Two Syriac Masoretic signs:
Nagoda and Metappeyana

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Abstract

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Nagoda and Metappeyana are lines inserted in Syriac biblical manuscripts, among the Easterners (or Nestorians); Nagoda appears above words and Metappeyana below or on the line between words. The confinement of these lines to biblical texts suggests that they were designed to ensure proper enunciation in public reading.

Chapter 1 presents the treatment of these lines by classical Syriac authorities - Elias of Tirhan, Joseph bar Malkon, John bar Zoëbi, Bar Hebraeus, and two anonymous treatises. The Syriac texts are presented with English translation and critical notes, and a comparative table follows. While some agreement exists regarding the role of Metappeyana (said to appear before words beginning with vowelled consonant, after construct nouns and certain particles), these authorities' prescriptions for Nagoda show bewildering variety.

Chapter 2 summarises the findings of modern writers (notably Ewald, Martin, Duval, Merx and archbishop David). While Ewald based himself on biblical manuscripts alone, the others relied in varying degrees on biblical texts and Syriac classical works together, and all reached different results.

In Chapter 3, the text of Genesis in Add. 12138 has been analysed in itself with certain references to Syrian
grammarians. Metappeyana appears to join successive words, and to cancel the word stress on the former word. Nagoda appears to indicate a special intonation, showing the inter-relations of words and clauses within the verse. The common notion that Nagoda and Metappeyana are straightforward opposites and therefore incompatible is rejected.

Chapter 4 surveys the use of the lines in other manuscripts. While manuscripts vary in their precise usage, partly in accordance with varying tastes, the basic functions inferred in Chapter 3 still appear applicable. While the Syrian grammarians' views on Metappeyana seem more or less accurate, their treatment of Nagoda has been largely vitiated by the illusion that it is simply the opposite of Metappeyana.
Acknowledgements

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Scheme of Transliteration

The method of transliterating Syriac characters is adopted here as follows:

- \( \checkmark \) - fricative b
- \( \checkmark \) - fricative g
- \( \checkmark \) - fricative d
- \( \checkmark \) - h
- \( \checkmark \) - w
- \( \checkmark \) - p; fricative p
- \( \checkmark \) - z
- \( \checkmark \) - h
- \( \checkmark \) - t
- \( \checkmark \) - y

An initial \( \checkmark \) is usually omitted in technical Syr. terms; e.g. A\( \checkmark \) if similarly, also in a final position, e.g. Retma.

Gemination of letters is shown by doubling; e.g. Metappeyana.

The vowels are represented as follows:

- a = petaha or zeqapa
- e = zelama qašya or pesiqa
- i = hebasa arika
- o = rewaha or alaša.

Sewa, whether quiescens or mobile, is normally transcribed as /e/ in the event of conventional technical terms.
Principal Abbreviations

Add. = British Museum Additional Manuscripts
AJSL = American Journal of Semitic Languages and Literatures
Brit. Lib. = British Library
JA = Journal Asiatique
JAOS = Journal of the American Oriental Society
JSS = Journal of Semitic Studies
ms., mss. = manuscript, manuscripts.
Pet. 9 = Codex Petermann ms. 9 (ed. Merx, 1889, 183-94)
Chapter 1

Classical Syrian Grammarians on Nagoda and Metappeyana

The lines Nag. and Met. are explicitly described by the East Syrian grammarians Elias of Tirhan (died 1049), Joseph bar Malkon (12th cent.) and John bar Zoći (12th-13th cents.), and also by the Jacobite Bar Hebraeus (†286), who states that "the West Syrians do not possess them, only the Easterners."¹ The text of all relevant passages is presented in this chapter, together with translation and commentary.

In addition, lines having the appearance of Nag. (usually drawn, as we shall see, as a diagonal line running 'north-east' to 'south-west') but not named as such occur in an appendix (foll. 303bff.) to the well-known Nestorian masoretic manuscript Brit. lib. Add. 12138 (dated AD899), and in two anonymous lists of accents² dated by J.B. Segal to the tenth century.³ Relevant extracts from these are added.

A basic problem arises in the translation of the native sources. At the beginning of this study, of course, the meaning of the terms ḫada and ḫeṣā must be treated as unknown. How then should one translate at

3. J.B. Segal, (1953.79).
the outset an instruction like \( \text{ŋa} \) or \( \text{ŋa} \), bidding the reader as appropriate to carry out whatever is prescribed by Nag. or Met? Etymology yields no satisfactory solution: among other meanings, \( \text{ŋa} \) can mean 'attract' or 'prolong', and \( \text{ŋa} \) can mean 'shut' (in pe\( ^\text{c} \)al) or 'attach' (pe\( ^\text{c} \)al and pa\( ^\text{cc} \)el), all suggesting different phonetic phenomena. It seemed best not to translate these two forms at all in this chapter, but to write NGD and TPY, begging no questions.

The first extant East Syriac grammar to discuss the lines is that of Elias of Tirhan, the Nestorian Catholicus, bishop of Tirhan from 1028 till 1049. Elias compiled ecclesiastical canons and also composed grammatical tracts. 4

As a grammarian, Elias "was outstanding in his day, both for his attempt to evolve a synthesis of Eastern and Western Syriac grammar, and also for his work in explaining Syriac linguistic usages to an Arabic-speaking public." 5 Wright suggests that Elias composed his grammatical tracts before 1028. Some of these - including the following section on the lines - were edited and translated by Baethgen. 7

In a concise style, Elias offers rules for applying each symbol; however, he gives no detailed information

---

4. Cf.Wright, (1894.233ff.).
5. Cf.Segal, op.cit., pp.32ff., also Merx, op.cit., ch.IX.
7. See: F.Baethgen, (1880. ff.).
as regards their graphic forms or positions. His section on the lines runs as follows:

"Regarding the function of the lines current among the East Syrians - that is to say, Mag., Met., Marthana and Mehagyan - we know that the pointing signs are of..."
two types. One is for distinguishing the pronunciation of individual words, i.e. nouns, verbs, and the other parts of speech; such signs are Zeqapa, Petaha, Quṣṣaya etc. The other type guides one towards and indicates the proper meaning of the context, e.g. Celaya, Taḥtaya, Zauga\(^{10}\) and the rest of the accents. Therefore certain lines belong to the former type, others to the latter.

Now, Nag. sometimes has the function of separation,\(^{11}\) e.g. 

\[
\text{The word is to be NGDed so that we can read the rest of the sentence.}\]

Similar is:

(Matt. 13:34)

\[
\text{We NGD so that both M's in will be clear.}
\]

Elsewhere, however, the function of Nag. is like that of an accent, as in a command, e.g.

(Matt. 11:28)

\[
\text{Met. is the opposite of Nag., in that it follows}
\]

the sense. Thus we say:

---

10. These three, together with Pasoqa, are the main pausal accents; see Bar Malkon, (Add. 25876, fol.277).

11. Following Baethgen "ist... in der Trennung", for Syr.

12. Syr. ֵ may also mean 'word', but only sentence seems to yield acceptable sense, as shown below.
We join so that we recognize the construct usage

In public reading, one can sound ridiculous if one reads a non-final pause (as in ^> ) with the falling tone normally reserved for the end of a sentence. Elias' first case, therefore, may show Nag. as a warning to the reader not to make the pause sound final. Broadly, then, Nag. in Elias' first usage is a sort of accent with musical significance.

The third usage also suggests a musical accent, which however seems to have little in common with the first usage. Perhaps the analogy of English and Modern Arabic suggests rising tone as a common feature of non-final pause and commands. Alternatively, it is worth noting that both examples of command are also examples of non-final pause: the sense of requires to be completed by the words spoken, and the citation from (Matt. 11:28) by . Perhaps, then, non-final pause and not command was the true factor here.

The second usage, however, seems utterly different (clear pronunciation).

The example of Met. in construct phrases is clear, but one cannot easily tell in what sense Met. is the opposite of Nag.

13. Baethgen's interpretation was quite different; see ch.2 below.
Plate 1

(i) Elias of Tirhan, ed. Baethgen, p. 39

... (Faded text due to damage)

(ii) Bar Malkon, ed. Merx, p. 126-7

... (Faded text due to damage)

1) Rota punctorum etiam in codice Berolinensi Petermann 9 existat - P., qui hoc loco praebeat.

2) P. f v pro f v.

3) P. f v pro f v.

4) P. f v pro f v.

5) P. f v pro f v.

6) P. f v pro f v.

7) P. f v pro f v.

8) P. f v pro f v.
In a treatise on the accents, Elias again mentions Nag., observing that the accent Mesabbe\textsuperscript{c}ana is "compounded of Paqoda and Nagoda." Mesabbe\textsuperscript{c}ana itself, declares Elias in the same treatise, is so called "because it satisfies the reader with the voice."\textsuperscript{15} According to Segal, Paqoda originally accompanied imperative and jussive forms, and was generally marked by rising tone (pp. 69 f, 87ff.), while Mesabbe\textsuperscript{c}ana is "identical with Pasoqa both in appearance and use" (p.113). The available information on Mesab., mostly from the first anonymous treatise in Codex Pet. 9, is surveyed later in this chapter.

In the 12th century, Joseph bar Malkon,\textsuperscript{16} bishop of Nisibis,\textsuperscript{17} composed a metrical treatise\textsuperscript{18} in twelve-syllabled lines, entitled 'The net of the dots',\textsuperscript{19} on the Syriac pointing system, including Nag. and Met.\textsuperscript{20} Unfortunately the constraints of metrical form resulted in some obscurity and disorderly arrangement. Bar Malkon too omitted to describe the outward form of the lines, and his statements-like Elias's—are not marked by the

14. Ed. Merx, op.cit., pp.194-200; the two references are on pp.197,200.
15. Syr. ܒܕstartIndex(37,497) ܠܪܓܘܐܡܣܘܐ ܓܘܐܡܣܘܐ \textsuperscript{c}
16. On Joseph or Yabbar Malkon, see Baumstark, (1922.309).
17. Wright, (1894.256).
19. Syr. ܐܛܪܟܝܐ ܢܒܢܘܙܐ ܨܠܠܝܘܐ \textsuperscript{c}
20. His section on the lines is to be found in Add.25876 fol.277; Merx, op.cit., pp.126-7.
symbols themselves in the surviving manuscript.

I. B. Malkon states: "It is right to know that two lines, called Nag. and Met., are related to the accents. Nag. is placed above the vowel preceding the final vowelless consonant of a word, when it is followed by a word whose initial consonant has no vowel; provided that the former vowelless consonant does not bear an accent such as: Samka, Mezišana, Rahta or Retma, and provided that vowelless consonant is not one of the letters W, Y, preceded by a homorganic vowel.

21. Syr. The author made use of this term (loc.cit. fol.277b) as an introductory title for his discussion on the accents. It seems, however, that he invented the form tap for his own usage; cf. Gottheil (1887.40 §80) who could not find this form in any of the other native grammarians.

22. A lower dot which marks with falling tone a minor pause before the end of a clause; see Segal, op.cit., pp.72, 101.

23. An upper dot accompanied by rising tone indicating a minor pause in a sentence to which such tone is suitable e.g. question, exclamation etc., see Segal, op.cit., p.81 ff.


25. An upper dot used in a sentence with rising tone where it is placed over the word or syllable to which it is desired to give emphasis, see Segal, ibid., p.84.

26. He thus regarded final matres lectionis as vowelless consonants; on this view, every Syriac word ends in a vowelless consonant. By contrast, Elias of Tirhan treated the three matres lectionis as (vowel letters) and as the sources of all the vowels (/a/ and /ā/ come from Alep, and so on); see Baethgen's ed., ch.27.
II. NGD when both vowelless consonants ending the first word and beginning the second one are homorganic, 28

III. but TPY when one of the consonants that come together can be pronounced softly. 29

Examples of the former i.e. Nag.: 30

Examples of the latter i.e. Met.: 31

And similarly: 31

27. Syr. 30 مبَلس

28. Cf. Bar Hebraeus' expression مبَلس for letters that are phonetically similar, his exs. being the pairs tt (and tt) and dt; see Moberg's ed. op.cit. p.196, 1.27. For further information on the term مبَلس and the division of the consonants into phonetic groups, see Duval, op.cit., pp.401 and 17, and Merx, op.cit., pp.55ff.

29. Syr. مبَلس

30. The pointing of this word emerges clearly from the twelve-syllabled lines: 30

31. Syr. مبَلس, so that these are further examples of Met. Merx considered them instances of Nag. and hence found support for his theories that Nag. had conjunctive force (p.127) and that Nag. occurred after a word ending in a vowel or before a word beginning with a vowelless consonant (pp.200ff.). In ch.2, however, these theories are shown to be invalid, and cannot possibly justify Merx's unnatural interpretation of مبَلس here. According to vs.4, Bar Malkon would not have allowed Nag. after طلم or لطلم, since final Alep belongs to the مبَلس.
Met is thus used where Nag. might seem appropriate; one does not then NGD, but articulates softly."

Bar Malkon's first proviso in 'I' suggests that as Nag. is incompatible with certain accents, it may itself have musical significance.

Statements II and III, along with the enigmatic final couplet, seem to concern the situation where the two consonants on either side of a word boundary are homorganic. In natural pronunciation, one consonant (usually the former) might be pronounced lightly or even omitted. In deliberate pronunciation each consonant would be pronounced carefully, albeit with difficulty.

Bar Hebraeus describes the homorganic sets bp, gkq, hח and zסס as mutually hostile letters (אשיא), unfit to be joined together. Met. might then have indicated natural, and Nag. deliberate, pronunciation. The final couplet may mean that in some cases both a deliberate pronunciation (with Nag.) and a natural pronunciation (with Met.) were acceptable.

Bar Malkon briefly mentions Mesabee³ana among a list of accents such that "all are not agreed concerning them and men judge (for themselves) their insertion."

---

33. Merx, p. 124. The remaining accents in the group are given as and
Plate 2

(i) Bar Zocbi in Add. 25876. fol.167ff.

...
(ii) Loc. cit. fol. 166b.
A more detailed discussion on the lines is offered in the grammar of John bar Zo'bi, who flourished at the beginning of the 13th century. He wrote metrical homilies on the chief doctrines of his Nestorian faith, but was better known as grammarian. His grammar, which survives in Brit. Lib. Add.25876 and other manuscripts, includes a description of the Eastern punctuation system. The discussion on Nag. and Met. falls within the section edited and translated by Abbé Martin, who mainly used foll. 155b-271b of the London manuscript and sometimes consulted the Vatican ms. Syr. 450. It is also paraphrased by Merx (pp.127ff.), who interspersed comments reflecting his own theories, notably that Nag. was conjunctive and Met. separative; these theories are discussed in Ch.2.

Although Bar Zo'bi profited by the work of his predecessors his treatise on the lines is far more clearly written, apart from occasional seeming contradictions. The cases are arranged in an admirably orderly scheme, and the examples are carefully chosen. Bar Zo'bi has been justly acclaimed as the greatest of the East Syrian grammarians.

34. Wright, op.cit., p.258.
35. Merx, op.cit., Ch.X.
36. Martin, (1877).
37. Especially Elias of Tirhan who was mentioned by name in his section on the accents, cf. Add.25876 fol. 170.
38. Merx, op.cit., p.158.
Bar Zocbi states that Nag. occurs on the penultimate consonant of a word (IIb, VIIa below; cf. VIA, VIIa); the looser statements that Nag. accompanies ((Conv) a word (IIIb, IVa, Vb) may be equivalent. Met. is said to accompany (Conv) a word (Ib, IIa etc.). He does not describe the form of either line.

In the London ms., Nag. is an upper line, turned upwards in the first five examples (e.g. (Conv)), but downwards in the rest (e.g. (Conv)). Only once does it appear on the penultimate consonant, namely (Conv) under IVb, in fol. 168a, 1.16. Usually it falls on the last consonant, but sometimes between words, and even, in two early examples ((Conv)), on the first consonant of the second word. This departure from Bar Zocbi’s own instructions casts doubt on the evidence of the ms. Met. is a lower stroke, somewhat below the level of the line, drawn between words. In three cases the words had to be divided between lines, and the new line began with the second word; thus in fol. 168a, 1.12 ends (Conv) and 1.13 begins (Conv).

Bar Zocbi states: "It is right to know that the pointing system includes four lines called Nag., Met, Mehagg, and Marht. Two of these lines are related to the large dots (the accents), that is to say, Nag. and Met. The


40. On the last two, see n.8 above.
other pair, i.e. Mehagg. and Marht., are related to the small dots (the vowels).

Now we shall treat the pair which are related to the large dots, that is to say, Nag. and Met. These two are mutual opposites: where Nag. operates, Met. cannot, and vice versa. They are recognizable by their characteristics, as follows: 41

Ia When a word has two consonants repeated, 42 and we wish both the consonants to be clear, we NGD the word which precedes that one which contains the repetition; e.g. (Matt. 13:34)

Ib If the latter word is not written with such repetition, Met. appears with the preceding word; e.g.

IIa When a nominal phrase comprises a noun in the construct state 43 and another noun in the absolute/emphatic state, 44 Met. accompanies the first noun, e.g.

IIb When a nominal phrase comprises two nouns in the emphatic state and the relative particle (d) joins them,

41. Each case was introduced by or . Merx argued that this meant that Bar Zo[bi's list was not intended to be exhaustive, but that is not convincing.

42. Martin strangely: "un mot redoublé".

43. Syr. ('incomplete noun').

44. Syr.
Nag. occurs on the consonant preceding the final emphatic Aleph of the first noun; e.g.

\[\text{لام-حلا، } \text{لم-حل، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا}].\]

IIIa When prepositions are written without personal pronoun suffixes, Met. appears with them, unless the noun introduced by the preposition begins with Yod hebasa or vocalized Aleph; e.g.

\[\text{لام-حلا، } \text{لم-حل، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا}].\]

IIIb If however the prepositions are suffixed, Nag. accompanies them; e.g.

\[\text{لام-حلا، } \text{لم-حل، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا، } \text{لم-حل، } \text{لم-حلا}].\]

IVa When the particle Kad introduces a word whose initial consonant has no vowel, then Met. occurs on it; e.g. With verbs:

\[\text{بدو-سر، } \text{بدو-سب، } \text{بدو-نس.}\]

The same applies to nouns whose first consonant is vowelless:

\[\text{بدو-طمس، } \text{بدو-حصب، } \text{بدو-اسب.}\]

45. The Vatican ms. omits this proviso, according to Martin (p.24), who approves, perhaps because it is not stated what happens if the noun does begin in Yod hebasa etc.

46. This ex. does not occur in the Vatican ms., according to Martin.

47. The only suffix in these exs. is that of the first person singular.
IVb However when the particle Kad introduces a word whose initial consonant has a vowel, then Nag. accompanies it, e.g.

With verbs:

Similarly with nouns:

Va When one of the particles; Kad, Cad, Cap, Cav, Cen introduces a verb, whether its initial consonant has a vowel or not, then, providing that that initial consonant is not Yod hebasa or vocalized Alep, Met. appears; e.g.

With verbs:

48. Presumably a participle.

49. It is odd that should be included a second time here, especially as rules V contradict IV: before a word which begins in a true consonant followed by a vowel, IVb prescribes Nag. while Va prescribes Met. Martin (p.25, n.2) therefore considered that case Va applied when the first consonant of the second word was vowelless only, and emended away the rubric "whether its initial consonant has a vowel or not", together with appropriate exs.

50. Elias of Nisibis (ed. Gottheil, 1887, p. 2) explains that the term was used to indicate the modification of the initial yi/ye into ²i/²e. Bar Hebraeus (op. cit., p.5) classifies it as an Eastern vowel corresponding to Western Hebasa ²arika - i.e. /long i/.
The same rules apply to nouns, just as for verbs. When the initial consonant of the word introduced by the particle is vocalic Aleph or Yod, Nag. accompanies it; e.g.

With verbs:

Nouns also follow the same rules as verbs: when the first consonant of the word is vocalic Aleph or Yod, Nag. is

51. The ms. gives no exs. but under heading Vb (on words beginning effectively with a vowel) we find six exs. which must originally have belonged here, and are together presented now; see n.53 below.

52. Syr. which according to Duval, (op. cit., p.394), may indicate a semi-vowel as well as a vowel. The terms and exs. in Va suggest, however, that the second word in each case should effectively begin with a vowel. The only contradictory ex. is . Meix (p.129, n.1) dismissed it as an error. Perhaps was to be pronounced ; cf. the note on (as well as ) in Add. 12138, fol. 9a, 11.25ff., bidding the reader to pronounce the Yod .
inserted, for example.\footnote{53}

\begin{verbatim}
27
53
68
226
712

VIa When the pronominal suffix (H) is followed by a noun whose initial consonant has no vowel, you NGD the element preceding that suffix, in order to make that (H) clear; e.g.

\begin{verbatim}
53
69
522

VIb However when the consonant following the suffix
\end{verbatim}

\footnote{54}

53. In the London ms. (fol.168b, 11.15-16), there follows a list consisting of the five exs. from Vb, with inserted nouns after the third. These of course do not concern nouns, and must have been repeated in error from Vb; they are omitted here. The ms. continues (11.17-20): "Similarly with nouns, in the same way, Met. is inserted, as in etc." This too is not germane to our context, which deals with words that begin effectively with a vowel; it must have been displaced from Va, the heading being duplicated. It is therefore inserted in Va. Thereafter, the ms. has (1.20) ..... which at last yields the exs. relevant to Vb. Martin (p.26) and Merx (p.129) perceived that the text was in disorder but did not restore it in detail, as has been attempted here. The Vatican ms. is in similar disorder, according to Martin (p.25, n.1.).

54. Oddly, is classified here as beginning in a vowelless consonant, and yet as beginning in a vowelled consonant in VIb. The latter pronunciation is familiar. The ex. under VIa, if not a textual error, may imply that the Alep retained its vowel (\textit{d\textashape alaha}), though this would contradict the exs. in VIIb below, or that the Alep and its vowel could be omitted (\textit{alaha}, cf. \textit{\textashape al-\textashape ilah}).
(H) has a vowel, Met. is to be used; e.g.

\[
\begin{align*}
&\text{\textdialect{H}}
\end{align*}
\]

VIc Met. is used also when Alep appears instead of H, e.g.:

\[
\begin{align*}
&\text{\textdialect{H}}
\end{align*}
\]

VIIa In the case of two consecutive vowelless consonants, the former being the last of the first word and the latter being the first of the next word, Nag. occurs on the vowelled consonant which precedes the final vowelless consonant in the first word; e.g.

\[
\begin{align*}
&\text{\textdialect{H}}
\end{align*}
\]

VIIb However if the initial consonant of the second word, which follows the vowelless consonant has a vowel, then Met. appears; e.g.

\[
\begin{align*}
&\text{\textdialect{H}}
\end{align*}
\]

VIIIa When such things scil. in VIIb occur after Retma and these are two "words" only after Ret., you

---

55. The exs. show that the 3rd s.f. as well as the 3rd s.m. suffix is meant.

56. This contradicts IIb above, which prescribed Nag. in precisely these cases.

57. This case differs in that Alep belongs not to the emphatic ending but to the noun itself; it hardly serves "instead of the suffix H".

58. See, n. 25 above.

59. Syr.  לשִׁים, whereas his usual term for 'word' is  לשנים, but the emphasis on the emphatic ending is perhaps two closely connected words could form a single.  לשִׁים, since  לשִׁים is offered as an ex. of two לשִׁים. Here quotation marks distinguish  לשִׁים from לשִׁים.
NGD the vowelled consonant which precedes the final vowelless consonant of the first word, so that the articulation of it, rather than of any other "word", will be that characteristic of Nag., e.g. (2 Sam. 14:7) VIIIb When a further "word" is added after i.e. when Ret. is followed by more than two "words" Nag. is to be dropped and Met. appears as usual, e.g.

IX In metrical discourses too, you should NGD and TPY with this sense: Met. indicates excess, Nag. deficiency.

From his mention of clear pronunciation in (Ia) and (Vla), it seems that Nag. sometimes implied a deliberate and distinct pronunciation. Met. may then have indicated.

60. Syr. which may denote either vocalization or inflection of the voice, see n.39 above.

61. Accompanied by an accent that cannot readily be identified. Again, three "words" = four words.

62. No ex. is supplied to elucidate this obscure statement. Given, however, that Met. precedes vowelled consonants and Nag. vowelless consonants (VII), it seems that Met. indicated the addition of a vowel (e.g. p.16) and Nag. the omission of a vowel (e.g. p.5), both of which are sometimes required at the beginning of a word; references are to Bickell, (1866).
a natural pronunciation, in which fusion was possible; this seems natural after construct nouns (IIa) and unsuffixed prepositions (IIIa). It is also plausible that the final consonant of a particle was neglected (Va), unless the next word began with a vowel, in which case the pronunciation of the particle remained clear (Vb). The contradictory doublet (IV) on يس is mysterious.

In (VII) and possibly (IX), however, Nag. and Met. have the quite different function of showing whether the next word begins in a vowelless or vowelled consonant.

The effect of Ret on the lines (VIII) suggests that they have musical significance; this is hard to link with either function above.

Almost immediately before his treatment of the lines, Bar Zo. briefly mentions Mesabbeٍ. "Mesabb. is so called because it satisfies the reader in an interrogative sentence, and its sign is Nag., placed at the end of a phrase." Examples:

Gen. 18:31

Gen. 18:32

The reference to "satisfying the reader" recalls Elias, but remains obscure. Nor can one relate this function of Mesabb. with those assigned by Bar Zo. to Nag.
Plate 3

(i) Bar Hebraeus, ed. Moberg, p.200-1.

(ii) Loc. cit. p.252.
In the 13th century Bar Hebraeus properly named Gregory Abu \(^{31}\)-Farag discussed the subject of the lines. Bar Hebraeus, the Westerner, (died 1286) composed three grammatical works as well as many others touching nearly every branch of science known in his time. 63

The lines are discussed in his large grammar entitled 'The Book of the Lights'. It has been first edited by Martin (1872) and translated and again excellently edited by Moberg (German tr. 1907, Syr. text 1922).

Bar Heb.'s main treatment of the lines appears in his section on the consonants, between paragraphs on successive vowelless consonants and on consonants written but not pronounced. He refers to Nag. (but not Met.) again, however, in his discussion of the accents.

The former passage appears in Moberg (pp.200 ff) and may be translated:

"The West Syrians do not have these \(\_
\text{lines}\), only the Easterners.

When two separate vowelless consonants occur \(\_
\text{at a word boundary}\), they NGD or prolong the vowelled consonant which precedes the vowelless consonant ending the first word, and above it they insert an oblique stroke which they term Nag. e.g.

\[
\text{above } \quad \text{in } \quad (\text{Ps.3:4})
\]

\[
\text{and above } \quad \text{in } \quad (\text{Ps.7:3})
\]

Ib However, if a vowelless consonant at the end of
the first word is followed by a vowelled consonant at the
beginning of the second word, they TPY and "hold" (אָסָמ) and do not prolong the vowelless consonant, and they
place below it a horizontal line which they term Met., e.g.

below א in (Ps.7:8) חָלְתִּי לְפָנַי יָהוָה
and below מ in (Ps.7:12) נַעֲמַת חֲלֹמוֹת
and below ח in

IIa Particles ending in a vowelless consonant, e.g.
Kad, kad, āw, ān, āp, etc., when they introduce a word
beginning with a vowelless consonant, take Met. on their
final consonant; e.g.

with nouns as in: דִּבְרֵי לֵאמָּה קָדָם
with verbs as in: צְרִיךְ לֶמֶט אַד

IIb When these particles introduce a word beginning
in a vowelled consonant, then

(i) if that vowelled consonant is Yod hebas or
Aleph with any vowel, Nag. accompanies the final vowelless consonant of the particle:

with nouns, e.g. דִּבְרֵי לֵאמָּה קָדָם
with verbs, e.g. צְרִיךְ לֶמֶט אַד

(ii) if that vowelled consonant is other than
Yod hebas or Aleph, Met. accompanies the final vowelless consonant of the particle:

with nouns, e.g. דִּבְרֵי לֵאמָּה קָדָם
with verbs, e.g. צְרִיךְ לֶמֶט אַד

IIIa When suffixed prepositions are followed by a word
beginning with a vowelled consonant, Nag. accompanies the
vowelless consonant of the suffix, e.g. 

IIIb However, if the preposition is unsuffixed, Met. appears, e.g. 

IVa In cases of repetition, Nag. is used, e.g. 

Matt. 13:34 

IVb Met. appears in the absence of the repetition, e.g. 

Bar Heb.'s treatment is briefer than Bar Zo.'s, where all these four rules are paralleled (VII, V, III, I). Two contrasts exist. On unsuffixed prepositions, Bar Zo. prescribes Met. provided that the following consonant is not vowelled Yod or Aleph, but Bar Heb. requires that consonant to be followed by a vowel. Regarding repetition, while both authors (as well as Elias) quote (Matt. 13:34) as their sole example, they differ as to the repeated element: for Bar Zo. (and Elias) it is (M) in מַלָּכָה, but for Bar Heb. it is apparently (M) (cf. מַלָּכָה). Bar Zo.'s explanation, in terms of clear pronunciation, is more convincing. Perhaps Bar Heb. knew (Matt. 13:34) as the stock example of Nag. in connection with repetition, without understanding why, and felt bound to append it.

The explanations of NGD as "prolong" and TPY as "hold" (i.e. curtail?) are variously interpreted, as we shall see in Ch. 2.

Bar Heb.'s other reference to Nag. appears in his treatment of the accent Garora (Moberg, p.252). Segal cites many varied explanations of Garora among the Syrian grammarians (pp.123, 148), though its "exact significance...
was forgotten early" (p.123, n.16). For Bar Heb., however, its function is tolerably clear: it appears on "separate words that draw one another along", i.e. on any single word that carries emphasis but does not end the sense-unit. Separate items in a list would suit this description, and would require special modulation to show that the list continued. Bar Heb.'s ex. is (2 Cor. 6:4-7 "But in everything let us show ourselves as servants of God..."). He prescribes Garora on the earlier items in the list that follows ("with great endurance;... with kindliness"). He continues (Moberg, p.252, 11.24-7):

"Therefore, when the items [אכ] are joined [ךל], Garora ceases, and Nag., whose sign is an upper line, appears, especially among the Easterners, thus:

The expression "joined" may mean that these later items comprise phrases of two or more words, or that these items should not be separated abruptly like the earlier items. At all events, Nag. here indicates the intonation characteristic of a non-final pause in a list.

The evidence of the four grammarians is summarised in the comparative table below. Here a modern phonetic description is used, rather than those of the grammarians, who somewhat neglected the distinction between script and pronunciation, e.g. in classifying matres lectionis as consonants. In particular, words which Bar Zo. describes as beginning in Yod hebasa or vocalized Alef, are treated as beginning in a vowel.
Comparative Table

<table>
<thead>
<tr>
<th>NOTATION</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Consonant, not including Aleph or Yod hebra.</td>
</tr>
<tr>
<td>C</td>
<td>Consonant, including Aleph or Yod hebra. This symbol has graphic rather than phonetic significance.</td>
</tr>
<tr>
<td>V</td>
<td>Vowel</td>
</tr>
<tr>
<td>S</td>
<td>Sow</td>
</tr>
<tr>
<td>C</td>
<td>occurrences of same consonant.</td>
</tr>
<tr>
<td>1,...,C 1...</td>
<td>different consonants</td>
</tr>
<tr>
<td>A</td>
<td>Retma, Samka, Mezi'ana, Ra'ata, or similar accent (Bar Malkon)</td>
</tr>
<tr>
<td>R</td>
<td>a preceding Retma, followed by just two &quot;words&quot; (Bar Zo'bi)</td>
</tr>
<tr>
<td>H</td>
<td>&quot;homorganic&quot; relation between successive consonants (Bar Malkon)</td>
</tr>
<tr>
<td>S</td>
<td>relation permitting the former of two consonants to be pronounced &quot;softly&quot; (Bar Malkon)</td>
</tr>
<tr>
<td>d</td>
<td>consonant /d/</td>
</tr>
<tr>
<td>s</td>
<td>consonants /d/ or /t/</td>
</tr>
<tr>
<td>D</td>
<td>particle ֶ</td>
</tr>
<tr>
<td>{KAD}</td>
<td>particle ֶ</td>
</tr>
<tr>
<td>{PART.}</td>
<td>any of א, י, ג</td>
</tr>
<tr>
<td>#</td>
<td>word boundary</td>
</tr>
<tr>
<td>+</td>
<td>morpheme boundary</td>
</tr>
<tr>
<td>-</td>
<td>in absence of</td>
</tr>
<tr>
<td>E</td>
<td>Elias of Tirhatv</td>
</tr>
<tr>
<td>M</td>
<td>Joseph bar Malkon</td>
</tr>
<tr>
<td>Z</td>
<td>John bar Zo'bi</td>
</tr>
<tr>
<td>H</td>
<td>Bar Hebraeus</td>
</tr>
</tbody>
</table>

Superscripts: t in description, but not necessarily in example
e in example, but not necessarily in description
ms as drawn in Add.25876
Mob. as in Moberg (1922)
A colon(:) warns that an authority also presents alternative evidence.
Comparative Table (Cont'd)

<table>
<thead>
<tr>
<th></th>
<th>NAG.</th>
<th></th>
<th>MET.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual relationship opposites EZ (implied also by general schemes of MH)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>line turned upwards $Z^m$:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>line turned downwards $Z^m$:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$H^\text{Mob}$ (probably $H^\uparrow$ &quot;diagonal line&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizontal position</td>
<td>on penultimate consonant $M^tZ^m$:</td>
<td></td>
<td>between words $Z^m$:</td>
</tr>
<tr>
<td></td>
<td>on last consonant $Z^m$:</td>
<td></td>
<td>between words $Z^m$:</td>
</tr>
<tr>
<td></td>
<td>between words $Z^m$:</td>
<td></td>
<td>on first consonant of second word $Z^m$:</td>
</tr>
<tr>
<td>Vertical position</td>
<td>above line $M^tZ^m$:</td>
<td></td>
<td>below level of line $Z^m$:</td>
</tr>
</tbody>
</table>

**ENVIRONMENTS**

**Phonetic**

<table>
<thead>
<tr>
<th></th>
<th>C#C H</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>+H</td>
<td>C#C  A</td>
<td></td>
</tr>
<tr>
<td>-A</td>
<td>C#C  Z</td>
<td></td>
</tr>
<tr>
<td>$C#C^3$</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>$C#CV$</td>
<td>Z</td>
<td></td>
</tr>
<tr>
<td>$C#CV^2$</td>
<td>+R</td>
<td></td>
</tr>
<tr>
<td>EZ</td>
<td>#C3C Z</td>
<td></td>
</tr>
</tbody>
</table>

(repetition of words?) $H$

{metrical "deficiency"}$Z$

{metrical "excess"}$Z$

**Syntactic**

{emph. noun}$\{(D=emph.noun)Z$

{const. noun}$EZ$

{emph.noun}$da Z$

{preposition+suff.}$Z$

{preposition}$Z$

(KAD)$^\uparrow$CV

(PART.)$^\uparrow$V

(noun+suff./h/)$^\uparrow$da

... Continued ...
| Accentual | before direct speech $E^\circ$ |
| RElation TO OTHER SIGNS | component of Mesabb. $EZ$ |
| for listed items that are "joined" | near alternative to Garora $H$ |
| (see also 'A' and 'R' in phonetic list) | |
| FUNCTION | "separation (?)", so that the rest of the sentence can be read" $E$ |
| clear pronunciation | $EZ$ |
| lengthening $H$ | "holding" ($^{\sim}~$) $H$ |
The grammarians differ considerably, though Bar Heb. shares much with Bar Zo., who in turn shares much with Elias of Tirhan.

The environments not only are dauntingly numerous, but depend on three utterly different types of criterion - phonetic, syntactic and accentual (i.e. related to overall sentence structure), sometimes in combination. For all their differences, Elias, Bar Zo. and Bar Heb. attest all three types, while Bar Malkon mentions both phonetic and accentual features. How so many diverse functions came to be attributed to the lines, is an acute problem.

The evidence of Syrian grammarians is completed by two anonymous lists of accents in ms. Pet. 9 of the Berlin Library (fol.228b and fol.22a col.2), and another such list in an appendix to the Masoretic ms. of the Brit.Lib. Add.12138, foll. 303b-8a. The first two lists were edited by Merx64 and the third partially edited by Diettrich.65 Each list shows accents along with biblical examples. It has been necessary to consult Add.12138 itself, as Diettrich selected one example only of each accent, however many examples appeared in the ms.

The list in Add. 12138 pre-dates the ms. itself (dated A.D.899), according to Diettrich (p.xxiii), as it sometimes disagrees with the accentuation of the main text; rather than having been compiled on the basis of the main text, it seems to have been copied from an earlier exemplar.

64. Merx, op.cit. pp.183-9 and pp.189-94.
65. Diettrich, (1899.98ff.).
The accentual systems of the two lists in Pet.9 seem more developed, but less so than that of Elias of Tirhan, as Weiss showed in a comparative study;\textsuperscript{66} he concluded that both lists could be tentatively dated around the mid-tenth century, and also that the list on fol.228b might be the older of the two. All three lists, Weiss remarked (p.35), had much in common, and seemed to reflect a single authoritative source, which must have listed accents along with standard examples drawn from the Syriac Bible.

None of the lists mentions the term Nagoda. All, however, show an upper line which must be associated if not identified with Nag., both on account of its appearance and because fol.228b in Pet.9 repeatedly calls it Mesabbe\textsuperscript{c}ana, which term was closely identified with Nag. by Elias and Bar Zo\textsuperscript{c}bi. Met., on the other hand, never features in these lists.

Following Weiss's chronology, we begin with Add.12138; there we have a small oblique or vertical stroke on the penultimate or last consonant of a word. The entries where it appears have been extracted, and presented in Plate 4. It will be seen that the line may be preceded by various accents:

(i) rising tone: Retma, Paqoda, Mezi\textsuperscript{c}ana or Zauga \textsuperscript{c}elaya.
(ii) level tone: Meqimana.
(iii) falling tone: Samka, Metka\textsuperscript{a}\textsuperscript{a}pana or Samka geniba.

Elsewhere it appears with another accent in the same word:

\textsuperscript{66} Weiss, (1933.32-6).
Plate 4

Upper line in the Appendix of Add. 12138. fol. 303b-8.

**Isa. 41: 25**

**Josh. 7: 21**

**Matt. 11: 5**

**Sir. 25: 2**

**Jer. 17: 18**

**2 Kings 13: 24**

**Gen. 37: 20**

**Zech. 4: 4**

**Prov. 23: 15**

**Hos. 9: 13**

**John 20: 24**

**Gen. 43: 7**

**Ezek. 9: 9**

**2 Sam. 14: 7**

**Job 40: 9**

**Luke 22: 48**
Dan. 9:16
Gen. 18:21
2 Tim. 4:14
Mark 12:28
Isa. 23:18
Jer. 52:34
Ex. 14:31
Mark 16:20
Col. 6:11
1 Kings 10:5
Isa. 54:3
Amos 8:6
Job 34:5
Jon. 1:8
Isa. 26:3

1-2
1-2
1-2
1-2
(i) Mesa\textsuperscript{a}lana as in (Jon.1:8)
(ii) Retma as in (2 Tim.4:14)
(iii) also with un-named accents - in the form of upper dots - as in (Isa.41:25) and (I Kings 10:5).

In Plate 4, the passages are classified, in the right-hand column, according to the nature of the pause at their end and the number of words separating the line from that pause, as follows:

I. One word intervenes before a non-final pause, i.e. one beyond which the sense continues.

II. One word intervenes before a complete or great pause, i.e. one which ends a spoken utterance or concludes a paragraph.

III. Two or more words intervene before a pause.

IV. On the opening word of a sentence or verse.

V. On the second word of a sentence or verse, both times after rising tone accent. In (Job 34:5), the line is repeated. The line never occurs on the very last word of a sentence.

In fol.228b of Pet.9 (ed. Merx, pp.183-9), the upper line is horizontal, placed on any of the last three syllables of a word but most frequently on the penultimate consonant. Those entries whose titles contain the term Mesabb\textsuperscript{c}ana appear in Plate 5, and the remainder in Plate 6.

Inferences from Plate 5 are:

(i) Mesabb. never occurs on its own, but only when the sentence carries one of the rhetorical accents: Paqoda, Me\textsuperscript{š}k\textsuperscript{š}pana or Mena\textsuperscript{h}ta. Of these, Paq. appears the most frequently. It alone may be combined with Mesabb. in
Plate 5
Instances of Mesabbe'ana in Pet.9 fol.228b (ed. Merx, p.187)

Gen. 18:29

Dan. 12:8

John 14:12

Ps. 15:1

Col. 1:2

Rom. 1:30

[Handwritten text in ancient script, likely translations or examples of Mesabbe'ana usage.]
Plate 6
Other probable instances of Nag. in Pet.9 fol.228b (ed. Merx, pp.183-9)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isa. 41:25</td>
<td>IV</td>
</tr>
<tr>
<td>Jodh. 7:21</td>
<td>I</td>
</tr>
<tr>
<td>Matt. 11:5</td>
<td>I</td>
</tr>
<tr>
<td>Jer. 17:18</td>
<td>I</td>
</tr>
<tr>
<td>2 Kings 13:24</td>
<td>I</td>
</tr>
<tr>
<td>Gen. 37:20</td>
<td>II</td>
</tr>
<tr>
<td>Ezek. 9:9</td>
<td>I</td>
</tr>
<tr>
<td>36:35</td>
<td>I</td>
</tr>
<tr>
<td>2 Sam. 14:7</td>
<td>II</td>
</tr>
<tr>
<td>Matt. 6:9</td>
<td>I</td>
</tr>
<tr>
<td>Isa. 26:3</td>
<td>II</td>
</tr>
<tr>
<td>Acts 20:10</td>
<td>III</td>
</tr>
<tr>
<td>Matt. 11:4</td>
<td>III</td>
</tr>
<tr>
<td>Ex. 30:33,38</td>
<td>IV</td>
</tr>
<tr>
<td>Isa. 28:25</td>
<td>III</td>
</tr>
<tr>
<td>Lev. 14:14</td>
<td>III</td>
</tr>
<tr>
<td>Gen. 43:7</td>
<td>I</td>
</tr>
</tbody>
</table>
a single word. We may compare Elias's statement that Mesabb. is compounded of Paq. and Nag.

(ii) Mesabb. appears only in questions (6x) and before non-final pause (3x). The former usage recalls Bar Zo.'s statement that Mesabb. appears in interrogative contexts; the latter accords with Bar Heb.'s description of Nag. as an eastern alternative to Garora. Both strongly suggest that Mesabb. regulated the intonation before a pause.

The entries in Plate 6 associate the line with many different titles. It is preceded by various accents:

(i) rising tone: Ret, Zaugelaya, Paq. or Mešašana.

(ii) level tone: Meqimana.

(iii) falling tone: Metkasspana or Napsa.

Sometimes it occurs with Ret. or Paq. in a single word.

The passages are classified thus:

I. One word intervenes before non-final pause.

II. Two or more words intervene before a pause.

III. Immediately before non-final pause, esp. with verb introducing direct speech.

IV. On the opening word of a sentence or verse.

All entries showing the line in fol.22a of Pet.9 (ed.Merx, pp.189-94) are gathered in Plate 7. Here it is preceded by various accents:

(i) rising tone: Ret, Maslmanuta, Mešašana or Mezišana.

(ii) falling tone: Metkasspana, Samka, Napsa or Samka geniba.
**Plate 7**

Probable instances of Nag. in Pet. 9, fol. 22a.

<table>
<thead>
<tr>
<th>Scripture</th>
<th>Passage</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Kings 13:24</td>
<td>Gen. 37:20</td>
<td>I  طالس  م أجلطر</td>
</tr>
<tr>
<td>Ezek. 36:35</td>
<td></td>
<td>III  طالس  م أجلطر</td>
</tr>
<tr>
<td>2 Sam. 14:7</td>
<td></td>
<td>II  طالس  م أجلطر</td>
</tr>
<tr>
<td>Mark 12:28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isa. 58:13</td>
<td>Gen. 1:9</td>
<td>I  طالس  م أجلطر</td>
</tr>
<tr>
<td></td>
<td></td>
<td>III  طالس  م أجلطر</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II  طالس  م أجلطر</td>
</tr>
<tr>
<td>Ps. 35:10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isa. 26:12</td>
<td>Gen. 3:4</td>
<td>II  طالس  م أجلطر</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I  طالس  م أجلطر</td>
</tr>
<tr>
<td>Gal. 5:22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>III  طالس  م أجلطر</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II  طالس  م أجلطر</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I  طالس  م أجلطر</td>
</tr>
</tbody>
</table>
Elsewhere it is combined in a single word with an accent that is written as an upper dot. Two combinations, viz. ּ and ּ (used with verb ֲ), and ּ (a unique term), are of particular interest. The passages are classified thus:

I. One word intervenes before non-final pause.

II. One word intervenes before complete pause.

III. Immediately before a pause. The word bearing the line either was ֳ| introducing direct speech (4x) or concluding a question (2x) or command (Ix).

IV. Three words intervene before non-final pause.

Many passages are common to two or more lists, and the comparative table (Plate 8) shows that great variety existed in the choice and position of the signs. Sometimes we find that where one authority prescribes the line, another has an upper dot, see: Isa. 26:3, Gen.43:7, Dan.9:16, John 20:29. This strongly suggests that Nag., like those accents written as upper dots, was accompanied by rising tone. Sometimes, again, within one authority the title mentions Retma while the example shows only the line in that position (Gen.37:20b, 2 Sam.14:7c), or the title mentions a doubled Retma while the example shows a single Retma followed by the line (Gen.37:20c, Mark 12:28c, John 20:29a). This reinforces the impression that Nag. was sometimes interchangeable with an upper dot accent, and was thus characterised by rising tone. But even this modest inference finds little confirmation from the other grammarians, and is far from accounting for all the available evidence on the lines.
Plate 8

Probable instances of Nag. common in two or more lists.

**Gen. 37:20**

Appendix fol. 303b

Pet. 9 fol. 228b

Pet. 9 fol. 22a

---

**2 Sam. 14:7**

Pet. 9 fol. 228b

Pet. 9 fol. 22a

---

**Mark 12:28**

Pet. 9 fol. 22a

---

**1 Sa. 26:3**

Pet. 9 fol. 228b

Pet. 9 fol. 22a
Gen. 43:7

Pet. 9 fol. 228b

Pet. 9 fol. 22a

Dan. 9:16

Pet. 9 fol. 22a

John 20:29

Pet. 9 fol. 22

App. fol. 304
Chapter 2
Modern Treatments of the Lines

The first modern writer to discuss the lines was Ewald (1832). He stipulated in the title that his study rested on manuscript evidence alone, dismissing the native grammarians, whose explanations of Syriac pointing he found either false, incomplete or non-existent (p.55). He concentrated on two manuscripts, namely Paris Nat. Syr. 15 (cent. X) and Paris Nat. Suppl. Syr. 101, datable AD1217, which he terms Cod. Ju. as it had been brought to Paris by a certain Juannin in 1824 and was not yet catalogued. These two were chosen as they exhibited what Ewald simplistically termed the Syriac pointing system more fully than other mss. which he examined. As he ignored the grammarians, Ewald did not call the points by their terms, and so Nag. and Met. were never mentioned by name.

Ewald regarded Nag. as an accent which modified the normal intonation towards the end of a sentence (pp.109f.). He inferred the normal intonation from the position of accent-dots. In the course of a sentence, one or more upper dots indicated places where the voice was raised; near the end, a lower dot showed that the voice was lowered, to die away at the close of the sentence (Luke 15:18,21). A simple example is (Luke 15:18,21) with just one rise. In long sentences the upper dot might be repeated, but the lower dot heralding the end appeared once only, apart from a few dubious exceptions (pp.115f.).
Sometimes, however, an upper line appears between the lower dot and the end of the sentence, as in:

Its appearance identifies it with the line called Nag. by the grammarians, but Ewald termed it "Hemmungsstrich", i.e. check-line, supposing that its main function was to interrupt the falling intonation with which sentences normally ended, and to keep the voice up (p.110). It appears typically on the penultimate word, but sometimes in Cod. Ju. on the last word.

Though he identifies this function of Nag., Ewald hardly discussed what particular features might have caused this departure from the normal end-of-sentence intonation. He supposed that it tended to occur in sentences wherein a word carrying especial emphasis attracted the lower dot to an unusually early position, and thus created before the end of the sentence an interval into which Nag. was introduced (pp.111f.). His examples were:

Luke 13:8
Rom. 1:31

He did not explain, however, why especial emphasis should have been accorded in the first place to the words bearing a lower dot, nor why some of his citations showed the lower dot in an early position but without any Nag. following, e.g.

Rom. 1:31 (p.113)

Thus although Ewald proposed a function for Nag. near the
end of a sentence, he did not identify its environment, i.e. the particular circumstances in which it occurred.

Nag. was also found elsewhere than near the end of a sentence, as in Luke 19:24 (misprinted 44), cited on p.111:

The cause, according to Ewald, is that these words carry a slight pause and that another sentence (주하반) precedes.¹ This seems a makeshift explanation, which Ewald never employs elsewhere.

More convincing is his treatment of Luke 18:20 (p.112):

In such an enumeration, every item is pronounced slowly and deliberately (whence the repeated end-of-sentence points), but the voice is prevented from dying down by the repeated application either of Nag. or (with more marked effect) of an upper dot. He further adduced:

Luke 21:11
Rom. 1:29f.

Here Ewald's interpretation of Nag., as interrupting the fall of the voice, is plausible, as the analogy of English and other modern languages suggests that in lists the voice is periodically raised, to show that the sentence is not yet complete.

Another situation (p.116f.) where Ewald found Nag.
was towards the end of a preliminary sentence (Vorsatz), i.e.
a sentence whose sense is incomplete without the continuation,
as in
Luke 21:8  o  , so-Jb^ 0  * m J b c u L = »  (sic) \[\text{\textit{sic}}\]
In this situation too, an upper dot often appeared rather
than Nag. The function of both was to prevent the voice
from falling and thereby suggesting that the end of the
whole sentence was at hand. Here again the analogy of
English confirms the raising of the voice at a pause not
intended as final.

The study also contains many cases of Nag. such as
Luke 24:25 (p.115) \[\text{\textit{sic}}\]
on which Ewald offered no comment and which therefore need
not detain us here.

In summary, Ewald proposes a function for Nag. (i.e.
to prevent the voice from falling), but determines its
environment in part only (items in a list, the end of a
preliminary sentence, the end of an unspecified class of
sentence). A theory on Nag. is best evaluated by testing
how well the function corresponds to the environment.
Although Ewald attained good correspondence in the special
cases of the list and the preliminary sentence, his failure
to specify the environment further renders his treatment
incomplete. A further inadequacy is the utter neglect of
the native grammarians, whose evidence, even if rejected,
must still be accounted for.

Ewald also studied (p.128) a lower line found between
words in Cod.15, resembling Met. as drawn by the copyist
of Add.25876. As elsewhere, its native name did not interest him. He found that it occurred on any word which carried none of the sixteen signs which he believed to comprise the Syriac accentuation system, and that it indicated close connection, as in

He remarked that it strongly resembled Hebrew Maqqep. This explanation seems plausible, but again ignores the contrary evidence of the grammarians, who are concerned with the structure of consonants and vowels at the word boundary.

Martin (1872) did not reject Ewald's explanation of Nag. as a Hemmungsstrich ("trait de suspension") belonging to the accentual system, but considered it incomplete. His own scheme of environments is thus summarised in terms of the Comparative Table of Ch. 1; the authorities shown are those invoked by Martin.

<table>
<thead>
<tr>
<th>NAG.</th>
<th>MET.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C#C₃ ZH + 4 mss.</td>
<td>C#CV H + 2 mss.</td>
</tr>
<tr>
<td>{PART.}#V ZH + 1 ms.</td>
<td>{PART.}#C Z</td>
</tr>
<tr>
<td>{PREP. + suff.} #CV ZH + 1 ms</td>
<td>{PREP.}#CV</td>
</tr>
<tr>
<td>{repeated words} Z²H</td>
<td>{no repeated words} H</td>
</tr>
<tr>
<td>{emph. noun} # D Z + 1 ms.</td>
<td>{Const. noun}# Z + 1 ms.</td>
</tr>
</tbody>
</table>

2. Bar Zo. in fact spoke of repeated letters, not words (see p. 23 above).
All these environments are drawn from Bar Zo. or Bar Heb., but they do not constitute a full statement of the scheme of either grammarian. Five biblical mss. are cited, from the 7th to 12th centuries, but as only eleven citations appear altogether, Martin's appeal to mss. is little more than cosmetic. In fact he admits (p.404) that mss. offer cases inconsistent with his scheme, and argues that great variety prevailed among different schools, down to the 13th cent., when grammatical traditions were systematised (p.405).

Martin's proposals for the function of the lines were based on Bar Zo. and Bar Heb. He accepted their statements that the lines were related to the accentual system, and he supposed that they regulated the musical intonation so as to indicate relationships between words and phrases within a single sentence (p.403). In addition to regulating pitch, Martin inferred (p.404) a second function, affecting duration or volume, on the basis of Bar Heb.'s explanations of אֶל as אָל and of פָּד ג as פָּד: one prolonged the voice on syllables bearing Nag. and softened or hurried it on those bearing Met. This function of Nag. reminded


4. To represent this variety, he asserts (p.404) that three colours of ink had to be used in Add.12138 - black, red and green. The report of green ink surprises the present writer, who has long worked with the ms., and would have surprised the copyist, who explains in detail his use of black and red inks, but never mentions green (fol. 309b, translated by Segal, op.cit., pp.78-9).
Martin of Hebrew Meteg.

Martin's treatment of Nag. and Met. must be criticised on three grounds:

(1) It rests on a small fraction of the available evidence, i.e. part of the testimony of just two grammarians, Elias and Bar Malkon, are ignored (apart from the mere mention of the latter and his "Net of Points" on p.399).

The evidence of the mss. is largely explained away, by supposing inconsistency among the Syrians.

(2) Even among the relatively few environments which Martin admitted, he did not explain why such diverse criteria (phonetic, syntactic and accentual — for he did not reject Ewald's Hemmungsstrich) should be associated with the same signs.

(3) He failed to correlate his functions with his environments. In other words, he did not explain why C#C$ and C#CV should be pronounced with differing intonation, duration or volume.

In the preceding pages (pp.393-8), Martin discussed another line, which he called by the Hebrew Maqqep, finding no Syriac term. This was a lower line between words, found in both biblical and non-biblical mss. Martin did not identify it with Met.; he no doubt relied on the evidence of Bar Zo. and Bar Heb., that Met. appeared under the last

5. Add.12138 and Paris Syr.15.

6. In JA (1875.196,n.2), he reports its occurrence in Par. Syr. 183, containing fragments of the Nestorian Khudra.
or penultimate consonant, and ignored the placing of Met. between words in Add.25876.

He inferred that this line indicated strict union in sense and pronunciation alike. He thus agreed with Ewald's conclusion (which he does not mention), but adduced far more evidence. There was, firstly, the syntactic structure of phrases showing the line, e.g.

\[ \text{Strict union was confirmed by two marginal notes accompanying it in Add. 12138. At Gen.24:65(fol.11a), } \text{is marked }, \text{which convinced Martin too that this line had the same role as Hebrew Maqqep. At Gen. 39:8 (fol.18b), } \text{is marked confirming union in pronunciation. He conjectured (p.395) that the sign was invented in the VIth. cent. by Ramişo, the grammarian whom the copyist was careful to cite (in red ink) even where he differed from the usual mode of reading (Segal, p.78). He was later tempted to compare the line with Arabic Tesdid but found no conclusive evidence.} \]

Martin's discussions of this line probably shed more light on Met. than did his treatment of Met. itself.

Baethgen (1880), in a footnote to his translation of Elias (p.48, n.1), explained as a translation of Greek διαστολή "drawing asunder, prolongation". This

7. He may not yet have been aware of it, as his edition of this text appeared in 1877.
8. See loc.cit., n.6.
term appears in the scholia to Dionysius Thrax's Grammar, and denotes a sign in the form of a comma, inserted between words that have to be kept distinct in pronunciation. The example given is ἕστιν, ἀξιός—not to be misread ἓστιν ἄξιός.

In support, Baethgen invokes Elias's statement that Nag. yields clear pronunciation of [example given] and Bar Heb.'s...

Unfortunately, this theory leaves most of the evidence on Nag. unexplained, including the accentual functions attested by Elias himself and elsewhere.

Duval (1881), rather like Bar Heb., has a chapter on the lines (pp.132-3) within a section broadly concerned with the pronunciation of phonemes, and then mentions Nag. again with a wholly different function, in his treatment of the accents (p.159). On pp.132-3, he prescribed three functions for Nag., though it was not always clear which was or were appropriate in any given case, and converse functions for Met.

(i) In environment C#C9, Nag. supplies a helping vowel and fuses the words, yielding CVCA9. This rests, firstly, on Bar Zo.'s statement that, in metrical writings, the lines are thus used: Duval takes this to mean that Nag. "sert à compléter la mesure" (p.132) and thus provides an additional vowel; but Bar Zo.'s sense (albeit obscure) must be virtually the opposite of Duval's translation. His second item of

evidence is that in C#C# Bar Heb. places Nag. on the last consonant of the first word, which allegedly took the helping vowel. In fact, of course, Bar Heb. places Nag. on the penultimate consonant (e.g. طرسه تم). Finally, Duval invokes the effect of Mehaggyana within words (CC#C+CVCS#), and Bar Heb.'s statement (ed. Martin, p. 199, 11.17-9) that a helping vowel ( ) tended to occur even at the word boundary (e.g. سلا، حمودي، حس، طلا). However, Bar Heb. makes no connection between Nag. and helping vowel. Furthermore as Duval well knew, Nag. also occurs outside the environment C#C#. Duval simply isolated the cases of Nag. in the C#C# environment, from all the others, and supposed that Nag. had one function in the C#C# cases and a series of totally different functions (ii-iv below) in the remaining cases. Met., by contrast, is said to appear before #CV, and wherever no helping vowel occurs within metrical works.

(ii) More generally, Nag. indicates a loose connection between words which allows the voice to be prolonged ("une liaison lâche qui permet à la voix de s'étendre"), while Met. shows a close union. Hence he named the following environments, all based on Bar Zo.

NAG. MET.

{emph. noun}#D {const. noun}#
{preposition + suff.}# {preposition} #
{PART.}# CV {PART.}# C#

10. Duval claims that Bar Heb. prescribes a lower line to mark this helping vowel, but this does not appear in Bar Heb.'s text.
The third line misquotes Bar Zo., who has the mutually contradictory:

\{\text{KAD}\} CV \quad \{\text{KAD}\} C\theta \\
\{\text{PART.}\} V \quad \{\text{PART.}\} C

(iii) Nag. prescribes clear pronunciation where a word begins in two identical consonants, (e.g. \(\text{مُتَّلَك} \text{مُتَّلَك} \text{مُتَّلَك} \)), while Met. occurs in the absence of repetition (e.g. \(\text{نَّبِي} \text{نَّبِي} \text{نَّبِي} \)). This simply repeats Bar Zo.

In his discussion of the accents, Duval adds a fourth function for Nag. (p. 159):

(iv) Nag. stands at the end of an interrogative sentence followed by an answer, e.g.

(Gen. 18:31f.)

This too (including the exs.) comes from Bar Zo., apart from the suggestion that the presence of an immediate reply was important. Duval linked this usage with (ii), as showing that Nag. connected sentences as well as words.

(v) In his introduction to these lines (p. 132), Duval declares that Nag. is a Hemmungsstrich, as Ewald explained, and shows that the voice should be sustained and prolonged into the next word ("soutenue et prolongee sur le deuxieme mot"), while Met. shows that the voice is lowered ("baissée"). It is not clear whether pitch, duration or volume are concerned. Here are echoes not only of the four functions above, but of others still.

Duval translates Nag. as "conduiteur" and Met. as "qui ferme", but the meaning in phonetic terms is again not clear.
In summary, Duval's treatment consists mainly of statements by Bar Zo., with interpretation and some misquotation; the mass of remaining evidence is ignored. The problem inherent in Bar Zo.'s treatment, viz. how one sign can have so many unrelated functions, is not solved but compounded.

In a separate section, Duval mentions (p. 134) the lower line which Martin termed Maqqep or "trait d'union". He agreed with Martin (who much influenced his whole discussion) that it indicated close connection, and deduced from his exs. that it was sometimes accompanied by the fusion of identical consonants at the word boundary (e.g. ل-ح-ط-ح-ط), or the absence of word stress on the former word (e.g. خ-ط) or the latter (e.g. ح-ط). All this is hardly an advance on Martin.

Merx (1889) explained ن to etymology (p. 132) as "attractor" and د to "obturator, clausor", and deduced that Nag. served to connect words and Met. to separate them. He seemed unaware that also meant "prolong" and د in the Pa-Cel (from which conjugation derives) meant "join", so that the very opposite functions were equally supported by etymology.

The evidence of the grammarians is interpreted accordingly. Bar Zo. prescribed Met. after a construct noun, Merx argues, to protect its final consonant from being neglected in this combination of words (p. 128). Nag. however accompanied genitive constructions with د, to express the close connection; in Neo-Syriac, Merx notes,
the D is often pronounced as if it belonged to the former word. Again, one could equally argue the opposite, as Duval did, namely that as Met. appears in the closer contraction it expresses a closer connection.

As for Bar Zo.'s rule prescribing Nag. in C#C9 (e.g. ʼכמ/ in Duval, p.130) that the close connection shown by Nag. resulted in the assimilation of the first vowelless consonant to the second, and he compared Arabic and Targumic Aramaic. Unfortunately, Bar Zo.'s prescription of Met. in C#CV forced him to restrict this assimilation law to cases of C#C9; and with this situation, none of Merx's comparative material agrees. In Arabic, the C#C9 situation hardly exists.

All Merx's Neo-Syriac exs., e.g. 'I said' for 'it was said by me', show a vowelled consonant in the second word. Finally, in the Targum text in the Codex Reuchlianus, a Dages in the first letter of a word, which Merx claimed (surely erroneously) to indicate close connection with the preceding word and therefore to

---

11. Morag, S. (1959.220ff) argues that Dages in ʼכ shows it to be consonantal, while in the letters רסז מזרז מזרז Dag. is used according to the same rules as are usually applied to רסז מזרז (i.e. initially, unless the preceding word ends in a vowel and is closely connected, and medially, after a vowelless consonant). In addition, Dag. also indicated gemination. The extension of the רסז מזרז rules to other letters did not imply that they too possessed plosive and fricative allophones, but served to show, for example, that any preceding Sewa was silent. Throughout Morag's detailed treatment there is nothing to suggest that Dag. had the conjunctive force supposed by Merx.
correspond to Nag., occurs frequently in C#CV, (e.g. מָלֵךְ אָנָן) as well as in C#C#.

Unfortunately, for the remainder of Bar Zo.'s alleged cases of separation and fusion, e.g. Nag. on מַלְכֵנָה before CV but Met. before C3, Merx offers no explanation.

Similarly, Bar Malkon's rules are translated (p.131f) but Merx does not give, for the most part, any explanation of their relationship to his interpretation (e.g. why מַלְכֵנָה, with Met., requires separation, or why certain accents affect the lines). The exs. in Vs.7, which is introduced מַלְכֵנָה, are most naturally referred to the category discussed in Vs.6b, namely Met., but as Merx thought they showed close connection or assimilation, he viewed them as exs. of Nag: מַלְכֵנָה

That this interpretation thrice infringes Bar Malkon's rule (Vs.4) that Nag. does not appear on a word ending in /w, y, 3/, evidently did not worry Merx.

Verses 5 and 8 of Bar Malkon were taken to mean that, normally, every word was distinctly pronounced; where the consonants at the word boundary can easily be pronounced together (Vs.5 מַלְכֵנָה), fusion and indistinct pronunciation are avoided through the insertion of Met.; contraction (=Nag.) was prescribed only when the two successive vowelless consonants were difficult to read together. All this implies a highly artificial manner of reading, and Merx could only suggest that such was the peculiar usage of the Nisibene School (p.132).
As for Bar Heb., Merx interpreted to mean prolongation of the voice into the next word, i.e. conjunction, and to mean holding the voice back, i.e. separating one word from the next (p.256n.). The opposite explanation, proposed by Martin, seems more natural.

On pp.200ff. Merx extended his theory. Bar Zo.'s formulae and meant that his cases were not exhaustive. The true environments, from which Bar Zo. merely extracted particular cases, were:

| NAG | MET. |
| V#C | C#CV |
| C#V |
| C#C3 |

Bar Zo.'s rule of Nag. in genitive constructions like belongs to the V#C class; his rules on particles before vowels (e.g. ) illustrate C#V; the rules for C#C3 and C#CV were stated by Bar Zo. himself. Merx ignores the many cases in Bar Zo. which infringe these rules, e.g.

He repeats the claim that fusion similar to that expressed by Nag. also occurs in Cod. Reuch., being expressed there by Dages in the first letter of the second word. The many cases of Dages in C#CV, where he prescribed Met. (i.e. separation), imperilled his theory; he replied that the process of fusion had progressed further in Cod. Reuch. than in Syriac (pp.204f), and that the
Dages might on occasion indicate not conjunction but disjunction (p.205).

Finally (p.207) Merx noticed the manuscript evidence, and the marginal notes of Add.12138, e.g.

\[
\text{Gen. 24:65} \quad \text{[graphic]}
\]
\[
\text{Gen. 39:8} \quad \text{[graphic]}
\]

In the face of such clear evidence, Merx did not abandon his theory that Met., which he drew throughout as a lower line (following Add.25876), expressed separation. Instead, he declared that the system which he had inferred from the grammarians' evidence was not yet in force when Add.12138 was written (AD899). In this ms., conjunction is expressed by a lower line, and no sign for disjunction exists; only later did the Nestorians invent a system which marked both conjunction (by an upper line, whence Hebrew Maqqep was borrowed) and disjunction (by a lower line). Why the Syrians did not allocate the upper line for disjunction and retain the existing usage of the lower line, Merx does not explain. Nor does he seem aware that Add.12138 exhibits upper lines which must be identified as Nag.

This theory that the ms. showed a different system from the grammarians created new difficulties for Merx. For example Martin had reported the conjunction of in the ms., but in this environment (C#CV) Bar Zo. prescribed separation (i.e. Met.). Merx concluded that the Syrians themselves were inconsistent (pp.207-8). Altogether, Merx never allowed the facts to disturb his
conviction that Nag. was conjunctive and Met. separative, no matter what fantastic hypotheses were forced on him.

Brockelmann (1895) connected Nag. with Greek \( \delta \kappa \alpha \omega \tau \sigma \nu \gamma \) (after Baethgen) and defined it as a conjunctive accent (after Merx), while Met. is called a separative accent, for the usage of which the reader is referred to Martin and Merx.

David, in his Syriac grammar (1896.222), defined \( C\#C\#C \) as the environment of Nag., declaring that, unlike the Westerners, who insert a helping vowel (e.g. \( \mid \) \( \overset{\wedge}{\circ} \) \( \overset{\wedge}{\circ} \)), the Easterners place a line above the last consonant of the first word and prolong the preceding vowel, whence the term Nag. He thus transcribes \( \overset{\wedge}{\circ} \overset{\wedge}{\circ} \overset{\wedge}{\circ} \) by \( \overset{\wedge}{\circ} \overset{\wedge}{\circ} \overset{\wedge}{\circ} \). He gives \( C\#C\#V \) as the environment of Met., but mentions no function. All this may reflect reading habits in David's day, but does not explain the contrary evidence of mss. (Add.12138 often shows Nag. before \( \#C\#V \) and Met. before \( \#C\#V \)) and grammarians.

Diettrich (1899), introducing his edition of Isaiah extracts in Add.12138, identified lower lines between words (e.g. Isa. 2:2 \( \overset{\wedge}{\circ} \overset{\wedge}{\circ} \) \( \overset{\wedge}{\circ} \)) as Met. Martin, Duval and Merx had all denied this identity. He considered that it prevented the fusion of two identical or related consonants, and he rejected the statements of Elias and Bar Zo. that it indicated close relationship in sense (p.X). To Nag. too he attributed some sort of separative force (p.XXV), but the disagreement among the native grammarians led him to doubt whether its exact function
could be identified. These conclusions are not supported by any proper examination of instances in the ms.; nor does Diettrich explain how the grammarians' statements, which he summarily rejects, ever arose.

R. Payne Smith (1902) defines Nag. as a line of prolongation (printed at an unexpected angle, e.g. \[\text{\textit{mdhit\text{\textae}}\text{\textae}}\]), and Met. as an abbreviating line, relying too exclusively, one fears, on etymology.

J. Payne Smith (1903) does not mention the grammatical term Nag., but defines Met. as "line of abbreviation" and gives under \[\text{\textit{mdhit\text{\textae}}\text{\textae}}\] the meaning: "to pronounce with a close sound, to contract".

Nöldeke (1904) acknowledged (pp.viif) that his Grammar was deficient in that no full account of the Masoretic tradition of the Syrians was available to him. He does not therefore discuss Nag. and Met.

Robinson (1915.10) defines Met. as "an oblique line written under a letter to indicate that it is not pronounced at all, e.g. \[\text{\textit{mdhit\text{\textae}}\text{\textae}}\], and Nag. as "an oblique line written over a letter to show that the sound is to be sustained, e.g. \[\text{\textit{mdhit\text{\textae}}\text{\textae}}\] = ne\'slun". These pronouncements lack any support from either grammarians or mss. Yet L.H. Brockington's revision (1962) retains them, adding that the only line "now in common use" is the so-called 'linea occultans', which is "written either above or below a letter, with the force of \[\text{\textit{mdhit\text{\textae}}\text{\textae}}\]. Brockington remarks: "It will be observed that some confusion has arisen in the course of time". It will indeed.
Weiss (1933), in his analysis of Add.12138 on Genesis, agreed with Martin that a lower line between words was the equivalent of Maqqep (p.22n.). He did not identify it with Met. Nor did he mention the upper line, surely identical with Nag., which occurs about 300 times (listed in Ch.3 below) in Add.12138 on Genesis.

Segal (1953) hoped to discuss the lines elsewhere (p.5n.), but explained מָמֵ֖ק (p.171) as "drawing (with a yoke), extending" and מָקַפְּצַֽה as "pressing close, attaching".

All in all, modern writers are even more sharply divided than the native grammarians. The most disturbing aspect is the failure to synthesise the evidence of grammarians and manuscripts; the main contributions have either neglected grammarians (Ewald, Dietrich), neglected mss. (Baethgen), or concluded that the two exhibit differing systems (Martin, Merx). Ch. I, on native grammarians, had to be balanced by an examination of manuscript evidence in order for a synthesis to be finally attempted.
An adequate corpus for a first analysis of the ms. evidence is provided by the Genesis portion of the Nestorian Masorah, Add. 12138, foll. 1b-24a. Soundings elsewhere in the ms., and in other mss., appear in Ch. 4.

It seemed best to begin with Met., given the accompanying marginal notes already noticed by Martin. At first sight, Met. does not seem actually to occur here. Bar Hebraeus placed Met. beneath the last consonant of a word, but no such line appears at all frequently in this ms. Nor does the list of accents in foll. 303bf. mention Met. However, many instances (116 in the Genesis corpus alone) occur of a line between two words (e.g. חִפְפִּי - חִפְפִּי), much like the representation of Met. in Add. 25876 of Bar Zo'bi. This line is most naturally identified as Met., with Biettrich, rather than as a separate Maqqep sign (Martin etc.), and this identification will be shown to account for the evidence of both mss. and grammarians.

The marginal notes show, as Martin argued, that Met. has conjunctive force, much like Maqqep. The instruction מַקְקָא accompanies five passages:

24:65 אָסַיּוֹ מִסְפָּרָה - עֹז
27:13 מָמָא - לֹא
27:32 מִזְאַבְתָה - הָרָא
29:14 מַמָּא - הָרָא - נֹצֵר
34:5 מַמָּא - מַפְרִיש - לֵב
Again, in five cases (over four verses) where an identical consonant occurs on either side of Met, a marginal note prescribes that the consonant be pronounced once only:

\[
\begin{align*}
29:12 & \quad [\text{סְיָר} \text{ יַדְּוֹר}] \\
39:8 & \quad [\text{סְיָר} \text{ וָבָא} \text{ עֲלִיָּא}] \\
41:55 & \quad [\text{סְיָר} \text{ הָלָּא} \text{ מַכָּנָא}] \\
50:16 & \quad [\text{סְיָר} \text{ הָלָּא} \text{ מַכָּנָא}] 
\end{align*}
\]

The notes suggest, then, that Met. prescribed close union in pronunciation and sense.

None of the 116 instances of Met. occurs at the end of a phrase, and all are consistent with this conjunctive function. We must now identify the precise environment of Met., and also fit the grammarians' evidence into place.

One recalls that the grammarians prescribed two main types of environment - syntactic (after construct nouns, unsuffixed prepositions and proclitic particles\(^1\)) and phonetic (before vowelled consonants, and also, according to Bar.Malkon, after words ending in matres lectionis). The former well fit the function of close union; the latter seem wholly unrelated.

These seemingly ill-sorted environments broadly fit the ms. corpus also. Ten cases (marked 'Ia' in Plate\(^1\)) involve unsuffixed prepositions (including מִסְר). Eleven (marked 'Ib') involve construct nouns. Four (marked 'Ic') involve the particle הָי. Of the remaining 91, 75 preceded

---

1. The syntactic categories are sometimes accompanied by phonetic conditions, which are discussed on p. 37. above.
a vowelled consonant, which characteristic is marked 'II'.
The remaining 16 of course preceded a vowelless consonant,
but in 11 cases the former word ended in a mater lectionis
(e.g. حَمْسٍ حَمْسٍ), effectively in a vowel - a characteristic
marked 'III'. Just five cases were not covered by the
grammarians' rules, namely:

| 3:20 | لَمْ بْحَلِي - مَسَّ | |
| 4:15 | لَمْ بْحَلِي - لَمْ | |
| 15:11 | مَلَعْتُ - مَلَعْتُ | مُلَعَّبَ | |
| 36:24 | دَمَدَمْتُ - تَسَّعَ | | |
| 37:5 | مَلِعْتُ - لَعْبَتَ | | |

It is noteworthy that all five exceptions exhibit syntactic
connection hardly less strong than in cases classified 'Ia'
and 'Ib'. We shall return to these.

Let us now consider, however, the 75 cases marked
'II' alone (#CV) and the 11 cases marked 'III' alone (V#).
All exhibit some sort of syntactic link, albeit less
obvious than in the cases 'Ia' and 'Ib'; all occur in
compact phrases. Admittedly, we cannot rigorously define
"compactness", and variation between mss. (and even between
black and red drawing in this ms.) shows that readers'
perceptions differed. Even so, relations between words
joined by Met. are always fairly close, e.g.

- noun + pronoun (12:18 نَمْ يُنَبِّئُ) 
- pronoun + noun (24:65 تَقْصِيُّ) 
- noun in apposition (27:24 قَمَّصُ) 
- subject + verb (15:3 مَدَنْتُ - مَدَنْتُ) 
- verb + subject (27:46 خَوَصْتُ - خَوَصْتُ)
verb + preposition (7:23)

A sharper picture can now be formed of Met. It united two words linked in sense, probably deleting the word-stress on the former word. When two vowelless consonants occurred at the word boundary, Met. tended not to be used, because fusion would have yielded a cluster of three consonants (C#C3C → CC3C); there is, as Bar Heb. put it, a certain heaviness in the C#C3C combination, which cannot easily be rushed over. Hence Met. occurred mainly with the remaining phonetic possibilities - when the second word began in a vowelled consonant, or when the first word ended in a vowel. Only in the event of a strong syntactic link did Met. appear in the C#C3C context, strong links being confined to:

- (a) unsuffixed preposition (including ↓\) + noun
- (b) construct noun + noun
- (c) after proclitic particle
- (d) an infinitive and its introductory verb
- (e) verb + enclitic
- (f) a close-knit relative expression (e.g. →)

A wider investigation may reveal further categories.

In the table, which classifies all 116 cases, they are denoted 'Ia' etc. A complication is that 'I' and 'II' characteristics may co-exist.

---

The grammarians' statements are partial accounts of this situation. They report the three commonest types of close syntactic link (Ia and Ic in Bar Zo., Bar Heb.; Ib in Elias, Bar Zo.). They were aware that Met. occurred in other contexts, and recognized that the pattern of consonants and vowels at the word boundary was then crucial. Instead of forbidding Met. in the event of two vowelless consonants, they prescribed Met. in alternative situations. Bar Zo. and Bar Heb. specify the commonest alternative, namely (II) that the second word begins in a vowelled consonant; Bar Malkon provides the further alternative, that (III) the first word ends in a vowel; none mention that "compactness" must also be present.

The grammarians' proviso that, before a word beginning in a vowel, Met. was not applied to a preposition (Bar Zo.) or particle (Bar Zo., Bar Heb.), is not contradicted in the 14 cases of Iac in the ms. Its explanation may be that the final consonant of a preposition

---

3. Bar Zo.'s environments of metrical excess, emph. noun#da, noun + h#5a, are simply particular cases.
Plate 1
Met. in Genesis, Add. 12138

| 16/16 | 1:7 | ] 8:00 | 0 | 
| 1:11 | 1: | 1:11 | 1:11 |
| 2:14 | 2:14 | ] 8:00 | 0 |
| 3:16 | 3:16 | ] 8:00 | 0 |
| 3:20 | 3:20 | ] 8:00 | 0 |
| 4:2 | 4:2 | ] 8:00 | 0 |
| 14:21 | 14:21 | ] 8:00 | 0 |
| 15:2 | 15:2 | ] 8:00 | 0 |

Plate 1
Met. in Genesis, Add. 12138

| 78 | 78 | 78 | 78 |
| 78 | 78 | 78 | 78 |

Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
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Plate 1
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Plate 1
Met. in Genesis, Add. 12138

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Plate 1
Met. in Genesis, Add. 12138

<p>| 78 | 78 | 78 | 78 |
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<thead>
<tr>
<th>페이지</th>
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<tbody>
<tr>
<td>7a</td>
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<td>29:27</td>
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<tr>
<td>22b</td>
<td>29:28</td>
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or particle was neglected (not necessarily assimilated) in the event of fusion with a word beginning in a consonant, but was of course pronounced clearly if the following word began in a vowel. In the latter event, the distinct pronunciation of the preposition or particle gave the impression that no fusion had occurred, and so Met. was not appropriate.

We have thus accounted for all the grammarians' environments for Met. except for "absence of repetition" (Bar Zo., Bar Heb.), which will be explained on p. 86. In summary, Met. indicates phonetic fusion, and did not occur in the C#C#C environment unless a strong syntactic link was present; the fusion of a preposition or particle apparently weakened its final consonant, if another consonant followed.

We now pass to Nag. The grammarians' statements that Nag. and Met. are opposites raise hopes that the function of Nag. can be inferred from that of Met. This alleged opposition, however, is not borne out in our ms., which shows in Genesis alone ten passages where both signs appear simultaneously, e.g. (2:14). Such passages suggest that the signs are not mutual opposites at all.

Scrutiny of the 306 instances of Nag. in Genesis showed that over half (160 = 52%) occurred within direct speech, plus 16 further instances (or 5%) in phrases that immediately introduce direct speech. Of course direct speech comprises for less than half of Genesis, or of the Genesis portions in our ms. Now most of the grammarians'
statements declare that the placing of Nag. depends on the pattern of consonants at the word boundary, or on the syntactic structure. Were this true, however, the disproportionate representation of direct speech would be inexplicable: direct speech hardly differs from other material either in its structure of consonants and vowels or in its syntactic patterns. The one feature which, in the recitation of the text, would have marked out direct speech is intonation. Perhaps, then, Nag. is some form of musical accent.

That Nag. affected intonation has as yet been suggested by Ewald alone, who suggested two environments (which were far from exhaustive) for Nag.: on separate items within a list, and towards the end of a preliminary sentence (Vorsatz). We may subsume these under a more general rule, that Nag. occurs before incomplete pause, i.e. a pause beyond which the sense runs on. Many varieties of incomplete pause exist, and a full classification is attempted below. It will be seen that the majority of cases of Nag. (195, comprising 71%\textsuperscript{4}) are assignable to this broad category.

In such cases, one may suppose, Nag. indicated the characteristic intonation of incomplete pause. That intonation can hardly be recovered today, but Ewald's suggestion that the voice was raised seems reasonable.

\textsuperscript{4} The denominator is taken as 274 rather than 306, counting just once any phrase in which Nag. occurs more than once.
Firstly, as Ewald pointed out, an upper sign should indicate a rise. Secondly, Nag. appeared to alternate with upper dot accents in the grammarians' lists (p. 51 above), and also in different mss. of the same text (p. 113 below). Thirdly, in modern languages like English and French, a rise is characteristic of incomplete pause. Just how the supposed rise of incomplete pause may have differed from other possible rises in the language, it is naturally impossible to say.

Of the remaining cases, of Nag., most are found at the close of a section of narrative or utterance. Such pauses as here follow Nag. may be termed "great pauses". It will be objected that the intonation of incomplete pause and great pause can hardly have been the same. It is, nevertheless, possible that great pause was also characterised by a rise, albeit of a different sort. Modern English offers an analogy: special rises (of different sorts) mark out not only incomplete pause but also great pause (e.g. "and they all lived happily ever after"). These intonations contrasted with the standard intonation in which the majority of sentences concluded; that standard pattern can hardly be recovered, but Ewald's argument that it was an unbroken fall still seems cogent. The category of "great pause" is in turn sub-divided below; there are 55 cases, or 20%.

A final category comprises a small number (24 cases = 9%) of questions, commands and transitions in speech, which again, to invoke the analogy of English, may have
been characterised by special rises. The preponderance of
direct speech among passages containing Nag. is due in
part to this category. In the main, however, it can be
attributed to a tendency to intone direct speech more
vividly and expressively than narrative, so that the
special intonation patterns of incomplete pause and great
pause were particularly highlighted.

It is suggested, then, that Nag. marked a number of
different intonation patterns, each involving some sort
of rise: incomplete pause, great pause, vivid speech. The
reciter was thereby prompted not to slip into the standard
falling intonation; he would have been sufficiently familiar
with the text not to choose wrongly among the alternative
intonations shown by Nag.

On this view, the grammarians' idea of Nag. and Met.
as straightforward opposites is mistaken. It may be
responsible for many of the grammarians' rules for Nag.,
which seem artificial reflexes of the rules for Met. Met.
was known to occur on construct nouns and unsuffixed
prepositions; Bar Zo. therefore prescribed Nag. for emphatic
or suffixed nouns in genitive constructions, and (with
Bar Heb.) for suffixed prepositions. One would hesitate
to dismiss these rules if they were borne out in the ms.,
but over all 306 cases, the numbers of emphatic or suffixed
nouns in genitive constructions (15) and of suffixed
prepositions (12) are both negligible.

Again, Bar Zo. prescribes Met. on $^\Delta$ before a vowelless
consonant, and on a particle before a consonant, with only
minor inconsistency. His corresponding rules for Nag.
on ָה before a vowelled consonant and on a particle before a word beginning in a vowel - clash more seriously, but only because both rules are mere inversions of the rules for Met., leaving no trace in the ms.

More artificial rules for Nag. resulted from the tendency to neglect certain consonants in the presence of Met., whence the misconception that Nag. indicated clear pronunciation of consonants. Thus Elias (followed by Bar Zo.) prescribes Nag. before a word beginning in two identical consonants "so that both may be clear". Bar Malkon prescribes Nag. when two vowelless consonants at a word boundary are "homorganic" but cannot be pronounced together "softly". He apparently means a pair of closely related consonants which on that account cannot be easily pronounced and must therefore be enunciated separately, as in the modern Hebrew pronunciation of נֶפֶר or נֶפֶרֶה as lamádati or hehlaátáti. Bar Heb.'s rule of Nag. in the event of repetition merely distorts the above rule of Nag. before a word beginning in two identical consonants, and the prescription of Met. "in the absence of repetition" (Bar Zo., Bar Heb.) is yet another reflex. All these rules attest the triumph of grammatical systems over the language. The conviction that Nag. and Met. were opposites stemmed from their predilection for opposed pairs (e.g. Rukkaka/Quṣṣaya) and was no doubt fostered by the appearance of the signs in "opposed" positions, above and below the line.

It is tempting to reject the grammarians' prescription of Nag. before a vowelless consonant, as a worthless reflex
of their rule of Met. before a vowelled consonant; but a count shows that it contains some truth. The proportion of words beginning in a vowelled consonant throughout Genesis is estimated around 30%, on the basis of samples totalling 250 words. Roughly the same proportion applies to words preceded by Met. Of words preceded by Nag., however,

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Total words</th>
<th>Words beginning in #CV</th>
<th>Words beginning in #C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nag. cases in Gen.</td>
<td>306</td>
<td>100 (33%)</td>
<td>206 (67%)</td>
</tr>
<tr>
<td>Met. cases in Gen.</td>
<td>116</td>
<td>83 (72%)</td>
<td>33 (28%)</td>
</tr>
<tr>
<td>Control samples</td>
<td>250</td>
<td>175 (70%)</td>
<td>75 (30%)</td>
</tr>
</tbody>
</table>

(Gen. 1:1-5, 6:1-4, 28:1-5, 50:1-6)

the far higher proportion 67% begin in a vowelled consonant. The explanation may be that, within a phrase ending in incomplete pause etc., the preferred position of Nag. was before a vowelled consonant. The reason may be that the long-short sequence (VGC), interrupting the rhythmic flow, was a fitting place for Nag., which interrupted the standard intonation pattern. Where more than one long-short sequence occurs in the phrase, Nag. could be repeated, e.g.

7:13
29:18
This tendency is not an invariable rule. In some Nag. phrases, no position before a vowelless consonant is available (e.g. 1:11 \(\text{\textsuperscript{1}2\text{\textsuperscript{1}}1}\)) and even when a word beginning in a vowelless consonant does exist, Nag. is still occasionally placed elsewhere (e.g. 2:21 \(\text{\textsuperscript{2}2\text{\textsuperscript{1}}0}\)).

What remains of the grammarians' evidence confirms that Nag. was an accent, regulating intonation. Elias prescribes Nag. "so that the rest of the sentence can be read", and Bar Heb. applies it to listed items that are "joined"; these echo our category of incomplete pause. That Nag. had musical value is confirmed by Bar Malkon's report that it could not occur in the same syllable as Retma or another accent, and by Bar Zo.'s statement that it could be induced by Retma on the previous word.

It remains to classify in detail the cases of Nag. The table gives the frequency of each class, the total being 274 (not 306, as cases of repeated Nag. within a single phrase are counted once only).

I. Incomplete pause characterises a phrase whose sense is completed by

(a) an explication, e.g. 5X
1:27 \(\text{\textsuperscript{1}2\text{\textsuperscript{1}}2}\)
(b) a parallel phrase, e.g. 3X
15:15 \(\text{\textsuperscript{1}5\text{\textsuperscript{1}}5}\)
(c) a contrast, e.g. 1X
37:11 \(\text{\textsuperscript{3}7\text{\textsuperscript{1}}1}\)
(d) the opening of direct speech, e.g. 16X
2:16  066 066 066 066 066 066 066 066 066
(e) It may occur on items (other than the last item), of a list, 14X
and 7:13 (those who entered the ark) etc., including once before a summarising statement:
10:19 090 090 090 090 090 090 090 090 090
(f) In a connected narrative, particularly at a tense point, Nag. renders a pause incomplete, and prevents any premature impression of the end of the sense, e.g. 32X
2:21 3:8
The reason for this intonation varies (e.g. at 19:33 the story is only half complete, 31:46 looks forward to the reference to in the next verse, 42:20 is a tense moment for Joseph's brothers), and doubtless depended somewhat on taste, but can usually be discerned.
(g) Nag. similarly sustains the momentum of connected speech, 38X
Questions may be included:
e.g. 12:19 090 090 090 090 090 090 090 090 090 or commands:
e.g. 6:16
(h) Nag. sustains the voice before "expansions" within a sentence, whether in narrative or speech, an
expansion being a final clause: 16X
e.g. 2:19

or a causal clause:
e.g. 3:3f

or an added provision:
e.g. 24:8

or the like. The ms. does not always mark the following pause, which must nevertheless have existed.

(i) Nag. occurs within similar "expansions", maintaining continuity between what precedes and what follows, 33X
e.g. 10:21

19:16

31:19 ("now Laban had gone..."")

(j) Again to avoid a premature close, Nag. appears at or near the beginning of a long sentence, 37X
e.g. 1:29

3:24

8:13

II. Nag. marks "great pause",
(a) at the end of a section of narrative or genealogy 11X
e.g. 4:16

6:22

46:20

46:20
(b) on the last (or only) phrase of an utterance: 44X
  e.g. 3:16
  6:7
  9:25

III. Within direct speech, Nag. further indicated lively modulation,

(a) in a question, 2X
  e.g. 21:7

(b) in commands or requests, 12X
  e.g. 6:19
  17:1
  33:11

(c) before a transition, 10X
  e.g. 6:13 (warning-instructions)
  11:6 (deliberation-decision)
  48:19 (conversation-oracle)

There is of course much scope for disputing the detailed assignment of cases to the different categories, and even the definition of the categories themselves. Again, our knowledge of intonation patterns centuries ago must be severely limited. Even so, the totality of the evidence is explained if Nag. is supposed to indicate a rise, whether in incomplete pause, great pause, or vivid speech.
Plate 2
Mag. in Genesis, Add.12138

1:9
1:11
1:14
1:22
1:27
2:10
2:11
2:13
2:14
2:16
3:6
3:12
3:14
3:16
3:24
4:5
4:7
4:16
5:23
6:2
6:6
6:7

IIb
IIb
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13 28:9

13 28:15

13 28:18

13 28:19

13b 29:27

13b 29:30

14 30:6

14 30:15

14 30:23

14 30:29

14 30:30

14 30:33

14 30:35

14 30:37

14b 31:6

14b 31:13

14b 31:19

14b 31:27

14b 31:29

14b 31:31

14b 31:34

14b 31:41

14b 31:42

15 31:43
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**Notes:**
- **نبويَّة** (Guidance): revealed by God through the Prophet Muhammad (peace be upon him).
- **شريعة** (Sharia): the legal system derived from the guidance given by the Prophet Muhammad and the Qur'an.
- **منطق** (Reason): the rational and logical aspects of the religion.
- **عقيدة** (Belief): the beliefs and principles of Islam.
- **فقه** (Fiqh): the legal and theoretical aspects of Islam.
Chapter 4

Nag. and Met. outside the Genesis portion of Add. 12138

The conclusions based on the corpus of Ch. 3 must now be tested with soundings in other sources.

Despite Bar Zo.'s statement that the lines were used in metrical discourses, and Martin's report of Met. (or, as he termed it, Maqqeph) in the text of the Nestorian Khudra in Par. Syr. 183, all the manuscripts of the British Library in which either line has been identified to date are biblical (including lectionaries). All, moreover, are Nestorian.

Met. is first attested in Add. 14471 (AD 615), where the original hand inserted it on the level of the line between consecutive words, and Nag. does not appear. The oldest ms. to feature Nag. is Add. 14448 (AD 699), which shows both lines. It is noteworthy that three mss. show Nag. but apparently not Met., viz. Add. 17923 (AD 1074), Add. 14688 (cent. xii) and Eger. 681 (AD 1206). That manuscripts may exhibit one line without the other confirms that the lines did not originate as an opposed pair. Thus Nag. is first attested after Met., (unless this is a mere accident of survival) and both appear after the 'pausal' accents, fully attested in Add. 14542 (AD 509).¹ Fewer examples of either line appear in the earliest than in later manuscripts.

1. Segal, p. 65.
<table>
<thead>
<tr>
<th>Plate 2</th>
<th>Met. in mss. other than Add.12138</th>
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<tbody>
<tr>
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<tr>
<td><strong>Add. 14471</strong></td>
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<td>53b</td>
<td>1:35</td>
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<td>54</td>
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<td>56b</td>
<td>4:6</td>
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<td>Matt. 3:5</td>
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<td>113</td>
<td>John 19:38</td>
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<td><strong>Add. 7157</strong></td>
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<tr>
<td>4b</td>
<td>Matt. 7:3</td>
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<tr>
<td>7b Ch.2</td>
<td>10:19</td>
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<td>28 Ch.2 Mark 1:1</td>
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<td>29b</td>
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<td>30</td>
<td>2:14</td>
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<tr>
<td>30b</td>
<td>2:17</td>
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<tr>
<td>36 Ch.2</td>
<td>8:14</td>
</tr>
</tbody>
</table>
Add. 14892

6b Deut. 18:19
9 13:12f
11 Ex. 34:1f

Add. 17922

5 Matt. 2:8
   2:13
6 3:4
6b 3:16
   3:17
7b 4:18
8 4:25
   5:9
8b 5:15
10 5:44
10b 6:8
   6:9
52 26:64
52b 26:75
   27:3
53 27:19
54b 27:45
   27:46
57 Mark 1:6
Both lines vary somewhat in form. Met. sometimes appears between words, now on the level of the line, rarely below it; elsewhere it stands beneath the last consonant of a word. Nag. is usually diagonal (resembling an acute accent) but can be horizontal or vertical; it may stand between words or on the last or penultimate consonant of a word. Such variations appear not only between different mss. but even within a single passage in one ms., in the original hand.

Let us first review the evidence for Met., beginning with Add. 12138. Plate '1' includes one passage with a marginal note، and four passages where the same consonant occurs either side of the line and a marginal note prescribes that it be read once only. As before, Met. indicates union in pronunciation, indicating an at least moderate link before a vowelled consonant (e.g. Ex.10:17 مَلَأ وَمَلَأ وَمَلَأ وَمَلَأ وَمَلَأ وَمَلَأ وَمَلَأ وَمَلَأ وَمَلَأ and a strong link before a vowelless consonant (e.g. ٌلا). The Met. before يَبِطْطَس in Matt. 24:37 might seem an exception; the whole phrase يَبِطْطَس يَبِطْطَس يَبِطْطَس يَبِطْطَس يَبِطْطَس يَبِطْطَس is, however, intimately bound together, with inserted into...، and is therefore marked Ig, representing a new type of strong syntactic link.

Plate '2' presents 76 instances of Met. drawn from other mss. - Add. 14471 (AD 615), 14448 (AD 699), 7157 (AD 768), 14492 (AD 862), 17922 (AD 1222). Nearly all fall into the classification established in Ch.3. There are only seven exceptions, i.e. passages where Met. appears
before a vowelless consonant where no "strong syntactic link" as hitherto defined is present. In five cases, the construction is still compact:

Add. 14471 Luke 1:1
Add. 14448 Matt. 5:39
Add. 17922 Matt. 5:44

It is quite credible that here too Met. indicated phonetic fusion, and that there was some latitude in the perception of a strong link. The sixth and seventh cases, both in Add. 14492, are different, and suggest that this manuscript may have followed a different system. The sixth is from Deut. 13:12f.

Here Met. stands in the middle of an unusually long preliminary clause: "(12) And when thou hearest in one of thy cities which the Lord thy God gave thee to dwell therein, and they say unto thee: (13) 'Men, children of sin, have gone forth from thy midst...' (14) then inquire..."

In order to sustain the continuity of that clause in recitation, the reader may have been instructed to run together the end of v.12 and the beginning of v.13, without pausing for breath. A similar device, to maintain the continuity of a divine speech, may explain the seventh case:
Plate 3
Alternation (and combination) of Nag. and Met.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Add.</th>
<th>Folio</th>
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<tbody>
<tr>
<td>Matt. 2:4</td>
<td>Add. 14448, fol. 1b</td>
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<tr>
<td>Add. 17922, fol. 6</td>
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<tr>
<td>Matt. 5:44</td>
<td>Add. 12188, fol. 234</td>
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<td>Add. 17922, fol. 10</td>
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<tr>
<td>Matt. 7:129</td>
<td>Add. 14448, fol. 5</td>
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<td>Add. 17922, fol. 29</td>
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<td>Matt. 21:45</td>
<td>Add. 12188, fol. 241b</td>
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<td>Add. 17922, fol. 54b</td>
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<td>Mark 1:10</td>
<td>Add. 12188, fol. 242</td>
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<td>Add. 17922, fol. 57</td>
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<td>Mark 1:13</td>
<td>Add. 7157, fol. 28b</td>
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<td>Add. 17922, fol. 57</td>
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<tr>
<td>Mark 1:27</td>
<td>Add. 17922, fol. 57b</td>
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<td>Add. 7157, fol. 29b</td>
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<tr>
<td>Mark 2:6</td>
<td>Add. 17922, fol. 59</td>
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<td>Add. 7157, fol. 47</td>
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<tr>
<td>Luke 1:1</td>
<td>Add. 14448, fol. 51b</td>
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<td>Add. 17922, fol. 90b</td>
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At all events, however, the overwhelming majority of cases (69 out of 76) follow the rules deduced in Ch. 3.

As for Nag., an adequate corpus seemed to be provided by the material spread over the different plates in this Chapter, each of which emphasises a different aspect. Already encountered in Plates 1-2 are nine passages exhibiting both Nag. and Met. They are listed now, together with the code adopted in Ch. 3 to classify cases of Nag.:

Add.12138 - Num 4:10 (Ig).

Like their counterparts in Ch. 3, these passages confirm that Nag. and Met. were not mutual opposites, but were mutually compatible. The marginal note on Num 4:10 is especially instructive.

This compatibility of Nag. and Met. is reflected again in Plate 3, which exhibits passages in which one ms. shows Nag. and another shows Met., e.g. at Matt. 3:4 -
Add.14448 - Add.17922 -

Our rules in Ch. 3 show that there is good reason for the appearance of both signs. The phrase stands in the middle of an "expansion" - "Now John (clothing was of camels' hair, and a leather belt upon his
Plate 4
Further variations in Nag. between mss.

<table>
<thead>
<tr>
<th>Manuscript Details</th>
<th>Textual Variations</th>
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<tbody>
<tr>
<td><strong>Matt. 1:18</strong></td>
<td>Add. 12138, fol. 232b</td>
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<td>Add. 12138, fol. 233</td>
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<td>Add. 17922, fol. 5</td>
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<td><strong>Matt. 6:9</strong></td>
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<td><strong>Matt. 10:3</strong></td>
<td>Add. 7157, fol. 7</td>
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<td>Add. 7157, fol. 29</td>
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<td><strong>Luke 1:1</strong></td>
<td>Add. 14471, fol. 52b</td>
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<td><strong>Luke 1:18</strong></td>
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<td>Add. 17922, fol. 2</td>
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<td><strong>Luke 1:26</strong></td>
<td>Add. 14471, fol. 53</td>
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<td>Add. 17922, fol. 3b</td>
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</table>
Luke 1:41  Add. 17923, fol. 3b  Eges. 681, fol. 9

Luke 1:42  Add. 17923, fol. 3b  Eges. 681, fol. 9

Luke 6:25  Add. 14471, fol. 60a  Add. 17922, fol. 105b

John 1:17  Add. 7157, fol. 78  Add. 12138, fol. 257b

John 20:29  Pet. 9, fol. 22a  Add. 1157, fol. 98b

2 Cor. 6:7  Appendix to Add. 12138, fol. 303b  Bar Heb. (p. 35 above)
loins, and his food was locusts and wild honey" - and warrants Nag. under II. At the same time, \( \textcircled{3} \) \text{ends in a vowel} \( \text{within a compact phrase, which is case III of Met.} \)

Both mss. may well envisage the very same oral rendering of the phrase, in which \( \textcircled{3} \) was read with rising tone (Nag.) and led into the next word without any break (Met.).

One ms. then recorded the intonation pattern, while the other was more impressed by the fusion in pronunciation.

In some cases, both are recorded; see Luke 1:12. On the other hand, the oral renderings that lie behind the different graphic representations in Plate 3 cannot always have been the same; rhythmic and tonal patterns must have varied somewhat between one reader and another.

Some variation regarding Nag. can be detected in passages like Luke 1:43 in Plate 3:

Add.17923
Eger.681
Add.17922

The phrase warrants Nag. (IIIa - impassioned question), but two mss. reserved the rise for \( \text{while the third began earlier and repeated it. It is equally noteworthy that Nag. on} \) \( \text{a alternates with an upper dot accent, which indicated rising tone. Both the variation in placing Nag., and its alternation (or combination) with upper dot accents, appear repeatedly in Plate 4; they confirm that Nag. involved some sort of rise, and that reciters were broadly but not uniformly agreed as to when it was appropriate.} \)
Plate 5
Marginal notes accompanying Nag.

| Add. 12132 | Gen. 49:31 | לְפָנָיו לְוַיַּעַצֵּב | 1 | 
| Add. 17922 | Matt. 26:61 | אַלּוּ בְּשֵׁם שָׁם | 1d/1g |
| | Luke 14:29 | וְחָגַר | 1g |
In Add.12138 and 17922, some instances of Nag. were marked by marginal notes; these are assembled in Plate 5. In Add.17922, the imperative \( \text{n} ^ {\text{n}} \) takes a letter as its object; on \( \text{n} \text{n} \text{n} \) and \( \text{n} \text{n} \text{n} \) we find notes \( \text{n} \) and \( \text{n} \). These seem at first to contradict our conclusion that Nag. indicated a special intonation, and perhaps to support the grammarians' view, here rejected, that Nag. prescribed clear pronunciation of consonants. The marginal notes taken together, however, in no way suggest consistently clear pronunciation; in fact the consonants on either side of the word boundary are on occasion neglected (Gen. 49:31, Matt.28:13 and Isa.15:5). The explanation of \( \text{n} \text{n} \text{n} \) etc. is rather that the rising tone fell on a particular syllable, which was identified in writing by any consonant it contained.

All these cases of Nag. confirm the analysis of Ch.3. Naturally, the contexts differ; for example, the category of connected speech (Ig) in Genesis could offer no example from a sermon (Matt.5:44, Add.17922) or a complex sequence of ritual instructions (Num 4:10, Add. 12138). The categories themselves, however, are fully borne out by this supplementary corpus of nearly fifty passages.

It will be observed that Plate 4 refers not only to manuscripts but also, on occasion, to grammarians (Matt.6:9, John 20:29, 2 Cor.6:7). In fact, all the instances of Nag. extracted from lists of accents and classified in a preliminary fashion in Ch.1 (Plates 4-8)
can be readily classified according to our present scheme. Evidently these grammarians utilised Nag. as a component in complicated accents, which do not however seem to have been so popular in mss. as Nag. itself.

**Conclusion**

The mysterious signs Nagoda and Metappeyana have been identified as devices to represent the patterns of intonation and rhythm within living speech. We are now a step closer to appreciating how the Syriac language sounded, not only at the time of our surviving authorities but rather in the earlier centuries in which reading traditions were shaped. These deductions have in turn revealed the liability of the native grammarians to be led astray by excessive systematization. One may conclude by recalling the methodology of the thesis, which insists that all available evidence be accounted for, whether accepted or not. The grammarians' testimony is not to be contemptuously dismissed, after Ewald, nor taken at face value, as most subsequent investigators have tended to do. Rather, it must be subjected to critical scrutiny, which must be preceded by an assessment of the grammarians' capacity to report - and to distort. One may hope that in other areas too of Syriac grammar, this methodology will be found fruitful.
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