc. zizānu 'reptiles'), 'ōφ 'flying creatures' (Syr. 'awφā), 'ayit 'bird(s) of prey', qimmōš 'thistles, nettles', rexeš 'steeds', remeš 'creeping creatures', šereš 'swarming creatures' (Syr. šeršā 'reptiles'); to (c) Heb. š'ōn 'small cattle', šeφardēq 'frogs'; to (d) Heb. bo'šāḥ 'stinking weeds', bəhēmāḥ 'beast(s)', dāγāḥ 'fish' collectively as contrasted with dāγ 'a single fish', 'āβuddāḥ 'servants' as contrasted with 'eβeḏ 'servant', šir'āḥ '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. 'ōniyyāḥ 'ship': 'ōnā 'ships, fleet'; ša'ārāḥ 'single hair': šē'ār 'hair' collectively (so also Arab. ša'[a]ratuⁿ: ša'[a]ruⁿ); širāḥ 'single song': šir 'song, poem'; ləβēnāḥ 'brick' (Arab. labinatuⁿ 'single brick': labinuⁿ 'brick' collectively); dəβōrāḥ 'bee' (cf. Arab. dibruⁿ 'swarm of bees'); nəmālāḥ 'ant' (Arab. namlatuⁿ 'single ant': namluⁿ 'ant' collectively); cf. also Arab. baṭṭatuⁿ 'one drake or duck': baṭṭuⁿ 'duck' collectively; dahabātuⁿ 'piece of gold': dahabuⁿ '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. cit.

§ 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. dahabātuⁿ would primarily have meant 'that (particular piece of) gold' as contrasted with dahabuⁿ '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 *yugā*, Old Church Slav. *iga* 'yokes': Latin *iugā*, 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.	<i>-u</i>	— (<i>-at-u</i>)
Passive case sing.	<i>-a</i>	<i>-at-a</i>
Active case dual	<i>-au(ni)</i>	— (<i>-at-au[ni]</i>)
Passive case dual	<i>-ā(ni)</i>	<i>-at-ā(ni)</i>
Active case plur.	<i>-ū(na)</i>	— (<i>-āt-u</i>)
Passive case plur.	<i>-ā(na)</i>	<i>-āt-a</i>

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 **īad-* 'hand', Acc. *'īdu*, Heb. *yād*, Syr. *'īdā*, 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.: 'ēber 'pinions' ('eβrāḥ 'pinion'), 'ēγōz 'nuts' (Arab. ḡawzuⁿ 'nuts', ḡawzatuⁿ 'nut'), 'āzēn 'implements', 'āḥū 'reeds', 'ōnī 'ships, fleet' ('ōniyyāḥ 'ship'), 'assīr 'prisoners', bo'sāḥ 'stinking weeds', bāhēmāḥ 'beast(s)', bōser 'sour grapes' (Arab. busruⁿ), bə'ir 'beasts, cattle', bāqār 'cattle' (Arab. baqaruⁿ, but baqaratuⁿ 'single head of cattle'), dim'āḥ 'tears', zīz 'moving things', ṭaφ 'children', 'āβuddāḥ 'servants', 'ōφ 'flying creatures', 'ayit 'bird(s) of prey', 'ārāβ 'steppe-dwellers', pōl 'beans', š'ōn 'small cattle' (also šōneh), šippōr 'bird(s)', šəφardēq 'frogs', šir'āḥ 'hornets', qimmōs 'thistles, nettles', rāḥit 'rafters, boards'(?), rexeβ 'chariots', rexeš 'steeds', remes 'creeping things', šeres 'swarming things'. From Accadian one may cite zizānu 'reptiles', and from Syriac hemrā 'asses' (sing. ḥamārā), quryā 'cities' (sing. qarīḥā).

§ 195. In Arabic and Ethiopic the 'broken plural' is developed to such degree that it usurps in great measure the true plural of distribution. 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. yādāyim, Bib. Aram. yədayin, Syr. 'idayyā, Arab. yadāni, Eth. 'edē 'two hands'. Except in Arabic, the dual tends to disappear in favour of the plural² and to be used, where it survives at all, to denote objects which occur normally only in pairs, as Acc. 'uznān 'two ears', 'inān 'two eyes', šaptān 'two lips', birkān 'two knees' (Heb. 'oznayim, 'ēynayim, šəφāḥayim, birkayim), Heb. šənayim 'two', kappayim 'two palms of the hands or soles of the feet', raḡlayim 'two feet', nəḥuštayim 'brazen fetters', na'ālayim 'pair of sandals', qarnayim 'two horns', kənāφayim 'two wings', məšillayim 'cymbals', melqāḥayim 'tongs, snuffers', mōzənayim 'balance' (§ 44); Syr. saḥeyn 'two se'ahs' (Heb. sāḥayim), təreyḥ 'two', maḥeyn 'two hundred' (Heb. māḥayim), 'esrīn 'twenty' (Acc. 'ešrā, Heb. 'ešrīm, Arab. 'iṣrūna, Eth. 'ešrā, P-S *'iṣrā-, dual of *'aśr- 'ten'); Eth. haq"ē 'two hips', dēdē 'door' (

¹ Wright, *Grammar*, i, §§ 304-6. I-E knows the same phenomenon of a collective singular with plural force, as Gk. ὅς φάσαν ἢ πλεθός (*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. *dālāṭayim*, 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 kənāḥayim* 'six wings', *šib'āḥ* 'ēynayim '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. 'abdūna 'slaves' individually ('servi') as contrasted with 'abīdu' 'slaves' collectively ('servitium'), e.g. Acc. *rīšū* 'heads' (Heb. *rāšim*), 'ilū, 'ilāni 'gods', *šalmānu* 'pictures'; Heb. *šaddīqim* 'righteous men', *zəḥārīm* 'males', *kəsāḥīm* 'pieces of silver';¹ Syr. *talmīdīn* 'disciples', 'idīn 'festivals'; Arab. *sāriqūna* 'thieves', 'alamūna 'worlds'; Eth. *qasīsān* 'priests'.

§ 198. The plural may also be expressed by reduplication, as Hebrew *pīḥiyyōṭ* 'cutting edges' beside *piyyōṭ*, *mēmē* 'water' beside *mayim*; Syr. *ḥadḥadānē* 'certain ones', *daqdaqē* 'little ones'; Arab. ✓ *qasāqisatu* '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. 'abdu, 'abdi, 'abda '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.	<i>-u</i>	<i>-a-u(ni)</i> } <i>-au(ni)</i>	<i>-ū(na)</i>
Gen.	<i>-i</i>	<i>-a-i(ni)</i> } <i>-ai(ni)</i>	<i>-ī(na)</i>
Acc.	<i>-a</i>	<i>-a-a(ni)</i> } <i>-ā(ni)</i>	<i>-ā(na)</i>

¹ Heb. plurals of the type of *kəsāḥīm*, *səḥārīm* 'books', *qōḏāšīm* 'sanctuaries' from 'səḥōlate' singulars *keseḥ*, *səḥer*, *qōḏeš* (cf. §§ 121-4) instead of **kaspīm*, **siprīm*, **qudšīm* seem due rather to the analogy of *dəḥārīm*, 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)	$\left\{ \begin{array}{l} -ayim \\ (-ayin), -ēy \end{array} \right.$	$\left\{ \begin{array}{l} -eyn, -ayin, -īn \end{array} \right.$	-ā(ni)	$\left\{ \begin{array}{l} -ē \end{array} \right.$
Gen. "	$\left\{ \begin{array}{l} -ē(n) \end{array} \right.$			-ay(ni)	
Acc. "					
Nom. Plur.	-ū, -ānu	$\left\{ \begin{array}{l} -īm (-īn), -ēy \end{array} \right.$	$\left\{ \begin{array}{l} -īn, -ay \end{array} \right.$	-ū(na)	$\left\{ \begin{array}{l} -ān \end{array} \right.$
Gen. "	$\left\{ \begin{array}{l} -āni, -ē \end{array} \right.$			-ī(na)	
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', *Ṣiddōnīn* 'Sidonians', *rāṣīn* 'runners', etc. (cf. Meša Inscription *MLKN* '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. *yāthā* (cf. *layātheh* '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 < *'āyāh and 'ēθ < *'āīāh stand to each other in the same relation as Heb. *dūš*, *dīš* 'tread, thresh', *kūr*, *kīr* 'furnace', *sūm*, *sīm* 'put, place', *hūm*, *hīm* 'make noise' (§ 404), etc. They both seem to be cognate with Syr. *yāthā* 'essence, being, self', with a weakening of meaning first to a demonstrative (cf. §§ 241-6 and the development of Heb. *neφeš* 'soul' > 'ipse'), and then to a mere accusative sign analogous to the use of Bib. Aram. *dī*, Syr. *də*, Acc. *ša* 'that' as a genitive exponent (e.g. Bib. Aram. *šamēh dī-'ēlāhā* 'his name, that of God' > 'the name of God'). Like Heb. 'āšer (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 ṭōḃāḥ 'a good woman', 'iššāḥ ṭōḃāḥ lēḃāḃ 'a woman good as to heart, a good-hearted woman', dāḃār 'a word', dāḃār han-nāḃī 'the word of the prophet, the prophet-word', meleḫ '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', piḥ'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. 'aršāḥ 'earthwards', Bāḃelāḥ 'to Babylon', miḏbārāḥ 'toward (at) the desert', šāḃōnāḥ '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 mizrāḥāḥ 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.	<i>katbu</i>	<i>kāthāβ</i>	<i>kəθab</i>	<i>katabu(n)</i>	} <i>katab</i>
Const. " "	<i>katab</i>	<i>kəθaβ</i>	<i>kəθaβ</i>	<i>katabu</i>	
Abs. " fem.	<i>katabtu</i>	<i>kəθāβāḥ</i>	<i>kaθbā</i>	<i>katabatu(n)</i>	} <i>katabat</i>
Const. " "	<i>katbat</i>	<i>kiθəβaθ</i>	<i>kaθbaθ</i>	<i>katabatu</i>	
Abs. dual masc.	(<i>katbān</i>	<i>kəθāβayim</i>	(<i>kaθbeyn</i>	<i>katabāni</i>	} (<i>katabā</i>
Const. " "	<i>katbā</i>	<i>kiθəβā</i>	<i>kaθbey</i>	<i>katabā</i>	
Abs. " fem.	<i>katb[t]ān</i>	* <i>kiθəβāθayim</i>	* <i>kaθəβteyn</i>	<i>katabatāni</i>	} <i>katabatā</i>
Const. " "	<i>katb[t]ā</i>	* <i>kiθəβəθēy</i>	<i>kaθəβtey</i>)	<i>katabatā</i>	
Abs. plur. masc.	<i>katbāni</i>	<i>kəθāβīm</i>	<i>kaθbīn</i>	<i>katabūna</i>	} <i>katabān</i>
Const. " "	<i>katbā</i>	<i>kiθəβēy</i>	<i>kaθbay</i>	<i>katabū</i>	
Abs. " fem.	<i>katbāti</i>	<i>kəθāβōθ</i>	<i>kaθbān</i>	<i>katabātu(n)</i>	} <i>katabāt</i>
Const. " "	<i>katbāt</i>	<i>kiθeβōθ</i>	<i>kaθbāθ</i>	<i>katabātu</i>	

ENDINGS BEFORE PERSONAL PRONOUNS

	Heb.	Syr.	Egypt. Arab.	Eth.	P-S
Sing. 1st com.	<i>malkī</i>	<i>malk(ī)</i>	<i>malki</i>	<i>negūšeya</i>	<i>malki-ja</i>
" 2nd masc.	<i>malkəχā</i>	<i>malkāχ</i>	<i>malkak</i>	<i>negūšeka</i>	<i>malka-kā,</i> <i>malki-kā</i>
" 2nd fem.	<i>malkēχ</i>	<i>malkeχ(i)</i>	<i>malkik</i>	<i>negūšekī</i>	<i>malki-kī</i>
" 3rd masc.	<i>malkō,</i> <i>malkēhū</i>	<i>malkeh</i>	<i>malkoh</i>	<i>negūšū</i> (<i>*negūšehū</i>	<i>malka-hū,</i> <i>malki-hū</i>
" 3rd fem.	<i>malkāh,</i> <i>malkehā</i>	<i>malkāh</i>	<i>malk(χ)ha</i>	<i>negūša</i> (<i>*negūšehā</i>	<i>malka-šā,</i> <i>malki-šā</i>
Plur. 1st com.	<i>malkēnū</i>	<i>malkān(ā)</i>	<i>malkīna</i>	<i>negūšenā</i>	<i>malka-nā,</i> <i>malki-nā</i>
" 2nd masc.	<i>malkəχem</i>	<i>malkəχōn</i>	<i>malkīkum</i>	<i>negūšekemū</i>	<i>malka-kumā,</i> <i>malki-kumā</i>
" 2nd fem.	<i>malkəχen</i>	<i>malkəχeyn</i>	<i>malkīkum</i>	<i>negūšeken</i>	<i>malka-kinnā,</i> <i>malki-kinnā</i>
" 3rd masc.	<i>malkām</i>	<i>malkəhōn</i>	<i>malkīhum</i>	<i>negūšōmū</i> (<i>*negūšehōmū</i>	<i>malka-humū</i>
" 3rd fem.	<i>malkān</i>	<i>malkəheyh</i>	<i>malkīhum</i>	<i>negūšān</i> (<i>*negūšehān</i>	<i>malka-šinnā</i>

though any feeling for distinction of case appears to have been forgotten, e.g. *Pənū'ēl* ('[Having] the face of God') beside *Pənī'ēl*, *Hāmūtal* ('T. is [my] husband's father'; Qārē) beside *Hāmītal* (Kəθīβ).

§ 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*, **aḥū*, **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 *yōd* *compaginis*, e.g. *bənō Šippōr* 'son of Šippōr' (later, when the original meaning of the *ō* was forgotten, used with the feminine, as *ḥayθō'ereš* 'beast of earth', *ma'yənō-māyim* 'spring of water'), *šōχənī sənēḥ* 'dweller in a thorn-bush', *bənī 'āθōnō* 'his ass's colt' (also with the feminine, as *'al-diβrāθī malkī-šedeq* '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 apparently had a locative in *-ā*, 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 *svrabhakti*-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.

CHAPTER V 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 > 'ānī with ā 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, 'ānī	'enā	'anā	'ana	'an-ā(kā)
" 2nd masc.	'atta	'attāh, 'att	'att (Bib. Aram. 'antā)	'anta	'anta	'an-t-ā
" 2nd fem.	'atti	'att(ī)	'att(ī)	'anti	'antī	'an-t-t
" 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.	('ā)nīnu, (a)nīni	('ā)naḥnū (Miš. 'ānū)	('ana)ḥnan (Bib. Aram. 'ānaḥnā, Miš. 'ānan)	naḥnu (Egypt. iḥna, Trip. ḥne)	neḥna	naḥ-nū
" 2nd masc.	'attunu	'attem	'attōn (Bib. Aram. 'antūn)	'antum(ū)	'antemmū	'an-t-um-ā
" 2nd fem.	'attina	'attēn(āḥ)	'atleyn	'antunna	'anten	'an-t-inn-ā
" 3rd masc.	šun(u)	(h)ēm(māḥ)	hennōn (Bib. Aram. ḥimmō[n])	hum(ū)	'emūntū (we'etōmū)	h-um-ā
" 3rd fem.	šin(a)	(h)ēn(nāḥ)	henneyn (Bib. Aram. 'innān)	hunna	'emāntū (we'etōn)	š-inn-ā

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 *'ānaḥnū* by analogy with the sing. *'ānī*.

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

§ 233. 2nd plur. fem.: *'attēn* (only once) and *'attēnāḥ* (four times) are evolved from **'antina* 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 *hēnnāḥ* (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)ia* is the affixed form employed with nouns and particles, and **-niia* 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. **-nā*.

§ 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 *y* for the masculine, and *i* 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)ia, -niia
" 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(ā)	-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(ā)	-(h)ōmū	-h-um-ā
" 3rd fem.	-šina, -šin-ātu, -šin-āšim	-hēn, -ān, -hēnnāh	-heyen	-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(<i>kā</i>)	-(<i>i</i>) <i>ā</i> , - <i>niā</i>	- <i>kū</i>	'a-
" 2nd masc.	'an-t-ā	- <i>k-ā</i>	- <i>t-a</i>	<i>t-</i>
" 2nd fem.	'an-t-ī	- <i>k-ī</i>	- <i>t-ī</i>	<i>t-</i>
Plur. 1st com.	<i>nah-nā</i>	- <i>nā</i>	- <i>nā</i>	<i>n-</i>
" 2nd masc.	'an-t-um-ā	- <i>k-um-ā</i>	- <i>t-um-ā</i>	<i>t-</i>
" 2nd fem.	'an-t-inna-ā	- <i>k-inn-ā</i>	- <i>t-inn-ā</i>	<i>t-</i>

§ 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(kā)*, plur. **nā*; sing. and plur. 2nd com. **tā*; 3rd com. **īā*.

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 **ḏī*, **ḏā*, which seems originally to have had no distinction of gender (cf. Arab. *dā* masc., *dī* fem., as contrasted with Heb. *zōṯ* fem., *zeḥ* masc.); and for the plur., P-S **illa*, **illai*, **ul(l)a*.

§ 242. Historically, these are represented as follows: sing.: Heb. *zeḥ* (masc.) < **ḏī*, *zō* (fem.) < **ḏā*; Talm. Aram. *dē(n)* (masc.) < **ḏī*, *dā* (fem.) < **ḏā*; Arab. *dā* (masc.), *dī*, *tī*, *tā* (fem.); Eth. *zē* (masc.), *zā* (fem.); plur.: Heb. **ēl* < **illa* beside **elleḥ* < **illai*; 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, **ḏī*, being regarded as a gen., was supplemented in part by a nom. **ḏū* (poetic Heb. masc. *zū*, Arab. *dū*, *dī*, *dā* masc., *dātu*, *dāti*, *dāta* fem.; Heb. *zōṯ* fem.); and the plural shows Bib. Aram. **illēn*, Arab. **ulū*, **ulī* masc., **ulātu*, **ulāti* fem.

§ 244. Heb. *zeḥ* and *zō* occasionally serve for relative pronouns (§ 247; cf. also Eth. sing. *za* relative, *zē* 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(eḥ)* < **hallaḥ* < **hā-'allaḥ*, fem. *hallēzū* probably < **halliḏū* < **hā-'alliḏū*.

§ 245. The element **hā* just mentioned is not only found in such words as Arab. *hādā* 'this', *hākahā* 'accipe', Syr. *hādā*, *hāleyn* 'this, these', *hāw*, *hānōn* 'is, ei', etc., but serves in Hebrew, Phoenician, and the inscriptions of Šafā, Lihyā, and Tamūd as a prefixed article, while in Aramaic it is affixed for the same purpose (e.g. Heb. *ham-melex* 'the king'; Phoen. *HRBT* = *har-rabbat* (?) 'the great lady'; Syr. *malkā* 'the king': *mālex* '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-melex* > *ham-melex*, 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-hēmāmāh* 'in those days', Syr. *hā saybārābeḥ* '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* 𐤇𐤃𐤁, 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. *dā*, Arab. *alla-dī*, Eth. *za*, etc.), any real pronoun of this category has been practically supplanted in all the earlier portion of the Old Testament by 'āšer, a noun which originally meant 'place' (Acc. 'āšru 'place' [cf. 'āšar 'in'], Syr. 'aθar 'place', Arab. 'aṭaru', Eth. 'ašar 'footstep, mark'), and which appears only in the construct (its *ā* may be due to Aram. influence).

§ 248. The nominal origin of 'āšer explains the syntactic peculiarity of phrases containing it, as *kol-remeš 'āšer hū'-hay* 'every moving thing that liveth', *han-nāβī 'āšer šālāhō YHWH* 'the prophet whom YHWH hath sent', *gōy 'āšer lāšōnō* 'a people whose tongue', 'ereš 'āšer-šām haz-zāhāβ 'a land where there is gold', *kol-ham-māqōm 'āšer nāβō šāmmāh* 'every place whither we shall come', *hā-'āḏāmāh 'āšer 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' ἐφώνησαν* 'the women who called me', *τὰ παιδιά τοῦ γνωρίζω τῆ μάνα 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 'āšer is seen in such passages as *ba-'āšer kāra' šām nāḩal* 'where he bowed, there he fell', *'el-'āšer tēlaxī 'ēlēx* '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 *šā, 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 **šī*, **šā* (§ 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. *mazzeḩ* (< **mā-zeḩ*, Targ. *māḩēn*, Arab. *mā dā* 'what?').

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

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

CHAPTER VI
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. *tīltā*ⁿ 'every third'), are expressed by doubling the cardinal concerned, as Heb. *šib'āh šib'āh* 'seven each', *šēš wā-šēš* 'six each'. Multiplicatives are indicated either by the masculine singular (implying the loss of a feminine noun like *pa'am* denoting 'times') or by the feminine dual, as Heb. *šēβa'*, *šib'āθayim* 'seven times'.

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

§ 258. 'One': Heb. *'ehād* (< **aḥhad-* (cf. § 21, note 12) is properly the pausal form as contrasted with the const. form *'ahaḍ* (< **aḥadu*; *'aštēy* is used solely in combination with *'āsār*, *'esrēh* 'ten', and finds cognates only in Acc. *'ištēn* and, probably, Qatabānian *'ŠTN*. Eth. *'aḥattī* is formed by analogy with the pronoun *ye'etī* 'she' (see § 225).

§ 259. 'Two': Heb. *štayim* (< **eštayim?* cf. § 52) (< **štayim* (once actually *šəθēy*) is for **šettayim* (with the vocalism of the masc. *šənayim*) (< **šittayim* (< **pintay-* (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	'eḥād, 'aštēy	ḥaḏ	'aḥadu ⁿ	'aḥadū	'aḥadu
" fem.	'ettu, 'ištēnit	'aḥaḏ, 'aštēy	ḥəḏā	'iḥdā'u ⁿ	'aḥattī	'aḥadtu
2nd masc.	šinā	šənayim	təreyṇ	iṭnāni	(kel' ē[tū])	ḥinaḯ
" fem.	šittā	štayim	tarleyṇ	iṭnatāni	(kel' ētī)	ḥintaḯ
3rd masc.	šalāšu	šālōš	təlāḏ	ṭalātu ⁿ	šalās	ḥalāḥu
" fem.	šalaštu	šəlōšāḥ	təlāḏā	ṭalātatu ⁿ	šalāstū	ḥalāḥatu
4th masc.	'arba'u	'arba'	'arba'	'arba'u ⁿ	'arba'	'arba'u
" fem.	'irbittu	'arbā'āḥ	'arbə'ā	'arba'atu ⁿ	'arba'atu	'arba'atu
5th masc.	ḥamšu	ḥāmēš	ḥammeš	ḥamsu ⁿ	ḥames	ḥamišu
" fem.	ḥamištu	ḥāmiššāḥ	ḥamšā	ḥamsatu ⁿ	ḥamestū	ḥamišatu
6th masc.	šeššu	šēš	šeḏ	sittu ⁿ	sessu	šidḥu
" fem.	šeššit	šiššāḥ	('e)štā	sittatu ⁿ	sedestū	šidḥatu
7th masc.	sibu	šeḃa'	šəḃa'	sab'u ⁿ	sab'ū	šab'u < *sab'u
" fem.	sibittu	šiḃ'āḥ	šaḃ'ā	sab'atu ⁿ	sab'atū	šab'atu < *sab'atu
8th masc.	samānu	šəməneh	təmānē	ṭamāni ⁿ	samānī	ḥamānī < *ḥamaniḥu
" fem.	samāntu	šəmənāḥ	təmānyā	ṭamāniyatu ⁿ	samānītū	ḥamāniḥatu
9th masc.	tišu	tēša'	təša'	tis'u ⁿ	tes'ū	tiš'u
" fem.	tišit	tiš'āḥ	teš'ā	tis'atu ⁿ	tes'atū	tiš'atu
10th masc.	'ešru	'ešer, 'āšār	'əsar	'aš(a)ru ⁿ	'ašrū	'aš(a)ru
" fem.	'ešertu, 'ešrit	'āšārāḥ, 'ešrēḥ	'esrā, 'esrē	'ašaratu ⁿ , 'ašrata	'ašartū	'ašar(a)tu, 'ašratu

istēt

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

§ 260. 'Three': in the fem. const., the abs. **palāpatu* (Heb. *šəlōšāh*) > **palāptu*, whence Heb. const. *šəlōšeθ*.

§ 261. 'Five': the Heb. fem. abs. *ḥamiššāh* instead of **ḥāmēšāh* is influenced by analogy with the regular *šiššāh* 'six' (fem.), and its const. *ḥāmēšeθ* instead of the regular **ḥāmešeθ* < **ḥamištu* has *ē* instead of *e* through analogy with the regular masc. *ḥāmēš*; Syr. shows *hammeš* instead of **ḥāmeš* through analogy with 'arba' 'four'.

§ 262. 'Six': from P-S **šidpu* 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* < **šidpatu* has similarly been influenced by the corresponding form *ḥāmēšeθ* '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 **šidpu*, **šidpatu* 'six'.

§ 264. 'Eight': Acc. *samānu*, *samāntu*, instead of **šamānu*, *šamāntu*, have *s* instead of *š* < *ṣ* 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. 'asar, Arab. 'ašru, Eth. 'ašrū; (b) 'x+ten' masc. P-S **ašaru*, Heb. 'āšār, Arab. 'ašaru; (c) 'ten' fem.: P-S **ašar(a)tu*, Acc. 'ešertu, Heb. 'āšārāh, Syr. 'esrā, Arab. 'ašaratu, Eth. 'ašartū; (d) 'x+ten': P-S **ašratu*, Acc. 'ešrit, Heb. 'ešrēh (probably borrowed from Aram.), Syr. 'esrē, Arab. 'ašrata.

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

§ 267. The decades from 'twenty' to 'ninety' are uninflected absolutes. 'Twenty', as being 'two tens', was originally a dual **išrā*, as is still the case in Accadian, South Arabic, and Ethiopic ('ešrā, 'išray, 'ešrā; see § 196), these languages forming the other decades analogously in the dual (*šalāšā*, *talāṭay*, *šalāsā* 'thirty', etc.), while elsewhere in Semitic the plural of the decades from 'thirty' on (Heb. šəlōšim, Syr. *talāṭin*, Arab. *talāṭūna* 'thirty', etc.) has pluralised the original dual 'twenty' (Heb. 'ešrim, Syr. 'esrin, Arab. 'išrūna).

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-ḥāmiššāḥ la-ḥōdeš* 'on the fifth (day) of the month'.

§ 269. As in I-E¹, 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. *qaḏmāyā*, Eth. *qadāmī*: Acc. *quḏmu* 'front, former time', Heb. *qedem* 'front, east', Syr. *qaḏem*, Arab., Eth. *qadama* 'precede'; Arab. *'awwalu*: Heb. *'ulām* '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 **kātīb-* (cf. §§ 118, 126, 132).

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

	<i>*katub-</i>	<i>*katīb-</i>		<i>*kātīb-</i>	
	Acc.	Heb.	Syr.	Arab.	Eth.
'second'	<i>šanū</i>	<i>šēnī</i>	<i>taryānā</i>	<i>tāni</i> ⁿ	<i>sānīt</i>
'third'	<i>šalšu</i>	<i>šəlīšī</i>	<i>təlīḥāyā</i>	<i>tālītu</i> ⁿ	<i>šales</i>
'fourth'	<i>ribu</i>	<i>rəβī'ī</i>	<i>rəβī'āyā</i>	<i>rābi'u</i> ⁿ	<i>rābe'</i>
'fifth'	<i>ḥanšu, ḥaššu</i>	<i>ḥāmīšī</i>	<i>ḥəmīšāyā</i>	<i>ḥāmisu</i> ⁿ	<i>ḥāmes</i>
'sixth'	<i>šiššu</i>	<i>šiššī</i>	<i>šəḥīḥāyā</i>	<i>sādisu</i> ⁿ	<i>sādes</i>
'seventh'	<i>sibū</i>	<i>šəβī'ī</i>	<i>šəβī'āyā</i>	<i>sābi'u</i> ⁿ	<i>sābe'</i>
'eighth'	<i>samānu</i>	<i>šəmīnī</i>	<i>təmīnāyā</i>	<i>tāminu</i> ⁿ	<i>sāmin</i>
'ninth'	<i>tešū</i>	<i>təšī'ī</i>	<i>təšī'āyā</i>	<i>tāsi'u</i> ⁿ	<i>tāse'</i>
'tenth'	<i>'ešru</i>	<i>'āšīrī</i>	<i>'əšīrāyā</i>	<i>'āšīru</i> ⁿ	<i>'āser</i>

§ 272. For 'sixth' the regular Hebrew form would be **šəḥīšī*, but the actual form *šiššī* has been modelled on the cardinal *šēš*, *šiššāḥ*; Arab. *sādisu*ⁿ instead of **sādiḥu*ⁿ shows assimilation of *t* to *s* because of the initial *s* (contrast the cardinal *sittu*ⁿ < P-S **šidḥu*).

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.

CHAPTER VII
PARTICLES

[*VG* i, §§ 250-5, ii, §§ 25 d, 34 e, 45 d, 156 b (adverbs); §§ 12, 56-9, 104-9, 276, 457-8 (command and prohibition); §§ 144, 160, 187-8, 235-67, 348-53, 413-18 (prepositions); §§ 285-90, 302-11, 394-412, 419-56, 464-5 (conjunctions); §§ 3, 7, 19 (interjections); *KVG* §§ 69, 73, 121-2; *P* § 187; *Z* § 59; *O* §§ 158-63; *B* pp. 16-17; *B-L* i, §§ 80-3; *G* §§ 99-105.]

§ 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 **hā*, § 245): Heb. *hālōm*, 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. *hā* '-ne', *hālō*, '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. *kaḥa(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, 'āχēn '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-aḥ-*, Heb. *pō[h]* 'here' [cf. § 292]).

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

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

b. Interrogative

§ 279. P-S **aḥ* (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. māḥay, Acc. 'immati, Syr. 'emmaḥ < *'ina matai, Arab. matā 'when?'.
c. Voluntative

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

d. Assertional

§ 282. P-S *iśai 'there is': Acc. 'išu 'est illi', Heb. yēš, Syr. 'iḥ < *'iś (probably by analogy with layḥ 'is not' < *lā 'iḥay < *lā iśai), Arab. laysa < *lā iśa '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', yaḥad 'together' (as a noun, 'unitedness'), m'ōd 'very' (as a noun, 'abundance', cf. § 55), kəβār 'already', 'ūlām (once 'ullām) 'nevertheless', səβīβ 'around' (as a noun, 'surrounding area'), šəβa' 'seven times', māḥār 'tomorrow', Syr. šappīr 'beautifully', t̄āβ 'well', bīš 'badly', sāχ 'thoroughly', Arab. 'abadaⁿ 'always', ḡiddaⁿ 'very', šimālaⁿ 'to the left', kaṭīraⁿ '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. Yəhūdīḥ 'in Jewish, Jewishly', nōrā'ōḥ 'fearfully', niqlā'ōḥ 'wonderfully', rīšōnāḥ 'first(ly)', rabbaḥ (also raβ, rabbāḥ) 'greatly', šēnīḥ 'secondly'; Syr. pa'yāḥ 'beautifully', šəwāḥ, šawyaḥ 'simultaneously', ḥayyaḥ 'in living wise', Yawnā'īḥ 'in Greek, Hellenically', šappirā'īḥ 'beautifully', t̄āβā'īḥ 'well'.

§ 286. Hebrew also employs various substitutes for adverbs. (a) Prepositional phrases like bə-'aḥaḥ- 'once' (lit. 'in one'), kə-'eḥād 'together' (lit. 'as one'), lə-βad 'alone' (lit. 'for separation'), mib-bayīḥ 'within' (lit. 'from house'), 'ad-m'ōd '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-dālika* 'therefore' (lit. 'for this'), *li-mā* 'why?' (lit. 'for what?'), Eth. *ba-'entaze* 'therefore' (lit. 'in this').

§ 287. (b) Stereotyped imperatives (or, possibly, infinitives absolute), especially of the Hiφ'il (see §§ 395-6), as *haškēm wə-ha'ārēβ* 'at morning and evening' (lit. 'start early, make it evening'), *harbēh* 'greatly' (lit. 'make it great').

§ 288. (c) Sentences, as *maddūq* 'wherefore?' (< **māh yādūq* '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. *balhūdaw*, Eth. *bāhtitū* '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, 'aḥārēy 'after' (as a noun, 'hinder part'), 'ēšel 'beside' (as a noun, 'proximity'), *balī* 'without' (as a noun, 'destruction'; cf. Acc. *balū*, *balī* 'without'), *ba'aḏ* 'away from, behind' (cf. Arab. *bu'du* 'distance, separation,' *ba'du* 'after'), *zūlaḥ* 'except' (as a noun, 'removal'), *mūl*, *mō(')l* 'before' (as a noun, 'front'), *neyeḏ* 'in front of', *nōχah* 'straight before' (cf. *nāχōqh* 'straight[ness]'), *səβīβ* 'around' (cf. § 284).

§ 291. The following prepositions are common to more than one Semitic language: P-S **ilaj* 'to', Acc. 'ilī, Heb. 'el, 'ēlēy, 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 **baijn* 'between', Acc. 'ina bīrīt (< *'ina baijnāt), Heb. *bēyn*, Syr. *baynay*, Arab. *bayna*, Eth. *bayna*, *baynāt* (cf. Heb. *bēnayim* 'space between two armies', Arab. *baynu* '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. *liφamēy*) '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 **adaḷ* 'up to, until', Acc. 'adī, Heb. 'aḏ, 'āḏēy, Syr. 'əḏammā (< *'aḏaymā, Sab. 'D(Y); P-S **alaj* 'on, upon', Acc. 'elī, Heb. and Syr. 'al, 'ālēy (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 **tahta* 'under', Heb. *taḥaṯ*, *taḥt*(ēy), Syr. *təḥōṯ*(ay), *təḥēṯ*, *taḥtay*, Arab. *taḥta*, Eth. *tāhta*, *tāhtē*.

C. CONJUNCTIONS

§ 292. The chief conjunctions found in Hebrew in common with other Semitic languages are as follows: P-S **aw* '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 **ua* 'and', Acc. 'u, Heb. *wa*, *wə*,¹ Syr. *wə*, Arab., Syr. *wa*; P-S **kai* '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. 'āhāh, '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 *ḥālīlāḥ* '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 salutesst 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 **kaḏaba* '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. *kāβēḏ* 'be heavy', *qāṭōn* 'be small') or incomplete (transitive, e.g. Heb. *hāφēš* '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. *ṭāḇaḥ*, Syr. *ṭəḇaḥ*, Arab. and Eth. *ṭabaḥa*; P-S **naḫar-* 'guard, watch', Acc. *naḫāru*, Heb. *nāḫar*, Syr. *nəḫar*, Arab. *naḫara*, Eth. *naḫara*.

§ 304. Type **katib-*. P-S **ḫabiš-* 'be dry', Heb. *yāḇēš*, Syr. *yəḇeš*, Arab. *yabisa*, Eth. *yabesa*; P-S **šalim-* 'be sound, complete', Acc. *šalim*, Heb. *šālēm*, Syr. *šəlem*, 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 *yāḫōr* 'be afraid' (cf. Arab. *waḡira*), *yāḫōl* 'be able' (cf. Acc. 'akālu), *yāqōš* 'lure', *qāṭōn* 'be little' (cf. Syr. *qəṭan*), *šāḫōl* 'be bereaved' (cf. Targ. *təḫōl*, *təḫēl*, Arab. *ṭakila*). In other dialects the type is even more sporadic, e.g. Acc. *maruḫ* 'be ill'; Syr. *qəḫōd* 'bristle up' (beside *qəḫad*), Mand. *təqun* 'be firm' (cf. Syr. *təqen*, Heb. *tāqan*), *bəṭun* 'be pregnant' beside *bəṭin* (cf. Syr. *bəṭen*, 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. *təqen*, Mand. *təqun*, the three types may co-exist, not merely in different languages, but in the same one, as Heb. 'āḥaḇ, 'āḥēḇ 'love', 'āšam, 'āšēm 'offend, be guilty', *dāḇaq*, *dāḇēq* 'cling' (Syr. *dəḇaq*, *dəḇeq*), *šāḫan*, *šāḫēn* 'dwell', *šāḫal*, *šāḫōl* 'be bereaved'; Syr. *ḥəsan*, *ḥəsen* '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', *hurima* 'be deprived', *ḡu'ila* 'be put', *ḡuriba* 'be beaten'. In Biblical Aramaic it appears with *ī* (< *i* by analogy with the participle, e.g. *ṭarīd* 'be driven out', *kəṭīβ* 'be written', *yəḥīβ* '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 **ioktab-* (< **iuktab-* in the imperfect, with *o* (< *u* by analogy with the type **ioktab-* (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 **ioktab-* 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. **ioktab-*; (b) if the corresponding impf. **iaktīb-* and perf. **hoktab-* do not occur. Here belong, e.g. Heb. 'ukkal, *yə'ukkal* 'be devoured' (< **'ukal*, **yə'ukal* (cf. Arab. 'ukila, *yu'kalu*), *luqqah*, *yuqqah* 'be taken' (< **luqah*, **yulqah*; the perfects 'ussar 'be taken prisoner', *huṣṣaβ* 'be hewn', *yullaḏ* 'be born', *yušsar* 'be formed', *nuppaḥ* 'be blown', 'ubbaḏ 'be worked', 'uzzaβ 'be deserted', *šuggal* 'be ravished', *sutṭaφ* 'be scoured', *šuppaχ* 'be poured out'; and the imperfects *yəḥuppaš* 'will be sought out', *yuqqam* (< **yunqam* 'will be avenged', *yuttan* (< **yuntan* 'will be given', *yuttaš* (< **yudtaš* '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', *šōšēṭī* 'I have plundered' (< **šōsēṭī* 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 *kūtib-*. This passive of **kātab-* (cf. Arab. *kūtiba: kātaba*) is excessively rare in Hebrew, as *šōraš* 'be rooted', and probably in Hos. xiii, 3, where *yāsō'ar*, rather than the *yāsō'ēr* of the text, is favoured by Septuagint ἀποφυσώμενος, Vulgate *raptus*, Pāšitā *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*, *kittēβ*, 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 *kittēβ*, as *hiššaβ* 'consider, plan', *limmaδ* 'teach', *'ippar* 'cast dust': *kibbēs* 'wash', *dibbēr* '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', *qiššaš*, *qiššēš* '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 *Mənaššeḥ* 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 *kittēβ* 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. *ḍurriḇa* 'be beaten violently', *kussira* 'be broken in pieces', *quttila* 'be massacred'; Heb. *ḥullaq* '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', *šoddəḏāḥ* 'she hath been devastated' beside *šuddəḏāḥ*, 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 *məḥuspās* 'scaled off', as well as, perhaps, by Heb. *məχurbāl* 'bementled' (cf. §§ 64, 402).

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

§ 317. *Type *katabab-*. This type is historically represented by Heb. *kiḥbaβ*, Aram. *kaḥbaβ*, *kaḥbeβ*, Arab. *iktabba*, Eth. *katbaba* (cf. also Acc. *šūqamumu* 'stand upright', *šūqalulu* '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'ānan* 'be at ease, secure', *ra'ānan* 'be green'; Syr. 'aβdeδ 'enslave', 'azrar 'enwrap', 'aynen 'eye'; Arab. *išfarra* 'be yellow', *iswadda* 'be black', *i'wağğā* 'be crooked', *iḥwalla* 'squint', *irbatta* '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 *səḥarḥar* 'throb', translated in Talmudic Aramaic by the similar form *šəmarmar* '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'šaušaba* 'be gathered together', *imlaulaḥa* 'be salt'.

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

(cf. Arab. *ḥamara* 'ferment, leaven', 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', *niḏraš* 'let oneself be consulted, sought out', *niš'al* 'ask for oneself'; Arab. *inkasara* 'be broken', *inqaṭa'a* 'be ended', *inḥaṭama* 'be broken', *inhazama* 'be put to flight', *inḥada'a* 'let oneself be deceived'; Eth. *'anfara'aša* 'hop'.

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

§ 322. Type **hakatab-*. This appears historically in Heb. *hiχtēβ* < **həkətīb* < **hak(a)tab-*, with *i* instead of *a* most probably on the analogy of the corresponding form of verbs with medial *ḫ* (e.g. *hēβīn* 'understand, discern, teach' < **həbəḫian* < **hab(a)ḫian-*; cf. §§ 45, 419-20), Bib. Aram. *haχtēβ*, Eth. (in early inscriptions) *haktaba* (cf. §§ 395-6). The meaning is essentially causative, as Heb. *hiqdīš* 'consecrate', *hišdīq* 'justify', *hiχbīd* 'make heavy, cause to be honoured', *heḥšīχ* 'darken', *hiγbīr* 'confirm', *he'dīφ* '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' < **harayāḥa* beside the usual *'arāḥa*, *harāda* 'wish' beside *'arāda*, *harāqa* 'pour out' (Heb. *hērīq*) beside *'arāqa*, *haymana* 'believe' (Heb. *he'ēmīn*). 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. *hiṣpāqēd* 'present oneself for enumeration', with a corresponding pass. **takutib-*, in Heb. *hoṣpāqad* '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) *iṯkəṯēβ*, Syr. ' *əṯkəṯeβ*, Arab. *iktataba* (by metathesis < **itkataba*; Tun. Arab. *iktab*) < **t(a)katab-* (Arab. pass. *uktutiba*), Eth. *taktaba*, as Acc. 'iptalah 'be afraid'; Bib. Aram. *hiṣgəzēr* 'be cut out', 'iṯ'āqēr 'be uprooted'; Syr. ' *əṯgəβel* 'be created', ' *əṯpəley* 'be divided'; Arab. *iftaraqa*, go asunder', *iltamasa* 'search for', *iqtatāla* '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. *tiḥappēχ*; 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., *hiṣgō'aš* 'toss, reel', *hiṣrō'a* 'be broken asunder', *hiṣpōrar* 'be split' (cf. § 402), but it also appears in Arab. *takātaba*, *itkātaba* (Egypt. Arab. *itkātab*, Syr. Arab. *t^okātab*, Mor. Arab. *tkātab* < **t[a]kātaba*), Eth. *takātaba*, as Arab. *tagāfala* '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', *təḥāḥəreḥ* 'thou wilt hotly contend', and also in Syr. *targem* 'interpret, translate' (cf. § 402, and Arab. *tarḡama* 'translate', Acc. *targumānu* 'interpreter').

§ 329. *Type *takattab-*. This type appears historically as Acc. 'uktattib (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 < *(a)kattab-, Arab. *takattaba*, *itkattaba* (Egypt. Arab. *itkattab*, Syr. Arab. *t^akattab*, 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', *taħawwafa* 'be afraid', *ta'azzama* 'be proud', *tanaššara* 'become a Christian', *tanammara* 'become savage as a leopard', *faṭallaba* 'seek earnestly'; Eth. *takaddana* 'be covered', *taqaddasa* 'be declared holy'.

§ 330. *Type *takuttib-*. This passive of the foregoing appears in Heb. **tukattaβ*, *huθkattab*, Arab. *tukuttiba* (vocalised by analogy with other passives [see §§ 308, 311, 318, 320, 321, 330, 341, 402]; for *h* see § 326), as Heb. *huṭṭammā* < **huttammā* 'be defiled', *hukkabbas* < **hukkabbas* 'be washed', *huddaššēmāḥ* < **hutdaššēmāḥ* (erroneously pointed *huddašēmāḥ*) 'be made fat'; Arab. *tuṭulliba* 'be sought earnestly'.

§ 331. *Type *takatbab-* < **takatabab-* (cf. § 317). This type occurs in Hebrew only in *hištaḥwāwāḥ* < **tašaḥyaḥā* 'prostrate oneself', but finds parallels in Acc. 'uktabib, Syr. 'eθkaθbaβ, and Eth. *takatbaba*, as Acc. 'uštaḥrir 'rest'; Syr. 'eθbawrar 'be amazed', Eth. *tazang^wag^wa* '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', *hiθḥalḥēl* 'writhe with anxiety', *hiθmarmēr* 'become embittered', *hiθgalgēl* 'roll oneself', *hišta'āša* 'delight oneself'; Syr. 'eθbalbal 'be confused', 'eθza'za 'be moved'; Arab. *takabkaba* 'be overthrown', *tağarğara* 'gargle', *tawaswasa* 'be perplexed', *tazalzala* 'be agitated, tremble'; Tigrē *teqatqata* 'be broken', *tekalkala* 'surround'. The type **takābkib-* 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. *'ušaktib*, Miš. *šaχtēβ* (for *ē* instead of *a* cf. §§ 314, 315, 324, 325, 329, 335), Syr. *šaχteβ*, as Acc. *'ušapriš* 'cause to fly', *'ušamqit* 'throw down'; Mis. *ši'bēd* 'enslave' (cf. Heb. *he'ēβīd* 'force to work like a slave'), *šilhēβ* 'be aflame', *širbēβ* 'be great'; Syr. *ša'beđ* 'enslave', *šaħleφ* '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. *saχteβ*, Min. *saktab*, as Miš. *sargēl* 'draw lines'; Syr. *sarheβ* 'hasten', *saqbel* 'oppose' (cf. Heb. *hiqbīl*, Arab. *istaqbala*), Min. *saqnaya* 'dedicate', *sašraħa* 'make flourish'; and here, too, may belong such Arabic verbs as *sadala* 'let the hair hang down': *dāla* < **dayala* 'hang down', *saħata* 'scratch off': *ħatta* 'scratch', *saħaħa* 'spread out': *ħaħā* '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' < **natarāyaq-*, *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*) *niθpattah* 'open oneself' (Heb. *hiθpattah*), *niθkawwēn* 'determine upon', *niθqabbēl* 'receive', *niθnassāħ* 'be tempted', *niθ'aššēm* 'quarrel', and with the usual metathesis *st* < *ts*, etc. (§ 50), *nistappēγ* 'be dried up', *ništappāħ* '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, *ništaħrar* 'be set free', *ništa'bēd* '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', *ši'āša* 'comfort, delight in', *tiltēl* 'hurl'; Syr. *balbel* 'confuse', *garger* 'drag', *za'za* 'arouse', *ramrem* 'raise, exalt'; Arab. *gargara* 'gargle', *zalzala* 'shake', *ḥamḥama* 'neigh', *ḥašḥaša* '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', *šo'āša* '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 (*yixtōβ*, *yaχtēβ* [*Hiφ'il* (§§ 395-6); elsewhere generally coinciding in form with the imperfect, but also distinguished in the Qal of verbs with medial *i* or *u* (§§ 419-20), and in all forms of verbs with final *-h* (§ 421), as *yāqūm*: *yāqōm*; *yiγleh*:¹ *yiγel*], *yixtāβen-*, *yixtāβāh*, *kəθōβ*);² then, with four, Bib. Aram.: indicative, jussive, energetic, and imperative (*yixtuβ*, *yixtāβō* [only 3 plur. masc.], *yixtāβinn-* [3 sing. masc., *yixtāβunn-* 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 *-eh* in the imperfect of verbs with final *-h* 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. *kəṯōḅ*, Syr. *kəṯoḅ*, 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 *'eχtəḅāḥ* < **'aktubā*, etc., as Heb. *'ešmərāḥ* 'let me keep', *'āqūmāḥ* 'let me arise', *nənatteqāḥ* 'let us break asunder', *yāḥšāḥ* 'let him hasten', *tāḅō'āḥ* '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 *šomrāḥ* 'keep!', *miχrāḥ* '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'il; cf. §§ 395-6), Syriac, and Modern Arabic, however, the loss of the final vowel of the in-

¹ e.g. Gk. *ἀγε*, 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. *yixtōβ* [but *Hiφ'il yaxtēβ : yaxtīβ*], Syr. *nextoβ* = 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 *kī rā'īthi 'ēlōhīm . . . wat-tinnāšēl naφšī* 'for I have seen God . . . and my life is preserved', *yēšē . . . wə-'āmaḏ wə-qārā* 'he will go . . . and stand and call'. Outside Hebrew, this construction is found in South Arabic (*YGRBSM WSNKR WSF' WMSR* 'will remove and alter and destroy and take away'), in Moabite (*WYHLPH* '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 *īǧfir lī . . . fa-'adhūla 'l-ǧannata* 'pardon me . . . so that I may enter Paradise', *wa-lā tatǧaw fīhi fa-yahūlla 'alaykum ǧaḏabī* 'and do not exceed therein, lest my wrath alight upon you', *hallā tadrusu fa-tahfaẓa* 'why dost thou not study, that thou mayest learn by heart?', *mā ta'tīnā fa-tuhaddītanā* 'thou never comest to us to tell us something', *lā tanha 'an huluqiⁿ wa-ta'tiya miṭlahu* 'do not restrain (others) from a habit while thou practisest one like it', *hal ta'kulu 's-samaka wa-tašraba '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'iⁿ yašrabu 'he came to a spring of water to drink', 'arsala yu'limuhu bi-dālika 'he sent to inform him of this'; (b) inkafa'a yaḥmadu maḡdāhu 'he returned lauding his morning walk', ḡā'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. qāḡar 'aḡrāhām 'eḡ-sārāḡ 'ištō 'el-mā'ārāḡ ḡādeḡ ham-maxpēlāḡ . . . way-yāqom haś-sādeḡ wə-hammā'ārāḡ . . . lə'aḡrāhām '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-ḡummī tāmaxlā bī wal-taḡḡiḡēnī lə-ḡāneyḡā 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 < *ḡaqūma, 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 (yaqūm: way-yāqom). 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 (kāḡāḡtā: wə-kāḡāḡtā). 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-tišlah* 'stretch not forth', is really a jussive, as is clear from such Hiφ'ls forms as *al-talšēn* 'slander not!' (imperfect **tal-šīn*), *'al-tašhēθ* 'destroy not!' (imperfect *yašhīθ*), *'al-tāšeβ* 'refuse not!' (imperfect *tāšīβ*); but with a real imperfect in *'al-tabbīl* 'look not!'. The jussive likewise is frequently used after *wāw*, as *qaḥ wā-lēχ ū-θāhī 'iššāḥ* 'take (her), and go, and let her be a wife' (after imperative or cohortative), *tāšeθ-ḥōšeχ w-ihī lāylāḥ* '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 *yāhī '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 *yīyēl* < **īyēl*: impf. *yīyēlēḥ*) and the original vocalisation (*yāχlēβ* < **īāktīb*:- *yaχlēβ* [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, **īaktuban* and **īaktubanna*, of which Hebrew and Arabic alone retain both; Accadian has only the former (*'iktuban*, *'iktubana*), and Aramaic only the latter (Bib. Aram. *yədaḥālinnanī* 'it made me afraid', *yəšamməšūnnēḥ* 'they ministered unto him'). In Hebrew, the type **īaktuban* appears, only with affixed pronouns, in such forms as *yō'īdennī* 'he will appoint me a time', *təβa'āθannī* 'thou terrifiest me', *yəχabbəḏānnī* 'he glorifieth me', *yīšmā'ekkā* 'he will hear thee', *'ettəqenkā* 'I shall pluck thee away', *tinšərekkāḥ* 'she will keep thee', *yaḥqərennū* 'he will search him out', *yīqqāḥennāḥ* 'he will take her'.

§ 356. The second type of the energetic, **īaktubanna*, may be the basis of the Hebrew affixed intensive particle *-(n)nā*, which is used with the cohortative (as *'ērəḏāḥ-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', *təḏabber-nā* 'let her speak'), the imperative (as *hippāreḏ 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-'āšīṯā-nnā* 'and thou shalt make'). The particle is likewise added to adverbs, conjunctions, and interjections, as *'ayyēh-nā* 'where?', *'im-nā* 'if', *'al-nā* 'not', *hinnēh-nā* 'lo', *'ōy-nā* 'woe!'.

§ 357. It would seem that such forms as *na'bərāh-nnāh* were developed from **na'burannā*, *yēšēβ-nā* (< **īašibannā*, etc., comparable directly with Arab. *yaktubanna*, and that these (like the corresponding Aramaic forms) were evolving from the type **īaktuban* 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*, *mənyə-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-láb-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 glottogenic 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 'inflectum' (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 *dātā*, *dātāsi* '(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. *dātā vāsūni* '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 *mənγə-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'; North America: Kadiac *tχutšiča-n* 'thy taking' = 'thou takest' (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*, *šaknātīnā*, *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 *kāβēd* '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 *gabātran* 'bear a child': *baītran* 'be carrying'; Lat. *concupio* 'grasp at once' [e.g. in the mind]: *cupio* '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-ihūdāh yōšəβīm . . . wa'ōnī yō'āβ wə-'aβəḏēy 'āḏōnī . . . ḥōnīm* 'the ark, and Israel, and Judah (are) abiding . . . and my lord Joab, and the servants of my lord . . . (are) encamping', *tō'ānāh hū(a)-məβaqqēš mip-pəlišṭīm ū-βā'ēθ ha-hīy(a) pəlišṭīm 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-n-ki* 'thy carrying' = 'thou carriest' (cf. *láma-iki* 'thy llama'), Lule *amaitsi-tse* 'thy loving' = 'thou lovest' (cf. *umue-tse* 'thy mother'), Yaghan *s-ušōχ-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.	<i>yixtəβēnī</i>	<i>nextəβan(ī)</i>
" " fem.	<i>tiχtəβēnī</i>	<i>teχtəβan(ī)</i>
2nd " masc.	<i>tiχtəβēnī</i>	<i>teχtəβan(ī)</i>
" " fem.	<i>tiχtəβīnī</i>	<i>teχtəβīnān(ī)</i>
1st " com.	<i>('ex)təβēnī</i>	<i>('ex)təβan[ī]</i>
3rd plur. masc.	<i>yixtəβūnī</i>	<i>nextəβūnān(ī)</i>
" " fem.	<i>(tiχtəβūnī)</i>	<i>nextəβānān(ī)</i>
2nd " masc.	<i>tiχtəβūnī</i>	<i>teχtəβūnān(ī)</i>
" " fem.	<i>(tiχtəβūnī)</i>	<i>teχtəβānān(ī)</i>
1st " com.	<i>(niχtəβēnī)</i>	<i>(nextəβan[ī])</i>

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

	Hebrew	Syriac
3rd sing. masc.	<i>yixtəβēhū</i>	<i>nextəβeh, 'nextəβīw(hi)</i>
" " fem.	<i>yixtəβehā</i>	<i>nextəβīh</i>
2nd " masc.	<i>yixtəβəχā</i>	<i>nextəβāχ</i>
" " fem.	<i>yixtəβēχ</i>	<i>nextəβeχ(ī)</i>
1st " com.	<i>yixtəβēnī</i>	<i>nextəβan(ī)</i>
3rd plur. masc.	<i>yixtəβēm</i>	
" " fem.	<i>(yixtəβēn)</i>	
2nd " masc.	<i>yixtəβəχem</i>	<i>nextūβəχōn</i>
" " fem.	<i>(yixtəβəχen)</i>	<i>nextūβəχeyn</i>
1st " com.	<i>yixtəβēnū</i>	<i>nextəβan</i>

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

'ATELIC' IN SEMITIC

	Accadian		Hebrew	Syriac	Arabic	Syro-Palestinian Arabic	Ethiopic	
	'Present'	'Preterite'						
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	tiχtāβī(n)	teχtāβīn	taktubīna	tiktābī	tekatebī	
1st " com.	'akatab	'aktub	'eχtōβ	'eχtōβ	'aktubu	'iktub	'ekateb	
3rd dual masc.					yaktubāni			
" " fem.					taktubāni			
2nd " com.					taktubāni			
3rd plur. masc.	'ikatabū	'iktubū	yiχtāβū(n)	neχtāβūn	yaktubūna	}yiktābū	yekatebū	
" " fem.	'ikatabā	'iktubā	tiχtōβnāh	neχtāβān	yaktubna		}tiktābū	yekatebā
2nd " masc.	takatabū	taktubū	tiχtāβū(n)	teχtāβūn	taktubūna	}tiktābū		tekatebū
" " fem.	takatabā	taktubā	tiχtōβnāh	teχtāβān	taktubna			}tiktābū
1st " com.	nikatab	niktub	niχtōβ	neχtōβ	naktubu	niktub		

-i as their final vowel as contrasted with the Arabic -u, while Syriac appears to have had both *i* and *a* (*nex̄təβan[i]*: *nex̄təβeh̄*). 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 *ʕ* (*yaχ̄tīβ*, *ya'āmōδ*, *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'āmōdnāh̄* 'they shall stand up', *way-yiššarnāh̄* 'and they went straight'. In Syriac, the third singular masculine *nex̄tōβ* and the third plural *nex̄təβūn*, *nex̄təβān* are best explained as analogical with the first plural *nex̄tōβ* (similarly the first sing. in Moroccan, Tunisian, and Tripolitan Arabic: *nekteb*, *nuktub*, *nektib*; Biblical Aramaic, however, has *yiχ̄tuβ*, *yiχ̄təβūn*, *yiχ̄təβān*).

§ 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.	<i>kəθāβanī</i>	<i>kəθban(ī)</i>
" " fem.	<i>kəθāβaθnī</i>	<i>kəθaβəθan(ī)</i>
2nd " masc.	<i>kəθaβtanī</i>	<i>kəθaβtān(ī)</i>
" " fem.	<i>kəθaβtīnī</i>	<i>kəθaβtīn(ī)</i>
1st " com.	<i>(kəθaβtīnī)</i>	<i>(kəθaβtan[ī])</i>
3rd plur. masc.	} <i>kəθāβūnī</i>	<i>kəθbūn(ān)(ī)</i>
" " fem.		<i>kəθbān(ī)</i> , <i>kəθaβeynān(ī)</i>
2nd " masc.	} <i>kəθaβtūnī</i>	<i>kəθaβtūnān(ī)</i>
" " fem.		<i>kəθaβteynān(ī)</i>
1st " com.	<i>(kəθaβnūnī)</i>	<i>(kəθaβnān[ī])</i>

'ATELIC' IN PROTO-SEMITIC

	Sing.	Dual	Plur.
3rd masc.	$\dot{\imath}a/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-u/i$	$\dot{\imath}a/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-\bar{a}(n\bar{t})$	$\dot{\imath}a/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-\bar{u}(n\bar{d})$
" fem.	$\dot{\imath}a/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-u/i$		$\dot{\imath}a/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-(n)\bar{d}$
2nd masc.	$ta/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-u/i$	$ta/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-\bar{a}(n\bar{t})$	$ta/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-\bar{u}(n\bar{d})$
" fem.	$ta/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-\bar{i}(n\bar{d})$		$ta/u-\left\{\begin{matrix} k(u)tub \\ k(i)tib \end{matrix}\right\}-(n)\bar{d}$
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.	<i>katib</i>	<i>kāθaβ</i>	<i>kəθaβ</i>	<i>kataba</i>	<i>katab</i>	<i>kataba</i>
" " fem.	<i>katbat</i>	<i>kāθəβāḥ</i>	<i>keθbaθ</i>	<i>katabat</i>	<i>katabat</i>	<i>katabat</i>
2nd " masc.	<i>katbāt(ā)</i>	<i>kāθaβtā</i>	<i>kəθaβt</i>	<i>katabta</i>	<i>katabt</i>	<i>katabka</i>
" " fem.	<i>katbātī</i>	<i>kāθaβt(ī)</i>	<i>kəθaβt(ī)</i>	<i>katabtī</i>	<i>kətabtī</i>	<i>katabkī</i>
1st " com.	<i>katbāk(ū)</i>	<i>kāθaβtī</i>	<i>keθbeθ</i>	<i>katabtu</i>	<i>katabt</i>	<i>katabkū</i>
3rd dual masc.				<i>katabā</i>		
" " fem.				<i>katabatā</i>		
2nd " com.				<i>katabtumā</i>		
3rd plur. masc.	<i>katbū</i>	} <i>kāθəβū</i>	<i>kəθaβ(ū-n)</i>	<i>katabū</i>	} <i>katabū</i>	<i>katabū</i>
" " fem.	<i>katbā</i>		<i>kəθaβ(eyn)</i>	<i>katabna</i>		<i>katabā</i>
2nd " masc.	<i>katbātunū</i>	<i>kəθaβtem</i>	<i>kəθaβtōn</i>	<i>katabtum(u)</i>	} <i>kətabtū</i>	<i>katabkemmū</i>
" " fem.	<i>katbātīnā</i>	<i>kəθaβten</i>	<i>kəθaβteyn</i>	<i>katabtunna</i>		<i>katabken</i>
1st " com.	<i>katbānī/ū</i>	<i>kāθaβnū</i>	<i>kəθaβn(-an)</i>	<i>katabnā</i>	<i>kətabnā</i>	<i>katabna</i>

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

	Hebrew	Syriac
3rd sing. masc.	<i>kəṯāβāhū</i>	<i>kəṯbeḥ</i>
" " fem.	<i>kəṯāβāh</i>	<i>kəṯbāh</i>
2nd " masc.	<i>kəṯāβəχā</i>	<i>kəṯbāχ</i>
" " fem.	<i>kəṯāβēχ</i>	<i>kəṯbeχ(ī)</i>
1st sing. com.	<i>kəṯāβanī</i>	<i>kəṯban(ī)</i>
3rd plur. masc.	<i>kəṯāβām</i>	
" " fem.	<i>kəṯāβān</i>	
2nd " masc.	(<i>kəṯaβəχem</i>)	<i>kəṯaβəχōn</i>
" " fem.	(<i>kəṯaβəχen</i>)	<i>kəṯaβəχeyn</i>
1st " com.	<i>kəṯāβānū</i>	<i>kəṯban</i>

§ 375. In Hebrew, the 3rd sing. fem. *kəṯāβāh* (< **kat(a)bat* (cf., with affixed pronoun, *kəṯāβaṯnī*) is formed like 'feminine' nouns in *-āh* (< *-*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 ('*ā*)*naḥnū* 'we'.

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

	Singular	Dual	Plural
3rd masc.	<i>kataba</i>	<i>katabā</i>	<i>katabū</i>
" fem.	<i>kabat</i>	<i>kabatā</i>	<i>kabā</i>
2nd masc.	<i>katab(a)ta</i>	} <i>katab(a)tumā</i>	<i>katab(a)tumū</i>
" fem.	<i>katab(a)tī</i>		<i>katab(a)tinnā</i>
1st com.	<i>katab(a)kū</i>		<i>katab(a)nā</i>

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.	<i>kutub</i>	<i>kəθōβ</i>	<i>kəθōβ</i>	<i>uktub</i>	<i>uktub, ktūb</i>	<i>keteb</i>
" " fem.	<i>kut(u)bī</i>	<i>kiθəβī</i>	<i>kəθōβ(ī)</i>	<i>uktubī</i>	<i>(u)ktəbī, ktubī</i>	<i>ketebī</i>
" dual com.				<i>uktubā</i>		
" plur. masc.	<i>kut(u)bū</i>	<i>kiθəβū</i>	<i>kəθōβ(ūn)</i>	<i>uktubū</i>	} <i>(u)ktəbū, ktubū</i>	<i>ketebū</i>
" " fem.	<i>kut(u)bā</i>	<i>kəθōβnāḥ</i>	<i>kəθōβ(eyn)</i>	<i>uktubna</i>		<i>ketebā</i>

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

	Hebrew	Syriac
(a) 2nd sing. masc.	<i>koθəβēnī</i>	<i>kəθōβayn(ī)</i>
" " fem.	<i>koθəβīnī</i>	<i>kəθōβīn(ī)</i>
" plur. masc.	} <i>kiθəβūnī</i>	<i>kəθəβūn(ān)(ī)</i>
" " fem.		<i>kəθōβeynān(ī)</i>
(b) 3rd sing. masc.	<i>koθəβēhū</i>	<i>kəθōβāy(hī)</i>
" " fem.	<i>koθəβehā</i>	<i>kəθōβeyh</i>
1st " com.	<i>koθəβēnī</i>	<i>kəθōβayn(ī)</i>
3rd plur. masc.	<i>koθəβēm</i>	
" " fem.	(<i>koθəβēn</i>)	
1st " com.	<i>koθəβēnū</i>	<i>kəθōβayn</i>

§ 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.	<i>k(u)tub, k(i)tīb</i>	} <i>k(u)tubā, k(i)tībā</i>
" fem.	<i>k(u)tubī, k(i)tībī</i>	
	Plural	
2nd masc.	<i>k(u)tubū, k(i)tībū</i>	
" fem.	<i>k(u)tubā, k(i)tībā</i>	

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-*, **kātīb-*, **katūb-* see §§ 120, 125, 132, 127, and for **katb-* (Acc. pass. part. and Arab. inf.) and **maktūb-* (Arab. pass. part.) §§ 122, 160. With Heb. *kəθōβ* cf. such Arab. infinitives as *ṣalāḥu* 'be in good condition', *fasādu* 'be spoiled', *ḍahābu* 'go away', *naḥādu* 'penetrate', and such Eth. participles as *nagāšī* 'king' ('reigning one'); with Heb. *kāθūβ*, Acc. *ba'ūlāti* '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. Leviaš, *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.		<i>kəθōβ</i>				<i>k(u)tub-</i>
" abs.	<i>kātābu</i>	<i>kāθōβ</i>	<i>(meχtaβ)</i>	<i>(katbuⁿ)</i>	<i>(katībōt)</i>	<i>katāb-</i>
Part. act. masc.	<i>kātibu</i>	<i>kōθēβ</i>	<i>kāθeβ</i>	<i>kātibuⁿ</i>	<i>(katābī)</i>	<i>kātīb-</i>
" " fem.	<i>kātibtu</i>	{ <i>kōθəβāḥ</i> <i>kōθeβeθ</i>	<i>kāθəβā</i>	<i>kātibatuⁿ</i>		<i>kātibat-</i>
" pass. masc.	<i>(katbu)</i>	<i>kāθūβ</i>	<i>(kəθīβ)</i>	<i>(ma-ktūbuⁿ)</i>	<i>ketüb</i>	<i>katüb-</i>
" " fem.	<i>(katibtu)</i>	<i>kəθūβāḥ</i>	<i>(kəθīβā)</i>	<i>(ma-ktūbatuⁿ)</i>		<i>katūbat-</i>

jects', Arab. *qabūlu* 'go forward', *rasūlu* 'envoy', 'arūsū' 'bridegroom' ('wedded'), Syr. *rəhūmtā* 'beloved', *gənūβtā* 'stolen goods'; with Eth. *katībōt*, Arab. *raḥīlu* 'travel', *barīqu* 'gleam', 'azīmu' 'resolve'; with Syr. *kəθīβ* (cf. § 126), Heb. 'āsīr 'captive', *māšīqḥ* 'anointed', Arab. *nasīḡu* 'woven', *naḥīru* 'slaughtered', *ḡarīḡu* 'wounded'; with Syr. *mexṭaβ* (cf. § 157), Arab. *madḡalu* 'enter', *maḡbasu* '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'e'l*, 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
<i>kataba</i>	<i>katubu</i>	<i>k(a)tub</i>	[<i>k(a)tūb-</i>]	[<i>kātub-</i>]	<i>k(a)tūb-</i>
<i>katiba</i>	<i>katabu</i>	<i>k(a)tab</i>	<i>k(a)tāb-</i>	[<i>kātab-</i>]	[<i>k(a)tāb-</i>]
<i>katuba</i>	<i>katibu</i>	<i>k(a)tīb</i>	<i>k(a)tīb-</i>	<i>kātīb-</i>	<i>k(a)tīb-</i>

QAL

	Accadian	Hebrew	Aramaic	Arabic	Ethiopic	Proto-Semitic		
Telic <i>a</i>	* <i>kataba</i> ¹	<i>kāθaβ</i>	<i>kəθaβ</i>	<i>kataba</i>	<i>kataba</i>	<i>kataba</i>		
" <i>i</i>	<i>katiba</i>	<i>kāθēβ</i>	<i>kəθeβ</i>	<i>katiba</i>	} <i>katba</i>	<i>katiba</i>		
" <i>u</i>	<i>katuba</i>	<i>kāθōβ</i>	Man. <i>kəθuβ</i> ²	<i>katuba</i>		<i>katuba</i>		
Atelic <i>a</i>	' <i>iktub</i>	<i>yiχtōβ</i>	Bib. <i>yiχtuβ</i>	<i>yaktubu, yaktibu</i> ³	<i>yekteb</i> ⁴	<i>ḵa/uk(u)tubu/i</i> <i>ḵa/uk(i)tibu/i</i>		
" <i>i</i>	' <i>iktab</i>	} <i>yiχtaβ</i>	Bib. } <i>yiχtaβ</i>	<i>yaktabu</i>	<i>yektab</i>	<i>ḵa/uk(a)tabu/i</i>		
" <i>u</i>	' <i>iktib</i>			<i>yaktubu</i>	<i>yekteb</i>	<i>ḵa/uk(u)tubu/i</i>		
Impv. <i>a</i>	<i>katab</i>	<i>kəθōβ</i>	<i>kəθūβ</i>	<i>uktub</i>	<i>keteb</i>	<i>k(u)tub, k(i)tib</i>		
" <i>i</i>	<i>kitib</i>	} <i>kəθaβ</i>	} <i>kəθaβ</i>	} <i>iktib, iktab</i>	<i>ketab</i>	<i>k(a)tab</i>		
" <i>u</i>	<i>kutub</i>				<i>keteb</i>	<i>k(u)tub</i>		
Inf. <i>a</i>	<i>katābu</i>	<i>kāθōβ</i> ⁵	} <i>mextaβ</i>	} <i>katbu</i> ⁿ	} <i>katibōt</i>	<i>katūb-, katib-</i>		
" <i>i</i>	} <i>katēbu</i>	} <i>kəθaβ</i> ⁶				} <i>katbu</i> ⁿ	} <i>katibōt</i>	<i>katāb-</i>
" <i>u</i>								<i>katūb-</i>
Act. part. <i>a</i>	} <i>kātibu</i>	<i>kōθēβ</i>	} <i>kāθeβ</i>	} <i>kātibu</i> ⁿ	} (<i>katābī</i>)	<i>kātub-, kātib-</i>		
" " <i>i</i>		<i>kāθēβ</i>				<i>kātub-</i>		
" " <i>u</i>		<i>kāθōβ</i> ⁷				<i>kātib-</i>		
Pass. " <i>a</i>	} <i>katbu</i> ⁸	} <i>kāθūβ</i>	} <i>kəθīβ</i>	} <i>maktūbu</i> ⁿ	} <i>ketūb</i>	<i>k(a)tūb-, katib-</i>		
" " <i>i</i>						<i>k(a)tāb-</i>		
" " <i>u</i>						<i>k(a)tūb-</i>		

¹ This permansive form seems not to occur.

² Occasionally also in Syriac, as *qəφōδ* 'bristle'; cf. Targ. Aramaic *dəmuχ* '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-*, **katāb* (§§ 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

	Accadian	Hebrew	Arabic	Proto-Semitic
§ 389.				
Telic	'ikkatab	niχtaβ	inkataba	nakataba
Atelic	'ikkatib	yikkāθēβ	yankatibu	ʔa/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 **yānkāθēβ* < **ʔan(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 *kaḍibuⁿ* 'lie', *ḍaḥikuⁿ* 'laugh', *sariquⁿ* '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'el

§ 391. See table on page 106.

§ 392. For the telic see also §§ 312-14; the original *a* always appears in Heb. *kittāβtā* '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.

INFINITIVES AND PARTICIPLES OF QAL

	Proto-Semitic	Accadian	Hebrew	Aramaic	Arabic	Ethiopic
Inf. <i>a</i>	[<i>katūb-</i>]					
" <i>i</i>	<i>katāb-</i>	<i>katābu</i>	<i>kāθōβ</i>			(cf. act. part. <i>katābī</i>)
" <i>u</i>	<i>katīb-</i>	<i>katēbu</i>				<i>katībōt</i>
Act. part. <i>a</i>	[<i>kātub-</i>]					
" " <i>i</i>	[<i>kātab-</i>]					
" " <i>u</i>	<i>kātīb-</i>	<i>kātibu</i>	<i>kōθēβ</i>	<i>kāθeβ</i>	<i>kātibu</i> ⁿ	
Pass. " <i>a</i>	<i>k(a)tūb-</i>		<i>kāθūβ</i>		<i>maktūbu</i> ⁿ	<i>ketūb</i>
" " <i>i</i>	[<i>k(a)tāb-</i>]					
" " <i>u</i>	<i>k(a)tīb-</i>			<i>kəθīβ</i>		

PI'ĒL

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

4. Pu'al

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

§ 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 *hussānuⁿ* '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* < **ja-kutabu* (cf. §§ 307-9).

5. Hiφ'il

§ 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. *taχtēβnāh*). This *i* seems to be by analogy with the regular atelic Hiφ'il of verbs with medial *u* (§§ 419-20), as *yāqīm* (Qal *yāqūm*), cf. Arab. IV *yuqīlu*, *yusīru* (I *yaqūlu*, *yasīru*); cf. also Heb. *yāβīn* (both Qal and Hiφ'il): Arab. I *yabīnu*, IV *yubīnu*; and as in the Pi'el and Hiθpa'el (§§ 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 *i* instead of **haχtōβ*, **maχtēβ*, while the infinitive absolute is modelled on the imperative.

6. Hoφ'al

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

HIΦ'IL

	Accadian	Hebrew	Biblical Aramaic	Arabic	Ethiopic	Proto-Semitic
Telic	[<i>'ušaktab</i>	<i>hiχtīβ</i>	<i>haχtēβ</i>	[<i>'aktaba</i>	<i>'aktaba</i>	<i>hak(a)taba</i>
Atelic	<i>'ušaktib</i>	<i>yaχtīβ</i>	<i>yəhaχtēβ</i>	<i>yuktibu</i>	<i>yākteb</i>	<i>ʔa/uhak(a)tibu/i</i>
Impv.	<i>šuktib</i>	<i>haχtēβ</i>	<i>haχtēβ</i>	<i>'aktib</i>	<i>'akteb</i>	<i>hak(a)tib</i>
Inf. const.		<i>haχtīβ</i>			<i>'aktābī</i>	?
" abs.	<i>šuktubu</i>	<i>haχtēβ</i>	<i>haχtāβāḥ</i>	<i>'iktābuⁿ</i>	<i>'aktebō(t)</i>	?
Part.	<i>mušaktibu]</i>	<i>maχtīβ</i>	<i>məhaχtēβ</i>	<i>muktibuⁿ</i>	<i>makteb]</i>	<i>mahak(a)tib-</i>

HIṬPA'ĒL

	Accadian	Hebrew	Biblical Aramaic	Arabic	Ethiopic	Proto-Semitic
Telic	[<i>'uktattaba</i>	<i>hiθkatt ēβ</i>	<i>hiθkattaβ</i>	<i>takattaba</i>	<i>takattaba</i>	<i>takattaba</i>
Atelic	<i>'uktattib</i>	<i>yiθkatt ēβ</i>	<i>yiθkattaβ</i>	<i>yatakattabu</i>	<i>yetkattab</i>	<i>ʔa/utakatta/ibu/i</i>
Impv.	<i>kutattib</i>	<i>hiθkatt ēβ</i>	<i>hiθkattaβ</i>	<i>takattab</i>	<i>takattab</i>	<i>takatta/ib</i>
Inf. const.	<i>kutattubu</i>	<i>hiθkatt ēβ</i>		<i>takattubuⁿ</i>	<i>takattebō(t)</i>	?
" abs.		<i>hiθkatt ēβ</i>	<i>hiθkattāβāḥ</i>		<i>(takattābī)</i>	?
Part.	<i>muktattibu]</i>	<i>miθkatt ēβ</i>	<i>miθkattaβ</i>	<i>mutakattibuⁿ</i>		<i>mutakattib-</i>

§ 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'il (§ 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*, *kutattib* = *yiθkattēβ*, *hiθkattēβ* as contrasted with Aram.-Arab. *yiθkattaβ*, *hiθkattaβ* = *yatakattabu*, *takattab* suggest that Proto-Semitic had a double form **(īa/u)takattib-*, **(īa/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, *u*, or *ī* 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'; *hāγāḥ*: *yāγāḥ* 'remove': Arab. *waḡā* 'repel'; Heb. *hāmāḥ*,

RARE FORMATIONS

	Pōlēl, Pō'ēl	Pōlal, Pō'al	Hiθpōlēl, Hiθpō'ēl
Telic 3rd sing. masc.	{ 'ōnēn nōḏaḏ	rōmam	
" " " fem.	hōlālāḥ		hiθmōṭaṭāḥ
" 2nd " masc.	kōnantā	hōlaltā	
" " " fem.			
" 1st " com.	{ šōšēṭi rōmamṭi	hōlaltī	hiθ'ōrartī
" 3rd plur. masc.	zōrmū	šōrāšū	hiθmōγāγū
" " " fem.			
" 2nd " masc.			
" " " fem.			
" 1st " com.			
Atelic 3rd sing. masc.	γəhōlēl	γərō'ā'	{ γiθhōlēl γiθgōḏaḏ
" " " fem.	təməṭēṭ		tištōḥāḥ
" 2nd " masc.	təχōnēn	təməγəγenn-āḥ	tiθgōḏaḏ
" " " fem.			tiθgōḏāḏi
" 1st " com.	'eqōmēm		'eθqōṭāṭ
" 3rd plur. masc.	γəβōqāqū	γəhōlalū	γiθgōḏəḏū
" " " fem.		tərōmamnāḥ	tiθmōγaγnāḥ
" 2nd " masc.	tə'ōnēnū		tiθgōḏəḏū
" " " fem.	tə'ōḏēḏnāḥ		
" 1st " com.			niθ'ōḏāḏ
Impv. 2nd sing. masc.	kōnēn		
" " " fem.			hiθrō'ā'ī
" " plur. masc.	rōmēmū		hiθqōšəšū
" " " fem.			hiθšōṭaṭnāḥ
Inf. const.	{ mōṭēṭ bōšasəχem		hiθgōlēl
" abs.	hōγō		hiθrō'ā'āḥ
Juss.			
Part.	mərōmēm	mərōmam	miθgōrēr

Continued on following page

RARE FORMATIONS (*continued*)

	Hoθpa'al	Pu'lal	Pa'lēl	Hiθpa'lēl
Telic 3rd sing. masc.		'umlal	ša'ānan	hištaḥāwāḥ
" " " fem.	huṭṭammā'āḥ	'umləlāḥ	ra'ānānāḥ	
" 2nd " masc.				hištaḥāwīθā
" " " fem.				
" 1st " com.				hištaḥāwēyθī
" 3rd plur. masc.	hoθpāqəḏū	'umləlū	ša'ānānū	hištaḥāwū
" " " fem.				
" 2nd " masc.				
" " " fem.				
" 1st " com.				
Atelic 3rd sing. masc.				yištaḥāweḥ
" " " fem.				
" 2nd " masc.				
" " " fem.				
" 1st " com.				
" 3rd plur. masc.				yištaḥāwū
" " " fem.				
" 2nd " masc.				
" " " fem.				tištaḥāweynā
" 1st " com.				
Impv. 2nd sing. masc.				hištaḥāwī
" " " fem.				hištaḥāwū
" " plur. masc.				
" " " fem.				
Inf. const.	hukkabbēs			hištaḥāwōθ
" abs.				
Juss.				yištaḥū
Part.		məšōβεβεθ (fem.)	məṭaḥāwē (pl.)	mištaḥāweḥ

RARE FORMATIONS (*continued*)

		Pilpēl, Polpal	Hiθpalpal	Pe'al'al, Po'al'al, Pu'la', Tiφ'al
Telic	3rd sing. masc.			Pe. <i>səharḥar</i>
"	" " fem.			
"	2nd " masc.	<i>kilkaltā-m</i>		
"	" " fem.			
"	1st " com.	<i>gilgaltī</i>	<i>hiθmahmāhtī</i>	Ti. <i>tirgaltī</i>
"	3rd plur. masc.	<i>kolkəlū</i>	<i>hiθmahməhū</i>	Po. <i>ḥōmarmərū</i>
"	" " fem.			
"	2nd " masc.			
"	" " fem.			
"	1st " com.		<i>hiθmahmāhnū</i>	
Atelic	3rd sing. masc.	<i>yəχalkēl</i>	<i>yiθmahmah</i>	
"	" " fem.	<i>təsaφšēφ</i>	<i>tiθhalḥal</i>	
"	2nd " masc.			
"	" " fem.			
"	1st " com.	<i>'āsaφšēφ</i>	<i>'ešta'āšā'</i>	
"	3rd plur. masc.	<i>yəša'aš'ū</i>	<i>yištaqšəqūn</i>	
"	" " fem.			
"	2nd " masc.	<i>təšā'ōšā'ū</i>		
"	" " fem.			
"	1st " com.			
Impv.	2nd sing. masc.			
"	" " fem.	<i>salsəleḥ</i>		
"	" plur. masc.		<i>hiθmahməhū</i>	
"	" " fem.			
Inf. const.		<i>kalkēl</i>	<i>hiθmahmēqh</i>	
"	abs.	<i>'ar'ēr</i>		
Juss.				
Part.		<i>məqarqar</i>	<i>miθmahmēqh</i>	Pu. <i>məḥuspās</i>

hūm, hīm, hāmam 'make noise': Arab. *hamhama* 'murmur'; Heb. *ḥāqāḥ*: *ḥāqaq* 'cut in'; *gūr*: *yāγōr* 'fear, dread': Arab. *waḡira*; Heb. *īφ*: *yā'ēφ*: Syr. *'āφ* 'be weary, faint'; *šūq*: *yāšaq* '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'; *sūt* 'swerve': *sāṭāḥ* 'turn aside': Arab. *šaṭṭa* 'be removed, distant'; Heb. *dāχā(ḥ)* 'crush': *dūχ*: Arab. *dāka*: *dakka* 'beat'; Heb. *lūq'* or *lā'a* 'swallow': Arab. *walaḡa* 'lap up (dog)'; Heb. *'ūn* 'dwell': Arab. *ḡaniya* 'live (in a place)'; Heb. *šūš* 'peep, gaze': Arab. *ša'sa'a* 'try to open eyes (puppy)'; Heb. *šāmēm* 'be appalled': Arab. *sa'ima* 'feel disgust'; Heb. *tā'a* 'mock': Arab. *nataḡa* 'calumniate'; Heb. *ḥālāḥ* 'be weak, ill': Arab. *ḥalla* 'diminish': *naḡala* 'become thin'; Heb. *kārāḥ*: Arab. *'akara* 'dig'; Heb. *zāqaq* 'refine, purify': Arab. *ḡaqqā* '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'aš* 'contemn, spurn': Arab. *nāšā* 'flee, avoid'; Heb. *šā'aφ* 'crush, trample': *šūφ* 'bruise': Arab. *nasafa* 'break and scatter'; Heb. *yānaq* 'suck': Arab. *naqā* 'suck marrow from bone'; Heb. *yāšar*: *šūr* 'form, fashion': Arab. *šāra* 'cut'; Heb. *yāšaβ* 'sit': Arab. *ṭabba* 'seat oneself firmly'; Heb. *'āβaδ*: Arab. *bāda* 'perish'; Heb. *'ālaš*: Arab. *laḡza* '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. *bāsā* 'despise'.

§ 405. It is noteworthy that the rare Hebrew conjugations (§ 402) are found only in connexion with weak verbs, especially those with medial *ʔ* (*ʔ*) (§§ 419-420) and with geminated medial consonant (§§ 409-13), except Pōlēl for *lāšōn* 'slander' (part. *məlošəni* [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'il, and Hoφ'al; in Syriac, in Pə'al, 'Aφ'el, and

'Eθtaφ'al, e.g. Heb. *nāyaš* 'approach', atelic Qal *yiggaš*, impv. *gaš*, inf. const. *gešēθ*, telic Niφ'al *niggaš*, Hiφ'il *higgīš*, Hoφ'al *huggaš*; Syr. *nəφaq* 'go out', atelic Pe'al *neppōq*, telic 'Aφ'el 'appeq, 'Eθtaφ'al 'eθlappaq; Acc. *naqāru* 'be otherwise', telic 'iqqur, etc. In Hebrew, the initial consonant of *lāqah* '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. **ḵabuzu-z-u* > **ḵabzu-z-u*: **baza-za-* = **ḵakutub-u* > **ḵaktubu*: **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 **ḵabzu-zu* < **ḵabuzu-zu* would give Acc. **'ibzuz* (exactly represented by the type 'išlul), Heb. **yibz(ōz)*, Syr. **neβz(ōz)*, Arab. **yabzu(zu)*, Eth. **yebz(ez)* (exactly represented by the types *yehšeš*, *yehmam*), so that only Accadian and Ethiopic retain the original formations (though the Ethiopic may be a recreation). The historic Hebrew and Aramaic types *yāβōz*, *nebbōz* (< **nəβōz*), Arab. *yabuzzu* < **ḵabuz(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 **ḵabuzu* > **ḵabzu* > **ḵabzu-z-u* > **ḵabuzzu* (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* < **ḵasbu-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	yixtōβ	nexlōβ	yaktubu	yekleb	ʔa/uk(u)tubu/i
” geminate	'iʃlul	yāβōz, yēḥam	nebbōz	yabuzzu	yeḥšeš, yeḥmam	?
Telic strong	'ikatab	kāθaβ	kəθaβ	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. *hālāl* 'be boastful' shows both sets complete, but with different shades of meaning: Pi'ēl *hillēl* 'praise': Pōlēl *hōlēl* 'make foolish'; Pu'al *hullāl* '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 *šī'āša* 'sport', Palpal *ša'sa* 'be fondled', Hiθpalpēl *hišta'āša* '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 **ʕa'huðu* 'will seize', Acc. 'ēhuz, Heb. *yōhēz*, Syr. *nēhōd*, but Arab. *ya'huðu*, Eth. *ya'aḥaz* (note, however, Arab. impv. *ḥud*, and Syr. Arab. atelic *yāḥud*, *yōḥud*, 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 *ḫ*; in Heb., ' is here retained only when beginning a syllable, e.g. Acc. *malū* 'be full, fill', Heb. *mālē*, Syr. *mālā*, Arab. *mala'a* (but Syr. Arab. *qirī*, *yiqrā* 'read', Mesop. Arab. *qara*, *yaqra*: Heb. *qārā*, *yiqrā*).

5. Verbs With *i*, *u*

§ 417. Verbs with *ḫ* or *ḡ* as one of their three consonants may be treated together. Those with initial *ḡ* in Proto-Semitic are represented by verbs with initial *ḫ* in Hebrew and Aramaic, as Heb. *yālaḏ* 'bear, beget', Syr. 'ileḏ, 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 *ḡ* (but not *ḫ*) vanished in the Proto-Semitic period in the imperative second singular masculine, as Heb. *haβ* 'give!', Arab. *wahaba*, *yahabu*, *hab* < **ḡ(u)hab*; P-S **ḡ(u)lid*, **ḡ(i)lid* 'bear, beget!', Acc. *lid*, Heb. *lēḏ*, Syr. 'ilaḏ (by analogy with verbs with initial *ḫ*), Arab. *lid*, Eth. *lad*; but P-S **ḫ(u)baš* 'dry!' (Acc. 'ešir 'be just!', Arab. *īsir*), Heb. *yəβaš*, Syr. *ībaš*, Arab. *ības*, Eth. *yebas*. The same phenomenon is found in the atelic (except in Accadian), as P-S **ḫaḡlidu* 'will bear, beget', Acc. 'ūlid, Heb. *yēlēḏ*, Syr. *nīlaḏ*, Arab. *yalidu*, Eth. *yelad*; but P-S **ḫaḡbašu* 'will dry' (Acc. 'ešir), Heb. *yīβaš*, Syr. *nībaš*, Arab. *yaybasu*, Eth. *yeybas*.

§ 419. The essential characteristics of verbs with original medial μ and $\dot{\imath}$ 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 observation of the atelic of the first form, as P-S **qayama*, **ḡaqumu* 'stand' (Acc. 'ikān, 'ikūn 'be', Arab. *kāna*, *yakūnu* < P-S **kayana*, **ḡakunu*), Heb. *qām* (< **qōm* through analogy with *qamtā* < **qāmtā* < **qayamtā*, etc.), *yāqūm*, Syr. *qām*, *nəqūm*, Arab. *qāma*, *yaqūmu*, Eth. *qōma*, *yeqūm*; but P-S **šajama*, **ḡašimu*, 'put, place, set', Acc. 'išām, 'išīm, Heb. *sām*, *yāšim*, Syr. *sām*, *nəsīm*, Arab. *šāma*, *yašimu*, Eth. *šēma*, *yešim*.

§ 420. The two types coincide in Hebrew, except in the atelic Qal, and further confusion arises from the frequent interchange of $\dot{\imath}$ and μ (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 μ and $\dot{\imath}$ 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 $\dot{\imath}$ has supplanted that in μ , as P-S **dalaya*, **ḡaldyu* 'draw water', Acc. 'idli, 'idali, Heb. *dālāh*, *yidleh*, Syr. *dālā*, *neḡlē*, Arab. *dalā*, *yadlū*, Eth. *dalawa*, *yedlū*; but P-S **bakaja*, **ḡabkju* 'weep', Acc. 'ibki, 'ibaki, Heb. *bāxāh*, *yibkeh*, Syr. *bəxā*, *neḡkē*, Arab. *bakā*, *yabkī*, Eth. *bakaya*, *yebkī*. Acc. preserves a few traces of the type in μ , as 'imnu 'count' (but Arab. *manay-*), 'aqmu 'burn' beside 'imni, 'aqmi.

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