

STUDIA ORIENTALIA
EDITED BY THE FINNISH ORIENTAL SOCIETY

48:1

ON THE VOCALISM OF THE CLOSED UNSTRESSED SYLLABLES
IN
HEBREW

A STUDY BASED ON THE EVIDENCE PROVIDED BY THE TRANSCRIPTIONS
OF ST. JEROME AND PALESTINIAN PUNCTUATIONS

BY
TAPANI HARVIAINEN

HELSINKI 1977

CONTENTS

PREFACE		p. XIII
ABBREVIATIONS AND OTHER SYMBOLS AND REMARKS		p. XV
I	INTRODUCTION	
1.	Subject	p. 1
2.	Material	p. 4
3.	Method	p. 7
3.1.	Location of Stress	p. 7
3.2.	Closed Syllable	p. 13
3.3.	Treatment	p. 14
4.	The Vocalism of the Unstressed Syllables in Hebrew	p. 16
4.1.	The Vocalism Reflected by Tib. Punctuation	p. 16
4.1.1.	+ a and the Attenuation	p. 16
4.1.2.	+ i	p. 20
4.1.3.	+ u	p. 21
4.1.4.	Secondary Vowels	p. 23
4.1.5.	The Phonemic System of Vowels in Closed Unstressed Syllables	p. 25
4.2.	Special Features of Pal. Punctuation	p. 26
4.3.	Special Features of Bab. Punctuation	p. 32
4.4.	Other Evidence	p. 35
4.4.1.	Attenuation	p. 35
4.4.2.	[i] > [e] and [u] > [o]	p. 37
4.4.2.1.	Septuagint	p. 38
4.4.2.2.	Josephus	p. 39
4.4.2.3.	The Second Column of Hexapla	p. 40
4.4.2.4.	Jerome	p. 41
4.4.2.5.	Jewish Palestinian Aramaic	p. 42
4.4.2.6.	Mishnaic Hebrew	p. 45
4.4.2.7.	Sam. Hebrew, Sam. Aramaic, Aramaic of Ma ^C lula, Christian Palestinian Aramaic	p. 46

II	THE MATERIAL PROVIDED BY ST. JEROME	
1.	Background	p. 48
1.1.	Transcriptions or Transliterations?	p. 48
1.2.	The Quality of the Transcriptions as Reflects of Biblical Hebrew	p. 51
1.3.	Treatment	p. 53
2.	+ /a/	p. 54
2.1.	+ /a/ = Jerome \$a\$ = Tib. \$a\$	p. 54
2.2.	+ /a/ = Jerome \$a\$ = Tib. \$i\$/\$ä\$	p. 57
2.3.	+ /a/ = Jerome \$e\$ = Tib. \$a\$	p. 57
2.4.	+ /a/ = Jerome \$e\$ = Tib. \$i\$	p. 58
2.5.	+ /a/ = Jerome \$e\$ = Tib. \$ä\$	p. 60
2.6.	+ /a/ = Jerome \$i\$ = Tib. \$i\$	p. 62
2.7.	+ /a/ = Jerome \$o\$ = Tib. \$a\$	p. 64
2.8.	Conclusions	p. 65
3.	+ /i/	p. 67
3.1.	+ /i/ = Jerome \$i\$ = Tib. \$i\$	p. 67
3.2.	+ /i/ = Jerome \$e\$ = Tib. \$i\$/\$ä\$	p. 67
3.3.	+ /i/ = Jerome \$e\$ = Tib. \$a\$	p. 68
3.4.	+ /i/ = Jerome \$a\$ = Tib. \$a\$	p. 68
3.5.	+ /i/ = Jerome \$a\$ = Tib. \$i\$/\$ä\$	p. 69
3.5.	+ /i/ = Jerome \$o\$ = Tib. \$i\$	p. 70
3.6.	Conclusions	p. 70
4.	+ /u/	p. 73
4.1.	+ /u/ = Jerome \$u\$ = Tib. \$u\$	p. 73
4.2.	+ /u/ = Jerome \$o\$ = Tib. \$u\$/\$ä\$	p. 73
4.3.	+ /u/ = Jerome \$a\$ = Tib. \$ä\$	p. 74
4.4.	+ /u/ = Jerome \$e\$ = Tib. \$i\$	p. 74
4.5.	Conclusions	p. 75
5.	Remaining Occurrences	p. 76
5.1.	Jerome \$a\$	p. 76
5.1.1.	Jerome \$a\$ = Tib. \$a\$	p. 76
5.1.2.	Jerome \$a\$ = Tib. \$i\$ and the Problem of Attenuation	p. 78
5.1.3.	Jerome \$a\$ = Tib. \$ä\$	p. 84
5.1.4.	Jerome \$a\$ = Tib. \$u\$/\$ä\$	p. 84

5.2.	Jerome $\$e\$$	P. 86
5.2.1.	Jerome $\$e\$ = Tib. \$i\$$	p. 86
5.2.2.	Jerome $\$e\$ = Tib. \$a\$$	p. 88
5.3.	Jerome $\$i\$$	p. 90
5.3.1.	Jerome $\$i\$ = Tib. \$i\$$	p. 90
5.3.2.	Jerome $\$i\$ = Tib. \$a\$$	p. 91
5.4.	Jerome $\$o\$$	p. 91
5.4.1.	Jerome $\$o\$ = Tib. \$u\$/\$a\$$	p. 91
5.4.2.	Jerome $\$o\$ = Tib. \$i\$$	p. 92
6.	Secondary Vowels	p. 92
6.1.	Tib. $\$a\$ \neq$ Jerome $\$e\$$	p. 92
6.1.1.	Jerome $\$a\$ = Tib. \$a\$$	p. 92
6.1.2.	Jerome $\$o\$ = Tib. \$a\$$	p. 92
6.1.3.	Tib. $\$-a\bar{y}i-\$$	p. 93
6.2.	Tib. $\$a\$ \neq$ Jerome $\$a\$$	p. 93
6.2.1.	Jerome $\$e\$ = Tib. \$a\$$	p. 94
6.2.2.	Jerome $\$o\$ = Tib. \$a\$$	p. 94
6.2.3.	Jerome $\$o\$ = Tib. \$a\$$	p. 94
6.3.	Conclusions	p. 95
7.	SUMMARY	p. 96
7.1.	The Relation between Etymology and Jerome	p. 96
7.2.	The Relation between Jerome and Tib.Punctuation	p. 98
III	PALESTINIAN PUNCTUATIONS	
1.	Background	p.102
1.1.	The "Sephardic" Features of Pal. Punctuation	p.102
1.1.1.	The Date of the Change $\bar{a} > \bar{a}$	p.104
1.1.2.	The Quantitative Oppositions of Hebrew	p.109
1.1.3.	The Geographical Distribution of the Change /a/ > [ã] / [o]	p.110
1.1.4.	Sephardic Reading Traditions	p.114
1.1.5.	The Pal. 'a' and 'e' Graphemes and Their Relation to the "Sephardicization" of Reading Traditions	p.117
2.	Tib. $\$a\$ \neq$ Pal. $\$a, \bar{a}\$$	p.126
2.1.	Tib. $\$a\$ =$ Pal. $\$e, \bar{a}\$$	p.126
2.1.1.	Prae-laryngalia	p.126
2.1.2.	Post-laryngalia	p.127

2.1.3.	Remaining Occurrences	p.128
2.2.	Tib. \$a\$ = Pal. \$i\$	p.129
2.3.	Tib. \$a\$ = Pal. \$o\$	p.130
3.	Tib. \$ä\$ ≠ Pal. \$e, ä\$	p.132
3.1.	Tib. \$ä\$ = Pal. \$a, ä\$	p.132
3.1.1.	Prae-laryngalia	p.132
3.1.2.	Post-laryngalia	p.132
3.1.3.	Final Unstressed Syllables	p.133
3.1.4.	Remaining Occurrences	p.135
3.2.	Tib. \$ä\$ = Pal. \$i\$	p.135
3.2.1.	Prae-laryngalia	p.135
3.2.2.	Post-laryngalia	p.135
3.2.3.	Remaining Occurrences	p.136
4.	Tib. \$i\$ ≠ Pal. \$i\$	p.138
4.1.	Tib. \$i\$ = Pal. \$a, ä\$	p.138
4.1.1.	Tib. Word Final \$-iyyäh\$ = Pal. \$-a/äyäh\$	p.138
4.1.2.	Remaining Occurrences	p.139
4.2.	Tib. \$i\$ = Pal. \$e, ä\$	p.141
4.2.1.	Before a Tib. Doubled Consonant	p.141
4.2.2.	Tib. \$-äyi-\$ = Pal. \$-a/äyä/e-\$	p.144
4.2.3.	Remaining Occurrences	p.145
4.3.	Conclusions	p.148
5.	The Counterparts of the Tib. \$ä\$	p.151
5.1.	Tib. \$ä\$ = Pal. \$a, ä\$ <i>prae-laryngalia</i>	p.154
5.2.	Tib. \$ä\$ = Pal. \$a, ä\$ in Infinitive Forms of Qal with Suffixes Added	p.161
5.3.	Tib. \$ä\$ = Pal. \$a, ä\$ in Imperative Forms of Qal with Suffixes	p.163
5.4.	Tib. \$ä\$ = Pal. \$a, ä\$ in Remaining Verbal Forms	p.165
5.5.	Tib. \$ä\$ = Pal. \$a, ä\$ in Remaining Nominal Forms	p.165
5.6.	Occasional Counterparts of the Tib. \$ä\$	p.168
5.7.	The Development of Back Vowels into Front Vowels	p.168
6.	Tib. \$u\$/\$û\$ ≠ Pal. \$u\$/\$û\$	
6.1.	Tib. \$u\$/\$û\$ = Pal. \$o\$/\$ô\$	p.171
6.2.	Tib. \$u\$ = Pal. \$i\$	p.175
6.3.	The Confusion of the Pal. \$o\$ and \$u\$ as a General Phenomenon Irrespective of Position	p.176

7	Exceptional Punctuations Occurring in the Neighbourhood of Laryngeals and the Laryngeal Problem	p.179
7.1.	Vocalizations of the Stem Nif ^C al in <i>verba primae laryngalis</i>	p.180
7.2.	Vocalizations of the Imperfect Forms of the Qal Stem in <i>verba primae laryngalis</i>	p.183
7.3.	כִּוְּנָה , an Exceptional Hif ^C il ?	p.185
7.4.	The Auxiliary Vowels of the Segolates	p.186
7.5.	+pu ^C 1 > \$pa ^C äl-/\$po ^C äl-§	p.187
7.6.	Remaining Exceptions	p.187
7.7.	Summary	p.189
8.	The Attenuation	p.189
8.1.	Tib. \$a\$ = Pal. \$i\$ in the Nominal Prefixes \$m-/\$t-§	p.190
8.2.	Tib. \$a\$ = Pal. \$ä\$ in the Nominal Prefixes \$m-/\$t-§	p.190
8.3.	Tib. \$ä\$ = Pal. \$a\$ in the Nominal Prefixes \$m-/\$t-§	p.190
8.4.	Tib. \$i\$ = Pal. \$a\$ in the Nominal Prefixes \$m-/\$t-§	p.191
8.5.	Tib. \$i\$ = Pal. \$ä\$ in the Nominal Prefixes \$m-/\$t-§	p.191
8.6.	Conclusions	p.192
8.7.	Other Occurrences	p.196
8.7.1.	Tib. \$a\$ = Pal. \$i\$	p.196
8.7.2.	Tib. \$i\$ = Pal. \$a, ä\$	p.196
8.7.3.	Tib. \$ä\$ = Pal. \$a, i\$	p.197
8.7.4.	Pal. \$e, ä\$ = Tib. \$a, i\$	p.197
8.7.	Summary	p.198
9.	SUMMARY	p.200
9.1.	The Peculiarities Occurring in the Closed Unstressed Syllables of the Pal. Punctuations as Compared with Their Tib. Counterparts	p.202
APPENDIX:		
Remarks upon the Rise of the Tiberian Punctuation		p.206
1.	The Vernaculars Spoken in Palestine	p.207
2.	Different Reading Traditions of Hebrew	p.209
3.	The Relationship between the Consonant Text of Bible and its Reading and Punctuation Traditions	p.211
4.	Inconsistencies	p.213

5.	The Stabilization of Punctuations	p.214
6.	Why the Tib. Punctuation was felt Superior and Worthy of Adoption	p.218
BIBLIOGRAPHY		p.229
INDEX OF HEBREW AND ARAMAIC WORDS		p.249

PREFACE

This study began with a corpus dealing with Hebrew attenuation phenomena which I collected primarily from the transcriptions of Josephus, Origenes, and Jerome. I very soon realized that such a selection of examples is unable to provide reliable information; rather, such a study must be extended so as to deal with the vocalization of closed unstressed syllables as a whole, and the history of Tiberian reduced vowels demands a parallel study of its own. I suspected that I might find additional clues shedding light on the observations made on the basis of transcriptions in the Palestinian punctuation, and my expectations have indeed been borne out. This study deals solely with the vowels of unstressed closed syllables, but I hope to have the opportunity to publish a continuation of my work in the near future.

Of the people to whom I owe a debt of thanks I must first mention prof. E. J. Revell of the University of Toronto. He placed at my disposal his collection of photographs which contains copies of most of the manuscripts having Palestinian punctuation. In addition to this he also provided me with the opportunity to make long term use of his own personal analysis of the occurrences of the vowels of the texts. Without these sources those parts of my study dealing with Palestinian texts would hardly have come into being. My deepest thanks go to prof. Jussi Aro who over a period of several years has guided my work along the paths of Semitic linguistics and provided me with encouraging and edifying bits of useful information in so doing. I am also deeply indebted to prof. Ilmari Soisalon-Soininen for similar reasons.

During my studies at the Hebrew University of Jerusalem as a recipient of a scholarship from the Israeli government in 1970-71 I learned how important it is to become acquainted with research published in Modern Hebrew. My friends Mr. Ḥasib Shehadeh and Mrs. Mirjam Ronnen have been generous

in filling the requests for books and copies which I addressed to them in Jerusalem. The personnel of the interlibrary loan department of Helsinki University Library have earned my deepest thanks for their patient understanding of my sometimes idiosyncratic requests.

I received financial support from the Emil Aaltonen Foundation and the Finnish Culture Fund. The Academy of Finland has also granted me a number of temporary positions. The Finnish Oriental Society has accepted my work for publication in its *Studia Orientalia* series in addition to assuming the responsibilities for the costs of publication.

Mr. Eugene Holman has revised my English and I would also like to thank him for references to sources in the field of general linguistics.

Mrs. Saima Immonen carried out the final typing, a task demanding great exactitude and patience.

My thanks also extend to friends and above all to the members of my family. They have all provided invaluable support and inspiration for my work.

I should like to dedicate this book to my first teachers, my parents.

Helsinki, July 6, 1977 AD

T.H.

Abbreviations and Other Symbols and Remarks

AJSL	=	American Journal of Semitic Languages and Literatures. Chicago.
Akk.	=	Akkadian
app.	=	apparatus (criticus)
Ar.	=	Arabic
Bab.	=	Babylonian (punctuation, reading traditions reflected by it).
B-L	=	cf. Bibliography, Bauer-Leander 1922.
c.	=	column
C	=	consonant
CC	=	cf. Bibliography, Corpus Christianorum.
CSEL	=	cf. Bibliography, Corpus scriptorum ecclesiasticorum latinorum.
EJ	=	Encyclopaedia Judaica. Jerusalem 1971.
Eth.	=	Ethiopic (G ^ə əz)
Hebr.	=	Hebrew
JJS	=	Journal of Jewish Studies. London.
JNES	=	Journal of Near Eastern Studies. Chicago.
JQR	=	Jewish Quarterly Review. Philadelphia.
JSS	=	Journal of Semitic Studies. Manchester.
K-B	=	cf. Bibliography, Koehler-Baumgartner 1958.
l.	=	line
MGWJ	=	Monatsschrift für die Geschichte und Wissenschaft des Judentums. Breslau.
NT	=	Novum Testamentum
On	=	Onomastica sacra, cf. p. 60-62
P.	=	pausal form
Pal.	=	Palestinian (punctuation, reading traditions reflected by it)
Pal.-Tib.	=	Palestinian-Tiberian ("Non-conventional Tiberian", "Pseudo-Ben-Naphtali". Punctuation and reading traditions reflected by it, cf. Dotan 1971b, c. 1461-1468).

- PL = cf. Bibliography, Patrologia Latina.
 PLCNY = Publications of the Linguistic Circle of New York.
 Sam. = Samaritan
 ScrHier = Scripta Hierosolymitana. Publications of the Hebrew University, Jerusalem.
 Sy. = Syriac, Syrian
 Tib. = Tiberian (punctuation, reading tradition reflected by it)
 Var(r) = variant(s)
 ZAW = Zeitschrift für die Alttestamentliche Wissenschaft. Giessen, Berlin.
 ZDMG = Zeitschrift der Deutschen Morgenländischen Gesellschaft. Leipzig, Wiesbaden.

+ + +

- /a/ etc. = phoneme.
 \$a\$ etc. = grapheme.
 [a] etc. = phonetic realization, allophone.
 'a' = â & a.
 'e' = e & ä.
 ∅ = zero phoneme, grapheme, etc.
 â = half open back vowel.
 ä = half open front vowel.
 ə = central vowel.
 ɐ = half open central vowel.
 ɚ = closed central rounded vowel.
 ɪ = closed central unrounded vowel.
 ǎ = ultra-short vowel (here a).

+ + +

Transliterations follow the rules stated in the most recent (1976) drafts of the International Organization for Standardization (ISO):

ISO/DIS 9 "Transliteration of Slavic Cyrillic characters"

ISO/DIS 233 "Transliteration of Arabic characters into Latin characters"

ISO/DIS 259 "Transliteration of Hebrew characters into Latin characters" with the exception that a shewa occurring

between two equal consonants is indicated by the symbol \$ē\$ which is also utilized elsewhere when the indication of a shewa has been necessary; due to typographical reasons \$ä\$ is employed instead of \$ē\$. The Bab. [⋆] is always indicated by \$a\$; otherwise the Bab. and Pal. punctuations have been transliterated according to the system originally employed for the Tib. punctuation (Bab. [·] and Pal. [·] = \$i\$, Bab. [⋆] and Pal. [·] = \$e\$, Pal. [·] = \$ä\$, Bab. [⋆] and Pal. [·] = \$a\$, Bab. [˘] and Pal. [˘] = \$ā\$, Bab. [˙] and Pal. [˙] = \$o\$, Bab. [˘] and Pal. [˘] = \$u\$, and Bab. [˘] = \$ē\$; Bab. [˘] = \$CC/\$C\$, Bab. [˘] = \$C\$).

ISO/DIS 843 "Transliteration of Greek characters into Latin characters"

The Syriac signs [∘] and [˙] are transliterated by \$ā\$; otherwise the transliteration follows that of Brockelmann 1960, p. 5, 9.

+ + +

Hebrew letters used for the pagination have been transformed into Roman numerals (e.g. כד = XXI).

I INTRODUCTION

1. Subject

This study deals principally with the vocalism of unstressed closed syllables in Hebrew.¹ A parallel study of the history of the so-called reduced vowels which I have been concomitantly preparing will be published separately. Observations concerning "reduced" vowels are not used as evidence here; no doubt, they have, however, exerted an influence upon my views concerning certain phenomena in the historical phonology of the Hebrew language.

The material² used in these studies consists mainly of (1) the transcriptions of Hebrew words included in the works of St. Jerome and (2) the Hebrew texts pointed with Palestinian vocalization signs.

From the vocabulary represented by these sources I have attempted to analyze the relationship of the vowel signs in the positions mentioned above in terms with their relationship (1) to the etymological original vowel and (2) to the corresponding vowel in the Tiberian³ punctuation system. The transcriptions of Flavius Josephus provide additional material for the solutions of a number of problems.

The purpose of the treatment has been (1) to reveal conformity with and divergences from the etymology, on one hand, and the Tiberian punctuation, on the other, and (2) to seek explanations of the observed divergences.⁴

1 For the definition of the terms "unstressed syllable" and "closed syllable", see below, p. 7-14.

2 For details, see below, p. 4-7.

3 The traditional name "Tiberian" is used in this study with reference to the punctuation and reading tradition according to the school of Ben-Asher. The punctuations of Ben-Naphtali, Palestinian-Tiberian etc. traditions, even though using Tiberian vowel signs in order to record different reading traditions, are not covered by the term. For the problems of terminology, see Revell 1970b, p. 6; Morag 1972a, p. 111-117; Morag 1972b, p. 147-148, fn. 3.

4 Cf. below, p. 14-15.

Chronologically this study thus deals with the first millenium A.D.; geographically it may be assumed that all of the sources represent the Hebrew of Palestine.¹

The evidence supplied by these sources has been utilized in many studies on special problems of Hebrew linguistics, the nature of Tiberian punctuation, and particularly in historical grammars of Biblical Hebrew. In works of this type scholars have usually been contented to excerpt a number of occurrences which are suitable in that context as evidence in favour of the argumentation of the author, and the proportions between those cases and other, contradicting occurrences found in the same positions are neglected. This could also be said of the use of all non-biblical evidence.

In spite of the studies made by SPERBER (1937-38 and 1966), SUTCLIFFE (1948), and BARR (1967), when dealing with the transcriptions of Jerome we still have to return to the old article *Die Aussprache des Hebräischen bei Hieronymus* of SIEGFRIED (1884).² On Palestinian punctuations the comprehensive surveys of REVELL (Studies in the Palestinian Vocalization of Hebrew, 1970a, Hebrew Texts with Palestinian Vocalization, 1970b) are of great importance. There remains, however, work to be done in order to amplify the results appearing in his calculations and to find out explanations for peculiarities of Palestinian texts.³

A complete description of the vocalism of the transcriptions of Jerome or Palestinian punctuations would demand hundreds of pages as may be seen in BRØNNØ's *Studien über hebräische Morphologie und Vokalismus* on the small fragments of the Second Column of the Hexapla (1943, XVI+489 pages). Therefore I have preferred to limit the subject of my study to those cases where the differences between various source materials for the Hebrew language seem to be most striking, and this

1 Jerome had studied Hebrew, however, already before settling in Bethlehem (cf. Sutcliffe 1948, p. 112-113); for the Pal.punctuations, see below, p. 121.

2 For details, see below, p. 41-42.

3 For the results obtained in these works, see below, p. 26-32. Of the other studies dealing with Palestinian punctuations that of Yahalom (1969) is of particular significance.

has led to my interest being focused on the unstressed closed syllables (and vowel reduction).

The differences in vocalism are rather small; that can already be stated here. However, they are significant indicators of developmental trends showing what a reading tradition is drifting towards or which features are becoming obsolete. In the liturgical reading traditions there is always a tendency to preserve the tradition¹ and only the deviations or "mistakes" can show what lies behind the smooth outside; this is well demonstrated e.g. by the Sephardic manuscripts which observe with extremely few but significant exceptions the Tiberian punctuation rules which reflect a different reading tradition.²

Treating unstressed closed syllables (or "reduced" vowels) one can not avoid encountering the laryngeal problem of Hebrew, i.e. the question of the degree to which the laryngeal and pharyngeal³ consonants have preserved their original Semitic sound values in the reading traditions.⁴ As regards the tradition reflected by the transcriptions of Jerome, it is very likely that the laryngeals were realized properly;⁵ for the Palestinian punctuations connected with this problem, see below, p. 179-189.

After treatment of these themes there is reason to compare the results deduced from different sources and to argue whether they could shed

¹ See Morag 1969, p. 180-183.

² See below, p. 123.

For the significance of scribal "errors" as indicators of phonemic or phonetic changes, see Penzl 1957, p. 201, 206-207.

³ It is questionable whether there are pharyngeal consonants at all in the Semitic languages, see Denz 1964. For the sake of brevity I shall use the term laryngeals referring to all four of the consonants traditionally called laryngeal and pharyngeal: ([ʿ], [ħ], [ħ̣], and [ʕ].)

⁴ For the problem, see Kahle 1959, p. 164-171; Sperber 1966, p.174-176; Meyer 1966, p. 93-97; *contra* Kutscher 1950-51, p. 43-60; idem 1965, p. 41-50; Revell 1970a, p. 89-90, fn. 133. However, now there is new evidence for the problem of laryngeals, since Bar-Asher (1975, p.367-420) has convincingly demonstrated that the confusion of laryngeals was a common feature in Christian Palestinian Aramaic ever since the 6th century (p.415-419); according to him the cause of the phenomenon was the influence of Greek (and Latin) (p.419).

⁵ See Kutscher 1965, p. 46-48; Barr 1967, p. 13-23; Brønno 1970; also Sáenz-Badillos 1975, p. 124-129.

light on the problems concerning the rise and quality of Tiberian punctuation.

+ + +

There are numerous recent studies dealing with the topics I intend to treat that have been published in Israel in Modern Hebrew. Due to the language barrier they have not received the attention they deserve in Europe and North America. In order to facilitate comprehension of certain solutions offered in this study I have found it necessary to describe those results rather extensively in the introductions. I hope that they also will direct the attention of Western scholars to the information gap now existing in Hebrew linguistics.

2. Material

I have collected my material on the transcriptions of Jerome from the lists published twice by SPERBER (1937-38, p. 203-269; 1966, p. 124-165). He has, however, compiled his lists from the old editions of VALLARSI (1766-1772) and LAGARDE (1868 and 1877).¹ Thus it has been necessary to collate the spelling forms with the critical editions published in *Corpus Christianorum* or, because the edition of Jerome's works is in CC still unfinished, with *Patrologia Latina* of MIGNE.

For Palestinian punctuations I have had at my disposal the following manuscript photostats (negatives) acquired by Prof. E.J. Revell:

Cambridge:

TS 20:182	TS H2:75
H2:1	H3:4
H2:29	H5:25
H2:30	H5:222
H2:44	H6:28+NS 116:37
H2:45+58	H6:29
H2:55	H6:38
H2:61	H6:39
H2:72	H6:40

¹ Sperber 1937-38, p. 109, 116; idem 1966, p. 108, 111.

TS H6:97
 H7:1
 H7:2
 H7:7
 H7:15+NS 272:2¹
 H7:44
 H10:164
 H14:79
 H:15:69
 H16:1+NS 249:1
 H16:3+H16:2+H2:2+NS 249:12+Bod.Heb. d63f82-89^{1,2}+Mosseri P171/2¹
 H16:4
 H16:5
 H16:6
 H16:7+Ant. 369³
 H16:8
 H16:9+Bod.Heb. d55f4r-7v,9r-12r
 H16:10
 H16:12+Bod.Heb. c20f5-6
 10H7:1
 10H10:7
 13H2:10
 13H2:11+12
 NS 116:15^b
 NS 117:6+NS 123:2
 NS 117:7+H6:51
 NS 117:13
 NS 118:38
 NS 119:42+NS 301:66
 NS 119:43
 NS 249:2

1 No photograph of this fragment included.

2 The line numbers referring to Bod.Heb. d63f82-89 follow the edition of Kahle (1927, p. III-XXII), not the original order of lines in mss.

3 Microfilm not photostat.

TS NS 249:11
 NS 249:14+TS 12:210
 NS 275:15¹
 NS 275:16¹
 NS 301:62

Oxford:

Bod.Heb. d41f11-15
 d55f12v-14v
 d63f98+97+TS 10H5:7

Manchester:

John Rylands Library, Gaster Geniza Collection, fr. 18 and 21

New York:

J.T.S. Ms. ENA 2020 f23

Cincinnati:

H.U.C. Ms. 1001+'Levias'+TS NS 249:7+TS NS 301:28

Leningrad:

Antonin 222²
 360+361
 912
 959¹

All of these texts are non-biblical, most of them contain *piyyuṭim*; for details, editions, descriptions etc., see Revell 1970b, p. 122-155. In addition to the photostats Prof. Revell has very kindly put his detailed notes on the manuscripts at my disposal. The notes contain tables on the relationship of the Palestinian vowel signs of every text to corresponding (probable) Tib. vowels. By means of the photostats it has been possible to collate the occurrences of both published and unpublished texts.

Besides the liturgical manuscripts enumerated above I have utilized as material all the biblical manuscripts pointed with Pal. vowel signs³

1 No photograph of this fragment included.

2 Microfilm not photostat.

3 For details, see Revell 1970b, p. 73-93, 123-136.

on the basis of the editions and the comparative tables of REVELL.¹ On the contrary, rabbinical texts have been left outside the scope of this study, because *Geniza Fragments* of ALLONY (1973) was not accessible to me. In dealing with the transcriptions of Josephus I made use of the *Namenwörterbuch zu Flavius Josephus* of SCHALIT (1968) as my main source.

3. Method

In stating the subject of this study I used the term "unstressed closed syllable". It contains an idea influenced by Tib. punctuation. Exact facts concerning the location of stress in Hebrew are known to us only on the basis of Tib. punctuation where the majority of the accent signs lies on the stressed syllable. Thus we have to begin this chapter with two discussions: the first one of the place of stress in Hebrew and the second of the closure of syllables.

3.1. Location of Stress

There exist opinions that the Tib. stress system is of rather late origin; its stabilization is dated as late as the 9th century A.D.²

¹ For details, see Revell 1970b, p. 73-98.

² A view of this kind is still defended by Meyer (1966, p. 88-89) who - apparently on the basis of the Qumran texts (for that evidence and contrary views, see Goshen-Gottstein 1958, p. 123-126, and below, p. 9-10) - claims that in spoken Hebrew stress was located on the penultimate syllable "sofern sie lang oder die entsprechende Form durch Endungen erweitert war", otherwise on the antepenultimate syllable. Furthermore, in view of the examples given by Meyer it seems that he considers Samaritan stress patterns more original than Tib. and also finds additional support to his claim there. Moscati (1964, p. 68) referring to the Second Column of Hexapla and Brønno holds the opinion that "the pre-Masoretic stress-accent... must have diverged notably from its later Masoretic version". Brønno's own statement (1943, p. 428) is, however, entirely contrary; according to him the transcriptions of Secunda "für die Annahme eines vom M(asoretischen) T(exte) abweichenden Druckes keine Grundlage darbieten". According to Blau (1976, p. 30-34) the fifth and last period in the history of stress was the change that "final consonant clusters were opened by an auxiliary unstressed vowel", i.e. the segolization; since this change "Hebrew stress became as it is exhibited by the Bible" (p. 34). As is known, the segolization already appears in the transcriptions of the Septuagint (cf. below, p. 39), i.e. ca. 150 B.C.

Tib. stress patterns can, however, be deduced in an unforced manner from an earlier penultimate (and antepenultimate) stress system which testifies for a normal development relations of ancient spoken Hebrew to the Tib. reading tradition also as concerns stress patterns.¹

In certain respects the opinion of KUTSCHER² stands between these two attitudes. According to him at the beginning of the Christian era some "sub-standardic" forms of Hebrew developed where the stress was usually on the penultimate syllable; additionally there existed a synagogue reading tradition with a stress system of the Tib. type. As proofs, Kutscher makes use of the "pausal forms" which occur inside of sentences in Babylonian Hebrew texts (e.g. §yqṭwlny§) and in manuscripts and prints in Mishnah (e.g. §hûzzâqâh§), he also enumerates a number of similar "pausal forms" from Origines' Secunda and the transcriptions of Jerome³ and considers the "pausal forms" of Christian Palestinian Aramaic to result from the influence of Hebrew "dialects" with penultimate stress. According to Kutscher the "pausal forms" have penultimate stress; his main evidence is taken from a Mishnah manuscripts (TS E1 124 & 124a), published by EPSTEIN and dated by him on the basis of the script as from the 10th century⁴, where the accentuation signs fall upon the penultimate syllable contrary to the Tib. accentuation usages (e.g. נִקְרָה , נִפְגְּמָה , שְׁנַפְּחָה , נִסְדְּקָה).

Kutscher inserts the "sub-standardic" stress change in the well known Aramaic change dated ca. 700; on the other hand, taking into consideration the spelling forms of the word "rabbi" without the final §y§ in the ancient inscriptions, he sees the change as originating in the final period of the Second Temple. The ultimate stress and consequently

1 See Cantineau 1931, esp.p.95; Birkeland 1940, p. 5-8; Blau 1976, p. 30-34.

2 Kutscher 1959, p. 30-31, 254-261; idem 1963, p. 277-280.

3 See also the material collected by Yeivin 1968a, p. 364-368.

4 Epstein 1950, p. XXIV: "בערך מן המאה העשירית" "הכתב הוא ישרן, According to him(p. XXIII) the ms. originates from either North Africa or Spain (!). In addition to that, we have to bear in the mind that the palaeography of Hebrew mss. from those centuries is still very problematic (cf. Birnbaum 1971, c. 164,167-169;Goitein 1971, p. 240).

forms as [yiqṭǝlú], [huzzǝqá] were, however, preserved in "standardic" Hebrew, i.e. in the careful reading tradition used in synagogue worship. Later, influenced by the respected biblical reading tradition the "sub-standardic" parallel forms have been corrected in the manuscripts nearly completely; the penultimate stress is preserved, however, in four living reading traditions (Yemenite, Persian, Dagestanian, Ashkenazic, in addition, there are traces left in the Sephardic traditions), the Samaritan penultimate stress also reflects the same "sub-standardic" feature. The "pausal forms" of Qumran Hebrew are to be explained as "sub-standardic" forms with penultimate stress.¹

Reviewing Kutscher's work (1959) where these ideas are expounded MORAG (1960, p. 28-29) does not refute the opinion of Kutscher. However, he presents another possibility. According to it the "pausal forms" represent more original patterns which are most easily preserved in the positions which are strongly stressed, i.e. pausally. In contextual positions, especially in the living languages, a word even may be left without any stress on the strength of the sentence stress in which case the vowels are susceptible to reduction. According to the view of Morag Tib. punctuation has stabilized these two allomorphs so that the contextual forms are always spelled as reduced (\$yiqṭlú\$ etc.) while the original forms (\$yiqṭolú\$ etc.) are preserved in pausal positions. The punctuation traditions which have pausal forms inside of sentences have not established a boundary line of this type between allomorphs, thus the possibility of spelling pausal forms in the context is also open.

As mentioned before (p. 7, fn.2), there is no consensus of opinion on the penultimate stress of the "pausal forms" as \$yqṭwlw\$, \$yqṭwlnw\$, and \$'qṭwlh\$ found in the Dead Sea texts. GOSHEN-GOTTSTEIN (1958, p. 123-126) regards them as phonetic spellings indicating pronunciations as [yiqṭǝlú] etc., i.e. the *matres lectionis* letters stand for reduced vowels which have, however, preserved their original quality; this kind of pronunciation may also be spelled *defective* (\$yqṭlw\$ etc.) and it occurs side by side in

1 Ben-Ḥayyim (1958, p. 225-229; idem 1963) and Bush (1959-1960) stand for the same view.

the texts. He admits, however, that the question remains open.¹

In the review mentioned above MORAG (1960, p. 29) rebuts the claims of penultimate stress posited for Yemenite reading traditions. In the Yemenite reading traditions of the Bible penultimate stress instead of Tib. ultimate stress is rare and it occurs mainly in the reading of non-biblical texts; the main factor of the unstable change is the influence of the spoken language, Yemenite Arabic, and there is no evidence of relationship of the exceptional stress cases to any supposed ancient stress patterns of Hebrew.²

The information on Dagestanian and Persian penultimate stress mentioned by Kutscher comes from the descriptions of IDELSOHN (1913, p. 543, 545) and needs additional verification.³ The rise of Ashkenazic penultimate and antepenultimate stress is most probably connected with the influence of German and Yiddish; in a similar manner Yiddish has influenced since the 11th-13th centuries the development of the Sephardic realization of vowels so that they now have their present Ashkenazic-type values.⁴ Furthermore, the penultimate Samaritan stress seems to be secondary and developed from a system of the Tib. type.⁵

1 The idea of penultimate stress in Dead Sea Hebrew is usually based on the existence of that kind of stress in Samaritan and some other living reading traditions ("had we not what is known to us of the Samaritan tradition, we could not even presume that" [transl.], as Ben-Ḥayyim puts it, 1958, p. 228).

2 The Yemenite stress system is extensively described in Morag 1963, p. 212-261.

3 Besides Idelsohn I have not seen any mention of it, as might be expected e.g. in the article "Pronunciation of Hebrew" written by Morag (1971, chapter C. Stress, c. 1143).

4 For details, see Morag 1963, p. 287, 290; Leibel 1965, esp. p. 71-72.

5 See Macuch 1969, p. 218-224 where different kinds of explanations are described.

Babylonian Hebrew obviously has stress patterns identical with Tiberian.¹ On the basis of a number of accentuation signs YEIVIN regards the verbal "pausal forms" of Bab. punctuation as being stressed in accordance with the Tib. system.²

As for the "pausal forms" of the category \$huzzâqâh\$, they are particularly in the text with Pal. punctuation limited to verbal passive stems;³ the same seems to be the case also regarding other sources.⁴ Due to their limited occurrence they are not valid as proof of a general change of stress. In addition, they are hardly ever found in biblical texts, and this implies that "pausal forms" of this type most probably are morpho-phonemic variants of Mishnaic Hebrew based on the analogy set by the nominal declension (cf. \$dâbâr-\$dbârîm\$).⁵ If in a certain manuscript "pausal forms" receive penultimate accentuation, this does not mean that penultimate stress was a general feature in Palestine.⁶

As might be guessed, there is no concrete positive evidence at my disposal attesting that the stress system of the reading traditions familiar

-
- 1 For details and minor exceptions, see Yeivin 1968a, p. 183-194; idem 1973a, p. 30-33. Thus there is no support in the Bab. punctuation for the surmise of Morag (1963, p. 284-285) that the Yemenite penultimate tendency might be connected to the Bab. traditions as well as to Arabic influence.
 - 2 There are three types of verbal "pausal forms": (a) impf. + obj. suff., e.g. \$tišmorem\$, (b) cohort., as \$w-nidrošâh\$, and (c) only exceptional o-impf. forms, as \$yišponû\$, but none among the a-impf. verbs; \$o\$ of these forms was short. For details, see Yeivin 1968a, p. 342, 363-368, 372; idem 1973a, p. 78, 81-82.
 - 3 So according to my observations to be published later.
 - 4 Cf. Yalon 1938, p. 28-29; Morag 1957b, p. 143-144; Damti (Šibṭi'eI) 1938, p. 10-11 (1972, p. 209-210); Kutscher 1963, p. 277-279; Morag 1963, p. XXVIII, 109; Bar-Asher 1972 (1971), p. 177.
 - 5 Similar allomorphs characteristic to Mishnaic Hebrew are the well known pronominal suffixes sg. 2. masc. \$-âk\$ and sg. 2. fem. \$-ik\$, see Ben-Hayyim 1954, p. 13-29, 51-64; Kutscher 1963, p. 63-71.
 - 6 In addition, there is no information - as far as I know - of the penultimate stress peculiar to the "pausal forms" in the living reading traditions of Mishnaic Hebrew. On the contrary, there are differences between various manuscripts and local usages in the accentuation of Mishnaic texts, cf. Yeivin 1960, p. 157-165; Yeivin 1973b; Allon 1973.

to Josephus, Jerome, or the Pal. punctuators was equivalent to the Tiberian one or even similar to it.¹ However, on the strength of the previous discussion I do not find any convincing testimony supporting the late date of the Tib. stress system nor of decisive changes having occurred in the stress patterns since the beginning of our era, at least. So much the less is there evidence concerning the quality of the supposed non-Tib. stress patterns. On the contrary, according to my observations there is no *consistent* feature in the vocalism of the transcriptions of Jerome or in the Pal. punctuation which could be interpreted as alluding to a non-Tib. stress. For example, there is no tendency to reduce the vowels of the final syllable as in Samaritan Hebrew and Aramaic, no opening of the

1 According to Dietrich (1968, p. 109-111) the Pal. accentuation signs, which usually have no certain situation in respect to the location of stress, do (according to his classification) in the later manuscripts approach the places equivalent to Tib. punctuation. In the "shorthand" (serugin) text TS NS 249:6 + TS NS 172:11 the words are obviously abbreviated in a manner linked with the location of stress. The stress system reflected by this text is in principle equal with the Tib. one. However, a sporadic tendency seems to occur in the case of penultimate stress (as well as in the case of ultimate stress in two occurrences of *he locale*), see Revell 1969, p. 68-75. In another article Revell (1972) has described the placing of the accent signs in six biblical Pal. mss. According to him "the general tendency is to place the accent closer to the beginning of the word than in BHK (= Biblia Hebraica³). This is most marked in words which have (in BHK) a stressed, open, final syllable. Of these, the tendency is more marked in words where the penultimate syllable is open and has a 'full' vowel, and in longer words." (p. 37). However, even in these words the accent signs are placed only in 32-66% of cases on the penultimate syllable (see *idem*, p. 38). Since the consistency is rather incomplete, the tendency could be connected with the observation of Dietrich mentioned above, i.e. the accent signs would be placed either on the stressed syllable or *near* to it. Even if I am not convinced that these accents indicate stressed syllables and that "an older pattern (here the BHK stress pattern) is in the process of change" (*idem*, p. 42) the tendency (as well as that of segolate nouns to the ultimate stress, *idem*, p. 38) is too parallel to the development of Aramaic that it could be neglected in the treatment of Pal. vocalizations, see below, p. 149, fn. 5, p. 174, fn. 5. The accentuation system of the Palestinian-Tiberian punctuation which (with small divergences) follows Tib. usage could be used as an additional argument for the similarity of Tib. and Pal. stress systems; see Díez-Macho 1963, p. 31.

It is not certain, however, that the Pal.-Tib. punctuation is as closely connected with the Pal. reading traditions as is claimed by Morag (1962, p. 34) and Díez-Macho (1963, p. 26). There are a number of isoglosses between Pal.-Tib. punctuation and the early European Sephardic-Ashkenazic (Franco-German) traditions; see Allony 1964; Eldar 1975, p. 209-211; in short Dotan 1971a, c. 1464.

closed vowels in the *penultimate* syllable¹ nor recent prothetic vowels (found abundantly in Samaritan, ma^clūlī, Mandaic, etc.). The change of the Aramaic stress patterns (ca. 700) mentioned above (p. 8) is certainly a factor deserving attention. It has, however, no signification for the period of Josephus and Jerome; it might have had influence on the Pal. reading traditions², but direct proofs are lacking.

With these reservations I draw a parallel between my material as regards the stress and its location with the Tib. stress system. Another possibility would be open: that of calling my unstressed syllables 'syllables which occur in positions where there is an unstressed syllable in Tib. punctuation' and then applying the same method to syllables of all types. However, it would unnecessarily complicate the terminology at least until it has been demonstrated that the stress systems of the Josephus, Jerome, and Pal. reading traditions essentially diverged from that of the Tib. tradition.

3.2. Closed Syllable

The term "closed syllable" also needs explanations, since it is not sufficient in Hebrew to state that every syllable ending in one or two consonants is a closed one. My main criterion has been to deal with those syllables which are considered closed syllables from the standpoint of etymology.

Thus the syllables corresponding to the Tib. syllables followed by *secondary reduced vowels* (e.g. \$ya^c- in \$ya^camod\$ and \$nib- in \$nibāhāl\$ *contra* \$qoṭ- in \$qoṭlīm\$ because the shewa following \$ṭ\$ is no secondary vowel) are included among the closed syllables. On the other hand, since the realization of laryngeal consonants and in particular the transcriptional methods applied to them require further explanation, the syllables closed "virtually" by laryngeals and \$r\$ have not been dealt

1 Cf. the penultimate Aramaic of Ma^clūla where the stressed ⁺i and ⁺u develop into [e] and [o]; see Spitaler 1938, p. 10-11.

2 The only absolute date for Pal. punctuations is provided by the Pal. vowel signs in the ms. Leningrad MS Heb. B 3 (Codex Babylonicus Petropolitani) from the year 916; see Yeivin 1963, p. 127.

It is commonly assumed that the Pal. punctuation dates back to the 8th-10th centuries; see Dotan 1971b, c. 1416-1417, 1433. Cf. also above, p. 12, fn. 1.

with here.¹

Additionally, in order to illuminate the relationship between my material and Tib. punctuation I have found it profitable to treat the counterparts of those Tib. syllables which are followed by the so-called *shewa medium* in connection with closed syllables, although they etymologically represent open syllables.² Due to the same fact, the *divergent auxiliary vowels* of the segolate patterns are included in this study.

3.3. Treatment

Among the transcriptions of Jerome I have collected words where the original quality of the vowel occurring in an unstressed closed syllable³ can be defined by means of language comparison and/or pattern. The main groups built upon the different etymological vowels are compared with the vocalic spellings given by Jerome and these also with Tib. punctuation. Divergences as well as conformity between these three levels are then discussed in order to (1) illuminate the consistency and reliability of the transcriptions of Jerome and to (2) find out reasons calling forth the divergences between etymology and the spelling forms on the one hand, and between the spellings and Tib. punctuation on the other. However, numerous words are left in which the original vowel is unknown; these transcriptions are compared only with Tib. punctuation.

In the Pal. texts the punctuation of the unstressed closed syllables is in principle equivalent to the Tib.⁴ and the divergences mostly occur in those patterns where the original vowel cannot be defined; thus the consistent comparison to the original vocalism is unfruitful and only the comparison between Pal. and Tib. punctuations is made explicit.

-
- 1 For the problems of compensatory lengthening in Tib. punctuation, see B-L, p. 221-222; in the Pal. texts, see Revell 1970a, p. 62-65. For the varying transcriptional methods, see Kahle 1959, p. 164-167; Sáenz-Badillos 1975, p. 124-126. Cf. also East Syriac in which \$r\$ and \$e\$ are not doubled secondarily as other consonants when preceded by \$a\$, see Segal 1953, p. 52, fn. 1.
 - 2 For the occurrences, see Bergsträsser 1918, p. 121r-122 t; Ben-Hayyim 1954, p. 64-74; Rabin 1960, p. 195-202.
 - 3 As defined above (p. 7-14).
 - 4 See Revell 1970a, p. 61-65, 67-68, 70-71, 98; below, p. 26-32.

By the help of the notes of REVELL (cf. above, p. 6) and the tables prepared by him (1970b, 12-95) I have collected the Pal. punctuations of the unstressed closed syllables which diverge from the Tib. punctuation. In the "Sephardicized" text types¹ the divergencies originating from the internal interchange of $\$a\$-\$ä\$$ ² or $\$ä\$-\$e\$$ signs have been neglected.³ All the punctuations of the non-biblical Pal. texts examined in the study have been collated with the photostats; when photostats of the biblical texts have not been available I was not able to collate all of the occurrences given in the various editions and in the tables of REVELL (1970b, p. 73-95). The material is grouped according to the Tib. counterparts, i.e. all the divergences from the Tib. $\$a\$$ are arranged in sub-groups under the main heading Tib. $\$a\$$, e.g. Tib. $\$a\$$ = Pal. $\$ä,e\$$, Tib. $\$a\$$ = Pal. $\$i\$$, etc. Because the divergences are more numerous in the non-biblical texts, the treatment of them precedes that of the biblical texts; for the sake of clarity the classification figures of Revell⁴ are mentioned after each occurrence. For all the divergent groups I have attempted to detect either the phonetic or morphologic factors by means of which the divergences concerned could be interpreted and related to the history of Hebrew.

The Hebrew vocabulary of Josephus is almost exclusively composed of names. The etymologies of the names are, however, quite obscure and this is especially true in regard to the vocalism.⁵ Hence I have not been able to find material which would be adequately reliable for comparisons between the original vowels and the spellings of Josephus. The transcriptions of Josephus are thus used only as an additional material elucidating the results provided by other sources.

1 See Revell 1970a, p. 56-61; idem 1970b, p. 117-119; below p. 102-103.

2 Except examining the counterparts of the Tib. $\$ä\$$ ("qameṣ ḥatuf").

3 Cf. below, p. 117-125.

4 See Revell 1970b, p. 12-.

5 Cf. Noth 1928.

4. The Vocalism of the Unstressed Closed Syllables in Hebrew

4.1. The Vocalism Reflected by Tib. Punctuation

The vowels occurring in the unstressed closed syllables of Tiberian punctuation are \$a\$, \$ä\$, \$i\$, \$u\$, and \$â\$. Etymologically they are reflexes of ⁺/a/, ⁺/i/, ⁺/u/, and ⁺∅.¹

4.1.1. ⁺a and the Attenuation

According to the traditional opinion ⁺/a/ in an unstressed closed syllable develops into /i/ (e.g. ⁺naqtāl > niqtāl). The phenomenon is known by the names 'attenuation' or 'Verdünnung'. A converse development, ⁺/i/ > /a/, so-called Philippi's law, regulates the vocalism of the stressed closed syllables (e.g. ⁺kabīdta > kābād̄tā). Neither of these "laws" applies, however, consistently. As regards attenuation, it only has a slight effect on an ⁺/a/ in the neighbourhood of a laryngeal (cf. e.g. \$'admat\$ st.c., \$^cakbār\$) or before \$l\$, \$m\$, and \$r\$ (cf. \$mamlākāh\$, \$mar'āh\$ etc.); in addition, \$a\$ occurs contrary to the rule in the pattern *qattāl* (\$^ctabbāh\$ etc.), in other patterns before a doubled consonant (\$mabbūl\$ etc.), in derived forms of nominal patterns *qatl* and *qatal* (\$malkāh\$, \$kanpē\$ etc.), and in some verbal forms in medial position (\$npaltām\$, \$hitqaṭṭāl\$ etc.).² Besides these types of exceptions there are words with both \$i\$ and \$a\$, e.g. \$bikkûrāh\$ - \$bakkûrot\$, \$kibśāh\$ - \$kabśāh\$, \$mismrîm\$ - \$masmrîm\$.³

The irregularity of the attenuation phenomenon has called forth numerous attempts for interpretation, particularly since attenuation is infrequently encountered in the transcriptions (Septuagint, Josephus, Origenes, Jerome) and the Bab. punctuation (cf. below, p. 32-33). It is impossible to describe all the explanations proposed; the review presented below might, however, include the most prominent of them.

1 See Cantineau 1950, p. 111-112.

2 See Blake 1950, p. 78 § 3; Meyer 1966, p. 104.

3 See Blake 1950, p. 79 § 5; Rabin 1971, p. 20.

For the irregularities of Philippi's law, see Blake 1950, p. 81-82.

BERGSTRÄSSER (1918, p. 146-147, 165) considers attenuation to be a very recent phenomenon which occurred "unter gewissen nicht mehr bestimmbarⁿ Bedingungen" after the demise of Hebrew as a spoken language and which consequently did not become stabilized until the crystallization of Tib. punctuation.

BAUER and LEANDER (p.194 x) date attenuation back to the period of the el-Amarna letters (14th century B.C.) and consider it to have been effective during the entire history of Hebrew. The vacillation between $\$i\$\$$ and $\$a\$\$$ is explained, referring to Brockelmann (1908, p. 146), as arising "wohl zum Teil daraus, dass man für schwebende Nuancen bestimmte Grenzwerte traditionell festlegte". On the other hand, the authors make an allusion to the possibility of dialectal differences. MEYER (1966, p. 103-104) holds the same opinion as to the date.¹ In his opinion the a vowels in the vicinity of laryngeals are not original, but rather a part of the masoretic "Systembildung" connected with the restitution of laryngeal realization.

BLAKE (1950) judges attenuation to be a process of dissimilation together with its analogical extensions. According to him the starting point is to be found in cases where ⁺a occurring in an unstressed closed syllable is followed by another closed syllable also containing an ⁺a with either primary or secondary stress. Thus the developments as ⁺qattál > $\$qitt\grave{a}l\$\$,$ ⁺sadaqät > $\$sidq\grave{a}t\$\$,$ ⁺magdál > $\$mig\grave{d}\acute{a}l\$\$,$ ⁺yakbād > $\$yik\grave{b}\acute{a}d\$\$$ represent the dissimilation (Blake, p. 77, II § 1). The i originating by dissimilation is often extended by analogy to related forms, thus e.g. the i of forms like $\$sidq\grave{a}t\$\$$ is extended to pl.st.c. and to plural forms with suffixes ($\$sidq\hat{o}t\$\$,$ $\$sidq\hat{o}t\acute{a}y\$\$$ etc.) and the i of the st.c. type $\$kib\grave{s}\acute{a}t\$\$$ is extended to st.abs. $\$kib\grave{s}\acute{a}h\$\$$ (in details, Blake, p. 78, II § 2). In addition, there are a number of forms where the change occurs independent of the dissimilation or its analogy, such as e.g. the suffixed infinitive type $\$gi\check{s}t\acute{i}\$\$$ (⁺gašt-) where the i is perhaps analogical with an original i occurring in the infinitive of

1 "In geschlossener Silbe steht schon altkan. *a* neben *i* "

verba primae wav as $\$šibtî\$ <^+šibt$ (for details, idem, p. 79 II § 4). On the basis of a few Syriac similarities, as $\$qetlat\$$ (p^{ec}al, pf. sg. 3. fem.) and $\$besrâ' \$$ (⁺basar), Blake considers the dissimilatory change to be "a general north-west Semitic phonetic law", but not a feature of "parent-Semitic" (idem, p. 82-83, IV § 5 and 8).

RABIN (1960, p. 180-186, 196-202, and 1971, p. 17-23) combines the attenuation and Philippi's law to a general rule which on the synchronic level delineates the distribution of the vowels remaining short¹ (=of /ə/)² in the closed syllables. According to that the "short vowels" ⁺a and ⁺i (= /ə/)² in the stressed syllable are usually realized as $\$a\$$ and on certain conditions as $\$ä\$$ (an other possibility is the realization as .lengthened vowels $\$â\$$ and $\$e\$$ which does not come into the scope of this study); in the unstressed syllables the normal realization is $\$i\$$ besides which $\$a\$$ and $\$ä\$$ occur without clear rules; the phonetic surroundings, especially laryngeals, have, however, an influence on the occurrences of $\$a\$$ or $\$ä\$$ instead of anticipated $\$i\$$.³ Thus the rule also implies the idea that the "short vowels" no more reflect etymological vowel distinctions, but, inspite of their apparent uniformity with the etymological vowels, depend on both stress and the phonetic surroundings.

The influence of the phonetic environments producing exceptional realizations of /ə/ (= not $\$i\$$) in unstressed closed syllables are described by Rabin as follows:

(1) Disharmony. If the stressed vowel following an /ə/ is either $\$e\$$ or $\$i\$$, the realization of /ə/ is $\$a\$$, e.g. $\$maš^c en\$$, $\$maš^c enâh\$$ ⁴ *contra* $\$miš^c ân\$$, $\$miš^c ânät\$$; hif. $\$yakbîd\$$ *contra* $\$hikbadtî\$$ ^{5, 6}

1 The term denotes originally short vowels which are not (in pre-tonal position) lengthened nor reduced, called thereafter "short vowels".

2 For the conception of Rabin as regards the phonemics, see below, p. 25-26.

3 Rabin 1960, p. 182-184.

4 In this example $\$e\$$ is not stressed (!?).

5 For details, see Rabin 1960, p. 184.

The $\$i\$$ of the hif^cil pf. type $\$hikbîd\$$ is derived from the "Systemzwang" of the other personal forms of pf.; "Systemzwang" also calls forth the $\$i\$$ of pi^{cc}el pf. as in $\$kibbed\$$, in the parallel form $\$kibbad\$$ the vowels follow the main rule.

6 Bauer & Leander (p.215 l, m) and Meyer (1966, p.113-114) describe this phenomenon under the title dissimilation; however, according to them $\$a\$$ reflects an original etymological vowel.

(2) The opposition between certain forms of qal and hif^cil of *verba tertiae waw/yod* (e.g. \$yir'äh\$ - \$yar'äh\$, cf. below, p.25 -26) could be explained as a case of "Systemzwang".¹

(3) Barth's law (*yaqtul*, *yaqtıl* contra *yiqtal*) is visible in Hebrew only in those verbs where the imperfect prefix forms an open syllable, i.e. in *verba mediae waw/yod* or *mediae geminatae*; otherwise it seems to be operative only in a number of *verba primae laryngalis*, e.g. \$yähdal\$ contra \$yahšob\$. Rabin considers Barth's law in itself to be a result of disharmony, and the laryngeal instance reflects the renewed influence of disharmony: the closed vowels favour an \$a\$ in preceding syllables and \$i\$ (or \$ä\$ in the vicinity of laryngeals) is supported by following vowels of a-type. Thus the opposition is not etymological or phonemic, but dependent of the phonetic factors.

(4) The opposition existing between pf.sg.3.m. forms of *verba tertiae infirmae* in pi^{cc}el and some feminine nouns (usually of roots *mediae geminatae*), e.g. \$killâh\$-\$kallâh\$, is explained referring to the "Systemzwang" of verbs and the (not detailed!) influence of the adjacent consonants in the noun instances.

(5) There also seems to be an opposition between the pf.3.m. and *infinitivus constructus* forms of the pi^{cc}el stem, e.g. \$šillem\$ - \$šallem\$. The opposition is not, however, real, since the \$e\$ of pf. varies with a more original \$a\$ (\$šillam\$ etc.).

(6) The \$a\$ of the pattern \$qaṭṭâl\$ may be explained as a consequence of the emphatic nature of the pattern which has given a special rhythm (qeṣeb) to the form. For details of paragraphs 3-6, see Rabin 1960, p.186.

1 The second possible explanation presented by Rabin is based on the disharmony described in the previous paragraph. According to that, the original pattern of the impf. form in hif^cil is *yapni*; the impf. of qal of *verba tertiae infirmae* seems to follow the intransitive impf. patterns with an a as impf. vowel which would yield *yipnay* as the original form. Rabin regards as possible that there still was such a difference between the endings \$-äh\$ developed either from i or ay that it could determine the realization of /ə/ in the prefix; this would explain also the forms as \$mašqäh\$ - \$mištäh\$. See Rabin 1960, p. 185 & fn. 61-62. The claim concerning the a-impf. of the *verba tertiae infirmae* in the Semitic languages is, however, unfounded, see Aro 1964, p. 179-184 and the treatment of each particular language.

(7) The patterns connected with the occurrences of the so-called shewa medium, as \$malkê\$, \$birkat\$, \$'admat\$ (all of them st.c.), and \$malkût\$, in principle follow the rule of the realization of /ə/ in the unstressed closed syllables; "Systemzwang" and the phonetic surroundings have, however, exerted particularly strong influence upon these types, since neither an /u/ nor meaning oppositions are encountered in this area.¹

SPERBER (1966, p. 450-453) dealing with the attenuation phenomenon enumerates a number of forms with the \$m-\$ prefix where the vowel of the prefix varies either inside of the Tib. punctuation or between the Bab. and Pal. punctuations. The conclusion of Sperber is that the forms with \$ma-\$ and \$mi-\$ prefixes are independent and "thus the theory about a 'Verdünnung' of *a* into *i* is without basis".

In conclusion we may state that the differences of opinion are considerable. The most detailed is that of Rabin, in addition, it comprises a treatment of the complicated web of problems related to attenuation in its entirety; nevertheless even that encounters forms (esp. § 4-6) which are not amenable to a satisfactory explanation. As regards the explanations of Blake the main problem is, why analogy has taken place in some forms but not in all similar instances.

4.1.2. ⁺i

An original ⁺i usually appears in the Tib. punctuation as \$i\$ or \$ä\$. Partly, however, these vowels originate from ⁺a as described above, and the original vowel is not always to be defined.²

1 Rabin, idem, p. 196-202. /u/ and even meaning oppositions exist, however, in the st.c. and suffixed forms of plural of segolate nouns with pattern *qotäl*, e.g. \$ḥārbot\$ - \$ḥarbot\$, see idem, p. 202 § 11.

2 Blake (1950, p. 76-77) gives a list of cases in which \$i\$ seems to reflect the original ⁺i; a great number of them (e.g. the suffixal imp. forms of qal \$qitlāh\$, \$qitlû\$ etc., prepositions \$b-\$, \$l-\$, \$k-\$, conjunction \$w-\$, nouns of type \$miqtāl\$) is, however, doubtful.

šăš instead of the anticipated šîš (occasionally) occurs in following cases: (1) in šm-š prefixes followed by šâš, e.g. šmälqâhayimš, (2) in syllables preceding suffixes š-kâš and š-kâm, -kânš, e.g. šyošârkâš, (3) in the initial syllable of segolate nouns before the suffixes š-kâš and š-kâm, -kânš, e.g. šqâšpkâš, (4) beside šgš and škš, e.g. šnâgdîš, šlâktîš, (5) usually before laryngeals, e.g. šyâ'ânâš, and (6) after them, e.g. šhâlbôš (but not before a doubled consonant, e.g. š'immiš). There are, however, exceptions in each type, e.g. š'ohabkâš with šaš instead of šâš (<⁺i). In addition, if a stressed šeš (= ⁺i) in a closed syllable loses the stress (because of suffixes, maqef, etc.) šeš is replaced by an šâš, e.g. šway-yêlâkš, š'ât-š.¹ Accordingly, šâš occurs both for ⁺i and ⁺a (cf. above, p. 18). In a number of words šâš varies with šîš, e.g. š'âmratôš - š'imratôš; there are no meaning oppositions between šîš and šâš in closed unstressed syllables. On the contrary, meaning oppositions exist between šâš and šaš in the same patterns as between šîš and šaš, e.g. š'âr'âhš - š'ar'âhš (but not in the type škillâhš - škallâhš, since šâš does not occur before a doubled consonant).²

The attitude of RABIN has been described before, p. 18-20.

4.1.3. ⁺u

The normal counterparts of ⁺u in Tib. punctuation are šuš and šâš of which šâš does not occur before doubled consonants (cf. non-occurrence of šâš in the same position, above, p. 4.1.2.). On the other hand, šâš occurs almost regularly in the cases of transition of stress (š'âššârkâš, šway-yâqâmš, škâl-š etc.) and in laryngeal surroundings

1 Cf. Bergsträsser (1918, p. 148-149, 154, 157) and Bauer-Leander (p. 196, 207-208). šbin-š in the combinations as šbin-nûnš is an exception of the last group of cases, see Rabin 1960, p. 181 and fn. 52.

2 See Cantineau 1950, p. 112, 114.

(e.g. §bâ'šô§). Otherwise the punctuation vacillates considerably.¹ Rabin judges the vacillation to be a consequence of the centralized and opened realization of /u/.²

Occasionally ⁺/u/ appears as §i§ in Hebrew, e.g. ⁺sunbulat > §šibbolät§; §'omär§-§'imrâh§. KUTSCHER has devoted a long chapter to the phenomenon in his book on the Isaiah Scroll.³ According to him, the phenomenon can be divided to three stages: (1) a process of dissimilation, e.g. ⁺sunbulat > §šibbolät§ (for details, idem, p. 356, 358-360), (2) a non-phonemic change which occurs, if there is a pattern with /i/ to which the new form can easily be associated (e.g. nouns with pattern *qutlā - qittlā*, as §boṣ§-§biṣṣâh§, §'omär§-§'imrâh§); in addition to that, a form having its origin in a dissimilation is capable of being diffused analogically, such are e.g. the imp. forms of qal in which §â§ occurs only rarely (§miškû§-§mâškû§) and the inf.c. forms of qal with suffixes where §â§, however, is the normal vowel (§b-šâkbkâ§-§b-šikbâh§, idem, p. 360-367), (3) the loss of /u/ spreads over to the stressed syllables which calls forth the complete loss of short /u/; this development occurs consistently only in the Samaritan reading tradition; there are, however, a few Tib. forms of pi^{cc}el and hif^{cil} with apparently secondary §i§, e.g. §yissag§ (Micah 2,6, cf. Bab. §yussag§, see idem, p. 356, 367). At least partly, a kind of [ü] vowel should be considered as the intermediary stage in the development (see p. 356, 371-372). Similar changes can be observed in the Bab. punctuation (however, less), Isaiah Scroll A from Qumran (see p. 372-376), in Syriac, all dialects of Western Aramaic, and in Classical and Syro-Palestinian Arabic (see idem, p. 376-389).

1 Cf. Bergsträsser 1918, p. 150 m-n, 154 e; B-L p. 197 l'-m'; Cantineau 1950, p. 111-112, Rabin 1960, p. 183. See also the material collected by König 1895, p. 506-507, 511-513; and Weinberg 1968.

2 Rabin 1960, p. 184. He compares the development to that found e.g. in the English word "gun" in which the Southern pronunciation has an [ʌ] against [u] existing still in the Northern dialects.

3 Kutschler 1959, p. 39-42, 356-391, esp. 367-372.

4.1.4. Secondary Vowels

Secondary vowels which are the reflexes of original zero occur both initially and medially. Only the "full vowels" originating from $^+ \emptyset$ are under consideration here; these kinds of shewa and ḥaṭef vowels¹ will be dealt with in my forthcoming study.

As regards the date of the initial *prothesis vowels*, as $\$' \ddot{a}zr\ddot{o} \check{a}^c \$$, $\$' \text{argaz} \$$ MEYER (1966, p. 117) refers to the existence of such vowels in Ugaritic. The use of $\$' \$$ in Hebrew also mediates in favour of the considerable age of this phenomenon. On the other hand, there is evidence for more recent prothetic vowels which nevertheless were part and parcel of the correct Tib. reading tradition. In the "Abhandlung über das Schewa" publ. by Levy (1936, p. VIII-XII) it is stated that the Tiberians ($\$' \text{al-}\check{\text{t}}\text{abr}\ddot{a}\text{niyy}\ddot{i}\text{n} \$$) pronounce the words $\$ \check{\text{t}}\text{ayim} \$$, $\$ \check{\text{t}}\text{ê} \$$, and $\$ \check{\text{t}}\text{êh}\ddot{a}\text{n} \$$ with an $\$' \text{i} \$$ before the "initial" $\$ \check{\text{t}} \$$, i.e. approximately [$\text{'ist}\ddot{a}\text{yim}$] etc. This reading usage is known also from numerous other sources; the quality of the prothetic vowel varies, however.² Notwithstanding the fact that this feature categorically was part of the erudite Tib. reading tradition (cf. Abhandlung über das Schewa, Levy 1936, p. VIII, l. 20 -X, l.9), it is never spelled with $\$' \$$ in the biblical texts.

There are no detailed rules for the occurrences of prothetic vowels; usually they are said to appear before sibilants (B-L, p. 210a) or more restricted, before $\$z \$$, $\$ \check{\text{s}} \$$, and $\$ \text{t}^3 \$$ (Meyer 1966, p. 117) when the original initial vowel should be reduced. According to SPEISER the main factor producing prothetic vowels is the existence of highly sonoric consonants in a word irrespective of their location in the word.⁴

1 Cf. Bergsträsser 1918, p. 134-136; B-L, p. 211-212; Ginsberg 1929-30, p. 131-133; La Sor 1956; for the peculiarities of the Aleppo Codex, see Yeivin 1968b, p. 22-49; idem 1976, p. 190-192.

2 Levy 1936, p. 31-33.

3 $\$ \check{\text{ä}}\text{m}\ddot{o} \check{\text{l}} \$$ mentioned by Meyer seems to be an Akkadian loan word, see Speiser 1925-26, p. 151, fn. 5.

4 Speiser 1925-26, p. 150-153.

The weak point of the first explanation is the rareness of the phenomenon compared with the number of words beginning with one of the consonants mentioned above + shewa. As regards the proposal of Speiser, we have to state that it is difficult to find a Hebrew word without a sonoric consonant.

šäš and šaš are the normal prothetic qualities; in addition, šiš varies with šäš in the word š'ittmolš-š'ätmolš (in case it is a prothesis¹) and exists in the pronunciation of word šštayimš and similar to that mentioned above.

The second type of secondary vowels includes the medial or *anaptyctic* occurrences, the phenomenon which RABIN calls by a general name "segolization" (sgôlîzašîyah, 1960, p. 193). Vowels of this type occur in the following patterns:

(1) Should a pattern demand a ḥaṭef and a shewa (mobile) after it, the ḥaṭef is replaced by the corresponding "full vowel", e.g. ⁺ya^cbudū > ⁺ya^cābēdū > šya^cabdūš, similarly šza^camkāš, š'a^cānkāš, špā^cālkāš, šqāṭābkāš.²

(2) Should a word end in two different consonants, an anaptyctic vowel dissolves the cluster; the vowel is usually šäš, in the laryngeal surroundings mostly šaš, and after šyš šiš, e.g. šsēpārš, šway-yībānš; šnā^carš; šbāyitš.³

(3) The "segolization" connected with the previous group occurs in verbal pf. 2. fem. forms only in *verba tertiae* ^cayin/ḥet⁴, e.g. špāšā^catš, šhumlāḥatš.⁵

Rabin (1960, p. 193-194) presents two general rules of the anaptyxis:

(1) Diachronic rule: ⁺∅ between two consonants develops (without consistency, however) to an /ə/(a) when the second consonant is word final, (b) always when the first consonant is a laryngeal.

(2) Distribution rule: /ə/ is realized as a "short vowel", when the

1 š'ätmolš mentioned by Meyer seems to be an Akkadian loan word, see above, p. 23, fn. 3.

2 Exception: The "full vowel" before ḥaṭef may, however, be reduced and the ḥaṭef lengthened to šeš or šäš, e.g. št'ehābūš, št'āklehūš.

3 Exceptions: If the last consonant of the cluster is šṭ, q, b, d, k, tš the cluster may remain undissolved, e.g. šqoštš, šway-yēbkš. The anaptyctic vowel may become stressed, e.g. šb'ērš, šškāmš. šäš occurs occasionally also in the laryngeal surroundings, e.g. š'ōhālš, šlāḥāmš.

4 There is no example of *verba tertiae* he, Rabin 1960, p. 192, fn. 89.

5 These forms and the "normal" spellings as šlāqaḥtš are according to Rabin (1960, p. 192) "formae mixtae" which reflect alternative pronunciations as [lāqaḥt] or [lāqāḥat]; similar to them is š(way-)yīḥadš = either [yīḥd] or [yīḥad]. For the details of these types of anaptyxis, see Bauer-Leander, p. 210-214; Rabin 1960, p. 188-196; Meyer 1966, p. 116-120.

second consonant is word final (e.g. \$šēpār\$) or when the vowel following the second consonant is an /ə/ in an open syllable (=šĕš)¹ (e.g. \$ya^cabdūš)².

4.1.5. The Phonemic System of Vowels in Unstressed Closed Syllables

As mentioned (p. 16) the vowels occurring in the closed unstressed syllables are \$a\$, \$ä\$, \$i\$, \$â\$, and \$u\$. Among them, there is no opposition between \$ä\$ and \$i\$ and the only opposition between \$â\$ and \$u\$ (\$'âmnâm\$ - \$ha-'umnâm\$) is very uncertain.³ Thus, there are at most three vowel phonemes in the (unstressed) closed syllables which CANTINEAU marks out in symbols A, I, U.⁴ MORAG (1962, p. 22 & fn. 17) is, however, inclined to regard \$ä\$ as an independent phoneme; his opinion is based on the contrasts as \$'ar'ākâ\$ - \$'är'ākâ\$ and "an examination of the distributional features of \$ä\$"; for contrary views, see *idem*. The most extreme theory of vowel phonemes is that of RABIN (1960). According to him, the "short vowels" represent only two phonemes: /ə/⁵ and /u/ of which the former is realized as \$a\$, \$ä\$, or \$i\$ and the latter as \$u\$ or \$â\$ (cf. above, p. 18-20, 22, 24-25).⁶

In spite of the fact that Rabin encounters with problems of the distribution of his phonemes, he has, however, demonstrated in clear-cut fashion, how restricted the opposition between /A/ and /I/ of Cantineau is: it appears only in (1) *verba tertiae waw/yod* (e.g. \$yaṗnäh\$ - \$yiṗnäh\$) and (2) the type /C₁əC₂ā/, e.g. \$kallâh\$ - \$killâh\$; even these contrasts may be considered morphophonemic, i.e. \$a\$ in the former type is connected with hif^cil stem and in the latter

- 1 Cf. below, 4.1.5. "Shewa medium" is according to Rabin (1960, p. 195-196) the zero realization of /ə/.
- 2 If the vowel following the second consonant is any vowel except /ə/ in an open syllable or an /ə/ in a closed syllable (realized as "short vowels"), the anaptyctic /ə/ is realized as a ḥaṭef, e.g. \$ya'āläh\$, \$ya'ābor\$.
- 3 Rabin 1960, p. 172; Cantineau 1950, p. 111-112, 114.
- 4 Cantineau 1950, p. 111-112.
- 5 Realizations of /ə/ occurring in an unstressed open syllable are šĕš, šăš, šâš, and partly šâš; šâš may also be a realization of /u/ in that position, see Rabin 1960, p. 176-180.
- 6 Rabin 1960, esp. p. 183, 186, 202-204.

with nouns.¹ As for \$ä\$, it is according to Rabin the realization of /ə/ in those cases where the punctuators were not able to decide between the extreme values \$i\$ and \$a\$. The "long" \$ä\$ which occurs stressed in a medial or final position and is developed from ⁺i or diphthong ⁺ay belongs to another group; the only common feature between them and the \$ä\$ realization of /ə/ is a timbre of similar type without any genetic connection. All of the remaining \$ä\$ vowels except the "long" \$ä\$ are realizations of /ə/, including the initial vowels of segolate nouns and the secondary \$ä\$ vowels.²

4.2. Special Features of Pal. Punctuation

The description follows the article *The Palestinian Vocalization of Hebrew* by REVELL (1970a) which is the only concentrated elucidation of Pal. vocalism based on a large material³ (p. 61-65, 67-68, 70-71, and table p. 98).

All of the Pal. vowel graphemes occur in unstressed closed syllables. Compared with Tib. usage the Pal. signs \$â\$, \$e\$, and \$o\$ are thus surprising in that position. As for \$â\$ and \$e\$, their employment mainly originates from the "Sephardic" nature of the texts, i.e. from the confusion between \$a\$ and \$â\$ on one hand and \$ä\$ and \$e\$ on the other⁴.

1 Rabin 1960, p. 202-203.

In addition, it may be asked, what is the bearing of the phonemic minimal pair definition upon a dead, liturgical language which has no more message function, at least not between human beings; this question has special bearing on those phonemes the "functional load" of which is very restricted.

2 Rabin 1960, p. 184; idem 1971, p. 22-23.

3 For the material used, see idem, p.93 - 96.

4 Revell (1970b) has divided the Pal. texts according to the vocalism to 12 classes. Among them \$â\$, \$a\$ and \$e\$, \$ä\$ are well distinguished only in class 1 and their use corresponds almost exactly that of the Tib. In addition, there is a marked difference between \$â\$ and \$a\$ in the classes 2, 4, and 6 (see idem 1970b, treatment of each class mentioned before and in summary, p. 101-103, 111-112, and 1970a, p. 97, table). There are, however, occurrences of \$â\$ and \$e\$ in these classes also in unstressed closed syllables.

Pal. $\$o\$$ is the most usual counterpart of Tib. $\$a\$$ in the unstressed closed syllables, besides it Pal. $\$a\$$ and $\$a\$$ occur in that position.¹

The description of Revell does not depart from a comparison of etymological and Pal. vowels, but from the difference between Tib. and Pal. usages. The same method is applied here.

The main *divergences as compared with the Tib. use of $\$a\$$* are the occurrences of $\$a\$$ in the classes 1, 2, 4, and 6 where $\$a\$$ and $\$a\$$ as a rule are used much as the Tib. punctuation uses $\$a\$$ and $\$a\$$. The Pal. $\$a\$$ occurs, however, in these classes 47 times in unstressed closed syllables; 22 of them occur before a (Tib.) doubled consonant; in addition to that Revell mentions 16 cases preceding a laryngeal in unstressed open or closed syllables.

The second exceptional counterpart is Pal. $\$i\$$ (e.g. $\$kirmy\$$) which is "rare" and therefore not included in the calculations.²

The third group consists of 25 cases where Pal. $\$a\$$ corresponds to Tib. $\$a\$$: one of them occurs before a doubled consonant, 12 in a word final unstressed closed syllable, and 12 in a "normal" unstressed closed syllable; in addition, there are 18 occurrences preceding a laryngeal in unstressed open or closed syllables.

The first group is explained (partly) by Revell as a result of the loss of consonant doubling;³ 10 of the non-final occurrences of type Tib. $\$a\$$ = Pal. $\$a\$$ follow laryngeals "and are probably due to their influence", the laryngeals also seem to have exerted an influence upon many of the remaining cases.

1 Revell, 1970b p. 100 and 115 iii.

2 An additional reason is that "the $\$i\$$ sign can be explained (often with much probability) as a broken $\$a\$$ "; Revell 1970a, p. 68, fn. 64.

3 This explanation is given also to the correspondences Tib. $\$i\$$ = Pal. $\$a/e\$$ and Tib. $\$u\$$ = Pal. $\$o\$$, see below, p. 29 and 31.

The exceptional counterparts of the Tib. \$ä\$ are few. The Pal. \$a\$ occurs in the place of the Tib. \$ä\$ 14 times of which five are word final; in addition, there are two occurrences before laryngeals in open or closed syllables.

Two of the \$i\$ counterparts of Tib. \$ä\$ occur before a (Tib.) doubled consonant, one as word final, and six in "normal" positions; among the pre-laryngeal cases six occur in closed syllables; thus the total figure is 15.

In the texts of class 1 where \$e\$ and \$ä\$ usually follow Tib. usages, Tib. \$ä\$ is replaced in three cases by Pal. \$e\$ (1 before a doubled consonant, 1 word final, and one "normal" case); in addition, there are two pre-laryngeal occurrences.¹

According to Revell these divergences show "nothing more than uncertainty as to the quality of vowels in closed, unstressed syllables". The cases where Tib. \$ä\$ = Pal. \$i\$ "may, however, represent the culmination of an 'a → i' change".

A special divergence type occurring mostly in the segolate forms may be described in this connection. There are 53 cases where Pal. \$e\$ corresponds to Tib. \$ä\$ in word final position.² According to Revell Pal. \$e\$ is much rarer in the final syllable of segolate forms than \$ä\$ irrespective of the vocalism classes. The Pal. biblical counterparts of Tib. segolate patterns \$qeäl\$ and \$qätäl\$ are, however, exceptional: \$e\$ occurs 17 times and \$ä\$ occurs only 5 times in the *final* syllable. Revell explains the difference as being connected with and presumably dependent on the quality of the preceding vowel, i.e. if the first vowel of a segolate pattern is an 'a' or 'o', the second is normally \$ä\$, otherwise \$e\$. The assertion is supported by the biblical vocalism of the *first* syllables of segolate nouns: "Of the 12 cases in which \$e\$ is used in this position"³

1 Apparently in words י (=Tib. מִיִּרְיָהוּ Isa. 45:24) and דָּן (2nd hand, = Tib. מִיִּרְיָהוּ Isa. 57:1); both of them occur in ms. Heb. e30 f. 48-9+, see Revell, 1970b, p. 75, I.

2 This type is mentioned by Revell only in his article (1970a, p. 58-59, 70-71) and not in the tables; the pretonic cases as \$'e1\$, \$'et\$ occurring in biblical quotations are not included in the 53 cases, see idem, p. 70. fn. 69.

3 Vs. 57 x \$ä\$.

8 would follow 'a' of 'o' vowels. The same change of \$ä\$ to \$e\$ can be seen in similar situations in other forms."¹ On the basis of this dependence Revell assumes that \$e\$ may reflect a special vowel quality, possibly close to that represented by \$a\$; another possibility mentioned by him is a change of quantity.

The most usual *exceptional counterpart of the Tib. \$i\$* is the Pal. \$ä/e\$ which occurs 50 times, half of them before doubled consonants and the other half in "normal" syllables; the figure of the cases before laryngeals in unstressed open and closed syllables is 27.² \$ä\$ is much more common than \$e\$, but this is evidently solely the result of the general preference for \$ä\$.

The Pal. \$a\$ occurs in the place of the Tib. \$i\$ 11 times of which nine are "normal" syllables and two before doubled consonants.

The explanations of Revell are the same as above, i.e. the loss of consonants gemination and the uncertainty as to the quality of vowels in unstressed closed syllables.

The counterpart of the Tib. \$ä\$ (qameṣ ḥaṭuf) is "in the great majority of cases" \$o\$. There is only one exception (\$ä\$) in the texts of classes 4,6,8,9, and 11 (\$kâ-'ony\$ TS H2:72, v8, Cl. 4).³

As for the biblical texts of class 1, Revell (1970b, p. 74 E) mentions 101 cases of \$ä\$ and one \$o\$ (\$bo\$ = tib. \$mib-bâṣrâh\$). In the non-biblical texts of this class \$ä\$ occurs twice and \$o\$ once (idem, p. 35E). Revell presumes the use of \$ä\$ existing in the class 1 to be due to Tib. influence;⁴ it is, however, the only evidence of Tib. influence (besides the mappiq sign).

- 1 It should be mentioned, however, that also other vowels besides the type 'a' or 'o' occur fairly often before segolate nouns punctuated with an \$ä\$ in the first syllable, i.e. the 57 occurrences of the pattern \$qätä/el\$ do not all follow 'a' or 'o' vowels as may be understood from the wording. This bears still more on "other forms", cf. Revell 1970a, p. 59, fn. 29.
- 2 By reason of their exceptionality the text Bod. Heb. d63 f.98 and the \$ä/e\$ signs of the cluster -ayi- are not included in these figures, see idem, p. 98, fn. 157.
- 3 See Revell 1970b, p. 113, 47 E & fn. 39, and the E-paragraphs of every class.
- 4 Revell, 1970a, p. 54 iv: "perhaps"; 1970b, p. 37, 79, 102, 115iii: "probably".

The only counterpart in the biblical texts of the class 2 is \$â\$ (1970b, p. 80 E), but Revell does not give the number of occurrences.

Otherwise the varying counterparts can be tabulated as follows:¹

	\$o\$	\$â\$	\$a\$
Class 2:			
Non-biblical	13	14	3
Class 3:			
Biblical	19	10	2
Non-biblical	1	-	-
Class 5:			
Non-biblical	35	8	10
Class 7:			
Biblical	2	-	-
Non-biblical	68	13	12
Class 10: no occurrences			
Class 12 (mixed class):			
Biblical (only TS 12:197)	1	6	-
Non-biblical(only TS H7:7) ²	5	3	1
	<hr/>		
Total	144	54	28

As regards classes 4,6,8,9, and 11, which, as mentioned before, have as a rule \$o\$ in place of Tib. \$â\$, we must keep in mind the fact that this \$o\$ occurs rather infrequently; in addition, these classes only comprise non-biblical texts:

¹ See Revell, 1970b, E-paragraphs of chapters III and IV.

² See Revell, 1970 b, p. 31.

Class 4:	33x	šoš (plus 1 x šâš, see above, p. 29, and 1 x šuš šqudškš TS NS 117:6, lv10).
Class 6:	12x	šoš.
Class 8:	13x	šoš (only one text).
Class 9:	3x	šoš (TS 10 H10:7, lr2, lv9, lr12).
Class 11:	1x	šoš.
<hr/>		
Total:	62x	šoš (+ 1x šâš + 1x šuš).

Revell (1970a, p. 72) considers the preference for the Pal. šoš to be connected with the same change which transformed ⁺u in the Tib. punctuation to šâš or to šoš; the Pal. punctuation thus represents a more developed stage of the general change of ⁺u to vowel of type [o].

The counterparts of Tib. šuš are Pal. šuš and šoš. šoš occurs in unstressed closed syllables 25 times of which two instances are "normal" syllables and the others in the position before doubled consonants; in addition, there are eight occurrences before laryngeals in open or closed syllables. The text TS 20:53+ which always has an šoš in the place of the Tib. šoš or šuš is not, according to Revell(1970b, p. 100), in accordance with the dominant Pal. tradition, but rather, is possibly connected with Sam. pronunciation.

These divergences are also explained by Revell as originating primarily from the loss of consonant gemination. Thus, all of the explanations given by Revell are in conformity with his view of Pal. punctuation as a "dialect" of Hebrew which represents "a more developed, and therefore a 'later' form of the language".¹

In the light of this description, Pal. punctuation seems to be fairly close to the Tib. system. This also holds true in regard to attenuation.² However, especially the relationship of the numerous cases where Tib. šiš = Pal. šä/eš remains questionable, and the claim of loss of the ability to double consonants needs additional corroboration. In addition, the possible morphologic factors behind the divergences are not accorded a definitive solution.

1 See esp. Revell 1970a, p. 71-77; 1970b, p. 104-106.

2 Also Leander (1936, p. 92-93) considers Pal. punctuation to be in accordance with Tib. regarding attenuation, according to him the only exception occurs in the word ׀׀׀׀ cf. Bab. šsansannâ(y)wš and Tib. šsansinnâ(y)wš.

Concerning the use of Pal. vowel signs in place of Tib. reduced vowels, see Revell 1970a, p. 83-93; 1970b, p. 34-95, paragraphs F,H,J, and M.

4.3. Special Features of Bab. Punctuation¹

The vowel signs occurring in the unstressed closed syllables of Bab. punctuation are \$a\$, \$e\$, \$i\$, \$o\$, and \$u\$. Thus \$e\$ and \$o\$ are vowels unknown to the Tib. system in this position, on the other hand, Tib. \$ä\$ has no specific counterpart in Bab. punctuation.

The Early Compound Babylonian system² possesses diacritical signs indicating the nature of the closure following vowels of unstressed closed syllables. If a syllable of this kind is closed with a doubled consonant, the diacritical bar is written *over* the vowel of this syllable (e.g. טְבִּיָּה , אֲשֶׁר־ , פְּקִדְהִי); on the contrary, the diacritical bar *below* vowels indicates "normal" closed unstressed syllables (e.g. לִשְׁמֹר), in addition, there are two specific vowel signs for "normal" closed syllables: \dot{x} = \$a\$ (e.g. הַלְכִי) and \dot{x} = \$u\$ (e.g. הַכְמִי). The diacritical signs are not added, however, to those \$e\$ and \$o\$ which occur before doubled consonants.³

The Late Compound system thus deviates in that the diacritical bar may also be added below an \$e\$ or \$ä\$ occurring in a "normal" closed unstressed syllable (e.g. רִיָּיָי ; רִיָּיָי *pro* \$o\$, הַכְמִי *pro* \$u\$).

Attenuation appears in Bab. punctuation less than in Tib. The nominal patterns *maqṭâl*, *maqtel*, *maqṭalat*, *maqtolat*, etc. and *taqtâl*, *taqtelâh*, *taqtolat*, etc. nearly always have an \$a\$ in the initial syllable, i.e.

1 The description follows the surveys given by Yeivin (1968a, p. 275-278, 281-284, 288-290; 1973a, p. 57-59, 61-63, 65-66.

2 The term "Compound Babylonian system" is equal with the names "Complicated Babylonian system" (used e.g. by Morag), "die komplizierte babylonische Punktation" (Kahle, etc.), and "niqqûd mûrkab bablî" (Yeivin, etc.)

3 The signs of the "normal" unstressed closed syllables including \ddot{x} (= \$e\$ occurring only in this position) are used also as "hatefs" in open unstressed syllables, see Yeivin 1968a, p. 276-278; *idém* 1973a, p. 59.

the attenuation has not occurred. The few exceptions with an $\$i\$$ originate from the influence of the following consonant (usually sibilants).

Derivatives of nouns of types *dābār* and *gāder* are punctuated as a rule with an $\$i\$$ in the initial syllable; $\$a\$$ is preserved, however, in a number of cases, e.g. $\$dibrê\$$, but $\$katpôt\$$, $\$maṭrôt\$$, $\overset{\text{א}}{\text{ל}}\overset{\text{ל}}{\text{ש}}$, $\overset{\text{א}}{\text{ל}}\overset{\text{ל}}{\text{ר}}$.

In the segolate forms $\$i\$$ sometimes occurs instead of the anticipated $\$a\$$ as in Tib. punctuation, e.g. $\$šibtî\$$, $\$zibḥî\$$; in addition to that, $\$i\$$ occurs even in some words against Tib. $\$a\$$, e.g. $\$dirkô\$$, $\$šil^cî\$$, $\$riḡlâ(y)w\$$, $\$šilmô\$$, $\$sil^cô\$$. On the contrary, there are segolate nouns which have preserved $\$a\$$ (*pro* Tib. $\$i\$$), e.g. $\$baḡdî\$$, $\$b-qasṗî\$$, $\$qabrô\$$, $\$ganzê\$$, $\$batnî\$$; $\$a\$$ may be retained also in other segolate patterns, e.g. $\$šab^câh\$$, $\$šab^cim\$$, $\$baltî\$$, and especially in the pattern *qatlūt*, e.g. $\$rap'ût\$$, $\$saklût\$$; examples of other $\$a\$$ -cases (*pro* Tib. $\$i\$$) are $\$yôšabyâh\$$, $\$šalšal\$$, $\$b-par^câtôn\$$, and the forms with suffixes $\$damkam\$$, $\$yadkam\$$ (an exception: $\$'amišyâh\$$ = Tib. $\$'âmašyâh\$$).

A doubled consonant is preceded by $\$i\$$ as a rule, also in words with the $\$m-$ prefix, e.g. $\$pinnâh\$$, $\$miṭṭâh\$$; the Bab. $\$i\$$ even occurs sporadically in place of Tib. $\$a\$$, e.g. $\$qinnî\$$, $\$l-šiddô\$$, $\$has-šlibbîm\$$, but in some words *vice versa* e.g. $\$w-sansannâ(y)w\$$, $\$w-ham-moraggîm\$$.

Most consistently attenuation appears in verbal forms where it is extended widely into *verba primae laryngalis*, e.g. $\$yihmod\$$, $\$yihros\$$, $\$ni^csâh\$$ (nif., pf).¹

Bab. $\$a\$$ occurs in place of Tib. $\$i\$$ only sporadically in a number of verbal forms, e.g. $\$mba^cattakâ\$$ (= Tib. $\$mba^cittäkâ\$$, pausal form), $\$yladtîkâ\$$, $\$w-hitgaddaltî\$$ ², $\$w-hitqaddaštî\$$ ². A peculiar exception is Bab. $\$i\$$ in the participle of *hif^cil* stem of *verba primae nun* (*pro* Tib. $\$a\$$, e.g. $\$migḡîd\$$ = Tib. $\$magḡîd\$$).

Philippi's law, in contrast to attenuation, has a wider influence upon Bab. punctuation than upon Tib., see Yeivin 1968a, p. 289.

1 Otherwise Bab. $\$h\$$ and $\$ḥ\$$ behave almost in the same fashion as the "strong" consonants, and $\$c\$$ comes close to them in the late and non-biblical texts, see Yeivin 1968a, p. 288, in details, p. 214-253.

2 Consecutive pf.

⁺*i* is represented usually by Bab. §i§ and only seldom by §e§. §e§ occurs mainly in cases in which an originally stressed §e§¹ has lost its stress (1) in "maqgef"-combinations, e.g. §yitten lw§, §ben nwn§, §'et§, (2) in forms of consecutive imperfect, e.g. §way-yered§, §way-yiben§, (3) in verbal and nominal forms with suffixes sg. 2.m. and pl. 2.m., e.g. §mlammedkå§, §mnaḥemkm§, §yeškå§, §'etkam§, (4) when ⁺*i* is transformed by the influence of §'§ into §e§, e.g. §š'eltiŵ§, §t'espû§, (5) occasionally in the apparently unstressed suffixes sg. 2.f., e.g. §yšartünek§, §'hebâtek§, and in addition, (6) in some loan words, e.g. §w-hag-gëzbârîm§.

§i§ dominates before doubled consonants, exceptions are §e§'s in §kålebbî§, §mågennî§, and possibly §'ellå'§; §i§ is also the normal vowel after laryngeals (pro Tib. §ä§), e.g. §'il§, §'iqtoł§, §himdåh§, §^cilyôn§; in addition, it occurs before §h§ and §ḥ§, sometimes also before §'§ and §^c§, e.g. §yihrog§, §yihpoš§, §ni'kālî§, §ni^cšåh§.

An §i§ can be transformed to §a§ in cases of stress transition. The phenomenon occurs both in open and closed syllables, mostly after laryngeals, but always irregularly, e.g. §'elf§-§'alêham§. In closed syllables of verbal forms the change is restricted to impf. of qal and pf. of hif^cil, e.g. hif^cil §higgid§-§w-haššigûkå§, §hišlaḥtî§-§w-haqrabtam§; qal §t'esop§- §way-yi'aspannû§ (= Tib. §way-yä'äspännû§, Bab. ⁺§way-ya'aspannû§). In nouns it also exists in non-laryngeal surroundings, e.g. §hiblô§-§hablê§, §piš^ci§-§paš^cekam§, §nidrâk§/§nidrê§-§nadrêham§, §zimrâh§-§w-zamrat§, §'išpâh§-§'ašpâtô§; §'itrôg§-§'atrûgîn§, §b-niqqâyôn§-§wi-b-naqyôn§. The phenomenon is also found in Tib. punctuation (see Bergsträsser 1918, p. 157; B-L., p. 197, n[°], 349 q) but more rarely and in partially different circumstances.

1 §e§ occurs sometimes also instead of the stressed §a§, e.g. st. abs. §lab§, but st. c. §b-leb§; pi^{cc}el imp. §kappar§, but with "maqgef" §kapper n'§.

Corresponding to Tib. \$ä\$, in Bab. punctuation there is usually an \$i\$. In general, the \$i\$ represents ⁺i. The Bab. \$a\$ occurs, however, in a number of words representing original ⁺a, e.g. \$w-'aḥmol\$, \$'algābîš\$, \$^caglâh\$, \$^cadrô\$, \$pan\$, \$manhû\$, \$^cāreh\$, \$ḥarmeš\$, \$'ar'allîm\$, \$'asṇabbîš\$, \$ḥam-malṣar\$, \$marḥašwân\$.

The Bab. vowels representing ⁺u are \$u\$ (e.g. \$sukkâh\$, \$sqdšî\$, \$shuḡtaltî\$, \$b-yusdô\$ inf.) and, more rarely, \$o\$. Before doubled consonants \$o\$ sometimes occurs in *verba mediae geminatae*, e.g. \$ronniš\$, \$syibozzûm\$, in pu^{cc}als, e.g. \$kollû\$, \$kossû\$, and in nominal forms, e.g. \$^cuzzô\$, \$mâ^cuzzîm\$, \$qtonniš\$. In other types of syllable \$o\$ is found in similar cases as described above concerning \$e\$ (p. 34): (1) combined with following words, e.g. \$kol\$, (2) in forms of consecutive impf., e.g. \$way-yâqom\$ (an exception: \$way-yârum\$), (3) in forms with "heavy" suffixes, e.g. \$yišmorkâ\$, \$'emorkam\$, \$ḥoqqam\$, \$boštam\$, (4) others, e.g. \$qodqod\$, \$l-por^cânût\$, \$lôksân\$.¹

In the texts representing the Late Compound Bab. system \$u\$ and \$o\$ are replaced by a "short" \$â\$ (x) which coincides with Tib. punctuation.

4.4. Other Evidence

For the development of the short vowels in the Semitic languages in general, see Brockelmann 1908, p. 144-151. Here I shall deal only with those languages and dialectes geographically connected with Palestine.

4.1.1. Attenuation

As mentioned before (p. 16-17), attenuation has been dated back to the Canaanite period. There is not, however, any convincing evidence for assuming the existence of general attenuation in the el-Amarna letters, the Amorite names, or in Ugaritic.

1 On the basis of the occurrences of \$e\$ and \$o\$ we could anticipate that also the Bab. \$â\$ might appear in equivalent positions in place of \$a\$. This kind of change does not exist, however; rather \$a\$ is retained in those cases, e.g. \$hitpallal nâ'\$, \$yilbaš nâ'\$, \$way-yâ'ar\$, for the few exceptions as \$tûbâl qyn\$, see Yeivin 1968a, p. 283-284.

In the el-Amarna letters an anticipated \$a\$ is replaced by \$i\$ or \$e\$¹ quite often, but *only* in verbal prefixes. These kinds of forms are impf. prefixes of the simple stem in which \$a\$ also occurs, e.g. \$yi-it-ru-uš-\$- \$ia-az-ku-ur\$²; thus we already have to presume the existence of both impf. types, *yīqtul* and *yaqtul*, in the simple stem in the Canaanite dialects.³ Furthermore, \$i\$ occurs in the "hif^cil" stem \$hi-ih-bi-e\$ (cf. Tib. \$hāḥbī'\$), in the impf. forms of T-stem, e.g. \$yi-eš-ta-par\$, but \$ia-aš-tap-par\$, in the impf. form of "nif^cal" stem \$yi-en-na-bi-eš\$,⁴ and in the noun \$mehrutī\$⁵ which seems to be the only nominal occurrence.

\$i\$ occurs in a few words instead of \$a\$ among the Amorite proper names; GELB (1958, p. 147) mentions the following examples: \$Sa-am-a-la-DINGIR\$ (=Šam'āla-'El) - \$TUR-Si-im-a-al\$⁶, \$Ba-ah-di-Li-im\$ (=Ba^cdī-Lim) - \$Ma-na-Bi-ih-di-im\$, and \$Ha-am-mi-ta-lu-ū\$ (=Ammī-talluhu? - \$Ha-am-mi-ti-lu-ū\$. The verbal prefixes always have (with some uncertain exceptions) an \$a\$ as the prefix vowel.⁷

The only change of ⁺a in unstressed closed syllables occurs in Ugaritic before \$'\$ where ⁺a seems to develop to an e-vowel⁸; in addition to this the short unaccented vowels in open and closed syllables show a tendency to assume the quality of the following accented vowel, e.g. \$ulp\$ (cf. Tib. \$'allūp\$), \$udm\$ (cf. Tib. \$'ādōm\$), \$urbt\$ (cf. Tib. \$'arubbāh\$), \$irby\$ (cf. Tib. \$'arbāh\$). Otherwise short original vowels remain unchanged.⁹

1 \$i\$ and \$e\$ are used in these texts indiscriminately, see Böhl 1909, p. 2 ("scheint Regellosigkeit die Regel").

2 Böhl 1909, p. 2, 25.

3 See Ebeling 1910, p. 45-50; Böhl 1909, p. 48-58.

4 See Ebeling 1910, p. 64-67.

5 Böhl 1909, p. 2.

6 The word has also in Arabic varying forms \$šamāl\$ and \$šimāl\$ (see Lane 1872/1956, Book I, Part 4, p. 1600-1601), and thus it is no convincing proof in favour of the attenuation (cf. D'jakonov 1967, p. 335, who cites this occurrence as the only example of the change of the short a to i in the unstressed closed syllables which change is according to him well represented in Amorite).

7 Gelb 1958, p. 156 § 3.3.1.1. & 2., and the cross-references mentioned there.

8 See Gordon 1965, p. 31 § 5.16.

9 *idem*, p. 30-32.

In the light of the previous review it seems overhasty to date general attenuation as early as the second half of the II millenium B.C. All the evidence cited above can be divided into three groups, i.e. (1) the change of the verbal prefixes attested rather well in el-Amarna letters, (2) the alternative forms of some isolated words, and (3) the phonetic change of Ugaritic.

4.4.2. [i]>[e] and [u]>[o]

Another development of the vocalism of unstressed closed syllables dealt with especially by KUTSCHER¹ is the possible coalescence of [i] and [u] into [e] and [o] in "sub-standardic" Hebrew² and Palestinian Aramaic from ca. 200 B.C.³ According to him [i] and [u] were preserved, however, in that "standardic" Hebrew and Aramaic which served as the sacral reading traditions of Biblical Hebrew and Aramaic as well as in that of the Aramaic of Targum Onqelos.⁴ This theory is mainly based on the transcriptions of the Septuagint, Josephus, Hexapla, and Jerome, the Greek inscriptions found in Palestine, and the manuscripts of the Palestinian Targum, Palestinian Talmud, and Mishnah, all of which have occurrences of $\$e\$/\$ä\$\$$ instead of the anticipated (Tib.) $\$i\$\$$ and $\$o\$/\$ä\$\$$ instead of (Tib.) $\$u\$\$$.

Contradicting his theory Kutscher finds $\$i\$\$$ and $\$ou\$/\$u\$\$$ signs in the transcriptions (Septuagint, Hexapla, Jerome) especially before doubled consonants. Kutscher supposes the doubling to have an influence similar to that exerted by the doubling of "standard" protecting $\$u\$\$$.⁵

1 Kutscher 1969; the article is published also with small supplements in *Qöbes ma'amarim* 1972, p. 129-165. I quote according to the former publication.

2 Kutscher 1969, p. 219-227, esp. 226-227.

3 idem, p. 227-233.

4 idem, p. 226, 230.

In fact, the "standardic" biblical Hebrew seems to be in Kutscher almost identical with the "reading tradition of the Masoretes", i.e. with the Tib. Hebrew. Cf. Kutscher 1959, p. 46: -רושם בם- (Jerome =) "יש שהוא קומות שונים תעתיקים שונים של אותה מלה, ומתן אחת הצורות זהה עם קריאת בעלי המסורה, ומותר להניח אפוא (sic!), כי היא בחינת קריאת סטנדרד, ואילו השנייה חופפת אותה הצורה, אשר לגביה יודעים אנו, או רשאים אנו להניח, כי היא פרי הניב העממי: לשון חז"ל, ארמית או פרי התפתחות לשונית מאוחרת, כלומר מסתבר שהיא בחינת טובסטנדרד ביחס לקריאת המקרא."

All the remaining types of Hebrew and Aramaic including the Hebrew of the transcriptions *diverging* from the "Masoretic reading" thus belong to the realm of the "sub-standard".

5 idem, p. 227.

The "sub-standardic" divergences are rare in the most reliable Mishnah manuscripts (Ms. Kaufmann and Ms. Parma 138).¹ Kutscher explains that as being due to the later corrections which were made in order to have Mishnaic Hebrew comply as closely as possible to the usage of the respected "standardic" Hebrew; the procedure began just after the death of Mishnaic Hebrew as a spoken language. The $\$i\$$ and $\$u\$$ vowels occurring in Aramaic texts also originate from corrections using biblical Aramaic and the Aramaic of Targum Onqelos as a basis. The corrections are numerous especially in the words which are usual in these "standardic" texts, but strange to the genuine Pal. Aramaic, e.g. $\$pitg\ddot{a}m\$$; correcting also extended to Aramaic since Pal. Aramaic in its turn was replaced by other languages, esp. by Arabic, as the spoken language of the Jews.²

Kutscher has not treated the cases where there is an $\$a\$$ in place of an anticipated $\$i\$$. In addition to that, he does not deal with the varying counterparts of ^+a or even of the Tib. $\$a\$$; e.g. as regards Galilean Aramaic he mentions plainly (p. 227): "Of course, I have not taken into account $\$e/\ddot{a}\$$ as the realization of pataḥ, as e.g. $\$y\ddot{a}mm\ddot{a}'\$$." (translation).³ Both of these phenomena are, however, fairly common in the material used by Kutscher. Accordingly, it is appropriate to re-examine the sources as regards these two changes and at the same time to give a general survey of the vocalism of the unstressed closed syllables found in this material essentially connected with my study.

4.4.2.1. Septuagint

The normal counterpart of the Tib. $\$a\$$ is the Greek $\$a\$$, besides it there occurs $\$e\$$ mostly in unstressed positions, e.g. $\$Selm\bar{o}n\$$ = Tib. $\$ṣalm\bar{o}n\$$, $\$Kedm\bar{o}naios\$$ = Tib. $\$qadmon\bar{i}\$$; the Greek $\$o\$$ is found e.g. in $\$Sofonias\$$ = Tib. $\$ṣṣṣpany\ddot{a}h\$$.⁴

1 Kutscher 1969, p. 233-250, esp. p. 241-242, 248-250.

2 Kutscher 1969, p. 229-234.

3 "המונן לא הבאיטי בחשבונון ע = ביצוע פתח, כגון "קמא".

4 Könncke 1885, p. 20.

There is usually $\$e\$$ in place of the Tib. $\$i\$$. Other counterparts are $\$a\$$, e.g. $\$Baldad\$ = Tib. \$bildad\$, \$Galgala\$ = Tib. \$gilg\dot{a}l\$, \$Mall\bar{o}\$ = Tib. $\$mill\bar{o}'\1 , $\$i\2 , and occasionally $\$u\$$ ($\$Sume\bar{o}\$ = Tib. \$\check{s}im^c\bar{o}n\2 and $\$o\$$ ($\$Iothor\$ = Tib. \$yitr\bar{o}\$, \$Lobeni\$ = Tib. \$libn\bar{i}\$$).³$

The counterpart of Tib. $\$a\$$ is "fast überall" $\$e\$$; $\$a\$$ is mentioned only in four words ($\$Abiathar\$ = Tib. \$'äbyät\bar{a}r\$, \$Agalleim\$ = Tib. \$'äg\bar{l}ayim\$, \$Ak(k)ar\bar{o}n\$ = Tib. $\$^c\bar{a}qr\bar{o}n\$, \$Gasi\bar{o}n\$ = Tib. $\$^c\bar{a}sy\bar{o}n\)$; other occasional counterparts are $\$u\$$ in the name $\$B\bar{e}th\ samus\$ = Tib. \$b\bar{e}t\ \check{s}äm\bar{a}\check{s}\$$ ($\$e\$$ is the normal vowel of the final syllables in the "segolate" forms in the Septuagint⁴) and $\$Aerm\bar{o}n\$ = Tib. \$\check{h}ärm\bar{o}n\$$ where $\$a\$$ apparently incitates the laryngeal $\$h\bar{h}\$$.⁵$$

Besides the $\$o\$$ counterparts of the Tib. $\$u\$$ there are the exceptional forms $\$Arab\bar{o}th\$ = Tib. \$'ärubb\bar{o}t\bar{t}\$$ and $\$Le\bar{o}meim\$ = Tib. \$l'ummim\$. Tib. $\$a\$$ is usually represented also by Greek $\$o\$$, but in some cases with $\$a\$$, e.g. $\$Saraa\$ = Tib. \$\check{s}är^c\bar{a}h\$, \$Ambri\$ = Tib. $\$^c\bar{a}mr\bar{i}\$, or $\$e\$$, e.g. $\$Iektan\$ = Tib. \$y\check{a}q\check{t}\bar{a}n\$, \$Herman\$ = Tib. $\$h\check{a}rm\bar{a}h\$.^6$$$$$

As regards the vowels, the transcriptions of Aquila, Symmachus, and Theodotion do not deviate essentially from those of the Septuagint, for details, see Sáenz-Badillos 1975, p. 112-117.

4.4.2.2. Josephus⁷

The most common counterpart of the Tib. $\$a\$$ is also in Josephus the Greek $\$a\$$. $\$e\$$ occurs, however, in 17 names, e.g. $\$Obedias\$ = Tib. $\$^c\bar{o}bad\ y\bar{a}h\$, other counterparts are $\$o\$$ (at least five occurrences, e.g. $\$Tholomaios\$ = Tib. $\$talmay\)$ and once $\$ou\$$ ($\$Ougin\$ = Tib. $\$haggay\)$.$$$$

1 Könecke 1885, p. 23: "Für letzteres (= "short" $\$i\$$) nun steht entweder $\$e\$$ oder $\$a\$$, ohne dass überall ein erkennbarer Grund für die Setzung des einen oder anderen vorläge".

2 See idem, p. 22-23, and Kutscher 1969, p. 219-220. $\$i\$$ occurs mainly in place of the Tib. initial cluster $\$yi-\$$.

3 Könecke 1885, p. 23.

4 idem, p. 24-25.

5 idem, p. 21.

6 idem, p. 24.

7 As far as I know there are no calculations of the vocalism of the transcriptions of Josephus as compared with Tib. punctuation or any other form of Hebrew. The figures given here are based on my previous observations of the word lists published by Schlatter in 1913.

The Greek \$a\$ occurs at least 45 times in place of the Tib. \$i\$, e.g. \$Masfa\$ = Tib. \$mišpāh\$, \$Sapfōra\$ = Tib. \$šipporāh\$. According to Kutscher, there are ca. 40 occurrences of \$e\$ and eight of \$i\$ in this position¹; thus \$a\$ seems to be even more common than \$e\$. Besides these, there are also cases of \$o\$ (e.g. \$Sofonian\$ = Tib. \$šip̄yōn\$, LXX \$Safōn\$), \$u\$ (e.g. \$Sunabanēs\$ = Tib. \$sin'āb\$), and \$ō\$ and \$ou\$ (\$Iōmnēs\$, \$Ioumnēs\$ = Tib. \$yimnāh\$).

Any vowel except Greek \$o\$ occurs instead of Tib. \$u\$ or \$ā\$ at least 15 times. They are \$a\$ (e.g. \$Amarinos\$ = Tib. \$āmri\$), \$ou\$ (\$Iouktas\$ = Tib. \$yāqtān\$), and \$e\$ (\$Efran\$ = Tib. \$āprāh\$). Kutscher mentions ten occurrences of \$o\$ and possibly one \$ou\$ instead of the Tib. \$u\$.²

For results based on the new lists of Schalit (1968), see below, p.79-82.

4.4.2.3. The Second Column of Hexapla.

According to BRØNNO the Greek vowel corresponding to Tib. \$a\$ in unstressed syllables is \$a\$ 149 times, \$e\$ 69 times and \$i\$ five times; in addition there are morphologically explainable cases in which Tib. \$a\$ has no counterpart and a few obscure occurrences.³ \$e\$ occurs in impf. and imp. prefixes of hif^cil stem, in pi^{cc}el forms, "segolate" forms, etc.,⁴ but without consistency.⁵

The counterparts of the Tib. \$i\$ are \$e\$ 107 times, \$i\$ 19 times, and \$a\$ 27 times; in addition, there are 17 obscure cases.⁶ The occurrences of \$i\$ are classified by KUTSCHER into three groups: (1) eight cases of the type \$bayit\$, \$mayim\$ in which Greek \$i\$ represents the consonantal Hebrew \$y\$, (2) seven cases where Greek \$i\$ occurs beside sibilants (six times before them) and (3) twice where \$i\$ precedes doubled consonants.⁷

1 Kutscher 1969, p. 220-221. Of the other counterparts Kutscher mentions (p. 220) only the varying forms \$assarōn\$-\$essarōn\$ = Tib. \$iššārōn\$ without further comments.

2 idem, p. 222.

3 For details, see Brønno, p. 290-296.

4 idem, p. 267-268.

5 idem, p. 290-291.

6 idem, p. 284-287, 262-264.

7 Kutscher 1969, p. 224-225.

The Greek \$a\$ omitted by Kutscher is found (1) 12 times in place of the Tib. \$mi-\$ nominal prefix, (2) 10 (partly uncertain) times in the prepositions \$b-\$ and \$l-\$ before the Tib. shewa (e.g. \$barsōnō\$ = Tib. \$bi-rṣōnō\$, \$lablōm\$ = Tib. \$li-blōm\$, pausal), and (3) twice in the impf. prefixes of qal stem (\$tharak\$ = Tib. \$tirḥaq\$, \$souiardou\$ = Tib. \$way-yirdū\$); the remaining cases are \$karbam\$ = Tib. segolate \$qirbām\$, \$dabrē\$ = Tib. \$dibrē\$, and \$mat arō\$ = Tib. \$mi-ḥārō\$.¹

The unstressed Tib. \$ā\$ appears in Secunda as the Greek \$e\$ 45 times, \$a\$ 11 times, and in 39 cases it is without counterparts. All of these 39 cases are auxiliary vowels of segolates. Additionally, there are uncertain occurrences.²

The counterpart of the Tib. \$ā\$ and \$u\$ is 26 (27) times \$o\$ (five times in place of the Tib. \$u\$ or \$ū\$³), other counterparts are \$a\$ four times, \$ō\$ twice, \$e\$ two (3?) times, and \$u\$ twice (?).⁴

4.4.2.4. Jerome

The Lat. \$e\$ occurs besides \$a\$ as the counterpart of the Tib. \$a\$ (and \$ā\$ in open syllables) both in the stressed and unstressed syllables; according to SIEGFRIED \$e\$ appears "besonders auch vor Verdoppelung". Other counterparts are \$o\$ and "selten... i statt a: sinthoroth \$ṣantôrôt\$".⁵

As regards the counterparts of the Tib. \$i\$, Siegfried enumerates some rare \$i\$ occurrences⁶ and mentions thereafter: "In allen anderen Fällen ist das kurze I durchweg in ě⁷ oder a übergegangen". He gives, however, 18 examples of the \$a\$ counterpart; five of them occur before doubled consonants⁸, six are nouns with the Tib. \$mi-\$ prefix, seven remaining

1 See Brønno 1943, p. 286-287.

2 idem, p. 287-290.

3 idem, p. 366-367.

4 idem, p. 355-356, 366-367, 375, 149.

5 Siegfried 1884, p. 74-75.

6 Kutscher 1969, p. 225, mentions seven occurrences.

7 According to Kutscher (idem) ca. 70 occurrences and ca. 50 different words.

8 According to Siegfried (p. 77) \$e\$ occurs, however, "fast immer" before doubled consonants.

are \$sadecenu\$ = Tib. \$šidqenü\$, \$saba\$ = Tib. \$šib^câh\$, \$anjan\$ = Tib. \$^cinyân\$, \$gazera\$ = Tib. \$gizrâh\$, \$scaslev\$ = Tib. \$kislew\$, \$cariath\$ = Tib. \$qiryâh\$, and \$sarphod\$ = Tib. \$sirpâd\$.

Lat. \$e\$ usually corresponds both to Tib. \$â\$ and \$e\$; however, \$a\$ occurs in a few words, e.g. \$malcaim\$ = Tib. \$mälqâhayim\$, \$scasath\$ = Tib. \$qäsât\$.¹

The counterpart of Tib. \$â\$ is according to Siegfried² "selten kurz ö wie in bosra \$bâšrâh\$, codsa \$qâdšâ'\$", more commonly it is "kurz ä: agga \$hâggâh\$, amri \$^câmrîš.., cadeso \$qâdšô\$". As the counterparts of Tib. \$u\$ he gives \$u\$ in two unstressed closed syllables,³ \$o\$ in four words,⁴ and \$a\$ in three words in the same position.⁵

4.4.2.5. Jewish Palestinian Aramaic

a) In the fragments of the Palestinian Targum published by KAHLE (1930, p. 1-65) there also occur \$â\$ and \$e\$ instead of anticipated \$a\$ (or \$â\$⁶) even alternating with \$a\$; examples:

הַשֵּׁשִׁי (A, Ex. 22:2, but אֶשְׁשִׁי G, 11 and אֶשְׁשִׁי G, 13⁷), אָנָּה, אָנָּה (e.g. C, Gen. 31:42; D, Gen. 38:26, but אָנָּה, אָנָּה D, Gen. 44:20, 22), אֶתְּוֹתֵךְ (D, Gen. 37:20), אֶתְּוֹתֵךְ (D, Gen. 37:33, but אֶתְּוֹתֵךְ D, Gen. 8:1 etc.), אֶתְּוֹתֵךְ (D, Dt. 28:28, but אֶתְּוֹתֵךְ D, Dt. 28:29).⁸ \$i\$ occurs instead of the normal form רַבּוֹן in רַבּוֹן (C, Gen. 35:9), \$o\$ e.g. in the word אֶתְּוֹתֵךְ (D, Dt. 27:2), and \$u\$ especially in the word אֶתְּוֹתֵךְ (e.g. D, Gen. 43:14).

1 The auxiliary vowel of the segolates is usually \$e\$, the first vowel vacillates, however, between \$e\$ and \$a\$, Siegfried 1884, p. 76.

2 idem, p. 78.

3 Kutscher (1969, p. 225-226) mentions three occurrences. He adds the word \$gubba\$ = Tib. \$gubbâ'\$ which does not appear in Siegfried. All of them occur before doubled consonants.

4 According to Kutscher (idem) there are seven occurrences.

5 Siegfried 1884, p. 78-79.

6 The punctuation of the texts, except the fragment B, is "Sephardic", i.e. without distinction between \$e\$ and \$â\$ on one hand and between \$a\$ and \$â\$ on the other. Kutscher 1969, p. 227; Yeivin 1960a, p. 351.

7 According to Kutscher (1969, p. 232) the punctuation of the fragment G follows that of the Onqelos Targum and does not reflect the true Palestinian dialect.

8 Ginzberg (1934, p. 381) presents this phenomenon but without further comments.

DALMAN (1894, p. 64), ignorant of these fragments, already mentions the phenomenon: "Vom Übergange von a in e oder i in ganz oder halb geschlossener Silbe zeigt des galiläische wie das judäische Aramäisch unserer Texte zahlreiche Beispiele". On the contrary, he places, however, on an equal footing the change of a or i into u (p. 65: "Ebenso häufig ist im galil. Dialekt der Übergang von a (bez. i) in u"). Accordingly, it seems that attenuation is no common phenomenon in the Jewish Palestinian Aramaic. The vacillation in the representation of ⁺a may more probably be interpreted as a result of the vagueness (centralization?) of the realization which calls forth the use of varying graphemes; this possibility is already mentioned by Dalman.¹ ⁺a is developed, however, into §ä,e§ in the impf. prefixes of the simple stem.²

Similar vacillation also occurs in the Aramaic of the Pal. Talmud, e.g.

הַגְּנִיִּים³, כְּנַפְיָהוֹן⁴, and on the contrary מִן⁵.

b) According to Kutscher (1969, p. 227) in the fragments A-D there are ca. 300 instances in which §ä,e§ appears instead of §i§ and ca. 80 cases of §i§. The §i§ punctuations are explained by him (idem, p. 228-232) (1) as counterparts of shewa vowels after §y§, e.g. אַמְרֵךְ, (2) or before §y§, e.g. גִּיּוֹרֵךְ, (3) preserved by the influence of a §y§ in the following syllable, e.g. אַמְרֵיךְ (4) as an §i§ preserved in the biblical names, e.g. אֶרְבֵּיךְ, (5) in the suffixed forms §'innûn§ and §'illên§ §i§ originates from the influence of the parallel forms in biblical Aramaic and Targum Onqelos, (6) the word §pitgâm§, alien to Pal. Aramaic, is punctuated in accordance to biblical Aramaic and Targum Onqelos. Ca. 40 of the 80 §i§ exceptions are left outside of these explanations; Kutscher considers them to be the results of corrections. The same explanation is offered to the fragments F and G in which §e,ä§ occurs only exceptionally instead of anticipated §i§.⁶ Similar punctuations are also found in the fragments of the

1 Dalman 1894, p. 58-59.

2 See Kutscher 1971a, c. 272. As regards the attenuation, the situation prevalent in the biblical Aramaic according to the Tib. punctuation is rather similar to that of the Jewish Pal. Aramaic, cf. Bauer-Leander 1927, p. 29 x-y, 97-98 m; §ä,e§ vowels and the vacillation are, however, unfamiliar to the former.

3 = Tib. §hab—bannâyîm§, Epstein 1932, p. 242, l. 17.

4 Ginzberg 1909, p. 155, l. 13.

5 idem, p. 160, l. 8 = Tib. §min§.

6 Kutscher 1969, p. 231-232.

Palestinian Talmud.¹

In addition to these §e,ä§ occurrences, there are also §a§ vowels in the fragments A-D instead of §i§, especially in those cases where one of the prepositions §b-, l-, k-§ or §d-§ is attached to words having shewa as the first vowel, e.g. וְיִבְרָכְךָ (B, Gen. 4:8, twice), לְלֵךְ (B, Gen. 4:8; D, Ex. 9:29, Dt. 5:26), וְלִשְׁכֵּם (C, Gen. 34:24), וְיִדְבַּר (D, Gen. 38:18). The vowels used in this position fluctuate, however, even in same words and morphs in verses close to each other, e.g. לְמִשְׁבַּחְךָ and לְמִשְׁבַּחְךָ (both in C, Gen. 32:27); לְלֵךְ (D, Gen. 37:22); וְיִבְרָכְךָ (C, Gen. 32:25), וְיִבְרָכְךָ (C, Gen. 32:39); וְלִשְׁכֵּם (D, Dt. 26:19, 27:9), וְלִשְׁכֵּם (D, Dt. 26:18); וְיִבְרָכְךָ (C, Gen. 31:43), וְיִבְרָכְךָ (C, Gen. 31:46), but וְיִבְרָכְךָ (D, Dt. 5:26).² The use of §a§ corresponds to the system of Syriac and that of the Hebrew transcriptions in Hexapla³, but diverges, however, from both biblical Aramaic⁴ and the Aramaic of Targum Onqelos⁵ which in accordance with Tib. Hebrew have an §i§ in that position⁶.

c) As mentioned before (p. 42, fn. 6) the punctuation of these fragments, excluding text B, is "Sephardic", i.e. §e§ and §ä§ are used indiscriminately. As regards other exceptions instead of an anticipated §ä§, there is no evidence at my disposal.

d) The anticipated §u§ is replaced 22 times by §o§, §ô§ or §â§ in the fragments; §u§ or §û§ occurs 12 times, but 11 of these words are punctuated also with §o§ or §â§. Of the Palestinian Talmud Kutscher mentions one occurrence of §ô§ and one of §û§.⁷ There is, however, a question concerning the realization of the "Sephardic" §â§ which complicates the review of situation. Kutscher giving the occurrences וְיִבְרָכְךָ ,

1 Cf. idem, p. 233.

2 Peculiar punctuations are also וְיִבְרָכְךָ (C, Gen. 32:20) and וְיִבְרָכְךָ (D, Gen. 44:3). As a similar case of vacillation may be mentioned the treatment of the prothetic vowels, e.g. וְיִבְרָכְךָ (A, Ex. 22:1), וְיִבְרָכְךָ (A, Ex. 22:2), וְיִבְרָכְךָ (D, Ex. 7:17, 19:20); in closed syllables וְיִבְרָכְךָ (B, Gen. 4:11 etc.), וְיִבְרָכְךָ (D, Ex. 6:6). An occurrence not connected with prepositions is וְיִבְרָכְךָ (D, Gen. 37:25).

3 Cf. Brønno, 1943, p. 221-222.

4 Cf. Bauer-Leander 1927, p. 257 d, 258 n.

5 Cf. Dalman 1894, p. 177.

6 Ginzberg (1934, p. 381-382) in his description of this phenomenon considers §a§ to reflect the original *a in the prepositions §b-, l-, k-§.

7 Kutscher 1969, p. 232-233.

אָבֵרָא , and אָבֵרָא concludes that "on account of the first example, it is evident that the qameṣ is a small one".¹ However, the punctuation אָבֵרָאִי (C, Gen. 34:21, but אָבֵרָאִי in the following verse) with an אָ has escaped his attention. Therefore it is not sure that every (Tib.) אָ in unstressed closed syllables represents a labialized vowel of the [ã] or [o] type.

4.4.2.6. Mishnaic Hebrew

The great majority of the evidence presented by Kutscher in favour of the changes [i] > [e] and [u] > [o] consists of Greek and Latin loan words.² On one hand, it may be asked if this kind of material is conclusive as regards the *Hebrew* sound system and its changes. On the other, the fluctuation between אָ, אֶ, and אֵ and between אֹ, אֶ, and אֵ appearing in his tables deserves attention. If the punctuation of Mishnah has been corrected to the extent that Kutscher believes³, why did the correctors not strive for uniformity in the punctuation of one and the same word, at least?⁴

On the basis of the previous excursus, it seems to me that the theory of Kutscher concerning the loss of [i] and [u] in the unstressed closed syllables of "sub-standardic" forms of Hebrew and Aramaic, and only in them, is too simplified. From the material it becomes evident that there existed hesitation concerning the qualities of vowels and their graphic notation in that position. The hesitation appears, however, as regards all of the vowels and the opening of [i] and [u] is by no means the *only* trend of development either in spoken or liturgical Jewish languages.

1 Kutscher 1969, p. 232 : "בגלל הדוגמה הראשונה מסתבר, כי הקצץ קטן הוא"

2 idem, p. 235-248. For Hebrew words, see idem p. 241-2, 248-250.

3 See idem, p. 234.

4 For the variation [a] / [i] in living reading traditions of Mishnaic Hebrew, see below, p. 194-196.

4.4.2.7. Sam. Hebrew, Sam. Aramaic, Aramaic of Ma^Clūla, Christian
Palestinian Aramaic

In order to facilitate the comparisons I give below a short description of the vowel systems of *Samaritan Hebrew*, *Sam. Aramaic*, the *Aramaic of Ma^Clūla*, and of *Christian Palestinian Aramaic*.

(1) Attenuation is unfamiliar to the Samaritan reading tradition of Hebrew. According to MACUCH this is a result of the difference in the stress system.¹ Exceptional are, however, the vocalizations of the prefixes in qal stems where [æ], [e], and [i] vary indiscriminately;² another exceptional group consists of a number of monosyllabic particles and nouns (e.g. \$^Cm\$ = [a/æm] "with", \$'m\$ = [æm] "mother") in which in the suffixed forms the "Zentralvokal" becomes [i] (e.g. [immi], [immak]).³

⁺i is represented in the unstressed closed syllables by qualities resembling [e].⁴

As the counterparts of ⁺u in the closed (stressed or unstressed) syllables occur [ā], [ē], [æ], and even [i], e.g. Tib. \$'āznô\$ = [iznu], \$āk̄lām\$ = [eklimma], \$kol, kâl-\$ = [kæ1] or [kel]. Labial qualities are not extant in this position.⁵

The vowel system of Samaritan Aramaic is parallel to that of the Sam. Hebrew.⁶

1 Macuch 1969, p. 174.

2 According to Macuch (idem, p. 175) [a] is the original vowel in these forms and the other vowels are to be explained as originated by the analogy of stems with an [i] as the prefix vowel, *imāla*, and "vielleicht auch durch den Einfluss der Vulgärsprache der Samaritaner", i.e. not connected with the attenuation. [i] occurs as the normal prefix vowel in the stems nif^Cal and hitpa^{CC}el, see idem, p. 288-292.

3 idem, p. 175.

4 Macuch 1969, p. 159-163, 178. The stressed counterpart is as a rule [i].

5 idem, p. 178-179.

6 See Vil'sker 1974, p. 29, 32, 34-35, 52; Kutscher 1968, p. 400.

(2) In the Aramaic of Ma^clūla ⁺a is realized as an [a] (e.g. [dáhba]), ⁺i is realized in closed syllables preceding stress as an [i] and following stressed syllables as an [e] (or rather as an [ə], e.g. [šinnō̄]-[ih̄fe/ən], and ⁺u appears as an [u] (e.g. [iš̄qul], [dukkalī̄ta]; in the syllables preceding stress [i] and [u] vary, however, dependent on the quality of the the consonantal surroundings, i.e. the phonemic opposition is neutralized between them in that position.¹

(3) ⁺a in Christian Palestinian Aramaic² often seems to be changed into [ä]-[i], so especially in later texts³. The change occurs, however, also in open syllables with an [ā].⁴ Thus it obviously has nothing to do with attenuation, but is a kind of *imāla* phenomenon. A vowel varying between [ä] and [i] seems to occur in the prefixes with initial \$y\$ in the stem qal.⁵ The distribution of short labial vowels is dependent from the nature of syllables: [u] occurs mainly in open syllables and [o] in the closed ones, phonologically both of them represent a single phoneme.⁶ The occurrences of [i] and [e] ([ə]?) possibly follow the same rule.⁷

1 For details, see Spitaler 1938, p. 10-11 and the cross-references mentioned there.

2 Called "Palestinian Syriac" by Bar-Asher and some others, cf. Bar-Asher 1975, p. 1-2.

The dialect was used as a literary language among the Melkites obviously living in Jerusalem and its surroundings in the 6th-13th centuries; the speakers of the dialect probably were converts of Jewish origin; the dialect was superseded by Arabic ca. 900; for details, see Bar-Asher 1975, 145-146, 161-166, 354-361.

3 From the 10th-13th centuries, see idem, p. 42-48, 163-166.

4 See idem, p. 214-216, 282; Schulthess 1924, p. 20.

5 Schulthess 1924, p. 12, 24, 63; he gives no information of other prefixes.

6 For a few exceptions and other details, see Bar-Asher 1975, p. 483-505.

7 See idem, p. 266, fn. 527; p. 271.

II THE MATERIAL PROVIDED BY ST. JEROME

1. Background

1.1. Transcriptions or transliterations

In describing the material utilized in this study I have spoken of the transcriptions of St. Jerome. However, the term *transcriptions* has problems of its own. We know of Jerome's own statements that he made use of the works of Origenes including his Hexapla and the old Greek Bible versions (Septuagint, Aquila, Theodotion, Symmachus).¹ In addition to them, Jerome had so-called Onomastica sacra lists at his disposal.² Thus there exists the possibility that Jerome would have *transliterated* the former Greek transcriptions or transliterations into Latin characters in which case the Hebrew material provided by him is insignificant as far as the actual pronunciation of Hebrew in his life time is concerned. As regards the Onomastica sacra this seems to be widely true.³

¹ "Unde et nobis curae fuit omnes veteris legis libros, quos vir doctus Adamantius in Hexapla digesserat, de Caesariensi bibliotheca descriptos, ex ipsis authenticis emendare, in quibus et ipsa Hebraea propriis sunt characteribus verba descripta; et Graecis litteris tramite expressa vicino. Aquila etiam et Symmachus, Septuaginta quoque et Theodotio suum ordinem tenent." Comm. in Epist. ad Titum, on 3:9, PL 26, c.630 (734 C-D). Cf. also von Campenhausen 1965, p. 135-136, according to his opinion "Hieronymus schöpft sein erstaunliches Wissen ganz überwiegend aus zweiter Hand".

² See Sperber 1966, p. 108-109.

³ idem, p. 108-112. For the differences concerning the use of the Latin \$h\$ between the name lists and Jerome's own transcriptions, see Brønno 1970, esp. p. 172, 184. The differences occurring sometimes between spelling forms of same names go according to Sperber (idem, p. 110-111) back to different *Vorlagen* of the Onomastica sacra. For the explanation of Kutscher (1959), who considers the interpretation of Sperber to be "rahôq" (p.46, fn. 1a), see below, p.51-52.

On the other hand, Jerome had studied Hebrew intensively with qualified Jewish informants also in Palestine where he spent 34 years until his death in 419/420¹ and was therefore completely aware of the differences between the old transcriptions of the Septuagint etc. and the "hebraica veritas", the contemporary pronunciation of those words among the Jews. It becomes unquestionably evident from his words (Comm. in Epist. ad Titum, on 3:9, PL 26, c. 630, 734 B-C):

"Et si forte erraverimus [*Al.* erravimus] in accentu, in extensione et brevitae syllabae, vel brevia producentes, vel producta breviantes, solent (sc. the Jews) irridere nos imperitiae, maxime in aspirationibus in quibusdam cum rasura gulae litteris proferendis. Hoc autem evenit quod LXX. Interpretes, per quos in Graecum sermonem lex divina translata est, specialiter HHETH litteram et AIN, et caeteras istiusmodi (quia cum duplici aspiratione in Graecam linguam transferre non poterant) aliis litteris additis expresserunt. Verbi causa, ut *Rahel*, *Rachel* dicerent: et, *Iericho*, *Iericho*: et *Hebron*, *Chebron*: et *Seon*, *Segor*: in aliis vero eos conatus iste deficit [*Al.* defecit]. Nam nos et Graeci unam tantum litteram *s* habemus, illi vero tres, SAMECH, SADE, et SIN: quae diversos sonos possident. *Isaac* et *Sion* per SADE scribitur: *Israel* per SIN, et tamen non sonat hoc quod scribitur.² *Seon*, rex Amorrhaeorum, per SAMECH litteram et pronuntiatur et scribitur. Si igitur a nobis haec nominum et linguae idiomata, ut videlicet barbara, non ita fuerint expressa, ut exprimuntur ab Hebraeis, solent cachinnum attollere, et jurare se penitus nescire quod dicimus."

In this passage and other similar statements³ Jerome refers to Christians who - without knowing Hebrew - had learned the name forms from the Greek transcriptions of the Septuagint etc. and due to the differences of the Hebrew and Greek sound and script systems⁴ pronounced them in a "comically" distorted way⁵, a case just parallel to

1 For his studies and teachers, see Sutcliffe 1948, p. 112-116.

2 For the problems concerning the realization of the Hebrew §šš and §šš, see Sutcliffe 1948, p. 121-123, and Barr 1967, p. 23-28.

3 See Sperber 1966, p. 109, and Barr 1967, p. 4-9.

4 See Sperber 1966, p. 170-172.

5 This interpretation is offered also by Brønno (1970, p. 205) rebutting the opinion held by Kutscher. Kutscher (1965, p. 48) explains the words "solent irridere nos imperitiae" referring to (Palestinian) "Christians, who were, apparently of Greek or Hellenized origin" and therefore unable to articulate /h/ and /^c/.

the modern English pronunciations [dʒerus(ə)ləm], [áizæk], or [džérikou] *pro* Hebrew [yərušáláyim], [yišḥáq], and [yəriḥó].¹

In spite of the fact that Jerome made extensive use of the *Onomastica sacra* adapting the Greek transcriptions into the Latin phonemic system,² he did not painstakingly follow his *Vorlagen*.³ Thus, although the *Onomastica sacra* material in Jerome cannot be taken as direct evidence of the contemporary pronunciation of Hebrew, it, nevertheless, represents name forms *accepted* by Jerome. Therefore these lists should not be disregarded in research on the Hebrew of the period of Jerome, but a careful use of them should be made in the light of more convincing material, i.e. the Hebrew words of his commentaries.

According to the common view, the Hebrew material included into the commentaries of Jerome goes back to the knowledge of Hebrew he acquired with Jewish informants.⁴ As regards the Hebrew vowels dealt

-
- 1 According to Sperber (1966, p. 109-110) the discrepancies between the name forms of the *Onomastica sacra* and Jerome's statements concerning the realization of the Hebrew \$h\$ and \$^c\$ originate in the changes of the pronunciation of Hebrew: already before the time of Jerome \$h\$ and \$^c\$ had become merely vowels. As regards the change of realization of \$h\$ (and tentatively of \$^c\$) since the period of the Septuagint, there seems to be new evidence in favour of this opinion, but not in the sense advocated by Sperber (and originally by Kahle), see Wevers (1970) who on the basis of the Hebrew transcriptions of the Septuagint and an etymological research upon them has revived the theory of the double pronunciation of \$h\$ (= [h] or [ḥ]) and \$^c\$ (= [ḥ] or [ḡ]) still extant in Hebrew in the second century B.C.
- 2 Cf. Barr 1967, p. 4-5.
- 3 See the detailed comparisons made by Wutz (1914, p. 259-316); for the use of the non-Greek \$h\$, see Brønno 1970, p. 39-172, in short, p. 167-172.
- 4 See Sutcliffe 1948, p. 115; Kutscher 1959, p.35,46; Sperber 1966, p. 112-113; Barr 1967, p.35-36; Brønno 1970, e.g. p.173 and 181: "die eigenen Transkriptionen des Hieronymus". For his teachers, see Sutcliffe 1948, p. 112-116.

with in this study, Jerome could not gain any help from unvocalized Bible text, i.e. he was not able to transliterate, but was compelled to rely upon the Jewish reading tradition(s)¹, viz. to make transcriptions of those vowels, at least.² The only external aid which he could have made use of was the Second Column of Origenes' Hexapla (cf. above, p. 48, fn.1). A comparison of the transcriptions of Origenes and Jerome on the basis of the lists published by Sperber³ indicates, however, that Jerome did not copy the Hebrew of his great predecessors; this can be seen particularly in the transcriptions of the segolate nouns and forms and of the counterparts of the Tib.reduced vowels. Accordingly, the Hebrew words presented by Jerome in his commentaries reflect Jewish pronunciations of his time and provide a reliable source, especially for studies on the unstressed vowels which as a rule are not even indicated with *matres lectionis* in the consonantal text.

1.2. The Quality of the Transcriptions as Reflects of Biblical Hebrew

There is still a problem regarding the quality of the transcriptions of Jerome. According to KUTSCHER, these transcriptions, at least partly, represent a "sub-standardic" dialect of Hebrew; this sub-standard is a reading tradition used outside the synagogues in "profane" occasions and influenced by the spoken language, i.e. Mishnaic Hebrew and Aramaic dialects. As proofs for his theory Kutscher mentions the pronominal suffix form sg. 2 masc. \$-ach\$, the corresponding verbal pf. personal suffix \$-th\$ (*pro* biblical, "standardic", and synagogical \$-kâ\$ and

-
- 1 Jerome had studied Hebrew with different teachers and in different places (see Sutcliffe 1948, p. 112-115) and was aware of personal and regional divergences in pronunciation, cf. his statement "pro voluntate lectorum ac varietate regionum eadem verba diversis sonis atque accentibus proferantur" (Epist. 73 ad Evangelum, n. 8, CSEL 55, p. 21, cf. below, p. 209, fn.4). Thus we can not be sure, whether his transcriptions *always* reflect Palestinian pronunciation habits which, however, is probable regarding his commentaries composed in Bethlehem.
 - 2 For his reliance upon the *written* Bible text, see Barr 1967, p. 5-8.
 - 3 Sperber 1937-1938, p. 203-269; idem 1966, p. 124-165.

§tā§), and some pairs of transcriptions (§thennim§-§thannim§¹, §gob§-§gub§², §beel§-§baal§³, §aria§-§arie§) in which one (= the former) is sub-standardic, i.e. Mishnaic, Aramaized, or a result of recent development, and the other (= the latter) standardic. The reason for the sub-standardic character is that the informants "did not - or did not know how to - read the biblical text strictly according to the biblical tradition, but read it in accordance with their spoken language " [translation]⁴.

As regards the Mishnaic Hebrew and its possible influence, we have to keep in mind that Mishnaic Hebrew became a dead language when it was superseded by Aramaic in about 200 A.D.⁵ It means that the informants of Jerome and their teachers had spoken Aramaic 200 years, at least. That spoken Mishnaic Hebrew had influenced the reading traditions of biblical Hebrew, is very plausible. Analogously, spoken Aramaic had its own effect on them; we could argue that it in particular made itself felt for the pronunciation of unstressed open syllables. It seems unlikely to me that the informants of Jerome, exposed to the influence of Aramaic upon their reading traditions of biblical Hebrew, nevertheless had also preserved their Mishnaic sub-standardic modifications in order to present them to a Christian orientalist, especially if they also had to memorize the standardic tradition for the synagogical liturgy.⁶

1 See below, p. 78 & fn. 1.

2 §gob§ (Ezek.16:24) is according to Jerome "fovea"(pit) (=Aramaic), but §gab§ (Ezek.43:13) "altitudo". Thus it is no real case of variation.

3 §baal§ and §beel§ occur in Hos. 2:16-17: "Hunc Sidonii et Phoenices appellat Baal; eadem enim inter beth et lamed litteras consonantes, ain uocalis littera ponitur, quae iuxta linguae illius proprietatem nunc Beel, nunc Baal legitur." Thus Jerome seems to refer to Aramaic and not to Hebrew.

4 "לא הקפידו - ויתכן כי אף לא ידעו להקפיד - לקרוא את הטקסט המקראי לפי המסורת המקראית וקראו אותו בהתאם ללשונם המדוברת." (Kutscher 1959, p.35). This theory also concerns the transcriptions of Hexapla. See Kutscher 1959, p. 35,46-47; idem 1965, p. 44; idem 1969, p. 226.

5 Kutscher 1971c, c. 1591-1593.

6 It is true that the suffixes §-kā§ and §-tā§ mentioned on the previous page were considered in the *punctuation* traditions of biblical Hebrew to be the correct forms, see Ben-Ḥayyim 1954, esp.p.61. However, we do not know, if the assortment between these biblical and non-biblical (still living, cf. Spanier 1929) allomorphs was performed already in the time of Jerome (or Origenes).

Regarding the influence of Aramaic, there is no clear evidence of that; e.g. in the treatment of the vowels of the unstressed open syllables mentioned above, the very opposite is true.¹ Of course, there may be words or forms influenced by Aramaic, but their amount is surely too small to stigmatize the Hebrew material of Jerome as a sub-standard.

1.3. Treatment

In the following tables the words are arranged according to the original vowels; the subgroups consist of the different counterparts of a given original vowel in Jerome and in the Tib. punctuation. If the original vowel is unknown or uncertain, the words are located in their own groups with the comparison taking place only between Jerome and the Tib. punctuation.

The starting point for a determination of the original vowel has been the *Lexicon* of KOEHLER-BAUMGARTNER (=K-B) and the etymologies and language comparisons presented there. These have been collated with grammars (mainly Bauer-Leander and Meyer) and dictionaries of respective languages. These have also provided additional evidence for etymologies.²

The spelling of the transcriptions follows that of the critical edition *Corpus Christianorum* (=CC) and in few words, which are not yet available in CC, of Migne's *Patrologia Latina*; the latter are indicated with the abbreviation PL. Amongst the textual variants only those having a bearing upon the vowels concerned here have been mentioned. The abbreviation *On* indicates words going back to the *Onomastica sacra*. The mistakes concerning the places of occurrence in Sperber are corrected without notice.

1 According to my observations these vowels have preserved their original qualities in the reading tradition(s) reflected by the transcriptions of Jerome; the material will be dealt with in a forthcoming study.

2 If not mentioned otherwise, the dictionaries have been: for Akkadian: *Akkadisches Handwörterbuch* of von Soden (1959-), for Arabic: al-Farā'id of Hava (1970), for Syriac: *Lexicon Syriacum* of Brockelmann (1928), for Ethiopian: *Lexicon Linguae Aethiopicæ* of Dillmann (1955), and for Ugaritic: *Ugaritic Handbook* of Gordon (1965).

2. ⁺/a/2.1. ⁺/a/ = Jerome \$a\$ = Tib. \$a\$

Jerome	Tib.	Etymological notes	Place of occurrence
1. aganoth	'aggânô _t	Akk.agannu	Isa.22:24
2. agmon	'agmôn	Akk.agammu	Isa.19:15
3. aiala	'ayyâlâh	Akk.ajjalu(m), Ug. 'aylt	Gen.49:21
4. aelamoth	'elammô _t	Akk.e/illamu (?)	Ezek.40:16
5. amma	'ammâh	Akk.ammatu(m), Ug. 'amt	On,2.Sam.2:24
6. aphpho	'appô	Akk.appu(m),Ar. 'anf ^{un} ,	Am.1:11
baaphpho	b-'appo	Eth.'anf	Isa.2:22
7. arbee	'arba ^c	Ar.,Eth.,Sy.,Ug.'a-	On, Gen.23:2
arbaim	'arbâ ^c îm		Jonah 3:4
8. argaman	'argâmân	Akk.argamannu,Ug. 'argmn	Ezek.27:16
9. aria	'aryeh	Eth.'arwē,	Isa.21:8, CC 73, p.206
arie		Sy.'aryâ'	Isa. 21:8, CC 73, p. 292.
10. baali	ba ^c alî	Akk.ba'lu,balu, Ar.ba ^c l ^{un}	in Hos. 2:16-17
11. gannim	gannîm	Akk.gannu,Sy. gannēt _â '	On,Josh.19:21
in Engannim			
12. idabber	ydabber	pi.,impf.	Isa.32:6
13. alleluia	halēlû-yâh, ⁺ hallēlû-yâh	pi., imp.	in Isa.26:6
14. agan	hag-gân	Hebr.article,cf.K-B	On, 2 Kgs.9:27
in Bethagan			
aggoi	hag-gôy		Mal.3:9
adagim	had-dâgîm		Zeph.1:10
acchumarim	hak-kmârîm		Zeph.1:4

accherubin	hak-krubīm		On, Exod. 25:20
alluoth	hal-luhōt		Hab. 2:2
ammelech	ham-mälāk		Zech. 14:10
amsuchan	ha-msukkân, + ham-msukkân		Isa. 40:20
affara	hap-pârâh		On, Josh. 18:23
asedec	haṣ-ṣādāq		in Isa. 19:18
baggoim	bag-gōyim		Hab. 1:5
baphphuch	bap-pūk		Isa. 54:11
labala	lab-bähälâh		Isa. 65:23
lamanasse ¹	la-mnaṣṣeâh, + lam-mnaṣṣeâh		praefatio in Dan.
15. aggi	ḥaggi	Ar. ḥāḡḡ ^{un} , ḥāḡḡ ^{un}	On, Num. 26:15
16. adda	ḥaddâh	Hebr. ḥaddâh,	On, Josh. 19:21
in Enadda		Ar. ḥadd ^{un}	
17. hamma	ḥammâh	Hebr. ḥâm	Isa. 24:23
18. arasthem	ḥāraštām-	qal, pf., transit.	Hos. 10:13
19. zabdi ²	zabdī	Akk. zabdī, zabdi-	On, Josh. 7:1
(& zebdi, see p. 57)		ilu, ³ Hebr. zābād	
20. chauonim	kawwānīm	Akk. kamānu	Jer. 7:18

1 Transcriptions obscure or occurring only as variants of this group are

nifilim,			
annafilim	han-npīlīm		Gen. 6:4
sademoth	haš-šremot,		Jer. 31:40
asademoth	cj haš-šdemot		
+ asaphanaim,			
assafanaim,	ha-špattayim		Ezek. 40:43
assefanaim			

2 According to Jerome \$zabdi\$ means "fluxus vehemens" and the parallel form \$zebdi\$ (also On, Josh. 7:1) "dotis meae". The former goes back to the roots \sqrt{zwb} , \sqrt{zby} , "to flow" and the latter to the root \sqrt{zbd} = "to bestow a person with", cf. Tib. \$zebäd\$ with \$e\$; see K-B and Jastrow (1950), s.v. Thus it seems that Jerome considers them to be two different names.

3 Besides these names there occurs also *zibdi* in Akkadian, see Tallqvist 1914, p. 245, 248; cf. also the variants \$zabdy\$ and \$zibdy\$ (Josh. 7:17) in Bab. punctuations, see Yeivin 1973a, p. 199 \$489.

21. caphthorim	kap̄tôr(îm)	Akk. kaptaru	Amos 9:7
22. charmi	karmî	Akk. karmu(m), Ar. karm ^{un}	On, Exod. 6:14
23. amaggenach	'amaggänkä	pi., impf.	Hos. 11:8
24. memmasce	mim-mašqeh	hif., part.	Ezek. 45:15
25. enasse	'ānassāh	pi., impf.	Isa. 7:12
26. lamanasse	la-mnašṣeāh	pi., part.	prefatio in Dan
27. ami	^c ammî	Ar. ^c amm ^{un} , Hebr. ^c am	On, Num. 1:7
	in Aminadab		
	ammi		On, 2 Sam. 13:37
	in Ammiod		
28. acrabbim	^c aqrabbîm	Ar. ^c aqrab ^{un} etc.	On, Josh. 15:3
29. maphate	m̄p̄atteāh	pi., part.	Zech. 3:9
30. calloth	qallôtā	qal. pf.	Nahum 1:14
31. carnaim	qarnayim	Ar. qarn ^{un} etc.	Gen. 14:5; On, Gen. 14:5
32. rabbath	rabbat	Akk. rabbū(m) etc.	On, Deut. 3:11
rabbōth ¹	+ rabbôt ²		On, Josh. 19:20
33. masmim	mašmîm	hif., part.	Ezek. 3:15
34. thannin	tannîn	Ar. tannîn ^{un} , Sy. tannînā'	Isa. 27:1
	Total 53 occurrences.		³

1 Jerome: = "multî".

2 Pro Tib. §rabbîṭ§

3 In addition to these, Sperber mentions words
cassaphe kaššāpê qattāl, Akk. kasšāpu Jer. 27:9

samtech, ṣammātek Ar. ṣamma^{tun} Isa. 47:2

However, §cassaphe§ does not occur in any manuscript of Jerome's Commentary on Isaiah, but the forms given in them are §chassane§ and §cassane§ which nevertheless are translated by him "daemonum fasmatibus seruientes".

Jerome does not give his own transcription in Isa. 47:2; §samtech§ is according to him the transcription of Theodotion and §semmathech§ that of Aquila.

Thus the value of these words as evidence is doubtful.

2.2. ⁺/a/ = Jerome \$a\$ = Tib. \$i\$/\$ä\$

1. gaba ¹	gib ^c âh	Akk. gab'u, cf. B-L, On, 1 Sam. 10:26 459 z [˘]	
2. dabre in dabrejamin	dibrê	Hebr. dâbâr	1 Chr. 1:1 (PL)
3. chachar	kikkar	Akk. kakkaru; ⁺ karkar, cf. B-L, 482 f ^o	Zech. 5:7
4. lacerath	li- <u>qra</u> 't	Prep. ⁺ la ⁻²	Am. 4:12
5. naalma	nä ^c âlmâh	nif., pf.	Job. 28:21 in Gen. 24:43
6. caria cariath	qiryâh qiryat	Ar. qarya ^{tun} , cf. B-L 1927, p. 182 b [˘]	Isa. 26:5 in Hos. 2:15
	cariathaim	qiryâ ^{tayim}	On, Num. 32:37
7. saba	šib ^c âh	Ar. sab ^c a ^{tun} , Sy. šab ^c â', etc.	Jer. 15:9
8. sacchore	šikkôrê	Akk. šakkūru	Isa. 28:3

Total ten occurrences; ⁺/a/ is followed by \$a\$ in the next syllable in eight cases among them. For the discussion of these transcriptions, see below, p. 65, 87; for \$naalma\$, see also p. 61.

2.3. ⁺/a/ = Jerome \$e\$ = Tib. \$a\$

1. eezinu	ha'âzînu	hif., imp.	Joel 1:2
2. heieu	hayyêhû	pi., imp.	Hab. 3:2
3. ieros	yahârôš	qal, o-impf.	Hos. 10:11
4. esne	hasne ^c	hif., imp.	Mic. 6:8
5. theethim	tahtîm	Ar. tahta, etc.(?)	On, 2 Sam. 24:6

As for \$zebdi\$ (= Tib. \$zabdi\$, On, Josh. 7:1), it is uncertain whether the original vowel of this variant also is ⁺a, cf. above, p. 55, fn. 2.

For \$semmathech\$, see above, p. 56, fn. 3.

¹ The derivative \$gabaath\$ given by Sperber (On, Josh. 24:33 = Tib. \$gib^cat\$) does not occur in manuscripts; instead of that CC has \$galaath\$ and \$gabaad\$ as a variant in one ms.

² For the etymology, see Brockelmann 1908, p. 495-496; B-L, p. 636; Rabin 1960, p. 201.

The interpretation of the (Tib.) name \$taḥtīm ḥādšī\$ is rather uncertain (cf. K-B, p. 1027, s.v.) All of the other cases are verbal. Among them \$ieros\$ seems to be connected with a tendency to bring *verba primae laryngalis* closer to the patterns of "strong" verbs. In particular this development may be seen in the Bab. punctuation (cf. above, p. 43, and שִׁרְיָ / שִׁרְיָ, Yeivin 1968a, p. 351), but it also appears in Pal. punctuation and in Mishnaic Hebrew.¹

The imperative forms of hif^Cil and pi^{CC}el stems with \$e\$ in the prefix are rather strange. Exact counterparts are found, however, in the transcriptions of Hexapla where the great majority of imp. and impf. forms in hif^Cil has the Greek \$e\$ as the prefix vowel in closed syllables (e.g. \$ouerninou\$ = Tib. imp. \$w-harnīnū\$; \$thesthirēm\$ = Tib. impf. \$stastīrem\$)², and similar forms occur also in the imperative of pi^{CC}el (e.g. \$felletēni\$ = Tib. imp. \$palltenī\$)³. BRØNNO considers the hif^Cil forms with \$e\$ (or even \$i\$ in \$iggiou\$ = Tib. impf. \$yaggi^Cū\$) to represent an expansion of the attenuation phenomenon to patterns where it is not permitted in the Tib. punctuation.⁴ For a modified attempt to explain these cases, see below, p. 66.

2.4. ⁺/a/ = Jerome \$e\$ = Tib. \$i\$

1. geborim ⁵	gibbôrîm	Ar. ḡabbār ^{un} , Sy. gabbārā, ganbārā'	in Isa. 13:3
2. megella	mġillāh	Akk. magallatu, Sy. mgalltā'	Zech. 5:1
3. respha	rišpāh	Ar. raṣf	On, 2 Sam. 3:7
4. setta	šittāh	Ar. sant ^{un}	Isa. 41:19
settim	šittim		On, Ex. 25:5

1 See Murtonen 1958, p. 39; Yahalom 1969, p. 39-41, and below p. 180-185.

As regards the preserved realization of laryngeal consonants in the time of Jerome, see above, p. 4, fn. 2.

2 See Brønno 1943, p. 100, 91; Sperber 1966, p. 188-190.

3 See Brønno 1943, p. 78; Sperber 1966, p. 186.

4 Brønno 1943, p. 97-98, 101.

5 PL: \$gibborim\$. For \$gibbor\$ (Isa. 9:5 etc.), see below, p. 62.

5.	semsi	šimsī	Akk. šamšu, Ar. šams ^{un}	On, 1 Sam. 6:18
6.	iessaar ¹	yishār	Pref. ya- ²	On, Ex. 6:18
7.	iesboc	yisbāq	- " -	On, Gen. 25:2
8.	iegal	yig'āl	qal, impf., trans., or pref. ya- ²	On, Num. 13:7
9.	iemna	yimnāh	- " -	On, Gen. 46:17
10.	iepte	yiṭtāḥ	- " -	On, Josh. 15:43
11.	iezboleni	yizblenī	qal, impf., trans.	Gen. 30:20
12.	iezra	yizra ^c ,	- " -	On, Josh. 17:16
	in Iezrahel	yizr ^c ä(')l		
13.	iebla	yibla ^c ,	- " -	On, 2 Kgs. 9:27
	in Ieblaam	yibl ^c ām		
14.	haiecba	hā-yiqba ^c	- " -	Mal. 3:8
15.	thephphol	tippol	qal, o-impf.	Ezek. 8:1
16.	neptalti	niṭtaltī	nif., pf.	Gen. 30:8
17.	nethab	niṭ ^c āb	nif., part.	Isa. 14:19

\$zemma\$ = Tib. \$zimmāh\$ in Ezek. 16:27 (cf. Ar. dam^{un}) is a transcription of Theodotion only quoted by Jerome. \$hechin\$ in Am. 4:12 seems to be a pf. of hif^cil³ *pro* Tib. imp. of nif^cal \$hikkôn\$.

At least seven of the occurrences are verbal prefixes in which "attenuation" had already existed in the el-Amarna letters.⁴ Also in Ugaritic \$i\$ occurs as the prefix vowel of *verba mediae* and *tertiaie laryngalis*,⁵ and in the transcriptions of the Septuagint and Hexapla \$e\$ (besides \$i\$⁶) is just about the only vowel found in the closed prefix syllables of verbal forms, including even the prefixes of the hif^cil

1 But \$isaar\$ in Zech. 4:14, cf. below, p. 62.

2 Cf. B-L 487-488; Koehler 1950. For ⁺a, see Barth 1889, p. 228, and below, p. 60, fn. 3.

3. As proposed by Sperber (1966, p. 142, s.v.).

4 See above p. 36.

5 See Gordon 1965, p. 71 § 9.9.

6 \$i\$ represents the Tib. prefix \$yiC-\$ (e.g. \$isrof\$ = Tib. \$yišrop\$) in Hexapla. Irrespective of that whether \$isrof\$ etc. reflects a pronunciation as [isrof] or [yisrof] (cf. Brønno 1943, p. 374-375), these transcriptions bear evidence for the change of ⁺/a/ into /i/ in the verbal prefixes even more than those with \$e\$ (e.g. \$thephphol\$). For the similar \$i\$ occurrences in Josephus, see below, p. 80, fn. 1.

stem.¹ Thus we are entitled to conclude that the ⁺/a/ of the closed verbal prefixes in Hebrew had acquired a quality resembling [e] or [i] long before the time of Jerome. $\$e\$$ used by Jerome testifies for a rather open timbre of the prefix vowel, because even the Latin $\$i\$$ is frequently transcribed with the Greek $\$e\$$ in Latin loan words.²

In remaining ten words $\$e\$$ occurs between $\$y\$$ and a sibilant twice ($\$iessaar\$, \$iesboc\$\), preceded by a sibilant twice ($\$setta\$/\$settim\$, \$semsi\$\), followed by a sibilant in one word ($\$respha\$\), and preceded by $\$y\$$ in three words ($\$iegal\$, \$iemna\$, \$iepte\$\). The two words left are thus $\$geborim\$ and $\$megella\$\$ ⁴. As regards the influence of sibilants and /y/, see below, p. 63-64; for the Hebrew sound values reflected by Latin $\$e\$, see below, p. 70-72.$$$$$

2.5. ⁺/a/ = Jerome $\$e\$$ = Tib. $\$ä\$\$

According to the common view the Tib. $\$ä\$\$ of the following words has its origin in the influence exerted by the laryngeal consonants.⁵

1.	esebon	ḥäšbôn	Ar. ḥasbān	On, Num. 21:25
2.	hesre	ḥäšreh	Hebr. ḥšār, etc.	Ezek. 40:49
3.	nesab	näḥšāb	nif., part.	Isa. 2:22
4.	eelim	häḥlīm	hif., pf.	2 Kgs. 4:27 in Isa. 7:14
5.	esphoch	'äšpok	qal, o-impf.	Joel 3:1 (2:31).

1 See Sperber 1966, p. 180-182, 187-192; cf. also above, p. 58.

2 Cf. Sturtevant 1940, p. 31, 110. See also below, p. 71.

3 Even if it would be better to compare the nouns with a prefix $\$y-\$$ with the prefixes $\$m-\$$ and $\$t-\$$ (cf. below, p. 189-199), they nevertheless represent an earlier tendency towards "attenuation", i.e. the stabilization of a closed vowel in the prefix; the difference could be due to an analogy of the verbal prefixes with $\$y-\$$.

4 $\$m\bar{g}illāh\$ is mentioned by B-L (p. 492 w⁶) among the words of pattern maqtil/miqtil.

5 See e.g. B-L, p. 207-208.

The three verbal cases represent the "attenuation" of verbal prefixes dealt with in the previous paragraph. The Latin $\$e\$$ used by Jerome does not indicate whether the Hebrew vowel had a quality of [e-ä] as in the Tib. Hebrew or even more closed resembling [i] ; as mentioned before (p.41-2) Latin $\$e\$$ is the normal counterpart of the Tib. vowels $\$e\$$, $\$ä\$$, and $\$i\$$.¹

Above (p.57-8) we have encountered $\$ieros\$$ (= Tib. $\$yaḥrôš\$$) in which the counterpart of the Tib. prefix vowel $\$a\$$ is Lat. $\$e\$$. Also, taking into account the "non-Tib. attenuation" of the words $\$eezinu\$$ and $\$esne\$$ (above, p.57-8) we could suppose that the attenuation was extended to all *verba primae laryngalis*. The evidence in support of this is, however, very sparse.² In addition, we possess a reverse example where $+/a/$ in that position is transcribed with $\$a\$$ by Jerome while the Tib. punctuation has an $\$ä\$$. That occurs in the pf. of $nif^C al \$naalma\$$ = Tib. $\$nä^C älmäh\$$ (Job 28:21 in Gen. 24:43).³ Thus it is evident that a quality of the [a]-type was not unknown for the prefixes of *verba primae laryngalis*. We may possibly argue that the assimilative influence of the laryngeals tended to preserve original prefix vowel in this group of verbs; on the other hand the "Systemzwang" of the "strong" verbs could produce forms as $\$ieros\$$; among the laryngeals $\$ḥ\$$ was perhaps (as in the Bab. Hebrew) the most liable to tolerate regular formations.

As regards $\$esebon\$$ and $\$hesre\$$, in both of them $\$e\$$ is followed by a sibilant ($\$š\$$ and $\$ś\$$), cf. below, p.63 - 64.

-
- 1 For the Hebrew sound values reflected by Latin $\$e\$$, see below, p. 70-72.
 - 2 In Jerome $\$ieros\$$ is the only occurrence of *verba primae laryngalis* which in the Tib. punctuation have $\$a\$$ as the prefix vowel in the stem *qal*.
 - 3 Cf., however, Tib. part. forms $\$na^C älmäh\$$ (pausal, Nahum 3:11) and $\$na^C älmâm\$$ (Ps. 26:4).
For the Tib. change of $\$ä\$$ into $\$a\$$ - contrary to our case - connected with the transition of the stress (e.g. $\$yä'äsoḗ\$$ - $\$ta'asḗ\$$), see Bergsträsser 1926-29, p. 111-112; B-L, p. 197 n¹, 349 q.

2.6. ⁺/a/ = Jerome §i§ = Tib. §i§

1.	gibbor ¹	gibbôr	Ar. ġabbār ^{un} , Sy.	Isa. 9:5; 10:21, gabbārâ', ganbārâ'	Jer. 32:18
2.	issa	'iṣṣâh	Akk. ašṣatu, Ug. 'att	in Jer. 1:11	
	hissa	- " -	- " -	Gen. 2:23	
3.	illaue ²	yillâwâh	nif., impf.	Gen. 29:34	
4.	isaar ³	yiṣhâr	Pref. ya ⁻⁴	Zech. 4:14	
5.	isaac	yišhâq	- " -	Am. 7:16	
6.	nimrezeth	nimrâṣât	nif., part.	1 Kgs. 2:8 (PL)	

§chion§ (Am. 5:26, = Tib. §kiyyûn§, cf. Akk. kaj(j)āmanu(m) and Ar. kaywān^{un}) is a transcription of Aquila and Symmachus quoted by Jerome.

§i§ in the closed unstressed syllables is very rare in Jerome, occurring in a total of 12 words (cf. below, p.67,90-91). Among them §i§ is preceded by the Hebr. §y§ in three words and followed by it also in three (§abiona§, §sionim§, §siim§), in two it is followed by sibilants (§š§ in §hissa§, §issa§⁵ and §z§ in §mimizra§) and once preceded by §š§ (§sinthoroth§); in the words §nimrezeth§ and §mimizra§ §i§ occurs between the nasals (§m§ and §n§). In addition, sibilants also occur in four of the §y§ cases (§isaar§, §isaac§, §sionim§, §siim§) and nasals twice next to sibilants (§mimizra§ and §sinthoroth§).

Similarly §i§ occurs only 19 times as the counterpart of the Tib. §i§ in closed unstressed syllables in the transcriptions of Hexapla (cf. above, p. 40-41). In eight of them §i§ represents the consonantal yod of the Tib. cluster §-ayi-§ (e.g. §maim§ = Tib. §mayim§). The other occurrences (11) can be classified⁶ as above: following after the Hebrew §y§, four cases:

1 But §geborim§ in Isa. 13:3, cf. above, p.58 .

2 Var.: §ellaue§.

3 But §iessaar§ (On, Ex., 6:18), cf. above, p.59 .

4 Cf. above, p. 59, fn. 6, and 60, fn. 3.

5 Cf. the Greek transcription §essa§ in Josephus (Ant. 1,36), mentioned by Schlatter 1913, p. 22.

Jerome derives them from the masculine form §his§, §is§. Thus it is probable that §i§ is influenced by this etymology, as argued by Kutscher (1969, p. 225).

6 For the classification of Kutscher, see above, p.40-41.

ισραφ	yísrōp̄	ισρη	yísrê-
ἱθαλλалу	yithallālu (P.)	ουῖκραηνι	hû' yiqrâ'enî
before sibilants, four cases:			
νισβαθ	nišba ^C tā	μιχνωθαμ	mišknōtām
μισγαβ	mišgāb (twice)		
following §šš, one case			
σιμου	šim ^C û-		
before nasals: two cases:			
...ιμμα	û-klimmāh (P.)		
μιμμενι	mimmännî (P.) ¹		

§i§ occurs twice between §y§ and a sibilant (§šš, §śš), four times between a nasal and a sibilant.

The Greek §i§ occurs in Hexapla as the counterpart of other Tib. vowels in unstressed closed syllables four times:²

following §y§:	ΥΥΛΟΥ	yaggî ^C û	ισουμοχ	yísmhû
before §šš:	μισβιθ	mašbîṭ		
following §śš:	σιμωθ	šammôṭ		

In two of them §i§ occurs between a nasal (§m§) and a sibilant (§šš), once between §y§ and a sibilant (§śš).

The §i§ signs of Hexapla and Jerome occur just in equal consonantal surroundings which hardly can result from mere chance. This also becomes apparent upon statistical examination: according to CANTINEAU³ the consonants §y§ (8.8%), §šš (4.53%), §śš (0.6%), §sš (1.3%), §zš (0.76%), §ss (0.7%), §m§ (9.03%), and §n§ (6.1%) represent only 31.79% of the total number of consonants in Hebrew texts⁴, i.e. we could anticipate that the ways of explanation given above should cover less than a third part of the §i§ occurrences. In particular, this concerns the sibilants with an average frequency of 7.89%⁵, a number highly exceeded by the occurrences.⁶

1 For details, see Brønno 1943, p. 284-285, 370.

2 Cf. idem, p. 370-375, and the cross-references there.

3 Cantineau 1950, p. 97-98.

4 The corresponding number according to the table of Radday-Shore (1976, p. 120) based upon the Pentateuch is 30.99%.

5 According to Radday-Shore (idem) 7.86%.

6 For other "anomalous" correspondences in the neighbourhood of sibilants or §y§, cf. above, p. 60, 62 and below 80, fn. 1, 88, 90-91, 128-129, 147-149, 191.

PRETZL and BRØNNO have already referred to the sibilants (§šš and §śš) as an explanation for the exceptional \$i\$ vowels of Hexapla.¹ A tendency of the sibilants to change vowels of [a]-type into [e] or even [i] is a common phenomenon in the Semitic languages², especially in Syriac³. It appears also in the Bab.⁴ and Pal.⁵ punctuations. Similarly the "diphthong" [ya] is inclined to develop into [ye], [yi] or into vowels [ī], [i] in many of the Semitic languages⁶. Taking this evidence into account it is not surprising to find \$i\$ (and \$e\$) vowels instead of an anticipated \$e\$ (or \$a\$) in the consonantal surroundings described above in the transcriptions of Jerome (and Hexapla); in particular it is true regarding the cases where both \$y\$ and a sibilant occur in the same syllable.⁷ Concerning the analogous effect of nasals, there is no external evidence at my disposal excluding the parallel forms of Hexapla (...\$simma\$ and \$mimmeni\$). The only \$i\$ in Jerome which does not tally with these explanations is that of \$gibbor\$ (cf. the plural form \$geborim\$).

2.7. ⁺/a/ = Jerome \$o\$ = Tib. \$a\$

1.	bocboc	<u>baqbuq</u>	Sy. bagbuggā'	Jer. 19:1
2.	chodchod	kad <u>ko</u> d	Ar. kadmada ^{tun} ,	Isa. 54:12
			Sy. qadqednā'	

\$bocboc\$ could be connected with the influence of the labial consonants which show a tendency to assimilate the adjacent vowels into labial

1 See Brønno 1943, p. 284-285, 264-265.

The solution is approved also by Kutscher (1969, p. 224).

2 See Brockelmann 1908, p. 201-202.

3 Brockelmann 1960, p. 35-36.

4 Cf. above, p. 32-33; Yeivin 1968a, p. 288.

5 Cf. below, p. 128-129.

6 See Brockelmann 1908, p. 189-190.

7 This is the explanation of Kutscher for transcriptions as \$Isaak\$, \$Ismael\$, \$Israel\$, and \$Iesha\$ of the Septuagint (Kutscher 1969, p. 219).

qualities¹. That does not, however, fit for \$chodchod\$.²

2.8. Conclusions

⁺/a/ is indicated with \$a\$ in Jerome for 42 different words (cf. above 2.1. & 2.2.) and this represents 54.5% of the total amount (77) of the occurrences of ⁺a.

Group 2.2. containing words which have preserved the original vowel quality as against Tib. \$i\$ demonstrates that the transcriptions of Jerome reflect at least in part a more conservative reading tradition than the Tib. punctuation and by no means a sub-standardic popular type of Hebrew.³

Of the 35 cases where Jerome has another counterpart for ⁺/a/ than \$a\$, at least 15 are vowels of verbal prefixes marked by him either with \$e\$ (groups 2.3, 2.4, 2.5) or \$i\$ (2.6). That the development of the ⁺/a/ vowels of verbal prefixes into sound values as [e] or [i] has taken place long before Jerome's time, is postulated above (p. 59-60); this kind of change occurs even in other Semitic languages, most clearly in Syriac and Modern Arabic dialects⁴, for which attenuation is an otherwise unknown phenomenon.

As regards the view according to which attenuation originates in Hebrew from a regressive dissimilation of a-vowels⁵, we have to pay attention to the fact that among the eight "unattenuated" words (group 2.2) there are six in which unstressed \$a\$ is followed by an other \$a\$. If "attenuated" verbal prefixes are also taken into account, we must conclude that the dissimilation theory is unsound, cf. also below, p. 79, 82-83, 87-88.

1 See Brockelmann 1908, p. 199-201, and Kutscher 1959, p. 391-392 with the literature mentioned there.

A similar case occurring in a stressed syllable is \$rob\$ "magister" (in Hagg. 1:1), but \$rabsaris\$ (On, 2 Kgs. 18:17). For \$gob\$ = Tib. \$gab\$ (P.) - \$gab\$ = Tib. \$gab\$ (st.c.), see above, p. 52, fn. 2. Cf. also forms with exceptional labial vowels in the Septuagint, and Josephus, above, p. 38-40.

2 According to Kutscher (1959, p. 358-360) both of these words probably represent the pattern *qulqul* dissimilated later into *qalqal*; for *qilqil* patterns (\$selsel\$ and \$gelgel\$), see below, p. 87 & fn. 2, and p. 89 & fn. 4.

3 For the attenuation problem, see below, p. 82-83, 87-88, 189-199.

4 See Brockelmann 1908, p. 560-562.

5 Cf. above, p. 17-18.

It thus seems well-grounded to separate the development of verbal prefixes of the stems qal and nif^Cal from other types of attenuation and to put them on different diachronical levels in the phonological history of Hebrew. The prefixes of hif^Cil (cf. \$eezinu\$, \$esne\$ and those of Hexapla, above, p. 57 - 58) have possibly followed the development of other verbal prefixes¹ in the Hebrew reflected in these transcriptions; a similar phenomenon is the Bab. hif. part. \$miggîd\$ (= Tib. \$maggîd\$).²

The only occurrence of stems with the prefix \$ht-\$ is the hitpolel. \$methnosasoth\$ (5.2.1.no. 20, below, p. 86 & fn. 8) which might perhaps be used as evidence for the "attenuation" of these stems. Concerning the vocalism of verbal prefixes of *verba primae laryngalis* the material is very sparse; \$naalma\$ (p. 61) indicates, however, that these verbs could escape the change; on the other hand, \$ieros\$ (p. 61) is in accordance with the "strong" patterns. As a consequence of this consideration, we could classify the vowels of the verbal prefixes occurring in the "strong" stems qal and nif^Cal and possible also hif^Cil (and hitpa^{CC}el?) as representatives of the *synchronic* /i/³ in the Hebrew reflecting in Jerome's transcriptions.

As regards the remaining 20 words, in six of them \$e\$ occurs beside sibilants (2x *post*, 4x *prae*), in four preceded by the Hebrew /y/ and in four between /y/ and a sibilant (= total 14)⁴. For \$bocboc\$ and the possible effect of labials, see above, p. 64-65, \$heieu\$, \$theethim\$ (p. 57), \$geborim\$, \$megella\$ (p. 58 - 60), \$gibbor\$ (p. 62) and \$chodchod\$ (p. 64) are the only words (6 = 7.8%) not suited to these explanations.

The agreement of Jerome's transcriptions with the original ⁺/a/ is thus even surprisingly strict.

1 I.e. not the general attenuation, cf. above, p. 58 .

2 Cf. above, p. 33 . For the exceptional nature of the Tib. \$a\$ in hif^Cil, see above, p. 18 - 19.

3 According to the traditional view of the phonemes, cf. above, p. 25- 26.

4 For the assimilative influence of these consonants and the supposed sound values indicated by the Lat. \$e\$, see p. 63 - 64, 71-72.

3. ⁺/i/
3.1. ⁺/i/ = Jerome \$i\$ = Tib. \$i\$

1. mimizra mim-mizrah Ar. & Hebr. min in Gen. 2:8¹

In eight similar cases the preposition \$min\$ is transcribed with \$e\$, see below, 3.2. For the possible effect of nasals occurring on both sides of the vowel (as in \$mimmi\$ of Hexapla), see above, p. 63 - 64, cf. however, also p. 90-91.

- 3.2. ⁺/i/ = Jerome \$e\$ = Tib. \$i\$/\$ä\$

1.	emmer	'immer	Akk. immeru	Jer. 20:1
2	ieiu ²	yihyu	qal, intr. a-impf., Eth. yehyaw	Isa. 26:19
3.	chennor	kinnôr	Akk. kinnârum	On, Ezek. 26:13
4.	mebeten	minnî-bätän (⁺ mib-bätän)	Ar. & Hebr. min	Isa. 46:3
	mebbeth	mib-bêt		Am. 1:5
	meiam	miy-yâm		Hos. 11:10
	mecchenaph	mik-knap		Isa. 24:16
	memmenni	mimmännî		2 Kgs. 4:27 in Isa 7:14
	menni	minnî-		Isa. 46:3
	memmallo	mim-ma ^c al lô		Isa. 6:2
	memmasce	mim-maşqeh		Ezek. 45:15
5.	ephsi, ephsiba ³	hăpšî-bâh	Ar. hifz ^{un} , B-L, p. 460 g [~]	Isa. 62:4
	ebsiba			On, 2 Kgs. 21:1
6.	egla	^c äg-lâh	Ar. ^c iğl ^{un} , ^c iğla ^{tun}	Hos. 10:11
7	sela ⁴	⁺ şillâh, şillâh	Ar. zill ^{un}	On, Gen. 4:19

1 Codex Monacensis 6299, (saec. VIII-IX): \$meccedem\$ (= Tib. \$miq-qädäm\$) following the type 3.2.4.
2 Hebr. \$h\$ occurs as \$ô\$, \$h\$, or \$ch\$ in Jerome, see Siegfried 1884, p. 70-71; here it is obviously "ganz verschluckt" as Siegfried (idem, p. 70) states.
3 Var. \$ephesi\$.
4 Cf. also \$beselehel\$, 3.3.2.

8. iethmau yit_umāhu (P.) qal, intr. a-impf. Jer. 4:9
Total 16 occurrences.

3.3. ⁺/i/ = Jerome §e§ = Tib. §a§

- | | | | |
|--------------|-----------|------------------------------|--------------|
| 1. reglau | raglā(y)w | Ar. riġl ^{un} , | Isa. 6:2 |
| | | Bab.Hebr. riġlā(y)w | |
| 2. beselehel | bšal'el | Akk. Ina-šilli-bēlīja, | |
| | | etc., Ar. zill ^{un} | On, Ex. 31:2 |

For the Hebrew of Jerome, these words could thus be places in the previous group. For the Tib. anomalousness, see B-L, p. 559 1-m, 566-567 e.¹

3.4. ⁺/i/ = Jerome §a§ = Tib. §a§

- | | | | |
|-----------------------|--------------------------------------|------------------------------------|-------------|
| 1. bamma ² | bam-mäh | Pre. ⁺ bi ⁻³ | Isa. 2:2 |
| 2. ast-hesre | ^c aštē ^c äšreh | Akk. ištēn(um), | Ezek. 40-49 |
| | | istiat | |

Both of these etymologies are, however, uncertain. ⁺/a/ is usually considered to be the original vowel of the prepositions l- and k- as opposed to ⁺bi which has an historical ⁺/i/³. In Hebrew, however, all of these prepositions are vocalized equally in similar positions. The regular counterpart of the vowel of these prepositions is §a§ in Hexapla, both in open⁴ and closed syllables,⁵ and this is the case also regarding the transcriptions of Jerome (for §lacerath§, see above, p. 57). Thus the view of RABIN concerning ⁺/a/ as the original vowel of these prepositions⁶ appears for Hebrew, at least, rather plausible.

1 Cf. also Bab. punctuations §k-šal§, §šalēlê§, §šaš-šel§, §miš-šillô§, Yeivin 1973a, p. 150-151; for the Bab. §riġl-§, see idem, p. 195.

2 Sperber (1966, p. 144) mentions indiscriminately the forms §bamma§ and §bama§.

According to Jerome, however, §bama§ is "excelsum", but §bamma§ means "in quo"; thus §bama§ should be compared with the Tib. §bāmāh§ and only §bamma§ with the prepositional combination §bam-mäh§.

3 See e.g. Brockelmann 1908, p. 495-496; B-L p. 636; Meyer 1969, p. 175.

4 Excluding cases in which there is no vowel in Hexapla.

5 See Brønno 1943, p. 216-224.

6 Rabin 1960, p. 201.

If the Hebr. $\$^c a\hat{s}t\hat{e}\$$ really is a loan word,¹ it may have gotten the back vowel together with the appearance of the non-etymological $/^c/$. As the consonant text of Hebrew indicates, this $/^c/$ and probably also its vowel are not innovations from the period of Jerome. On the other hand, LEWY has proposed a common original form $^{+c} a\hat{s}t\hat{a}i$ with an initial $/a/$ vowel for both the Hebr. and Akkadian form.²

3.5. $^{+}i/ =$ Jerome $\$a\$\$ =$ Tib. $\$i\$/\$\hat{a}\$\$$

- | | | | |
|-------------|-----------|--------------------------------|----------|
| 1. alechcha | 'äl-ḥikkā | Ar. 'ilā, Bab. Hebr. Zech. 7:1 | |
| | | 'il ³ | |
| 2. casleu | kislew | Akk. Kis(i)līmu | Hos. 8:1 |

$\$alechcha\$\$$ could be connected with the interchange of prepositions $\$'\hat{a}l\$\$$ and $\$\hat{c}al\$\$$ of Hebrew.⁴

$\$casleu\$\$$ has parallel forms with $\$a\$\$$ also in the Septuagint (Zech, 7:1, Neh. 1:1; 1 Macc. 1:54), in Josephus ($\$Hasleus\$,$ Schalit, p. 45ab), and as a Hebrew loan word [kaslew] in the Jewish Neo-Aramaic of Azerbaijan⁵. On the other hand, we have to pay attention to the peculiar counterparts of the Hebrew vowels occurring between the Hebrew $\$k\$\$$ and $\$\hat{s}\$\$$ both in Jerome and in the other transcriptions. Jerome transcribes the (Tib.) word $\$ksil\$\$$ (Am. 5:8) as $\$chasil\$\$$ which follows his normal methods; the inflected forms of the same word $\$ksil\hat{e}\$\$$ and $\$ksil\hat{e}h\hat{a}m\$\$$ (Isa. 13:10) = $\$chisile\$\$$ and $^{+}\$chisileem\$\$$ ⁶ have, however, in the place of the Tib. shewa an $\$i\$\$$ which occurs nowhere else in that position before a non-laryngeal.⁷

1 Cf. e.g. K-B, p. 745, s.v.

2 Lewy 1949, p. 110, 116.

$\$\hat{c}\$\$$ occurs also in South Arabian ($\$\hat{c}st\$\$$), see Bauer 1966, p. 63.

3 See Yeivin 1973, p. 221.

4 For details, see Goshen-Gottstein 1957, p. 7-9; idem 1958, p. 108; Sperber 1966, p. 631-633.

5 Sabar 1975, p. 281.

6 $\$chileem\$\$$ of the manuscripts is most probably corrupted by omission of the syllable $\$si\$\$$ from $\$chisileem\$\$,$ a form given by Vallarsi, Migne, and Sperber. $\$chisile\$\$$ occurs in Lib. V and $\$chileen\$\$$ in Lib. VI.

7 So according to my observations; for $\$nifilim\$\$,$ see above, p. 55, fn. 1; cf. also Siegfried 1884, p. 80.

In Hexapla $\$i\$$ occurs only once corresponding to the Tib. shewa; that takes place in the words $\chi\lambda\omicron\upsilon\omicron\varsigma$ = Tib. $\$k-s\hat{u}s\$$ (Ps. 32:9),¹ i.e. between the Hebr. $\$k\$$ and $\$s\$$. Josephus has four Hebrew words with this combination among his transcriptions. They are Ἐξαλώθ , Ἐαλώθ cf. Tib. $\$kisl\text{ot } t\grave{a}bor\$$, $\$ksul\text{ot}\$$ ², Ἐξελέους and Χασλεύς mentioned above = Tib. $\$kislew\$$ ³, and a more regular Χέσλοιομος = Tib. $\$kaslu\hat{h}im\$$ ⁴. What is the factor calling forth these peculiarities is not clear to me.

3.6. $+/i/$ = Jerome $\$o\$$ = Tib. $\$i\$$

1.	gozi	gizze ^ˆ	Akk. gizzu(m)	Am. 7:1
			Ar. ġizza ^{tun}	

Jerome translates this word as "tonsor (regis)" (and "tonsura") which indicates that he has interpreted it as a kind of participle form of the parallel root \sqrt{gzy} .

3.7. Conclusions

Of the 16 words presented in this chapter Jerome has transcribed $+/i/$ with $\$e\$$ in ten cases and with $\$i\$$ once.⁵ The value of the other five words as contrary evidence is limited.

The use of $\$e\$$ as the normal counterpart of $+/i/$ is problematic. In addition to Jerome, all of the transcriptions follow the same line.⁶ According to BRØNNO (1943, p. 264-265, 454) $\$e\$$ of Hexapla represents an [e] vowel, and it is also the interpretation of KUTSCHER concerning all of the transcriptions with the modification that he considers [i] to have been preserved in the "standardic" synagogical reading tradition (cf. above, p. 37-38).⁷ On the basis of the transcriptions

1 See Brønno 1943, p. 321.

2 Schalit 1968, p. 45a, Septuagint: Χασαλώθ Ἐαβάρ .

3 idem, p. 45ab, Septuagint: Χασελεύ .

4 idem, p. 126bc, Septuagint: Χασλωνιμ .

5 = 68.75%

6 Cf. above, p. 39-41, for the inscriptions, see Kutschler 1969, p. 223.

7 For my points of view in regard to the "standardic" Hebrew and its relation to the transcriptions of Jerome, see above, p. 51 -53.

of Hexapla, MEYER (1966, p. 105) argues that the Tib. [i] "aus älterem $e < i$ mas(oretisch) weithin neugebildet wurde".

Earlier PRETZL¹ has compared the $\$e\$$ vowels of Hexapla as "die Umschreibung des kurzen i" with the Modern Arabic of Damascus in which $^+ /i/$ and $^+ /u/$ have centralized into a neutral "Gleitlaut" the timbre of which is determined by the adjacent sounds. Brønno (1943, p. 264-265, 454) rebuts this view, because the transcriptions of Hexapla cannot be treated as a transcription of the masoretic text.

The vowel used in the place of *stressed* Tib. $\$i\$$ vowels (as a rule $< ^+ /i/$) is normally $\$i\$$ (or $\$ei\$$)² in all of the transcriptions.³ That is a clear proof for the fact that the writers did not identify the realization of the counterparts of the Tib. stressed $\$i\$$ with that of the unstressed, at least not regarding the sound system of Greek or Latin. However, $\$i\$$ also occurs in the transcriptions a few times in closed unstressed syllables,⁴ a fact indicating that neither does the frequent employment of $\$e\$$ in this position reflect the existence of a graphic tradition of transcriptions. Rather this irregularity speaks in favour of the usage of vowel signs having originated in actual auditory perceptions.

Concerning the Hebrew sound values transcribed by the Greek or Latin $\$e\$$ we have to pay attention to the fact that in the Latin graphemic system of vowels there was only one sign, $\$e\$$, reflecting front (or central) half-open vowel qualities⁵, while the Greek alphabet was able to indicate also a timbre of [ü]-type.⁶ Thus we may conclude that the Latin $\$e\$$ used by Jerome should cover a considerable area of the vowel square,

1 Pretzl 1932, p. 13-14.

2 The Greek "diphthong" $\$ei\$$ was realized as [ī] before consonants since 200 B.C. Sturtevant 1940, p. 40-41.

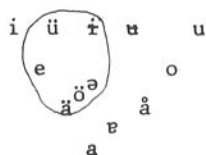
3 Könnecke 1885, p. 22; Brønno 1943, p. 281-284; Siegfried 1884, p. 77.

4 Cf. above, p. 39-41, 62-64, 67 & below, p. 90-91.

5 In the period of Jerome $\$æ\$$ already had the same realization as $\$e\$$ (Sturtevant 1940, p. 123-129) and $\$y\$$ was pronounced as [u] (idem, p. 121-123).

6 Sturtevant 1940, p. 41-44, 50-52. The quantity of $\$ē\$$ as a long vowel was obviously preserved in the time of the Greek transcriptions (idem, p. 31-38) and thus it was unsuitable for positions concerned here; in addition, as regards the quality it was realized identically with $\$e\$$ (idem, p. 39-41). For use of ypsilon, see above, p. 39-41.

somewhat as in the figure below



If we take into account this graphemic point of view and the $\$i\$$ occurrences, the conception held by Brønno, Kutscher, and Meyer appears biased. On the other hand, approving the explanation model of Pretzl regarding the centralized realization it should be more than likely that we would find numerous examples of confusion between $\$i\$$ and other "short" vowels at least in some of the Hebrew punctuation systems. However, this is not the case.¹

One solution might be to consider the $\$e\$$ occurring as the counterpart of $^+i/$ in Jerome (and possibly also in the other transcriptions) to reflect a quality fluctuating between [e], [ɨ], and [i]. This would make it easy to understand (1) why the stressed and unstressed $^+i/$ are not transcribed with the same symbol, (2) the occurrence of exceptional counterparts besides $\$e\$$ influenced by the consonantal surroundings, (3) the general employment of one and the same vowel sign for the occurrences of synchronic $/i/$ ² (< $^+a/$, $^+i/$) independent of the position (or length?) in the punctuation traditions of Hebrew, and (4) the few cases of vacillation between $\$i\$$ and other vowel signs existing in closed unstressed syllables in those punctuations.

This does not imply, however, that every $\$e\$$ of Jerome or transcriptions in general occurring in that position would represent $/i/$. Much rather many of the $^+a/$ = Jerome $\$e\$$ cases (influenced by sibilants, etc.) may still belong to the realm of the Hebrew $/a/$ ² in spite of their more closed realization which is identified by Jerome with the "lower edge" of the area of the *Latin* grapheme $\$e\$$.

¹ Cf. above, p. 21, 29, 34, 37-38, and below, p. 148-150.

² According to the phonemization of Cantineau and others, cf. above, p. 25-26; for the contrary views of Rabin, cf. there.

4. ⁺/u/4.1. ⁺/u/ = Jerome \$u\$ = Tib. \$u\$

- | | | | |
|-----------------------|----------------|---------------------------------------|----------------------------|
| 1. gubba ¹ | gubbâ' (Aram.) | Akk. gubbu, Ar.
ğubb ^{un} | Dan. 6:8,25 in
Jer. 6:7 |
| 2. amsuchan | ha-msukkân | pi., part. (??) | Isa. 40:20 |

In the word \$gubba\$ ⁺/u/ is followed by a labial consonant which is able to give even an ⁺/a/ labial sound values.² Thus the occurrence of \$u\$ instead of a more likely \$o\$ is not surprising. As for \$amsuchan\$ and its \$u\$, both the etymology and the meaning of this word are obscure,³ as a consequence the closing of the syllable \$-such-\$ cannot be confirmed.

4.2. ⁺/u/ = Jerome \$o\$ = Tib. \$u\$/\$â\$

- | | | | |
|------------------------|-----------------------|--|----------------------------|
| 1. borodim | bruddîm | qatul ⁴ | Zech. 6:3 |
| 2. chullo ⁵ | kulloh | Akk. kullatu,
Ar. kull ^{un} , etc. | Ezek. 11:15 |
| 3. maozim | mâ ^c uzzîm | Hebr. mâ ^c ôz | Dan. 11:38 in
Isa. 30:1 |
| 4. ozi
in Ozihel | ^c uzzi'e1 | Hebr. ^c oz, B-L,p.
455 h' | On, Ex. 6:18 |
| 5. sgolla | sğullâh | Akk. sug/kullu(m) | Mal. 3:17 |
| 6. codsa ⁶ | qâdšâh (?) | Ar. quds ^{un} | in Isa. 40:13 |

1 Var.: \$gabbas\$.

2 Cf. above, p. 61, fn. 1.

According to Jerome \$gubba\$ is both a Syriac and Hebrew word = "cisterna", see in Jer. 6:7 and cf. Kutschler 1969, p. 226.

3 Cf. K-B, p. 658.

4 An adjective denoting colour, cf. Barth 1889, p. 13-14; B-L, p. 467 n^o-o^o.

5 \$chullo\$ mentioned by Sperber (1966, p. 142, s.v.) and following him by Kutschler (1969, p. 226) is no independent transcription but a variant form of \$schullo\$ occurring in Editio Mavrinorvm and in Vallarsi (\$ghullo\$ of PL is not attested in mss.).

6 Jerome: "spiritum sanctum lingua sua appellari genere feminino: rua codsa". \$codsa\$ is, however, no adjective of feminine gender, but a derivation of the noun "holy thing" which independent from its meaning has ⁺/u/ as the initial vowel, a fact sufficient for our purposes.

4.3. ⁺/u/ = Jerome \$a\$ = Tib. \$â\$

1. adamim	'ădummîm	qatul ¹	Zech. 6:2
2. cadeso	qâdšô	Ar. quds ^{un}	Isa. 63:10
3. amri	^c âmri	Akk. <u>humri</u>	Mic. 6:16

\$amasim\$ (Zech. 6:3) is not an adjective denoting colour¹ in Jerome as is the Tib. \$'ămuššîm\$; according to him it is "pro fortibus", cf. the verbal root $\sqrt{mš}$ = "to be strong" and the noun ⁺\$'omăš\$ proposed by Kutscher (1959, p. 500) as occurring in 1QISa.

Two of these three words have ⁺/u/ before \$m\$, a labial (cf. above, p. 73), which makes \$a\$ even more conspicuous. For detailed discussion of these and similar phenomena in other sources, see below, p. 168-171, where a very open realization of ⁺/u/ occurring particularly in certain morphological patterns is suggested to be the factor behind \$a\$ counterparts (cf. also below, p. 84-85).

4.4. ⁺/u/ = Jerome \$e\$ = Tib. \$i\$

1. sefor	šippôr	⁺ šuppur ²	On, Num. 22:2
----------	--------	----------------------------------	---------------

According to Kutscher³ this case of dissimilation is part of the first stage of the development u>i which appears in many languages and dialects of Syro-Palestine. The form of the Septuagint (\$sepfor\$) together with the Aramaic parallels having \$e\$-\$i\$ vowels as the counterpart of ⁺/u/⁴ go to show that the change is much earlier than Jerome's transcriptions. Thus the \$e\$ of \$sefor\$ obviously represents /i/ in the period concerned here, and the word could have been dealt with in paragraph 3.2. above.

1 An adjective denoting colour, cf. Barth 1889, p. 13-14; B-L, p. 467 n^o.

2 See Kutscher 1959, p. 357, 358, fn. 15.

3 idem, p. 356, 358-360, and above, p. 22.

4 See idem, p. 383.

What is the effect of the labial /p/ upon the vacillation between labial and illabial vowels in different sources, even upon the alleged original pattern?

4.5. Conclusions

The occurrences are rather few - a total of 12. Nine of them occur before a Tib. doubled consonant¹, and thus the doubling as proposed by Kutscher² is not an adequate explanation for the two \$u\$ cases.

The dispersion of the counterparts of ⁺/u/ is quite similar to that of ⁺/i/: the main counterpart is \$o\$ with some more "closed" and "open" "exceptions", and the situation in other transcriptions also seems to be similar.³

The explanations given by BRØNNO and KUTSCHER are also on the same line as for the \$e\$ cases (cf. above, p. 70): the Greek and Latin \$o\$ reflects Hebrew [o] sound which has developed from an [u]⁴. For PRETZL and his theory concerning the centralized realization of ⁺/i/ and ⁺/u/, see above p. 71.

The normal counterpart of *stressed* Tib. \$u\$ (as a rule <⁺/u/) in the Greek transcriptions is \$ou\$ and in the Latin ones \$u\$, but only exceptionally \$o\$ (or \$ō\$)⁵. As regards the Greek transcriptions it is of great importance to observe that there was no short [u] in Greek, at least not before the second century A.D., and thus \$o\$ was the only grapheme which could be used in order to mark short labial vowels.⁶

Latin possessed two short back vowels [u] = \$u\$ and a more open [o] = \$o\$.⁷ Since Latin \$u\$ is not used, however, as the normal counterpart of

1 Of the eight remaining counterparts of the Tib. \$u\$/\$ā\$ four occur in the Tib. punctuation before doubled consonants, see below, p.84-85, 91.

2 Kutscher 1969, p. 225-226; cf. above, p. 37.

3 See above, p. 39-41; Kutscher 1969, p. 224.

4 See Brønno 1943, p. 356, 458. For Kutscher, see above, p.37-38 (and 51-52).

Meyer does not express clearly his view, cf. Meyer 1966, p. 106.

5 See Könncke 1885, p. 24; Brønno 1943, p. 364-366; Siegfried 1884, p. 78.

6 Sturtevant 1940, p. 46-47, 104. \$ō\$ was realized as a long vowel at least until the second century A.D., and in that time it already was identical with \$o\$ in regard to quality (idem, p. 47).

7 idem, p. 115-119.

Hebrew ⁺/u/ in closed unstressed syllables, I arrive at a solution equal to the above for the counterparts of ⁺/i/ (p.72): the Hebrew ⁺/u/ was usually realized as a vowel which was able to move between the sound values [ã] , [ʊ] and [u] depending on the consonantal surroundings. However, the §a§ correspondences of ⁺/u/ (above, p. 74 , and below, p. 84-85, 168-170) give proofs for the existence of even more opened allophones resembling perhaps an [e] timbre. On the contrary, since there is no real case of (contemporary) confusion between ⁺/u/ and ⁺/i/ in Jerome, we may conclude that the centralization of the realizations did not reach into [ə] . + + +

As a general conclusions we are able to learn that the three original vowels ⁺/a/, ⁺/i/ and ⁺/u/ are consistently distinguished in the Hebrew reading tradition(s) which the transcriptions of Jerome reflect.

5. Remaining occurrences

In the words listed below the original quality of the vowel occurring in a closed unstressed syllable is unclear. Thus the comparison is restricted to the spelling of Jerome and that of Tib. punctuation.

5.1. Jerome §a§

5.1.1. Jerome §a§ = Tib. §a§

Jerome	Tib.	Etym.notes	Place of occurrence
1. abrech	'abrek		Gen. 41:43
2. adama ¹	'admâh		On, Deut. 29:22
3. asir	'assîr		On, Ex. 6:24
4. arbe	'arbâh	+ a/i ²	in Hos. 13:3
5. armanoth	'armnôt		Jer. 17:27
6. asamath	'ašmat		in Am. 8:14
7. baddau	baddâ(y)w		Hos. 11:6
baddim ³	baddîm	Hebr. bad	Ezek. 9:2

1 = "humus", thus obviously = Tib. §ădâmâh§.

2 Cf. K-B, p. 82, s.v.

3 Quoted by Jerome as a transcription of Theodotion.

8. gallim	gallim	Hebr. gal, Akk. gillu	Isa. 10:30
9. dabbath ¹	dabbäšät		On, Josh. 19:11
10. daioth	dayyôṭ		Isa. 34:15
11. hatath	ḥaṭṭā't		Gen. 4:7
12. pharpharoth ²	+ ḥāpārpārot	qataltal, B-L, 482-3	Isa. 2:20
13. harsith	ḥarsîṭ (qrê)		Jer. 19:2
14. lapidoth	lappîdôṭ		On, Judg. 4:4
15. mamad	maḥmad		Hos. 9:6
16. mate	maṭṭeh-		Ezek. 4:16
17. machthes	makteš		Zeph. 1:11
18. malach	mal'ak		Hag. 1:13
malachi	mal'ākî		Mal. 1:1
malache	mal'ākê		Isa. 14:32
19. malchihel	malkî'el	+ a/i ³	On, Num. 26:45
20. mamzer	mamzer		Zech. 9:6
21. maceloth	maqhelot		On, Num. 33:25
22. macaloth	maqlôṭ		Zech. 11:7
23. marchaboth	markābôṭ		On, Josh. 19:5
in Bethmarchaboth			
24. marphe	marpe'		Eccles. 10:4
25. massa	maššā'		On, Gen. 25:14
26. massa ⁴	maššā'		Isa. 19:1 (Lib.VII)
27. matthan	mattān		On, 2 Kgs. 11:18
28. mathana,	mattānāh		On, Num. 21:18
matthana	- " -		Eccles. 7:7
29. manasse	mnāssāh		On, Gen. 41:51
30. azur	^c azzur		On, Ezek. 11:1
31. alma	^c almāh		Isa. 7:14

1 \$dabbasth\$ given by Sperber does not occur in manuscripts, cf. the critical apparatus of CC, and below, p. 93, fn. 2.

2 Quoted as a transcription of Theodotion.

3 Akk. *malku* but *milk* in Phoenician, see below, p. 89, fn. 6.

4 But \$messa\$ in Isa. 13:1 (Lib. V); both of them are translated by Jerome as "pondus" ("onus"), cf. below, p. 89, no.6.

32. araboth	^c arbot	On, Num. 26:63
33. phanag	pannaḡ	Ezek. 27:17
34. salama	šamlâh	On, Gen. 36:36
35. saddai	šadday	Ezek. 1:24; On, Luke
36. sademôth	šadmôṭ	On, 2Kgs. 23:4
37. samma	šammâh	On, Gen. 36:13
38. thannim ¹	tannîm	Isa. 13:22 (Lib.VI), Isa. 43:20, Jer. 10:22.
39. thafue	tappûâh	On, Josh. 15:53
in Beththafue		
thaffue	- " -	On, Josh. 12:17
40. thamuz	tammûz	Ezek. 8:14
41. tardema	tardemâh	Gen. 15:12
thardema	- " -	Isa. 29:10

5.1.2. Jerome \$a\$ = Tib. \$i\$ and the Problem of Attenuation

1. balaam	bil ^c âm	On, Num. 22:5
2. gazera	gizrâh	Bab. Hebr. \$gizrâh\$ ² Ezek. 42:10
3. zamri ³	zimrî	On, Num. 25:14
4. chabratha	kibrat	Bab. Hebr. \$kibrat\$ ⁴ On, 2 Kgs. 5:19
5. chaphphe ⁵	kippâh	Isa. 19:15
6. mabsar	mibšâr	Bab. Hebr. \$ma-\$ On, Gen. 36:42
7. mabsam	mibšâm	On, Gen. 25:13
8. magdal	miḡdâl	Ar. miḡdal ^{un} , Sy. On, Josh. 15:37
in magdalgad		magdlâ', NT Magdala
9. magdal	miḡdol	Bab. Hebr. \$ma-\$ Ezek. 29:10
10. magras	miḡrâš	Bab. Hebr. \$ma-\$ Ezek. 48:17

1 But \$thennim\$ in Isa. 13:22 (Lib. V); \$thennim\$ occurs also as a textual variant in Isa. 43:20, cf. below, p. 89, no. 11.

2 Yeivin 1973a, p. 190.

3 For \$zemerî\$, see below, p. 86, no. 4, Jerome: zamri = "psalmus uel canticum meum".

4 Yeivin 1973 a, p. 191.

5 Varr.: \$caffa\$, \$chephpha\$.

11. machthab	miktâb	Bab. Hebr. \$ma-\$	Isa. 38:9
12. mesaloth ¹	mšillôt		Zech. 14:20
13. masarfoth	mišrpôt		On, Josh. 11:8
14. masma	mišmâ ^c	Bab.Hebr. \$ma-\$	On, Gen. 25:14
15. sarphod	sirpad		Isa. 55:13
16. anian	^c inyan	Bab.Hebr. \$ ^c inyân\$ ²	Eccles. 1:13
17. sadecenu	šidqenû		Jer. 23:6
18. sannoth	šinnôt		Am. 4:2
19. sapphonim	šip ^c onîm		Jer. 8:17
20. satana	šitnâh		Gen. 26:21
21. sadda	šiddâh		Eccles. 2:8
saddoth	šiddôt		- " -
22. thamna	timnâh		On, Josh. 15:57
23. thamna	timna ^c		On, Gen. 36:12

In 16 cases the unstressed \$a\$ is followed by another \$a\$ vowel. Similarly we have seen above (p. 57) in the corresponding group 2.2. eight words with an "unattenuated" \$a\$ and in six of them this \$a\$ is followed by another \$a\$. On one hand, these transcriptions could be used as evidence for a late date of Tib. attenuation³ and against the theory of the dissimilatory tendency as the starting point for the attenuation⁴, on the other.

It might not be out of place to deal here also with the vowels corresponding to the Tib. \$i\$ in the transcriptions of Josephus which yield similar results. According to my observations based on the *Namenswörterbuch* of SCHALIT (1968), there are 35 words in which the Greek vowel occurring in place of Tib. \$i\$ is \$e\$. Besides a few occasional cases

1 Sperber (1966, p. 147, 113): = Tib. \$mišhălot\$, but cf. Barr 1967, p. 31.

2 Yeivin 1973a, p. 177.

3 Cf. above, p. 16-17.

4. Cf. above, p. 17-18, 65.

of $\$i\1 , $\$u\3 , and $\$ou\3 , there are, however, 49 words where the counterpart of the Tib. $\$i\$$ is $\$a\$$:

Josephus	Septuagint	Tib.
1. Apsánēs	Esebon (A) Abaisan (B)	'ibṣān
2. Bagathōōs	Bagathan	biḡtān, biḡtānāh
3. Bādakros	Badekar	bidqar
4. Bālamōs	Balaam	bil ^c ām
5. Bālla	Balla	bilhāh
6. Bārsas	Barsa	birṣa ^c
7. Gabathā	Gabaa/e	gib ^c āh
8. Gabaōn	Gabaon	gib ^c ōn
9. Gabathōnē	Gabathōn	gibbtōn
10. Gālgala	Galgala	gilgāl
11. Galaadītis	Galaad	gil ^c ād
12. Dāklēs (& Déklēs)	Dekla	diqlāh
13. Zalfā (& Zelfā)	Zelfa	zilpāh
14. Zambrías	Zambri	zimrī
15. Za- (& Zembrānēs)	Zemras	zimrān

1 13 different words: Giōras = $\$giyyōrā'\$$, Garizeis etc. = $\$grizzim\$$, Ginaia etc. = $\$gannim$, $\$ginnā'\$$, Gitthā, Gitta; Gittaōs = $\$gittā'$, $\$gittī\$$, kighares = $\$kikkār\$$, (Schlatter 1913, p. 67), Lībba, Lembā = Ar. $\$libb\$$, (Schlatter 1913, p. 119), Magiddō etc. = $\$mgiddō\$$, Mithridātes = $\$mitrdāt\$$, Fineēsēs = $\$pīnhās\$$, Fulistīnos = $\$plištīm\$$, Sīmōn = $\$šim^cōn\$$, Thīsrī = $\$tišrī\$$; in addition, there are five words (ismaēlītai, Ismaēlos, Isoúsios, Isrāēlos, Issahārēs) where the Tib. cluster $\$yi-\$$ is transcribed plainly with the Greek $\$i\$$, all of them occur before sibilants. Cf. Kutschler 1969, p. 220-222, and above, p. 40.

2 Two words: Sunabānēs = $\$šin'āb\$$ and Amúgdalon = $\$ham-miḡdāl(im)\$$.

3 Soumōús = $\$šim^cī\$$, cf. below, p. 81, no. 42.

16.	Ialdafās (& Ieldāfas)	Ieldaf, Ieldaf	yidlāp̄
17.	Iafthās (&Iefthās)	Iefthae	yiṗtāḥ
18.	Labina	Lomna, Lobna	libnāh
19.	Mássamos, Mábamos	Massam	mibšām
20.	Madianē, Madiānēs	Madiam	midyān
21.	Madianītai, Madianītis	--	midyānfm
22.	Madianītis	--	midyānft
23.	Mahmā	Mahemas	mikmās/s
24.	manahasēn ¹ (< + mahanasēn)	--	miknāsayim (?)
25.	Maniāthē	--	minnft
26.	Masfathē	Massefa	miṣpāh
27.	Mariāmē	Mariam	miryām
28.	massabazanēs ²	--	mišbšōt
29.	Másmasos	Masma	mišmā ^C
30.	assarōn (& essarōn) ³	--	^C iššārōn
31.	Fannī, Fanāsēs	--	pinḥās
32.	Fénanna	Fennana	pninnāh
33.	pāsha	faska	pishā'
34.	Farathonītai, Farathōs	Fraathōnitēs, Fraathōn	pir ^C ātōnī
35.	Sabía	Sabía	ṣibyāh
36.	Kabrōthabā	--	qibrōt hat-ta'āwāh
37.	Kariathiareīm	Kariathiareīm	qiryat y ^C ārim
38.	Arablathā	Deblatha	riblātāh, riblāh
39.	Sállis	Salē, Seleim	šilhfm, šiḥlayfm
40.	Samās	Sama(a)	šim ^C ā'/h, šammāh
41.	Samoúis	Semei	šim ^C i
42.	Samārōn	Zambram	šimrōn
43.	Sampsōn	Sampsōn	šimšōn
44.	Thádalos	Thargal	tid ^C āl
45.	Thámna, Thámna	Thamnatha	timnāh

1 Schaltter 1913, p. 73.

2 idem, p. 77.

3 idem, p. 89.

46.	Thamnāē	Thamna	timna/ā ^c
47.	Thapsā	--	tiṗsaḥ
48.	Tharsīkēs	Tharaka	tirhāqāh
49.	Thārsē (& Thērsis)	Thersa	tirṣāh

In 40 of them the unstressed $\$a\$$ is followed by an other $\$a\$$ (cf. above, p. 65,79). A comparison with the spellings of the Septuagint goes to show that Josephus did not plainly copy his transcriptions of that source, at least not of textual forms known to us, but made use of his own studies.

Thus the transcriptions of Josephus and Jerome lead to the same conclusion: attenuation seems to take place after the death of Hebrew as a spoken language. The transcriptions are mutually independent and hence their power as evidence is multiple.

However, there are two facts which stand in the way of this tempting solution. Firstly, it is difficult to perceive a factor calling forth a number of occasional "attenuated" $\$i\$$ and $\$e\$$ vowels as $\$Ginaīa\$$ ¹, $\$kighares\$$ ² in Josephus or $\$geborim\$$, $\$gibbor\$$ ³, $\$megella\$$ ⁴ in Jerome which occur in forms and phonetic surroundings similar to those of the $\$a\$$ cases. Secondly, there is a great problem concerning changes and "development" of liturgical languages which are transmitted as oral traditions from generation to generation but not used any more to serve in a normal living message function between human beings. MORAG has described various ways in which spoken vernaculars influenced the reading traditions of Hebrew and other languages.⁵ The influence of vernaculars "usually results in phone substitution and reinterpretation of distinctive features".⁶ As a rule the consonantal phonemes of a given reading tradition of Hebrew are thus limited to those existing also in the spoken language of this community and that is also true regarding the vocalic phonemes in most communities.⁷ Other factors producing

1 For the etymology, see above, p. 54, no. 11.

2 For the etymology, see above, p. 57, no. 3. Unfortunately, the only case of the type Josephus $\$e\$$ = Tib. $\$i\$$ where the original vowel can be defined as /a/ is $\$Resfā\$$ (= Tib. $\$riṣpāh\$$, cf. above, p. 58, no. 3) which has a sibilant after $\$e\$$ (cf. above., p.63 -64). There is no clear occurrence of verbal prefixes among the transcriptions of Josephus.

3 Cf. above, p. 58- 60, 62, 64.

4 Cf. above, p.58 - 60.

5 Morag 1958; 1963, p. 271-284; 1969, p. 132-141.

6 Morag 1969, p. 138.

7 idem 1958, p. 427, in details, idem 1963, p. 276-284.

changes in the reading traditions are the interference between different reading traditions (of Biblical Hebrew, Mishnaic Hebrew, etc.), analogy, and hypercorrection inside the communities¹ and the external effects of more respected reading traditions.²

If we intend to fix the date for attenuation in the period between A.D. 400-900, we thus have to be able to recover either a strong tendency towards attenuation in Palestinian vernaculars or in some other, highly respected, reading tradition of Hebrew. As regards Palestinian Aramaic dialects, the evidence for attenuation is uneven and scanty (cf. above, p. 42-43, 46-47), and in Greek there is no such development. The Bab. punctuation tradition is less favourable for attenuation than the Tib. (cf. above, p. 32-33), the respected status of the Tib. tradition and even its existence in the form known to us before the 9th century is still by no means unquestionable;³ some features of the Pal. punctuation are, however, interesting concerning the attenuation (cf. above, p. 27-28). Thus it seems to be the best solution at this moment to take the problem up for further consideration only after the treatment of the Pal. punctuation.⁴

As a conclusive note on this stage of our study we are able to observe that the unattenuated forms are more numerous in the transcriptions made by Josephus than in those made by Jerome; on the other hand, these forms occur in varying patterns and are not restricted to certain morphemes as e.g. *ma/ta-* prefixes. The main factor producing "attenuated" forms in Jerome is the consonantal environment: sibilants and /y/ preceding the vowel; the attenuation of verbal prefixes is an earlier development; no evidence concerning these changes is found in Josephus (cf. above, p. 82, fn. 2).

For the exceptional auxiliary vowels occurring in segolate forms (= ϕ), see below, p. 93-95.

1 Morag 1969, p. 139-141.

2 Cf. Weinreich 1954, p. 94, and the pervasion of the Sephardic Israeli pronunciation into non-Sephardic communities in the last decades.

3 See below, p. 206 - 214 .

4 Cf. below, p. 189 - 199 .

5.1.3. Jerome \$a\$ = Tib. \$ä\$

The normal counterpart of the Tib. \$ä\$ is \$e\$ in Jerome. Thus the counterparts of the Tib. \$i\$ and \$ä\$ can not be distinguished from each other. Of the \$a\$ counterparts two are dealt with above (\$naalma\$, p. 61, and \$alechacha\$, p. 69), for the exceptional auxiliary vowels occurring in segolate forms (= ⁺∅), see below, p. 92-93, 95.

1. malcaim mälqāḥayim Isa. 6:6.

The second occurrence \$sasaim\$ = Tib. \$ṣä'äṣä'im\$ (Isa. 22:24) is a transcription of Aquila only quoted by Jerome.

The Tib. \$ä\$ in \$mälqāḥayim\$ is due to the following /l/ (pro ⁺\$milqāḥayim\$).¹ Thus \$malcaim\$ represents the unattenuated forms treated in the previous chapter.

5.1.4. Jerome \$a\$ = Tib. \$u\$/\$ä\$

1. abanim ²	'ābnāyim	Jer. 18:3
2. agga ³	ḥaggā'	Isa. 19:17
3. chasamim	kussmim	Ezek. 4:9
4. afara ⁴	^c āpārah	On, Josh. 18:23
5. phalach	pā ^c ālḱā	Hab. 3:2

Above (p. 74) we have seen three words where the counterpart of ⁺/u/ is \$a\$ in Jerome. Of the occurrences here at least \$chasamim\$ and \$phalach\$ probably follow the same line of development, i.e. the opening and centralization of labial vowels of unstressed closed syllables (cf. above,

1 So according to B-L, p. 490 xe.

2 Jerome: "rota figuli", "lapides", "organum", = Tib. \$'äbnānim\$ (?), cf. Sperber 1966, p. 125, s.v.

3 Jerome: "festivum", = Aram \$ḥaggā'\$.

4 Jerome: "humus eius", = Tib. \$^cāpārāḥ\$, cf. Sperber 1966, p. 153, s.v.

p.75-76, and esp. below, p. 157-160).¹ \$abanim\$, \$agga\$, and \$afara\$ would be some kinds of textual variants, see footnotes above, p. 85.

¹ The proper names occurring in the text of Vulgata provide additional material in favour of this hypothesis, cf. e.g.

Tib.	LXX	Vulgata	
yâqn ^c âm	Iekonam (A), Iekom (B)	Iachanaem	Jos.12:22
yâqt'el	Iehthael̄ (A), Iakareel̄ (B)	Iekthel	Jos. 15:38
c ^c âprâh	Afra (A), Efratha (B) Gofera Efratha	Ofra Ephra Ephra	Jos. 18:23 1 Sam. 13:17 Jud. 6:11, 24, etc.
hârmâh	Anâthema Ermath Erma Erma Erma (Luc.) Erma exolêthreusan (A), Anâthema (B)	Horma Herma Arma Harma Arama Horma Horma	Num. 21:3 Jos. 12:14 Jos. 19:4 Jos. 15:30 1 Sam. 30:30 Deut. 1:44 Jud. 1:17
hâpra ^c	Erma Ouafrē	Orma Efree	1 Chr. 4:30 Jer. 44:30
yât̄bâh	Ieteba, cf. Josephus: Iotâpata	Iethba	2 Kgs. 21:19
şâr ^c âh	Saraa cf. el-Amarna:Şarha, Mod. Arabic:Şar ^c a; the Tib. ŞâŞ	Sara(a)	Jos. 19:41 etc.

of this name could be due to the influence of /r/, at least, cf. Kutscher 1959, p. 391-392.

I am grateful to Prof. J. Aro for having drawn my attention to these occurrences.

5.2. Jerome §e§

5.2.1. Jerome §e§ = Tib. §i§

1. bechchora	bikkûrâh	Mic. 7:1
2. geddupha	+ giddûpâh ¹	Ezek. 5:15
3. gelule	gillûlê	Ezek. 20:7
4. zemerî ²	zimrî	On, Num. 25:14
5. hedalu ³	hîdlû	Isa. 2:22
6. ezzahon	+ hîzzâyôn ⁴	On, 1 Kgs. 15:18
7. alechcha	'âl-hikkâ	Hos. 8:1
8. esci	hîšqî	Isa. 21:4
9. iedlaf	yidlâp (P.)	On, Gen. 22:22
10. iemla	yimlâh (P.)	On, 1 Kgs. 22:8
11. iesag ⁵	yiš'âg (P.)	Am. 1:2
12. iethro	yitrô	On, Ex. 3:1
13. leuiathan	liwyâtân	Isa. 27:1
14. metta ⁶	miṭṭâh	Gen. 48:2
15. mello	millô'	in Isa. 38:8
16. mesraim ⁷	mišrâyim (P.)	Isa. 19:1
17. mesphaa	mišpâh	Isa. 5:7
18. mesra	mišrâh	Isa. 9:6
19. mesphat	mišpâṭ	Isa. 5:7
20. methnosasoth ⁸	mitnôsēsôt	Zech. 9:16
21. sethri	sitrî	On, Ex. 6:22

1 Pro Tib. §gdûpâh§.

2 Jerome: "iste exacerbens siue amaricans", = (Tib.) §zâh§ + √mrr. Cf. (above, p. 78, no.3) §zamri§ = Tib. §zimrî§ (On, Num.25:14) = "psalmus uel canticum meum". Do these two transcriptions of §zimrî§ occurring only once in Numeri go back to different *Vorlagen* of Onomastica?

3 Varr.: §hedlu§, §hedal§.

4 Pro Tib. §hâzyôn§ (?), Sperber 1966, p. 136, s.v.

5 A *mediae laryngalis* verb which has an a-impf. and /i/ as the prefix vowel, cf. above. p. 59-60.

6 Varr.: §metha§, §m&ta§. For §metta§/§mate§ (Ezek. 4:16), cf. Barr 1967, p. 31-32.

7 +u/i, cf. K-B, p. 558, s.v.

8 §meth-§ is a verbal prefix of the hitpolel stem. As mentioned above (p.59-60, 65-66) +a of the verbal prefixes developed into /i/ in an early stage of Hebrew. There is, however, no evidence of the hitpa^{cc}el or hitpolel stems in this respect, cf. Meyer 1969, p. 109.

22. aheberim ¹	hā- ^c ibrîm	On, Ex. 2:6
ebrioth	^c ibriyyôṭ	On, Ex. 1:16
23. phethee	pittuḥâḥ	Zech. 3:9
24. selsel ²	ṣilṣal (st.c.)	Isa. 18:1
25. cena	qin'âḥ	Ezek. 8:3
26. remmon	rimmon +u/i ³	On, Num. 33:19
in Remmonfares		
27. segionoth	ṣiḡyonôṭ	Hab. 3:1
28. semu	ṣim ^c û	Isa. 1:2
29. semei	ṣim ^c î	On, Ex. 6:17
30. seccuse	ṣiqquṣê	Ezek. 20:7
31. thephellath	+ṭpillat	in Isa. 38:5
32. thersa	tirṣâḥ	On, Num. 26:33

Ṣeddim\$ (= Tib. Ṣiddîm\$ Isa. 64:5) is a quotation from Theodotion.

A comparison between the \$a\$ and \$e\$ counterparts of the Tib. \$i\$ discloses some interesting features:

(1) There are ten counterparts of the Tib. pattern \$qitlâḥ\$ among the transcriptions of Jerome (2.2., nos. 1,6,7; 5.1.2., nos. 2,4,5,18,20, 21 & 5.2.1., no 25); nine of them (in 2.2. and 5.1.2.) have \$a\$ in the Latin form.⁴ Taking into account the numerical preponderance of the \$qâṭâl\$ segolates in comparison with the pattern \$qeṭâl\$ in Tib. Hebrew, on the basis of these transcriptions it is not unreasonable to argue that many of the Tib. words of the pattern \$qitlâḥ\$ have an "attenuated" \$i\$ in the first syllable.⁵

1 Instead of \$ibri\$ in PL and Sperber (1966, p. 151) = Tib. Ṣibrî\$ (Gen. 14:13) CC only discloses the form \$Hebraeo\$.

2 For the second \$e\$, cf. \$gelgel\$, p. 88, no.2 & p. 89, fn. 4; cf. also the corresponding *qulqul* patterns of \$bocboc\$ and \$chodchod\$, above, p. 64-65 & fn. 2.

4 There are 13 occurrences of this pattern in Josephus; eight of them have a Greek \$a\$ in the initial syllable, two vacillate between \$a\$ and \$e\$ in the ms. tradition (cf. above, p.80-82), and three are spelled with \$e\$ (\$Melhâ\$ = LXX = Tib., for the initial vowel cf. below, p. 89; \$Rhebêkka\$ = LXX = Tib. \$ribqâḥ\$; \$Rhesfâ\$ = LXX = Tib. \$riṣpâḥ\$, cf. above, p.82, fn. 2). Thus the state of affairs in Josephus in this respect is similar to that of Jerome.

5 Cf. B-L, p. 456 i', 459 y', 601 b.

3 Cf. Kutscher 1959, p. 357.

(2) in contrast to the previous group all the counterparts of the Tib. pattern \$qittul\$ have a Latin \$e\$ in the first syllable (five occurrences, 5.2.1., nos. 1, 2, 3, 23, 30 + one \$i\$, cf. below, p. 90, no. 3) which could be used as an evidence for the originality of /i/ in this position.¹

(3) There are 17 occurrences of the nouns with the Tib. prefix \$mi-\$ or \$ti-\$ in Jerome and 16 in Josephus. In the transcriptions of Jerome five of them are spelled with \$e\$ (nos. 14, 17-19, 32), one with \$o\$ (cf. p. 92), and one with \$i\$ (\$mizra\$, cf., however, p.90-91).² Of these seven "exceptions" four occur before sibilants (nos. 17-19 + \$mizra\$) which have a tendency to change neighbouring vowels towards the timbres [e], [i] (cf. above, p. 63-64). In Josephus all of these kinds of occurrence are spelled with the Greek \$a\$. Thus it is possible to conclude that a vowel resembling to [a] was the normal vowel of these prefixes in the Hebrew familiar both to Josephus and Jerome.

Other patterns occur in these lists too infrequently to provide material for further conclusions.

5.2.2. Jerome \$e\$ = Tib. \$a\$

1. beemoth	bahämöt (st.c.)	Isa. 30:6
2. gelgel	galgal	Ezek. 10:13
3. melchom ³	malkâm	Zeph. 1:5
4. melchibel	malkî'el	On, Gen. 46:17, Num.26:45
melchechem	malkkâm	Am.5:26
melchisedec	malkî-şädäq	On, Gen. 14:18
5. emsa li ⁴	'amşäh li	Zech. 12:5

1 Cf. B-L, p. 480 u. There is no occurrence of this pattern in Josephus.

2 The only contrary case (Jerome \$e\$ = Tib. \$a\$) is \$themrurim\$ = Tib.

\$tamrûrîm\$, for its Greek etymology (?), see K-B, p. 1033, s.v. II.

3 Jerome: "idolus Ammonitarum".

4 Jerome: "confortentur mihi".

6. messa ¹	maššâ'	Isa. 13:1 (Lib.V)
7. nesus	na ^c âšûš	Isa. 55:13
8. neptule	na ⁻ ptûlê	Gen. 30:8
9. arethic	hâ-rattôq	Ezek. 7:23
10. themrurim	tamrûrîm	Jer. 31:21
11. thennim ²	tannîm	Isa. 13:22 (Lib.V)

The Tib. word \$bhemâh\$ vacillates in its declension between two patterns³, and \$beemot\$ of Jerome seems to follow that of the Tib. suffixed forms \$bhämtkâ\$, \$bhämtô\$.

As for \$gelgel\$, cf. the Tib. st.c. form \$gilgal\$ Isa. 28:28; that does not explain, however, the second \$e\$ vowel.⁴

As a rule the Tib. \$mäläk\$ is classified to a *qatl*-noun.⁵ In Phoenician, however, "king" appears in the pattern *qitl*,⁶ a fact which is in accordance with the transcriptions of Jerome with the Latin \$e\$. Thus it is not impossible that there existed in Hebrew two patterns (dialectal or alternative) for the noun \$mlk\$;⁵ as for *melchom*, the "idolus Ammonitarum" (cf. above, p. 88, fn.3) occurs as \$milkom\$ in the Tib. punctuation (cf. K-B, p. 532, s.v.).

\$emsa li\$ is translated by Jerome as "confortentur mihi" which indicates that he derived the meaning from the root $\sqrt{m\dot{s}}$.⁷ \$emsa\$ may recleft the pi^{cc}el pf. (Tib.) \$'immšâh\$, although a pu^{cc}al would be more fitting for the Latin passive form.

\$arethic\$ corresponds better to the Tib. st.c. \$rattîqat\$⁸ (1 Kgs. 6:21) which, however, also has a Tib. \$a\$ as the initial vowel.

- 1 But \$massa\$ in Isa. 19:1 (Lib.VII), cf. above, p. 77, no. 26 & fn.4.
- 2 But \$thannim\$ in Isa. 13:22 (Lib.VI), Isa. 43:20, Jer. 10:22, cf. above, p. 78, no. 38 & fn. 1.
- 3 Cf. B-L, p. 600 j'.
- 4 Cf. also Sy. \$gîglâ'\$ and Mandaic \$gîrglâ\$ (Macuch 1965, p. 53-54) which Barth (1889, p. 204-205) classifies into the pattern *qilqil*; cf. \$selse\$ above, p. 87, no. 24 & fn.2.
- 5 See B-L, p. 456 j', 570 q; Blau 1976, p. 71 § 40.9. Cf. however, the personal name \$milkâh\$ (K-B, p. 531, s.v., B-L, p. 456 j').
- 6 Harris 1936, p. 25, 34, 57 § 17.2, p. 118-119.
- 7 Thus \$emsa\$ does not correspond to Tib. \$'ämšâ\$ as has been proposed - obviously on the basis of the Septuagint - by Sperber (1966, p. 147, $\sqrt{m\dot{s}}$).
- 8 As proposed by Sperber (1966, p. 160, s.v.).

As regards the words \$nesus\$, \$neptule\$, and \$themrurim\$¹ there is no evidence in favour of the originality of Tib. \$a\$.

\$messa\$² and \$thennim\$ occur also as \$massa\$ and \$thannim\$, and it is not impossible that \$e\$ would be a scribal mistake.

Whichsoever the explanation of these "attenuated" forms may be, in any case their amount remains small in comparison with the correspondences (⁺/a/ =) Jerome \$a\$ = Tib. \$a\$ and (⁺/i/ =) Jerome \$e\$ = Tib. \$i\$; accordingly they do not essentially disturb the conclusions suggested above (p. 65-66, 82-83, 87-88).

5.3. Jerome \$i\$

5.3.1. Jerome \$i\$ = Tib. \$i\$

1. abiona	'ăbiyyônăh	Eccles. 12:5
2. mimizra	mim-mizrăp	in Gen. 2:8
3. sionim	şiyyunîm	Jer. 31:21
4. siim	şiyyîm	Isa. 13:21

Three of four occurrences have \$i\$ before the Hebrew \$y\$ which obviously has assimilated the timbre of the vowel closer to [i] than what is normal, cf. above, p.62-64.

In \$mizra\$ \$i\$ is followed by a sibilant which has a similar influence upon vowels, cf. above, p.63-64, 88. There is, however, a variant \$meccedem\$ in the Ms. ϕ ³. Both of them can not be Jerome's own tran-

1 A Greek loan word (?), K-B, p. 1033, s.v. II.

2 \$e\$ is followed by a sibilant, cf. above, p.63-64. According to Barr (1967, p. 31) these kinds of variation are "to be attributed not to variations or uncertainties in the pronunciation of Hebrew but to the inadequacy Jerome's equipment for phonemicization". As we have seen (p.54-76) the transcriptions of Jerome are, however, admirably well in agreement with the original phonemics of Hebrew; of course, that does not deny the likelihood of mistakes.

3 Codex Monacensis 6299(saec. VIII-IX).

scriptions, and thus we might claim that the more regular $\$meccedem\$$ would be the original form which, in addition opposite to $\$mimizra\$$, corresponds to the Hebrew text.

$\$i\$$ of the *qittul* pattern $\$sionim\$$ is in accordance with other counterparts of this pattern regarding the originality of /i/ of the initial syllable, cf. above, p. 88.

5.3.2. Jerome $\$i\$$ = Tib. $\$a\$$

1. *sinthoroth* $\$antr\hat{o}t$ Zech. 4:12

The Latin $\$i\$$ could be accounted for the influence of a sibilant and nasal occurring on the both sides of the vowel, cf. above. p. 63-64. The etymology of the word is obscure; thus the Tib. $\$a\$$ may be unoriginal as well as the vowel of Jerome.

5.4. Jerome $\$o\$$

5.4.1. Jerome $\$o\$$ = Tib. $\$u\$/\$\hat{a}\$$

1. <i>orobba</i>	$\$rubb\hat{a}h$	Hos. 13:3
<i>arobboth</i>	$\$arubb\hat{o}t$	On, 1 Kgs. 4:10
2. <i>sochoth</i>	$\$ukkot\hat{a}h$	On, Ex. 12:37
<i>socoth</i>	$\$ukkot$	On, Gen. 33:17
<i>sochoth</i> ¹	$\$ikk\hat{u}t$	Am. 5:26
3. <i>bosra</i>	$\$b\hat{a}sr\hat{a}h$	Isa. 34:6

These occurrences are in accordance with the conclusions drawn above, p. 75-76.

1 Jerome = "tabernacula", = Tib. $\$sukk\hat{a}h\$$; = Septuagint.

5.4.2. Jerome \$o\$ = Tib. \$i\$

1. thopherth	tip ⁻ ärät	Ezek. 16:12
--------------	-----------------------	-------------

This isolated counterpart could be accounted for by the assimilative effect of labial consonants (\$p\$, cf. above, p.64-65 and Kutscher 1959, p. 392, fn. 244); it might just as well be a scribal error.

6. Secondary Vowels

6.1. Tib. \$ä\$ ≠ Jerome \$e\$

The normal counterpart of the Tib. secondary \$ä\$ is \$e\$, e.g. \$cedem\$ = Tib. \$qädäm\$, \$meneceth\$ = Tib. \$mënäqät\$, \$sefee\$ = Tib. \$'äp^cäh\$, \$ceda\$ = Tib. \$äqdäḥ\$. The following segolates disclose exceptional counterparts.

6.1.1. Jerome \$a\$ = Tib. \$ä\$

1. araz	'ärüz	Jer. 22:15
2. barad	bäräd (P.)	On, Gen. 16:14
3. zachar ¹	zekär	Isa. 26:14
4. cesath	qäsät	Ezek. 9:2
5. ramath	rämät	On, Josh. 19:21
6. fara	pärä'	Gen. 16:12
7. arab ²	(ba-) ^c rab, ^c äräb, ^c eräb	Isa. 21:13 in Isa. 21:13

6.1.2. Jerome \$ø\$ = Tib. \$ä\$

1. ⁺ dabbasth	dabbäšät	On, Josh. 19:11
2. arasth	ḥärošät	On, Judg. 4:2
3. asarmoth	ḥsärmawät	On, Gen. 10:26

1 Jerome = "memoriale dicimus", but \$zochor\$ = "masculum".

2 Jerome: = "Arabia", "vesper", "corvus" (= Tib. \$^coreb\$!), "planities", "occidens".

4. thopherth	tip̄'ärät	Ezek. 16:12
5. aun ¹	'āwän	On, Ezek. 30:17

šdabbasthš is a quite probable emendation pro šdabbathš.²

These occurrences represent two noun patterns: (1) segolates with medial waw which never have a secondary vowel in Jerome, and (2) segolates with the feminine suffix šthš which also occur with a secondary šeš in Jerome.³ On the other hand, all but one of these words go back to the Onomastica.

6.1.3. Tib. š-āyi-š

The segolates of the Tib. pattern šbāyitš always occur without secondary vowels in Jerome (e.g. šainš, šleisš, šsaithš) which is in accordance with transcriptions of the Tib. type šmāwätš (cf. above, 6.1.2), and the same is true also regarding other counterparts of the Tib. cluster š-āyi-š, e.g. šmaimš, šsamaimš, šenaimš, šmezraimš.

6.2. Tib. šaš ≠ Jerome šaš

The segolate forms with medial or final laryngeals may have šeš, šaš, šøš, or šoš as the secondary vowel in Jerome. šeš is even slightly more usual than šaš.⁴ The divergences from the Tib. system are enumerated below.

1 Cf. šonš in On. Hos. 4:15.

2 Cf. the critical apparatus of CC; Lagarde: "ego anno 1885."

3 E.g. šHisboethš (On), šzoelethš (On), šmenecethš.

These occurrences indicate that the nature of the consonant preceding the feminine ending štš obviously has no effect on either the appearance of secondary vowels or on their absence in Jerome.

4 Cf. the lists of Sperber (1966, p. 200-206). For his far-reaching conclusions, see idem, p. 216-217, but Brønno 1943, p.477-486.

6.2.1. Jerome §e§ = Tib. §a§

1. nehel	naḥal	Ezek. 47:7
2. reeb	raḥab	Isa. 30:7
3. reem	ra ^c am	Isa. 62:4
in banereem		
4. sohel ¹	šaḥal	Hos. 5:14
5. theeth	taḥat	On, Num. 33:26
6. bete	bāṭah	Gen. 34:25
7. bace	bäqa ^c	Gen. 24:22
8. zare	zārah	On, Num. 26:20
9. tabech	ṭābah	On, Gen. 22:24
10. Abinoem	'ābino ^c am	On, Judg. 4:6
11. sabe (&saba)	šāba ^c	On, Josh. 19:2 (Isa. 4:1)
Bersabee	b'er-šāba ^c	On, 1 Sam. 3:20
12. Mathusale	m ^u šālah (P.)	On, Gen. 5:21

§ieze§ = Tib. §yāza^c§ (Ezek. 44:18) is a quotation from Theodotion.

6.2.2. Jerome §ø§ = Tib. §a§

1. zor	zohar	Ezek. 8:2
2. iar	ya ^c ar	Hos. 2:15
3. sarath	šāra ^c at	in Gen. 17:15
4. urob	w-roḥab	Ezek. 40:49
5. thas	tāḥaš (P.)	Ezek. 16:10

§sarath§ could be connected with three similar feminine segolates without secondary vowel in Jerome, cf. above, p. 92-93; for others, see below, p. 95.

6.2.3. Jerome §o§ = Tib. §a§

§soor§² = Tib. §šāḥar§ (P., Ezek. 27:18) is a transcription of Aquila and Theodotion.

For §sohol§ of Sperber, see below, fn. 1.

1 §sohol§ mentioned by Sperber (idem p.162, s.v.) as an independent occurrence is a textual variant in Ms. Pal.¹⁻², cf. CC.
2 Cf. the material collected by Kutscher (1959, p.392-393) for the change of reduced vowels before /r/ into labial timbres [o], [u]. As to the segolates of pattern *qotol*, see idem, p.83-84, 396-398, and Yahalom 1969, p.57-58.

6.3. Conclusions

As compared with the transcriptions of Hexapla, the most prominent difference is the scarcity of $\$o\$\$$ counterparts in Jerome.¹ It is even possible that a secondary vowel of the laryngeal nouns as $\$zor\$\$, \$iar\$\$, \$urob\$\$ is dropped by scribes from odd vowel combinations as $^+\$zoar\$\$/\$zoer\$\$ etc.; there are abundant similar cases among the counterparts of reduced vowels.² On the other hand, it would not be surprising, if the feminine segolates with the weakly sonorous suffix /t/ should be among the last segolate forms to adopt secondary vowels.$$

I have not been able to define factors which would regulate the occurrence of different counterparts of Tib. secondary vowels.³ On the one hand it is evident that there were secondary vowels in the final syllables of segolate nouns in the Hebrew known to Jerome; on the other hand, we could interpret the vacillating qualities of the vowel⁴ in Jerome as an attempt to render a centralized and probably ultra-short vowel in Latin characters. The transcriptions without Latin counterpart (6.1.2. and 6.2.2.) and especially the feminine segolates which occur both with and without secondary vowels corroborate the assumption of the ultra-short quality of that vowel in Hebrew.

As for the vocalism of the initial syllables of segolate forms, it seems impossible to connect the qualities of Jerome to their Tib. counterparts.⁵ Similar is the situation prevailing in Hexapla.⁶

1 Cf. Brønno 1943, p. 123-150, 451.

2 Cf. Siegfried 1884, p. 80.

3 A factor producing $\$e\$\$ vowels into segolates with a medial laryngeal (e.g. $\$reem\$\$) might be the use of $\$e\$\$ as a kind of laryngeal symbol, a method going back to the Septuagint, cf. Sperber 1966, p. 175-176.$$$

4 For the vacillation occurring in the Tib. punctuation, see above, p. 24.

5 Cf. Siegfried 1884, p. 76; Sperber 1966, p. 217: "the first syllable varying in every group between α and e ."

6 Cf. Brønno 1943, p. 123-150, esp. 124-125; for the relationship with the Septuagint as well as the Tib. vacillation, see idem, p. 480-485, and B-L, p. 455-456 i', 459a''.

7. Summary

The conclusions drawn in the previous treatment from the transcriptions of Jerome may be presented in the most convenient manner in the form of the following tables:

7.1. The Relation between Etymology and Jerome

1) ⁺a (77x)

Indicated by Jerome with:

\$a\$	42x	= 54.5%
\$e\$	27x	= 35.1%
a) 13 x (at least) in verbal prefixes, i.e. = /i/ (two cases of the hif ^c il prefix ⁺ /ha- are included here)		= 16.9%
b) 2x between /y/ and a sibilant		
c) 2x preceded by a sibilant		
d) 3x followed by a sibilant		
e) 3x preceded by /y/		
<hr/>	23 x	
Left without explanation: \$heieu\$, \$theethim\$, \$geborim\$, \$megella\$		
\$i\$:	6x	= 7.8%
a) 2x in verbal prefixes, i.e. = /i/		= 2.6%
b) 1x followed by a sibilant		
c) 2x between /y/ and a sibilant		
<hr/>	5x	
Left: \$gibbor\$		
\$o\$	2x	= 2.6%
a) 1x preceded by a labial (?) Left: \$chodchod\$ (<qu ^l qu ^l ?)		
<hr/>	Total	77x 100%
Left without explanation, total 6(?)		7.8%

2) ⁺i (16x)

Indicated by Jerome with:

\$e\$	10x	= 62.5%
\$i\$ (? , between nasals)	1x	
\$a\$:	4x	
a) 1x a lexical variant		
b) 1x probably = ⁺ a		
c) 1x between /k/ and /s/		
Left: \$ast-hesre\$ [= ⁺ a(?)]		
\$o\$:	1x	
a morphological variant		
	<hr/>	
Total	16x	

3) ⁺u (12x)

Indicated by Jerome with:

\$o\$	6x	= 50%
\$u\$:	2x	
a) 1x preceded by a labial		
b) \$amsuchan\$ (?)		
\$a\$:	3x	= 25%
\$adamim\$, \$cadeso\$, \$amri\$		
\$e\$:	1x	
= /i/		
	<hr/>	
Total	12x	

The normal counterparts of ⁺/a/, ⁺/i/, and ⁺/u/ are \$a\$, \$e\$, resp. \$o\$ in Jerome. There is no evidence of attenuation in these transcriptions, but the sibilants and /y/ may call forth more closed vowel qualities instead of the anticipated \$a\$. On the contrary, the verbal prefixes, which are pointed as a rule with \$i\$ in the Hebrew punctuations, normally have \$e\$ also in Jerome; this \$e\$ most probably indicates a contemporary phoneme /i/. This ancient change of verbal prefixes may be extended to some forms of hif^cil stem in contrast to most of the Hebrew punctuations; *verba primae laryngalis* may have retained, however, /a/ in their prefixes.

As a matter of fact all of the ⁺/i/ occurrences are spelled with \$e\$ in Jerome; the exceptions are few and unreliable.

Of the exceptional counterparts of ⁺/u/ only those indicated by \$a\$ (3x = 25%) deserve attention. As mentioned (cf. above, p. 76), I am

inclined to interpret them as an evidence for rather open allophones of /u/.¹

+ + +

As regards the realization of the Hebrew vowels indicated by Jerome with §a§ and corresponding to /a/ of Hebrew, we are left without further information, since the Latin alphabet does not possess other characters to reflect remaining qualities of open vowels, e.g. [ä] or [ɐ]. Excluding the cases originating from the consonantal surroundings (sibilants and /y/) there are, however, extremely few occurrences of vacillation between §a§ and other vowels; this speaks in favour of a rather open realization of /a/.

§e§ which is the normal counterpart of /i/ probably reflects slightly opened and centralized habits of realization of this phoneme (cf. below, fn. 1). §o§ as the main counterpart of /u/ may be interpreted similarly; a number of §a§ counterparts possibly bear evidence to even more opened allophones (? cf. below, fn. 1) than is the case in regard to the realizations of /i/.

There are no proofs of a confusion between /i/ and /u/.

The close relationship between the original vowels and the spellings of Jerome bears a strong testimony in favour of the high quality of Jerome's informants and the reliability of his transcriptions in general.

7.2. The Relation between Jerome and Tib. Punctuation

a) §a§ of Jerome (119x) corresponds in the Tib. punctuation to

§a§: 34x (2.1.)	§ä§: 1x (2.2.)	§naalma§
2x (3.4.)	1x (3.5.)	§alechcha§
41x (5.1.1.)	1x (5.1.3.)	§melcaim§
<hr/>	<hr/>	
77x = 64.7%	3x = 2.5%	

1 This study is not able to provide a solution for the problem concerning the phonemic status of the vowels of unstressed closed syllables (cf. above, p. 25-26), and thus the discussion on the realizations is based on the traditional view.

\$i\$: 7x (2.2.)	\$u\$/â\$: 3x (4.3.)
1x (3.5.)	5x (? 5.1.4.)
<u>23x (5.1.2.)</u>	<u>8x = 6.7%</u>
31x = 26.1%	

Total: 119x.

The \$i\$ divergences consist of unattenuated nouns of which 19 (= 61.3%) correspond to the Tib. patterns \$qitlâh\$, \$miqtVl\$, and \$tiqtVl\$. These patterns occur only rarely spelled with Lat. \$e\$ (6x) or other vowel signs (1x \$i\$, 1x \$o\$) and the forms with \$e\$/i\$ are obviously due to the influence of sibilants. The transcriptions of Josephus reflect a similar unattenuated type of Hebrew.

For the remaining differences, see the respective paragraphs above.

b) \$e\$ of Jerome (74x) corresponds in the Tib. punctuation to

\$i\$: 17x (2.4.)	\$a\$: 5x (2.3.)
6x (3.2.)	2x (3.3.)
1x (4.4.)	11x (5.2.2.)
<u>32x (5.2.1.)</u>	<u>18x = 24.3%</u>
56x = 75.7%	

Total: 74x.

For reasons mentioned above (p. 84) the occurrences Jerome \$e\$ = Tib. \$â\$ are not included into this table.

\$e\$ is the normal counterpart both of ⁺/i/ and the Tib. \$i\$.

The amount of the counterparts Jerome \$e\$ = Tib. \$a\$ looks considerable at first glance. It consist, however, of exceptional Tib. punctuations (3.3.), deviating treatment of verbal prefixes (2.3.), textual variants and other vague material (5.2.2.) the value of which remains minor as evidence.

c) \$i\$ of Jerome (12x) corresponds in the Tib. punctuation to

\$i\$: 6x (2.6.)	\$a\$: 1x (5.3.2.)
1x (3.1.)(?)	
<u>4x (5.3.1.)</u>	
11 x	

Total: 12x.

The $\$i\$$ counterparts are problematic only from the viewpoint of Jerome. As a rule they originate from the influence of neighbouring consonants, i.e. sibilants and /y/ (and nasals?) which have given to these vowels an even more closed timbre instead of the expected timbre spelled with $\$e\$$ by Jerome.

d) $\$o\$$ of Jerome (13x) corresponds in Tib. punctuation to

$\$u\$$: 5x (4.2.)	$\$i\$$: 1x (3.6.)
2x (5.4.1.)	1x (5.4.2.)
<hr/>	<hr/>
7x = 53.8%	2x
$\$a\$$: 1x (4.2.)	$\$a\$$: 2x (2.7.)
1x (5.4.1.)	
<hr/>	
2x = 15.4%	

Total: 13x

$\$o\$$ is the normal counterpart of both $^+ /u/$ and the Tib. $\$u\$ / \$a\$$ in Jerome. For the remaining counterparts (variants, influenced by labial consonants, etc.), see resp. paragraphs.

e) $\$u\$$ of Jerome corresponds in the Tib. punctuation to

$\$u\$$ 2x (4.1.); the first of them obviously goes back to the assimilative influence of the labial /b/ and the second $\$u\$$ may represent an /u/ in an open syllable.

f) The Secondary Vowels

The transcriptions of Jerome disclose a considerable number of secondary vowels which deviate from the Tib. qualities. In addition, there are forms which appear both with and without auxiliary vowels. It may be concluded that the existence of these kinds of vowels was a normal phenomenon in the Hebrew reflected in Jerome's transcriptions; the quality of the auxiliary vowels was, however, centralized and vague and it was possibly ultra-short in quantity.

The previous treatment goes to show that the Tib. punctuation shows but minor deviations from the Hebrew reflected in the transcriptions of Jerome as far as the vocalism of the unstressed closed syllables is concerned. The main divergences concern attenuation phenomenon and the more consistent treatment of the auxiliary vowels in Tib. punctuation.

III PALESTINIAN PUNCTUATIONS

1. Background

For reasons described above (p. 14) the Pal. punctuations of the unstressed closed syllables are examined here and compared with the Tib. system only. For the material and methods, see above, 4-7, 15, and for earlier descriptions, p. 26-32, and below.

1.1. The "Sephardic" Features of Pal. Punctuation

Dealing with the counterparts of the Tib. vowels (esp. \$a\$, \$â\$, and \$ä\$) we can not escape encountering the problem of the realizations of the Pal. graphemes \$a\$, \$â\$, \$e\$, and \$ä\$. According to REVELL the Pal. signs \$e\$ and \$ä\$ denote separate phonemes only in mss. of text class 1, in mss. of classes 2 and 3 they represent one phoneme but indicate two allophones in certain segolate patterns¹ "for historical reasons", in remaining classes even this distinction has disappeared.² The Pal. \$a\$ and \$â\$ are used distinctly in classes 1, 2, 4, and 6 which, in his opinion, reflect "a pronunciation with two 'a' phonemes"; on the contrary only one phoneme was used in the pronunciations reflected in classes 8-11; classes 3, 5, and 7 also have one 'a' phoneme but two allophones "which were used distinctly in only a few morphs³ for historical reasons".⁴

The opinion held by DOTAN is, however, just opposite: "The Palestinian system ... does not make finer distinctions than to note the five cardinal vowels, at least in its most ancient stage as known to us." \$â\$ and \$a\$ were originally employed for two different vowels ("probably

1 For details, see Revell 1970a, p. 58-60, 72-73 § 33, and above, p. 28-29.

2 Revell 1970b, p. 102-103 § 8.

3 For details, see Revell 1970a, p. 57-58, 72-73 § 33.

4 Revell 1970b, p. 101; cf. also below, p. 124, fn. 5.

For earlier observations, see also Morag 1962, p. 34-38.

â and a"), but "no vestiges have remained from this period or from this use of the signs"; the distinction between \$e\$ and \$ä\$ is according to him "the product of a relatively later stage" apparently called forth by the Tib. system.¹

The wording of Dotan "to note the five cardinal vowels" obviously implies that the Pal. vowels \$â\$ and \$a\$ were realized approximately as [a], and \$e\$ and \$ä\$ as [e]. Revell does not specify his attitude in regard of the realizations, however, in his tables (2 & 3, 1970b, p. 111, 113) he assigns the only 'a' phoneme of classes 8-11 to the /â/ used in other classes as the opposite of /a/ as well as the only 'e' phoneme of classes 4-11 to /ä/.²

Common to these views of Dotan and Revell and to those of certain other scholars³ is the fact that they consider the existence of the phonemes /a/, /â/ (and partly of /e/ and /ä/) as a relatively old feature in Hebrew, and as a consequence the Pal. punctuations where the distinctions are neutralized reflect the situation prevailing in impoverished and otherwise later "dialects" than that reflected by the Tib. punctuation.

1 Dotan 1971b, c. 1434-1436; the articles of Revell (1970a and 1969) are included in the bibliography of this item; as regards the text chronology Dotan seems to follow the conclusions of Dietrich (1968, p. 111-121).

2 Cf. his note to Table 2 (1970b, p.111, fn. 26): "The signs used for the vowel qualities are conventional and not intended to represent any exact quality, although it is probable that the qualities involved were near to those suggested by the symbols used."

3 Bendavid 1958, p. 484; Morag 1962, p. 37 (see also below, p.104). According to Dietrich (1968, p. 119-121) the "genuin pal. Lautstand" possessed only one 'a' and one 'e' vowel; the graphemes \$a\$, \$â\$ and \$e\$, \$ä\$ may, however, indicate earlier attempts "die hörbaren Nuancen durch variierte Zeichen festzuhalten"; on a later stage the Pal. punctuators tried to imitate the Tib. reading tradition employing the Pal. \$â\$ for the Tib. [â] sound and correspondingly Pal. \$ä\$ for Tib. [ä].

Murtonen (1958, p. 29, 31-32) speaks of increasing promiscuity of \$a\$, \$â\$ and \$e\$, \$ä\$ signs, on the other hand he seems to consider that the original difference between the realizations of the signs was quantitative, cf. "our ms. e uses the vertical line for a long a and the horizontal one for a short a almost without exceptions" (p. 29).

In a wider form this conception has been presented and expanded upon by MORAG. Dealing with the Yemenite pronunciations of $\text{\$}\text{\$}$ he concludes that back sound values ($\text{e}-\text{\text{a}}-\text{o}$) were extant besides [a] in Hebrew at least subsequent to the period of the Dead Sea Scrolls and even earlier in the Canaanite dialects; the vacillating counterparts of (Tib.) $\text{\$}\text{\$}$ in transcriptions bear additional evidence for those timbres. Corresponding vowels of the Tib., Bab., and some of the Pal. reading traditions as well as those of East-Aramaic magical texts (5th/6th century A.D. ?) and Syriac had similar sound values. The [a] realizations of Pal. and Sephardic reading traditions¹ and of Eastern Syriac have originated from a loss of the retracted timbre ($\text{\text{a}}>\text{a}$).²

The change of the *stressed* $\text{\text{a}}>\text{\text{a}}$ took place in the Canaanite dialects including Hebrew for the first time as early as the 15th century B.C.³

A similar development appears again in Hebrew when the new quantitative opposition $\text{\text{a}}$ vs. $\text{\text{a}}$ is replaced by a qualitative one, i.e. /a/ vs. / $\text{\text{a}}$ /.⁴ The date and range of distribution of the latter phenomenon are, however, more problematic than what might be concluded from the previous reviews, and the matter has considerable bearing on the interpretation of the Pal. punctuation.

1.1.1. The Date of the Change $\text{\text{a}}>\text{\text{a}}$

Besides the dates given by Morag (see above), the common opinion is that the change $\text{\text{a}}>\text{\text{a}}$ "seems to be very late, however, not after Jerome's time".⁵

We may first revise the evidence from the time up until Jerome.

1 According to Morag the pronunciation reflected in the Pal. punctuation is preserved by the Sephardic communities, see Morag 1963, p. 288-289.

2 idem, p. 102-105.

3 Brovender 1971, c. 1564-1565.

4 A parallel development seems to be $\text{\text{e}}$ vs. $\text{\text{e}}$ > / $\text{\text{e}}$ / vs. /e/, cf. below, p. 109-110.

5 Blau 1971, c. 1571; similarly Bergsträsser 1918, p. 58-59a, 165 m, and Beer-Meyer 1952, p. 32.

1) According to KÖNNECKE the only occurrence of back vowels as the counterpart of the Tib. \$â\$ (= "qameş gadol") in the *Septuagint* is in \$Iobēl\$ = Tib. \$yābāl\$¹; according to LISOWSKY in the Pentateuch of the Septuagint "Kames ist \$a\$. Die einzige Ausnahme bietet \$Lobon\$ für \$lābān\$ Dt. 1.1".²

2) In the *Dead Sea Scrolls* there are a number of cases in which \$w\$ appears in place of the Tib. \$â\$ (e.g. \$kbwšym\$ = Tib. \$kbāšim\$, IQISA, 5:17). On the basis of these occurrences MEYER³ (and following him MORAG, see above, p. 104) has supposed that a change $\bar{a} > \bar{o}$ has taken place as a dialectal phenomenon in the Hebrew reflected in the scrolls while some other reading traditions had preserved $[\bar{a}]$; according to him the shape of the Tib. \$â\$ is a combination of the \$a\$ and \$o\$ graphemes leaving the possibility of choice between the $[a] - [\bar{a}] - [o]$ realizations to dialectal reading habits.

KUTSCHER has examined the occurrences enumerated by Meyer and interpreted the \$w\$ cases as originating from various phonetical, morphological, and semantical factors.⁴ In his review of Kutscher's work MORAG admits the explanations of Kutscher to be probable; on the basis of other evidence (presented above, p. 104) he gives, however, preference to the simpler, phonological interpretation.⁵

3) *Hexapla* normally has a Greek \$a\$ (362x) as the counterpart of the Tib. "qameş gadol". The Greek vowels \$o\$ and \$\bar{o}\$ occur four times which is 0.86% of the total amount of \$â\$ counterparts (466x).⁶ According to BRØNNO all of the \$o\$, \$\bar{o}\$ cases (\$emōsem\$ = Tib. \$'āmḥāšem\$, \$ouesokēm\$ = Tib. \$w-'āšḥāqem\$, \$sfōthai\$ = Tib. \$špātay\$, \$old\$ = Tib. \$ḥālād\$ P.) are variant forms.⁷

1 The normal counterpart is \$a\$, rarely \$e\$, and once \$ai\$. Könncke 1885, p. 20.

\$Iobēl\$ is most probably a variant = Tib. \$yobel\$.

2 Lisowsky (1940, p. 124) mentions the labial \$b\$ as a possible factor for the first \$o\$; Morag (1960, p. 29, II) compares \$Lobon\$ with a Phoenician name spelled with Greek characters as \$labon\$, but cf. Dotan 1971-1972, p. 2.

3 Meyer 1958, p. 39-48; idem 1966, p. 55-56. Bendavid (1958, p. 484, II) refers to the same phenomenon as an evidence for an early date of the change $\bar{a} > \bar{o}$ in certain reading traditions.

4 Kutscher 1959, p. 495-496, and the cross-references mentioned there.

5 Morag 1960, p. 29-31.

6 Brønno 1943, p. 352-355.

7 idem, p. 34, 110, 136-137, 354.

4) The transcriptions of *Jerome* provide the main evidence for the dates of the change concerned here.¹ \$o\$ occurs in place of the Tib. "qameş gadol" in the following *seven* words:²

bosor = Tib. \$bāšār\$ in Isa. 34:6
 gob = Tib. \$gāb\$ (P.) Ezek. 16:24
 hom = Tib. \$hām\$?
 sochor = Tib. \$zākār\$ in Isa. 26:14
 melcom = Tib. \$malkām\$ Zeph. 1:5
 soor = Tib. \$šāhar\$ (P.) Ezek. 27:18
 recob = Tib. \$rāqāb\$ Hos. 5:12

Even most of these occurrences are not reliable. According to Jerome \$gob\$ is "fovea", i.e. = Aramaic \$gob\$, \$gubbā'\$,³ \$hom\$ does not occur in the alphabetical lists of Siegfried⁴ nor in those of Sperber⁵ and thus seems to be some kind of mistake, \$melchom\$ "idolus Ammonitarum" is most probably = Tib. \$milkom\$,⁶ \$soor\$ is only a quotation from Aquila and Theodotion,⁷ and \$recob\$ "tinea" seems to be a variant (cf. Aram. \$rûqbā'\$ = "decay; moth"⁸)

The two remaining words \$zochor\$ and \$bosor\$⁹ (but \$basar\$ in Ezek. 10:12!) both have as their final consonant an /r/ which has a tendency to provide vowels with labial timbres,¹⁰ a similar effect is noted for /b/ occurring in \$bosor\$.¹¹

Besides deducing the change $\bar{a} > \grave{a}$ from this material we could just as well claim that \bar{a} was realized as an [ä] vowel referring to the *nine* \$e\$ counterparts of the Tib. \$ā\$ in Jerome which are also enumerated by Siegfried.¹²

1 Cf. above, p. 104 & fn.5.

2 According to Siegfried 1884, p. 75.

3 Cf. above, p. 52, fn. 2.

4 Siegfried 1884, p. 47.

5 Cf. Sperber 1966, p. 135.

6 Cf. above, p. 89

7 \$soor\$ may be compared with \$sohel\$ = Tib. \$šāhal\$ (cf. above, p. 94) both of which represent a non-Tib. *quilt*-pattern.

8 Jastrow 1950, p. 1463, s.v.

9 With a variant \$basar\$ in two mss.

10 See Kutscher 1959, p. 392 & fn. 244.

11 See idem, p. 391, and above, p. 65, fn. 1.

12 See Siegfried 1884, p. 75; the material presented by Sáenz-Badillos (1975, p. 112-113) is rather similar.

As far as I can see, the material examined up until now is unambiguous and yields only one conclusion: there is no trace of the change according to which \bar{a} acquired back vocalic sound values in the Hebrew reflected in our sources until the 5th century A.D.; if the transcriptions of Jerome are included, this date may be reused to include the first two decades of the 5th century.

5) The first positive proofs of the change, at least as a consistent phenomenon, seemingly derive from the East-Aramaic magical texts mentioned above (p. 104).¹ However, their date is uncertain (5th/6th century ?), and due to geographical reasons, they can not be connected with the historical phonology of the Palestinian languages.

6) We are better informed about the corresponding change in *Syriac*. The quantitative opposition between 'a' and 'e' vowels is obviously maintained in Syriac at least until the schism of Nestorians and Jacobites which took place at the beginning of the 5th century.² The quantitative distinctions were still a living feature in the first phases of the Nestorian punctuation system,³ but were eventually gradually lost.⁴

In the Jacobite, Western Syriac the quantitative distinctions were partly replaced by qualitative oppositions. \bar{e} develops either into /e/ thus coalescing with the old /e/ or into /i/ (= the old phonemes

1 In Phoenician the change is obviously restricted into original long \bar{a} vowels, see Dotan 1971-1972 and the references there. In Palmyrene Aramaic the change seems to be just an occasional, lexical phenomenon, see Rosenthal 1936, p. 27.

2 Birkeland 1947, p. 28.

3 i.e. since the turn of the 7th century. Segal 1953, p. 29-30.

4 Birkeland 1947, p. 14; Morag 1962, p. 49-50. It is not clear to me, however, why Birkeland (and quoting him Morag) considers that a quantitative system was replaced by a qualitative one, cf. his argumentation (idem): "There are also *mistakes* that are difficult to explain if the system is merely qualitative. Sometimes \bar{a} stands for \bar{a} and \bar{e} for \bar{e} and *vice versa* and there are inconsequences too. These "mistakes" must signify that an original quantitative system is being given up and substituted by a qualitative one... It is evident that the Nestorians themselves have had difficulties in distinguishing long vowels from short ones. That is just what must be inferred from inconsequences we usually call "mistakes". "

If the old oppositions were replaced by new ones, how could that call forth confusion and mistakes? These "Sephardic" phenomena are clear indications of the loss of the quantitative distinctions which were

/i/ and /ī/),¹ but more interesting for our purposes is the graphical notation of the original /ā/. It is still indicated with the Syriac Ⲫ'Ⲫ in the vocalization system invented by Jacob of Edessa in the latter half of the 7th century while a special symbol (Ⲫ, probably derived from the Greek ⲪⲟⲪ) was needed to denote the [o] sounds of non-Syriac loan words. Later, probably in the 8th century, the Greek ⲪⲟⲪ was adopted for the vowel sign of the old /ā/², which testifies that /ā/ had acquired a marked labial sound value; whether it was nearer to [ã] or [o] which is its realization in modern reading traditions, is uncertain.³ Of course, the Syriac Ⲫ'Ⲫ of Jacob might already represent an [ã] sound in contrast to [o] indicated with Ⲫ. At any rate, the use of the Greek ⲪⲟⲪ is the earliest datable proof for a regular change of /ā/ into a clearly marked back vocalic realization in the Syro-Palestinian area since the change of the stressed ⁺ā which occurred in Canaanite dialects.⁴

This change is unknown in Eastern Syriac where the old /a/ and /ā/ were distinguished only in open, non-final syllables; in this position a consonant preceded by ⁺/a/ was doubled (e.g. ⁺/maḥē/ = [maḥḥe]) while one preceded by ⁺/ā/ remained single (e.g. ⁺/māḥē/ = [maḥe]).⁵

7) The *Tib.punctuation* testifies that the development /ā/ > [ã] was a normal phenomenon in the Hebrew reading tradition reflected in it.⁶ The oldest manuscripts known to us date back to the second half of the 9th century.⁷

not replaced by new distinctive features; cf. also Morag (idem, p. 57-58): "E(astern)S(yriac) vocalizers continued the practice of having different signs for /a/ and /a:/, as well as for /e/ and /e:/, even after these pairs of opposition had been neutralized."

1 Birkeland 1947, p. 15, 38.

2 See Segal 1953, p. 42, 46.

3 The loss of /o/ (cf. Birkeland 1947, p. 15) left open a wide scope for different possibilities of realization.

4 Cf. above, p. 104; Kahle 1959, p. 72-75.

5 As described by Bar Hebraeus, a West Syrian scholar, in the 12th century (*Ktābā' d-Ṣemḥe'* IV,4, § 1, quoted in Segal 1953, p. 51-52).

6 As far as I know, that has been opposed recently only by Sperber (1966, p. 433-434), cf. his conclusions (p.434): "ⲪⲟⲪ and ⲪⲟⲪ are indiscriminately used to indicate the vowel *ā*. Our sources, thus, do not warrant a differentiation between *ā* and *ā* merely on the basis of the shape of the vowel-sign employed to signify the vowel."

7 Yeivin 1976, p. 12 § 19.

8) The realization of the *Bab. Hebrew* אָ is still an open question,¹ [ā] is especially supported by MORAG,² and [ā] lastly by KUTSCHER.³

The conclusions to be drawn from the previous review are that the (second⁴) change /ā/ > /ā/ (or > [ā]) appears in our sources for Palestine in the first Tib. punctuations known to us; in Western Syriac it seems to go back to the 8th century.

1.1.2. The Quantitative Oppositions of Hebrew

That the older quantitative oppositions were replaced by qualitative ones in the Hebrew reflected by the Tib. punctuation, is a well known fact.⁵ However, the quantitative distinctions appear clearly in the transcriptions of Hexapla where the vowels occurring in place of Tib. אָ and אֲ are regularly indicated by the Greek ε̄, resp. ε; the counterparts of the Tib. אָ and אֲ (of closed unstressed syllables) are represented by the Greek ὄ, resp. ο. The Greek alphabet is not capable of distinguishing between long and short 'a' vowels; analogously it is thus reasonable to conclude that a similar quantitative distinction also existed between the counterparts of Tib. אָ and אֲ.⁷

The transcriptions of the Septuagint⁸, Aquila, Symmachus, and Theodotion⁹ are also in accordance with these observations.

1 See Weinreich 1964, p. 236-237; Yeivin 1968a, p. 44; Yeivin 1973a, p. 14.

2 Morag 1963, p. 102-105.

3 Kutscher 1966, p. 224 The oldest mss. with the Bab. punctuation known to us go back to the 9th century, see Yeivin 1973a, p. 13-14.

4 Cf. above, p. 104.

5 See e.g. Blau 1971, c. 1573.

6 Exceptions occur mainly in the stressed syllables of verbal forms (e.g. אֲדַבֵּר = Tib. אֲדַבֵּר, אֲסַר = Tib. אֲסַר) or segolate patterns (e.g. אֲשַׁלַּח = Tib. אֲשַׁלַּח, אֲכַר = Tib. אֲכַר), i.e. in morphs which are commonly considered to be short-vocalic. Cf. Brønno 1943, p. 248-267, esp. 252-254, and 356-364, esp. 357-359; idem 1950, p. 532-549.

7 See Brønno 1943, p. 346; idem 1950, p. 550-551.

8 See Brønno 1940, p. 212-213; idem 1943a, p. 60-64.

Brønno, who has opposed the theories of Kahle and Sperber, has been the subject of their severe criticism, much of which is without basis. For this reason many of Brønno's studies have not received the attention they deserve.

9 See Sáenz-Badillos 1975, p. 113-116.

Jerome did not have vowel signs indicating different quantities at his disposal. However, his statement "et si forte erraverimus in accentu, in extensione et brevitae syllabae, vel brevia producentes vel producta breviantes, solent (sc. the Jews) irridere nos imperitiae"¹ is unambiguous: the vowel quantities were an important feature in the pronunciation of Hebrew names and consequently also in reading traditions. On the contrary, Jerome does not mention a word about Hebrew vowel qualities the unsuccessful pronunciation of which would be mocked by the Jews of Palestine, and the supposed qualities [ā] and [ä] had surely been "difficult" timbres for speakers of Greek or Latin. Thus we are entitled to conclude that the quantitative distinctions surpassed the qualitative ones (if there were any) regarding their significance in the Hebrew familiar to Jerome.

On the basis of the Hebrew names and words in Syriac and Arabic transcriptions it has been argued that the quantitative distinctions were still preserved in Hebrew in the 7th century.² It is uncertain if this was also true as regards all of the reading traditions of Hebrew.

1.1.3. The Geographical Distribution of the Change /ā/>[ā]/[o]

As mentioned above (p.107-109), we have found datable proofs for the change /ā/>[ā] in Western Syriac, Tib. punctuation, and Bab. Middle Aramaic. In addition to them, the Modern Aramaic dialects of Ma^Clūla and Ṭūr^C Abdīn disclose the development of ⁺/ā/ into [ō]; in ma^Clūlī it occurs, however, only in stressed syllables while unstressed ⁺/ā/ appears as [a].³ When the change took place in these dialects is not known to us.

1 Quoted *in extenso* above, p. 49. Cf. also: "Huc usque per breuem litteram E, nunc per productam nominum sunt legenda principia" (Lib. interpr. Hebr. nom., CC 77, p. 65).

2 Brockelmann 1899, p. 343-344; B-L, p. 238 j⁻; Rabin 1971, p. 34.

3 For ma^Clūlī, see Spitaler 1938, p. 1-2, 7, 10. In this respects ṭūrōyō deviates from remaining Modern East Aramaic dialects, see Cereteli 1964, p. 23. The change is thus independent of the boundary between West and East Aramaic.

Palestinian Jewish Aramaic and its vocalism are of great significance regarding the development of Hebrew reading traditions because it was probably the spoken vernacular of the Palestinian Jews. Unfortunately, we are badly informed as to the vowel system of Palestinian Aramaic and we know even less about dialectal (areal and sociological) differences which may have been considerable.¹ Some conclusions may be drawn, however, from the punctuated Targum fragments published by KAHLE (1930). The fragment A is punctuated with Pal., the other ones (B-G) with Tib. signs.

Among these fragments only B does not disclose "Sephardic" vacillation between 'a' and 'e' vowels;² in the fragments C and D the "Sephardic" features are not numerous while the punctuations of mss. A, F, and G clearly reflect "Sephardic" vowel systems.³

Since the Tib. punctuation signs do not indicate quantitative, but qualitative distinctions, the punctuation of fragment B obviously represents an Aramaic dialect in which the quantitative distinctions had developed into qualitative ones something in the style of the Hebrew of the Tib. punctuation. Contrary to that, fragments F and G disclose a dialect (or dialects?) in which there were only one /a/ and one /e/ phoneme.⁴ The texts C and D resemble Pal.-Tib. and Sephardic manuscripts the punctuators of which endeavour to imitate Tib. punctuation more or less successfully as regards the use of \$a\$/\$â\$ and \$ä\$/\$e\$ signs in spite of the fact that there were only one /a/ and /e/ in their reading traditions.⁵ We could suspect that even a faultless punctuation of the ms. B would be the result of theoretical consideration and imitation. Regarding the Hebrew texts it might be conceivable, but what would have

1 According to the Gospel of Matthew, at least, Peter did not talk much in the courtyard of the high priest, nevertheless his "accent" (ʿē laliā sou) betrayed that he was a Galilean (Matthew 26:69-73).

2 Yeivin 1960a, p. 351 § 11.

3 Kutscher 1969, p. 227: "ha-mnaqqdīm "s̄paradīm" hayū".

4 In favour of their reliability as proofs of spoken Palestinian Jewish Aramaic: Kahle 1930, p. 11⁺, 13⁺; Kutscher 1950-51, p. 193-194 (4-5); idem 1971a, c. 271.

5 Cf. Morag 1962, p. 39, 37; Dotan 1971b, c. 1461-1464; below p. 123.

been the benefit drawn from a theoretical punctuation of a targum which was intended to be a translation for people unable to understand Hebrew? Did the punctuator have a grammar of Palestinian Jewish Aramaic upon which he based his punctuation because it could not be unambiguously derived from that of Hebrew? It is much more plausible that different dialects of Jewish Aramaic still existed in Palestine¹ and that a dialect with a richer vowel inventory was a model worthy of imitation for the remaining dialect(s).² Unfortunately the date of these Targum texts is obscure³, for a hypothetical attempt for the areal location of the dialects, see below, p. 121.

The *Samaritan* reading tradition of Hebrew does not show the change treated here as a regular phenomenon. It does occur, however, in a number of words such as [gāg] = Tib. \$gāg\$, [dāt] = Tib. \$dāt\$, [Cāsār] = Tib. \$Cāsār\$, mostly in the neighbourhood of palatals, postpalatals, and liquids, but it is impossible to express this in terms of a general combinatory rule.⁴ These [ā] cases are interpreted by MACUCH as last survivals of an older, more extensive appearance of this vowel which probably originated in "ein älterer westaramäischer Einfluss westsyrischer Prägung".⁵ The tendency to provide /ā/ with back vocalic sound values thus seems to have reached Samaria even though it occurs there only sporadically.

Palestinian Christian Aramaic, probably spoken in Judea,⁶ does not reveal proofs of this change;⁷ on the contrary, \$'§ may be used as a vowel sign indicating both +/a/ and +/ā/.⁸

1 In fact, it is not corroborated - although probable - that the texts are of Palestinian origin, cf. however, above, p. 111, fn. 4.

2 Cf. above, p. 83 and fn. 2.

3 The mss. B, C, D are dated by Kahle (1930, p. 3⁺) to the second half of the 8th century, A to ca. 700, and F, G to ca. 1000; the dates are approved by Kutscher (1950-51, p. 193-4, 50, = 1963, p. 4-5, 50), but proofs presented by Kahle (idem, p. 2⁺-3⁺) are no more convincing.

4 Macuch (1969, p. 156): "erlaubt uns, nur von einer phonetischen Tendenz und von keiner Regel zu sprechen."

5 idem, p. 156

6 Cf. above, p. 47, fn. 2.

7 The contrary opinion of Schulthess (1924, p. 20) is based plainly on the analogy of West Syriac.

8 Schulthess 1924, p. 7-8, 20.

In this context I would call attention to a wording in the famous statement of ABRAHAM IBN ^CEZRA: דע כי הנועה קמ"ץ גדול מורכבת מחולם ומפתח גדול, על כן היא צורתו כצורת שניהם, כי נקמץ מהם, גם הפה נקמץ בקריאתו, ואיננו פתוח כפת"ח גדול, כאשר אנחנו קורין אותו במקומות האלה, רק אנשי טבר"ה גם חכמי מצרים ואפריק"א יודעים לקרוא הקמ"ץ הגדול.¹ Ibn ^CEzra wrote his book in Italy in the middle of the 12th century. He was, however, a native of Spain; thus "these places" where Tib. §â§ was realized as §a§, i.e. = [a], most probably refer both to Spain and Italy. According to him the proper, labialized [â] pronunciation was a *common* feature only among the 'anšê ṭberyā"ḥ while the *scholars* of Egypt and "Africa" (i.e. Tunisia), obviously in contrast to the "Sephardic" common people, followed the same manner of pronunciation probably imitating the Tib. reading tradition.² The interesting wording is 'anšê ṭberyā"ḥ which determines the group aware of the genuine realization of §â§. Is it a matter of mere chance that Ibn ^CEzra calls them just "people of *Tiberias*" and not 'anšê 'ereṣ yišra'el or yōšbê ha-'areṣ "inhabitants of *Israel*" or something similar? Or did he know that the Jews of Palestine were not uniform in respect to the realization of §â§ thus making use of the term 'anšê ṭberyā"ḥ?

The latter assumption could be supported by other evidence presented above: the positive proofs of the [â] occurrences (West Syriac, Ma^Clūla, Ṭur ^CAbdīn) are all from those areas facing North-East from Palestine,³ the negative ones may be located in Judea (Jerome, Christian Pal. Aramaic). Between them there is Samaria where the change only appears sporadically in the reading tradition of Hebrew; Galilee, north of Samaria, would thus be the most south-western edge of the [â] district. The division of Pal. Jewish Aramaic into "Tib." and "Sephardic" dialects could be linked to the theory as the adstratum influencing the pronunciation of Hebrew reading traditions. There is also a similar boundary running between Samaria and Galilee, which has been proposed by GINZBURG to the north of which the /n/ prefix is used in the impf. sg. 1 forms of West

1 Sefer Ṣaḥūṭ, ed. G.H. Lippmann 1827, fol. 3b.

2 See Klar 1954, p. 44.

3 Cf. also the occurrences of [â] or [o] *pro* [ā] in certain Modern Arabic dialects spoken in Lebanon and Western Syria, see Bergsträsser 1915, p. 190 § 16; Fleisch 1974, p. 206.

Aramaic (§nqtwl§ vs. §'qtwl§).¹

1.1.4. Sephardic Reading Traditions

The Sephardic tradition with five vowel phonemes (/i,e,a,o,u/) is often considered to be the scion of the Pal. pronunciation of Hebrew. In this respect the statement of MORAG is representative: "The Palestinian pronunciation was first transplanted from Palestine to Italy, and later, when the influence of Italian Jewry on the Jewish communities of Spain became prominent, it was transplanted from Italy to Spain (this transplantation possibly took place in the time of Rabbi Moses ben Ḥanokh, in the second half of the tenth century C.E.)"²

However, this theory leaves at least two questions open: (1) What made all of the communities now observing the Sephardic system of vowels all the way from Cochin in India³ to France⁴, Morocco, and Portugal unanimously approve the Pal. pronunciation? and (2) upon what was the Pal. pronunciation "planted"?

The Jewish population in the Mediterranean countries and the Middle East surely has a history dating back to pre-Christian centuries. Additionally, the Hebrew inscriptions found everywhere in these areas testify that the "holy tongue" was not unknown even to the early diaspora.⁵ We have no direct information as to the nature of those ancient reading traditions. The transcriptions of the Septuagint and Hexapla⁶ may possibly provide us with a notion of the traditions extant in the Greek language areas. As suggested above (p. 109-110) there are good reasons for believing that quantitative distinctions were a characteristic feature of such early reading traditions. On the other hand, it is difficult to find an important

1 Ginzberg 1934, p. 382-383 §6, and fn. 15. Cf. also below, p. 179.

2 Morag 1971, c.1125; idem 1963, p. 288-292; Weinreich 1954, p. 89-93; idem 1964, p. 240-241; however, according to Kahle (1959, p. 74) and Meyer (1966, p. 54) the Sephardic reading tradition is of Bab. origin.

3 However, there are two reading traditions in Cochin, one following the Sephardic system of vowels and another for certain feasts in which §ā§ is realized as [o], cf. Rabinowitz 1952, p. 108-109; Bar-Giora 1956, p. CXL, fn. 21. I hope to have an opportunity to deal with these matters in another context in the future.

4 For the Sephardic background of the Ashkenazic reading traditions, see Morag 1971, c. 1128-1130 and the sources mentioned there.

5 Cf. the Jewish inscriptions dating from the period 3rd century B.C. - 7th century A.D. published by Frey (1936 & 1952).

6 The transcriptions of Hexapla originate possible in Caesarea, see Brønno 1943, 6-7.

language spoken by Jews in the Mediterranean area which preserved quantitative distinctions as a phonemic phenomenon until the end of the first millennium.¹ On the basis of what is known concerning the influence of vernaculars upon liturgical languages,² it is most likely that the loss of quantitative distinctions occurring in spoken languages also yielded a corresponding change in the respective Hebrew reading traditions. The transcriptions of the Septuagint and Hexapla reduced by the quantitative distinctions as well as those of Jerome are in principle in accordance with the Sephardic reading habits of the Mediterranean area.

As for the loss of quantity oppositions in the vernaculars of the Middle East, esp. Eastern Aramaic, our knowledge is restricted and partly contradictory.³ In addition, those areas were under the influence of Bab. Hebrew.⁴ Nevertheless the result is the same: the Eastern Sephardic reading traditions of Hebrew are just as "Sephardic" as those of Spain and the Balkans as regards the absence of quantitative distinctions and the number of vowel "phonemes".

Thus it is difficult to believe that the Pal. pronunciation in so uniform a shape was transplanted in the immense regions in Europe, Africa, and Asia in spite of the fact that it was not the respected Tib. pronunciation. If we accept the transplantation theory we also have to suppose that the Tib. pronunciation was familiar only to a small group or was current in a restricted area among the Jews of Palestine while the majority of emigrants carried along with themselves "Sephardic" Palestinian reading traditions, a conclusion which would be well suited to the view of divisions between the Hebrew reading traditions in Palestine (cf. above,

1 This refers mainly to Greek and Latin. The quantity oppositions of the former vanished until the 5th century A.D. (Sturtevant 1940, p. 47, 103-104; according to Schwyzer, 1939, p. 392, already ca. 100 A.D.) and those of the latter until the end of the 3rd century A.D. (Väänänen 1967, p. 31 §44).

2 Cf. above, p. 82-83.

3 Cf. the Modern Eastern Aramaic dialects including Mandaic (see Macuch 1965, p. 15-16) and East Syriac, on the one hand, and the Bab. Jewish Aramaic as reflected by the Yemenite reading traditions with /a/ vs. /ā/ opposition (see Morag 1961, p. 221-229; for the possible Hebrew origin of the opposition, cf. however, idem. p. 229 §2.231, and p. 238, fn. 64), on the other.

4 Cf. the statement of al-Qirqisani from the year 937 (Kitāb 'al-'anwār wa-'l-marāqib II, 16, ed. Nemoj 1940, p. 135) according to which the Bab. reading tradition extends from Iraq to China, Persia, and Yemen (Klar 1943, p. 33-34: שהרי קריאה בבל מלאה את העולם, כיון שהיא מתפשטת מגבול רקה ועד גבול סין לאורך ולרוחב רוב יושבי אלג'זירה וכ'ראסאן ופארס וכרמאן ואצפהאן וימאמה ובחריין ותימן וזולתן).

p. 113)¹. However, it is more convenient to argue that a similar development occurring in various vernaculars, viz. the loss of quantity oppositions, led to equal results also as concerns the vowel system of Hebrew reading traditions.²

On the contrary, at least some of the typically Palestinian features occurring in so-called Palestinian-Tiberian manuscripts, e.g. *š* before *š*, *š* before *š*, *š* before *š*, etc. *pro* *š* before *š*, the lacking of pataḥ furtivum signs, the assimilation of a reduced vowel before laryngeals to the timbre of a following "full" vowel,³ may be attributed to the influence of Palestinian teachers. On the other hand, a different problem is raised by the question of the degree to which these Palestinian features were accepted as normal *reading* habits. In other words, we could argue that the Pal. influence only extended to some *graphical* punctuation conventions which for a certain time were able to contend with the Tib. ones while the actual reading traditions ("realizations") were preserved as "Sephardic".⁴

Thus I am inclined to conclude that the similarities of Pal. and Sephardic traditions originate from similar developments which nevertheless are mutually independent. Some of the typical Pal. features occurring in Sephardic (and Proto-Ashkenazic) mss. may be due to Pal. influence (teachers, punctuators), on the other hand, they may only reflect parallel development. In principle, however, the Sephardic reading traditions are to be deduced from forms of Hebrew the quantitative distinctions of which had collapsed and not been replaced by new

1 The statement of Ibn Ezra concerning the scholars of Egypt and "Africa" (see above, p. 113) seems to indicate the contrary: the scholars took pains to follow the Tib. pronunciation models, but the foreign neologisms were shunned by the genuine "Sephardic" pronunciation tradition as it existed among the common people (and soon also among scholars).

2 A number of phenomena resembling those of the Bab. tradition which seem to exist in Sephardic reading traditions of Spain and North Africa (cf. Morag 1971, c. 1125; Katz 1973) could be interpreted either as remnants of the ancient "Sephardic" traditions (cf. the "exceptional" forms of transcriptions) or as mere local variants and innovations influenced by vernaculars without any direct connection with the Bab. forms. Local variation has surely existed in Hebrew reading traditions all through its history.

3 Cf. Díez-Macho 1963, p. 19-25; Dotan 1971b, c. 1462-1463; Eldar 1975, p. 207-208.

4 Those Pal. features do not appear in transcriptions from medieval Spain, cf. Garbell 1954, p. 691-693. For the ostensible similarity of the Sephardic Proto-Ashkenazic reading traditions with the Pal., see Eldar 1975, p. 206-210.

distinctions.¹

1.1.5. The Pal. 'a' and 'e' Graphemes and Their Relation to the "Sephardicization" of Reading Traditions

Since there is no reliable absolute chronology of the Pal. mss., the attempts of relative chronologies as e.g. that of DIETRICH are based on various opinions concerning the significance of these Pal. features deviating from Tib. usages.² This implies that the use made of relative chronologies in order to cast light on the origin of certain phenomena, e.g. of the Pal. 'a' and 'e' vowels, ultimately leads to a vicious circle. Accordingly, we are not able to date the Pal. mss which have only one 'a' sign in place of Tib. \$a\$ and \$â\$ and one 'e' sign corresponding to the Tib. \$e\$ and \$ä\$ vowels³ as representative of earlier or later stages than the others. Since the evidence of influence of the Tib. punctuation on the Pal. is sparse⁴ it is not probable that the employment of two signs for one /a/ and similarly for one /e/ could be a plain imitation of the Tib. punctuation. Besides those texts in which the signs \$a\$/\$â\$ or \$e\$/\$ä\$ are more or less mixed⁵ there are also texts in which the distribution of these signs is clear-cut. I refer to the mss. of class 1 according to the classification of Revell;⁶ for numerous non-

1 Or were the quantitative distinctions nevertheless preserved by some Proto-Ashkenazic reading traditions which would explain completely the development of the Ashkenazic vocalism? Or did the ancestors of *Ashkenazim* execute the theories of Qimḥis as regards these distinctions; cf. the problems of Weinreich (1960, p. 67-68, §18) explaining the origins of the vowel system of Yiddish. The latter supposition is, however, more probable since there is no evidence for the preservation of those distinctions in Europe, cf. Garbell 1954, p. 693-694; Rabin 1971, p. 34-35.

2 Cf. Dietrich 1968, p. 71-129.

3 The texts of classes 8-11 according to the classification of Revell, see Revell 1970b, p. 64-70, 118 iii. It is important to note that there is no biblical ms. of this type (Revell 1970a, p. 81, fn. 107.)

4 Cf. *idem*, p. 104-109.

5 Cf. above, p. 102.

6 See Revell 1970b, p. 34-37, 71-79, 117, Group A i.

Tib. features of these texts, see Revell (1970b, p. 37, 78-79).¹

§ā§ and §e§ indicate in numerous Pal. texts vowels which occur in place of the Tib. reduced vowels.² Thus the Pal. vowel signs must be signs denoting qualities;³ the second possibility, that e.g. the vowel of the preposition §l-§ in the word $\dot{\text{ל}}\dot{\text{ו}}\dot{\text{ל}}$ (TS H3:4 v18) would be assimilated to the following vowel and therefore lengthened into [ē] is beyond all probability.

Since quantitative distinctions were preserved in Hebrew longer than has been supposed (cf. above, p. 109-110), we could argue that the Pal. §ā§ and §e§ signs *originally* indicated approximately the vowels [ā] and [ē], i.e. lengthened counterparts of §a§ and §ä§. In that case, however, we would expect special signs also for long \bar{i} , \bar{u} , and \bar{o} . That not being the case, we must conclude that the Pal. vowel signs also indicate originally quantitative distinctions, i.e. §ā§ reflects a vowel resembling [ā]⁴ and §e§ a vowel resembling [e] (in contrast to §ä§ \cong [ä]).

I have above (p.110-114) expressed arguments against the opinion that the change $\bar{a} > \dot{a}$ was a general phenomenon in Aramaic and Hebrew; it seems to be limited to areas north of Samaria. On the other hand, the change does not seem to have taken place before the sixth century, probably even later, ca. 700 A.D. According to what is known to us of the living reading traditions of Hebrew, the sound shifts occurring in vernaculars appear in reading traditions much later and the vowels are more capable of resisting external influences than are the consonants.⁵

1 If all of the biblical texts of class 1 were *serugin*-texts as those enumerated by Revell (idem, p. 73-74; + the mixed JTS MS 504 f. 2+ with Bab. and Pal. punctuation), we could in spite of the non-Tib. features suspect that they are "short-hand" notes of the Tib. punctuation written merely with Pal. vowel signs. However, TS NS 246:22 published by Díez-Macho (1967) discloses a normal biblical text punctuated in typically Pal. way, i.e. incompletely, and without clear Tib. features; nevertheless the use of 'a' and 'e' signs follows that of the Tib. punctuation. Taking into account also the liturgical Pal. texts of class 1 (see Revell 1970b, p. 34-37), I do not see any reason to doubt the genuineness of these punctuations as reflectors of a certain Pal. reading tradition.

2 Cf. Revell 1970a, p. 85-92.

3 Cf. idem, p. 60-61.

4 Since there is no confusion between §ā§ and §o§ signs (for exceptions, see Revell 1970b, p. 43, and below, p. 153, fn. 3), it is probable that the timbre was somewhere between [a] and [o]; all of these phonetic values are, of course, only approximate values.

5 Morag 1963, p. 275-276, 281-284; Weinreich 1954, p. 94.

As for the "Sephardic" Pal. mss. confusing 'a' and 'e' vowels, the "pendulum" theory $\bar{a} > \hat{a} > a$ (cf. above, p. 102-104) thus appears to be unlikely. That theory would imply that first developments $\bar{a} > \hat{a}$ and $\bar{e} > e$ occurring in vernaculars (ca. 700 ?) produced parallel changes in the Pal. reading traditions, then a reverse development took place, i.e. the loss of the distinctions between \hat{a} and a resp. e and \hat{a} ,¹ and these changes were adopted by the "Sephardic" Pal. reading traditions. There is evidence for the first development from northern parts of Syro-Palestine (cf. above, p. 110-114), but not for the second one *as a continuation of the first development*. In addition the time interval is hardly long enough for such complicated developments and their penetration into the reading traditions of Hebrew.

Therefore, I would like to propose another solution for the problem. As suggested above (p. 113), there seems to have been areas in Palestine south of Galilee where the quantitative oppositions were not substituted by qualitative ones. These ancient oppositions were possibly preserved until the 7th century (cf. above, p. 110). What happened then might be deduced from the Samaritan reading tradition: the oppositions disappeared² and were not replaced by others, i.e. the vocalism was "Sephardicized". Some of the Palestinian Jewish Aramaic texts with Tib. punctuation bear evidence for the existence of such dialects (cf. above, p. 111-112). This phonemic loss of quantitative distinctions took effect on the Hebrew reading traditions in those circles where this kind of dialect was the spoken language. The reverse development, i.e. the replacement of the quantitative distinctions by a new qualitative ones,

1 Besides the influence of vernaculars, another factor for the supposed "Sephardicization" of certain Pal. reading traditions would be the effect of respected reading traditions. However, what could be a such respected "Sephardic" tradition?

2 For \hat{a}/a , see above, p. 111-112.

For the Samaritan vocalization systems distinguishing only $\$i\$, \$e\$, \$o,u\$, \$a\$, and \$\hat{a}\$, see Morag 1962, p. 42-43; Dotan 1971b, c. 1469; Macuch 1969, p. 67-76; Ben-Hayyim 1954. According to Ben-Hayyim (1954, p. 521-530) $\$a\$$ indicates the combination /^ca/ while $\$\hat{a}\$$ is the normal counterpart of /a/; according to Macuch (1969, p. 73) the Samaritans attempted to indicate with these signs quantitative differences imitating the Arabic vocalization system, "obwohl sie nie imstande waren, die beiden Zeichen richtig zu gebrauchen".$

called forth Hebrew reading traditions of the Tib. type.¹

- 1 The sound history of Yiddish, Scandinavian languages, and Greek demonstrates parallel phenomena of development, especially for the main focus of this discussion, viz. the development of /ā/.

In *Yiddish* ⁺/ā/ turned into [o] obviously in the 14th century (Joffe 1954, p. 106-107) or at last in the end of the 15th century (Weinreich 1964, p. 247-251); in the southern dialects the development reached later until [u] (Weinreich 1960, p. 66 §13).

The short ⁺/a/ occurring in open syllables became then first lengthened and later labialized into [o] in the Eastern Yiddish (idem p. 67, §18). According to Joffe (1954, p. 116-117) the change took place ca. 1650; in southern dialects (Polish-Ukrainian) also this [o] developed into [u] ca. 1730 (idem, p. 120-121). In the main part of Western Yiddish this secondary lengthened [ā] joined, however, in original short [a] which was not lengthened and stayed short (Joffe 1954, p. 113-114; Weinreich 1960, p. 67 §18, 65 §6). The difference could be accounted for by the influence of German.

Western Yiddish could thus be compared with the 'Sephardicized' reading traditions of Hebrew while the development of the northern (Lithuanian) dialects of Eastern Yiddish resembles that of the Tib. type of Hebrew.

Also the *Scandinavian languages* represent a type with an unstable ā and its development into retracted and labial timbres in different periods. The original ⁺/ā/ developed into [ǎ] first in Icelandic and Ancient Norwegian in the 13th century, in Ancient Danish ca. 1250 (the spelling \$aa\$ was preserved, however, until 1948 when it was replaced by \$å\$), and in Late Ancient Swedish in the second half of the 14th century; in the Swedish dialect of Gotland ⁺/ā/ is realized, however, until this day as [ā]. See Wessén 1954, p. 47. This [ǎ] was then drawing nearer to the timbre [o]; in Swedish it was joined with it and in the same time with the reflex of Ancient Swedish /o/ ca. 1900. See Wessén 1951, p. 50-58. The consequences of the change ⁺/ā/ > [ǎ] in Swedish are also interesting as a comparison material for Hebrew. The original /ō/ turned into a closed [o] ca. 1400, and before the end of the period of Late Ancient Swedish (1526) the original ⁺/ū/ was realized as [u]. Amongst the changes of the original short vowels the developments ⁺/i/ > [e] and ⁺/u/ > [o] belong to this period. - The short o-vowels originating from ⁺/a/ by "Umlaut" on one hand and from the before mentioned change ⁺/u/ > [o] on the other were realized in Late Ancient Swedish as an open [ɔ] and in numerous dialects it developed into an intermediary timbre between [o] and [ö]; this vowel was marked either with \$ǎ\$ = [ǎ], later = [ɔ] or with \$o\$ = [ɔ]; the intermediary timbre disappeared but ca. 1900. See Wessén 1951, p. 54-58, 111-112.

The secondary long /ā/ originating from /a/ is realized in Modern Swedish as an open vowel (idem, p. 110-111) and especially in areas around Stockholm the realization is clearly back vocalic [ǎ]. In the Swedish spoken in Finland this development does not occur, but the difference between /ā/ and /a/ is only quantitative, [ā] vs. [a].

Greek and *Latin* represent a type of language where the original quantitative distinction of /ā/ and /a/ disappeared and was not replaced by new distinctions; after this loss both of them were realized as a short [a]. (Cf. Sturtevant 1940, p. 30, 106-107). The development took place in Greek during first centuries A.D. and in Latin until the end of the 3rd century A.D. (cf. above, p. 115, fn. 1).

As known, it is by no means certain that the Pal. punctuation originates from Palestine.¹ However, approving the common view² as a working hypothesis, we could try to locate Pal. reading traditions reflected by the Pal. punctuations into the language-geographical map of Palestine. On the basis of the previous discussions we had to put the traditions with two 'a' and 'e' vowels somewhere in Northern Palestine (Galilee)³ while the "Sephardic" traditions would originate in areas south of it.⁴ In addition, accepting the opinion as regards the originality of the seven vocalic sound system of the Pal. traditions proposed above (p. 117 - 119), we are forced to conclude that the Pal. punctuation system was created in Northern Palestine, i.e. it is closely related to the Tib. system. The punctators of the "Sephardic" circles⁵ made efforts to imitate northern punctuations and perhaps even the reading traditions (possibly respected since Galilee was the cultural centre) just as the *Sephardim* later tried to imitate Tib. punctuation and their scholars also imitated the pronunciation (cf. above, p. 113). As was the case with the *Sephardim*, the results were more or less successful and some of the punctators were contented to make use of one or the other of the 'a'/'e' signs (cf. Revell 1970b, class 8 & 9: \$â\$ and \$ä\$, class 10: \$ã\$ and \$e\$, class 11: \$a\$ and \$e\$, p. 65-70). In addition, it is rather probable that the "Sephardic" vernaculars gained ground diachronically among the Jews of Palestine which would mean that the "pendulum" development $\bar{a} > \hat{a} > a$ was a reality in certain frontier areas and could also be reflected in Hebrew.⁶

1 According to Eldar (1975, p. 210-211) even the term "nîqqûd 'ereṣ yiśra'el" of Maḥzor Vitry refers to the Pal.-Tib. vocalization system and not to the supralinear Pal. as suggested by Kahle and others.

2 Cf. Kahle apud B-L, p. 83-85; Weinreich 1954, p. 90-91 (Southern Palestine); Morag 1962, p. 34; idem 1968a, c. 841; Meyer 1966, p. 53; Bendavid 1958, p. 483, II; Kutscher 1950-1, p. 50 (Galilee) Revell 1970b, p. 120 (Palestine, Egypt); Eldar 1975, p. 209, fn. 89.

As far as I know, there is no other proposal concerning the place of origin of the Pal. punctuation.

3 As proposed by Kutscher (1950-1, p. 50).

4 As proposed by Weinreich (1954, p. 90-91).

5 Of course, there could be "Sephardic" groups also in Galilee; besides geographical, boundaries of tradition may also be social.

6 In particular, this could be true as regards some texts of class 2, cf. Revell 1970b, p. 38-39 D.E.G., p. 80 D.E.G. and below p. 123-124, 152, 153, fn. 3.

As regards the "Sephardic" realization of the only /a/ phoneme we are entitled to suppose that it was a kind of [a]. First, there is no evidence of the reverse development of /a/ into back vocalic sound values in closed unstressed syllables in Semitic languages in general¹ or in Hebrew reading traditions in particular.² Second, Pal. \$â\$ and \$a\$ occur as the counterpart of the Tib. *qameš haṭuf* only in certain morphological patterns (cf. below, p. 154-168) while the Pal. normal counterpart is \$o\$. Third, according to al-Qirqisani the Jews of *al-Rûm* and *al-Mağrib* had reading traditions equal to that of *al-Ša'm*.³ In addition, he tells that the Jews living in *al-Ša'm* have no *qameš* since it is not extant in the language *al-rûmt*, i.e. in Greek.⁴ There was no [â] nor [ā] in Greek, and thus independent of the realization of \$â\$ by the Babylonian al-Qirqisani⁵ the Byzantine Jews had a kind of [a] in place of that vowel; as a consequence \$â\$ was realized as [a] also in several of the reading traditions of *al-Ša'm*, i.e. Palestine. For the realization of the only /e/ in "Sephardic" reading traditions we do not possess similar evidence; thus we cannot decide whether it was nearer to [ä] or [e], on the basis of the Sephardic realizations the latter possibility seems more probable.

The distinction between 'e' vowels is apparent only in a few texts, viz. in those of Revell's class 1, while 'a' vowels seem to be more widely kept apart (cf. above, p. 102, and below, p. 123-4). The vacillation of 'e' vowels even in class 1 is not insignificant (cf. Revell 1970a, p. 98, Appendix C: 11x Pal. \$e\$ *pro* Tib. \$â\$ and 7x Pal. \$ä\$ *pro* Tib.

1 Cf. Brockelmann 1908, p. 144-151.

2 [o] as the realization of the Tib. \$a\$ occurs only in the Hebrew component of Yiddish in Podolia, Moldavia, and Bessarabia due to the development of those dialects of Yiddish; even there it does not occur in "Whole Hebrew", i.e. reading traditions, see U. Weinreich 1960, p. 249, and Morag 1971, c. 1135-1136.

3 See Klar 1943, p. 36, *al-Rûm* refers to Byzantine areas (idem, p. 36, fn. 31; Weinreich 1964, p. 242), *al-Mağrib* to Morocco or North Africa in general (idem, p. 36, fn. 32), and *al-Ša'm* to Syro-Palestine (idem, p. 33, fn. 9).

4 See Klar 1943, p. 37.

5 Thus the statement of al-Qirqisani does not give evidence in favour of the [â] realization among the Babylonians as claimed by Klar (1943, p. 37, fn. 37).

§e§). These divergences occur among the biblical mss. in Bod. Heb. e39 f. 48-9+¹ while TS NS 246 discloses only one such case;² among the non-biblical texts there are in TS H16:10 four cases in which the Pal. §ä§ corresponds to Tib. §e§, but in this respect TS NS 249:2 is in complete accordance with the Tib. system.³ Because these deviations occur in all of the positions where Tib. §ä§ and §e§ are extant and do not represent certain morphological patterns,⁴ it would be the simplest explanation, at least, to consider them to reflect the penetration of the "Sephardicized" reading traditions into circles which had observed distinctions of the Tib. type. Even though evidence of confusion is sparse, the apparent regularity could well be accounted for by *punctuation* traditions, i.e. historical spelling not reflecting the actual *reading* tradition which had been "Sephardicized". As a case of comparison I refer to the punctuations of Mishnah Kaufmann and Mishnah Sasson (Ramban)⁵ in which the confusion of 'a' and 'e' vowel signs is a rare phenomenon; nevertheless these manuscripts are considered to reflect Sephardic reading traditions.⁶ On the contrary, texts as TS NS 246 and TS NS 249:2 may represent reading traditions still free of "Sephardic" influence.

As for the divergences of the 'a' vowels in the classes 1,2,4, and 6 (cf. above, p. 102), we are able to make similar observations. According to REVELL (1970a, p. 98, Appendix C) there are in these classes 132 cases in which the Pal. §a§ occurs in place of the Tib. §ä§ and 147 cases where the reverse is true; these cases occur in all kinds of syllable, including the Pal. §ä§ *pro* §a§ in closed unstressed syllables.⁷

1 See Revell 1970b, p. 75 I & K.

2 Díez Macho 1967, p. 18.

3 See Revell 1970b, p. 35 I & K.

There are also other both biblical and non-biblical texts without "Sephardic" features (see *idem*); however, the texts are short or the punctuation is so sparse that the conclusions drawn from them remain uncertain.

4 Cf. Revell 1970a, p. 67, 69-71.

5 Cf. Yalon 1964, p. 31, 33-34.

6 *idem*. Cf. also Penzl 1957, p. 201, 206-207 ("Reverse or inverse spellings always indicate a phonemic coalescence.").

7 For the various explanations given by Revell, see *idem*, p. 63-64, 66-67, 69, and above, p. 27.

Only some of the small fragments of class 1 seem to observe a strict assortment of the 'a' vowels.¹ Although the distribution of 'a' vowels is more in accordance with the original vocalism and the Tib.punctuation than that of the 'e' vowels, these observations make the apparent regular use of the 'a' vowels suspect as an indicator of the actual reading habits.

According to my interpretation the Pal. punctuations known to us,² possibly excluding some of the texts of the class 1, represent different stages of historical spelling as regards the use of 'a' and 'e' vowels, while the reading traditions were widely "Sephardic", i.e. they possessed only one 'a' and 'e' vowel. Of course, this does not exclude the possibility that a distinction was preserved longer in certain stress patterns or morphs than in others.³ A careful scrutiny of Pal. morphology might shed light upon the relationship between the historical spelling and the reading customs; on the other hand, however, the punctuators surely were not completely ignorant of morphological facts and thus they could attend to historical spelling in certain patterns in which a specific choice from the available variants was considered by them to be significant.⁴

-
- 1 Cf. Revell 1970b, p. 13, 35 D & G, 74 D & G; even TS NS 246 reveals two cases of Pal. §â§ = Tib. §a§ (2. Chr. 14:4; 15:16) and two of Pal. §a§ = Tib. §â§ (15:15 and 15:17; not mentioned by Díez Macho 1967).
 - 2 The Pal. fragments found in Cairo Geniza are divided into 12 different sub-traditions or "dialects". How many "dialects" were not represented among those fragments and are thus unknown to us?
 - 3 Cf. the neutralization of the /â/-/a/ distinction in certain stress and morphological patterns in the Bab. Aramaic and its reading traditions among the Yemenite Jews, Morag 1961, p. 221-229; idem 1968b, p. 71-78.
 - 4 According to Revell (1970a, p. 57-61) the distinctions of the 'a' and 'e' vowels are preserved in some morphs even in the texts where these vowels are used elsewhere indiscriminately; the distinction was "almost certainly one of the vowel quality" (p. 60). As a counter-evidence for a possible orthographic tradition he mentions the different treatment of pronominal suffix 3. sg. fem. bound in perfect verb forms (regularly written with §â§) in contrast to the ending of fem. noun forms or the emphatic ending of impf. and imp. verb forms (written either with §a§ or §â§; idem, p. 60, fn. 33). All of the suffixes (Tib.) §-kâ§, §-tâ§, and §-âh§ mentioned by him as regular Pal. §â§ cases are, however, morphs occurring in other forms in other traditions and genres (cf. Ben-Ḥayyim 1954, p. 13-64). It is probable that traditional habits appear in such morphs. For the pronominal suffix 3. sg. masc. bound to pl. nouns, cf. Yahalom (1970, p.31-32) who considers §a§ to be a "rafe" sign indicating the realization of the suffix to be [o] as in Samaritan Hebrew (pro Tib. [-âw]).

If we intend to find a factor calling forth the "Sephardicization" of a number of Aramaic dialects spoken in Palestine (cf. above, p. 111-114) and, as a consequence, of most of the Pal. reading traditions of Hebrew, we must take into account the prominent position enjoyed by Greek. It is well known that there were Jews in Caesarea in the 4th century who even read the *Shema*¹ prayer in Greek. The influence of the Greek language upon the Palestinian dialects of Aramaic is manifest by the abundance of Greek loan words occurring in Mishnah,² fragments of the Pal. Targum,³ and Christian Palestinian texts.⁴

As the vowel system based on quantitative oppositions became unstable in Aramaic possibly in the 6th century, the effect taken by Greek could well be the factor which produced the loss of quantitative distinctions and prevented their becoming qualitative ones in certain southern dialects of Palestinian Aramaic; as mentioned, the quantitative distinctions of Greek disappeared in the first centuries A.D. and the number of the Greek vowel phonemes was continuously diminishing (Itacism). Another adaptation of the same idea would be to consider Greek the main cause of the loss of quantitative distinctions in the whole Aramaic area; thus the West Syriac and Tib. development types would represent a case of substitution for the purpose of maintaining the original number of vowel phonemes while e.g. East Syriac and "Sephardicized" Palestinian dialects reflect vowel systems conforming to that of Greek.⁵

1 TP, Soṭa VII, 1, 21b; Lieberman 1942, p. 30.

For the knowledge and influence of Greek in general, see Lieberman 1942 and 1950; Sevenster 1968.

2 Cf. Albeck 1971, p. 197-198, 365-390.

3 Kahle 1930, s. 11 & fn. 2.

4 Schulthess 1924, p. 3; Bar-Asher 1975, p. 162.

In general, see also Krauss 1898-1899.

5 In addition, what might have been the result of the shift of stress from the last syllable unto the penultimate syllable (at least in words with a vocalic ending) taking place in Aramaic "about A.D. 700" (Moscati 1964, p. 69) for the changes of the vowel systems?

2. Tib. \$a\$ ≠ Pal. \$a,ä\$

As a consequence of the previous discussion the cases where Pal. \$ä\$ occurs as the counterpart of Tib. \$a\$ have not been incorporated into the following lists.

2.1. Tib. \$a\$ = Pal. \$e,ä\$

Divergences of this type mostly consist of cases occurring in laryngeal surroundings.

2.1.1. Prae-laryngalia

a) Non-biblical texts

מַעֲלֵלִיּוֹ	~	מַעֲלֵלִיּוֹ	d 55, 13v20	Cl.2.
בְּעֵדִי	~	בְּעֵדִי	prep. - " - 14v6	- " -
קָלַע			Ant.369, Kober 1929, 18:11	- " -
נִעְנִי ¹	nif. 2 x		- " - - " -,17:8,18	- " -
נִעְשִׂיתָ ¹	nif., pf.		TS H16:4, r9	Cl. 4
תִּחַסְכּוּ ¹	qal, impf. √חש		d 55, 7r33	Cl. 5
נִעְשָׂה	2x, nif. pf.		- " - 4r23 & 9r30	- " -
וְנִעְשׂוּ	nif.		- " - 5r22	- " -
קָדַח			- " - 10r5	- " -
קָדַח			- " - 10r5	- " -
בְּאֵר שֶׁבַע			- " - 9r32	- " -
בְּעֵרְפֵל	prep.		- " - 10v1	- " -
בְּאֵהָבָה	~	בְּאֵהָבָה	- " - 11v28	- " -
נִצַּח			TS H16:5, 2r8, Edelmann 1934, XXXI:21	- " -
פָּגַע			TS H2:55, v3	Cl. 6
דָּבַח			d 41, 12r31	Cl.7.
תִּחַנֶּה	qal, impf.		- " - 14r18	- " -
	~	תִּחַנֶּה		

1 The Tib. \$a\$ is not attested, cf. Bergsträsser 1926-29, p. 111 b⁺, f.

מֶלֶח	4x	d 63, 88b 15&16	Cl. 7.
בְּעֵלֵי	~ בְּעֵלֵי (?)	- " - 82a36	- " -

b) Biblical texts

לִיחֲדוֹ ¹	~ יִחְדָּו :	TS 12:196 = Kahle L, Ps. 71:10	Cl. 3.
וְחָעָדֵי	~ וְחָעָדֵי qal	TS 20:59 = Kahle H, Ezek. 16:13	- " -
תְּחַטֵּיא	~ תְּחַטֵּיא	TS 20:59 = Kahle H, Ezek. 14:13	- " -

In addition, there is in Ps. 31:23 (TS 20:54 = Murtonen c) a punctuation [תְּחַטֵּיא] (= Tib. תְּחַטֵּיא) in Murtonen², but]תְּחַטֵּיא in Allony and Díez Macho.³

2.1.2. Post-laryngalia

a) Non-biblical texts

עֲנוּהָ		d 55, 4r8	Cl. 5.
עֲנוּתָךְ		2x - " - 7v13; 10r23	- " -
עֲנוּתָו		- " - 10v18	- " -
הֲדַרְתָּךְ		2x - " - 5v10; 7v10	- " -
אַמְיָץ	~ אַמְיָץ (?)	- " - 9v10	- " -
הֲדַרְתָּ		d 41, 12r29	Cl. 7.
מֵאַרְבַּע		d 63, 82a2	- " -
וּמִשְׁבָּחָתְךָ		- " - 87b36	- " -
הֲדַרְתָּ		TS H7:7, v5	Cl. 12.

b) Biblical texts

מִן הַקֵּץ (י)	~ מִן הַקֵּץ	BodHeb e30 f. 48-9 = Kahle 1901, Isa. 8:9; added by a 2nd hand. ⁴	Cl. 1.
לְהַזְכִּיר	~ לְהַזְכִּיר	TS 12:196 = Kahle L, Ps. 70:1	Cl. 3.

1 But לִיחֲדוֹ in Ps 55:15 (TS 12:195; the same text).

2 Murtonen 1958.

3 Allony - Díez Macho 1958a.

4 According to Kahle (1901, p. 281, app.) \$ä\$ "ist wohl durch die "baby1." Vokalisation vermittelt".

The cases occurring before laryngeals are closely connected with the problem concerning the supposed "weakening" of laryngeal consonants (cf. above, p.3&fn.4,5). This kind of evidence is dealt with in a special chapter devoted to that problem; a great majority of such cases appears to arise from two inverse tendencies, viz. the assimilative, opening effect of laryngeals upon adjacent vowels on one hand and the *Systemzwang* on the other (for details, see below, p. 179-189).

The latter factor also exerts an effect upon the word נִשְׁבַּח (cf. below, p. 187-188). Of the remaining 13 cases of *post-laryngalia*, eight are derived form of the (Tib.) nouns \$^cānāwāh\$ and \$^thādārāh\$; the recurrence of the Pal. \$ā\$ in these words implies that a vowel resembling [e] was a lexical feature independent of general changes of vocalism.¹ Also the segolate form נִשְׁבַּח seems to be a lexical variant, cf. \$amasim\$ (= \$^tāmasim\$) in Jerome (above, p. 74). נִשְׁבַּח could be connected with the non-Tib. "attenuation" of hif^cil prefixes occurring in the transcriptions of Hexapla and Jerome (cf. above, p. 58, 66 & below , p. 185 -186); as an isolated case it may represent better the influence of sibilants upon adjacent vowels (cf. above, p. 62- 64, 88, and below p. 129). For the remaining words נִשְׁבַּח, נִשְׁבַּח, see below, p.188 .

2.1.3. Remaining Occurrences

a) Non-biblical texts

לְהִיָּקְהִלּוֹת ~ לְהִקְהִלּוֹת ⁺	st.c. d 55, 10v13	Cl. 5.
נִצְפָּץ ~ נִצְפָּץ	d 63, 84b31, Isa. 29:4	Cl. 7.
שָׁבַח ~ שָׁבַח	Ant. 222, 1r7	- " -
יְכַלְכְּלוּהוּ ~ יְכַלְכְּלוּהוּ	TS H6:39, r24	- " -
טְנֵה־דְרִיּוֹת ~ טְנֵה־דְרִיּוֹת	d 41, 11 r 9	- " -

b) Biblical texts

וְלִלְבָן ~ וְלִלְבָן ³	TS 16:96 = Kahle J, Dan. 11:35	Cl. 3.
------------------------------------	-----------------------------------	--------

1 Cf. Syriac \$hidrā'\$, Mandaic \$hidrā\$, and the Tib. st.c. forms \$hādār\$ and \$hādār\$ (K-B, *sub* \$hādār\$/ \$hādār\$) as well as the Pal. st.c. \$hādār\$ = Tib. \$hādār\$, below, p. 134 .

2 The punctuation of the 1st hand is according to Murtonen (1958, p. XVIII, app. 145) \$l-māqhālôt\$, i.e. without \$a\$ of \$q\$.

3 For the form (inf. c. of hif^cil without \$h\$), see B-L, p. 228 a⁻, 332 t.

Pl. st.c. form of the word \$maqhel\$ is not attested in Biblical Hebrew; thus we are not able to decide what the Tib. counterpart of the prefix vowel is,¹ for the nouns with \$m-\$/ \$t-\$ prefixes, see below, p. 189-199.

שׁבַח and טְנֵה־רִיחַ² may be accounted for the influence of sibilants (cf. above, p. 62 - 64, 128), possibly also תִּצְפָּק; on the other hand, תִּצְפָּק and יִכְלֹוּהוּ are both impf. forms of the reduplicated pilpel stem, cf. the equal vowels occurring in reduplicated nouns in Jerome (above, p. 65, fn. 2, and p. 87, fn. 2).

וִלְלֹן is obviously a pi^{cc}el (= +\$û-1-labben\$) instead of hif^cil; pi^{cc}el of this root does not occur in Biblical Hebrew, but is common in post-biblical texts including Mishnah.³

2.2. Tib. \$a\$ = Pal. \$i\$

a) Non-biblical texts

נְעֵשָׂה	~	נַעֲשָׂה	nif.pf. Mosseri P171/2, Zulay	Cl. 7.
			1939, p. 116, 1. 5	
מְעִילִין	~	מַעֲלִין	d41, 11r1	- " -
טְנֵה־רִיחַ	~	טְנֵה־רִיחַ	- " - 11r9	- " -
כְּרַמִּי	~	כְּרַמִּי	- " - 15v22	- " -
לְמַשְׁלֵיטִי ⁴	~	לְמַשְׁלֵיטִי	TS H7:7, v5	Cl. 12.

b) Biblical texts

וּמְלַבֹּשֶׁךְ	~	וּמְלַבֹּשֶׁךְ	TS 20:59 = Kahle H,	Cl. 3.
			Ezek. 16:13	
תְּזַנְוֹתֶיךָ ⁵	~	תְּזַנְוֹתֶיךָ	- " - Ezek. 16:25	- " -
וּבְטָחִים	~	וּבְטָחִים	- " - Ezek. 13:15	- " -
וּתְרַבִּי	~	וּתְרַבִּי	3x - " - Ezek. 16:25, 26, 29	- " -

1 Cf. e.g. Tib. \$mašber\$, but st.c. \$mišbar\$, B-L, p. 215 1; Rabin 1960, p. 184.

2 Cf. also below, § 2.2., and p. 133, 196.

3 In meanings as "to cleanse" (Jastrow, p. 690, s.v.), "ausglühen" (Albeck 1971, p. 326, s.v.) well suited to Dan. 11:35.

For the expansion of the pi^{cc}el stem in post-biblical Hebrew, see Yalon 1964, p. 160-164.

4 The last vowel sign is also originally \$e\$ which is corrected into \$i\$; thus it has nothing to do with the Pal. \$o\$ sign.

5 But twice with \$ā\$ (Ezek. 16:20, 26).

הַצִּילֵנִי ~ הַצִּילֵנִי	TS 20:54 = Murtonen c, Cl. 3. Ps 39:9
פָּצַץ ~ פָּצַץ	BodHeb d. 29 f, 17-20 = Cl. 7. Dietrich Obl, Josh. 19:21, hand A
פָּצַץ ¹ ~ פָּצַץ	- " - hand B - " -

The initial \$i\$ in כִּרְמִי goes back to the edition of BAR (1936, p. 45, fn. 4: "So punktiert"). However, according to the photostat at my disposal the sign is a clear \$a\$.²

הַצִּילֵנִי seems to be a pf. form *pro* the Tib. imperative.³

The forms וְחִרְבֵי resembling qal instead of Tib. hif^cil are difficult to explain, especially since qal is unsuited for those contexts (cf. however, below, p. 133).

For נִעְשֶׂה, see below p. 180-182 ; for טָנְהָדְרִי'וֹה above, p. 129 and below, p. 133, 196.

All of the remaining cases are closely connected with the problem of attenuation, cf. below, p. 189-199 .

2.3. Tib. \$a\$ = Pal. \$o\$

a) Biblical texts

וְשׁוֹעֲתֵי ~ וְשׁוֹעֲתֵי	2x TS 20:53+, Ps. 39:13 & Cl. 3. Ps. 40:2
קָוָה ~ קָוָה	- " - Ps. 40:2 - " -
קָוָה ~ קָוָה	- " - Ps. 37:34 - " -

There are in the same text TS 20:53+ at least nine occurrences in which a Pal. \$o\$ according to REVELL indicates the consonantal nature of \$w\$.⁴
In addition to those mentioned above they are:

1 Also the Pal.-Tib. hand D discloses an \$i\$ in the initial syllable.
2 So also Revell in his private notes; the Pal. \$kirmi\$ in Revell (1970a, p. 68, fn. 64) is quoted according to Bar.
3 Allony - Díez Macho (1958b, p. 266): "o sea, perfecto por imperativo. Lección inferior a la de BH."
4 Revell 1970b, p. 88 & fn. 29.

שׁוֹעֵי	~	שׁוֹעֵי	Ps. 30:3
בְּשׁוֹרִי ¹	~	בְּשׁוֹרִי	Ps. 30:7
פִּי	~	פִּי	Ps. 36:4
אֲנִי ²	~	אֲנִי	Ps. 38:6
אִן	~	אִן	Ps. 41:7

The Revell's explanation seems to be appropriate at least for פִּי³. A parallel usage is encountered in the Bab. punctuation especially in cases where \$w\$ is preceded by \$i\$ (e.g. וְיִתְּנֶנּוּ); the vowel used in those cases is, however, \$u\$ and not \$o\$.⁴

Among these nine cases seven are either preceded or followed by a Tib. 'a' vowel. Thus it is possible to suggest another explanation for the Pal. \$o\$ occurring in this position. There is in the Tib. punctuation a tendency to change the anticipated \$a\$ into \$â\$ before \$w\$, a phenomenon originating from the assimilative effect of the labial consonant.⁵ This tendency seems to be even more frequent in the Bab. punctuation,⁶ and it also occurs in the Bab. Aramaic and its Yemenite reading traditions.⁷ Therefore, it would not be surprising if this development had in a certain Pal. reading tradition⁸ penetrated into patterns where it does not occur in Tib. Hebrew. Since the reading tradition reflected in the text TS 20:53+ is clearly "Sephardic", the punctuator was not able to make use of \$â\$ in order to indicate a back vowel and was compelled to use \$o\$ as the nearest symbol of the assimilated timbre. In particular, the punctuations קוֹה and קוֹה support this explanation, because \$o\$ signs are situated above \$q\$ and not above \$w\$ as a "dageš forte" should be. Whether the explanation is also suited for 'a' vowels following \$w\$ is uncertain.

- 1 Does not occur in Allony - Díez Macho (1958b), cf. Revell 1970b, p. 88, fn. 29.
- 2 According to Murtonen (1958) \$o\$ is the vowel following \$l\$, but according to Allony-Díez Macho (1958b) and Revell (1970b, p. 88, fn. 29) it is written above \$w\$.
- 3 Allony and Díez Macho (1958b, p. 264-265) consider this Pal. usage to be the prototype of the Pal.-Tib. habit of indicating word final consonantal \$w\$ with a dot. A similar interpretation is offered by them for the Pal. and Pal.-Tib. punctuations \$-yi\$ in final position, cf. also Bar-Asher 1973, p. 33-34.
- 4 Yeivin 1968a, p. 201-202, §10; \$u\$ is explained by him as a proof for the vocalic nature of \$w\$, i.e. resembling to \$l\$.
- 5 B-L, p. 204-205 (e.g. וְיִתְּנֶנּוּ, וְיִתְּנֶנּוּ, וְיִתְּנֶנּוּ).
- 6 Yeivin 1968a, p. 202, §11.
- 7 Morag 1968b, p. 85, & fn. 75,86.
- 8 Other occurrences mentioned by Revell (1970b, p. 78,82,93, & fn. 35) are sporadic and explainable differently (see there).

+ + +

As a conclusion we can note that the Pal. divergences from the Tib. system are remarkably few as regards the counterparts of the Tib. \$a\$; the explanations are mostly to be found in the morphology.

3. Tib. \$ä\$ ≠ Pal. \$ä,e\$

Because the vacillation of \$ä\$ and \$e\$ signs can always be explained as originating from the "Sephardicization", the type Tib. \$ä\$ = Pal. \$e\$ is not included in these lists.

3.1. Tib. \$ä\$ = Pal. \$a,ä\$

3.1.1. Prae-laryngalia

a) Non-biblical texts

הַאֲפֹדִים	~	הַאֲפֹדִים	d 55 12r9	Cl. 5.
------------	---	------------	-----------	--------

3.1.2. Post-laryngalia

a) Non-biblical texts

נְעֻצְבוֹ	~	נְעֻצְבוֹ	d 55, 10v23	Cl. 5.
אַרְצָה	~	אַרְצָה	qal - " - 6v8	- " -
כְּאַרְאֵלִי	~	כְּאַרְאֵלִי	pl.st.c. d 41, 15v25 = Bar 1936, p. 45, 1.33	Cl. 7.
סְנֵהְדְרֵי־וֹת	~	סְנֵהְדְרֵי־וֹת	d 41, 11r9	- " -
עֲדָרָךְ	~	עֲדָרָךְ	d 63, 83a15	- " -

b) Biblical texts

וְחַלְדֵי	~	וְחַלְדֵי	TS 20:54 = Murtonen c, Ps. 39:6	Cl. 3.
וְאַרְאָה	~	וְאַרְאָה	TS 16:96 = Kahle J, Dan. 10:8	- " -
וְאַלְתֹּלַד	~	וְאַלְתֹּלַד	d 29 f. 17-20 = Dietrich Ob 1, Josh. 15:30	Cl. 7.

The words תִּאֲפוֹד¹ , נִעְצְבוּ , עֲדָרָךְ , וְחִלְדֵי¹ and possibly also אֲלֶחֶלֶד represent cases in which the contrastive assimilative tendencies of laryngeals and regular patterns have produced forms deviating from those of the Tib. punctuation, for details, see below, p. 182-185 , 188 .

According to the photograph the original initial vowel of טְנֵה־רִי'וֹת has been \$i\$ which is later corrected to \$ä\$; the Bab. punctuation is טְנֵה־רִי'וֹת² containing thus an \$a\$ as the initial vowel, as is common for the Bab. and European traditions, and an unexplained shewa sign above the \$h\$. The varying punctuations probably reflect different adaptations of the Greek word σὺνέδριον , συνέδριον into the Hebrew sound system, see also below, p. 196 .

וְאֵרָאָה is accounted by KAHLE possible for the influence of /r/³, which in the Tib. punctuations sometimes calls forth 'a' vowels instead of other timbres occurring in similar patterns without /r/;⁴ this tendency appears in the Bab. punctuation, sometimes even more extensively.⁵ Although the explanation is not very convincing, it nevertheless covers all of the remaining cases. In addition, it could serve as an explanation for the curious punctuations וְחִרְבֵי (hif^cil, see above, p. 129-130): \$i\$ might be a pseudo-correct vowel *pro* the proper \$a\$; for other similar occurrences, see below, p. 147 .

3.1.3. Final unstressed syllables

a) Non-biblical texts

אֲבֹן	~	אֲבֹן	d 55, 13r9	Cl. 2.
בְּהַעֲרוֹבָה	~	בְּהַעֲרוֹבָה	- " - 14v20	- " -
וְיִרְדֹּ	~	וְיִרְדֹּ	d55, 4r17	Cl. 5.
רַחֵם ⁷	~	רַחֵם	d41, 13r11	Cl. 7.
לְגִישָׁה	~	לְגִישָׁה	TS NS 249:14, v6	Cl. 8.

1 The original vowel is according to Bauer-Leander (p. 567 g) *i* which occurs also in the Bab. punctuation (see Yeivin 1973a, p. 194).

2 Yeivin 1973a, p. 215.

3 Kahle 1930, p. 20⁺-21⁺.

4 See B-L, p. 207 i, 208 s.

5 See Yeivin 1968a, p. 216-217.

6 Or possibly a pausal form, cf. Tib. \$way-yerād\$.

7 Or = Tib. \$raḥam\$ (Judg. 5:30)?

b) Biblical texts

וִיקָם ¹	~	וִיקָם	TS 20:54 = Murtonen c,	Cl. 3.
			Ps. 40:3	
אִוִּן	~	אִוִּן	TS 12:195 = Kahle L,	- " -
וִאוֹן	~	וִאוֹן		
וְתַחֲטֹ	~	וְתַחֲטֹ	hif. TS 20:54 = Murtonen c,	- " -
			Ps. 39:12	
וְהִדֹּר ³	~	וְהִדֹּר	st.c. TS 16:96 = Kahle J,	- " -
			Dan. 11:20	

These occurrences excluding the uncertain וִיקָם represent vacillation of auxiliary vowels of "segolate" patterns. As a rule the Pal. segolate patterns follow the Tib. habits in this respect. I do not know of any reason (e.g. sonority etc.) which could have produced divergent vowels just in these words. It seems, however, that at least the graphical indication of the auxiliary vowels was not as stabile as it is in the Tib. punctuation. The degree to which this is true regarding reading traditions, remains rather obscure. In comparison with the transcriptions of Hexapla (cf. Brønno 1943, p. 289) and Jerome (cf. above, p. 92-95) it would seem that there existed various realizations of segolate patterns; this conception may be supported also with Pal. הִלֵּן patterns (cf. above p.126-7, and below, p.144-145, 186-187) and Pal.-Tib. punctuations as כְּתָר, עֲקָב, תְּלָר in the ms. BodHeb. c20 f. 25-28.⁴ Thus it is not impossible that the auxiliary vowels were quite vague in timbre and perhaps shorter in quantity than the "normal" ones⁵, at least in certain traditions; the apparent consistency of graphical notation may supersede a number of minor divergences of realization both in the Pal. and Tib. punctuations.

1 \$a\$ does not occur in Allony - Díez Macho (1958b).

2 From root $\sqrt{\text{mss}}$ = Tib. +\$wat-támäs\$ (?).

3 Cf. above, p. 128 & fn. 1.

4 See Díez-Macho 1963, p. 52; Revell 1970a, p. 71, fn. 72.

5 As proposed by Revell (1970a, p. 70-71 & fn. 72).

3.1.4. Remaining occurrences

a) Non-biblical texts

תַּמְשֵׁלָה ~ תַּמְשֵׁלָה Ant. 912, Ormann 1934, Cl. 12.
p. 26, l. 52

b) Biblical texts

בְּקֶצֶפֶךָ ~ בְּקֶצֶפֶךָ TS 20:54 = Murtonen c, Cl. 3.
Ps. 38:2

For the former occurrence, see below, p. 137-8, 190-1, for the latter, p. 137.

3.2. Tib. \$ä\$ = Pal. \$i\$

3.2.1. Prae-laryngalia

a) Non-biblical texts

נְחֵלֶק	d 41, 12r3	Cl. 7.
נְעֻצֵב	- " - 14r31	- " -
נְחֻשֶׁק	- " - 15v2	- " -
נְחֻשְׁבִּילִים	Ant. 912, Ormann 1934, p. 26, l. 45.	Cl. 12.

b) Biblical texts

תְּהִגָּה (הגה) ~ תְּהִגָּה qal TS A43:1 = Kahle 1901, Cl. 1.
Isa. 59:3

All of these verbal cases agree with the corresponding "strong" forms, for details, see below, p. 180-185.

3.2.2. Post-laryngalia

a) Non-biblical texts

בְּחֻזִּיּוֹן ~ בְּחֻזִּיּוֹן st.c. d 41, 15r27 Cl. 7.

b) Biblical texts

אִתְּהִנְפְּשׁוּ ~ תִּנְּ ~ תִּנְּ
 TS 20:59 = Kahle H, Cl. 3.
 Ezek. 13:20

אִתְּהִנְפְּשׁוּ is in accordance with similar non-laryngeal noun patterns (e.g. \$zikrôn\$, cf. B-L, p. 498, dθ); \$i\$ occurs also in the Bab. punctuation in the plural of the word.¹

\$i\$ of אִתְּ could be but a too vertical \$ä\$, cf. אִתְּכֶם (Ezek. 14:23).

3.2.3. Remaining occurrences

a) Non-biblical texts

לְמִוֹת ~ לְמִוֹת
 Ant. 912, Ormann 1934, Cl. 12.
 p. 26, l. 1.

If \$i\$ is not a mistake pro \$ä\$, it could be connected with other evidence for the vacillating timbres of auxiliary vowels of segolate patterns, cf. above, p. 133-134.

b) Biblical texts

נִגְדָה ~ נִגְדָה
 TS 20:54 = Murtonen c, Cl. 3.
 Ps. 39:6
 נִפְתּוּר² ~ נִפְתּוּר
 d 29 f. 17-20 = Dietrich Cl. 7.
 נִפְתּוּר³ ~ נִפְתּוּר
 Ob 1, Josh. 15:9
 - " - Josh. 18:15 - " -

נִגְדָה added with suffixes has \$i\$ as the initial vowel also in the Bab. punctuation.⁴

1 Yeivin 1973a, p. 213.

2 Hand A, cf. נִפְתּוּר written by the Pal.-Tib. hand D.

3 Hand B, cf. נִפְתּוּר written by the Pal.-Tib. hand D.

4 Yeivin 1973a, p. 194.

The initial vowel of the place name נַחְפוּח vacillates in our sources between \$ä\$, \$i\$ and \$a\$^{1,2}; \$a\$ occurs also in the transcriptions of the Septuagint and Onomastica sacra.³

A similar case of vacillation is קַצְפֹּרִי mentioned above, p. 135. The initial vowel of derivatives of this word is either \$i\$ or \$ä\$ in the Tib. punctuation⁴, but \$a\$ in the Bab.⁵ \$a\$ instead of the proper Tib. \$ä\$ occurs also in Pal.-Tib. punctuations, e.g.

הַמְרַכְבוֹת ~ הַמְרַכְבוֹת	d 29, f. 17-20 = Dietrich Ob 1, Josh. 19:5, hand D.
בְּעֶשְׂתָּרָה ~ בְּעֶשְׂתָּרָה	d29, f. 17-20 = Dietrich Ob 1, Josh. 21:27, hand D.
בְּצַדְקָתָךְ ~ בְּצַדְקָתָךְ	+ TS 2nd (Misc.) 2:71 = Dietrich Cb 7, ⁶ Ezek. 16:52
מִלֵּךְ ~ מִלֵּךְ	BodHeb. d80 f. 6, cf. Díez-Macho 1963, p. 39, Num. 21:1, 2nd hand
אַתְּ, אַתְּ ~ אַתְּ	- " - Num. 21:2 ⁷

The occurrences Tib. \$ä\$ ≠ Pal. \$ä,e\$ enumerated in this chapter are not numerous. Nevertheless they indicate that there existed in Pal. reading traditions both opener and more closed vowel timbres in those patterns and positions where the Tib. punctuation makes use of Tib. \$ä\$. In spite of the fact that the agreement between the Pal. and Tib. punctuations in this respect is well-nigh complete we may surmise that the Tib. \$ä\$ encountered here and there is a compromise sign originating from a graphical *System-*

1 Hand A, cf. נַחְפוּח written by the Pal.-Tib. hand D.

2 Hand B, cf. נַחְפוּח written by the Pal.-Tib. hand D.

3 See Dietrich 1968, p. 18

4 B-L, p. 574 y; K-B p. 848, s.v.

5 Yeivin 1973a, p. 198.

6 See Dietrich 1968, p. 58.

7 The 2nd hand of BodHeb. d. 80 f 6 makes use of \$a\$ and \$ä\$ indiscriminately, see Díez Macho 1963, p. 39.

zwang.¹

4. Tib. §i§ ≠ Pal. §i§
 4.1. Tib. §i§ = Pal. §a,ä§
 4.1.1. Tib. word final §-iyyâh§ = Pal. §-a/âya h§
 a) Non-biblical texts

לְרַצִּי'ה ² ~ לְרַצִּי'ה ⁺	TS H 16:7, Kober 1929, p.13, Cl. 2. 1.18.
תְּחִילָה ~ תְּחִילָה	- " - - " - p.22, 1. 22.- " -
מִתְחִילָת ~ מִתְחִילָת	TS H16:2, 2v12 = Kahle 1927, Cl. 7. p. XXIII, 1. 16
בְּתִחִילָה ~ בְּתִחִילָה	d 41, 13r29 - " -
תְּחִילָתֵינוּ ~ תְּחִילָתֵנוּ	- " - 14r30 - " -
לְתִחִילָה ~ לְתִחִילָה	- " - 15r20 - " -
סְנֵהדְרִי'וֹת ³ ~ סְנֵהדְרִי'וֹת	- " - 11r9 - " -

This type of variant is known to us from Bab. punctuations,⁴ Yemenite reading traditions,⁵ and especially from the punctuations of Mishnah Kaufmann.⁶ In Mishnah Kaufmann, forms with §i§ and §ä§ are partly different lexemes, often they occur indiscriminately;⁶ in other sources mentioned

1 Cf. the statement of Rabin (1971, p. 22): "(the Tib. §ä§) מִיִּצְגָה כְּעִין תְּנוּעַת-בִּינָיִים בֵּין וּבֵין a, במקרים שבהם התקשו המסורנים והנקודנים להחליט אם הם שומעים או מבטאים חירוק או פתח."

As compared with the general uniformity of the Pal. and Tib. punctuations regarding the use of §ä, e§ this wording appears too categorical. It is impossible that all of the punctuators "met with difficulties" just in the same words and patterns and chose as a rule the same sign §ä, e§. Had the Tib. §ä§ been a plain sign of relief, we would surely be able to find much more vacillation among its counterparts in the varied Pal. punctuations.

2 Tib. §i§ is not attested, see Segal 1927, p. 103-104.

3 Cf. §sänhädriyyôṭ§ in Mishnah Kaufmann, Sanhedrin I, 5, and the Greek §sunedria§.

4 Porat 1938, p. 136

5 Morag 1963, p. XXIX, fn. 3.

6 Kutscher 1963, p. 276-277.

here only the word תחיה seems to favour §i§. The variant form with §a,â§ also in Pal. punctuations is clearly represented only by תחיה.¹

In סנהדריות §â§ appears in Bab. punctuation² and Yemenite reading traditions,³ and it is the vowel given by JASTROW⁴ and SEGAL.⁵

Thus, in the Pal. traditions of which we have knowledge, the phenomenon may be considered to be more a lexical one than one representing a general tendency of development.

4.1.2. Remaining occurrences

a) Non-biblical texts

רמקח ~ ומקח ⁶	TS H16:10, v22 = Edelmann 1934, Cl. 1. p. XVI, l. 16
דברי ~ דברי	d 55, 5r15 Cl. 5.
מזבח ~ מזבח	- " - 9v21, Gen. 33:20 - " -
מנהג ⁷ ~ מנהג	- " - 10r23 - " -
משכניו ~ משכניו	- " - 10v12 - " -
הרחיב ~ הרחיב	- " - 11 v17 - " -
ויצמאו ~ ויצמאו	TS H2:55, r11 Cl. 6.
מתכווין ~ מתכווין	TS H6:39, 2v7 Cl. 7.
לשמחח ~ לשמחח	d 41, 13v25 - " -
מנהגיו ~ מנהגיו	- " - 15v5 = Bar 1936, p. 43, 1. 7. - " -

1 §i§ occurs, however, in תחיה ("Levias", Kahle 1927, p. XXVII, 1.5; Cl. 4).

2 Yeivin 1973a, p. 215.

3 See Šibtī'el 1972 (1963), p. 236, Sanhedrin I,5.

4 Jastrow 1950, p. 1005.

5 Segal 1927, p. 130.

6 Revell (1970b, p. 36, fn.9): "מקח The same form occurs in H2:1 r11, where it is best considered as a masculine form of §maqqaḥh§ 'merchandise', and not §miqqaḥh§ 'buying'."

7 Punctuated by Murtonen as משכניו.

b) Biblical texts

מְצַדִּי ~ מְצַדִּי	TS 20:54 = Murtonen c, Ps. 37:23	Cl. 3.
וּתְנַחֵה ~ וּתְנַחֵה	- " - Ps. 38:3	- " -
הִלְכְּתִי ~ הִלְכְּתִי	- " - Ps. 38:7	- " -
וּמְנַחֵה ¹ ~ וּמְנַחֵה	- " - Ps. 40:7, 1st hand	- " -
בְּהִכְרֹת ~ בְּהִכְרֹת	- " - Ps. 37:34	- " -
מְגַדֵּל ~ מְגַדֵּל	TS 20:52, - " - Ps. 61:4	- " -
יִפְגַּעוּן ~ יִפְגַּעוּן	d 29, f. 17-20 = Dietrich Ob 1, Josh. 17:10, hand A ²	- " -

§a§ of דְּבַרִּי is not visible in the photograph; instead of it there is a clear §y§ written above the line between §d§ and §b§.

According to Murtonen (1958, p. XXI, app.), the punctuation להַעֲמִיךְ הִירָחִיב is q̄rê הַרְחִיב לְהַעֲמִיךְ *pro ktib* הַרְחִיב לְהַעֲמִיךְ .

§a§ of וַיִּצְמַח is probably the vowel of *waw consecutivum* and not that of the verbal prefix.³

In שִׁמְחָה the bar above ש is no §a§ but a diacritical sign ' indicating §śś in contradistinction to §šš.⁴

According to Allony - Díez Macho the vowel signs in וּתְנַחֵה are misplaced *pro* וּתְנַחֵה and the stem is thus hif^{ci}l ("mejor que el *Qal* de BH");⁵ according to Murtonen the stem is pi^{cc}el.⁶ In any case the first §a§ hardly has anything to do with the prefix vowels of the *qal* stem.⁷

- 1 Murtonen 1958, p. XXXVII, apparatus. The punctuation given in the text by him and Allony - Díez Macho (1958b) is §minḥāḥ§, i.e. = Tib.
- 2 idem, p. 19, the punctuation is located, however, in the first apparatus (p. 9^r) which indicates the punctuations of the hands B and C (idem, p. 16).
- 3 So also Revell in his private notes.
- 4 Bar (1936, p. 22): "Das §śś ist in der Hs. dadurch erkennbar, dass es stets ein kleines Häckchen hat, ... Dagegen hat das Šin kein besonderes Zeichen..."
- 5 Allony - Díez Macho 1958b, p. 266, = "e hiciste descender".
- 6 Murtonen 1958, p. XXXVI, apparatus, and p. 45.
- 7 Could it be from a secondary root $\sqrt{tnḥ}$ (*qal*, pf. sg. 2. masc., for the second §a§, cf. Revell 1970a, p. 92 & fn. 141)? As far as I know, the root is attested, however, only in hif^{ci}l.

הלכתי is an apparent qal *pro* the Tib. pi^{cc}el,¹ בהכרת an *infinitivus constructus* of hif^cil *pro* the Tib. nif^cal,² and similarly לפגעון could be hif^cil *pro* the Tib. qal.³

There are eight nouns left with the prefix \$m-\$ and the participle of hitpa^{cc}el מתכווין which could be compared with the curious punctuation מְשַׁבְּחִינִי occurring in Mishnah Kaufmann (Sanhedrin V, 2) instead of מְשַׁבְּחִי in other texts known to me. Thus it is perhaps not impossible that the analogy of hif^cil and nominal \$ma-\$ prefixes was sometimes able to penetrate into the prefixes of hitpa^{cc}el participles. For these nine words, see below, p. 191-195 .

The deviational type Tib. \$i\$ = Pal. \$a,â\$ thus occurs mainly in two kinds of pattern: (1) in the word final cluster \$-a/âyah\$ at least in the word חחיה , and (2) in a number of \$m-\$ prefixes; other cases are but seemingly counterparts of the Tib. \$i\$.

4.2. Tib. \$i\$ = Pal. \$ä,e\$

This is the most common type of deviations; it appears particularly in the text d 63 f. 98+.⁴

4.2.1. Before a Tib. doubled consonant

Almost half of the occurrences belongs to this sub-group.

a) Non-biblical texts

פִּיחִיּוֹן		d 55, 13a22	Cl. 2.
עִיִּיִּתִי	pi.	d 63, 98v14	- " -
נִיִּיקִיִּי	pi.	- " - 98v15	- " -
קִיִּיבִּלְהִי	pi.	- " - 98v15	- " -
מִדְּמִי	prep.	- " - 98v15	- " -
לְהִיִּיקוּוֹן	nif.	- " - 98v17	- " -
בְּכִיִּיוֹן		- " - 98v18	- " -

1 Allony - Díez Macho 1958b, p. 266 ("mejor lección la de nuestro Manuscrito"). Considered as a variant also by Murtonen (p. XXXVI, apparatus).

2 Allony - Díez Macho, 1958b, p. 266. Considered as a variant also by Murtonen (idem, idem).

3 Revell 1970b, p. 92 L.

4 \$e\$ occurs even more commonly *pro* the Tib. \$i\$ in stressed syllables (Revell 1970b, p. 40 L). These divergences are not included in the table given by Revell (1970a, p. 98), see idem, p. 98, fn. 157.

ממקֹּוֹשֵׁשׁ	prep.	d 63 98v19	Cl. 2.
ממחרֶף	- " -	- " -98v19	- " -
הִלְרִי		- " -98v21	- " -
גִּלְלוּעִי		- " -98v23	- " -
רִיכֹּחֵיךְ		- " -98v25	- " -
הִנְחֹתֶימָם ~ הַנְּחָמִים		- " -98v27	- " -
במחִלּוֹת		TS 10H5:7, 2r6	- " -
פִּיצָה	pi.	TS NS 249:7, 1v2(3) ¹	Cl. 4.
אִיבְנָה	nif.	TS 13H2:10, 2r15	- " -
אִימְצָה	pi., pf.	- " - 2v20	- " -
אִינִיחֵי	- " -	d 55, 7v1	Cl. 5.
הִילּוּלִים		Ant. 222, 2v4	Cl. 7.
רִישֶׁק	\sqrt{nsq}	d 41, 15v2 = Bar 1936, p. 43, 1.2	- " -
מִלִּילָה	prep.	- " - 15r1 = idem, p. 47, 1.46	- " -
לְבוֹ	2x	- " - 13v23	- " -
בְּאוּרִי ~ בְּאֹרֵי		- " - 14r7	- " -
וְעִימָם		d 63, 86b11	- " -
פִּיצָח	pi., pf.	TS H16:1, 1v12 = Edelmann 1934, p. XXX, 1.5	- " -
מִגֵּן	prep.	TS H6:39, 1v19	- " -
מִלִּלָל	pi., pf.	TS H2:29, 2v1	Cl. 11.
לִתֵּן		Ant. 912 = Ormann, 1934, p. 29, 1. 16.	Cl. 12.
תִּיּוֹשֵׁב	nif., impf.(?)	- " - idem, p. 33, 1. 44	- " -
אֵשָׁה ~ אִשָּׁה	st.c.	TS H7:7, r2	- " -
שִׁבְחֵי ²	pi., pf.	- " - r11	- " -
נִדְדוּנִים		- " - v13	- " -

1 The second occurrence mentioned by Revell (1970b, p. 17) is וְצִילֵי הַיְהִל וְרִימָה (HUC 1001, 1v6); the Tib. doubling of \$t\$ in הִתְחַל is, however, uncertain (either = \$hittel\$ or \$hetäl\$, cf. K-B, \sqrt{htl} , p. 243, and \sqrt{tll} II, p. 1030).

2 Pf. is corrected by a 2nd hand into imperative, see Revell 1970b, p. 31.

b) Biblical texts

כְּלִי־וַיִּן ~ כְּלִי־וַיִּן	TS A43:1 = Kahle 1901, Isa. 10:22	Cl. 1.
הָאֲדָרֶשׁ אֲדָרֶשׁ ~ הָאֲדָרֶשׁ אֲדָרֶשׁ	TS 20:59 = Kahle H, Ezek. 14:3	Cl. 3.
תְּהַלְתֵּךְ ~ תְּהַלְתֵּךְ	TS 20:54 = Murtonen c, Ps. 35:28, 1st hand ¹	- " -
מִלְאֲתִי ~ מִלְאֲתִי	d 29 f. 17-20 = Dietrich Ob 1, Josh. 14:8, hands BC ²	Cl. 7.
וַיִּשְׁבַּע ~ וַיִּשְׁבַּע	- " - Josh. 14:9 ³	- " -

In addition, only Murtonen has two more cases: לְבָרְחִי (= דְּבַרְחִי,
Ps. 39:4)⁴ and טָפְרוּ (= טָפְרוּ, Ps. 44:2).⁵

The prefix vowel of nif^cal impf. sg. 1. pers. vacillates also in the Tib. punctuation between §i§ and §ä§ due to the analogy of qal and hitpa^{cc}el stems;⁶ this could be the explanation of אֲדָרֶשׁ. Otherwise the Tib. §ä§ is extremely rare before doubled consonants.

As mentioned above (p. 27, 29) the factor calling forth this type of divergences is, in REVELL's view the loss of ability to double consonants. However, there is no Pal. text in which §ä,e§ would appear as the only counterpart of the Tib. §i§ followed by a doubled consonant; even in d 63 f98 we find occurrences as בְּדִיבֹר (v11), גִּינִל (r21), חִינִל (r22). Second, the explanation covers merely a half of the divergences Tib. §i§ = Pal. §ä,e§ and other explanations are needed for the remaining cases (cf. above, p. 29). Third, the greatest obstacle for approving the proposal of Revell is that we do not know of a corresponding change in the vernaculars of Syro-Palestine.⁷ The nearest parallels exist in West Syriac and Modern East Aramaic including ṭūrōyō; however, in these dialects

1 See Murtonen 1958, p. XXXV, apparate; in the text he has תְּהַלְתֵּךְ as Allony - Díez Macho (1958b).

2 But hand A: מִלְאֲתִי.

3 Cf. Dietrich (1968, p. 23, fn. 2); "A schrieb §i§ manchmal etwas schräg nach rechts geneigt, z.B. וַיִּשְׁבַּע 14,9, וַיִּצְיַעַר 15,54."

4 But §i§ in Allony - Díez Macho (1958b)

5 But no vowel signs in Allony - Díez Macho (1958a).

6 Cf. Bergsträsser 1926-29, p. 92 h; 1918, p. 157 o^c.

7 On the contrary, the doubling is preserved in the Aramaic of Ma^clūla (see Spitaler 1938, p. 45 d), in Samaritan Aramaic (see Macuch 1969, p. 148), and in the Aramaic place names of Lebanon (see Wild 1973, p. 46-47).

As regards the loss of original doublings in the Tib. punctuation (cf.

the vowels preceding a formerly doubled consonant are left without changes.¹ Thus even these dialects do not provide a parallel case for the supposition of a Pal. secondary lengthening or reduction of those vowels² which had preceded an originally doubled consonant. Since it is very unlikely that a liturgical language would have developed self-dependently, another explanation (1) resting upon phenomena attested in Aramaic and (2) also suited to occurrences besides those preceding doubled consonants would seem more plausible (cf. below, p. 148-150).

4.2.2. Tib. §-áyi-§ = Pal. §-a/äyä/e-§

a) Non-biblical texts

בְּבִי'תָּ הַחֲפְשִׁיחַ	d 55, 14r25	Cl. 2.
בְּמַעְבְּרֵי יָךְ	d 41, 15v4 = Bar 1936, p. 43, 1. 6	Cl. 7.
אֲבֵרִיךָ	- " - 15v4 = - " - p. 43, 1. 6	- " -
חֲגִיךָ	- " - 15v4 = - " - p. 43, 1. 7	- " -
מְנַהֲלֵיךָ	- " - 15v5 = - " - p. 43, 1. 7	- " -
וּלְפָנֶיךָ	- " - 11r16	- " -
מְכִלְתֵּי יָם	- " - 13r31	- " -

b) Biblical texts

יְדִיךָ ~ יְדִיךָ	TS 20:59 = Kahle H, Ezek. 16:11	Cl. 3.
וְעִיךָ ~ וְעִיךָ	d 29 f. 17-20 = Dietrich Ob 1, Josh. 15:32	Cl. 7.
וְשַׁעְרֵיךָ ~ וְשַׁעְרֵיךָ	- " - Josh. 15:36	
וְעִדְיֹתֶיךָ ~ וְעִדְיֹתֶיךָ	d 29 f. 17-20 = Dietrich Ob 1, Josh. 15:36	Cl. 7.

Revell 1970a, p. 62-63 & fn. 41) we have to take into account that - excluding its loss in laryngeals and /r/ - the phenomenon never takes place between "full" vowels; the occurrences before shewa and in word final positions (cf. B-L, p. 219-222) are quite parallel to those of Modern Arabic dialects (cf. e.g. Blanc 1964, p. 54 c; Grotzfeld 1965, p. 15d; Palva 1966, p. 9-10) in which the loss does not otherwise occur.

1 Cf. Brockelmann 1960, p. 42; Cereteli 1964, p. 28-29.

2 The Pal. §e,ä§ could represent either a lengthened [ē] or a reduced shewa vowel.

הִקְיֹן ~ הִקְיֹן	d 29 f. 17-20 = Dietrich Ob 1, Josh. 15:57	Cl. 7
עִיֹן ~ עִיֹן	- " - Josh. 19:7, hand B	- " -
וְחַפְרִיֹם ~ וְחַפְרִיֹם	- " - Josh. 19:19	- " -
עִיֹן ~ עִיֹן	- " - Josh. 21:16	- " -

The 'a' signs preceding \$y\$ indicate that the cluster was not reduced to an 'e' vowel, at least not in the dual and *mediae yod* segolate patterns of d 29 f. 17-20. As regards the suffixes sg. 2. fem. of d 41 it remains uncertain.¹

These cases are most probably connected with other divergences occurring in final unstressed closed syllables (cf. above, p. 133-134, and below, p. 186 - 187). It is worth noticing that this (centralized?) variant only appears in two texts; thus it is not a typical Pal. feature but rather is restricted to certain sub-traditions or punctuation habits.

4.2.3. Remaining occurrences

a) Non-biblical texts

סִידְרִי		d 55, 14r28	Cl. 2.
מִצְרִי		d 63, 98v9	- " -
חִזְכֵּהוּ		- " - 98v12	- " -
לְהִצְטֹדֵק		- " - 98v18	- " -
וְנִטְקֵל		- " - 98v19	- " -
תִּפְעֵל		- " - 98v24	- " -
הִתְחַתְּלִים		- " - 98v27	- " -
בְּמַחְיֵנִי	prep.	- " - 98v27	- " -
לְלַפּוֹת	- " -	TS 10H5:7, 2r10	- " -
הִרְאִיתָהּ		HUC 1001, 2v28	Cl. 4.
בִּיקְשֵׁיֶיךָ	prep.	TS H16:9, r5 = Edelmann 1934, p. XI, l. 18	Cl. 5.

1 The ending \$áyik\$ is preserved in Mishnaic Hebrew, at least, cf. Kutscher 1963, p. 263 (4).

יִשְׂרָאֵל ¹		TS H16:9, v13 = Edelman 1934, p. XIII, l. 14, Isa. 50:20.	Cl. 5.
יִשְׂרָאֵל		d 55, 9r15	- " -
וּמִשְׁעִיר	prep.	- " - 4r12	- " -
וּתְנַעַם	qal., impf.	- " - 12r27	- " -
הַלְכוֹת	st.c.	Ant. 222, 3r20	Cl. 7.
לְכַבֹּד		J. Ryland, GG, fr. 21, r5	- " -
זְכוּר		d 41, 11v3	- " -
לְפִתְחָה	2x	- " - 12v17	- " -
לְתַשׁוּעָה		- " - 14r27	- " -
הַרְאִיָּה		- " - 13v17	- " -
מִתְרַפְּקִים		TS H2:75, v13	- " -
הִירֵהוּר		TS H6:97, r10	- " -
בִּירְכֹהוּ		TS H16:1, 1r17 = Edelman 193, p. XXIX, l. 12	- " -
לְשִׁבְבוֹתָם		TS H16:8, = idem, p. X, l. 18	- " -
יִשְׁעָן ²		d 63, 83a17	- " -
וּמִשְׁכַּנְתָּהּ	~ וּמִשְׁכַּנְתָּהּ	TS H2:1, v26	- " -
בְּקֶהָ ³	prep.+st.c.	TS H7:7, v4(5)	Cl. 12.

b) Biblical texts

תְּהַלֵּל (תה) ל (ל)	~ תְּהַלֵּל		TS NS 301:29, Isa. 41:16 ⁴	Cl. 1.
מִשְׁלַל	~ מִשְׁשַׁל	2x	TS 16:96 = Kahle J, Dan. 11:3,5	Cl. 3.
הַכְּבֹדִיו	~ הַכְּבֹדִיו		TS 20:59 = Kahle H, Ezek. 13:22	- " -
וּיְרוֹמְמֶהָ	~ וּיְרוֹמְמֶהָ		TS 20:54 = Murtonen c, Ps. 37:34	- " -

1 Edelman (idem) has \$i\$ above \$y\$, but in the photograph the vowel sign is a clear \$ä\$. He has \$i\$ in this word also in p. XIII, l. 9 (= Num. 15:26), but in the photograph the sign is uncertain.

2 Cf. however, the Tib. \$yäs^c akâ\$ (Ps. 85:8).

3 \$ä\$ is corrected into \$i\$ (Revell 1970b, p. 31 D).

4 According to Revell (1970b, p. 75 L).

In addition there is in TS 20:53 בִּרְדָּתִי (= בְּרִדְתִּי, Ps. 30:10) in MURTONEN, but בִּרְדָּתִי in ALLONY - DÍEZ MACHO (1958b).

In the Tib. punctuation the pf. prefix vowel of the verb $\sqrt{r}y$ in hif^cil is usually \$ä\$, but \$i\$ in the form sg. 2. masc.¹ הִרְאִיתָּהּ may thus correspond to the Tib. forms with \$ä\$; on the other hand /r/ seems to call forth hesitation as regards the preceding vowels in general (cf. above, p. 133) and in hif^cil of this verb in particular (cf. וּרְאִיָּה, above, p. 132 - 133, and the Tib. pf. sg. 1. וְהִרְאִיתִּי Nah. 3:5). הִרְאִיתִּי could be due to the same factor, as well as בִּרְכַּחְתִּי. The occurrences before \$r\$ are, however, too sporadic to offer us any reliable explanation.

The Tib. \$i\$ in וְיִרְוּמָהּ is an exception; the normal vowel in similar patterns is \$ä\$ (< ⁺i)² which is in accordance with the Pal. punctuation.

Exceptional from the viewpoint of the general Tib. system is also חֲמַשֵּׁל in which \$ä\$ is the anticipated prefix vowel.³ Cf. below, p. 190-192.

As mentioned, the occurrences before \$r\$ are not numerous enough to serve as a basis for explanation. The case in conjunction with sibilants seems to be different. Of the 34 occurrences enumerated above, \$ä,e\$ is followed by a sibilant in ten cases, a number equal to 29.4%⁴, while the average frequency of occurrence of sibilants is not more than 7.9% (cf. above, p. 63).⁵ Above (p. 63-64, 88, 128-129), the influence of sibilants has assumed an inverse shape, i.e. as turning anticipated open vowel timbres into more closed sound values. Now the results are seemingly in contradiction to that, i.e. they disclose a tendency to open closed timbres (but see below).

-
- 1 Cf. B-L, p. 426 and 208 o. The Bab. vowel is always \$i\$, see Yeivin 1968a, p. 630.
 - 2 B-L, p. 405 and 196 j'. The Bab. counterpart is \$a\$, see Yeivin 1968a, p. 479.
 - 3 Cf. B-L, p. 490 x c.
 - 4 Excluding the words הִרְאִיתָּהּ (2x), וְיִרְוּמָהּ, and חֲמַשֵּׁל (2x) discussed above the percentage exceeds 34.5%.
 - 5 Occurrences before highly sonorant consonants (l, m, n, r) are quite numerous, too. Their number, nine, corresponds to 26.5%. This is, however, well in accordance with the average frequency of those consonants (31.3%, cf. Cantineau 1950, p. 97). This comparison gives further evidence in favour of the significance of sibilants as a factor having an effect upon preceding vowel timbres.

4.3. Conclusions

As a general explanation of \$ä,e\$ punctuations the influence of sibilants is also insufficient. So we have to take into consideration the theory of KUTSCHER concerning the changes [i]>[e] and [u]>[o] in the unstressed closed syllables of "sub-standardic" Hebrew and Palestinian Aramaic; this conclusion is based mainly upon transcriptions of Hebrew and punctuations of Palestinian Aramaic texts.¹

As far as I can see, the evidence going back to transcriptions does not testify for phonemic or phonetic changes in Hebrew, but rather originates in the inadequacy of Greek and Latin script for indication of Hebrew vowel timbres.²

The situation is different in Palestinian Aramaic texts. The punctuators had an \$i\$ and \$u\$ sign at their disposal and in fact they sometimes made use of these signs in unstressed closed syllables; nevertheless as a rule \$i\$ is replaced by \$ä,e\$ and resp. \$u\$ by \$o,â\$.³ Because the \$i\$ occurrences obviously mainly originate in the effect of the homorganic [y] on the one hand and borrowings from Hebrew and Aramaic of Targum Onqelos on the other,⁴ we are entitled to consider the conclusion of KUTSCHER to be valid regarding the change [i]>[e] in Palestinian Aramaic.

In Mishnah Kaufmann the proofs for the change [i]>[e] are extremely few in comparison with the tremendous amount of contrary evidence, a fact which causes Kutscher trouble.⁵ However, if the change is not considered to date back to the "sub-standardic" Hebrew, used since the 3rd century B.C. as Kutscher assumes on the basis of transcriptions,⁶ the few \$ä,e\$ occurrences of Mishnah Kaufmann become much more easy to understand.

1 Cf. above, p. 37- 38.

2 Cf. above, p. 71- 72, 75 - 76.

3 For details, see Kutscher 1969, p. 227-233, and above, p. 42-45.

4 For details, see idem, p. 228-232.

5 According to him the punctuations are largely corrected in accordance with the Tib. punctuation of Bible. See Kutscher 1969, p. 233-234, 241-242.

6 idem, p. 226.

The punctuations of Mishnah reflect reading traditions, not spoken Mishnaic Hebrew as such. As stated,¹ the vernaculars have an assimilative effect upon reading traditions, and in Palestine the vernacular was just the Palestinian Jewish Aramaic. According to Kutscher, good examples of the [e] realization in Mishnah Kaufmann are the following 11 words:² אלא, אימת, אשות, גלגל,³ הפרת, הליל, הילך, הירעין, זרעין, מזורן,⁴ סנהדרין, רבי (and אלו, אסור in the fragments of the Palestinian Talmud²). In seven of these 11 words \$ä,e\$ is followed by a doubled consonant and by a sibilant in מזורן. This observation is equal to that drawn from the Pal. punctuations.

The main factor of exceptional \$ä,e\$ occurrences in Pal. texts thus seems to be the influence of Palestinian Aramaic in which an [i] of unstressed closed syllables had disappeared as a rule. This feature of the vernacular has penetrated into Pal. reading traditions of Hebrew. However, the infiltration is far from being complete; the syllables closed with a doubled consonant or a sibilant are more disposed than others to adapt the influence.⁵

There are a number of \$ä,e\$ signs instead of the anticipated \$i\$ also in stressed syllables and unstressed open syllables of Pal. punctuations as well as cases inverse to them.⁶ However, these occurrences involve further inspection from a morphological point of view. In any case, there is no Pal. text known to me in which the confusion of \$i\$ and \$ä,e\$ signs would resemble the Samaritan reading tradition where the distribution of [i] and [e] vowels is mainly dependent from the closure of

1 Cf. above, p. 82-83.

2 Kutscher 1969, p. 241.

3 The word occurs also with \$a\$: \$galgal\$, see idem, p. 236.

4 But cf. below, p. 196.

5 As mentioned above (p. 12, fn.1) Revell (1972) has suggested that in Pal. reading traditions there might occur a tendency to shift the stress towards the beginning of the word. Thus it could be possible to explain at least some of these Pal. \$ä,e\$ signs as indicators of stressed and, as a consequence, "lengthened" 'e' vowels which is a phenomenon taking place regularly in ma^clülī (cf. above, p. 13, fn.1). However, these Pal. \$ä,e\$ signs occur in all kinds of distance from Tib. stressed syllables and it is unlikely that the location of stress could be free in this degree.

6 See Revell 1970a, p. 98, Appendix C.

the syllable.¹ However, text d 63 f 98+ indicates that even among the Pal. reading traditions there existed a tendency towards a general confusion of closed and half-open illabial vowels.²

As regards the *phonetic interpretation* of \$ä,e\$ signs in unstressed closed syllables instead of \$i\$, I am not so sure that they reflect just a shift > [e]. We have seen above that the vacillation of vowel signs in this position is not restricted to \$i\$/ \$ä,e\$ and \$u\$/ \$o,ä\$ (cf. above, p. 42-45). In this context it is interesting to note that the Tib. shewa sign is occasionally used in closed syllables, e.g. ³ ׁ in Mishnah Kaufmann,³ נְלִיָּ in TS B6:5 and J.T.S. MS E.N.A. 2116,⁴ an usage just opposite to the "true" Tib. habits. A tendency towards the centralization of short vowels and especially that of /i/ and /u/ more than of /a/ would be well in accordance with what is known for other Semitic languages, in particular of Modern Arabic dialects and Old Ethiopic;⁵ in addition, it would explain the vacillation of spelling, since there was no special vowel sign suited to reflect such varying timbres, even the methods applied to indicate the (mostly secondary) vowels of final unstressed closed syllables (cf. above, p. 133-134, 136, 144-145) are parallel to this interpretation.

There is still a factor which surely produced vacillation between \$i\$ and \$ä,e\$ vowels. Punctuating Pal. words of this study I have perceived how laborious it is to write two dots strictly perpendicularly. The Pal. scribes most certainly encountered the same obstacle. Unfortunately we are not able to distinguish between phonemic or phonetic factors and these scribal troubles; nevertheless we can judge that the latter type was not restricted to specific types of syllable.

-
- 1 [e] occurs mainly in closed and [i] in open syllables, see Macuch 1969, p. 159-163.
 - 2 Cf. Revell 1970b, p. 40, I.K.L.
 - 3 See Kutscher 1969, p. 236-237.
 - 4 See Díez Macho 1963, p. 30-31. The texts are Palestinian-Tiberian.
 - 5 Cf. e.g. Bergsträsser 1963, p. 159-160, 97-98. Cf. also below, p. 178-179.

5. The Counterparts of the Tib. §â§

One of the most exceptional usages of the Tib. punctuation as compared with other systems is the employment of §â§ for vowels in unstressed closed syllables.¹ Thus it is not surprising to note that the disagreement between Tib. and Pal. punctuations of those syllables appears most prominently among the counterparts of the Tib. §â§.

The main counterparts of the Tib. §â§ are §o§ and §â§ in the Pal. texts, but §a§ also occurs rather frequently. However, the employment of these signs varies considerably from text to text.² In the *biblical texts* §â§ is commoner than in the others, and the vacillation between §â§ and §o§ (and §a§) is limited to texts of class 3.³

In the biblical class 1 the normal counterpart is §â§;⁴ the only exception לֵּ (= תְּבַרְכֶּנּוּ , Isa. 63:1, TS A43:1) testifies in the first place that the punctuation is not a direct copy of the Tib. system.⁵

According to Revell §â§ is also the only counterpart of Tib. §â§ in class 2.⁶ The occurrences are, however, very few: in TS NS 249:6+ there is one case (אֵה = אֵה-אֵהִיִּם , 1 Chr. 4:41, TS NS 172:11)⁷, in BodHeb. d 44 f. 1-4+ one (הַתְּפַקְדוֹ = הַתְּפַקְדוֹ passive of hitpa^{cc}el, 1 Kgs. 20:27),⁸ and in J.T.S. MS 594, box b, env. 12 there are three cases: וְתִשָּׁב = וְתִשָּׁב (Lam. 1:8), עֲנִי = אֵה-עֲנִי (Lam. 1:9), and [כָּל עֲבָרִי] = כָּל-עֲבָרִי (Lam. 1:12).

- 1 Cf. above, p. 21-22. For the Bab. punctuation, see above, p. 35.
Cf. also the indication of the short Swedish o (§o§/§â§), above, p. 120.
- 2 For the observations of Revell, see above, p. 29-31.
- 3 Cf. above, p. 29-30, and below, p. 155, 166.
- 4 According to Revell (1970b, p. 74 E) §â§ occurs in this position 101 times; in addition, §â§ is the counterpart of the Tib. §â§ in TS NS 246 (two cases), cf. Díez Macho 1967 and Revell 1970b, p. 78, fn. 10.
- 5 Cf. above, p. 117-118 and fn. 1; p. 29 and fn. 4.
- 6 Cf. above, p. 30.
- 7 TS NS 172:11 is published by Revell (1969).
- 8 The marginal note referring to this word וְכָל וְיִדְבַּר דָּךְ is translated by Dietrich (1968, p. 31) as "כל wird in gleicher Weise ausgesprochen"; according to him the note indicates that §â§ was unfamiliar ("ungewohnt") as a "Qameṣ-Ḥaṭuf". However, the note has nothing to do with realizations; it indicates that all of the three occurrences of this word in Numeri are punctuated equally. וְיִדְבַּר is one of the Hebrew names of the Fourth Book of Moses, cf. Jastrow 1950, p. 373, s.v.
According to Murtonen (1971, p. 29) the form is to be read *hatpaqḏū*.

As concluded above (p. 118-119, 124), the Pal. §â§ most probably indicates a back vowel in the texts of class 1. Thus it was also possible to make use of this sign to denote similar timbres occurring in unstressed closed syllables, even without contacts with the Tib. employment of 'vowel signs.¹ The realization of §â§ in class 2 is more uncertain, and there are reasons to believe that the back vocalic timbre was disappearing (cf. above, p. 123-124). Since the §â§ occurrences of unstressed closed syllables are as few as they are, their evaluation remains problematic; for the possibility of incipient "Sephardicization", see above, p. 121 & fn. 6.

Contrary to classes 1 and 2, the counterpart of the Tib. §â§ in class 7 is §o§ which occurs, however, only twice (cf. Revell, 1970b, p. 91 E). It is obvious that §â§ in this class is confused with §a§ and most probably was realized as a vowel resembling [a];² thus §o§ and §u§ were the only vowel signs indicating back vowels and §o§ was apparently considered to be more suited for denoting back vocalic timbres of unstressed closed syllables than §u§, a fact clearly apparent in all of the Pal. texts.³

The only text of class 12 (TS 12:197) is corrected by a hand resembling that of class 1.⁴ Thus the counterparts of Tib. §â§, twice §o§ and six times §â§, may go back to different traditions and their value as evidence is small.

Among the *non-biblical texts* those of classes 3, 6, 9, and 11 dis-close only §o§ as the counterpart of the Tib. §â§ (cf. above, p. 29-31); the reason is obviously parallel to that proposed above for biblical class 7.

1 Cf. above, p. 117-118 and fn.1; p. 29 and fn. 4.

2 Cf. above, p. 102, 123-124.

3 There are only two cases of §u§ in the Pal. texts in this position, cf. below, p. 168.

4 Cf. Revell 1970b, p. 95-96.

Accordingly, the texts of biblical class 3 and of the non-biblical classes 2, 4, 5, 7, 8, and 12¹ disclose varying counterparts and therefore need additional scrutiny. A method taking into account both phonetic and morphologic aspects has turned out to be most productive regarding interpretations of the vacillation.

Among the texts of the last mentioned classes in which \$o\$ and \$ā,a\$ vary as the counterpart of the Tib. \$ā\$, there are according to my calculations ca. 125 occurrences of \$o\$, 44 cases of \$ā\$, and 40 of \$a\$. The biblical texts of class 3 are partly unpublished,² and therefore the total number of \$o\$-s is not precise and the pattern of seven \$ā\$ cases is unknown to me.

One of the factors which obviously regulates the distribution of \$o\$ and \$ā,a\$ is the consonantal script: the *mater lectionis* \$w\$ is almost regularly punctuated with \$o\$;³ on the other hand, of those 125 occur-

1 There is no occurrence in class 10 (see Revell 1970b, p. 68). In the non-biblical class 1 there are three occurrences: twice \$ā\$ (ערמה TS H6:38, r17 and פּעלך TS NS 249:2, r12) and once \$o\$ (חַפְּנִיּוֹ TS H16:10, r16 = Edelman 1934, p. XV, 1.9, חפּגיו in Edelman is a typographical error). Both of the words with \$ā\$ occur, however, in the lists of exceptional words below (p. 154-155, 166). Thus it is not impossible that they represent even here opened Pal. variants (cf. below, p. 168-171).

2 Cf. Revell 1970b, p. 83, fn. 21, and p. 84 E.

3 Exceptions occur in two texts: the biblical TS 12:197 and the non-biblical TS H16:6 (=Edelman 1934, Ms. A).

The only case of the former text is יְצוּרָה (Isa. 1:5) the Tib. *qrê* of which is יְצוּרָה and *ktîb* יְצוּרָה: The text belongs to class 12 which is corrected in accordance with class 1 (cf. above p. 152); thus it is not surprising that *qrê* is written into the text with \$ā\$ regardless of the consonantal script.

In the text TS H16:6 (class 2) there are nine counterparts of the Tib. \$ā\$; all of them are punctuated with \$ā\$. Six of these are spelled plene, i.e. with \$w\$: בגּוֹנֵן (qal, infinitive, Edelman 1934, p. III, 1.10; or polel?), חוֹפְּשִׁית (idem, p. IV, 1.4), קוֹדֵשׁ (idem, p. IV, 1.8; Ps. 105:42), בּוֹלוּרָךְ (qal, infinitive, idem, p. IV, 1.11), רוֹנִי (qal, imperative, idem, p. V, 1.3), and בּוֹמְרָה (qal, infinitive, idem p. V, 1. 11).

In this text there occurs an interesting pseudo-correct punctuation בקוֹדֵשׁ (= בּוֹקוֹדֵשׁ idem, p. I, 1.9.) which indicates that the punctuator did not pay attention to the discrepancy of *matres lectionis* and vowel signs.

In addition to the pseudo-correct בקוֹדֵשׁ there occur "Sephardic" punctuations confusing 'a' vowels, e.g. צעקה (= צעקה, idem, p. IV, 1.17) and טל (idem, p. II, 1. 24). Still, it is quite reasonable that the stress of the word רוֹנִי (see above) in the pair of imperatives קוֹמְהִי רוֹנִי occurs upon the penultimate syllable (for the vacillation in the Tib. punctuation, see B-L, p. 429 j), i.e. \$ā\$ corresponds to the Tib.

(cont...)

rences of §o§ ca. a third part is *defective*-cases.¹

Of the remaining 77 occurrences of §ā,a§ known by their form, three patterns 1. *prae-laryngalia*, 2. *infinitivus constructus* of the qal stem added with suffixes, and 3. imperative of qal added with suffixes cover 62.3% (48 cases) of the total amount.

5.1. Tib. §ā§ = Pal. §ā,a§ *prae-laryngalia*

a) Non-biblical texts

תָּאַרְם	d 55, 13r20	Cl. 2.
לְפַעְלוֹ	- " - 12v18	- " -
פַּעְלוֹ	- " - 13r3	- " -
פַּעְלָךְ	- " - 14v8	- " -
כְּאוֹנִי ²	prep. TS H2:72, v8	Cl. 4.
אֶהְלוֹ	d 55, 9v11	Cl. 5.
פַּעְלָם	H16:8, 1v2 = Edelman 1934, p. VII, 1. 2	- " -
עֹהֵרָה	- " - 2v6 = idem , p. X, 1. 3	- " -
בְּעֹהֵרָה	d 55, 10 r28	- " -
בְּעֹהֵרָה	d 63, ³ 82b24	Cl. 7.
וְעֹהֵרָה	- " - 89a16	- " -
עֹהֵרָה ⁴	- " - 83b3	- " -

§o§ as in בְּקוֹדֶשׁ.

Taking into account this evidence it is probable that the punctuator intended to imitate a reading tradition resembling to that of class 1, viz. distinguishing between two 'a' vowels. However, unable to distinguish between timbres of types [ā] and [o] he made use of §ā§ even in patterns where his both proper reading tradition and the consonantal script had demanded an §o§. Cf. Revell 1970b, p. 43, and above, p. 121 & fn. 6.

For לְחֹנָנִים (TS H6:38, v22, class 1), see Revell 1970b, p. 35, fn. 4; for הַוֹּרֵז, see below, p. 165.

1 Cf. the similar observations made already by Yahalom (1969), p. 45, 49-50.

As parallel case, cf. the effect of §w§ or its absence upon the distribution of /o/ and /u/ in Yemenite reading traditions of Aramaic, Morag 1961, p. 229-230; cf. also §w§ = §o§, but *defective* = §ā§ or §ā§ in Mishnah Paris, see Bar-Asher 1973, p. 31-32.

2 The counterpart of the Tib. §ā§ is written plene which did not give other possibilities besides §o§ for the punctuator (cf. above, p. 153 & fn. 3), cf. the conclusions of Revell (1970b, p. 47, fn. 39) who spells the word without §w§.

3 Parts of the same ms. TS H16:3+.

4 For the form, cf. Kahle 1927, p. 14⁺, fn. 6.

אֱהֹלִי		TS H16:3, a3, Jer. 30:18	Cl.7.
אֱהֹלִיכֶם		-"- a40	-"-
אֱהֹלִים		TS H16:2, ¹ a3	-"-
אֱהֹלִי	2x	d 63, ¹ 85a1	-"-
אֱהֹלִי		TS NS 249:12, ¹ B11	-"-
אֱהֹלִי		d 41, 13r6	-"-
אֱהֹלִיבָה		-"- 14r20	-"-
בֵּאֱהֹלִי		-"- 13r11	-"-
אֱהֹלִיבָה		TS H16:1, r22 = Edelman 1934,p. XXIX, 1.15	-"-
בְּחַרְם	qa1, inf. c.	d.63, ¹ 89a13	-"-
צִהְרִים		TS 12:210, v7	Cl.8.
וּלְאֱהֹלִיָּהֶם		H7:7, v2	Cl.12.
לְאֱהֹלִים		-"- v3	-"-
לְאֱהֹלִיָּהֶם		-"- v8	-"-

b) Biblical texts

בֵּאֱהֹלִיָּהֶם ~ בְּאֱהֹלִיָּהֶם		TS 12:196 = Kahle L, Ps. 69:26	Cl.3.
פְּעֹלֶךָ ~ פְּעֹלֶךָ		TS NS 249:3 = Dietrich Cb 8, Ps. 77:13	-"-
וּצִהְרִים ~ וּצִהְרִים		TS 12:195 = Kahle L, Ps 55:18	-"-
אֱהֹלִי ² ~ אֱהֹלִי		TS 16:96 = Kahle J, Dan. 11:45	-"-

There are a total of 31 occurrences (16x §â§ and 15x §a§) which is equal to 40.3% of all of the §â,a§ cases (77). Among these 31 occurrences there are, however, actually only five different words (חַרְם, פְּעֹלֶךָ, טַהֲרָה, אֱהֹלִים, צִהְרִים); בְּחַרְם (the only case with a medial §h§) is closely connected with the other infinitive cases (cf. below, p.161-162), for כְּאוֹנִי, see below, p. 157-159.

1 Parts of the same ms. TS H16:3+, cf. above, p.154, fn. 3.

2 Kahle (1930, p. 20¹): "was man doch wohl nur *ahale* lesen kann".

Seven of these same texts disclose contrary evidence, i.e. §o§ in similar patterns and even words: d 55 (class 2: 3x, all of them spelled without §w§), TS H16:8 (class 5, twice, both *plene*), d 55 (class 5, 6x, five of them *plene*), d 63+ (class 7, 6x, four of them *plene*), d 41 (class 7, 3x, twice *plene*), TS NS 249:14+ (class 8, twice *plene*), and TS H7:7 (class 12, once *defective*); the number of the contrary occurrences with *defective*-§o§ is thus eight while 15 are spelled *plene*:

פְּעִלְכֶם		d 55, 13v30	Cl. 2.
תְּאָרוֹ		- " - 14r4	- " -
לְעִמְתּוֹ	hof.	- " - 14v11	- " -
אֲהִלִּיךְ		TS H16:8, 1r6 = Edelmann 1934, p. V. l. 17	Cl. 5.
אֲהִלִּיו		- " - 1r6 = idem, p. V, 1.17	- " -
לְנֹאמָיו		d 55, 4v6	- " -
זִרְהָרְךְ		- " - 9r1	- " -
נִזְאֲמְךְ		- " - 9r5	- " -
תְּאָרוֹ		- " - 9v15	- " -
פְּעִלוֹ ¹		- " - 11r30	- " -
בְּאֲחֻזְךְ	inf. c.	- " - 12r1	- " -
וּבְשׂוֹאֲלֵינִי	- " -	d 41, 12v26	Cl. 7.
אֲהִלִּי		- " - 13r6	- " -
בְּשׂוֹחֲטִים	inf. c.	- " - 14v6	- " -
כְּנִזְמֵךְ		d 63, 82a1	- " -
אֲהִלִּיךְ		- " - 82b10	- " -
גִּזְאֲלֵינִי	imp.	- " - 83b35	- " -
גִּזְאֲלֵינִי	- " -	- " - 87a28	- " -
לְיֹהֲפֵךְ	hof. ²	- " - 89b14	- " -
וּתְאָרוֹ		TS H16:3, b25	- " -
הִזְאֲגָרְיָ	hof. ³	TS NS 249:14, v6	Cl. 8.
יִזְאֲפֵס	- " -	TS 12:210, r12	- " -
בְּפְעִלִים		TS H7:7, v4	Cl. 12.

1 Murtonen 1958: פְּעִלוֹ, but פְּעִלְוֹ in p. 51; in the photograph the sign is a clear §o§.

2 All of the forms of hof^cal are spelled in this text either with §w§ or §o§ or with both of them, see Yahalom 1969, p. 46 & fn. 95.

3 In accordance with all of the forms of hof^cal in this text.

Also in texts in which the counterpart of the Tib. §ā§ without exceptions is the Pal. §o§ there exist punctuations such as פִּוְעֵלְרַ (H.U.C. 1001, fol. d, r27, class 4) and אֹהֶלִי (TS NS 249:7, 1r9, class 4).

It is easiest to begin with טהרה . According to my best knowledge it does not occur with §o§ or §w§ in Pal. texts. In the Bab. punctuation of biblical texts and biblical quotations the word is punctuated with §u§ (e.g. טְהַרְתּוּ), but in non-biblical texts with §a§ (e.g. טְהַרְתּוּ)¹ which is a manifestation of the fact that there existed two variants of the same word. The punctuation of Mishnah Kaufmann is טְהַרְתּוּ and accordingly the word is realized in Sephardic, Yemenite, and Ashkenazic reading traditions of Mishnaic Hebrew,² and possibly already in the Hebrew of the Dead Sea Scrolls.³ The Pal. punctuations follow the last mentioned variant and the proper Tib. follow that with a back vowel.

As for classes 3, 5, 7, and 8-11, it is certain that §ā§ and §a§ were realized similarly,⁴ i.e. approximately as [a].⁵ Thus אֹהֶלִי and אֹהֶלִים seemingly represent an opened variant resembling ['ahl-] while אֹהֶלִי seems to have a more closed back vowel in the initial position. Even independently from the realization of §ā§,⁶ the text d 55 of class 2 also has three alternative types of punctuation:

- (1) פִּעְלֵכֶם type po^cāl- (cf. לְנוֹאֲמוֹ class 5)
- (2) תִּאָּרוּ type po^cōl-⁷
- (3) תִּאָּרֶם type pa^cāl- (cf. צְהַרִּים class 8).

In addition, there is in class 4⁷

- (4) כִּאֲרֹנִי type pa^cōl-.

1 Cf. Yeivin 1973a, p. 86 §188; 1968a, p. 391-392.

2 Yalon 1964, p. 30.

3 Kutscher 1959, p. 109-110.

4 Cf. above, p. 102, 123-124.

5 Cf. above, p. 121-122.

6 Cf. however, above, p. 123-124, 121 & fn. 6.

7 The secondary vowel is spelled with §o§ only in this word among the occurrences of the laryngeal pattern under consideration; for the very few §o§ signs in the place of the Tib. §ā§ in general, cf. Revell 1970b, III & IV, F.

All of these four forms have counterparts in other punctuations and traditions of Hebrew. The first one occurs in the Tib. punctuation as a parallel form of the more regular type \$pā^cāl-\$, e.g. \$ū-pō^cālō\$, \$w-tō'ārō\$.¹ \$pā^cālō\$ with two back vowels is the normal Tib. type.² The third Pal. variant is to be compared with \$phalach\$ (= Tib. \$pā^cālā\$, Hab. 3:2) in Jerome (cf. above, p. 84) and the Tib. \$'ālpa^cal\$ (1 Chr. 8:12) and \$b-šā^cālē\$ (Ezek. 13:19, but \$b-šā^cālō\$ in Isa. 40:12). The last, doubtful Pal. type is the normal form in the Sephardic reading traditions; e.g. the Tib. \$tā'āro\$ is realized as [tā'ōrō]³ and there are also Sephardic punctuations as \$pa^cālāk\$ in early mss;⁴ the Sephardic manner of realization is considered by BEN-HAYYIM and MORAG⁵ to be

1 See B-L, p. 582 u[~] ("falsche Analogie nach freien Formen"); cf. also forms as \$'dhālākā\$, \$'dhālāy\$, idem, p. 580-581, for different attempts of explanation, see idem, p. 240 t[~].

There are similar occasional forms in the Tib. verbal conjugation, e.g. \$hō^cālāh\$, cf. B-L, p. 425, 356 ("dial."); Rabin 1960, p. 194-195, according to him the forms are alternative although the second type has almost vanished.

2 B-L, p. 210 d, 211 g.

3 Ben-Hayyim 1954, p. 72-73; Morag 1971, c. 1136. This type of realization extends from England (cf. Corrē 1956, p. 88-89) to Morocco, Turkey, and Iraq (cf. Harviainen 1970, p. 208, 185, 145, 161, e.g. \$lā-hālī\$ = [lā-hōlī] in Iraq).

4 For the Worms Maḥzor, see Bet-Arye 1972 (1965), p. 314; for Mishnah Paris 328-329, see Bar-Asher 1973, p. 32 (V), see also below, p. 169.

5 Ben-Hayyim 1954, p. 73; Morag 1971, c. 1136.

The former refers to the Greek and Latin "transliterations" Οολα; Οολιβα, Ολιβα; Οολιβεμα, Οολιβαμα, Ολιβεμα, Οlibama; Νοεμει, Νοομ (of the Septuagint and Vulgata). There are, however, a number of \$a\$ and other signs in the place of the Tib. "short" \$ā\$ in various transcriptions (cf. above p. 39-41, 74, 84).

According to Morag the Sephardic realization originated from the *meteg* that follows \$ā\$; the *meteg* was interpreted erroneously as indicating that \$ā\$ is a "long" qameṣ, i.e. [a]. However, did all of the *Sephardim* from Western Europe until Iraq change their reading habits unanimously when they saw the Tib. *meteg* signs which, in addition, occur very inconsistently in open syllables of manuscripts (cf. Yeivin 1976, p. 184-185)?

Referring to Ḥayyūḡ's Kitāb 'al-tanqīṭ (ed. by J.W. Nutt, p. XIV-XV) Ben-Hayyim (idem, p. 72 & fn. 83) is inclined to date the Sephardic realization into the period of Ḥayyūḡ, at least (11th century).

According to Ḥayyūḡ (Nutt, p. XIII-XIV) e.g. שדח added with suffixes received the *back* vowel of שדח in the *initial* syllable (والفتيت ضمه) على الحاء الاول لتكون دليلة على الساقط وهو الواو واسكنت الدال).

However, forms as תארם and פעלו resembling אהלו demand a vowel *also* after the medial consonant (ולמ תסכנה כמה פעלית פי שדח) ואורר ואחבהמה ולא יגוזרן אן טעול פעלו, אהלו באסאן העין והעא (p. XIV) and this vowel is a *back* vowel (damma^h): אעני אהלו, פעלו, טהרו למ יגזרן אן טעול הוואו ונטפתי זמעה אעלי האלו לאנך לא טעכן מן אטאטהא מן חרקה טעך אעני אהלו אלא אן טפתי זמעה אעלי אדמהא לטלא יטעבה זהא המצד המצאף באלעאל המצאף. (p. XV)

Also

(Cont.)

secondary as compared with the Tib., according to RABIN¹ it may have developed from the same centralized and opened sound value (appr. [ʌ]) which in the Tib. punctuation was indicated as a rule with §ā§.

The secondary vowel of the laryngeal is indicated with §o§ only once and it is unlikely that the factor would be merely the incomplete punctuation (cf. above, p. 157, fn. 7). Because כִּנְיִן is also a unique punctuation the types *po^cāl-* and *pa^cāl-* appear as the main forms of the Pal. punctuation. There seem to be three possibilities of explanation for this state of affairs; (1) the forms are free variants, (2) both the initial and secondary vowel had a timbre resembling [ǎ] for which there was no adequate vowel sign, consequently the timbre was indicated alternately with §o§ or §ā, a§, (3) as a rule the timbres are close to that of §o§ and the spellings with §ā, a§ are historical.

As regards the third explanation we have first to pay attention to the counterparts of the Tib. §ā§, e.g. פִּעֲלֵי , פְּעַלְכֶם , תְּאָרוֹ , תְּאָרֵם . If the punctuation were historical, we should also expect to observe consistency in this respect. Second, it is unlikely that §a§ had ever been a sign of a back vowel;² thus it is improbable that §a§ e.g. in אֶהְיֶה would have been used as a historical spelling. Third, if the employment of §ā, a§ were traditional, these signs would appear equally in all of the *qutl* patterns which, however, is not the case with the Pal. punctuation (cf. above, p. 154).

Contrary to that, it is difficult to decide between the first and second explanation. There are, however, some arguments which could be interpreted as favouring the variant theory. I have referred above (p. 157-158) to the existence of variants both inside of the Tib. punctuation and between the Tib. and other traditions. Consequently, it would not be surprising to find alternative forms also in Pal. texts. Further, supposing that a special vowel timbre resembling [ǎ] occurred in the Pal. *pu^cl* patterns, it would not be unlikely that the Pal. punctuators had invented a particular sign for the timbre or differentiated a super-

the likelihood of confusing infinitive and participle forms (§po^cālō§) added with pronominal suffixes is much greater if the corresponding form of infinitive was realized as [po^cōlo] than what is the case with the Sefhardic realization [pa^cōlo].

Dawid Qimhī mentions in his *Miklōl* (ed. Rittenberg, Lyk, p. CLIIa) that §ā§ in these patterns is "read as a long qameṣ" (ויקרא פי"א והפעל בקמץ רחב, כמו אהלי אדום) which is a clear proof for the existence of the Sefhardic type in Europe ca. 1200.

1 Rabin 1960, p. 183-184 & fn. 59.

2 Cf. above, p. 122.

fluous sign for it in the "Sephardicized" reading traditions, at least.¹ Such features are, however, unknown to us. In addition, the variant *pa^cāl-* could be considered to represent the original form of the Sephardic realization [pa^cōlo] etc.: the Tib. §ā§ occurred numerous in patterns in which also the Sephardic tradition probably had a back vowel.² Contrary to that the Tib. §ā§ appeared in the place of the Sephardic [o] and [a]; §ā§ was thus considered to be an almost unambiguous sign indicating an [o] vowel³ and this realization was approved also for patterns as §pā^cālōš while the occurrence of the "ambiguous" §ā§ in the initial syllable did not demand any change of inherited reading traditions.

Independent of those interpretations we are able to conclude open realizations of ⁺u in *qutl* patterns to be more numerous in the laryngeal type under consideration than in other *qutl* patterns, a fact which might be the result of the assimilative effect exerted by the laryngeal consonants.⁴

-
- 1 Cf. the employment of the Tib. §ā§ for indicating the "short" *qameš* in Pal.-Tib. mss. Dotan 1971b, c. 1462 (10); Morag 1959, p. 230.
- 2 E.g. §'āniyyāš, §ḥādāšim§, §ḥālīš, which as far as I know, are realized by all of the *Sephardim* with an initial [o]; unfortunately, these patterns are extremely rare in the ancient transcriptions, cf. however, Garbell 1954, p. 686, 693.
- 3 Cf. above, p. 160, fn. 1. §ā§ is used still by Reuchlin instead of *qameš ḥaṭuf* (e.g. §'ōzān§, but §'āznayim§, 1506, p. 559-560) although he is aware of a back vocalic realization of §ā§ (idem, p. 9: "medium est igitur per participationem inter a italicum & o id quod vocamus camez"); curiously enough, this method also occurs in the Aleppo Codex (e.g. הַיְיִן, see Yeivin 1968b, p. 19-21) and certain other medieval mss.
- 4 As for the spellings as ^lחַיִּי with a plene-*šwš*, we could suppose that the (slightly?) labial initial vowel was marked in the *consonantal* text with *šwš* which did not provide to the punctuator any choice than to make use of the *šoš* vowel sign (cf. above, p. 153 & fn. 3); thus their value as evidence would be minor. In any case, the occurrences with an *šoš* spelled defectively are clearly found to be in the minority as compared with §ā, a§ cases (8 vs. 31), a fact supporting the popularity of the open variant in *qutl* patterns with a medial laryngeal.

5.2. Tib. §â§ = Pal. §a, â§ in Infinitive Forms of Qal with
Suffixes Added

a) Non-biblical texts

למלכו	d 55, 4v32, Jer.1:1	Cl.5.
בגמרוך	-"- 12r1	-"-
במלכוך	-"- 12r5	-"-
בסלחך	-"- 12r5	-"-
בפצחך	-"- 12r6	-"-
בצלחך	-"- 12r6	-"-
בקראך	-"- 12r7	-"-
אמרוך ¹	d63, ² 83a19	Cl.7.
להרגה	-"- 86b2	-"-
בהפשיני	-"- 87a21	-"-
בעזרינו ³	TSH16:2, ² a6	-"-
כפתחך	-"- b9	-"-

b) Biblical texts

יִכְשַׁמְעִי ~ יִכְשַׁמְעִי	TS 16:96 = Kahle J,	Cl.3
	Dan. 10:9	

There are a total of 13 occurrences.⁴ בַּחֲרֹם (d 63,89a13)
could be included among these cases.⁵ The most consequential feature of
this group is that these exceptional punctuations of infinitive forms
are only found in three texts, while the other texts make use of §o§.

1 §â§ is just above §m§; thus it could also be a counterpart of the
Tib. type §'amärkä§; however, §a§ between §r§ and §k§ makes this inter-
pretation unlikely.

In addition, the Pal. form could be a counterpart of the Tib. noun
§'omär§ which added with suffixes has §i§ as the Tib. initial vowel
(e.g. Gen. 49:21; Job. 20:29).

2 d 63 and TS H16:2 are parts of the same ms. TS H16:3+, see Revell
1970b, p. 129.

3 Cf. however. עֲזָרִינוּ (ול) (d 63, 84a9 & 87a18) below, p. 168.

4 Murtonen (1958, p.30) and Yahalom (1969, p.45) mention בְּלִבְשָׁךְ
(d 55,12r4) as representing this type of infinitive. However, in the
photograph the first §â§ is situated above §b§ and is thus more
probably the counterpart of the Tib. shewa.

5 Some of the occurrences of פִּעַל above could be classified among
infinitives. Since the infinitive and noun forms of this root reveal
similar punctuations in the Tib. punctuation, the forms are dealt
with in the same paragraph 5.1.

According to MURTONEN (1958, p. 30, 47; 1971, p. 95) the \$a,ā\$ signs in these and some other forms of the ms. d55 are written by a 2nd hand, while the first punctuator as a rule made use of \$o\$; the identification of the two hands rests on the different qualities of the ink; the forms with *a* are compared by him with Sam. Hebrew. Text TS H16:3+ even contains numerous infinitive forms which are spelled defectively and punctuated with \$o\$, e.g. באמך (d 63, 87a22), כזכרך & כרתך (both in d 63, 83a4).¹ However, there is no evidence in favour of several punctuators of the text.

\$a\$ in the infinitive forms with suffixes is rare in Tib. punctuation. It occurs only in a number of *verba mediae laryngalis*, e.g. \$l-pā^cāmō\$, \$za^cpō\$,² and in the verbs הפך and רקע (\$šap̄kkām\$, \$raq^cākā\$).³ Usually the vowel is \$ā\$ which in some verbs varies, however, with \$i\$;⁴ \$i\$ occurs regularly in certain verbs, in particular in those with a final laryngeal,⁵ and \$u\$ is attested twice in the verb קצר.⁶ In the Bab. punctuation the normal vowel in these patterns is \$u\$; \$a\$ seems to occur only in the verbs צעד, פתח, and בלע.⁷ Unfortunately the transcriptions disclose but one occurrence. It is βααφϚ (= Tib. \$b-hāpzi\$, Ps. 31:23) in Hexapla;⁸ the initial vowel is in accordance with this exceptional group of Pal. punctuations. The most usual type of infinitive in the simple stem of the Sam. reading tradition of Hebrew is [dāraš], with \$l\$ [līdraš]⁹, and with suffixes ['efšēbri].¹⁰

For a suggestion as to the explanation of these Pal. punctuations, see below, p. 164-165, 168-171.

1 Cf. Yahalom 1969, p. 45.

2 Cf. Bergsträsser 1926-29, p. 116 d; for the punctuations with \$ā\$ and other variants, see idem.

3 idem, p. 82 n^c.

4 idem, p. 82 n: שכב, שלח, שכן, נפל, מחר.

5 idem, p. 82 n^d: רבע, פתח, פגע, נטע, בקע, בצע, בטח, בלע, שבר, שטן, בגד.

6 idem, p. 82 n^c. For the vocalization of these infinitive forms, see also Kutscher 1959, p. 366-367.

7 Yeivin 1968a, p. 385, 389, 390-391. In addition to \$u\$ and \$a\$, \$i\$ occurs in the verbs נפל, שבר, זבח, בטח, and פגע (idem, p. 385, 390-391).

8 See Sperber 1966, p. 185.

9 For different explanations, see Murtonen 1964, p. 82-86, and Macuch 1969, p. 269-270.

10 Murtonen 1964, p. 82-83.

5.3. Tib. \$â\$ = Pal. \$â,a\$ in Imperative Forms of Qal
with Suffixes

Non-biblical texts

עֲנֵדִינִי	d 63, ¹ 84a9	C1.7
כִּהְרָה	-"- 84a22	-"-
נִהְגֵינִי ⁴	TS H16:3, ¹ b11	-"-
מִשְׁכִּינִי	TS H2:1, v5	-"-

The normal vowel in the position under consideration is \$â\$ in the Tib. punctuation. It occurs particularly in the imperative forms of sg. 2. masc. with suffixes and in "lengthened" imperatives of verbs having an o-imperfect (e.g. \$šâmrenî\$, \$šâmrah\$).² Contrary to that, \$i\$ is the most usual vowel in the imperative forms with a vocalic endig (e.g. \$škitḇî\$, \$škitḇû\$) and in verbs with an a-imperfect (e.g. \$ššimâh\$).³ \$a\$ occurs in verbs with a medial laryngeal (e.g. \$šahâlî\$ sg. 2.fem.) and in the imp. \$šablehû\$ (Prv. 20:16 & 27:13).⁴

The punctuation of similar infinitive forms in the Bab. punctuation discloses two main types. (1) In the forms with ultimate stress (cf. Tib. \$šqâṭlém\$) the punctuation is of the type šqâṭlém , i.e. with an initial \$i\$ and preserved imperfect vowel \$o\$, while (2) the forms with penultimate stress (cf. Tib. \$šqâṭlénî\$ etc.) have two or three allomorphs: šqâṭlénî (with \$u\$ as in *qutl* nouns) and šqâṭlénî or šqâṭlénî (\$i\$ seems to be typical for older texts).⁵

The transcriptions lack reliable parallels. However, šqâṭlénî (= Tib. \$šw-pânnenî\$, P., Ps. 30:11, but šqâṭlénî = Tib. \$špânnenî\$),

1 d 63 and TS H16:3 are parts of the same ms. TS H16:3+, see Revell 1970b, p. 129.

2 Cf. Bergsträsser 1926-29, p. 80-81 i^{c-d}.

3 But \$šqârbâh\$. Cf. idem, p. 80-81 i^{b-d}. \$â\$ occurs in some verbs with an initial laryngeal (e.g. \$šârkâh\$), idem, p. 114 k; B-L, p. 347 g.

4 Other types are \$šg'alâh\$ and \$šzo'amâh\$ (once, Num. 23:7), cf. B-L, p. 354 d, 356 u, 356-357 v. Thus we cannot be sure that \$a\$ in šqâṭlénî is the counterpart of the Tib. \$â\$ although the verb has in the same text \$o\$ as the imperfect vowel, cf. Yahalom 1969, p. 46 where also the forms šqâṭlénî and šqâṭlénî are dealt with.

5 Yeivin 1968a, p. 378-381 (with parallels from the Dead Sea Scrolls), for varying punctuations of verbs with medial and final laryngeals, see idem, p. 381-4.

and if the emendation is right, ${}^+\sigma\epsilon\phi\tau\eta\nu\iota$ (*pro* εφτηνι = Tib. §šāp̄tenî§, Ps. 35:24) occurring in Hexapla¹ could be used as proofs for the unstable nature of the initial vowel in the forms discussed here.

In Sam. Hebrew the infinitive forms preserve their initial [ē] vowel when suffixes are attached.²

The Pal. exceptional imperative forms occur only in two texts both of which belong to class 7. In text TS H16:3+ the punctuation of the imperatives with suffixes is dependent on the consonantal text: forms written *defective* are punctuated with §a§ and those with §w§ have §o§ as the initial vowel.³ יְיָיִכְשֹׁבֶה is the only occurrence in TS H2:1. It is not possible to find a phonetic factor which could serve as the explanation of the exceptional forms with §ā,a§ occurring in infinitives and imperatives with suffixes.⁴

The vacillation of the initial vowel as well as that of the pattern is hardly as large for any morphological category as it is in the suffixed forms of the infinitive and imperative of the qal stem, both in the Tib. and other punctuations. The phonological interpretation of these forms seems to provide us with a plausible remedy for comprehending the vacillation. I refer here to the opinion according to which both the imperative and *infinitivus constructus* forms originate from the basis ${}^+qtul$.⁵ Thus the initial vowel occurring in lengthened combinations would be secondary,⁶ and apt to assume varying realizations due to its phonetic surroundings (and certainly also dependent on graphical approximate values and traditions). Consequently it is

1 Cf. Brønno 1943, p. 46-49; Mercati 1958.

2 There are also imperative forms with initial [ā] in the Sam. Hebrew (e.g. [rādaf]), see Macuch 1969, p. 373, 280.

3 See Yahalom 1969, p. 46.

4 Numerous labials should favour labial vowels!

5 Cf. Birkeland 1940, p. 74-76; Meyer 1969, p. 106; elaborated in Rabin 1960, p. 200-201.

6 According to Rabin (*idem*) it is more probable that imperatives with suffixes are coined according to the analogy provided by §tiktoḅ§:§ktoḅ§ which phonemically produces forms as /kətəbī/ etc. This would also explain the situation of the stress. In any case the initial vowel is a secondary one.

probable that a tendency of back vowels to undergo gradual fronting occurring in the usage of some readers and punctuators (cf. below, p. 168-171) had left its vestiges particularly in these patterns.

5.4. Tib. §ā§ = Pal. §ā,a§ in Remaining Verbal Forms

Non-biblical texts

יַעֲמֹדוּ	d 55, 12v14	Cl.2.
יַפְרוּזוּ	d 55, 5r26	Cl.5.
וַיִּקְרָא לָהֶן	d 63, 87a18, Job 22:28	Cl.7.
וַיִּקְרָא	d 41, 13r24	—"

In addition, there is הוֹרִיזוּ in d 55, 5r27, in which §ā§ may correspond either to Tib. §ā§ or §u§.¹ This and the two first words in the table are forms of hāf^cal which as a rule are punctuated with §o§ or §u§ even in the first part of d 55 (Cl.5).² However, two of these three occurrences are from the first part of the text d 55 (Cl.5) in which corresponding §ā,a§ signs are also rather numerous in other patterns (cf. above, p. 170).

§a§ in the consecutive imperfects of *verba mediae infirmae* is a phenomenon occurring in numerous European mss.,³ and its realization in accordance with the normal §a§ is mentioned by an Ashkenazic grammarian in the 13th century.⁴ A similar realization occurs in Sam. Hebrew: [wyāqam].⁵

5.5. Tib. §ā§ = Pal. §ā,a§ in Remaining Nominal Forms

a) Non-biblical texts

מִתְנַיִה	d 55, 12v13	Cl.2.
בְּשֵׁתוֹ	—" 13r34	—"
הִתְפַּשְׂיָה	—" 14r25	—"

1 Cf. above, p. 153, fn. 3

2 See Murtonen 1958, p. 43-44.

3 Eldar 1975, p. 200 & fn. 43, I; Yalon 1942a, p. 17; Weinreich 1964, p. 318-319. In Maḥzor Vitry this punctuation seems to be a regular phenomenon (Eldar, idem).

4 See Eldar 1975, p. 200 & fn. 46.

5 Macuch 1969, p. 330-331.

קרבן	TS H16:7, Kober 1929, p.12, 1.6	Cl.2.
קבלו ¹	d 55, 4v15	Cl.5.
עולה	"- 5r33 (=Tib. § ^C är1äh\$?)	"-
עולת ²	"- 7r21	"-
קדקוד	"- 10v21	"-
אזנינו	"- 10v26	"-
הכמה	Ant.912, Ormann 1934, p.34, 1.58	"-
מתניה	TS H16:8, 2r11 = Edelmann 1934, p.VIII, 1.22	"-
הצפית	6x d 63, 84b2, 13,40;85a3,8,21	Cl.7.
מבצרה	"- 88b10	"-
לקדקוד	"- 88a3	"-
ובגפריה	"- 89a10	"-
מתנים	"- 89a29, Nahum 2:2	"-
וחכמתם	TS H16:2, a14	"-
ערמה	TS H6:97, A1	"-
לאכלה	d 41, 14r11	"-

b) Biblical texts

ומתניהם ~ ומתניהם	TS 12:196 = Kahle L, Ps.69:24	Cl.3.
-------------------	----------------------------------	-------

There are a total of 25 occurrences for 13 different words which cover 32.5% of the total amount (77) of the §a,â§ cases dealt with in this chapter 5.

Among these words all but קבל , קדקוד , בשת and הצפית occur in the Bab. punctuation with §u§ which is the normal counter-

1 Cf. the Tib. punctuation §qābāllō§ (Ezek.26:9) which according to B-L (p.582, s.v.) "zwei Lesungen zur Wahl gestellt: qābāllō ... und qēbāllō".

2 According to Murtonen (1958) the punctuation is עולה ; the (original?) §o§ does not appear in the photograph.

part of the Tib. $\$a\$$ in that position.¹ However, נש with suffixes has $\$o\$$ as the initial vowel; in the corresponding forms of the word קול the initial vowel is $\$o\$$ according to the school of Nehardea, but "elsewhere" (probably in Sura) $\$u\$$.²

On the basis of *defective* spellings occurring in texts from Qumran and supported by parallels in other Semitic languages WERNBERG-MØLLER has suggested that a vowel of [a] type existed in a number of words instead of the Tib. back vowel. Of the words enumerated above מחניט and קול are included in his list.³ Because he does not pay attention to contrary, i.e. *plene* spellings, KUTSCHER has doubts about the total result; according to Kutscher מחניט occurring four times is the most reliable case of [a] variants although it is once spelled with $\$w\$$ in the War Rule.⁴ In another context Kutscher proposes a pattern deviating from the Tib. *qutl* for ערמה occurring three times *defective* in the texts from Qumran.⁵

The place-names חצפיה and בצרה occur with a varying initial vowel even inside of the same text. The former is punctuated with $\$u\$$ in מחצפיה (d 63, 84b24) and with $\$o\$$ (*defective!*) in d 63, 84b39. In d 63, 88b9 Bosrah is spelled with $\$w\$$ and $\$o\$$, and as mentioned above (p. 151) $\$o\$$ of this very name is the only exceptional counterpart of the Tib. $\$a\$$ extant in the biblical text class 1 as against 103 cases of the Pal. $\$a\$$. Thus it seems that certain names and other nouns had alternative patterns;⁶ on the other hand, however, the small number of $\$a,a\$$ occurrences as compared with nouns punctuated with $\$o\$$ and their concentration mainly in the texts in which $\$a,a\$$ is used also in

1 See Yeivin 1973a, p. 181, 201-204; קול and חצפיה are not included in his lists.

2 idem, p. 63 § 121, p. 189 § 475, p. 200 § 492.

3 Wernberg-Møller 1958, p. 253.

4 Kutscher 1959, p. 466-468.

However, even the texts from Qumran may reflect different reading habits. Cf. also Murtonen 1964, p. 274 n (⁺matn), but Yahalom 1969, p. 44, fn. 83.

5 Kutscher 1959, p. 109-110.

6 מחניט occurs once in d 63 written *plene* and with $\$o\$$ (89b21).

other patterns (d 55. TS 12:195+, TS H16:3+) make this explanation as a general one too colourless. See below, p. 170-171.

5.6. Occasional Counterparts of the Tib. §ā§

קוֹדֶשׁ ¹	TS NS 117:6,lv10	Cl.4.
מחֹצפִית	d63, ² 84b24,cf.above, p.167.	Cl.7.
עֲזָרִינוּ	-"- 84a9	-"-
וּלְעֲזָרִינוּ	-"- 87a17	-"-
לְפִי ³	TS H16:3, b25	-"-
בִּלְפִי ³	TS H2:2, ² A16	-"-

The infinitive form עֲזָרִינוּ is obviously connected with the varying punctuations of these forms dealt with above, p. 161-165 (cf. בעֲזָרִינוּ in the same text). In the same time, it could represent the change of back vowels into front sound values, a phenomenon appearing in לְפִי, בִּלְפִי. This change occurring in other traditions of Hebrew as well as in Aramaic and Arabic is presented above (p. 22). These occurrences, although sporadic, also reflect the unstable nature of back vowels in unstressed closed syllables.⁴

5.7. The Development of Back Vowels into Front Vowels

The loss of unstressed closed back vowels is complete in Sam. Hebrew and Sam. Aramaic; they are replaced by vowels varying between [a] and [i] (cf. above, p. 46).

All of the transcriptions disclose §a§ or even §e§ counterparts of the Tib. §ā§ and §u§ (cf. above, p. 39-41, 74, 84). For similar developments in texts of Qumran, Mishnaic Hebrew, Bab. punctuation, Aramaic, and Arabic, see Kutscher 1959, p. 372-389.

1 Cf. Revell (1970b, 19 D): "This is perfectly clear in the ms, error for §o§."

2 These mss. are parts of T_S H16:3+, cf. Revell 1970b, p. 129.

3 Cf. יוֹפִי (=the Tib. §yāpī§) occurring in d 63, 83b4, 84a21, and TS H16:3, a 11.

4 Cf. also below, p.175: לְפִי. Thus the change into §i§ may be at least partly due to the assimilative effect of [y]. Cf. also below, p.179.

The change is not, however, equal with that of the Tib. punctuation which is proved by the punctuations אִמְרֵךְ (d 63, 87a21, possibly

Traces of the development are extant in European transcriptions, too. The vowel corresponding to the Tib. \$â\$ is transcribed with the Latin \$a\$ in the Psalms of the Codex Carnutensis No. 30 dated back to the 10th century (azenech = Tib. \$'âznek\$, Ps. 45:11; iafiech = Tib. \$yâpyek\$, Ps. 45:12; iafiafitha = Tib. \$yâpyâpîtâ\$, Ps. 45:3; however, always \$col\$ = Tib. \$kâl\$.)¹ Similarly, there are transcriptions as \$Mardohay\$ from medieval Spain.²

As for the Hebrew punctuations in this respect, I have above referred to the type \$way-yâqam\$ attested in sources extending from France until Bohemia (p. 165) and to the variant \$ṭaharâh\$ (p.157). The latter type of noun also occurs in an Ashkenazic *maḥzor* dating back to the 14th/15th century: וַיִּקְרָא, וַיִּקְרָא. \$ă\$ which surely indicates an [a] sound still appears in 1527 in a *haggadah* from Prague (e.g. מִיָּנִי, בְּפִי, שְׁרָ, (4x)) in a quarter of the cases where \$â\$ would be the proper sign.³

Particularly interesting are certain punctuations occurring in the ms. BodHeb. d 29 f. 17-20 (Dietrich Obl). Besides Pal. punctuation in this text there are also Tib. vowel signs the use of which resembles that of the Pal.-Tib. system. Unfortunately Dietrich has published only the Pal. parts and offers merely some notes about the "Tib." punctuations. According to him "das Pataḥ kann für das Qameṣ-Ḥaṭuf stehen, z.B. וַיִּקְרָא (Jos.) 15, 38; וַיִּבְרָךְ 15, 39; וַיִּגְבַּל 18, 20."⁴ It is unknown where the Tib. signs are added in this ms.;

corresponding to the occurrences enumerated above, p. 155-156) and כְּאִמְרָךְ (TS H16:1, v18 = Edelman 1934, p. XXX, 1.10), cf. the Tib. \$'imrêkâm\$, \$'imrô\$ (but כְּאִמְרָתְךָ d 63, 84a10!).

As regards the spreading of the change, cf. also קָטוּחַ (Prov. 25:26, = Tib. \$mâšpât\$ P.) occurring in the ms. Antonin 243 published and described by Yeivin (1960a). Cf. also above, p. 84-85.

1 See Gumpertz 1953, p. 24-26.

2 Garbell, 1954. p. 686.

3 For these and other Ashkenazic evidence, see Yalon 1942b, p. 33-35.

4 Dietrich 1968, p. 26 g.

There are cases of confusion between \$â\$/\$a\$, \$e\$/\$ä\$, and \$o\$/\$u\$ in the text (idem, p. 26, d-f). As for the general nature of the "Tib." punctuation, Dietrich (idem, p. 25) concludes: "Einerseits könnte man in den Merkmalen eine frühe tib. Tradition vermuten, andererseits geben sie ein Bild, das man kaum mit der tib. Tradition zusammenbringen kann."

Cf. also כְּלִי instead of כְּלִי as a "recurrent 'Ben Naftali' (= Pal.-Tib.) punctuation", Díez-Macho 1963, p. 42, 37.

however, it is probable that a text punctuated originally with Pal. signs and found in the Cairo Geniza received even the "Tib." punctuation in Orient, i.e. independent from the European Sephardic and Ashkenazic occurrences mentioned above. For similar punctuations in Pal. Jewish Aramaic texts, see above, p. 44-45.

Thus we may conclude that the tendency of back vowels to be changed into front sounds was not restricted in the Sam. traditions, but was penetrating also into others. Contrary to Sam. traditions, however, the change took place as well in the Pal. punctuations as in other sources mentioned here towards *open* front vowels, i.e. ca. [a],¹ and the Pal. Hebrew occurrences, at least, are limited in a few patterns.²

As for the distribution of these exceptional \$ā, a\$ punctuations among Pal. mss., the most significant observation is that 46 of the total amount 77 (= 59.7%) occur in two texts, viz. TS H16:9+ (class 5) and TS H16:3+ (class 7). The distribution holds for all the \$ā, a\$ groups (5.1.-5.5.) with the exception of the first one (5.1.), i.e. the *quṭl* patterns with a medial laryngeal. In the two texts mentioned above we find only 12 of these occurrences, the majority of occurrences - 19 - is to be found in the remaining texts.³

The development resembling that of Sam. Hebrew thus clearly appears only in two Pal. texts which obviously represent a reading tradition deviating in this respect from the "Pal. main line". Since even in these texts \$ā, a\$ is merely an exceptional counterpart of the Tib. \$ā\$ occurring besides \$o\$ in certain patterns, it is reasonable to argue that the timbre to be associated with these patterns was opener than in others; nevertheless it still had a backed nature. The transcriptions testify to the considerable age of the tendency which in

1 For the possible effect of *imāla* as the factor of the Sam. [ä]-[i] realizations, see Macuch 1969, p. 179.

2 Cf. Murtonen (1958, p. 30) on the basis of d 55: "The phenomenon belongs thus to the form system..."

3 As proposed above (p. 157-160), these cases may be regarded as alternative patterns.

the Sam. traditions led to the complete loss of the back vowels, but only sporadically influenced Pal. traditions with the exception of those reflected in TS H16:9+ and TS H16:3+.

6. Tib. $\$u\$/\hat{\$u}\$ \neq$ Pal. $\$u\$/\hat{\$u}\$$

6.1. Tib. $\$u\$/\hat{\$u}\$ =$ Pal. $\$o\$/\hat{\$o}\$$

a) Non-biblical texts

חֹקִי	d 55, 14r23	Cl.2.
לעֹמֵעִם	TS H2:45+58, v12	—"
לחֹקִי ¹	TS H16:9, v23 = Edelmann 1934, p. XIII, 1.24.	Cl.5.
חֹפֵה	d 55, ² 4r5	—"
וכֹלֵם	—" 5v26	—"
חֹקִי	—" 6r33	—"
לֵאֲוֹמִים ³	d 41, 14v33	Cl.7.
כֹלֵם	—" 14v26	—"
לֵאֲמֹתָי ⁴	d 63, 82b8	—"
חֹפְנָה	—" 84a19	—"
לחֹפְנָה	—" 84a32	—"
כֹהֲנֵה	—" 82a28	—"
נִחְרָהּ $\sqrt{\text{חֹר}}$	TS H2:75, r13 (huf ^c al)	—"
לעֹמֵה	Ant.912, Ormann 1934, p.29, 1.20.	Cl.12

b) Biblical texts

בִּאֲרֹנוֹת ~ באֲרֹנוֹת	J.T.S.MS 594, Eccles.12:3	Cl.2.
כָּלוּ ~ כָּלוּ	TS 20:53 = Murtonen c, Ps.29:9	Cl.3
בְּטָכָה ~ בטָכָה	—" Ps. 31:21	—"

1 Edelmann: לחֹקִי ; the sign is according to the photograph, however, $\$o\$$.

2 This part of the ms.d 55 is a part of TS H16:9+, Revell 1970b, p.129.

3 Pl. of the noun לאוֹם.

4 = the preposition $\$l-\$$ + the noun אֹמָה.

ומקלליו ~ ומקלליו	TS 20:54, = Murtonen c, Ps. Cl.3.
בהמי ~ בהמי	TS 20:58, ^{37:22} Ps. 41:13
פתי ~ פתי	TS 20:59 = Kahle H, --
	Ezek. 14:9
הלה ~ הלה	-- Ezek. 16:4 --
הק ~ הק	-- Ezek. 16:27 --

In all but לעומעם \$o\$ is followed by a Tib. doubled consonant. The Tib. \$u\$ occurs, however, in unstressed closed syllables as a rule only when preceding a doubled consonant;² thus the distribution of the Pal. \$o\$ counterparts is by no means unexpected.

In most of these texts there are occurrences of the Pal. \$u\$ in similar positions: חוים (d 55, 14v16, class 2); כולם (d 55, 10v7, class 5), חות (d 55, 5v11), יוז (d 55, 5r3); לאומים (d 41, 14v5, noun), כולם (d 41, 15r29); אומה (d 63, 87b28), חות (d 63, 83a30), חות (idem, etc.), בכהונת (d 63, 88a26); גל (J.T.S. MS 594, Eccless. 12:6).³ There are no other counterparts of the Tib. \$u\$ than Pal. \$o\$ in the position under consideration in the texts TS H2:45+58, TS H75, TS 20:53+⁴, and TS 20:59⁴; Ant. 912 is a mixed text and thus inappropriate for a proof.⁵

According to MURTONEN (1958, p. 32) the \$o\$ signs instead of the anticipated \$u\$ are mostly "from the third hand" in the ms. d 55, and "they are perhaps traces of earlier times, when the vowels o and u

1 The erroneous pu^{cc}al instead of the Tib pi^{cc}el is probably due to the preceding (Tib.) pu^{cc}al \$y\bar{p}utt\bar{a}h\$ in the same verse, cf. Kahle 1930, p. 18.

2 Varying, however, with \$a\$, cf. Bergsträsser 1918, p. 150 n.

3 Cf. חל as the Pal.-Tib. punctuation of the word in the same ms., see Díez Macho 1959, p. 244, and below, p. 175-176.

4 \$u\$ does not occur in these mss. in any position; it is always replaced by \$o\$. For TS 20:53+, see Murtonen 1958, p. 32; Revell 1970b, p. 83 B, 89, 100: "This ms is, however, not in the main Palestinian tradition"; Yahalom 1969, p. 48 & fn. 106: \$o\$ occurs in the place of the "long" Tib. \$u\$ but in the word חו (Ps. 37:24).

For TS 20:59, see Yahalom 1969, p. 49, fn. 106: \$o\$ occurs in the place of the "long" Tib. \$u\$ but in the word חו (Ezek. 16:9).

5 Cf. Revell 1970b, p. 71.

were not distinguished at all, but were both written with this sign (=šoš), as the case is in the ms. c (= TS 20:53+)". As for several hands as the explanation of the variation of šoš and šuš, we have no similar information regarding other mss.

According to YAHALOM (1969, p. 50) the šuš occurrences are more numerous than those with šoš in the text TS H16:3+, and the other texts, excluding those four mentioned above, disclose an equal distribution. Consequently, the correspondence Tib. šuš = Pal. šoš is not a typical Pal. feature, but an exception occurring 22 times in rather few of the texts.

As described above (p. 22, 37-38) KUTSCHER has proposed a theory according to which the short /u/ has a tendency to be changed into /i/ especially in unstressed closed syllables,¹ on the other hand, ⁺[u] occurring in this position is replaced by [o] in Palestinian Aramaic as well as in the "sub-standardic" traditions of Hebrew.² The development proposed appears, however, but restricted in the Pal. punctuations. In spite of their small number the occurrences of šoš are not insignificant; the replacement of the Pal. šuš sign with šoš which has one dot more than šuš discloses a conscious motion of the punctuators.

I have in the previous page referred to MURTONEN's explanation of the šoš occurrences. In addition to that, there are the interpretations of YAHALOM and REVELL for the phenomenon, at least. Yahalom (1969, p. 49-50) considers that the punctuations with šuš are due to the Tib. influence while the proper Pal. vowel is šoš; thus he follows same lines as proposed by Kutscher and Murtonen. According to Revell (cf. above, p. 40-41) the main factor calling forth Pal. šoš vowels is the loss of consonantal gemination.

-
- 1 For the Pal. signs of front vowels as the counterparts of the Tib. šāš and šuš, cf. above, p. 168, and below, p. 175-176.
 2 For ⁺[i] > [e], cf. above, p. 148-150.
 For objections regarding the time and extent of the change, see above, p. 45, 75-76, 148-150.

Dealing with the Pal. \$ä,e\$ signs as the counterpart of the Tib. \$i\$ (above, p. 143-144) I have referred to the fact that loss of ability to double consonants is an unknown phenomenon in the vernaculars of Syro-Palestine. The appearance of this kind of development exclusively in reading traditions is consequently uncertain.

The change [u] > [o] in unstressed closed syllables appears quite clearly in the Pal. Aramaic texts.¹ In addition to that and contrary to the change [i] > [e] in similar positions, the development has penetrated extensively into the punctuations of Mishnah Kaufmann.² In these sources there are, however, numerous occurrences of \$u\$/\$û\$ varying with \$o\$/\$â\$ even in very same words and forms.³ The forms with \$u\$/\$û\$ are according to KUTSCHER's view corrections based upon the Tib. Biblical Hebrew and Aramaic as well as the Aramaic of Targum Onqelos.⁴ However, it is difficult to suppose that a Tiberian-minded corrector would have been satisfied with a sporadic following of the Tib. system, i.e. with correcting a word on one line and allowing the "sub-standardic" variant on the next one in the same word or form.

Similarly, since the vacillation between \$o\$ and \$u\$ vowels occurs mainly in the Pal. text classes 3,5, and 7 which deviate from the Tib. system more than certain other classes (1,4,6)⁵ and do not disclose any traces of the Tib. influence, why had the punctuators imitated the Tib. punctuation only in regard to the use of \$u\$? And even if they had done so, it would be probable that they were more consistent and not, as they did, use a spelling \$hûppâh\$ in some cases and \$hôppâh\$ in others, etc.

1 Cf. Kutschler 1969, p. 232-233, and above, p. 37, 44-45.

2 See idem, p. 242-250.

3 For \$â\$ (and \$a\$) cf. however, above, p. 44-45, 168-170.

For the vacillation, see Kutschler 1969, p. 232-233, 242-250.

4 Cf. above, p. 38.

5 According to Revell (1970b, p. 120 § 31, and 117 § 27 ii) the text classes 3,5, and 7 belong to his group B which "would be open to a greater variety of foreign influences" ("foreign influences" refer here to non-Hebrew effects).

As for the tendency to shift the stress towards the beginning of the word supposed by Revell, see above, p. 149, fn. 5. The view presented there is also valid in regard to these phenomena.

The best solution for the exceptional \$o\$ signs as the Pal. counterpart of the Tib. \$u\$ seems thus to be that which is based upon the influence of Palestinian Jewish Aramaic: the change [u] > [o] occurring in the vernacular has penetrated into the reading traditions of Hebrew. The penetration is, however, far from being complete, a feature which is just typical of this kind of interference, since the reading traditions as a rule approve changes of vernaculars with a considerable delay and hesitation. Most clearly the penetration appears in the Pal. texts TS 20:53+ and TS 20:59 in which \$o\$ occurs in all positions instead of the anticipated \$u\$;¹ curiously enough, both of these texts are biblical. For the confusion of \$u\$ and \$o\$ irrespective of position and the conclusions based upon this fact, see below, p. 176-179.

6.2. Tib. \$u\$ = Pal. \$i\$

וְהַחֲתִּיל הַמְּלַחֵת וְהַחֲתִּיל	TS 20:59 = Kahle H,	Cl.3.
~ הַחֲתִּיל הַמְּלַחֵת	Ezek. 16:4	
יְדִי ~ יְדִי	TS K26:1 = Dietrich Cb 2,	Cl.7.
	Ezra 3:6	

The first occurrence looks like a hif^Cil which, however, is not suitable to the context. The second one could be a form of nif^Cal *pro* the Tib. pu^{CC}al as proposed by REVELL.² In the light of the \$i\$ counterparts of the Tib. \$a\$ enumerated above (p. 168) and the parallel evidence from other sources including the Tib. punctuation (see above, p. 22), even these \$i\$ signs would reflect a tendency of developments affecting back vowels; the Pal.-Tib. punctuation הַלֵּל occurring as a "correction" in the text J.T.S. MS 594 (Eccles. 12:6) in the place of the Pal. הַלֵּל (= Tib. הַלֵּל) indicates that the change of [u] towards timbres resembling those of \$i\$ was a matter of fact familiar to several reading traditions.³

1 If the lacking of \$u\$ is not due to the incomplete punctuation, as supposed by Yahalom (1969, p. 48 & fn. 196).

2 Revell 1970b, p. 91 B.

3 Cf. also above, p. 168.

Thus the development towards more open timbres (ca.[u] > [o] > [a]) is not the only trend in the history of back vowels of liturgical Hebrew.

6.3. The Confusion of the Pal. \$o\$ and \$u\$ as a General Phenomenon Irrespective of Position

The vacillation between the Pal. \$o\$ and \$u\$ signs occurs in all types of syllable. According to the calculations of REVELL the Pal. \$o\$ occurs in place of Tib. \$u\$ 92 times, and inversely, the Pal. \$u\$ in place of Tib. \$o\$ 57 times.¹ As compared with other amounts of interference among the Pal. vowel signs, these numbers are rather significant.² Most extensively the vacillation appears in classes 5 and 7.³

Similar cases of conflation are attested in numerous traditions of Hebrew as well as in related languages.

In the Tib. punctuation of biblical texts the variation of \$o\$ and \$u\$ (or \$ô\$ and \$û\$) appears also in closed stressed and open syllables, as well facultatively (e.g. \$yansôp\$ - \$yansûp\$; \$lmô'el\$ - \$lmû'el\$)⁴ and morphologically (e.g. \$mâtôq\$ - \$mtûqâh\$; \$nâqôm\$ - \$nqûmôtî\$).⁵ The phenomenon is, however, quite rare.

The vacillation appears more extensively in certain non-biblical mss. as the Worms Maḥzor,⁶ Mishna-Codex Paris 328-329 in which \$u\$ in unstressed syllables seems to penetrate into the area of \$o\$ more than

1 For details, see Revell 1970a, p. 98, Appendix C. Cf. also Yahalom 1970, p. 41-43.

2 For different explanations proposed by Revell, see his 1970a, p. 62-63, 65-66, 68-69, and 1970b, p. 100 § 2, but cf. also below, p. 177-179.

3 Revell 1970b, p. 114.

4 Bergsträsser 1918, p. 114 d, "der Grund ist offenbar die sehr geschlossene Aussprache von ô".

5 idem, p. 145 d, "wahrscheinlich liegen hier Spuren eines fast überall durch Ausgleichung aufgehobenen Lautgesetzes vor"; B-L, p. 193 q: "druckloses o wurde in der tiberischen Überlieferung zu u", "o wird jedoch auch in der tib. Überlieferung meist durch Systemzwang gehalten".

6 For details, see Bet-Arye 1972 (1965), p. 316 § 14, p. 328 § 30, and the cross-references there. Some confusion appears also in the Pal.-Tib. biblical text J.T.S. MS 512 f.15, cf. Díez-Macho 1963, p.44-45.

inversely,¹ and Sifre Vaticanus 32 where, according to MIŠOR, the distinction between these vowels has disappeared.²

Among texts with the Bab. punctuation the vacillation appears clearly only in Ec 3.³

In the transcriptions the counterpart of the Tib. \$o\$ is normally \$ō\$/\$o\$ and that of the Tib. \$u\$ the Greek \$ou\$ or Latin \$u\$. Some but not many occurrences contrary to that exist in comparison with the usual relation.⁴ Some of them may, however, be significant as isoglosses, cf. βωωα (Hexapla, Ps. 89:46 = Tib. \$būšāh\$) attested in the corresponding form in the Yemenite reading traditions of Hebrew.⁵

/o/ and /u/ are represented by a single phoneme in the Samaritan reading tradition of Hebrew and Aramaic. The phoneme is realized as [u] in (1) open stressed syllables and (2) open syllables followed by the stressed syllable; in closed syllables and open syllables following stress the realization is [o] (e.g. דוּרוֹתִין dūrōt, בדוּרוֹתִין efdūrūto, דוּר dōr).⁶

- 1 For details and similar phenomena in other sources, see Bar-Asher 1973, p. 58-60; for the facultative variation of \$u\$/\$o\$/\$ā\$ in closed unstressed syllables, idem, p. 44. There is a pronounced tendency towards [u] also in the Ashkenazic reading traditions, see Yalon 1964, p. 21, and Weinreich 1964, p. 235-239-240.
- 2 Mišor 1969. All of these texts disclose "Sephardic" features: the vacillation of \$o\$ and \$u\$ (or [o] and [u]) is, however, no typical "Sephardism" either in Pal.-Tib. manuscripts or in true Sephardic reading traditions as implied by Yahalom (1969, p. 47).
- 3 Elsewhere the variation appears either morphologically (as in the Tib. punctuation, see above, p. 176) or between different mss. in the case of certain words. The claims of Bergsträsser (1918, p. 144-145 d) and Porat (1938, p. 8, fn. 3, and p. 46) concerning strong vacillation are based upon an erroneous interpretation of these phenomena; for details, see Yeivin 1968a, p. 279-280.
- 4 See Könnecke 1885, p. 23-24; Sáenz-Badillos 1975, p. 115-116; Brønno 1943, p. 363-364, 366-367; Siegfried 1884, p. 78.
- 5 Morag 1957a, p. 5.
- 6 For details, see Macuch 1969, p. 159-164 and the references there.

Also in Christian Palestinian Aramaic /u/ and /o/ have merged into a single phoneme which is realized as [u] mainly in open syllables and as [o] in the closed ones.¹

Among other Aramaic dialects, /u/ has completely superseded /o/ in West Syriac and the boundary between them has also been confused in East Syriac.² In the dialect spoken in Ma^clūla [o] appears only in stressed syllables.³ In the Yemenite reading traditions of Babylonian Jewish Aramaic which according to MORAG still reflects the East Aramaic spoken earlier by the Jews of Mesopotamia, /o/ occurs mainly in open, non-final syllables and only rarely in closed or word final open syllables, while /u/ appears in all kinds of syllables without a marked combinatory feature preventing the occurrences of /o/.⁴

I have above (p.149-150) referred to the interchange of \$i\$ and \$ä,e\$ signs in Pal. punctuations, a phenomenon resembling that of \$o\$ and \$u\$. It could be possible to offer parallel evidence also for the former type of vacillation from other sources; according to what is known to me, the changes of the back vowels appear, however, more widely.⁵ A morphological study might yield useful results even for the apparently irregular variation of the Pal.\$o\$ and \$u\$. For the present, it may be sufficient to infer that the system of back vowels was disturbed as well in certain Pal. reading traditions (especially in those of the classes 5 and 7)⁶ as in some other traditions of Hebrew and Aramaic dialects; the mutual relationship of these proofs is beyond our reach, until a careful comparison between them is per-

1 For details, see Bar-Asher 1975, p. 483-505.

2 Birkeland 1947, p. 29.

3 Spitaler 1938, p. 7-11; *pro* [u] or [a] in unstressed syllables.

4 Morag 1961, p. 229-232; /o/ und /u/ are, however, two phonemes, *idem*, p. 229-230.

5 E.g. in the Tib punctuation of biblical texts the variation between \$i\$ and \$e\$/ \$ä\$ occurs only in a few words in closed unstressed syllables, cf. Bergsträsser 1918, p. 148-149 g.

6 And in the biblical texts TS 20:53+ and TS 20:59 in which there is no occurrence of \$u\$, cf. above, p. 175 & fn. 1. Similarly there is the text d 63 f. 98+ in which the confusion between \$i\$ and \$ä,e\$ is much greater than in any other Pal. text, cf. above, p. 141 & fn. 4; 150.

formed. However, it may be worth of noticing that the evidence for the merger of /u/ and /o/ into a single phoneme originates from Samaria and Judea (Chr. Pal. Aramaic), i.e. from the area which also in other respects seems to provide phenomena of development contrary to those appearing in Northern Palestine.¹

The disturbance extant in vernaculars, even if it was slight, had a disorderly effect upon reading traditions of Hebrew and, as a consequence, upon the employment of the traditional graphemes of Hebrew punctuation systems; hence the hesitation and variation appearing in the use of \$u\$, \$o\$, \$ä\$, etc. The degree of the graphical confusion remained, however, uneven and dependent on the extent of phonetic (or even phonemic?) development in a certain tradition.

It is possible to consider that the variation occurring in the closed unstressed syllables in the Pal. (and Tib.) punctuations is a part - and the most expansive one - of the change affecting back vowels in general. As for the nature of the change in that position, we are obviously able to judge that, while it as a rule was a trend towards a more open timbre (i.e. ca. [o]), the development could reach into sounds resembling [a] (cf. above, p. 168-171); on the other hand the signs \$i, e, ä\$ seem to bespeak the existence of a coexistent tendency of centralization which is visible, however, only in a few surroundings (cf. above, p. 168 & fn. 4, 175-176). This conclusion is in accordance with that drawn from the exceptional counterparts of the Tib. \$i\$ (above, p. 149-150): in contrast to /a/, the more closed vowels disclose greater susceptibility to phenomena of change.

7. Exceptional Punctuations Occurring in the Neighbourhood of Laryngeals and the Laryngeal Problem

The exceptionality appears as (1) Pal. \$ä, e\$ and \$i\$ counterparts of the Tib. \$a\$ (cf. above, p. 126-130), (2) Pal. \$a, ä\$ and \$i\$ counterparts of the Tib. \$ä\$ (cf. above, p. 132, 135-6) and (3) Pal. \$a, ä\$ counterparts of the Tib. \$ä\$ in "Sephardicized" texts (cf. above, p. 154-155). These divergences are, however, occasional and as a rule

1 Cf. above, p. 113-114.

the Pal. punctuations correspond to the Tib. ones in this respect as well.

The last-named group consists of *qutl* nouns with a laryngeal as the medial consonant, and a morphological analysis also elucidates other exceptional occurrences.

7.1. Vocalizations of the Stem Nif^Cal in *verba primae laryngalis*

The regular vowel of the prefix in pf. and part. forms of the stem nif^Cal is §ä§ in the Tib. punctuation; §a§ occurs, however, in certain words and forms (esp. in *infinitivus absolutus* and "bei Fortrücken des Tons").¹ The Pal. exceptions to this scheme are:

נָעַנּוֹ ²	2x Ant. 369, Kober 1929, p.17, 1.8&18	Cl.2.
נָעַשְׁיחַ ³	TS H16:4, r9	Cl.4.
נָעַשָׂה	2x d 55, 4r23 & 9r30	Cl.5.
נָעַשׂוּ	-"- 5r22	-"-
נָחֵלֶק	d 41, 12r3	Cl.7.
נָעַצַּב	-"- 14r31	-"-
נָחַשְׁקַ	-"- 15v2 = Bar 1936, p.43, 1.3	-"-
נָעַשָׂה	Mosseri P171/2 = Zulay 1939, p.116, 1.5	-"-
נָחַשְׁבִּים	Ant. 912, Ormann 1934, p.26, 1.45	Cl.12.

All of these occurrences disclose the same tendency towards regular patterns of nif^Cal; those with §i§ have been completely adapted to "strong" patterns,⁴ while the Pal. §ä§ testifies to a partial assimilation. There is no inverse case. Of the 11 occurrences five are forms of the root עשה.

Parallel evidence is provided by certain other traditions. The gradual "normalization" appears most clearly in Bab. punctuations. The

1 Bergsträsser 1926, 29, p. 110 b^f, 111 b^{*f}, 111-112 c^b; B-L, p. 348 j-1.

2 $\sqrt{\text{נה}}$ II = "gebeugt werden". The Tib. §a§ is not attested, but cf. §na^Cāñh§ and §na^Cāšû§.

3 The Tib. §a§ is not attested, but cf. §na^Cāñêî§.

4 Cf. also מַעֲיִל , below p. 192.

vowel in the corresponding prefixes of the Bab. texts is $\$i\$$ when the first radical is either $\$h\$$ or $\$h\$$.¹ In verbs with an initial $\$'\$$ the prefix vowel in the texts of the early (c attîq) type is $\$a\$$ or $\$e\$$, while in the intermediate type ($bênônî$) of non-biblical texts ($lšôn \underline{h}akamîm$) $\$e\$$ and even $\$i\$$ take the place of $\$a\$$; in the late ($\$a^c\hat{i}r$) type the development appears in all kinds of text.² Corresponding changes also take place in *verba primae ayin* in which the prefix vowel $\$a\$$ is replaced in younger types with $\$i\$$.³ The treatment of *verba primae laryngalis & tertiae yod* does not deviate from that of other verbs with an initial laryngeal; as for the verb $\eta\psi$ $\$a\$$ occurs in biblical texts, while $\$ni^c\hat{a}h\$$ etc. seems to be the true form for non-biblical Hebrew, although it varies in certain texts with $\$n^c\hat{a}h\$$.⁴

In Mishnah Kaufmann $\eta\psi$ is always punctuated with an initial $\$ä\$$; similarly $\$ä\$$ occurs in $\eta\psi$ (Ta c anit I, 6 & 7).⁵

The Yemenite and Iraqi reading traditions of non-biblical Hebrew also disclose a parallel tendency, i.e. one approaching regular patterns, particularly in the forms of nif c al; the uniformity is, however, not attained and even one and the same form may be realized with either [i] or [ä](corresponding to the Tib. $\$a\$/\$ä\$$) in Yemen or [a] in Iraq, e.g. $\eta\psi$ / $\eta\psi$.⁶

In the Sam. reading tradition *verba primae laryngalis* have [i] as the prefix vowel of nif c al which is in accordance with the "strong" patterns of nif c al (e.g. niyyasaf = $\eta\psi$).⁷

1 For details, see Yeivin, 1968a, p. 396-397.

2 idem, p. 397-399.

3 idem, p. 399-400.

4 For details, see Yeivin 1968a, p. 617-619.

5 idem, p. 619.

6 Morag 1963, p. 188-191; Morag 1957a, p. 11.

7 See Macuch 1969, p. 299-300, 353; 288-289. This is not the case with forms of qal; in the "strong" verbs the prefix vowel of impf. as a rule is [i], but [a] - [e] in *verba primae laryngalis* (idem, p. 274-277, 295-296).

The Pal. exceptional punctuations enumerated above occur in non-biblical texts, a fact corresponding to the Bab. division between forms with $\$a\$$ and $\$i\$/\$e\$$. Of the five $\$i\$$ cases three are verbs with an initial $\$h\$$ which also resemble the Bab. manner of treating $\$h\$$ (and $\$h\$$) as a regular consonant. In the Pal. texts with divergent nif^cal forms there are "Tib." punctuations, too, e.g. $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{ש}}$ (d 55, 4 v17) and $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{צ}}$ (d 41, 14r31). In the light of the Bab. punctuations and Yemenite reading traditions this is not a peculiarity: the punctuators were aware of alternative realizations and did not consider the vacillations to be disturbing or worthy of condemnation.¹

The varying punctuations thus represent different stages of the effect of "Systemzwang": $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{ש}}$ seems to be the most archaic form, $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{צ}}$ and $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{צ}}$ are adapted to the general nif^cal pattern of *verba prima laryngalis*, and $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{ש}}$, $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ח}}\overset{\cdot}{\text{ק}}$ etc. are in complete agreement with the "strong" verbs; that the verbs with an initial $\$h\$$ are most inclined to follow regular patterns is a phenomenon familiar also in Tib. punctuations.²

One reason for the normalization tendency of nif^cal prefixes is to be seen in the fact that there was no nif^cal in Aramaic. Because the vernacular did not provide models for different realizations of nif^cal forms, Systemzwang was better able to exert an effect upon these patterns of the liturgical language.

There is still an apparent exceptional nif^cal: $\overset{\cdot}{\text{נ}}\overset{\cdot}{\text{ע}}\overset{\cdot}{\text{צ}}$ (d 55, 10v23). Its Tib. counterpart would be $\$w\text{-n}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{s}}\overset{\cdot}{\text{b}}\overset{\cdot}{\text{ü}}\overset{\cdot}{\text{s}}$. The Pal. punctuations could represent a contamination of the patterns $^+[\text{n}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{s}}\overset{\cdot}{\text{b}}\overset{\cdot}{\text{ü}}\overset{\cdot}{\text{s}}]$ (cf. $\$naalma\$$ in Jerome) and the Tib. type. However, a more probable solution would be

1 In the light of transcriptions $\$ounazerthi\$ = \text{Tib.}\$w\text{-n}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{z}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{r}}\overset{\cdot}{\text{t}}\overset{\cdot}{\text{i}}\overset{\cdot}{\text{s}}$ in Hexapla (cf. Brønno 1943, p. 103-107) and $\$naalma\$ = \text{Tib.}\$n\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{m}}\overset{\cdot}{\text{ä}}\overset{\cdot}{\text{h}}\overset{\cdot}{\text{s}}$ in Jerome (cf. above, p. 61, 66) it is probable that a vowel resembling [a] was preserved in certain words until ca. 400 also in cases where it does not appear in the Tib. punctuation.

2 Cf. the lack of compensatory lengthening (B-L, p. 221 q) and of the $\$a\text{ḥ}e\text{f}$ vowels (idem, p. 211 d, La Sor 1956). Cf. also below, p. 184.

to consider it to be an assimilated nitpa^{CC}al, cf. the Aramaic itp^Cel וְאֶעְצְבֶנּוּ¹ and the Tib. וְנִקְרַי (Ezek. 23:48); \$a\$ would be thus a sign for a "full" vowel and \$ä\$ the result of the compensatory lengthening. There seem to be quite numerous examples of the assimilated nippa^{CC}al stem both in the Pal. texts (e.g. נִיכֹה d 55, 12v20; נִפְצֹם TS NS117:6, 1r7; וְנִלְחֹם TS 16:96, Dan. 11:11; נִשְׁתַּחֲנֶה d 41, 12r4) and in other sources. The material will be dealt with in the forthcoming part of this study.

7.2. Vocalizations of the Impf. Forms of the Qal Stem in *verba primae laryngalis*

The Tib. prefix vowel in these forms is either \$a\$ or \$ä\$²; \$a\$ occurs in verbs with \$o\$ as the impf. vowel excluding the verbs with an initial \$'\$ which as a rule make use of \$ä\$ (or \$o\$); in *verba primae laryngalis* & *tertiaie yod* the prefix vowel is \$a\$ in certain roots and \$ä\$ in others without a clear distinction; in the impf. of the 1st person singular the vowel is always \$ä\$.³

The Pal. exceptions from the Tib. system are few. In the biblical texts they are

תְּהַגֶּה ~ תְּהַגֶּה	TS A43:1, Isa. 59:3	Cl.1
וְתַעֲדִי ~ וְתַעֲדִי	TS 20:59, Ezek. 14:13	Cl.3.

and in the non-biblical texts

תְּאִפְוֹד ~ תְּאִפְוֹד	d 55, 12r9	Cl.5.
תְּחַטְכוּ ~ תְּחַטְכוּ	-"- 7r33	-"-
תְּחַנֶּה ~ תְּחַנֶּה	d 41, 14r18	Cl.7.

All but תְּאִפְוֹד may be compared with the examples of nif^Cal above, i.e. they disclose realizations drawing nearer to the regular patterns; in (הגה)ת the uniformity is completed.

וְתַעֲדִי and תְּחַנֶּה are explained by YAHALOM as alluding to a certain stages in which all of the impf. forms of *verba primae laryngalis* & *tertiaie yod* were in the stem qal differing from those of hif^Cil. This

1 Jastrow 1950, p. 1101, עצב.

2 If the stress moves farther off, the prefix vowel \$ä\$ is changed often into \$a\$, see Bergsträsser 1926-29, p. 111-112 c, and B-L, p. 349 q.

3 Cf. Bergsträsser 1926-29, p. 110-111 b-b'; B-L, p. 347 a-f, 417 y'-a''.

only is the case in the 1st person singular in Tib. punctuation (e.g. §'ä^Cäläh§ vs. §'a^Cäläh§).¹ Based only upon two occurrences the suggestion is rather venturesome. The punctuation יָדָנָּן indicates, however, that the occurrences of the Pal. §ä§ in place of Tib. §a§ are not limited to such *verba primae laryngalis* which have a final *waw/yod*. We must also take into account the transcription §thaage§ in Hexapla (= Tib. §tähgäh§, Ps. 35:28, cf. Brønno 1943, p. 28-29) which is in complete contrast to the suggestion that there had been a difference between the prefix vowels of qal and hif^Cil in the verbs under consideration. It is more probable to argue that, as above in nif^Cal, the vocalizations (1) §thaage§ (in Hexapla), יָדָנָּן (qal, d 55, 9r13), the Tib. §tahārû², (2) יָדָנָּן (TS 12:196, Ps. 71:24), יָדָנָּן, the Tib. §tähgäh§, and (3) (אלל)נָּ as well as the Bab. type §yihtom§, §yihgah§³ are alternative products of the opposing forces felt between the assimilative tendency of laryngeal consonants and Systemzwang. This interpretation is also corroborated by the fact that there is only one Pal. case in which the prefix vowel of hif^Cil is not §a§ and even it is highly suspicious (cf. below, p. 185-186); if the factor calling forth §ä§-§i§ vowels instead of the anticipated §a§ were a phonetic one, the results would appear equally in similar phonetic surroundings irrespective of the stems or other morphological features. This not being the case we must favour a morphological explanation.⁴

Generally speaking it is probable that in any text the forms of qal are more usual than those of nif^Cal. Nevertheless there are 11 exceptional

- 1 In the Bab. punctuation the distinction appears only in the verb עלה, Yahalom 1969, p. 40.
- 2 The verb הרה is the only verb *primae he* with the Tib. §a§ as the prefix vowel of qal, see König 1881, p. 549.
- 3 *Verba primae §h, h§* have as a rule §i§ in the Bab. punctuation, *primae §'§ §e§*, and *primae §^C§* either §a§ or §i§, the latter appears in verbs with §a§ as the impf. vowel, cf. Yeivin 1973a, p. 79-80. It may be worth mentioning that all of the occurrences of the verb הרה enumerated here are from transitive contexts.
- 4 As a parallel case we may refer to the Modern Arabic dialect of Damascus in which [a] appears as the prefix vowel of the simple stem but in two or three verbs with an initial [C], otherwise the prefix vowel is the regular [ə], see Grotzfeld 1965, p. 30, Anm. Another similar phenomenon is the penetration of the impf. vowel §o§ into verbs with a medial laryngeal occurring in post-biblical Hebrew (including certain Pal. texts), see Yahalom 1969, p. 43-44 & fn. 79.

occurrences of nif^Cal and five of qal. As mentioned above (p. 182), there is no nif^Cal in Aramaic, but qal and 'af^Cel of Aramaic do not differ much from the qal and hif^Cil stems of Hebrew. Providing that the Aramaic verbs with an initial laryngeal still possessed prefixal vowels deviating from that of regular verbs¹ we could suggest that parallel patterns of the vernacular reduced the effect of Systemzwang more in the realizations of qal in Hebrew than is the case with prefixes of nif^Cal. On the other hand, there may have been a tendency to distinguish between forms of qal and hif^Cil in the reading traditions and such a tendency would demand prefixes with \$ä\$-\$i\$ for qal.

One phonetic observation more. Of the five exceptions the initial radical is \$h\$ or \$h\$ in three of them. As mentioned above (p. 180-1, 184, fn. 3) they are treated as regular consonants in the Bab. punctuation and \$h\$ (p. 182 & fn. 2) discloses similar features also in the Tib punctuation. The normalization of *primae* \$h, h\$ verbs more than of those with an initial \$',^C\$ also in Pal. traditions is thus rather likely.

In the light of the previous examination I would incorporate the remaining occurrences תפח as a pseudo-correct punctuation into the realm of the normalization tendency.²

7.3. א'טח , an Exceptional Hif^Cil?

The Pal. counterpart of the Tib. qal \$tähä'tä'\$ is א'טח in the text TS 20:59 (Ezek. 14:13, class 3). \$y\$ seems to indicate that the stem is hif^Cil in the Pal. text.³

Provided that this is the case, we have here an occurrence contrary to those of nif^Cal and qal dealt with above, i.e. an exceptional development departing from the regular patterns. However, the last syllable is not punctuated and thus we do not know whether the punctuator also considered

1 Cf. Dalman 1894, p. 215; Spitaler 1938, p. 38-39 e, 145-146.

2 Cf. however, the Sam. realizations of certain verbs with an initial laryngeal: [täsef] (= תפח) etc., see Macuch 1969, p. 295-296.

3 It is also the interpretation of Kahle (1927, p. 17⁺-18⁺). For the infinitive תפח in which \$ä\$ is probably due to the following sibilant, see above, p. 127-128.

the stem to be $hif^c il$. Maybe he was used to pronouncing the form as an impf. of qal in accordance with the Tib. system, but forgot to delete $\$y\$$. More probable is a third interpretation. Even there are in the Tib. text forms of this verb in which the punctuations follow that of *verba tertiae waw/yod*¹ and in Mishnaic Hebrew the confusion of *verba tertiae 'alef* and *tertia waw/yod* is a rather usual phenomenon (e.g. $\aleph\aleph\aleph$ Ms. Kaufmann, Yoma VIII, 9, 3x).² Thus there are reasons to conclude that the Pal. $\aleph\aleph\aleph$ was realized in qal by the ("Sephardic") punctuator appr. as [teħǣé], and $\$y\$$ was preserved (and maybe spelled) as a *plene* spelling of the final [é]. Consequently, there would be no deviation from the Tib. punctuation of prefix vowels.

7.4. The Auxiliary Vowels of the Segolates

There are 11 occurrences in which the auxiliary vowel is the Pal. $\$ä\$$ followed by a laryngeal: $\aleph\aleph\aleph$, $\aleph\aleph\aleph$, $\aleph\aleph\aleph$, $\aleph\aleph\aleph$, $\aleph\aleph\aleph$, $\aleph\aleph\aleph$, and $\aleph\aleph\aleph$ (4x) (cf. above, p. 126-127). $\aleph\aleph\aleph$ also belongs to this category (cf. above, p. 127). All of them occur in non-biblical texts.

These punctuations as well as the rhymes made of different laryngeals in Pal. texts are one of the phenomena emphasized by the supporters of the theory that the laryngeal consonants had disappeared in Hebrew.³ As for the rhymes, the *payyetañim* were not always strict in making use of the same consonants; similar sounds (e.g. $\$b\$-\$l\$$, $\$m\$-\$n\$$) were sometimes approved as rhyming.⁴

The segolates with a final (or medial) $\$h\$$ or $\$^c\$$ have in the majority of cases $\$a,\$ä\$$ as the auxiliary vowel in Pal. punctuations (e.g. $\aleph\aleph\aleph$

1 See B-L, p. 375, s.v.

2 Cf. also punctuations as $\aleph\aleph\aleph$ (^cAboda zara III,8) and $\aleph\aleph\aleph$ (fem. part., idem) in Ms. Kaufmann; Segal 1936, p. 150-151. The root $\aleph\aleph\aleph$ is treated as a verb *tertia waw/yod* also in Aramaic, see K-B, p. 1075.

3 See Kahle 1959, p. 167. The type $\$mäläh\$$ is also interpreted by Yahalom (1969, p. 39) as reflecting a "stage" ($\$alab$) in which the laryngeals did not possess the same assimilatory effect as was the case in the pronunciation reflected by the Tib. punctuation of the Bible.

4 Cf. Revell 1970a, p. 89 & fn. 133; Sáenz-Badillos 1975, p. 128-129. The exceptional segolates enumerated above occur only partly in rhymes.

d 63, 88b19, 2x)¹ Twelve exceptions occurring in diversified Pal. types of punctuations are hardly enough to disclose a considerable change in the consonant inventory of Hebrew. In the light of the previous groups I am inclined to judge them as a part of the tendency towards regular patterns. Although the development of the *status determinatus* forms of Aramaic into the normal shape of nouns is not very conspicuous in Jewish Aramaic,² it may have had the result that the vernacular provided less than earlier models for the preservation of irregular segolate forms (e.g. \$mälaḥ\$ vs. the Aramaic *status determinatus* \$milḥā'\$). Uncertainty of the genuine realization surely is a factor favouring the employment of the most usual pattern, viz. \$qätäl\$. That there was hesitation regarding the realization of the auxiliary vowels of segolates appears also in a number of punctuations in which the counterpart of the Tib. \$ä\$ is either the Pal. \$a,â\$ or \$i\$ (e.g. $\dot{\text{ל}}\dot{\text{א}}$, cf. above, p. 133-134, 136).³

7.5. ${}^+pu^c1- > {}^{\$}pa^c al- / {}^{\$}po^c al-$

This evidence is dealt with above (p. 154-160). As stated (p.155), among the words in which there is the Pal. \$a,â\$ instead of the anticipated Pal. \$o\$, the biggest group (40%) consists of *qutl*-patterns with a medial laryngeal. Since laryngeal surroundings have a greater influence on closed back vowels than on others, this observation is just contrary to the opinion of the "weakening" of laryngeals.

7.6. Remaining Exceptions

Most of the remaining exceptional punctuations could be explained on the basis of the two tendencies, the assimilative effect of laryngeals and Systemzwang.

1 Yahalom 1969, p. 39.

2 Dalman 1894, p. 150; cf. however, $ma^c\bar{l}u\bar{l}i$ in which "der Stat. det. stellt die Normalform des Substantivs dar, das infolgedessen sowohl determiniert als auch indeterminiert sein kann" (Spitaler 1938, p. 98).

3 Could the same Aramaic influence be a factor calling forth irregular punctuations of segolates also in the Tib. punctuation (e.g. \$bäräk\$ - \$birkay\$, \$lähäm\$, \$nähäl\$-\$nebäl\$, \$qoš\$, \$škäm\$)?

Contrary to the Tib. punctuation the Pal. forms והלדִי , עדרִי , and ואלתִי־לך (cf. above, p. 132) have a more assimilated vowel, i.e. $\text{\$a,ã\$}$,¹ while נֹוֹעַ etc., נֹדֵד ², and מִעֲלִילִי־ו (cf. below, p. 190) represent more regular realizations; in בְּחִיּוֹן the normalization is completed.³ In addition, some of them may be lexical variants (cf. above, p. 128); יְעִי is to be compared with יְיִ occurring in the same text (d 55, 13r14), with the Tib. type $\text{\$hägäh\$}$, $\text{\$qéšäh\$}$, the Tib. pausal form $\text{\$cädî\$}$,⁴ and the Bab. $\text{\$kã-cady\$}$ (Isa. 49:18),⁵ thus it is not impossible that $\text{\$ä\$}$ in יְיִ would be a "full" vowel and consequently the first $\text{\$ä\$}$ in ב would be the counterpart of a reduced vowel.

Those exceptional punctuations which are not suited to these explanations could be used as evidence for the "weakening" of the laryngeal consonants. The remaining cases are, however, extremely few: בְּעַרְפֵּל (unassimilated vowel of the preposition), בְּאֵהָבָה ⁶ בְּעַלִי ⁷ , יְחִדֹו ⁸ , מֵאֲרֹבַע , and מִן(ר)קִי (cf. above, p. 126-128). Six occurrences of this nature do not provide convincing support for the suggested development.

1 Cf. Bergsträsser 1918, p. 157 o^c.

2 Cf. idem, p. 157 o^a, e.g. $\text{\$cimqek\$}$, $\text{\$'ištka\$}$; $\text{\$cäzrî\$}$, $\text{\$'äštka\$}$. Cf. also above, p. 126-128.

3 Cf. above, p. 135.

4 Cf. B-L, p. 578-579 o', q'.

5 Yeivin 1973a, p. 212; there are in *piyyuṭim* and Mishnaic texts pausal forms as $\text{\$parî\$}$, $\text{\$qarî\$}$ also in context, see idem. p. 211.

6 Cf. the Tib. punctuations $\text{\$bhemâh\$}$ - $\text{\$bähämät\$}$. Was בְּאֵהָבָה realized appr. as [bē-'ehēbat]?

7 The punctuation and meaning of the word are uncertain, cf. Kahle 1930, p. IV, fn. 2 & p. 8⁺, fn. 2.

8 The punctuation יְחִדֹו , equal with the Tib., occurs in the same text (TS 12:195, Ps. 55:15, cf. above, p. 127 fn. 1).

7.7. Summary

The exceptional Pal. punctuations occurring in laryngeal surroundings originate in most cases from an adaptation, partial or complete, to the corresponding "strong" patterns. It is logical to judge that certain finesses of a liturgical language are easily superseded by leading rules and patterns, particularly in morphs which are absent in the vernacular or in which there do not exist corresponding finesses (cf. nif^cal, above, p. 180-183).¹ Cases in which the assimilative effect of laryngeals, i.e. the preference of open timbres, seems to be the explanation for unusual punctuations are rarer but extant; some of them are obviously pseudo-correct forms. Evidence which could be interpreted in favour of the weakening of the laryngeal consonants is scarce and unreliable.

8. The Attenuation

One of the interesting phenomena in the transcriptions of Jerome and Josephus is the occurrence of numerous "unattenuated" realizations in nominal patterns. Although we are usually unable to ascertain that /a/ is the original vowel in those words, the transcriptions testify, however, that two vowels resembling [a] in successive syllables (e.g. \$sadda\$) was a feature tolerated much more extensively in the reading traditions familiar to Josephus and Jerome than is the case in the Tib. system. A kind of "attenuation" appears in Jerome in a number of words, if the vowel concerned is preceded by a sibilant or /y/; in Josephus this phenomenon is not evident. On the other hand, the "attenuation" of verbal forms does not deviate materially from the Tib. punctuation (cf. above, p. 59-60, 65-68, 79-83).

Generally speaking the Pal. punctuations are analogous with the Tib. as regards phenomena connected with the attenuation. Among the exceptions it is difficult to discern those originating from other factors, e.g. surrounding consonants, Systemzwang etc. My solution is to deal first with the only group of cases which is morphologically delineated against

1 That the "lengthening" of vowels before virtually doubled laryngeals is more extensive in Pal. punctuations than in the Tib. (cf. Revell 1970a, p. 62; p. 82, Appendix C, the usage No. 5) is a phenomenon in accordance with the normalization tendency.

others, i.e. the nominal patterns with the prefixes \$m-\$ and \$t-\$, and to examine remaining material from this point of view.

8.1. Tib. \$a\$ = Pal. \$i\$ in the Nominal Prefixes \$m-\$/\$t-\$

וּמְלֹבֹשִׁי	TS 20:59, Ezek. 16:13	C1.3.
הַזְנוּתִיךָ	-"- Ezek. 16:25	-"-
מְעִילִי	d 41, 11r1	C1.7.
לְמַשְׁלֵי שִׁי	TS H7, v5	-"-

8.2. Tib. \$a\$ = Pal. \$ä\$ in the Nominal Prefixes \$m-\$/\$t-\$

מְעַלְלִי	d 55, 13v20	C1.2.
לְמִיִּקְהָלוֹחַ st.c.	d 55, 10v13	C1.5.

מְעַלְלִי seems to be partly assimilated to the regular type, cf. מְעִילִי above. On the other hand, the discrepancy between the initial \$ä\$ and \$a\$ following it is surprising. It might be possible that the first \$ä\$ represents a "full" vowel preceded by a reduced vowel, i.e. appr. [ma^cälälaw] > [mæ^cälälaw].

The Tib. counterpart of the prefix vowel of מְקַהֲלוֹחַ is problematic, cf. above, p. 128-9. In addition to that, the prefix vowel could equally well be classified in the photostat to \$i\$ as to \$ä\$; as a rule the \$ä\$ signs are more slanting than this one.

8.3. Tib. \$ä\$ = Pal. \$a\$ in the Nominal Prefixes \$m-\$/\$t-\$

מְמַשְׁלָה	Ant.912, Ormann 1934, p.26, l. 52.	C1.12.
------------	---------------------------------------	--------

The word occurs in the Tib. punctuation also with \$a\$: מְמַשְׁלוֹתִי (Ps. 114:2). The Tib. \$ä\$ vowels in the prefixes under consideration are explained by BAUER-LEANDER (p. 490 xc) to be due to following highly sonoric consonants \$l, m, r\$; elsewhere (p.614, s.v.) \$ä\$ in \$mämšäläh\$ is

1 But twice with an initial \$ä\$ in the same text (Ezek.16:20, 26).

considered to originate "wohl durch Assimilation des α ans ξ ".¹

A similar case is the Pal.-Tib. $\$ham-mark\hat{a}b\hat{o}t\$$ (d 29, f. 17-20, Josh. 19:5, cf. above, p. 137) in which the counterpart of the Tib. $\$ä\$$ followed by $\$r\$$ is $\$a\$$.

8.4. Tib. $\$i\$$ = Pal. $\$a\$$ in the Nominal Prefixes $\$m-\$/\$t-\$$

קָמַר	TS H16:10, v22	Cl. 1.
יָדַעַר	TS 20:54, Ps. 37:23	Cl. 3.
הִנְנֵה	--- Ps. 40:7, 1st hand	---
לִדַּעַר	st.c. TS 20:52, Ps. 61:4	---
הִנְנֵה	d 55, 9v21, Gen. 33:20	Cl. 5.
הִנְנֵה	--- 10r23	---
יָדַעַר	--- 10v12	---
יָדַעַר	d 41, 15v5	Cl. 7.

8.5. Tib. $\$i\$$ = Pal. $\$ä\$$ in the Nominal Prefixes $\$m-\$/\$t-\$$

הִנְנֵה	2x TS 16:96, Dan.11:3,5	Cl. 3.
הִנְנֵה	TS H2:1, v26	Cl. 7.

In these two words the Pal. punctuator has exceptionally arrived at a solution similar to the Tib. $\$mämsäläh\$$ (cf. above, p. 190). We have above (p. 145-147) observed that the sibilants obviously have a tendency to favour timbres resembling those of $\$ä,e\$$ before them in Pal. punctuations.² This would be an explanation for הִנְנֵה. הִנְנֵה might be compared with the transcriptions $\$(hl)limma\$$ and $\$mimmeni\$$ in

1 With a reference to Brockelmann (1908, p.202) who attributes the Tib. $\$i\$$ vowels in $\$misped\$$ and $\$mizbeäh\$$ to the influence of sibilants.

2 As is the case in Josephus and Jerome, the nominal prefixes $\$m-\$/\$t-\$$ are as a rule vocalized with $\$a\$$ in Hexapla. The Greek $\$e\$$ occurs but in the counterpart of the Tib. $\$mišpät\$$, and $\$i\$$ twice corresponds to the Tib. $\$i\$$ of the words $\$mišknötäm\$$ and $\$mišgäb\$$ (Brønno 1943, p. 179); even elsewhere $\$s\$$ and $\$š\$$ have an effect favouring $\$i\$$ in their neighbourhood (see above, p. 62-64).

Another possibility for explaining the opposition between the "unattenuated" type $\$maq\dot{a}l\$$ (Bab., Josephus, Jerome, etc.) and the Tib. and Pal. "attenuated" $\$miq\dot{a}l\$$ might be the suggestion that the actual realization of these vowels was exceedingly centralized in the reading traditions; thus the differing vocalizations would represent two different graphical solutions for the problem of how to indicate the central vowel occurring in closed syllables. The Aramaic evidence could be interpreted in favour of the suggestion, too. One of the explanations offered by BAUER-LEANDER (and Brockelmann) follows this point of view: "Das regellose Schwanken zwischen *a* und *i* 'erklärt sich wohl zum Teil daraus, dass man für schwebende Nuancen bestimmte Grenzwerte traditionell festlegte'¹."² The assumption of an orthographic tradition for the indication of a vague vowel timbre could be plausible in the case of the Tib. punctuation which is preserved to us in an apparently well polished form.³ Contrary to that, we certainly would be in a position to disclose a great number of varying counterparts for the Tib. attenuated vowels in the manifold Pal. punctuations, if the vowels were merely graphically stabilized in the Tib. (and Bab. etc.) texts. As the previous scrutiny of the Pal. counterparts of the prefixes $\$m-\$/\$t-\$$ has revealed, the vacillation and the divergences from the Tib. punctuation are, however, exceedingly few in number. Even more surprising is the almost total absence of the transitional stage, i.e. $\$ä,e\$$ signs, in these prefixes inspite of the fact there is a tendency towards $\$ä,e\$$ pro $\$a\$/\$i\$$ in Pal. punctuations. The minor vacillation occurs just between $\$a\$$ and $\$i\$$ ($\$man\dot{h}âh\$$ - $\$min\dot{h}âh\$$ etc.). Since the Tib. influence upon Pal. punctuations is insignificant, it is unreasonable to suppose that the Pal. punctuations and the Tib. punctuation independently arrived at the same graphical solution indicating centralized and hazy timbres of these prefixes. A rather great similarity

1 A quotation to Brockelmann 1908, p. 146.

2 B-L, p. 194 x. Other solutions proposed by them are the dissimilative effect of the following $\$i\$$ and $\$e\$$ vowels (e.g. $\$ma\dot{s}ber\$$ - $\$mi\dot{s}bar\$$, p. 215 l) and the possibility of dialectal differences (p.194 x).

3 The Pal.-Tib. punctuations are not dealt with by Bauer and Leander nor by Kahle (in B-L); in fact, these punctuations obviously bear no new evidence on the problem of attenuation (cf. Morag 1959 and Díez-Macho 1963).

of reading traditions is the condition of an equal graphical identification.

On the basis of the previous observations it seems impossible to consider the Tib. and Pal. type $\$miq\ddot{t}al\$\$ to be a direct upshot which developed from the type $\$maq\ddot{t}al\$\$ attested in Josephus and Jerome. As far as I can see, the explanation is to be found in the presence of parallel patterns which had existed since an early date in Hebrew and which for a long time were able to vary rather freely. Similar phenomena are provided by Arabic. In Classical Arabic there was a semantic distinction between the patterns /maq\ddot{t}al/ (abstract nouns), /maq\ddot{t}il/ (*nomina loci et temporis*), and /miq\ddot{t}al/ (nouns denoting implements);¹ in the vernaculars, however, the distinction between /maq\ddot{t}al/-/miq\ddot{t}al/ obviously was less strict and in the Modern Arabic dialects it has vanished.²

According to KURY\OWICZ "the generalization of the timbre *i* in the verbal prefixes of the verb rendered impossible a morphological distinction between abstracts (and related concrete nouns like the object or result of action) (*maq\ddot{t}al*) and names of implements (*miq\ddot{t}al*)" in Hebrew.³ As stated above (p. 59-60), the "attenuation" of the verbal prefixes took place rather early. Thus there seem to be good reasons for the confusion and alternation of the $\$t/ma-\$\$ and $\$t/mi-\$\$ prefixes.

The lacking of the Pal. $\$ä,e\$\$ vowels and the rarity of the Tib. $\$ä\$\$ in the prefixes $\$m-\$/\$t-\$\$ as well as the occurrences of the vacillation between $\$a,\ddot{a}\$\$ and $\$i\$\$ in the Pal., Tib.,⁴ and Bab.⁵ punctuations are well in accordance with this variant theory. A number of phenomena appearing in the reading traditions of Mishnaic Hebrew provide additional proof for the existence of variants differing by their "attenuation": in certain traditions of Yemen and Morocco there is a stem $nitpi^{cc}al$ (e.g. $\$nitgiddal\$\$) *pro* $nitpa^{cc}al$ of other traditions; $\$b-\$n^c h\$\$ is realized either as $[\$b-\$n^c \ddot{a}h\$\]$ or $[\$b-\$n^c \ddot{a}h\$\]$ in Iraq, but always

1 Cf. Brockelmann 1908, p. 377, § 197a; Kury\owicz 1973, p. 117.

2 Cf. Brockelmann 1908, p. 377; § 197a, Anm.; e.g. for Syro-Palestinian Arabic, Grotzfeld 1965, p. 61, § 60a.

3 Kury\owicz 1973, p. 118, § 54.

4 See Blake 1950, p. 79, § 5, and the lists offered by Sperber (1966, p. 451-453).

5 Cf. above, p. 191, fn. 2.

as [šb-šin^cāhš] in Yemen; the alphabet is called in Yemen either [š'alpā' .bêtā'š] or [š'ilpā' bêtā'š]; [šilwa'yš] occurs in Yemen, but [šalwa'yš] elsewhere; a morphological group of variation consists of verbal prefixes in the *verba primae laryngalis*, especially of the stem nif^cal (cf. above, p. 181).¹

Approving the existence of alternative realizations for the prefixes šm-š/\$t-š we could conclude that the employment of different variants in different reading traditions (Josephus, Jerome, Bab., Sam. *contra* Pal., Tib., Pal.-Tib.) was not a choice of graphemes, but a choice between two alternative forms. That the realizations with an open prefix vowel were also a phenomenon neither unknown to nor rejected by the Pal. punctuators is demonstrated by the biblical Bab. text JTS MS 504 f. 2 (= Eb 10) in which the Pal. punctuation mainly appears in cases where the Pal. (and Tib.) readings differ from those of the Bab. The šma-š patterns, typical to the Bab. tradition, are, however, left without Pal. corrections.² According to Yeivin "this again shows not only that he (= the Pal. scribe) could easily read the Babylonian signs, but also that he knew the peculiarities of the Babylonian pronunciation, and ignored them as well-known and accepted and not needing mention or correction on his part".³

Why the Pal. and Tib. traditions gave preference to šiš in contrast to the "Palestinian" tradition reflecting in the transcriptions of Jerome? Next to a guess we could suggest that the type with šaš was considered by the Pal. and Tib. *qaryanim* to be an Aramaism,⁴ and contrary to that šmiqṭālš appeared as the "genuine" Hebrew pattern.

1 For other examples and details, see Morag 1957a, p. 10-11 (1972, p. 192-193). The symbols [š-š] indicate transliterations of the realizations given by Morag in Hebrew characters with Tib. vowel signs.

2 Cf. Díez Macho 1954, p. 253-255, 259-262; Yeivin 1963b, p. 124-127.

3 Yeivin 1963b, p. 125.

4 As regards the Palestinian Aramaic ca. 600-900 we are lacking reliable evidence in this respect; cf. however, the Aramaic of Ma^clula in which the prefixes [ma-] and [ta-] have superseded entirely the types with [i] in the Aramaic vocabulary while [i] is preserved in prefixes of Arabic loan-words (Spitaler 1938, p. 84 § 74, p. 87 § 81), nevertheless [i] is the regular prefix vowel in the verbal forms of the simple stem (*idem*, p. 148 § 126c, p. 153).

8.7. Other Occurrences

All of the verbal occurrences are dealt with above, p. 180-186.

8.7.1. Tib. \$a\$ = Pal. \$i\$

ובטחים	TS 20:59, Ezek. 13:15	Cl. 3.
פצץ ¹	d 29 f. 17-20, Josh. 19:21	Cl. 7.
טנהדריון	d 41, 11r9	—

Two first occurrences represent obviously the same alternation which appears in the prefixes \$m-\$/\$t-\$ and still in living reading traditions of Mishnah, cf. [\$piqqahat\$] in Yemen, but [\$paqqahat\$] in Iraq; [\$dallû^cîm\$] in Yemen *contra* [\$dillû^cîm\$] in Iraq and Syria (both of them occur in Bab. punctuations);² for Bab. correspondences, see above, p. 33.

The original \$i\$ in טנהדריון³ would be the anticipated counterpart of the Greek ypsilon.⁴ In addition, it would be in accordance with the dissimilation tendency, since \$h\$ has an \$a\$ vowel. Why \$i\$ is corrected to \$ä\$, is not clear; it may be a contamination with the variant \$sänhädrīyyô^t\$ occurring in the Ms. Kaufman (Sanhedrin I,5). For the possible influence of the initial sibilant, see above, p. 129.

8.7.2. Tib. \$i\$ = Pal. \$a,â\$

Besides the occurrences in the nominal prefix \$m-\$ (possibly including מַתְכוּוֹרִין) the remaining cases are not connected with the problem of "attenuation" (cf. above, p. 139-141).

1 So according to the Pal. hands A and B; also the Pal.-Tib. hand D has vocalized the word with a Tib. \$i\$: \$piššes\$.

2 Cf. Morag 1957a, p. 10-11 (1972, p. 192-193), and above, p. 194-195.

3 Cf. above, p. 133, 139, below, p. 197.

4 Cf. Krauss 1898, p. 20.

8.7.3. Tib. \$ä\$ = Pal. \$a, i\$

בְּקֶצֶף	TS 20:54, Ps. 38:2	C1.3.
נִגְדָה	TS 20:54, Ps. 39:6	---
נִפְתּוּר ¹	d 29, f. 17-20, Josh. 15:9	C1.7.
נִפְתּוּר ²	--- Josh. 18:15	---

The segolate patterns are to be compared with those with a final laryngeal (above, 186-187) as well as the Bab. divergencies from the Tib. system regarding the vocalization of segolates (cf. above, p. 33) and the Pal.-Tib. exceptions (cf. above, p. 137). As for נִפְתּוּר we have even in the very same text proofs for the vacillation of the initial vowel: both occurrences are vocalized by the Pal.-Tib.punctuator with Tib. \$a\$ in contrast to the true Tib. \$ä\$; \$a\$ occurs also in the Septuagint and the Onomastica sacra (cf. above, p. 137). As proposed above (p. 137-138 & fn.1), it is not unlikely that the Tib. \$ä\$ in certain cases³ is a grapheme of compromise employed in order to escape the choice between \$a\$ and \$i\$ demanded by different reading habits. Needless to say, this may also bear upon verbal prefixes of *verba primae laryngalis* (cf. above, p. 180-186).

8.7.4. Pal. \$ä,e\$ = Tib. \$a,i\$

The relation of these divergences to the "attenuation" is difficult to evaluate. Among the occurrences Tib. \$a\$ = Pal. \$ä\$ (above, p.126-129), the words, יִחַד , מֵאֲרָבֶּה , בְּאֵהָבָה , and שֹׁבֵחַ could be connected with the dissimilatory tendency which in the Tib. punctuations obviously calls forth \$i\$ vowels in the syllables followed by a stressed \$a, ä\$.⁴ As we have seen, the sequence \$a\$-\$a\$ *pro* the Tib. \$i\$-\$ä, a\$ is a rather normal phenomenon in Josephus and Jerome. In the Pal. punctuation, however, there seems to be no case of this type deviating from the Tib. system with the exception of a number of \$m\$-\$ prefixes (cf. above, p.196-7). Thus it is not entirely unlikely that avoidance of two \$a\$'s following each other was occasionally more common in the Pal. than in the Tib. system, cf. also above, p. 195-196. However, the evidence is not convincing.⁵

1 The Pal. hand A.

2 The Pal. hand B.

3 The punctuations כִּי אֵלֵי and וְאֵלֵינוּ (above, p. 132-133) may be mentioned also in this context.

4 Cf. above, p. 17-19, 196.

5 For the effect of the laryngeals, see above, p.187-188; of the sibilants, above, p. 129.

As for the Pal. \$ä,e\$ counterparts of the Tib. \$i\$ (cf. above, p.141-146) it is worthy of note that all of the segolates occurring in the lists (דר , זכר , ישע) are ⁺qitl segolates. Excluding verbal forms which belong to a much earlier diachronical stage, the only occurrences which could be in connection with the "attenuation" are the words תהלתך , הלכות , and בִּירְכָתוֹ ; מִמְשַׁל , וּמִשְׁכַּנְתָּהּ , עֲנוּוֹתֶיךָ , הִדְרָתְךָ , and מְעַלְלֵיכֶם have been discussed above (p.128,188,190-191). As compared with the amount of other occurrences of this type, their number is rather small. It is probable that even these are due to the same phonetic tendency towards Pal. \$ä,e\$ which obviously is the main reason behind the entire group of divergences (cf. above, p.148-150), and have nothing to do with the problem of attenuation.

8.8. Summary

As was the case for the prefixes \$m-/\$t-\$, the intermediate stage of "attenuation", viz. punctuations with the Pal. signs \$ä,e\$ in forms traditionally associated with attenuation, appears very unreliable in Pal. punctuations. In comparison with those prefixes other divergences from the Tib. system are extremely few and besides the prefixes there is no certain occurrences of the sequence \$a\$-\$a\$ preserved against the Tib. punctuation. Taking into account the considerable number of the type \$sadda\$ found in Josephus and Jerome, we are obviously entitled to conclude that the (dissimilated?) variant¹ \$qitlâh\$ and those similar to that were accepted and established in the reading traditions reflected by the Pal. and Tib. punctuations earlier and more decisively than is the case for the prefixes \$m-/\$t-\$.

Excluding the prefixes \$m-/\$t-\$ in which \$a\$ is the normal vowel, the "unattenuated" forms occur in Bab. punctuation without morphological or phonetical consistency (cf. above, p. 32 - 34). In Tib.punctuation the forms which vary as regards the attenuation are primarily nouns with the

1 As for the unlikelihood of the attenuation in the period between Jerome and the punctuations, the arguments presented above (p. 82 - 83, 192) are valid also regarding these patterns. Thus the only plausible explanation seems to be that referring to the existence of alternative realizations, see above, p. 194-195.

prefix $\$m-\$$.¹ Both of these facts corroborate the previous conclusions concerning different dates for the approval of the "attenuated" variants.

Because we are not able to refer to an external factor producing attenuation phenomena in the liturgical reading traditions of Hebrew, the variation is to be dated back to the period when Hebrew still was a spoken language.² Whether the distribution of the "attenuated" and "unattenuated" variants was geographical or sociological, remains unsolved.

Most consistently the attenuation appears in certain verbal prefixes in Hebrew and in Aramaic, and it is attested as early as in the el-Amarna letters. Irrespective of whether this verbal "attenuation" was the factor giving impetus to similar development of other patterns,³ later a new change ⁺a>i took place in the non-verbal forms of certain dialects, either geographical or social, of spoken Hebrew. The effect of /y/ and adjacent sibilants as well as a tendency towards dissimilation may have been factors favouring the change; on the other hand, the laryngeals had a preservative influence upon the open timbres.

The "attenuated" and "unattenuated" variants of non-verbal forms were preserved in reading traditions after the death of Hebrew as a vernacular. However, the choice between them was never performed consistently;⁴ the greatest hesitation prevailed as regards the vowels of the prefixes $\$m-\$/\$t-\$$. Among the reading traditions known to us, those reflected in the transcriptions of Josephus and Jerome, the Babylonian, and especially the Samaritan were inclined to give the preference to the "unattenuated" variants, while the Palestinian and Tiberian traditions favoured (perhaps as an imagined antagonism against Aramaic features) "attenuated" forms; in the Tib. punctuation the alternation may have called forth $\$ä\$$ graphemes as a solution by compromise.⁵

1 Cf. Bergsträsser 1918, p. 146-147 b, 148-149 g.

2 Cf. above, p. 192-195.

3 The verbal attenuation may have penetrated in some traditions even into prefixes of $hif^c il$, cf. above, p. 58, 66.
For the prefixes $\$m-\$/\$t-\$$ in this respect, see above, p. 194 .

4 For the Tib. exceptional "unattenuated" punctuations, see Blake 1950, p. 78, §3.

5 As factors interfering the choice and crystallization may be mentioned (1) the difference of vowels occurring in pronominal suffixes added to nouns disturbing the effect of dissimilation, (2) the weakness of the phonemic opposition between /a/ and /i/ in the Tib. system, at least (cf. above, p. 25-26), (3) the influence of consonantal surroundings, and (4) the effects of Systemzwang and analogies.

9. SUMMARY

One of the most peculiar features of the Pal. punctuations differing from the Tib. and Bab. systems is their "Sephardic" nature, i.e. the variation of $\$a\$$ with $\$â\$$ and $\$ä\$$ with $\$e\$$. On the basis of the preliminary examination (cf. above, p. 102 - 125) I have concluded that the Pal. grapheme system with seven qualitative vowel signs goes back to reading traditions the vocalism of which had an equal number of vowel phonemes, i.e. a system resembling that of the Tib. Provided that the Pal. texts originate from Palestine, it is probable that these traditions are to be found in the northern parts of the area where the development of Aramaic vernaculars was able to produce this kind of vocalism in reading traditions of Hebrew by its influence (cf. above, p. 117- 123). The development referred to is the change of quantitative oppositions into qualitative ones ($a/\bar{a} > a/\hat{a}$, $e/\bar{e} > \hat{e}/e$), a phenomenon which took place in Aramaic dialects of the Northern Palestine (ca. 700?) (cf. above, p. 109 - 114).

As for the areas south of Galilee, we do not possess evidence for a similar change in Aramaic or in Hebrew; on the contrary the transcriptions from the Septuagint until Jerome testify in favour of the preservation of the quantitative distinctions in the reading traditions of Hebrew, at least; the statement of Jerome concerning "extensione et brevitate syllabae" is highly significant in this respect (cf. above, p. 104 - 107, 109- 114).

Among the Jewish Palestinian Aramaic texts punctuated with Pal. and Tib. vowel signs the majority of them discloses a "Sephardic" system of vowels (cf. above, p. 111- 112). According to my opinion, the "Sephardic" Pal. punctuations reflect reading traditions influenced by these kinds of Aramaic dialects and originate consequently from same geographical areas, i.e. from Palestine south of Galilee (cf. above, p. 111- 114, 119 - 121).¹ The most probable factor calling forth the "Sephardicized" type of Aramaic (and, as a consequence, of Hebrew) is the penetration of the Greek vowel

¹ For a similar boundary of dialects proposed by Ginzberg for the distribution of the /' / and /n / prefixes in the impf. forms of the first person sg. in Palestinian Aramaic, see above, p. 113-114.

system into Semitic vernaculars;¹ this view is well compatible with the areal distribution proposed above (cf. above, p. 125).

It is unlikely that the development of the quantitative oppositions into the qualitative ones ($\bar{a}/a > \acute{a}/a$ etc.) took place in all Aramaic dialects of Palestine earlier than the "Sephardicization" occurring in the southern vernaculars. Even less unlikely is the penetration of this hypothetical change into reading traditions of a liturgical language, Hebrew, followed soon by another infiltration, viz. the "Sephardicizing" effect of Aramaic; the rapid approval of features peculiar to vernaculars is contradictory to what is known to us of the conservative nature of liturgical languages in general and their vocalism in particular (cf. above, p. 82- 83, 118- 119). More probably the quantitative distinctions of the "Sephardic" dialects were lost due to the influence of Greek and were not replaced by new distinctions; this change was gradually adopted also by the readers of Hebrew speaking such kinds of Aramaic (cf. above, p.119-121).

The change occurring in these reading traditions of Hebrew revealed its presence in the punctuations. Since there was only one sound corresponding to the "Northern" Pal. sign (and sounds) \$a\$ and \$a\acute{a}\$ and similarly one for \$ä\$ and \$e\$ in the "Sephardicized" reading traditions, the punctuators were not able to keep them distinct. An exact parallel is the employment of the Tib. signs which may be observed in the true Sephardic manuscripts. As the Sephardic reading habits are reflected by the Sephardic "mistakes" of the punctuators to different degrees, all of the "Southern" Pal. punctuators as well did not make the same degree of effort to follow models of punctuation which, although respected, were superfluous from their viewpoint. According to my opinion most of the Pal. punctuations known to us belong to "Sephardicized" type while only some of the texts of Revell's class 1 represent "Northern" reading traditions. In respect of the division of the Pal. punctuations into two

1 Among the Jews of Palestine who used Greek as their spoken language the influence of the Greek sound system was able, of course, to reach Hebrew reading traditions directly.

groups my proposal thus resembles that of REVELL (1970b, p. 109-121), the classification of punctuations into groups is, however, different (cf. above, p. 122 - 124).

As for the dependence of the Sephardic reading traditions from Pal. traditions, especially from the "Sephardicized" type, it is doubtful whether these traditions had been able to expand into the enormous area from Spain to India. Taking into account the fact that the vernaculars spoken in the Mediterranean area have not preserved quantity oppositions, we could conclude that the Sephardic traditions have developed under the impact of vernaculars directly from reading traditions in which quantity oppositions were not replaced by qualitative ones; this development and its results would thus be parallel with those of the "Sephardicized" Pal. reading traditions and punctuations. This implies that these Pal. traditions would in fact be just one of the Sephardic sub-traditions, all of them with smaller peculiarities of their own until the approval of the Tib. punctuation levelled most of the local differences (cf. above, p. 114 - 117).

9.1. The Peculiarities Occurring in the Closed Unstressed

Syllables of the Pal. Punctuations as Compared with Their Tib. Counterparts

1) The great majority of the Pal. \$ä,e\$ signs as the counterpart of the Tib. \$a\$ occur in the neighbourhood of laryngeal consonants. The phenomenon obviously has nothing to do with the notorious theory of the "weakening" of the laryngeals. As a matter of fact, they originate in two opposite tendencies; the assimilative, i.e. opening, influence of the laryngeals and the Systemzwang, viz. the adaptation, partly or complete, to parallel regular patterns; as a rule the latter tendency was more prominent in the Pal. traditions than in the Tib. punctuation (cf. above, p.126-129, 179-189, below, § 4).

2) The factor calling forth Pal. \$i\$ counterparts of the Tib. \$a\$ is connected with the "attenuation". The discrepancy appears mainly in the vocalization of the prefixes \$m-\$ and \$t-\$. For reasons presented above (p.189-199) it is probable that the patterns either with *ma-/ta-* or

mi-/ti- had for a long time existed side by side as alternative forms which were able to find their way irregularly into different traditions and punctuations (cf. also above, p. 129 -130, below § 5).

3) There are a few occurrences in which the Pal. counterpart of the Tib. \$a\$ is \$o\$. All of them are either preceded or followed by \$w\$. On the basis of this observation and similar occurrences in other positions, it is suggested that this Pal. \$o\$ has its origin in the assimilative effect of the labial. The phenomenon is restricted to the biblical text TS 20:53+ (above, p. 130 - 131).

4) The normal counterpart of the Tib. \$ä\$ is the Pal. \$ä,e\$. Occasionally it is replaced by the Pal. \$a,â\$ or \$i\$. These cases are due to (1) the laryngeal surroundings (cf. above, § 1), (2) the vacillating indication of the vowels occurring in word final unstressed closed syllables, in particular in those of the segolate patterns (cf. also below, § 6); in addition to these there are a number of occurrences in which the Tib. \$ä\$ is more problematic (e.g. \$nägdô\$) than its Pal. counterparts (cf. above, p. 132 - 138).

5) The Pal. \$a,â\$ counterparts of the Tib. \$i\$ are of two kinds. First, they represent the morphophonemical variant \$tḥāyāh\$ instead of the Tib. type \$tḥiyyāh\$; second, the discrepancy originates from the alternation of the "attenuated" and "unattenuated" patterns, especially among the prefixes \$m-\$ and \$t-\$ (cf. above, § 2). In addition, there are in the biblical texts, at least, cases which are explained as morphological variants deviating from the Tib. text (cf. above, p. 138 - 141).

6) Almost half of the occurrences in which the counterpart of the Tib. \$i\$ is the Pal. \$ä,e\$ are followed by a (Tib.) doubled consonant. Otherwise there are cases of the Tib. word final closed cluster \$-ayiC\$ which obviously are connected with the indication of the vowels in the parallel position, in general; the occurrences mainly go back to two texts d41 and d29 (cf. above, § 4(2), and p.144 -145). In the remaining cases the Pal. \$ä,e\$ is followed by a sibilant almost in the third of the occurrences. The first and third types of change are obviously due to the influence of Palestinian Aramaic in which there was a strong tendency to transform

the[i] vowels occurring in the closed unstressed syllables into more opened and probably centralized timbres. Lacking a more appropriate sign these timbres were indicated with \$ä,e\$ (cf. below. § 7,8). As in certain other sources, the influence reveals its presence most clearly before doubled consonants in the Pal. texts, in addition to them, the influence seems to have easily penetrated into syllables closed with a sibilant. The Aramaic sound shift may be a part of a corresponding change taking place irrespective of positions, because there is even a Pal. text (d 63 f. 98+) in which the \$i\$ and \$ä,e\$ are used indiscriminately in all positions.

Still, a considerable number of this type of discrepancy may be the result of scribal obstacles to writing the dots exactly one on top of the other; on the other hand it is unlikely that the punctuators encountered this problem with the exception of surroundings such as those mentioned above (cf. p. 141-150).

7) The normal counterpart of the Tib. \$â\$ is the Pal. \$o\$. Besides it, there occur words with \$a,â\$ and \$i,u,e\$. As argued above (p. 118, 123-124) it is likely that the Pal. \$â\$ represents in some texts of the class 1 a back vowel. In other texts it obviously was realized as an open vowel resembling [a]. More than half of the \$a,â\$ punctuations occur in the remaining text classes in two texts, TS H16:9+ and TS H16:3+. In addition, all but four of the \$â,a\$ occurrences are to be divided into three types: (1) *qutl* patterns of roots with a medial laryngeal, (2) imperative and *infinitivus constructus* forms of the stem *qal* with suffixes attached, and (3) a few nouns of the pattern *qutl*. As for the first group, it seems that the alternative patterns with \$â,a\$ are more or less free variants with a considerably long tradition behind; of the three types this is the most common (40%). For the other two types there is evidence of a tendency to change back vowels to open or even front qualities. Since the phonemic status of the initial vowel of the infinitive and imperative forms mentioned above was particularly unstable, the change was in a position to penetrate into these patterns more than into other forms of *qutl*; certain nouns of the pattern *qutl* apparently showed a greater tendency to follow that change, than others. The phenomenon thus seems to be partly lexical.

The occasional counterparts \$u,i,e\$ reflect the tendency towards closed front vowels on the one hand, and the unstable character of /u/ on the other. Thus we could suppose that the actual realization of the back vowels occurring in closed unstressed syllables was centralized (cf. above, § 6, and below, § 8).

For /a/ there is no similar evidence. The centralization of other vowels in contrast to /a/ would be in accordance with what is known about certain other Semitic languages (Modern Arabic, Ethiopian) (cf. above, p. 151-171, and below, § 8).

8) The Pal. \$o\$ occurs instead of the Tib. \$u\$ mainly before a Tib. doubled consonant which, however, is due to the Tib. system making almost sole use of \$u\$ in this position. These occurrences are explained as originating in Aramaic influence, since Aramaic [u] had as a rule gone over to a probably opened and centralized timbre marked as \$o,â\$ (cf. above, § 6): The centralization seems to appear also in the form of some \$i\$ counterparts of the Pal. texts (cf. above, § 7). Parallel to what is proposed above regarding the counterparts of the Tib. \$i\$ (§ 6), the development of /u/ towards more open realizations seems to be a phenomenon appearing also in other positions in Aramaic and in reading traditions of Hebrew. Thus among Pal. punctuations there is no \$u\$ in the texts TS 20:53+ and TS 20:59, but it is replaced by \$o\$; the development is most perceptible in the Samaritan reading traditions. The trends of development having effect upon /u/ are, however, more firmly rooted and consequently to be considered as older than those observed as regards /i/. For the contrast with /a/, see above, § 7. Cf. above, p. 171-179.

APPENDIX

Remarks upon the Rise of the Tiberian Punctuation

We have seen above in the transcriptions of Josephus and Jerome that there are phenomena which hardly can be considered to represent earlier stages in the development culminating in the Pal. and Tib. punctuations. I refer here mainly to the "attenuation", but the treatment of the back vowels is also worth noticing in this context. Other prominent divergences of this type are the personal endings of the 2nd p. masc. in verbal pf. forms (as a rule $\$th\$$ in the transcriptions *contra* $\$t\grave{a}\$$ in the Tib. and Pal. punctuations) and the corresponding pronominal suffix ($\$h\$/\$ch\$$ *contra* $\$k\grave{a}\$$).¹

As the opposite poles in explaining the differences between the Tib. punctuation and other sources of Hebrew the theories of KAHLE and KUTSCHER should be considered. In a nutshell these theories consist of the following views. For Kahle the non-Tib. evidence of Hebrew, particularly the transcriptions, is the reliable source revealing the genuine character of the Hebrew language, while the Tib. punctuation is largely based upon theoretical considerations and pseudo-archaizing restitutions which the Masoretes (particularly the family of Ben Asher) following the model of the Qoran vocalization transplanted upon former oral reading traditions.²

Contrary to that, Kutscher distinguishes two categories in the history of Hebrew; the standard which was used in the synagogical reading of biblical texts and the sub-standardic "dialect" influenced by vernaculars (Mishnaic Hebrew, Aramaic) and later trends of development. The

1 For details, see Ben-Ḥayyim 1954, p. 13-64, according to him the endings without the final vowel are of Aramaic origin.

2 For details, see Kahle 1959, p. 51-188, where Kahle presents his opinions in the most detailed form. For critics, see esp. Goshen-Gottstein 1963.

term 'standard' is in fact used by Kutscher almost as a synonyme of the (Tib.) Masoretic Hebrew¹ which implies that phenomena deviating from the Tib. punctuations are classified as sub-standardic features.²

As mentioned, these opinions represent two extreme views in modern Hebrew studies. Beside them there are, of course, a number of views which may be characterized as mediatory, referring to differences between the schools of the Masoretes and the obstacles encountered by them in indicating reading traditions graphically.³ Without going into details of various explanations for the Tib. punctuation it may be useful to deal with certain topics raised by the examinations above on one hand and presented by earlier studies on the other.

1. The Vernaculars Spoken in Palestine

It is a well known fact that there is no mention of vocalization and accentuation signs in either of the Talmuds nor in early *midrašim*. This implies that the *post quem date* for the institution of these signs is ca. 600 A.D.⁴

Biblical Hebrew obviously ceased to be a spoken language during the last centuries B.C.⁵ Consequently, the biblical texts were transmitted as oral traditions about a thousand of years, at least as far as the vocalism is concerned.

As stated above (p. 82-3) the vernaculars have an evident tendency to adapt liturgical reading traditions to their sound system, particularly

1 Cf. e.g. יש שהוא (= היירונימוס) רושם במקומות שונים תעתיקים שונים של אותה מלה, ומהן אחת הצורות זהה עם קריאת בעלי המסורה, ומותר להניח אפוא, כי היא בחינת קריאת סטנדרד, ...

Kutscher 1959, p. 46.

2 For details, see Kutscher 1959, p. 35, 45-52; idem 1965, p. 42-45; cf. also above, p. 51-52.

3 Cf. Revell 1970a, p. 80-82; Goshen-Gottstein 1963, esp. p. 94; Morag 1972a; idem 1974, p. 74-77; Wernberg-Møller 1974; the references mentioned there.

4 See Dotan 1971b, c. 1416-1417.

5 Kutscher 1971b, c. 1584; Blau 1976, p. 1: "after the first exile."

to strike out distinctions unfamiliar to a given vernacular.¹

Unfortunately we are badly informed of vowel systems of the vernaculars spoken in Palestine during this crucial period. Nevertheless, we know that there was not one, but rather several vernaculars in Palestine. In addition, biblical Hebrew was neither synchronically nor diachronically a uniform language, but there existed dialects and internal phenomena of development as there do in every living language; however, these differences appear but sporadically in the texts preserved for us.² Corresponding divergences also prevailed in the later vernaculars: Aramaic, Mishnaic Hebrew, and Greek. In addition to the case of Peter at the charcoal fire ca. 30 A.D.³ we are acquainted with three literary Palestinian Aramaic dialects: Jewish (Galilean),⁴ Palestinian Syriac (Christian),⁵ and Samaritan;⁶ all of them with their history of development obviously going back to dialects of Official and Middle Aramaic.⁷ Aramaic texts representing obsolete dialects (Ezra, Daniel, various targums) were also transmitted orally.⁸ It seems that there were also dialectical differences in Mishnaic Hebrew,⁹ and what is more significant, Aramaic replaced it even in Judea already about 200 A.D.¹⁰ As for Greek, we are not aware of different dialects in Palestine; however, the great change into Koine and Medieval Greek took place exactly during the period under consideration.¹¹

-
- 1 Cf. the statement of al-Qirqisani as regards the Aramaized nature of the Bab. reading tradition: *تنطقت قراوتهم*, see Morag 1963, p. 96 & fn. 3.
- 2 See Bergsträsser 1918, p. 11-12.
- 3 Cf. above, p. 111, fn. 1.
- 4 For its sub-dialects, see Kutscher 1971a, c. 270, and above, p. 111-114.
- 5 Cf. above, p. 47 and fn. 2; for the possibility of two sub-dialects, see Bar-Asher 1975, p. 338-341.
- 6 For these dialects in general and their characteristic features, see Kutscher 1971a, c. 269-275.
- 7 Aramaic penetrated into Palestine not later than in the 8th century B.C.; see Wagner 1966, p. 4-7; Kutscher 1971a, c. 266-267.
- 8 Cf. Kutscher 1971a, c. 266-268.
- 9 See Kutscher 1971c, c. 1606-1607.
- 10 See idem, c. 1591-1593.
- 11 See Debrunner-Scherer 1969, p. 97-125.

The Arab conquest of Palestine in the 630's and the rapid spreading of the Arabic language¹ again brought forth an important change in the linguistic circumstances of Jewish Palestine before the completion of the Tib. punctuation of the Bible in the first half of the 10th century.

2. Different Reading Traditions of Hebrew

The consonant text of the Bible is a matter of dispute in numerous passages of the Talmud and *midrašim*,² but the first statements concerning vocalism occur in the masoretic literature.³ The consonant text which involved differences of opinion was, however, visible, and indicated with consonant signs. As for the invisible vocalism, it is plausible to assume that the differences and even variation were considerably greater.

An evident proof for the existence of different regional and even individual reading traditions regarding the vocalism is preserved by Jerome. Dealing with the Hebrew name $\$šim\$$ he says: "Nec refert utrum Salem an Salim nominetur, cum vocalibus in medio litteris perraro utantur Hebraei, et pro voluntate lectorum ac varietate regionum eadem verba diversis sonis atque accentibus proferantur."⁴

-
- 1 According to Dalman (1894, p.33) "etwa seit dem Jahre 800 trat das Arabische sowohl in Babylonien als in Palästina bei den Juden fast völlig an die Stelle des Aramäischen".
 - 2 See Talmon 1962, p. 14-15, 22-27; Yeivin 1976, p. 49, 94-96, 205. Lieberman 1950, p. 20-37.
 - 3 Revell 1970a, p. 80 & fn. 104 ("It is unlikely that before this time (= the end of the third century A.D.), or even for some time after, any particular value was attached to an exact formal pronunciation of vowel sounds.").
 - 4 "It does not matter whether it is called Salem or Salim, because the vowel letters (=matres lectionis) are used by Jews very rarely in medial positions and same words are realized with different (vowel) sounds and accents in accordance with the will of readers and regional distinctions." Epist. 73 ad Evangelium, n. 8, CSEL 55, p.21.
The wording of PL (22, c. 681) "lectorum, ac varietate, regionem eadem verba..." is an apparent mistake; it does not even occur in the critical apparatus of CSEL.

Since the biblical texts found among the Dead Sea Scrolls deviate in different degrees from the Tib. consonant text, it would be unlikely to suggest that there was but one "vulgar dialect of Qumran" for Biblical Hebrew in contrast to a kind of orthodox standard.¹

Most explicitly the great variety of reading traditions is revealed by different kinds of punctuation: there are three principal Bab. systems of punctuation² which disclose five types of pronunciation,³ the biblical Pal. punctuations are divided into four classes,⁴ the traditions reflected by the Pal.-Tib. punctuations seem to be rather heterogenous compared both mutually and with other traditions,⁵ and in the Tib. system there are the differences between the schools of Ben Asher and Ben Naphtali, at least;⁶ the Sam. reading tradition deviates materially from other traditions; in addition the transcriptions (Septuagint, Josephus, Aquila, Symmachus, Theodotion, Hexapla, Jerome) are neither identical one with another nor similar to a certain tradition reflected by punctuations.

As for the matters connected with the *recitation* of the biblical texts the differences obviously were still greater; besides other evidence⁷ this appears in *Kitāb 'al-Hulaf* in which the great majority of the disagreements enumerated existing between Ben Asher and Ben Naphtali are

-
- 1 For the characteristic features, see Kutscher 1971b, c.1585-1590; see also Lieberman 1950, p. 20-27; Talmon 1964, p. 97-99; Cross 1966, p. 91-93.
 - 2 In addition, there are several mixed systems; for details, see Yeivin 1968a, p. 43-62; idem 1973a, p. 14-16.
 - 3 The most important of them are the ancient (^cattîq), the intermediate (bênônî), and the late (şa^cîr), for details, see Yeivin 1968a, p. 63-68; idem 1973a, p. 22-25.
 - 4 For details, see Revell 1970b. The non-biblical Pal. punctuations disclose 12 classes; some of them may, however, be due to graphical differences in indicating similar reading traditions; contrary to that the biblical classes clearly deviate from each other, see idem, p. 73-96.
 - 5 Cf. Díez-Macho 1963.
 - 6 See below, p. 218, fn. 2.
 - 7 Cf. Díez Macho 1959; Revell 1970b, p. 96-98; Dotan 1971b, c. 1412-1413, 1437-1439, 1445, 1453-1454, 1463, 1470-1471; Yeivin 1976, p. 109-111; Hidayat^t 'al-qāri' (ed. Levy 1936), p. XXXIV-XXXV (& p. 29⁺ - 30⁺), obviously upon differences in melodies ('alḥan) which vary strongly between modern living reading traditions (cf. Yeivin 1976, p. 110).

concerned with the accentuation.¹

3. *The relationship between the consonant text of Bible and its reading and punctuation traditions is by no means unproblematic. The discrepancy is revealed most conspicuously by the $kt\hat{t}b$ - $qr\hat{e}$ differences.*²

Every student of biblical Hebrew is aware of numerous passages and words the proper understanding of which remains obscure. Nevertheless these parts are as a rule vocalized consistently in all of the sources known to us (including even the Dead Sea Scrolls as far as it is possible to draw conclusions from the *plene* spellings). Taking into account the fates of Palestine during the period of the Second Temple and until the stabilization of the patriarchate in Galilee in the latter half of the 2nd century A.D. as well as the variety of religious and leading groups, partly successive, partly contending one with another, we may surmise that the text was not transmitted and interpreted simultaneously by the same authorities.³

Similarly, there are grounds for asking whether the only group which survived the lost Roman wars (66-74 and 132-135) and which became the nucleus of later Rabbinic Judaism, i.e. the Pharisees, originating from lower social classes had become versed in all the details of Biblical Hebrew as well as in the traditions of textual interpretation.⁴

A third question refers to the crystallization of the consonant text of the Old Testament. As mentioned above (p. 209-210), in the last centuries of the Second Temple there were several text forms in circulation. The editorial activity in preparing a normative text was completed in principle during the first century A.D. The methods applied in

1 For details, see Lipschütz 1964, p. 16-22; Yeivin 1976, p.99-100. The accentuation signs are obviously older than the diacritics and vowel signs, cf. Dotan 1971b, c.1412-1413, 1437-1439,1470-1471; Morag 1974, p. 50-52.

2 For similar deviations and details, see Dotan 1971b, c. 1409-1410, 1419-1421; Yeivin 1976, p.41-51; Sperber 1966, p. 493-506.

3 This and the following assumption concerning interruptions of the tradition have been presented by Prof. J. Aro in his unpublished paper, 1974.

4 For the sociolinguistic aspects regarding the rise of Mishnaic Hebrew and Pharisaism, a case parallel to that proposed here, see Rabin 1958, p. 149-153, 160-161.

this work are unknown.¹ In addition, and this is more important, the *ktîb* - *qrê* divergences testify that the text and the oral reading traditions used in the following centuries, at least, were not quite compatible. The occurrences of *qrê* indicate cases where the reading traditions were irreconcilable with the approved consonant text;² the amount of "invisible" occurrences of *qrê* which were incorporated without traces in the consonant text tolerating various realizations³ may thus be considerable.⁴

1 For the problems of the history of the biblical consonant text, see esp. Cross-Talmon 1976.

2 There is no fixed number of occurrences, since the mss. are not uniform in their method to indicate these divergences; the figures vary between 800 and 1300/1500, see Yeivin 1976, p. 45.

3 Cf. the Pal. and Bab. punctuations added to the same consonant text employed by the Tib. punctuators.

4 Cf. above, fn. 1.

In the first place this allusion bears upon the vocalization of the pronominal endings $\$-k\$\$ and $\$-t\$\$ (cf. above, p. 51-2, 206). As regards their origin the explanation of Ben-Ḥayyim (the allomorphs without final vowel are due to the influence of Aramaic and there is no genetic connection between the types $\$-k\$\$ and $\$-âk\$\$ within the Hebrew language, 1954, p. 51-64) may be correct. As for their distribution, however, I am not convinced that the forms with a final vowel *always* have been a part and parcel of reading traditions for biblical texts, while $\$-âk\$\$ etc. was a variant characteristic of (spoken) Mishnaic Hebrew, non-biblical texts, and vulgar reading of Bible (see idem, p. 59-60, Kutscher e.g. 1965, p. 43-44).

I suppose that the scrutiny of the transcriptions of Jerome performed above has gone to show that the reading tradition reflected there is by no means more vulgar than is the case of punctuations; the examination of the counterparts of the Tib. reduced vowels will - as far as I see - yield even more convincing results in this respect. Nevertheless, the vowelless endings are a normal phenomenon in Jerome (as well as in other transcriptions, cf. Ben-Ḥayyim 1954, p. 22-27, 43-46). This fact causes me to surmise that the distribution between the allomorphs was in the time of Jerome still more dependent on regional differences of reading traditions than on differences between biblical and other texts (cf. the Sam. tradition: [-ă/ăk], but [-ta], Ben-Ḥayyim, idem, p. 37-39, 48). The Dead Sea Scrolls bear irreputable evidence for the existence of final vowel in these endings ($\$-kh\$\$, $\$-th\$\$, see Goshen-Gottstein 1958, p. 120) on one hand; the spellings $\$-kmh\$\$, $\$-mh\$\$, $\$-ky\$\$, and $\$-h'\$\$ (idem, p. 121-123) indicate, on the other hand, that variable forms of pronominal suffixes were rather numerous. Thus it is by no means certain that the normally *defective* spelling of the suffixes $\$-k\$\$ and $\$-t\$\$ in the Masoretic consonant text and their realization with a final vowel originally go back to the same reading tradition.

In this context I would like to recall the *defective* spellings of the personal endings pl. 3. & 2. fem. (e.g. $\$tihyânâ\$\$, $\$timšä'nâ\$\$, cf. Bergsträsser 1926-29, p. 19-20) as well as the habit of the people of Jerusalem to drop $\$h\$\$ in words ירושלִימָה , צפונה ,

4. Inconsistencies

I have above (§ 2) referred to the great number of differing reading traditions reflected by punctuations. In addition to that, the traditions are not internally consistent. The inconsistency appears on three levels: (1) in comparison with what would be anticipated on the basis of historical linguistics, (2) between different mss. of the same type or class of punctuation, and (3) as deviating punctuations of identical patterns or even same words inside one and same ms.; since the Tib. punctuation has reached us in a very polished form, the second group occurs only slightly in Tib. mss.¹ The inconsistencies have been one of the main arguments put forth by scholars who consider the Tib. punctuation to be of artificial and doubtful nature,² on the other hand, cf. BLAU (1971, c. 1571): "It is difficult to establish whether they (= inconsistencies) are due to the mixture of readings of different subschools(...), to chance, or to the desire to be over-accurate."

הַתְּנִיחַ (Pal. Talmud, Megillah I, 9, 71d, cf. Talmon 1962, p. 22-25; Sperber 1966, p. 518-519; Siegel 1975, p. 29 & fn. 42; the reference cannot be only to the indiscriminate use of medial letter forms also in final positions). All of the phenomena mentioned here could be associated in a conception about unstable nature of unstressed final *anceps* vowels.

- 1 Differences of this group in Tib. mss. apply mostly to the employment of *ḥatef* and *ga^cyah* signs. Curiously enough, the famous Aleppo Codex has a pronounced tendency to make use of $\$ā\$$ pro $\$ē\$$ occurring in other most reliable biblical mss. (see Yeivin 1968b, p. 22-49); other peculiarities of this ms. are the employment of "ḥatef ḥireq" occurring only in the Aleppo Codex (see Morag 1972, p. 110-111), the use of $\$ā\$$ pro "qameṣ ḥatuf" (see Yeivin 1968b, p. 19-21, and above, p. 160, fn.3) and the distinction made between the signs of a single consonantal /w/ and *dageš forte* occurring in $\$w\$$ ($\aleph = [w]$, but $\aleph = [ww]$, see Yeivin 1968b, p. 49, 64-66).
For *ga^cyah* signs in the Aleppo Codex and other mss., see Yeivin 1976, p. 188-190, 194-195.
The Cairo Codex of the Prophets punctuated by Moshe Ben Asher (!) is the biblical ms. which most of all known to us is in accordance with the peculiarities accounted to the Ben Naphtali tradition (Yeivin 1976, p. 17-18).
For inconsistencies in general, see Nöldeke 1912; Delitzsch 1920, p. 60-80; Morag 1972.
- 2 See e.g. Sperber 1966, esp. p. 414-421, 454-458; Meyer 1966, p. 82-83.

To sum up: I have here referred first to the variety of vernaculars spoken in Palestine and then to the evidence concerning differences between reading traditions of the dead liturgical language, Hebrew. In my opinion the differences mainly go back to the assimilative effect of the sound systems of vernaculars. As is known, we are very poorly informed about the development of Tib. punctuation. Without positive proofs I cannot believe that a given tradition was able to avert the impact of external factors to a degree superior to that of all the others, that this tradition gained the most effective graphical notation, i.e. the Tib. punctuation, and that this tradition, due to its purity and prestige, was soon admitted even by the proud Bab. congregations to be the most genuine reading tradition "in which God spoken to his prophets".¹

5. The Stabilization of Punctuations

The inconsequencies and the rapid expansion of Tib. tradition everywhere could provide us with some clues as to the mysteries of the Tib. punctuation.

The punctuation activity obviously derived its origins from a need to make the realization of certain difficult words or forms unambiguous.² A larger employment of vowel and diacritical signs called forth problems involved in phonemical and phonetical interpretation of the reading tradition.

MORAG (1962, p. 17-44, 61-76) has demonstrated that while the punctuation systems of Hebrew are in principle phonemic, the tendency to denote also

1 For the spreading into East: al-Qirqisani, Kitāb 'al-'Anwār wa-'l-Maraqib (written in 937, ed. Nemoj 1939), p. 140. Cf. also Klar 1943, p. 37-38; idem 1954, p. 327-328, 45-46.

2 Cf. Morag 1968a, c. 837-840, 854 § 5.

That the punctuation systems of Syriac have given an impetus to the rise of Hebrew punctuations seems to be now a widely accepted opinion, cf. Morag 1968a, c. 839-840, 846; Meyer 1966, p. 53; Morag 1974, p. 51-53; Blau 1976, p. 8; cf. however, Dotan 1971b, c. 1415-1416.

non-phonemic entities as well is greater than in the vocalization systems of Syriac and Arabic. The difference derives its origin from attempts to indicate respected reading traditions of a *dead* liturgical language as correctly as possible in order to preserve the realization of the text unchanged in the future; Arabic and Syriac were living languages and thus the phonemic vocalization was sufficient (*idem*, p. 63-69).

We may ask, however, whether the punctuators of Hebrew were completely aware of the difference between phonemes and allophones on one hand, and the boundaries between various phonemes on the other. Living languages provide plenty of material for a kind of minimal pair analysis which is capable of producing a rather successful phonemic system of spelling as demonstrated e.g. by Greek and Latin. A corresponding analysis of liturgical languages lacking the normal message function is a much more complicated task. The employment of the §å§ sign before /w/ in cases as §mâwät§, §šâw'§, §bânâ(y)w§ in the Tib. and partly also in other punctuations (cf. above, p. 131) as well as the problematic nature of the Tib. §ä§¹ could be referred to as examples for a confusion of phonemic and phonetic principles.

The differences between the ancient (^Cattîq) and intermediate (bênônî) stages of the Bab. punctuation² make evident the struggle for systematization and stabilization of punctuations into unambiguous reflections of reading traditions. The most extreme phenomena upon this line of development are the Bab. compound systems³ and the peculiar Pal.-Tib. punctuation of Codex Reuchlinianus;⁴ the intention of these innovations was obviously, however, to make the realization of punctuations more automatic and independent of the corresponding oral tradition.⁵

1 Cf. above, p. 25-6; Morag 1962, p. 22, fn.17.

The phonetic aspect of the Tib. punctuation is stressed by Wernberg-Møller (1974) and Ornan (1964).

2 Particularly the treatment of shewa signs, see Yeivin 1968a, p. 65-66; *idem* 1973a, p. 22-24.

3 For details, see Morag 1962, p. 32-34; Yeivin 1968a, p. 48-56.

4 See Morag 1959.

5 Cf. Morag 1959, p. 226-229; *idem* 1965, p. 208-209 (1972, p. 353-354).

The expansion of a punctuation to encompass all syllables, i.e. the "full" notation of a reading tradition, demanded besides the conversion of a sound system into graphical signs also a stabilization of scribal habits. This concerns both the location and shape of the punctuation signs¹ and, since the punctuations were not purely phonemic, the comparison of equal and similar patterns; in this context we must not forget the accentuation signs. The latter type of stabilization has left traces in the Tib. *masora parva* which includes notes about vocalization and accentuation.²

The stabilization of the punctuations was an enormous task and as a whole it is put in practice admirably well. The inconsistencies occurring within a given ms. or the biblical Tib. mss. in their entirety are, while extant, nevertheless very few in number. Surely one of the most important vehicles in this levelling were the *masora* lists and calculations; it is even possible that certain Masoretes composed their own adaptations of the *masora* material.³ The method applied in *Diqduqe haṭ-ṭe'amim* collected⁴ by Aharon Ben Asher is in this respect instructive: "rules" explaining punctuation, if any, are few and loose and "regular" occurrences as well as exceptions are enumerated in lists resembling those of masoretic works of collection (cf. *Okhlah we-Okhlah*).⁵

While the utilization of masoretic lists was convenient to the stabilization of punctuations, we may assume that it created inclination to Systemzwang at the same time: when a graphical decision concerning a given problematic case was made once, it surely had a tendency to gain ground among similar

1 For exceptional usages of Tib. signs, cf. above, p. 213, fn.1; Yeivin 1960a, p. 355-356 (§u\$ above the line); Morag 1968, c. 852-854 (punctuations applied to matres lectionis); Morag 1972, p. 110 (the colon of ḥaṭef signs above the line); B-L, p. 126-127 (dageš in \$'§ and \$r§).

2 See Yeivin 1976, p. 56-57.

3 Cf. Dotan 1971b, c. 1426-1427; Yeivin 1976, p. 86-88.

4 Cf. Dotan 1971b, c. 1472; Ben-Ḥayyim 1971, c. 467.

5 Cf. e.g. § 44 (Baer-Strack 1879, p. 39; unfortunately the edition of Dotan (1967) has not been accessible to me): כל לשון מרכבה, במקרא נצבה, ובלשון יחיד דבורה, בשלוש נקודות חצובה, כמו (two examples)... וכל לשון רבים, מרכבות מרובים, בפתחה דבורים, בלשון וניבים, כמו מִרְכָבוֹת פָּרַעַה, מִרְכָבוֹת עַמִּי נָדִיב, חוץ מאחד, במקרא מיוחד, בנקודה אחת מנוקד, והוא בצפנה מופקד, וירכב אתו בְּמִרְכָּבַת הַמִּשְׁנָה אֲשֶׁר לוֹ.

See also word lists in paragraphs 72-73 (Baer-Strack 1879, p. 61-68). For masoretic lists, see Dotan 1971b, c. 1425, 1428; Lyons 1974.

words and patterns irrespective of whether the extension in terms of historical grammar (which may be known to us but not to the Masoretes) was justified or not (cf. e.g. the prefixes \$m-\$/t-\$, verbal prefixes of verbs with an initial laryngeal, auxiliary vowels of segolate patterns, employment of ga^cyah). Thus this kind of systematization is probably one of the factors calling forth deviating punctuations; in spite of deviations of the graphical notation the oral realizations may have been rather equal. This factor has particular reference to various traditions of punctuation as well as to some of the internal inconsistencies, e.g. among punctuations of segolates. Thus e.g. the Tib. \$'ohäl\$ and \$lähäm\$ could be attributed to Systemzwang, i.e. they would be *graphically* coined in accordance with \$boqär\$ and \$qärän\$.¹ Such a graphical analogy would then have been in a position to take root as a kind of spelling pronunciation in the reading tradition and thus become a normal feature of it.²

As said, the inconsistencies occurring in punctuations are few and in particular this is true regarding the Tib. punctuation and its internal deviations.³ On one hand, the aspects dealt with in this paragraph may explain some of them; on the other, their existence and, even more, the fact that the punctuators were completely aware of some types of them, at least,⁴ offers proof against the supposed artificial and theoretical nature of the Tib. punctuation: a theorist could hardly allow e.g. the existence of the pronominal suffix sg. 2. masc. as \$-äk\$ (i.e. without \$â\$) in a few words.⁵

-
- 1 For the probable sound value of these auxiliary vowels, see above, p. 95, 134. If the vowel really was rather vague by its timbre in oral traditions as proposed there, the punctuators were compelled to make use of signs for "full" vowels, since shewa does not occur in closed syllables according to the system of the Tib. (and Bab.) punctuation.
- 2 For spelling pronunciation, see Anttila 1972, p. 42.
- 3 Inconsistencies in comparison with historical grammar (cf. above, p. 213) obviously go back largely to "inner-Hebrew" trends of development, see Wernberg-Møller 1974, p. 125-130.
- 4 Cf. above, p. 216, fn. 5.
- 5 See König 1895, p. 442; Ben-Ḥayyim 1954, p. 62-63. For the theory of Kahle and its refutation, see above, p. 206, fn. 2.

6. Why the Tib. Punctuation was felt Superior and Worthy of Adoption

Why did Tib.punctuation supersede all of the other systems and traditions? What granted the Tib. punctuation and particularly the subsystem of the family of Ben Asher the prestige and authority it enjoyed as early as in the 10th century?¹

As for the victory of the Ben Asher subsystem over other branches of the Tib. school,² the explanation offered by GOSHEN-GOTTSTEIN is very simple, realistic, and therefore most plausible. According to him the Aleppo Codex prepared by Aharon Ben Asher³ "was the *first codex of the complete Bible* with full Masoretic annotation, exhibiting what was to be regarded

1 Cf. above, p. 214, fn. 1; Ben-Ḥayyim 1971, c. 466.

The usual explanation for the rapid spreading of the Tib. (Ben Asher) system in referring to its prestige (cf. e.g. Weinreich 1954, p. 93; Morag 1963, p. 289-290; Revell 1970a, p. 82); the role of Maimonides stressed by Kahle (e.g. *apud* B-L, p. 88 q') and still by Meyer (1966, p. 35) was rather insignificant (see Goshen-Gottstein 1963, p. 85-89, 117-121).

In general, I have the impression that the reasons of this spreading have not been dealt with as widely as they deserve.

2 For Tib. subsystems and their mutual relationship, see "Abhandlung über das Schewa" (ed. Levy, 1936), p. IX-X, 8⁺-9⁻, and esp. Morag 1972, p. 111-113; according to Morag the Tib. school may be divided into the schools of Ben Naphtali and Ben Asher the latter of which comprises three sections (plaḡîm): (1) 'Abraham ben Rīqāṭ, his father Rīqāṭ, 'Abraham ben Furāt (Porat), Pinḥas ro'š hay-yšībah, Ṣemaḥ ben 'Abu Ṣaybah, Ṣemaḥ 'ibn Sawwarah, R.Ḥabīb ben R.Pipim, and 'Ahiyyahu the ḥaber from Ma'azyah (Tiberias), (2) the family of Ben Asher (five generations), and (3) R. Mošeh ben Moheh, Mošeh from Gaza, and "besides them many".

For the divergences between the schools of Ben Naphtali and Ben Asher, see Kitāb 'al-Hulaf (ed. Lipschütz 1962) & Lipschütz 1964; Goshen-Gottstein 1963, p. 98-112; between the "sections", see Goshen-Gottstein 1963, p. 115, fn. 117; Yeivin 1976, p. 97-98; Dotan 1971b, c. 1471; according to the "Abhandlung" (p. X) the divergences between the "sections" applied to the use of \$ā\$, \$a\$, \$e\$, \$ä\$ as well as shewa "quiescens" and shewa "mobile", cf. below, p.226, fn. 1.

It is worth of noticing, however, that according to Rabin (1971b, c. 540) the deviations of the school of Ben Naphtali "may be nothing but a gathering of traditional variants" and even "the very name Ben-Naphtali is suspect".

Even the "section" of the family of Ben Asher was not uniform, a fact which appears in a comparison between the Cairo Codex of the Prophets prepared by Mošeh Ben Asher and other mss. of the school of Ben Asher; the Cairo Codex is the ms. which most of all is in accordance with the readings attributed to Ben Naphtali, see Pérez Castro 1955 & 1963; Dotan 1971a, c. 468-469; Yeivin 1976, p. 17-18.

as the prototype of the Tiberian Bible text".⁴ The preparation of a complete codex was an enormous task demanding much time and many resources. Had there been a complete text of the Old Testament according to the school of Ben Naphtali contending with that of Ben Asher,¹ we could expect some statements to have been preserved about it. However, this is not the case.² Of course, this does not deny the existence of shorter mss. prepared by Ben Naphtali or his school.³

As compared with other, most probably contemporary,⁴ systems of punctuation the Tiberian system reveals a number of advantages and improvements. On the one hand, the superiority was due to the graphical efficiency, on the other, the Tib. punctuation reflected details of pronunciation more abundantly than the Pal. and Bab. systems.⁵ The former

(Cont.)

3 It is not certain that Aharon Ben Asher himself vocalized and added the masora to the Aleppo Codex (see Ben-Hayyim 1971, c. 467). Nevertheless, it is the ms. which best of all follows the readings which according to Kitab 'al-Hulaf are characteristic of the school of Ben Asher (see Yeivin 1976, p. 15).

The peculiarities of the Aleppo Codex (cf. above, p. 213, fn. 1 ; below p. 226, fn. 1) disclose, however, that this codex was not the final stage in the development; some of the peculiarities (eg. "ḥatef hireq") did not take root in later mss., while certain details of accentuation unfamiliar to the Aleppo Codex were introduced in them (see Goshen-Gottstein 1963, p. 115-117; Yeivin 1976, p. 13-14; Ben-Hayyim 1971, c. 467).

4 Goshen-Gottstein 1963, p. 86, see also idem, p. 84-89, 114-115.

1 As proposed by Kahle 1959, p. 115-118; accordingly e.g. by Eissfeldt 1963, p. 934-936.

2 Cf. Goshen-Gottstein 1963, p. 104, fn. 88, p. 108, fn. 100.

3 Cf. however, the opinion held by Rabin, above, p. 218, fn. 2.

4 Morag 1968, c. 840-841.

5 According to Revell (1970a, p. 82) the acceptance of the Tib. punctuation and pronunciation in the midst of the Pal. congregations goes back, besides "the integrity of those who had preserved the (= Ben Asher) pronunciation and ... the validity of their claim to be the bearers of authoritative tradition", to these factors; they are valid also regarding the Bab. traditions.

group consists of shapes for the vocalization and accentuation signs all of them which are differentiated in external appearance, location of accentuation signs to indicate stressed syllables, stabilization of the usage of diacritical signs and employment of the sheva sign to indicate syllabic limits.¹ Almost all of these features occur also either in Bab. or Pal. texts, but only the Tib. punctuation makes use of all of them together. Phonetic or even phonemic advantages are to be seen in the system of eight "full" vowels obviously going back to the preservation of corresponding vowel system in Aramaic spoken in Northern Palestine (cf. above, p. 111-2, 119-124),² signs for ultra-short vowels including *pataḥ furtivum*, use of *ga^cyah*, and the systematic employment of conjunctive accents.

The superiority of the Tib. punctuation system also manifests itself through its adaptations to divergent reading traditions as the Pal.-Tib.³ and the so-called Franco-German or Proto-Ashkenazic;⁴ a special case are the Bab. mss. in which there is a vowel sign indicating counterparts of the Tib. \$ā\$ (lacking in the genuine Bab. punctuations).⁵

As mentioned (above, p. 218-219), the victory of the Ben Asher subsystem within systems of the Tiberian type may be attributed to the preparation of the Aleppo Codex. No account of the existence of a similar complete codex in the midst of Bab. or Pal. traditions has reached us. Thus it is not impossible that the priority of the Aleppo Codex was not confined to the Tib. school, but granted a great prestige to the Tib. punctuation even elsewhere in the Jewish world.

-
- 1 The indication of consonants that are not to be pronounced is a consequence of this usage.
 - 2 Some Pal. texts may possess as many distinctions of "full" vowels, see above, p. 124.
 - 3 See Díez-Macho 1963; Dotan 1971b, c. 1461-1466.
 - 4 See Eldar 1975, esp. p. 206-211.
 - 5 See Yeivin 1968a, p. 56-61.

An additional factor favouring the acceptance of a given tradition and punctuation as the current standard of Hebrew could be the knowledge of standardization of religious texts by Moslems and Oriental Christians. The originality, purity, and uniformity of the liturgical language still are arguments used in disputes about the superiority of religions in the Near East. It is very likely that the diversity of reading traditions of Hebrew was felt by Jews in the 10th century to be a provoking disadvantage degrading the reputation of their faith in the eyes of gentiles. Facts stressed by Jewish scholars in favour of their (already Tib.) liturgical language were the number of consonants and vowels¹ as well as the musical carefulness of the recitation.² Just in this respect the Tib. punctuation provided improvements in comparison with the Bab. and Pal. traditions: the vowel inventory was larger and particularly the systematical employment of conjunctive accents was capable of regulating both the melodies and the tempo.³ In cases where a need for a uniform text and reading of the OT was felt, these factors supported the acceptance of the Tib. system.

However, were the uncontested graphical and phonetical advantages of the Tib. punctuation as well as the preparation of the Aleppo Codex significant enough to guarantee the acceptance of the Tib. punctuation and the reading tradition reflecting in it equally in Iraq as, say, in Tunis or Spain? Regarding the Aleppo Codex as the decisive factor I would be inclined to answer affirmatively. On the other hand, we know that

-
- 1 Cf. Saadia Gaon (Schreiner 1886, p. 220-225), Abraham de Balmes (idem, p. 230-233).
 - 2 Cf. Hidaya^t 'al-qāri' (ed. Levy 1936), p. XXXVI, 1. 2-12 (p.31⁺); Judah Halevi, Kuzari, II, 74-77 (Slonimsky 1968, p. 127).
 - 3 Cf. the living Yemenite reading traditions in which only the disjunctive accent - in accordance with the Bab. background - has a musical significance; an exception is the reading of Psalms where even the disjunctive accents are as a rule disregarded; these phenomena yield a peculiar anomaly to the recitation; for details, see Morag 1963, p. 212-220. The superior system of accentuation is stressed by Goshen-Gottstein (1963, p. 116, fn. 118) as the reason of acceptance in Babylonia.

al-Qirqisani wrote already in 937 that all of the Jewish scholars in Isfahan, Basra, and Tustar (Shustar in Iran) etc. give preference to the Palestinian ('al-ša'mī) reading,¹ and according to Dawid b. Abraham al-Fasī (living in the 10th century) the Tib. reading was spread out over the whole world with Tib. teachers.²

As said (above, p. 213-214), I am quite sceptic regarding the prestige of the Tib. reading tradition as a consequence of its superior preservation, purity, and genuineness. In my opinion these attributes go back to the advocates of the Tib. text as well as to the period after its acceptance. The activity of the Tib. Masoretes was in progress for 150 years (ca. 780-930), at least;³ however, the statements as to their prestige appear to date from not earlier than the first half of the 10th century. Nevertheless, the Tib. tradition had already superseded the Bab. among the scholars of Isfahan etc.⁴

Taking into account the adherence to local customs⁵ the rapidity of the acceptance is even more astonishing "in diesen traditionsgebundenen Jahrhunderten"⁶. In Yemen the transition from the Bab. punctuation

1 See Klar 1943, p. 37-38; idem 1954, p. 327-328.

2 See Klar 1950, p. 75; idem 1954, p. 45.

3 Kahle 1927, p. 39.

4 In which degree the acceptance reached to the rank and file, is uncertain. On one hand we know that the Bab. reading tradition and punctuation disappeared rapidly, on the other the Tib. reading tradition did not take root permanently anywhere, cf. above, p. 116, fn. 1.

As for the Karaism of the family of Ben Asher, it seems to be a generally admitted fact (see Ben-Hayyim 1971, c. 465-466) opposed only by a few scholars (see idem, c. 466 & Dotan 1971a, c. 469). The dispute in itself goes to show, however, how limited the actual information concerning these "highly esteemed Great Sages" is.

5 Cf. the principle "custom overrides the law" (מנהג מבטל הלכה), see Herr 1971, c. 6-7, and Elon 1971, c. 13-25, and the still living *minhag* differences between various congregations of Jews regarding the performance of prayers and other religious customs.

6 As stated by Bergsträsser 1923-1924, c. 584).

to the Tib. took ca. 250 years in spite of the authority of Maimonides whose statement in *Mišneh torah* probably was the reason calling forth the transition.¹

The reasons favouring the rapid acceptance of the Tib. text described above, while significant, are thus insufficient in my opinion.

The process becomes more explicable, if we assume that the Tib. Masoretes were fully conscious of the annoying diffusion of reading traditions of the Bible (cf. above, p. 221 and, as a remedy endeavoured to compose a text applicable as widely as possible over the boundaries of local (and social?) reading traditions. Such a task would imply three requirements: (1) in order to acquire reputation the text should be superior in respect to its accuracy as well as to graphical and phonetical qualities in comparison with its precedents, (2) in order to be accepted it should involve features common to various reading traditions and avoid local peculiarities, and (3) the acceptance should be facilitated with graphical solutions adaptable to local modifications demanded by traditional realizations. In other words, I assume that the Tib. Masoretes tried to incorporate different traditions, "dialects", in a "Hochhebräisch" based mainly upon the North Palestinian reading tradition which by its vowel inventory was the richest of all of the "dialects". A process similar to this is almost a rule in the growth of literary languages.²

Some arguments for this opinion. It is obvious that the diversity of reading traditions was a well known fact. The intercourse between congregations in Palestine, Babylonia, and the Mediterranean areas was always lively; besides this, there were Bab. communities in Palestine already in the 8th century.³

The equal activity of stabilization among Moslems and Christians was able to provide an impulse and even models for the Tib. Masoretes.

1 Morag 1963, p. XIX-XXII.

2 Cf. Serëbrennikow 1975, p. 418-424, 433-436.

3 See Mann 1916-1917, p. 473-476; idem 1969 (1920), p. 171; Klar 1943, p. 33, fn. 13 (the letter of Jacob b. Efraim a-Ša'mi quoted by al-Qirqisani); Morag 1963, p. 292, fn. 7.

Without taking a definite stand in regard to the problem who the inventors of a particular achievement were,¹ it is sufficient to state that both a tendency towards the standardization of reading traditions of liturgical texts as well as hope for the assurance of transmission into the future were strongly in the air in the Near East in the 8th-10th centuries. To the aspects of prestige involved in the accuracy of reading traditions in the contest between religions I have referred above.

As for the phonetical advantages, the Tib. Masoretes were working in Galilee where the reading traditions had probably preserved two different 'a' and 'e' vowels.² In addition, Galilee was the cultural centre of the Jewish Palestine. Since the graphical accomplishment was also superior,³ there was no punctuation equal to the Tib.

There are a number of mss. in which signs of different punctuation systems occur: texts with Bab. and Tib. signs,⁴ Pal. and Tib. signs,⁵ Bab and Pal. signs,⁶ and even with all of these three systems.⁷ While there are several explanations for various types of admixture,⁸ the mixed punctuations demonstrate that various schools of punctuation were

Cf. Cross (1966, p. 87 & 1976, p. 309) on the consonant text of the Old Testament: "Distinct textual families take centuries to develop but are fragile creations. When manuscripts stemming from different textual traditions come into contact, the result is their dissolution into a mixed text, or the precipitation of textual crisis which results in recensional activity, and often in the fixing of a uniform or standard text."

1 For the dispute, see Dotan 1971b, c. 1414-1417, and above, p. 214, fn. 2.

2 Cf. above, p. 111-114, 118, 220.

3 Cf. above, p. 219-220.

4 This type seems to be the most numerous; in general, see Morag 1968, c. 847-848; Dotan 1971b, c. 1467; in his list of Bab mss. Yeivin mentions also the employment of Tib. signs (1968a, p. 73-177).

5 See Kahle 1927, p. 35; Díez Macho 1954, p. 249-253, 260-265 (& Kahle 1959, p. 68-70, 336-344); Díez Macho 1960; Yeivin 1963, p. 121-124; Dietrich 1968, p. 18-20, 25-26, 32, 50, 54, 57-58, 69; Allony 1973, p. 4 § IV, 3-4.

6 See Díez Macho 1954, p. 253-260; Yeivin 1963, p. 124-127.

7 See Allony 1973, p. 3 § IV, 2 & fn. 17.

8 See Dotan 1971b, c. 1467-1468.

in contact with one another and were comparing different results.¹ Besides the admixture of different punctuations occurring in texts proper, there are corresponding cases in Tib. collections of *masora*.² This phenomenon together with the observations made of discrepancies between certain Tib. biblical mss. and their masoretic notes point to a collecting and accumulative trend in the work of the Tib. Masorettes.³ Of the graphical details of the Tib. punctuation the "ḥaṭef hireq" occurring in the Aleppo Codex is explained as a Bab. influence;⁴ according to YEIVIN the Tib. accentuation system is based upon Pal. results of development.⁵

Since the results of earlier phases of the Tib. punctuators are unknown to us, we are not able to distinguish their own reading tradition from supposed applications of external origin. However, it is worth noticing that it is difficult to find a Tib. phenomenon which has no counterpart in any other punctuation (cf. e.g. counterparts of ḥaṭef vowels occurring in Pal. texts, identical number of "full" vowels particularly in some texts of the Pal. class 1, signs corresponding to *dageš* in the Bab.); on the other hand there are inconsistencies in the Tib. punctuation which could be explained as having been accepted from other traditions as compromises. The following types of phenomena may be regarded as inconsistencies of such nature: "Sephardic" features with an exceptional 'a' or 'e' sign occurring even in the Aleppo Codex in contrast to the

-
- 1 Cf. Yeivin (1963, p. 127): "We have quite a number of MSS exhibiting the connection between the Palestinian and Tiberian systems of vocalization and accentuation, and it is a highly probable assumption that the Tiberian system developed out of the Palestinian one. Eb 10 for the first time provides a starting point for studying the connection (and in particular the temporal relation) between the Palestinian and Babylonian systems"; see also Dotan 1971b, c. 1466.
 - 2 See Díaz Esteban 1954, p. 317-320; Yeivin 1963, p. 127 (Pal. signs in the *masora magna* of the Codex Babylonicus Petropolitanus punctuated with Bab. signs with a Tib. admixture); Yeivin 1968b, p. 72-76; Yeivin 1976, p. 84.
 - 3 See Díaz Esteban 1954, p. 315-317, 320-321; Pérez Castro 1963; Yeivin 1976, p. 86-88.
 - 4 Loewinger 1960, p. 83-84; Goshen-Gottstein 1963, p. 116, fn. 118; see also above, p. 213, fn. 1.
 - 5 Yeivin 1976, p. 116.

other most reliable Tib. mss.,¹ cases of variation between \$ā\$ and \$i\$² as well as between \$ā\$ and \$u\$ in closed unstressed syllables³ both of them resembling the Pal. tendencies described above,⁴ inconsistencies regarding the employment of \$u\$ and \$o\$,⁵ and exceptional punctuations connected with "attenuation".⁶

Peculiarities of the Tib. reading tradition which do not appear in the punctuation are the qualitative assimilation of the reduced shewa vowel preceding a combination of a laryngeal + vowel (e.g. \$m'od\$ [mo'od]),⁷ the prothetic vowel of \$štê\$ and its derivatives,⁸ and the two realizations of \$r\$.⁹

As for the proposed flexibility of the Tib. punctuation so that it could assume various local realizations, MEYER has again taken notice of the well known statement of Abraham Ibn Ezra¹⁰ according to which the shape of the Tib. \$ā\$ is a combination of \$a\$ and \$o\$ thus allowing different realizations.¹¹ Taking into account the "Sephardicized" reading traditions and including our uncertainty about the realization of the Bab. \$ā\$,¹² the proposal could be plausible.¹³ Similarly, the

1 See Sperber 1966, p. 433-434, 446-448, 470-473; Goshen-Gottstein 1963, p. 98, fn. 65; for the Aleppo Codex (e.g. \$w\$-^canwatka\$, \$w\$-ham-mälqahayim\$), see Yeivin 1968b, p. 58-59, 68-71, 216-217. Cf. also the statement of the "Abhandlung über das Schewa" (ed. Levy 1963, p. X, l. 9-11) upon the Masorettes of the school of Ben Asher (cf. above, p. 218, fn. 2):
 קד אכתלפוא פי אשיא כחירה מן קמץ ופחה ותנתין
 ולתלה ושוא סאכן ושוא מתחרך.

2 Cf. above, p. 21.

3 Cf. above, p. 21-22.

4 Cf. above, p. 146-150, 172-176.

5 Cf. above, p. 176-179. See also Diquduq haṭ-ṭe^camim (ed. Baer-Strack 1879, p. 11 § 9):
 כי הנקודה למוד ואזהרה, לתלמידי תורה,
 למען לא ישגו במקרא בין נורא לנורא ובין שוֹכָה לסוֹכָה ובין צוּר לצוּר
 העירה ובין עוּר לעוּר אדם הנברא.

All of the examples in this passage have a reference to the (problematical?) realization of the *mater lectionis* \$w\$.

6 Cf. above, p. 190-199.

7 For details, see Morag 1963, p. 161-166.

8 See "Abhandlung über das Schewa", ed. Levy, p. VIII-IX and above, p. 23.

9 See Morag 1960, esp. p. 216-219, 232-233; idem 1972, p. 113-115 where the non-marking is explained to leave open the opportunity for different habits of realization.

If there in fact existed occasional [z] and [d]/[d̥] sounds in the Tib. reading tradition (see Morag 1972, p. 115-117), they would represent a case parallel to that of \$r\$.

10 Sefer Şahût, ed. Lippmann 1827, fol. 3b, see above, p. 113.

explanation proposed by MORAG for the stabilization of contextual and pausal allomorphs as a Tib. graphical solution (cf. above, p. 9) as well as the "formae mixtae" interpretation of RABIN for the Tib. spellings as \$l\dot{a}q\dot{a}p\dot{t}\$ (cf. above, p. 24, fn. 5) are well in accordance with my view.

My main concern here, however, is the employment of the Tib. \$ě\$ indicating both a reduced vowel and zero. As known, the "rules" concerning the problem of when \$ě\$ is to be realized as a vowel and when not (*mobile vs. quiescens*), are by no means unambiguous and this is true also regarding both the quality and the quantity of the realization;¹ the use of *ḥatef* signs is connected with the problem.² Besides these facts, scrutiny of the transcriptions of Jerome and Pal. punctuations³ has brought me to the conclusion that the Tib. \$ě\$ is a sign of compromise *par excellence* solving the great problem of graphical simplicity from the point of view of punctuators, for the readers of the

(Cont.)

11 Meyer 1958, p. 46-48; idem 1966, p. 54-56.

12 Cf. above, p. 119-125; 109.

13 The shape of the Tib. \$ă\$ might be a derivation of \$e\$ or, *vice versa*, \$e\$ a compromise of \$ă\$ with three dots and \$i\$ with one.

1 See Rabin 1960, p. 174-180, 195-206; Morag 1963, p. 160-166; idem 1968, c. 851-852; Chomsky 1971.

2 As a rule \$ě\$ was realized as a vowel resembling [ă] in the Tib. reading tradition, i.e. equal to \$ă\$ (see Morag 1963, p. 160-166). Nevertheless there are two signs.

The best Tib. mss. are not uniform in the distribution of \$ě\$ and \$ă\$; the Aleppo Codex makes extensively use of \$ă\$, see Loewinger 1960, p. 63-81, and Yeivin 1968b, p. 17-49; for other peculiarities of the Aleppo Codex in regard of the ultra-short vowels, see Yeivin 1976, p. 190-193.

Cf. also Diqduqe ḥaṭ-ṭe^c amim (ed. Baer-Strack 1879, p. 14-15, § 14) concerning local and traditional differences of reduced vowels and their indication: יש סופרים, דבר אמה מורים, ונוסחי ישרים, במקומות רבים... ואין לדבר הזה שרש כי אם ברצון הסופרים. Thus the existence of divergencies is not rejected as incorrect.

3 Observations of this kind are the preservation of the original qualities in the transcriptions of Jerome, the vacillation of the counterparts of the Tib. \$ě\$ followed by a combination a laryngeal + vowel in Pal. punctuations, various Pal. counterparts of the Tib. \$ě\$ in contrast to those of *ḥatef* vowels; in addition to them there are a great number of vowels in place of the Tib. "shewa quiescens" or "shewa medium" both in transcriptions and in the Pal. texts. The problems involved in the history of vowel reduction as well as those concerning the indication of the results of development will be dealt with in a forthcoming study.

Tib. text the neutral §ě§ sign rendered it possible to adhere (at first) to their traditional habits of reading¹ while accepting the Tib. system of punctuation on the basis of the numerous other advantages provided by it.

To sum up: besides the temporal, phonetical, and graphical advantages of the Tib. punctuation, observation of non-Tib. reading traditions and the amalgamation of observations into the Tib. punctuation were factors which contributed to the fact that supporters of other traditions recognized the Tib. text to be almost equal with their own reading habits, to adopt it, and to acknowledge that it is the text "quod semper, quod ubique, quod ab omnibus traditum est".

1 As regards the general selective nature of the Tib. punctuation, Bendavid (1958, p. 483 II, 486 I - 487 II, 489 II) and Weil (1961-1962) have presented similar opinions. Cf. Weil (1961-1962, p. 77-78: "On ne pourra plus, désormais, interpréter les données de l'histoire de la grammaire hébraïque qu'en fonction des divers systèmes massorétiques et particulièrement en fonction de la synthèse des diverses écoles philologiques et exégétiques...En l'absence d'un système vocalique existant, les savants qui eurent la tâche de fixer la lecture des textes, ne pouvaient échapper aux influences dialectales des langues avec lesquelles ils étaient en contact."

As for the employment of the §ě§ sign, cf. Bendavid (1958, p. 489 II): "כל שוא נח ניתן להניע בהנאים מסוימים...המצוא הנקדנים סימן כולל (השוא הבלי והטברני) שיהא משמש לכל הדיאלקטים ולכל הוואריאנטים בכמות ובאיכות."; a parallel view is presented by Bergsträsser (1918, p. 123 v).

BIBLIOGRAPHY

- Abhandlung über das Schwa, ed. by Kurt LEVY in his thesis Zur masoretischen Grammatik. Texte und Untersuchungen. Bonner Orientalistische Studien, Heft 15, p. 1-XXXIII (with a German translation, p. 1⁺-28⁺). Stuttgart 1936.
- ALBECK, Ch. 1971, Einführung in die Mischna. Studia judaica, 6. Aus dem Hebräischen übersetzt von Tamor und Pessach Galewski. Berlin.
- ALLON, H. 1973, Stress Patterns in the Traditional Reading of the Mishna of the Jews of Baghdad. A paper read at the Sixth World Congress of Jewish Studies, Jerusalem 1973 (Abstracts, E-7).
- ALLONY, N. 1964, see אלוני, נ. תשכ"ד
- " - 1973, Geniza Fragments, see אלוני, נ. תשל"ד
- ALLONY, N. - DIEZ MACHO, A. 1958a, Dos manuscritos "palestinenses" más de la Geniza del Cairo. Estudios Bíblicos, 17, p. 83-100. Madrid.
- " - - " - 1958b, Otros dos manuscritos "palestinenses" de Salmos. Sefarad, 18, p. 254-271. Madrid-Barcelona.
- ANTTILA, R. 1972, An Introduction to Historical and Comparative Linguistics. New York - London.
- ARO, J. 1964, Die Vokalisierung des Grundstammes im semitischen Verbum. Studia Orientalia, 21. Helsinki.
- " - 1974, Tekstitraditio, sen jatkuvuus ja katkot. An unpublished paper read at the meeting of the Finnish Exegetical Society, Helsinki, February 25th, 1974.
- BAER, S. - STRACK, H.L. 1879, Die Dikduke ha-T^eamim des Aharon ben Moscheh ben Ascher und andere alte grammatisch-masorethische Lehrstücke...herausgegeben von S. Baer und H.L. Strack. Leipzig.
- BAR, F. 1936, Liturgische Dichtungen von Jannai und Samuel. Inaugural-Dissertation, Bonn. Bonn.
- BAR-ASHER, M. 1972 (1971), see בר-אשר, מ. תשל"ב (תשל"א)
- " - 1973, see בר-אשר, מ. תשל"ג
- " - 1975, see בר-אשר, מ. תשל"ו

- BAR-GIORA, N. 1956, see בן-גורא, נ. תשי"ז
- BARR, J. 1967, St. Jerome and the Sounds of Hebrew. JSS, 12, p. 1-36.
- BARTH, J. 1889, Die Nominalbildung in den semitischen Sprachen. Leipzig 1889-1891.
- BAUĚR, G.M. 1966, Jazyk južnoaravijskoj pis'mennosti. Moskva.
- BAUER, H. - LEANDER, P. 1922, Historische Grammatik der hebräischen Sprache des Alten Testaments. Reprografischer Nachdruck der Ausgabe Halle 1922. Hildesheim 1965.
- " - - " - 1927, Grammatik des Biblisch-Aramäischen. Halle 1927.
- BAUMGARTNER, W. 1953, Das hebräische Nominalpräfix mi-. Theologische Zeitschrift, 9, p. 154-157. Basel.
- BEER, G. - MEYER, R. 1952, Hebräische Grammatik. Erster Band. Sammlung Göschen, Band 763/763a. Berlin.
- BEN-DAVID, A. 1958, see בנדויד, א. תשי"ח
- BEN-HAYYĪM, Z. 1954, Studies in the Traditions of the Hebrew Language. Madrid-Barcelona.
- " - 1958, see בן-חיים, ז. תשי"ח
- " - 1963, see בן-חיים, ז. תשכ"ג
- " - 1971, Ben-Asher, Aaron ben Moses. EJ, Vol. 4, c. 465-467.
- BERGSTRÄSSER, G. 1915, Sprachatlas von Syrien und Palästina. Zeitschrift des Deutschen Palästina-Vereins, 38, p. 169-222. Leipzig.
- " - 1918, Hebräische Grammatik mit Benutzung der von E. Kautzsch bearbeiteten 28. Auflage von Wilhelm Gesenius' hebräischer Grammatik. I. Teil: Einleitung, Schrift- und Lautlehre. Leipzig.
- " - 1923-1924, Mitteilungen zur hebräischen Grammatik. Orientalistische Literaturzeitung, 26, c. 253-260, 477-481; 27, c. 582-586. Leipzig.
- " - 1926-1929, Hebräische Grammatik (see above, 1918), II. Teil: Verbum. I. Hälfte (Leipzig 1926), II. Teil. 2. Hälfte (Leipzig 1929).
- " - 1963, Einführung in die semitischen Sprachen. Unveränderter fotomechanischer Neudruck der Ausgabe München 1928. München.
- BET-ARYE, M. 1972 (1963), see בית-אריה, מ. תשל"ב (תשכ"ה)

- Biblia hebraica, edidit Rud. Kittel, textum masoreticum curavit P. Kahle.
Editio quarta decima emendata typis editionis septimae expressa.
Stuttgart 1966.
- BIRKELAND, H. 1940, Akzent und Vokalismus im Althebräischen. Skrifter utgitt av Det Norske Videnskaps-Akademi i Oslo. II. Hist.-Filos. Klasse. 1940. No. 3. Oslo.
- " - 1947, The Syriac Phonematic Vowel System. Avhandlinger utgitt av Det Norske Videnskaps-Akademi i Oslo. II Historisk-filosofisk klasse (Festskrift til Professor Olaf Broch på hans 80-årsdag fra venner og elever), 1947, p. 12-39. Oslo.
- BIRNBAUM, S.A. 1971, The Hebrew Script. Part one. The Text. Leiden 1971.
- BLAKE, F.R. 1950, The Apparent Interchange between *a* and *i* in Hebrew. JNES, 9, p. 76-83.
- BLANC, H. 1964, Communal Dialects in Baghdad. Harvard Middle Eastern Monographs 10. Cambridge, Mass.
- BLAU, Y. 1971, Hebrew Language, Biblical. EJ, Vol. 16, c. 1568-1583.
- " - 1976, A Grammar of Biblical Hebrew. Porta Linguarum Orientalium, Neue Serie 12. Wiesbaden.
- BÖHL, F.M. Th. 1909, Die Sprache der Amarnabriefe, mit besonderer Berücksichtigung der Kanaanismen. Leipziger Semitistische Studien, V. Band, Heft 2. Leipzig.
- BROCKELMANN, C. 1899, Beiträge zur hebräischen und zur aramäischen Grammatik. Zeitschrift der Assyriologie, 14, p. 343-356. Berlin.
- " - 1908, Grundriss der vergleichenden Grammatik der semitischen Sprachen. I. Band: Laut- und Formenlehre. Berlin.
- " - 1928, Lexicon Syriacum. Editio secunda aucta et emendata. Halis Saxonum.
- " - 1960, Syrische Grammatik. Achte Auflage. Lehrbücher für das Studium der orientalischen Sprachen, Band 4. Leipzig.
- BRØNNO, E. 1940, Some Nominal Types in the Septuagint. Contributions to Pre-Masoretic Hebrew Grammar. Classica et Mediaevalia, 3, p. 180-213. Copenhagen.
- BRØNNO, E. 1943a, Einige Namentypen der Septuaginta. Zur historischen Grammatik des Hebräischen. Acta Orientalia, 19, p. 33-64, Lugduni Batavorum.

- BRØNNO, E. 1943, Studien über hebräische Morphologie und Vokalismus auf Grundlage der Mercatischen Fragmente der zweiten Kolumne der Hexapla des Origenes. Abhandlungen für die Kunde des Morgenlandes, 28. Leipzig.
- " - 1950, Zu den Theorien PAUL KAHLES von der Entstehung der tiberischen Grammatik. ZDMG, 100, p. 521-565. 1951.
- " - 1970, Die Aussprache der hebräischen Laryngale nach Zeugnissen des Hieronymus. Afhandling, Kjøbenhavn. Aarhus.
- BROVENDER, Ch. 1971, Hebrew Language, Pre-Biblical. EJ, Vol. 19, c. 1560-1568.
- BUSH, F.W. 1959-1960, Evidence from Milhamah and the Masoretic Text for a Penultimate Accent in Hebrew Verbal Forms. Revue de Qumran, 5, p. 501-514. Paris.
- CAMPENHAUSEN, H., Frh.v. 1965, Griechische Kirchenväter. 4. Auflage. Urban Bücher 14. Stuttgart.
- CANTINEAU, J. 1931, De la place de l'accent de mot en hébreu et en araméen biblique. Bulletin d'études orientales de l'Institut Français de Damas, 1, p. 81-98. Beyrouth.
- " - 1950, Essai d'une phonologie de l'hébreu biblique. Bulletin de la Société de Linguistique de Paris, 46, p. 82-122. Paris.
- CERETELJ, K.G. 1964, Sovremennij assirijskij jazyk. Moskva.
- CHOMSKY, W. 1971, The Pronunciation of the Shewa. The Meaning and the Term. JQR, 62, No. 2, p. 88-94.
- Corpus Christianorum, Series Latina, LXXII-LXXVIII. S. Hieronymi Presbyteri opera, Pars I, Opera exegetica. Tvrnholti 1959-1970.
- Corpus scriptorum ecclesiasticorum latinorum, Vol. LV. S. Eusebii Hieronymi opera (Sect. I, Pars II). Epistularum pars II. Recensuit Isidorus Hilberg. Vindobonae-Lipsiae 1912.
- CORRE, A.D. 1956, The Anglo-Sephardic Pronunciation of Hebrew. JJS, 7, p. 85-90.
- CROSS, F.M. 1966, The Contribution of the Qumran Discoveries to the Study of the Biblical Text. Israel Exploration Journal, 16, p. 81-95. Jerusalem.
- " - 1976, The Evolution of a Theory of Local Texts. Cross-Talmon (eds.), Qumran and the History of the Biblical Text, Second Printing, p. 306-320. Cambridge, Massachusetts and London.

- CROSS, F.M. - TALMON, Sh. 1976 (eds.), *Qumran and the History of the Biblical Text*, Second Printing. Cambridge, Massachusetts and London.
- DALMAN, G. 1894, *Grammatik des jüdisch-palästinischen Aramäisch*. Leipzig.
- DAMTI (ŠIBTI'EL), I. 1938 (1972), see (תשל"ב) י. חרצ"ז-חרצ"ח (חש"ל"ב)
- DEBRUNNER, A. - SCHERER, A. 1969, *Geschichte der griechischen Sprache*. II, *Grundfragen und Grundzüge des nachklassischen Griechisch*. Sammlung Götschen, Band 114/114a. Berlin.
- DELITZSCH, F. 1920, *Die Lese- und Schreibfehler im Alten Testament*. Berlin und Leipzig.
- DENZ, A. 1964, *Die phonetische Beschaffenheit der Laryngale im Arabischen und ihre phonologische Systematisierung*. ZDMG, 114, p. 232-238.
- DÍAZ ESTEBAN, F. 1954, *Notas sobre la Masora*. Sefarad, 14, p. 315-321. Madrid-Barcelona.
- DIETRICH, M. 1968, *Neue palästinisch punktierte Bibelfragmente*. Massorah, collection éditée par G.E. Weil. Série II, *Études*, premier volume. Leiden.
- DÍEZ MACHO, A. 1954. *Tres nuevos manuscritos bíblicos "palestinoses"*. *Estudios Bíblicos*, 13, p. 247-265. Madrid.
- " - 1959, *La cantilación protomasoretica del Pentateuco*. *Estudios Bíblicos*, 18, p.223-251. Madrid.
- " - 1960, *Un Ms. de Onqelos de transición del sistema palestinense al prototiberiense*. *Estudios Eclesiásticos*, 34, p. 461-466. Madrid.
- " - 1963, *A New List of So-called 'Ben Naftali' Manuscripts, Preceded by an Inquiry into the True Character of These Manuscripts*. *Hebrew and Semitic Studies Presented to Godfrey Rolles Driver*, p. 16-52. Oxford.
- " - 1967, *Nuevo manuscrito bíblico "palestinense" de la Genizah de El Cairo*. *Studia Papyrologica*, 6, p. 15-25. Barcelona.
- DILLMANN, Chr. Fr. A. 1955 (1865), *Lexicon Linguae Aethiopicae*. Reprinted, New York 1955 (Lipsiae 1865).
- Diquqe haṭ-ṭe^camim, see BAER-STRACK 1879.
- DĀKONOV, I.M. 1967, *Jazyki drevneĭ peredneĭ Azii*. Moskva.

- DOTAN, A. 1967, see דותן, א. תשכ"ז
- " - 1971a, Ben-Asher, Moses. EJ, Vol. 4, c. 467-469.
- " - 1971b, Masorah. EJ, Vol. 16, c. 1401-1482.
- " - 1971-1972, Vowel Shift in Phoenician and Punic. *Abr-Nahrain*, 12, p. 1-5. Leiden.
- EBELING, E. 1910, *Das Verbum der El-Amarna-Briefe. Beiträge zur Assyriologie und Semitische Sprachenwissenschaft*, 8. Band, Heft 2. Leipzig 1912.
- EDELMANN, R. 1934, *Zur Frühgeschichte des Maḥzor. Bonner Orientalistische Studien*, Heft 6. Stuttgart.
- EISSFELDT, O. 1964, *Einleitung in das Alte Testament*. 3., neubearbeitete Auflage. Tübingen.
- ELDAR, I. 1975, see אלדר (אדלר), א. תשלי"ה
- ELON, M. 1971, *Minhag*, In *Jewish Law*. EJ, Vol. 12, c. 7-26.
- EPSTEIN, J.N. 1932, see אפשטיין, י.נ. תרצ"ב
- " - 1950, see אפשטיין, י.נ. תשי"י
- FLEISCH, H. 1974, *Études d'Arabe dialectal. Recherches publiées sous la direction l'Institut de Lettres de Beyrouth. Nouvelle série. A. Langue Arabe et pensée Islamique. Tome IV. Beyrouth.*
- FREY, J.-B. 1936&1952, *Corpus Inscriptionum Ivdaicarum. Vol. I-II. Recueil des inscriptions juives qui vont du IIIe siècle avant Jésus-Christ au VIIe siècle de notre ère. Sussidi allo studio della antichità christiana, I & III. Città del Vaticano.*
- GARBELL, I. 1954, *The Pronunciation of Hebrew in Medieval Spain. Homenaje a Millás-Vallicrosa, Vol. I, p. 647-696. Barcelona.*
- GELB, I.J. 1958, *La lingua degli Amoriti. Atti della Accademia Nazionale dei Lincei. Rendiconti, Classe di Scienze morali, storiche e filologiche, VIII, 13, p. 143-164. Roma.*
- GINSBURG, H.L. 1929-1930, *Studies on the Biblical Hebrew Verb. AJSL, 46, p. 53-58, 127-138.*
- GINZBERG, L. 1909, *Yerushalmi Fragments from the Genizah, Vol. I. Texts and Studies of the Jewish Theological Seminary of America, III. New York.*
- GINZBERG, Ch. 1934, see גינזברג, ח.א. תרצ"ד

- GOITEIN, S.D. 1971, *A Mediterranean Society*. Vol. II: *The Community*. Berkeley - Los Angeles - London.
- GORDON, C.H. 1965, *Ugaritic Textbook*. *Analecta Orientalia* 38. Roma.
- GOSHEN-GOTTSTEIN, M.H. 1957, *Biblical Philology and the Concordance*. JJS, 8, p. 5-12.
- " - 1958, *Linguistic Structure and Tradition in the Qumran Documents*. *ScrHier*, 4, p. 101-137.
- " - 1963, *The Rise of the Tiberian Bible Text*. *Biblical and Other Studies* Edited by Alexander Altmann, p. 79-122. Cambridge, Mass.
- GROTZFELD, H. 1965, *Syrisch-Arabische Grammatik*. *Porta Linguarum Orientalium*, Neue Serie 8. Wiesbaden.
- GUMPERTZ, Y.F. 1953, see א"י ש"ן .פ.א.י' ,ימפ"א
- HARRIS, Z.S. 1936, *A Grammar of the Phoenician Language*. New Haven.
- HARVIAINEN, T. 1970, *Raamatun heprean elävistä ääntämistraditioista*. Unpublished M.A. thesis, Helsinki.
- HAVA, J.G. 1970, *Al-Faraid*. *Arabic-English Dictionary*³. Beirut.
- HAYYŪĠ, Y.b.D. 1870, *Kitāb 'al-tanqīṭ*, ed. Nutt, see י"ג ת"ר'ל ,י"ג
- HERR, M.D. 1971, *Minhag*, General. EJ, Vol. 12, c. 5-7.
- Hidāya^t 'al-qāri', ed. by Kurt LEVY in his thesis *Zur masoretischen Grammatik. Texte und Untersuchungen*. *Bonner Orientalistische Studien*, Heft 15, p. XXXIV-XXXVIII (with a German translation, p. 28⁺-33⁺). Stuttgart 1936.
- IBN ^cEZRA, A. 1827, *Seṗer Ṣaḥūt*, ed. G.H. Lippmann, see י"ג ע"א ,א
- IDELSOHN, A. 1913, *Die gegenwärtige Aussprache des Hebräischen bei Juden und Samaritanern*. MGWJ, 57, p. 527-545, 697-721.
- JASTROW, M. 1950, *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature*. Reprint, New York.
- JOFFE, J.A. 1954, *Dating the Origin of Yiddish Dialects*. *The Field of Yiddish*, PLCNY, 3, p. 102-121.
- JUDAH HALEVI 1968, *The Kuzari*. Translated from the Arabic by Hartwig Hirschfeld. First published 1905. Schocken Paperback, Second printing. New York.
- KAHLE, p. 1901, *Beiträge zur Geschichte der hebräischen Punktation*. ZAW, 21, p. 273-317.
- " - 1902, *Der masoretische Text des AT nach der Überlieferung der babylonischen Juden*. Leipzig.
- " - 1913, *Masoreten des Ostens*. *Reprografischer Nachdruck* (Leipzig 1913), Hildesheim 1966.

- KAHLE, P. 1922, Ein Beitrag (§§6-9) *apud* BAUER-LEANDER 1922, p. 71-162.
- " - 1927, Masoreten des Westens, I. Beiträge zur Wissenschaft vom Alten Testament. Neue Folge, Heft 8. Stuttgart.
- " - 1930, Masoreten des Westens, II. Beiträge zur Wissenschaft vom Alten und Neuen Testament. Dritte Folge, Heft 14. Stuttgart.
- " - 1959, The Cairo Geniza. Second edition. Oxford.
- KATZ, K. 1973, Towards the Traditional Pronunciation of the Community of Djerba. A paper read at the Sixth World Congress of Jewish Studies, Jerusalem 1973 (Abstracts, E-8).
- Kitāb 'al-hulaf, ed. Lipschütz 1962, see כתאב אלחלף
- KLAR, B. 1943, see קלאר, ב. תשי"ג
- " - 1950, see קלאר, ב. תשי"א
- " - 1954, see קלאר, ב. תשי"ד
- KOBER, M. 1929, Zum Machsor Jannai. Inaugural-Dissertation, Bonn. Frankfurt a.M.
- KOEHLER, L. 1950, Jod als hebräisches Nominalpräfix. Die Welt des Orients, Band I, Heft 5, p. 404-405. Stuttgart.
- KOEHLER, L. - BAUMGARTNER, W. 1958, Lexicon in Veteris Testamenti libros cui adjectum est Supplementum. Leiden.
- KÖNIG, F.E. 1881, Historisch-kritisches Lehrgebäude der hebräischen Sprache. Erste Hälfte. Leipzig.
- " - 1895, idem liber, Zeite Hälfte, 1. Theil. Leipzig.
- KÖNNECKE, C. 1885, Die Behandlung der hebräischen Namen in der Septuaginta. Programm des Koeniglichen und Groening'schen Gymnasiums zu Stargard in Pommern, p. 3-30. Stargard.
- KRAUSS, S. 1898-1899, Griechische und lateinische Lehnwörter im Talmud, Midrasch und Targum, I-II. Mit Bemerkungen von Immanuel Löw. Berlin.
- KURYŁOWICZ, J. 1973, Studies in Semitic Grammar and Metrics. Polska Akademia Nauk, Komitet Językoznawstwa, Prace językoznawcze 67. Wrocław-Warszawa-Kraków-Gdańsk-London.
- KUTSCHER, E.Y. 1950-1951, see קוטשר, י. תשי"י-תשי"ב
- " - 1959, see קוטשר, י. תשי"ט
- " - 1963, see קוטשר, י. תשכ"ג
- " - 1965, Contemporary Studies in North-Western Semitic. JSS, 10, p. 21-51.

- KUTSCHER, E.Y. 1966, Yemenite Hebrew and Ancient Pronunciation. JSS, 11, p. 217-225.
- " - 1968, see קוטשר, י. תשכ"ח
- " - 1969, see קוטשר, י. תשכ"ט
- " - 1971a, Aramaic. EJ, Vol. 3, c. 259-287.
- " - 1971b, Hebrew Language, The Dead Sea Scrolls. EJ, Vol. 16, c. 1583-1590.
- " - 1971c, Hebrew Language, Mishnaic. EJ, Vol. 16, c. 1590-1607.
- LAGARDE, P. de 1868, Hieronymi Quaestiones Hebraicae in Libro Geneseos. Lipsiae.
- " - 1887, Onomastica sacra². Gottingae.
- LANE, E.W. 1863-1893, An Arabic-English Lexicon. London-Edinburgh (Reprinted, New York 1955-1956).
- LA SOR, W.S. 1956, Secondary Opening of Syllables Originally Closed with Ġutturals (in Hebrew). JNES, 15, p. 246-250.
- LEANDER, P. 1936, Bemerkungen zur palästinischen Überlieferung des Hebräischen. ZAW, 54, p. 91-99.
- LEIBEL, D. 1965, On Ashkenazic Stress. The Field of Yiddish. Second collection, p. 63-72. London - The Hague - Paris.
- LEVY, K. 1936, Zur masoretischen Grammatik. Texte und Untersuchungen. Bonner Orientalistische Studien, Heft 15. Stuttgart.
- LEWY, J. 1949, Apropos of the Akkadian Numerals iš-ti-a-na and iš-tí-na. Archiv Orientální 17, 2, p. 110-123. Praha.
- LIEBERMAN, S. 1942, Greek in Jewish Palestine. New York.
- " - 1950, Hellenism in Jewish Palestine. Texts and Studies of the Jewish Theological Seminary of America, Vol. 18. New York.
- LIPSCHÜTZ, L. 1962, see כתאב אל־לִלִף
- " - 1964, Kitāb al-Khilaf. The Book of the Hillufim. Textus, Vol. 4, p. 1-29. Jerusalem.
- LISOWSKY, G. 1940, Die Transkription der hebraeischen Eigennamen des Pentateuch in der Septuaginta. Inaugural-Dissertation, Basel. Basel.
- LOEWINGER, D.S. 1960, The Aleppo Codex and the Ben Asher Tradition. Textus, Vol. 1, p. 59-111. Jerusalem.
- LYONS, D. 1974, The Collative Tiberian Masorah: A Preliminary Study. Society of Biblical Literature, Masoretic Studies, Number 1, p. 55-66. New York.

- MACUCH, R. 1965, *Handbook of Classical and Modern Mandaic*. Berlin.
- " - 1969, *Grammatik des samaritanischen Hebräisch*. *Studia Samaritana*, Band I, Berlin.
- MANN, J. 1916-1917, *Responsa of the Babylonian Geonim as a Source of Jewish History*. *JQR* 7, p. 457-490.
- " - 1969, *The Jews in Egypt and in Palestine under the Fāṭimid Caliphs*. Vol. I. Reprinted from corrected sheets of the first edition (1920). Oxford.
- MERCATI, Io. Card. 1958, *Psalterii Hexapli Reliquiae*. *Cvra et studio Ioannis Card. Mercati*. Pars prima. Vatican.
- MEYER, R. 1958, *Bemerkungen zu der hebräischen Aussprachetradition von Chirbet Qumrān*. *ZAW*, 70, p. 39-48.
- " - 1966, *Hebräische Grammatik*, I. Dritte, neubearbeitete Auflage. *Sammlung Götschen*, Band 763/763a/763b. Berlin.
- " - 1969, *Hebräische Grammatik*, II. Dritte, neubearbeitete Auflage, *Sammlung Götschen*, Band 764/764a/764b. Berlin.
- MIGNE, J.-P., see *Patrologia Latina*.
- Mishnah Kaufmann, *Faksimile-Ausgabe des Mischnacodex Kaufmann A 50*, hrsg. von G. Beer. Haag 1929.
- MİŞOR, M. 1969, see מִשׁוֹר, מ. תשכ"ט
- MORAG, S. 1957a, see מוֹרָג, ש. תשי"ז, א'
- " - 1957b, see מוֹרָג, ש. תשי"ז, ב'
- " - 1958, *A Special Type of Evolution*. *Proceedings of the VIII International Congress of Linguistics*, p. 425-428. Oslo.
- " - 1959, *The Vocalization of Codex Bezae Cantabrigiae: Is the "Pre-Masoretic" Bible Pre-Masoretic?* *JSS*, 4, p. 216-237.
- " - 1960, see מוֹרָג, ש. תשכ"א
- " - 1961, *Notes on the Vowel System of Babylonian Aramaic as Preserved in the Yemenite Tradition*. *Phonetica*, 7, p. 217-239. Basel - New York.
- " - 1962, *The Vocalization Systems of Arabic, Hebrew, and Aramaic*. *Janua Linguarum*, Nr. 13. Copenhagen.
- " - 1963, see מוֹרָג, ש. תשכ"ג
- " - 1965, see מוֹרָג, ש. תשכ"ה
- " - 1968a, see מוֹרָג, ש. תשכ"ח, א'
- " - 1968b, see מוֹרָג, ש. תשכ"ח, ב'
- " - 1969, *Oral Traditions and Dialects. Towards a Methodology for Evaluating the Evidence of an Oral Tradition*. *Proceedings of the International Conference on Semitic Studies held in Jeru-*

- saalem, 19-23 July 1965, p. 180-189. Jerusalem.
- MORAG, S. 1971, Pronunciations of Hebrew. *EJ*, Vol. 13, c. 1120-1145.
- " - 1972, see מורג, ש. תשל"ב
- " - 1972b, E.J. Revell, Hebrew Texts with Palestinian Vocalization (review). *JSS*, 17, p. 146-151.
- " - 1974, see מורג, ש. תשל"ד
- MOSCATI, S. 1964, An Introduction to the Comparative Grammar of the Semitic Languages, ed. by Sabatino Moscati. *Porta Linguarum Orientalium*, Neue Serie 6. Wiesbaden.
- MURTONEN, A. 1958, Materials for a Non-Masoretic Hebrew Grammar, I. Liturgical Texts and Psalm Fragments with the So-Called Palestinian Punctuation. Academic Dissertation, Helsinki. Helsinki.
- " - 1964, Materials for a Non-Masoretic Hebrew Grammar, III. A Grammar of the Samaritan Dialect of Hebrew. *Studia Orientalia*, 29. Helsinki.
- " - 1971, M. Dietrich, Neue palästinisch punktierte Bibelfragmente (review). *JSS*, 16, p. 89-98.
- NÖLDEKE, Th. 1912, Inkonsequenzen in der hebräischen Punktation. *Zeitschrift für Assyrologie*, 26, p. 1-15. Strassburg.
- NOTH, M. 1928, Die israelitischen Personennamen im Rahmen der gemeinsemitischen Namengebung. Beiträge zur Wissenschaft vom Alten und Neuen Testament. Dritte Folge, Heft 10. Stuttgart.
- Novum Testamentum graece, cum apparatu critico curavit D. Dr. Eberhard Nestle, novis curis elaboraverunt D.Dr. Erwin Nestle et D. Kurt Aland D.D. Editio vicesima quarta.* Stuttgart 1960.
- ORMANN, G. 1934, Das Sündenbekenntnis des Versöhnungstages. Inaugural-Dissertation, Bonn. Frankfurt a.M.
- ORNAN, U. 1964, The Tiberian Vocalisation System and the Principles of Linguistics. *JSS*, 15, p. 109-123.
- PALVA, H. 1966, Lower Galilean Arabic. An Analysis of Its Anaptyctic and Prothetic Vowels with Sample Texts. *Studia Orientalia*, 32. Helsinki.
- Patrologia Latina, Patrologiae cursus completus. Series Latina prior.* Accurante J.-P. Migne. Sancti Eusebii Hieronymi Opera Omnia. Tomus XXII-XXX. Parisiis 1865-1890.

- PENZL, H. 1957, The Evidence for Phonemic Change. Studies Presented to Joshua Whatmough on His Sixtieth Birthday, p. 193-208. [˘]s-Gravenhage.
- PÉREZ CASTRO, F. 1955, Corregido y correcto. Sefarad, 15, p. 3-30. Madrid-Barcelona.
- " - 1963, La masora del Códice de Profetas de El Cairo. Sefarad, 23, p. 227-235. Madrid-Barcelona.
- PORATH, E. 1938, see פורת, א. תרצ"ח
- PRETZL, O. 1932, Die Aussprache des Hebräischen nach der zweiten Kolumne der Hexapla des Origenes. Biblische Zeitschrift, 20, p. 4-22. Paderborn.
- QIMḤI, D. 1862, Seḡer Miklōl, ed. Rittenberg, see קמחי, ר' דוד
- QIRQISANI, Y. al-, 1939-1940. Kitāb 'al-'anwār wa-'l-marāqib, Code of Karaite Law, Vol. I-II. Ed. by Leon Nemoy. Alexander Kohut Memorial Foundation. New York.
- Qḏbeṣ ma'āmarîm 1972, see קובץ מאמרים בלשון חז"ל
- RABIN, Ch. 1958, The Historical Background of Qumran Hebrew. ScrHier, 4, p. 144-161.
- " - 1960, see רבין, ח. תשי"ך
- " - 1971, see רבין, ח. תשל"א
- " - 1971a, Ben-Naphtali, Moses ben David. EJ, Vol. 4, c. 540-541.
- RABINOWITZ, L. 1952, Far East Mission. Johannesburg 1952.
- RADDAY, J.T. - SHORE, Ch. 1976, see רדאי, י.ת. ושור, ח. תשל"ו
- REUCHLIN, Io. 1506, De rudimentis hebraicis. Phorcae 1506.
- REVELL, E.J. 1969, A New Biblical Fragment with Palestinian Vocalization. Textus, Vol. 7, p. 59-75. Jerusalem.
- " - 1970a, Studies in the Palestinian Vocalization of Hebrew. Essays on the Ancient Semitic World, edited by J.W. Wevers and D.B. Redford, p. 51-100. Toronto.
- " - 1970b, Hebrew Texts with Palestinian Vocalization. Near and Middle East Series, 7. Toronto.
- " - 1972, The Placing of the Accent Signs in Biblical Texts with Palestinian Pointing. Studies on the Ancient Palestinian World, presented to Professor F.V. Winnett on the occasion of his retirement I July 1971, edited by J.W. Wevers and D.B. Redford, p. 34-45. Toronto Semitic Texts and Studies, 2. Toronto.
- ROSENTHAL, F. 1936, Die Sprache der palmyrenischen Inschriften und ihre

- Stellung innerhalb des Aramäischen. Mitteilungen der vorderasiatisch-ägyptischen Gesellschaft, 41. Band, 1. Heft. Leipzig.
- SABAR, Y. 1975, see צבר, י. תשל"ה
- SÁENZ-BADILLOS, A. 1975, El hebreo del s. II d. C. a la luz de las transcripciones griegas de Aquila, Símmaco y Teodoción. Sefarad, 35, p. 107-130. Madrid-Barcelona.
- SCHALIT, A. 1968, Namenwörterbuch zu Flavius Josephus. Suppl. I to A Complete Concordance to Flavius Josephus, ed. by K.H. Rengstorff, Leiden.
- SCHLATTER, A. 1913, Die hebräischen Namen bei Josephus. Beiträge zur Förderung christlicher Theologie, 17. Gütersloh.
- SCHREINER, M. 1886, Zur Geschichte der Aussprache des Hebräischen. ZAW 6, p. 213-259.
- SCHULTHESS, F. 1924, Grammatik des christlich-palästinischen Aramäisch. Herausgegeben von Enno Littmann. Tübingen.
- SCHWYZER, E. 1939, Griechische Grammatik I. Handbuch der Altertumswissenschaft, II. Abteilung, I. Teil, I. Band, München.
- SEGAL, J.B. 1953, The Diacritical Point and the Accents in Syriac. London Oriental Series, Vol. 2. London - New York - Toronto.
- SEGAL, M.H. 1927, A Grammar of Mishnaic Hebrew. First edition 1927. (Reprinted lithographically from corrected sheets of the first edition. Oxford 1970.)
- " - 1936, see סגל, מ.צ. תרצ"ו
- Septuaginta, id est Vetus Testamentum graece iuxta LXX interpretes, edidit Alfred Rahlfs. Vol. I-II. Stuttgart 1943 (1935).
- SERÉBRENNIKOW, B.A. 1975, Allgemeine Sprachwissenschaft, Band I. Ins Deutsche übertragen und herausgegeben von Hans Zikmund und Günter Feudel. 2., berichtigte Auflage. Berlin.
- SEVENSTER, J.N. 1968, Do you know Greek? How much Greek could be first Jewish Christians have known? Supplements to Novum Testamentum, Vol. 19. Leiden.
- SIBṬI'EL, I. 1972 (1963), see שבטיאל, י. תשל"ב (תשכ"ג)
- " - see DAMTI, see דמתי, י.
- SIEGEL, J.P. 1975, The Severus Scroll and lQIs^a. Society of Biblical Literature, Masoretic Studies, Number 2, Missoula, Montana.
- SIEGFRIED, C. 1884, Die Aussprache des Hebräischen bei Hieronymus. ZAW, 4, p. 34-83.

- SODEN, W. von 1959-, Akkadisches Handwörterbuch. Wiesbaden.
- SPANIER, A. 1929, Ueber Reste der palästinischen Vokalisation in Gebetbüchern. MGWJ, 73, p. 472-475.
- SPEISER, E.A. 1925-1934, The Pronunciation of Hebrew According to (Based Chiefly on) the Transliterations in the Hexapla. JQR, New Series, 16 (1925-1926), p. 343-382; 23 (1932-1933), p. 233-265; 24 (1933-1934), p. 9-46.
- SPERBER, A. 1937-1938, Hebrew Based upon Greek and Latin Transliterations. Hebrew Union College Annual, 12-13, p. 103-274. Cincinnati.
- " - 1966, A Historical Grammar of Hebrew. Leiden.
- SPITALER, A. 1938, Grammatik des neuaramäischen Dialekts von Ma^clūla (Antilibanon). Abhandlungen für die Kunde des Morgenlandes, 23, 1. Leipzig.
- SUTCLIFFE, E.F. 1948, St. Jerome's Pronunciation of Hebrew. Biblica, 29, p. 112-125. Roma.
- TALLQVIST, K.L. 1914, Assyrian Personal Names. Acta Societatis Scientiarum Fennicae, 43, 1. Helsingfors.
- TALMON, Sh. 1962, The Three Scrolls of the Law that were Found in the Temple Court. Textus, Vol. 2, p. 14-27. Jerusalem.
- " - 1964, Aspects of the Textual Transmission of the Bible in the Light of Qumran Manuscripts. Textus, Vol. 4, p. 95-132. Jerusalem.
- VALLARSI, D. 1766-1772 (ed.), S. Eusebii Hieronymi Stridonensis Presbyteri opera. Editio altera, I-XI. Venetiis.
- VÄÄNÄNEN, V. 1967, Introduction au latine vulgaire. Nouvelle édition revue et complétée d'une anthologie avec commentaires. Bibliothèque française et romane, série A: Manuels et études linguistiques. Paris.
- VIL'SKER, L.H. 1974, Samaritjanskiĭ jazyk. Moskva.
- [Vulgata], Biblia Sacra iuxta Vulgatam versionem, recensuit et brevi apparatu instruxit Robertus Weber Osb. Tom. I-II. Stuttgart 1969.
- WAGNER, M. 1966, Die lexikalischen und grammatikalischen Aramaismen im alttestamentlichen Hebräisch. Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft, 96. Berlin.
- WEIL, G.H. 1961-1962, Un fragment de *Okhlah* palestinienne. The Annual of Leeds University Oriental Society, Vol. 3, p. 68-80. Leiden 1963.

- WEINBERG, W. 1968, The *Qamāṣ Qāṭān* Structures. *Journal of Biblical Literature*, 87, p. 151-165. Philadelphia.
- WEINREICH, M. 1954, Prehistory and Early History of Yiddish: Facts and Conceptual Framework. *The Field of Yiddish*, PLCNY, 3, p. 73-101.
- " - 1960, see וויינרייך, מ. 1960
- " - 1964, see וויינרייך, מ. תשכ"ד
- WEINREICH, U. 1960, see וויינרייך, א. תשי"ך
- WERNBERG-MØLLER, P. 1958, Studies in the Defective Spellings in the Isaiah-Scroll of St Mark's Monastery. *JSS*, 3, p. 244-264.
- " - 1974, Aspects of Masoretic Vocalization. *Society of Biblical Literature, Masoretic Studies*, Number 1, p. 121-130. New York.
- WESSÉN, E. 1951, *Svensk språkhistoria, I. Ljudlära och ordböjningslära. Tredje upplagan.* Stockholm.
- WEVERS, J.W. 1970, *Ḥeth in Classical Hebrew. Essays on the Ancient Semitic World*, edited by J.W. Wevers and D.B. Redford, p. 101-112. Toronto.
- WILD, S. 1973, *Libanesische Ortsnamen. Beirut Texte und Studien*, 9. Beirut.
- WUTZ, F. 1914, *Onomastica sacra. Untersuchungen zum Liber Interpretationis Nominum Hebraicorum des hl. Hieronymus. Texte und Untersuchungen zur Geschichte der altchristlichen Literatur*, 3. Reihe, 11.1. Leipzig.
- YAHALOM, J. 1969, see יהלום, י. תשי"ל
- YALON, H. 1938, see ילון, ח. תרצ"ז-תרצ"ח
- " - 1942a, see ילון, ח. תשי"ב, א'
- " - 1942b, see ילון, ח. תשי"ב, ב'
- " - 1964, see ילון, ח. תשכ"ד
- YEIVIN, I. 1960a, see ייבין, י. תשי"ך, א'
- " - 1960b, see ייבין, י. תשי"ך, ב'
- " - 1963, A Palestinian Fragment of *Haḥarot* and Other Mss with Mixed Pointing. *Textus*, Vol. 3, p. 121-127. Jerusalem.
- " - 1968a, see ייבין, י. תשכ"ח
- " - 1968b, see ייבין, י. תשכ"ט
- " - 1973a, see ייבין, י. תשל"ג

YEIVIN, I. 1973b, A paper read at the Sixth World Congress of Jewish Studies, Jerusalem 1973 (not included in the Abstracts).

- " - 1976, see ייבין, י., תשל"ו

ZULAY, M. 1939, see זולאי, מ., תרצ"ט

- אלדר (אדלר), א., תשל"ה, ניקוד ההגדה של פסח במחזור ויטרי (כ"י ששון 535). לשוננו 39, עמ' 192-216. ירושלים.
- אלוני, נ., תשכ"ד, איזהו "הניקוד שלנו" ב"מחזור ויטרי"? בית מקרא, שנה שמינית א-ב, עמ' 135-145. ירושלים.
- אלוני, נ., תשל"ד, קטעי גניזה של משנה, תלמוד ומדרש מנוקדים בניקוד ארץ-ישראלי. ערך בצרוף דברי מבוא (= ספרות חז"ל בניקוד ארץ-ישראל, עמ' 1-4) ומפתחות נחמיה אלוני. ירושלים.
- אפשטיין, י.נ., תרצ"ב, לשרידי הירושלמי. תרביץ 3, עמ' 15-26, 121-136, 237-248. ירושלים.
- אפשטיין, י.נ., תש"י, תרגום ערבי של משניות. ספר היובל לכבוד א. מארכס, חלק עברי, עמ' כג-מח. ניו יורק.
- בית-אריה, מ., תשל"ב (תשכ"ה), ניקודו של מחזור ק"ק ווארמייזא. קובץ מאמרים בלשון חז"ל, עמ' 302-347. (= לשוננו 29, עמ' 27-46, 80-102).
- בנדויד, א., תשי"ח, Murtonen, A(imo Edward). Materials of non-Masoretic Hebrew grammar. I: liturgical texts and Psalm fragments provided with the so-called Palestinian punctuation (בקורת).
- קרית ספר 33, עמ' 482-491. ירושלים.
- בן-חיים, ז., תשי"ח, מסורת השומרונים וזיקתה למסורת חלשון של מגילות ים המלח וללשון חז"ל. לשוננו 22, עמ' 223-245. ירושלים.
- בן-חיים, ז., תשכ"ג, בדבר מקוריותה של הסעמת מלעיל בעברית. ספר חנוך ילון, עמ' 150-160. ירושלים.
- בן-עזרא, אברהם ב"ר מאיר ספרדי, ס' צחות. מבואר באר היטיב מאת גבריאל הירש ליפמאן. פֵיֹרדא "יבינו הצחות".
- בר-אשר, מ., תשל"ב (תשל"א), משנה כתב יד פארמה "ב" לסדר סהרות (ירושלים תשל"א), מבוא. קובץ מאמרים בלשון חז"ל, עמ' 166-185.
- בר-אשר, מ., תשל"ג, משנה כתב-יד פאריס 328-329. דברי מבוא, עמ' 1-75. ירושלים.
- בר-אשר, מ., תשל"ו, הארמית של א"י. מקורות, מסורותיה ובעיות נבחרות בדקדוקה. חיבור לשם קבלת תואר דוקטור לפי-לוסופיה, ירושלים.

בר-ג'ורא, נ., תשי"ג, מקורות לתולדות היחסים בין היהודים
הלבנים והשחורים בקוג'ין. ספונות 1, עמ' רמג-רעח.
ירושלים.

גומפרץ, י.ג.פ., תשי"ג, מבטאי שפתנו. ירושלים.
גינזברג, ח.א., תרצ"ד, בשולי תרגום ארץ-ישראל. תרביץ 5,
עמ' 383-381. ירושלים.

דותן, א., תשכ"ז, ספר דקדוקי הסעמים לר' אהרן בן משה בן-
אשר. חיבור לשם קבלת התואר דוקטור לפילוסופיה,
ירושלים.

דמתי, י., תרצ"ז-תרצ"ח (תשל"ב), מסורת התימנים בדקדוק לשון
חכמים. קונטרסים לעניני הלשון העברית 1, עמ' 8-
15. ירושלים (= שבטיאל, י., קובץ מאמרים בלשון
חז"ל, עמ' 207-214).

וויינרייך, א., תש"ך, העברית האשכנזית והעברית שביידיש:
בחינתן הגיאוגראפית. לשוננו 24, עמ' 242-252. ירו-
שלים.

וויינרייך, מ., 1960, די סיסטעם יידישע קדמון-וואקאלן.
יידישע שפראך, כ' XX, 3, ז' 71-65. s.l.

וויינרייך, מ., תשכ"ד, ראשית ההברה האשכנזית בזיקתה לבעיות
קרובות של יידיש ושל העברית האשכנזית. לשוננו 27-
28, עמ' 131-147, 230-251, 318-339. ירושלים.

זולאי, מ., תרצ"ט, לתולדות הפיוט בארץ-ישראל. ידיעות המכון
לחקר השירה העברית 5, עמ' 107-180. ירושלים.

חיג, יהודה, كتاب الصنعة, ספר הנקוד. שלושה ספרי דקדוק,
(הוציא לאור) יוחנן ביליאס נוט, עמ' XV-I. לונדון
וברלין ת"ר'ל'.

יהלום, י., תש"ל, הניקוד הארץ-ישראלי בקדושתות הדתה למש-
מרות ותופעות הלשון העולות ממנו. לשוננו 34, עמ'
25-60. ירושלים.

ייבין, י., תש"ך א', קטע מקרא בניקוד סברני לא-מסורתי.
תרביץ 29, עמ' 345-356. ירושלים.

ייבין, י., תש"ך ב', הסעמת תורה שבעל פה בטעמים. לשוננו 24,
עמ' 47-69, 167-178, 207-231. ירושלים.

ייבין, י., תשכ"ח, הניקוד הבבלי ומסורת-הלשון המשתקפת ממנו.
חיבור לשם תואר דוקטור לפילוסופיה, ירושלים.

ייבין, י., תשכ"ט, כתר ארם-צובה. ניקוד וטעמיו. כתבי מפעל
המקרא של אוניברסיטה העברית, ג. ירושלים.

ייבין, י., תשל"ג, מסורת הלשון העברית המשתקפת בניקוד הבב-
לי. האוניברסיטה העברית בירושלים. ירושלים.

- ייבין, י., תשל"ו, מבוא למסורה הסברנית. הדפסה שלישית מתוק-נת. האוניברסיטה העברית בירושלים. ירושלים.
- ילון, ח., תרצ"ז-תרצ"ח, The Mishna Text in Babylonia, Fragments from the Geniza edited and examined by P. Kahle and J. Weinberg. (בקורת)
- קונטרסים לעניני הלשון העברית 1, עמ' 26-29. ירו-שלים.
- ילון, ח., תש"ב א', הגייה ספרדית בצרפת הצפונית בדורו של רש"י ובדורות שלאחריו. עניני לשון תש"ב, עמ' 16-31. ירושלים.
- ילון, ח., תש"ב ב', על הגיית החספים והקמץ החסוף באשכנז. עניני לשון תש"ב, עמ' 31-36. ירושלים.
- ילון, ח., תשכ"ד, מבוא לניקוד המשנה. ירושלים.
- כתאב אלבלף, אעתני בתחקיקה אליעזר ליפשיץ. Textus, Vol. 2, p. Jerusalem 1962. מח-א
- מורג, ש., תשי"ז א', למחקר מסורות העדות בלשון חכמים. תרביץ 26, עמ' 4-16. ירושלים. (= קובץ מאמרים בלשון חז"ל, עמ' 186-198).
- מורג, ש., תשי"ז ב', לשון בגלותה ובתחייתה. לשוננו לעם, 73, עמ' 20-27; 74-75, עמ' 69-78; 76, עמ' 104-111; 77, עמ' 139-145. ירושלים.
- מורג, ש., תשכ"א, י. קוטשר, הלשון והרקע הלשוני של מגילת ישעיהו השלמה (בקורת). קרית ספר 36, עמ' 24-32. ירושלים.
- מורג, ש., תשכ"ג, העברית שבפי יהודי תימן. ירושלים.
- מורג, ש., תשכ"ה, הערות לתיאור שיטת הניקוד של מחזור וואר-מיזא. לשוננו 29, עמ' 203-209. ירושלים. (= קובץ מאמרים בלשון חז"ל, עמ' 348-354).
- מורג, ש., 1968 א', ניקוד. אנציקלופדיה מקראית, ח, עמ' 837-857. ירושלים.
- מורג, ש., תשכ"ח ב', לתורת ההגה של הארמית הבבלית. לשוננו 32, עמ' 67-88. ירושלים.
- מורג, ש., תשל"ב, המסורת הסברנית של לשון המקרא: הומוגניות והטרוגניות. פרקים 2, עמ' 105-144. ירושלים.
- מורג, ש., תשל"ד, מפעלם של ראשונים: על דרכם של חכמי המסורה ועל מונחים ארמיים שטבעו. לשוננו 38, עמ' 49-77. ירושלים.
- מישור, מ., תשכ"ט, היעדר ניגוד שורק/חולם בכ"י שניקודו סב-רני (ספרי, וטיקן 32). לשוננו 33, עמ' 309-311. ירושלים.

- סגל, מ.צ., תרצ"ו, דקרוק לשון המשנה. תל-אביב.
 פורת, א., תרצ"ח, לשון חכמים לפי מסורות בבליות שבכתבי-יד
 ישנים. מחקרים לשוניים, ב. ירושלים.
 צבר, י., תשל"ה, היסטוריה העבריים בניבים הארמיים של יהודי
 אזרביג'אן. לשוננו 39, עמ' 272-294. ירושלים.
 קובץ מאמרים בלשון חז"ל, הביא לדפוס: משה בר-אשר. ירושלים
 תשל"ב.
 קוטשר, י., תשי"ג-תשי"ב, מחקרים בארמית הגלילית. תרביץ 21,
 עמ' 192-205; 22, עמ' 53-63, 185-192; 23, עמ' 36-
 67. ירושלים. (תדפיס: ירושלים תשכ"ט).
 קוטשר, י., תשי"ט, הלשון והרקע הלשוני של מגילת ישעיהו השל-
 מה ממגילות ים המלח. ירושלים.
 קוטשר, י., תשכ"ג, לשון חז"ל. ספר חנוך ילון, עמ' 246-280.
 ירושלים. (= קובץ מאמרים בלשון חז"ל, עמ' 1-35).
 קוטשר, י., תשכ"ח, הארמית של השומרונים. תרביץ 33; עמ' 397-
 419. ירושלים.
 קוטשר, י., תשכ"ח, ביצוע תנועות U I בתעתיקי העברית המקראית
 בארמית הגלילית ובלשון חז"ל. ספר זיכרון לבנימין
 דה-פריט, עמ' 218-251. ירושלים. (= קובץ מאמרים בל-
 שון חז"ל, עמ' 129-162, תיקונים ותוספות עמ' 163-
 165).
 קלאר, כ., תש"ג, עניני מסורה ומבטא אצל קרקסאני. עניני לשון
 תש"ג, עמ' 31-38. ירושלים. (= קלאר, מחקרים ועיונים,
 עמ' 320-328).
 קלאר, כ., תשי"א, לתולדות המבטא העברי בימי הביניים. לשוננו
 17, עמ' 72-75. ירושלים (= קלאר, מחקרים ועיונים,
 עמ' 42-46).
 קלאר, כ., תשי"ד, מחקרים ועיונים בלשון בשירה ובספרות.
 תל-אביב.
 קמחי, ר' דוד, ספר מכלול. (הוציא לאור) יצחק בן אהרן ריסטענ-
 בערג. ליק "כד הקמח לא תכלה". נדפס מחדש, ירושלים
 תשכ"ו.
 רבין, ח., תש"ך, התנועות הקטנות בעברית הסברנית. ספר נ.ה.
 טור-סיני, עמ' 169-206. ירושלים.
 רדאי, י.ת. - שור, ח., תשל"ו, על שכיחות האותיות וההגאים
 בעברית המקראית והחדשה. כלשון עמו, אסופת מאמרים
 בכלשנות, מקודשת לחיים רבין במלאת לו שישים שנה, עמ'
 120-129. ירושלים.

שבטיאל, י.י., תשל"ב (תשכ"ג), מסורות התימנים בדקדוק לשון המש-
נה (מסכת סנהדרין). קובץ מאמרים בלשון חז"ל, עמ' 230-
251. (= ספר חנוך ילון, עמ' 338-359. ירושלים תשכ"ג).
שבטיאל, י.י., ראה דמתי, י.

INDEX OF HEBREW AND ARAMAIC WORDS

occurring in parts II, III, and Appendix of this study. The vocalization is either genuine Tiberian or it reflects the (probable) Tib. counterparts of the occurrences; the consonantal spelling has been left unchanged, but the bound structural elements (§b-§ etc.) immaterial to the topics have been dropped.

Word	Page		
א			
אֲבִיּוֹנָה	62, 90	אֲהֲלִיכֶם	155, 157
אָבֹן	133, 187	אֲהֲלֶהָ	158
אֲבָנִים	84, 85	אֲהֲלֶם	155, 157
אֲבָנִים		אֲוִי	142
אֲבָצֹן	80	אֲוֹחֹזֶה	156
אֲבָרְיָה	144	אֲוֹלָמִי	131
אֲבָרָה	76	אֲוִמָּה	172
אֲגָמוֹן	54	אֲוֹמְתָהּ	171
אֲגָנוֹת	54	אֲוֹן	93, 131, 134
אֲדָמָה	76	אֲוֶן	160
אֲדָמָה		אֲזַנִּים	160, 169
אֲדָמִים	74	אֲזַנִּינֹו	166
אֲדָרֶשׁ	143	אֲזַנָּה	169
אֲדָרֶשׁ		אֲחֻטָּא	186
אֲהַבַּח	126, 188, 197	אֲיִבְנָה	142
אֲהֶל	217	אֲיִלָּה	54
אֲהֶלָה	158	אֲיִמְצָה	142
אֲהֶלוֹ	154, 158	אֲיִמְתִּי	149
אֲהֶלִי	158	אֲיִבִּיתִי	142
אֲהֶלִי	155, 157, 158, 159	אֲיֶשׁ	62
אֲהֶלִי	155, 156, 157, 159	אֲיֶשׁ בְּשֶׁת	93
אֲהֶלִיבָה	155, 158	אֲכָלָה	166
אֲהֶלִיבְמָה	158	אֲלִ(חֶכְר)	69, 84
אֲהֶלִיִּם	151, 155	אֲלָא	149
אֲהֶלִיֹו	156	אֲלוֹ	149
אֲהֶלִיָּה	156	אֲלֻמוֹת	54
		אֲלֻפָּא בִּיתָא	195
		אֲלֻפְעֵל	158

אֶלְתוֹלַד	132, 133, 188, 197	אַרְבֵּה	91
אַמְגָּנָה	56	אַרְבוֹת	91, 171
אִמָּה	54	אַרְבַּע	54, 127, 128, 188, 197
אַמְחָצִים	105	אַרְבַּעִים	54
אַמִּיץ	127, 128	אַרְגָּמָן	54
אִמֵּר	67	אַרְז	92
אַמְצָא	89	אַרְיֵה/א	52, 54
אַמְצֵה לִי	88, 89	אַרְמֹנֹת	76
אִמְץ	89	אַרְצֵה	132
אַמְצֵה	89	אַשֶׁה	62
אַמְץ*	74	אַשֶׁה	142
אַמְצִים	74	אַשְׁחֵקֵם	105
אַמְצִים*	128	אַשְׁמַת	76
אַמְרוּ	168-169	אַשְׁפֹּף	60
אַמְרִיָּה	168	אַשְׁתֵּר- אַשְׁתֵּר- אַת-	188
אַמְרִיכֶם	168-169		
אַמְרֶה	161, 162, 168-169, 183	ב	
אַמְרֶה	161, 162, 183	ב־	68
אַמְרָתָהּ	168-169	בְּגוֹלִים	55
אַנִּי	154, 155, 157, 159	בְּדוֹרוֹתַי	177
אַנִּיָּה	160	בְּמָה	68
אַסוּרָה(ה)	149	בְּמַחֲנֵי	145
אַסִּיר	76	בְּעָדֵי	126, 188
אַעֲלֶה	184	בְּעַרְפֹּל	126, 188
אַעֲלֶה		בְּפוּהַ	55
אַעְצִיבוּ	183	בְּקֶהֶל	146
אַפּוּ	54	בְּקִשְׁיֹת	145
אַפְעָה	92	בגד	162
אַצוּרָה	153	בְּגָתוֹן	80
אַצְרֶה		בְּגִתְּנָה	80
אַקְדַּח	92	בְּדִיו	76
אַרְאֵלִי	132, 197	בְּדִים	76
אַרְבֵּה	76	בְּדִקָּר	80

בְּהֵמָה	188	ג	
בְּהֵמוֹת	88	גְּאֹלָה	163
בְּהֵמַת	188	גָּב, גַּב, גֵּב	52, 65, 106
בְּהִמְתָּהּ	89	גָּבַח	73, 106
בְּהִמְתּוֹ	89	גְּבוּרָה (יָם)	58, 60, 62, 64, 66, 82
בוֹשָׁה	177	גִּבְעָה	57, 80
בְּחָרָם	155, 161, 182	גִּבְעוֹן	80
בַּטַּח	162	גִּבְעָת	57
בְּטַח	94	גִּבְתוֹן	80
בְּטַחִים	129, 196	גָּג	112
בִּירְכָתוֹ	146, 147, 198	גְּדוּפָה *	} 86
בֵּית	144	גְּדוּפָה	
בְּכוֹרָה	86	גּוֹאֲלֵינוּ	156
בְּלָהָה	80	גּוֹנְנָה	153
בִּלְע	162	גָּזִי	70
בִּלְעָם	78, 80	גְּזָרָה	78
בְּמָה	68	גִּיּוֹרָא	80
בְּנִיּוֹ	131	גִּיּוֹל	143
בַּעַל	52	גִּילּוּעֵי	142
בַּעֲלֵי	127, 188	גִּלְגָּל	65, 87, 88, 89, 149
בַּעֲלֵי	54	גִּלְגָּל	149
בְּצִלְאֵל	68	גִּלְגָּל	89
בַּצַּע	162	גִּלְגָּל	80
בְּצִקָּת	169	גִּלְגָּלֵי	86
בְּצָרָה	91, 151, 166, 167	גִּלְגָּלִים	77
בְּקָבֶקֶת	64, 66, 87	גִּלְעָד	80
בִּקְעָה	162	גִּלְתָּה	172, 175
בִּקְעָה	94	גְּמֻרָה	161
בִּרְשָׁע	80	גְּנָא, גְּנִיָּא	80, 82
בִּרְדִּים	73	גְּנִים	54, 80, 82
בִּרְדָּה	92	גְּפָרִית	166
בִּרְהָה	187	גְּרָדִים	80
בִּרְפִי	187	גְּמָא, גְּמֵי	80
בִּשְׂרָה	106		
בִּשְׂתוֹ	165, 166-167		

ד

דְּבָרִי	57, 139-140
דְּבָרְתִי	143
דְּבַשׁ	72, 92, 93
דוֹר	177
דוֹרוֹת	177
דוֹרוֹתָיו (ב)	177
דִּיבוֹר	143
דִּיּוֹת	77
דְּלוּעִים	196
דְּלוּעִים	196
דְּקָלָה	80
דְּרָשׁ (ל)	162
דָּת	112

ה

ה־

הגורי	54
הגן	54
הַדְּגִים	54
הַכְּמָרִים	54
הַכְּרָבִים	55
הַלְּחֹת	55
הַמְּלָה	55
הַמְּטָפֶן	55
הַנְּפִלִים	55
הַפְּרָה	55
הַצֵּדֵק	55
הַשְּׂדֵמָה	55
הַשְּׂרָמָה	55
הַשְּׂפָתַיִם	55
ה־	124
הא-	212
הַאֲזִינוּ	57, 61
הגה	184
הָגָה	188
הַדְּרִי, הַדְּרִי	128, 134
הַדְּרִי	

הַדְּרֵת	127, 128,
הַדְּרֵתָהּ	
הוֹאֲגְרוּ	156
הוֹרְזוּ	153-154, 165
הוֹתֵר	171
הַזְּפִיר	127, 128, 185
הַחֲתָל	175
הִילּוּלִים	142
הִילָה	149
הִיצֵטֶדֶק	145
הִיקָוֹת	141
הִירְהוּר	146, 147
הִיתָל, הִיתָל	142
הַכְּאֲבָתָיו	146
הַכּוֹן	59
הַכְּרַח	140-141, 149
הַלְּוֹאִי	195
הַלְּוֹאִי	195
הַלִּיל	149
הַלְּכוֹת	145, 198
הַלְּכָתִי	140-141
הַלְּלוּגָה	54
הַם	106
הַמְּלַחֵת	175
הַנְּחַתִּים	142
הַעֲלָה	158
הַעֲלִים	60
הַפְּכָכִים	162
הַצִּילֵנִי	130
הַצִּנֵּץ	57, 61
הַרְאִיתָהּ	145, 146, 147
הַרְגָהּ	161
הרה	184
הַרְחֵב	139-140
הַרְחִיב	139-140

הַרְנִינוּ	58	זְכָרָה	162
הַתְּחַתִּים	145	זְכָרוֹ	136
הַתְּלַת	172	זִלְפָה	80
הַתְּפִקְדוֹ	151	זִמָּה	59
	ו	זִמְרֵי	78, 80, 86
וּאֶסְפָּה	172	זִמְרוֹ	80
וְאֶרְאֶה	132, 133, 147	זִעְמָה	163
וְהִרְאִיתִי	147	זִעְפּוֹ	162
וּוִיכֹחֶיךָ	142	זִבַּח	94
וַיִּי, וַיִּי	116	זִרְעוֹנִין	149
וַיִּזְבֹּר	151		ח
וַיִּמְצְאוּ	139-140	חֲבֵלָהוּ	163
וַיִּקָּם	134	חֲבֵרוֹן	49
וַיִּקָּם	165, 169	חֲגָא	84-85
וַיִּכְדּוּ	133	חֲגִי	55
וַיִּכְדּוּ	133	חֲגִיזָה	144
וַיִּרְוֹמְמָה	146-147	חֲדָה	55
וַיִּשְׁבַּע	143	חֲדָלוֹ	86
וַתִּמַּס, *וַתִּמַּס	134	חֲדָשׁוֹ	158
וַתִּנַּחַח	140	חֲדָשִׁים	160
וַתַּעֲדִי	127, 183	חֲזֹנִים	153-154
וַתִּרְבֵּי	129, 130, 133	חֲזִיפָה	171, 172, 174
וַתִּשָּׁב	151	חֲזִיפִישִׁית	153
	ז	חֲזִיפַת	171
זִבְדֵי	55, 57	חֲזִיפְתָהּ	171
זִבְדֵי	55	חֲזִיפְתָהּ	172
זִבַּח	162	חֲזִיפְתִּית	167, 168
זִבַּח	126, 186	חֲזִקוֹ	171
זִהָר	94, 95	חֲזִקֵי	171
זִוְהָרָה	156	חֲזִקִים	172
זִחְלָה	93	חֲזִקַת	171
זִכָּר	92, 106	חֲזִירוֹן	86, 135, 136, 188
זִכָּר	92, 198	חֲטָא	186
זִכְרָה	145	חֲטָאת	77

חֲיִיהוּ	57, 66		
חֲזִיל	143	יְאֻסָּף	61
חִילוּגִי	142	יָבֵל	105
חֲכָךְ	86	יָבֵל	105
חֲכָמָה	166	יְבֻלַּע	59
חֲכָמָתָם	166	יְגָאֵל	59, 60
חֲלֹד	105	יְגַבֵּל-	169
חֲלֹדִי	132-133, 188	יְגִיעוּ	58, 63
חֲלִי	160	יְדָבֵר	109
חֲמָה	55	יְדִיָּה	144
חֲנַנִּי	163	יְדַלֶּף	81, 86
חֲפָזִי	162, 169	יְהַגֵּה	184
חֲפָנִיו	153	יָרוּ	124
חֲפָצִי (-בָּה)	67	יְוֹאֲפֵס	156
חֲפָרִים	145	יְוַהֲפֹךְ	156
חֲפָרַע	85	יְוַפִּי	168
חֲפָרְפָרַת*	77	יְזַבְּלָנִי	59
חֲפָשִׁית	165	יָזַע	94
חֲצַפִּית	166-167	יָזַרַע	59
חֲצַרְמוֹת	92	יָחַדוּ	127, 188, 197
חֲקָךְ	172	יָחִיו	67
חֲרָמָה	85	יָחַרוּשׁ	57, 58, 61, 66
חֲרָטִית	77	יָחַסָּם	184
חֲרָשֶׁת	92	יָטַבָּה	85
חֲרָשָׁם	55	יָטַל	172
חֲשָׁבוֹן	60, 61	יְכַלְכְּלוּהוּ	129
חֲשָׁקִי	86	יְלֹוֹהַ	62
		יְמַלֵּה	86
ט		יְמַנֶּה	59, 60
טַבַּח	94	יְנַשֵּׂרֶף	176
טַהֲרָה	157, 169	יְנַשְׁוּף	176
טַהֲרָה	154, 155, 157	יָסַד	168, 175
טַהֲרוּ	158	יְסָפָה	64
טַהֲרַת	154	יַעֲלוּ	184
טַהֲרַתוֹ	157	יַעֲמִדוּ	165
טַל	153	יַעֲמִתּוּ	156

זַעַר	94, 95
זַפְּעוֹן	140-141
זַפְּיָו	168
זַפְּיָהּ	169
זַפְּיָתָהּ	169
זַפְּרָזוֹ	165
זַפְּתָהּ	172
זַפְּתַח	145
זַפְּתַח	59, 60, 81
זַצְהָר	59, 60, 62
זַצְחָק	49, 50, 64
זַקְבַּע	59
זַקְנָעִים	85
זַקְרָאֲנִי	63
זַקְתָּאֵל	85, 169
זַרְשִׁלִּימָה	212
זַרְיָחוֹ	49, 50
זַשָּׂאג	86
זַשְׁבַּק	59, 60
זַשׁוּה	80
זַשְׁחָק	62, 64
זַשְׁמַחוֹ	63
זַשְׁמַעָאֵל	64, 80
זַשְׁמַעָאֲלִים	80
זַשַּׁע	198
זַשַּׁעָהּ	146
זַשַּׁעָהּ	146
זַשַּׁק	142
זַשְׂרָאֵל	49, 64, 80, 146
זַשְׂרִי	63
זַשְׂרָף	59, 63, 109
זַשְׂשַׁכָּר	80
זַתְּהַלְלוּ	63
זַתְּמָהוּ	68
זַתָּו	142
זַתְּרוֹ	86

כַּ	68
כַּ־	51, 52, 124, 206, 212, 217
כַּבּוֹשִׁים	105
כַּבְּרַח	78
כַּבְּשִׁים	105
כַּבְּכֹד	64-65, 66, 87
כַּה	212
כַּהוֹנֵת	171
כַּהוֹנֵתוֹ	172
כַּוְלָם	171, 172
כַּוְנָיִם	55
כַּי	212
כַּיּוֹן	62, 141
כַּיְתְּרִים	144
כַּכָּר	57
כַּכָּר	80, 82
כַּל־	151, 169
כַּלָּה	73
כַּלּוֹ	171
כַּלְיוֹן	143
כַּלְמָה	63, 64, 191
כַּנּוֹר	67
כַּכְמָה	212
כַּסּוּס	70
כַּסִּיל	69
כַּסִּילִי	69
כַּסִּילִיָּהֶם	69
כַּסֵּל	109
כַּסְלוֹ	69, 70
כַּסְלָחִים	70
כַּסְלָהּ	70
כַּסְלָתָהּ	70
כַּסְמִים	84
כַּפָּה	78
כַּפְתּוֹר(ים)	56
כַּרְמִי	56, 129, 130

כִּרְתָּהּ	162	מִגְדוֹ	80
כִּשְׁפֵי	56	מִגְדָּל (ים)	78, 80
כִּתְרֵךְ	134	מִגְדָּל־	140, 191, 192
כִּתְרָה	163	מִגְדָּל	78
	7	מִגִּיד	66
ל-	68	מִגְלָה	58, 60, 66, 82
לְאִידוֹ	118	מִגְרֵשׁ	78
לְבַהֲלָהּ	55	מִדִּין	81
לְחַלֵּי	158	מִדְּיָנִים	81, 192
לְכַבֹּד	145	מִדְּיָנִית	81
לְלִבָּן	128-129	מֵה	212
לְלִפְוֹת	145	מוֹכֵרָה	153
לְמַנְצַח	55	מוֹת	131, 136, 215
לְקִרְאָה	57, 58	מוֹתָנִים	167
לְשִׁגְבָכֶם	146	מִזְבַּח	139, 191
לְחִשּׁוּעָה	145	מִזְמוֹר	192
לְאוֹמִים	171, 172	מִזְעָר	192
לְבוֹ	142	מִזְרַח	62, 88, 90-91
לְבוֹן	105	מִזְרָן	149
לְבִנָּה	81	מִחִיָּה	192
לְבִשָּׁה	161	מִחִילוֹת	142
לְגִשָּׁת	133	מִחְמַד	77
לְוִיָּתָן	86	מִטָּה	77
לְחֵם	187, 217	מִטָּה	86
לִישׁ	93	מִטְמִין	186
לְמוֹאֵל	176	מִטְמֵא	186
לְמוֹאֵל	176	מִלֵּל	142
לְעוֹמֶת	171	מִים	62, 93
לְפִידוֹת	77	מִיָּנִין	192
לְפָנֶיךָ	144	מִיָּנֶקֶת	92, 93
לְקַחַת	227	מִיָּתְלָא	192
	מ	מִכְמָשׁ/ס	81
מֵאֵד	226	מִכְנָסִים	81
מִבְּצָר	78	מִכַּר	162
מִבְּשָׂם	78, 81	מִכְתָּב	79

מְכַתֵּשׁ	77	מַמְשָׁקָה	67
מְלֵאָה	77	מְנִי־	67
מְלֵאכִי	77	מְנִי־בֵטֶן	67
מְלֵאכִי	77	מְקֹדֵם	90-91
מְלֵאמֵי	143	מְנַהֲגָה	139, 191, 192
מְלִבוּשָׁה	129, 190	מְנַהֲגָיָה	139, 144, 191
מְלוֹא	86	מְנַחָה	140, 191, 192, 193
מֶלֶח	127, 134, 186, 187	מְנִיחַ	81
מְלַחָא	187	מְנַלֵּם	192
מְלָה	89, 134, 137	מְנַצַּח	56
מְלָכָה	87, 89	מְנַשֶּׂה	77
מְלִכּוֹ	161	מְסַכֵּן	192
מְלַכְיָאֵל	77, 88	מְסַכֵּן	73
מְלַכֵי־צֶדֶק	88	מְסַפֵּד	191
מְלָכָה	161	מְעַבְרָיָה	144
מְלַכְכֵם	88	מְעִזִים	73
מְלַכְכֵם, מְלַכְכֵם	88, 89, 106	מְעִיָן	129, 180, 190, 192
מְלַקְחִים	84, 226	מְעַלְלִי	126, 188, 190, 198
מְמַזְרֵר	77	מְפַתַּח	56
מְמַשֵּׁל	146, 147, 191, 198	מְצַהֲלָת	79
מְמַשְׁלָה	135, 190	מְצַלּוֹת	79
מְמַשְׁלוֹתֵי	190	מְצַעֲדֵי־	140, 191
מֶן, מִן		מְצַעֵר	192
מְבִטֵן	67	מְצַפָּה	81
מְבִיחַ	67	מְצַרִי	145
מְגֹן	142	מְצַרִים	86, 93
מְדַמּוֹ	141	מְקַהֲלוֹת	128-129, 190
מְיָם	67	מְקַהֲלָת	77
מְכַנְּף	67	מְקַח, מְקַח	139, 191
מְלִילָה	142	מְקַלּוֹת	77
מְמַזְרֵחַ	63, 67, 192	מְקַלְלִי	172
מְמַחְרֵף	142	מְקַנָּה	192
מְמַנִּי	63, 64, 67, 191	מְקַנֵּת	192
מְמַעַל	67	מְקַפָּה	192
מְמַקְוֵשׁ	142	מְקַשָּׁה	192
מְשַׁעִיר	146		

מִרְחָקִי	127, 128, 188	מִתְרַדֵּת	80
מִרְיָם	81	מִתְרַפֶּקֶת	146
מִרְכַּבַּת	77, 137, 191, 216	נ	
מִרְכַּבַּת	216	נֶאֱסָף	181
מִרְפָּא	77	נֶאֱסָרוּ	181
מִשָּׂא	77, 89, 90	נֶבֶל, נָבֵל	187
מִשָּׂא	77	נֶגְדוֹ	203
מִשְׁבַּחַת	127, 128, 186	נֶגְדָה	136, 197
מִשְׁבִּית	63	נֶהְגִּין	181
מִשְׁבָּצוֹת	81	נֶהְגִּינוּ	163
מִשְׁבֵּר, מִשְׁבֵּר	129, 193	נֹאמָו	156
מִשְׁבָּב	191	נֹאמָה	156, 160
מִשְׁוֹבָח	141	נֹפְסָרוּ	183
מִשְׁחַח	168-169	נֹרָא	226
מִשְׁכִּינִי	163, 164	נֹרָא	226
מִשְׁכַּנְיֹו	139, 191	נַחַל	94
מִשְׁכַּנְתָּה	146, 191, 198	נַחֲלֵק	135, 180, 182
מִשְׁכַּנְתֶּם	63, 191	נַחֲשָׁב	60
מִשְׁלִישִׁי	129, 199	נַחֲשָׁבִים	135, 180
מִשְׁמִים	56	נַחֲשֶׁק	135, 180
מִשְׁמַע	79, 81	נַטַע	162
מִשְׁעַם	192	נִידוּנִים	142
מִשְׁפָּח	86, 192	נִיפְנָה	183
מִשְׁפָּט	86, 191	נִיפְצָם	183
מִשְׁרָה	86, 192	נִיקֵיתִי	141
מִשְׁרָפוֹת	79	נִישְׁתַּנָּה	183
מִשְׁתַּבַּיַח	140-141	נִלְחַם	183
מִשְׁתָּה	192	נִמְרָצַת	62
מִתּוֹק	176	נִסְקֵל	145
מִתּוֹקָה	176	נִעְזָרָה	182
מִתּוֹשֵׁלַח	94	נִעְלָמָה	57, 61, 66, 84, 182
מִתְכַּנְיֹו	139, 141, 196	נִעְלָמָה	61
מִתָּן	77	נִעְלָמִים	61
מִתְנַה	77	נִעְמִי (אֲבִי) נְעָם	94
מִתְנוֹסְטוֹת	66, 86	נְעָמִי	158
מִתְנִיָּה	165, 166	נְעָנָה	180
מִתְנִיָּהֶם	166	נְעָנוּ	126, 180, 181, 182
מִתְנִים	166, 167		

נַעֲנִיתִי	180
נַעֲצֵב	135, 180, 182
נַעֲצֹבּוּ	132-133, 182
נַעֲצוּץ	89, 90
נַעֲקֵר	181
נַעֲשֶׂה	126, 130, 180, 181, 182
נַעֲשׂוּ	126, 130, 180, 181
נַעֲשִׂיתָהּ	126, 180
נַפֵּל	162
נַפְתּוֹחַ	136-137, 197
נַפְתּוּלִי	89-90
נַפְתְּלָמִי	59
נֶצַח	126, 186
נִקּוּם	176
נִקְוֹמוֹתַי	176
נִקְטוּל (אנא)	114
נִשְׁבַּעַתָּ	63
נִתְגַּדֵּל	194
נִתְעַב	59
נִתְתָּירוּ	131

ס

סְגֹלָה	73
סֵדֶר	198
סוּרָה	226
סִידְרֵי	145
סִיחוּן	49
סִפָּה	171
סִפּוּחַ	91
סִפְחַת	91
סִפְתָּהּ	91
סִלְחָהּ	161
סִנְהֶדְרֵי־וֹת	128, 129, 130, 132-133, 138- 139, 196
סִנְהֶדְרִין	149
סִפְרוֹ	143
סִרְפָּד	79

סִתְרֵי	86
---------	----

ע

עֲבָרִי	87
עֲבָרִים, עֲבָרֵי־וֹת	87
עֲגֹלָה	67
עֲדִי, עֲדֵי	188
עֲדִים	87
עֲדִיתִים	144
עֲדָרָה	132-133, 188
עֲוֹבְרָה	153
עֲוֹזָה	172
עֲוִמָּעַם	171-172
עוֹר	226
עוֹר	226
עֲזִיאֵל	73
עֲזָר	77
עֲזָרִי	188
עֲזָרֵינוּ	161, 168
עִימָם	142
עִין	93, 144, 145
עִינִים	93
עִישִׁיתִי	141
עֵלָה	184
עֵלְמָה	77
עֵמִי	56
עֵמֶקָה	188
עֵמְרִי	74
עֵבְדֵינוּ	163
עֵנָה	180
עֵנּוֹת	127, 128, 188
עֵנּוֹחוֹ	127, 128
עֵנּוֹתָהּ	127, 128, 198
עֵנּוֹתָהּ-	226
עֵנִי	151
עֵנִין	79
עֵפְרָה	84, 85
עֵפְרָה	84, 85
עֵקֵב	134

עֲקֻבִּים	56	פָּרָא	92
עָרֵב (ב) עָרֵב	92	פָּרִי	188
עָרֵב	92	פָּרְעָה	150
עָרְבַת	78	פָּרְעָחוּנִי	81
עָרְכָה	163	פַּתַח	162
עָרְלָה	166	פַּתְחָה	87
עָרְלַת	166	פַּתְחָה	161
עָרְמָה	153, 166, 167	פַּתִּיתִי	172
עֵשָׂה	180, 181		
עֵשֶׂר	112	צ	
עֵשְׂרֵה	60, 61	צֹאצְאִים	84
עֵשְׂרוֹן	81	צַבִּיָּה	81
עֵשְׂתִי	68-69	צְדָקְנוּ	79
עֵשְׂתָרָה	137	צְדָקְתָהּ	137
		צַהֲלִי	163
פ		צַהֲרִים	155, 157, 169
פִּגְעַ	162	צוֹר	226
פִּגְעַ	126, 186	צוֹר	226
פִּיּוֹ	131	צַחַר	94, 106
פִּי צַח	142	צִיּוֹן	49
פִּי תִּירוֹן	141	צִיִּים	62, 90
פִּלְטָנִי	58	צִיִּנִים	62, 90, 91
פִּלְשְׁתִּים	80	צִיעֹר	143
פִּנָּג	78	צֶל	67, 68
פִּנְחָס	80, 81	צֶלָה, * צֶלָה	67, 68
פִּנְנָה	81	צֶלְחָה	161
פִּסְחָא	81	צֶלְצֶל	65, 87, 89
פִּעְלוֹ	154, 156, 158 159, 160	צַמְחָה	56
פִּעְלָה, פִּעְלָה	153, 154, 155, 157, 158, 161	צָנוֹת	79
פִּעְלֵכֶם	156, 159	צַנְעָה	194-195
פִּעְלִים	154, 156	צַנְעָה	195-195
פִּעְמוֹ	162	צַנְחָרוֹת	62, 91
פִּצְחָה	161	צַעַד	162
פִּצְץ	130, 196	צַעֲקָה	153
פִּקְחַת	196	צַעֵר	49
פִּקְחַת	196	צַפּוֹנָה	212
		צַפּוֹר	74

צַפְעָנִים 79
צַרְעָה 85, 94

ק

קָבֵלֹ 166
קִבְרוֹת 81
קִדְח 126, 186
קִדְם 92
קִדְקוֹד 166, 167
קִדְשָׁה 73
קִדְשׁוֹ 74
קִדְשָׁה 169
קוֹדֶשׁ 153
קוֹדֶשׁוֹ 153
קוֹדֶשָׁה 168
קוֹה 130, 131
קוֹה 130, 131
קִיבֻלְתִּי 141
קִיֹּ 145
קִלוֹת 56
קִלַּע 126, 186
קִנְאָה 87
קִסְת 92
קִצָּה 188
קִצְפָּה 135, 137, 197
קִצֵּר 162
קִרְאָה 161
קִרְבָּה 160
קִרְבָּה 163
קִרְבָּן 166
קִרְח 126, 186
קִרְח 109
קִרִי 188
קִרְיָה 57
קִרְיַת 57, 81
קִרְיַתִּים 57
קִרְנִים 56
קִשְׁט 187

ר

רָב 65
רַבִּי, רַבִּי 149, 150
רַבְלָתָה 81
רַבְלָה 81
רַבְסָרִיס 65
רַבַּע 162
רַבְקָה 87
רַבּוֹת* 56
רַבִּית 56
רַבַּת 56
רַגְלִיו 68
רִדָּף 164
רִדְתִּי 147
רִוּנִי 153
רַחֵב 94
רַחֵב 94, 95
רַחֵל 49
רַחַם 133
רַחַם 133
רַחוּן 87
רַחַת 92
רַעַם 94, 95
רַצִּיָּה 138
רַצְפָּה 58, 60, 82, 87
רַקֵּב 106
רַקֵּבָא 106
רַקְעָרָה 162
רַתּוֹק 89
רַתְיַקַּח 89

ש

שְׁבַחוּ 142
שְׁבַע 94, 126, 186
שְׁבַעָה 57
שֶׁבַר 162
שְׁבָרִי (ב) 162

שָׁבַת	128, 197
שְׂגִילֵנוֹת	87
שָׁדָה	79, 189, 198
שְׂדוֹת	79
שְׂדֵי	78
שְׂדֵמוֹת	78
שׂוֹא	131, 215
שׂוֹאֲלֵינוּ	156
שׂוֹחֲטִים	156
שׂוֹעֲתֵי	130
שׂוֹעֲמֵי	131
שׂוֹרָה	226
שׂוֹרָה	226
שְׂחַל	94, 106
שְׂחֻלִים	81
שְׂטָה	58, 60
שְׂטִים	58, 60
שְׂטוֹן	162
שְׂטֹנָה	79
שְׂתִית	93
שְׂכַב	162
שְׂכּוּרֵי	57
שְׂכָם	187
שְׂכּוֹן	162
שְׂלוּרֵי	131
שְׂלַח	162
שְׂלַחִים	81
שְׂלָם	209
שְׂפָה	78, 81
שְׂמֹרֹת	63
שְׂמַחַת	139, 140
שְׂמִים	93
שְׂמִלָּה	78
שְׂמַעָא/ה	81
שְׂמַעוּ-	63, 87
שְׂמַעוֹן	80
שְׂמַעֵי	80, 81, 87

שְׂמַעֵי	161
שְׂמַרוֹן	81
שְׂמַשׁוֹן	81
שְׂמַשֵּׁי	59, 60
שְׂנָאָב	80
שְׂעֵלוֹ	158
שְׂעֵלִי	158
שְׂעַרְיָם	144
שְׂפַטְנֵי	164
שְׂפַחֵי	105
שְׂקוּצֵי	87
שְׂתֵי	226
n	
ת-ת-	51, 52, 124, 206, 212
תְּאִסְף	185
תְּאִסְפֵי	61
תְּאִפּוֹד	132-133, 183, 185
תְּאִרוֹ	156, 157, 158, 159
תְּאִרָם	154, 157, 158, 159
תְּדַעַל	81
תְּה-	212
תְּהַגֵּה	135, 183, 184
תְּהַיְוֶה	212
תְּהַלְתְּהַ	143, 198
תְּהַרְוֶה	184
תְּוִאֲרוֹ	156
תְּזַכְּרֶהוּ	145
תְּזַנְיָתְהָ	199
תְּזַנְיָתְהָ	129
תְּחַטָּא	127, 185
תְּחַטְּיָא	185-186
תְּחַטְּיָא	185-186
תְּחַיֶּה	138-139, 141, 203

תְּחִיֵּת	138-139
תְּחִיָּנוֹר	138-139
תְּחִנָּה	126, 183
תְּחִנוּנֵי	127
תְּחִסְכוּ	126, 183, 184
תְּחִשׁ	94
תְּחִשְׁכוּ	126, 183, 184
תְּחַח	94
תְּחִתִּים	57-58, 66
תְּחִיָּשׁב	142
תְּחִימָה	212-213
תְּחִיז	78
תְּחִי	172
תְּחִינָה	79, 81, 192
תְּחִינָע	79, 82, 96
תְּחִינָאוֹר	212
תְּחִינָרִים	88, 89, 90
תְּחִינָים	52, 78, 89, 90
תְּחִינָן	56
תְּחִינָעם	145
תְּחִינָרם	58
תְּחִינָרֵבָה	133
תְּחִינָרָת	92, 93
תְּחִינָח	78
תְּחִינָל	59
תְּחִינָלַח	87
תְּחִינָחַח	82
תְּחִינָחַל	145
תְּחִינָחִי	161
תְּחִינָחִיף	128-129
תְּחִינָחִמָה	78
תְּחִינָחִקָה	82
תְּחִינָחִרָה	82, 87, 192

תְּחִינָרִי	80
תְּחִינָרִיל	146

Syriac:

gîglâ'	89
hidrâ'	128
mâhe'	108
mahhe'	108

Mandaic:

gîrglâ	89
hidrâ	128

