GRAMMAR AND LOGIC IN SYRIAC (AND ARABIC)

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Abstract

In order to advance the debate surrounding the origins and background of the Arabic grammatical tradition, we offer an exploration of the Syriac grammatical tradition with a focus on the interdisciplinarity it shared with the study of logic. The essay demonstrates that the essentialist view of grammar adopted by many Greek thinkers led to the working assumption that logic and grammar were virtually the same discipline, and that the Syrians shared this view of things and transmitted it to Arab scholasticism. A number of philosophers and grammarians are explored with a view to demonstrating this point. Scholasticism in the Late Antique Near East was a cross-linguistic phenomenon which never respected the boundaries we like to draw between Greek, Syriac, Hebrew, and Arabic worlds. Arabic grammar grew out of this background, while being driven by its own internal genius.

The role that Syriac literature played in conveying to the Arabs of the Middle Ages the ‘inheritance’ of the Greek sciences has become an increasingly contested field over the last decade or so.¹ The presence of such influence is hardly in doubt. Not so the precise demarcation of its nature and extent, or whether ‘influence’ is even the most appropriate expression for this interaction.² Although a degree of ethnic pride is inevitably involved in such discussions, the principal obstacle to a clear-sighted solution remains the simple lack of evidence, so much of Syriac literature having been lost to the twin ravages of time and sword.³ One can say at least, however, that the importance of

¹ See the seminal works of Gutas (1998) and of Saliba (2007). Useful also is the earlier article by Daiber (1986).
² On the question of what counts as ‘influence’, we need to consider the pertinent thoughts of Versteegh 1990.
³ Hence the unending question of reconstructing lost texts — we can be fairly sure that Aristotle’s Poetics was translated, probably the Rhetoric too; maybe Homer (perhaps just a prose summary?), perhaps Proclus, and so on. For an overview of
Syriac intermediaries was considerably more marked in some scientific and philosophical disciplines than in others: medicine and astronomy respectively offer examples of each.\(^4\) Within the domain of the philosophical curriculum the Syrians had more to offer by way of Aristotle than of Plato,\(^5\) and more of logic than of, say, metaphysics. In the former, the Arabic genius always owed something to its older cousin’s labours, while in the latter its achievements were all its own.\(^6\) The field of grammar (or proto-linguistics, perhaps) is not yet clearly established as falling into one category or the other. While some suggestions have been made regarding the Syrogenesis of an early Kufan school of grammar against which the classical grammatical tradition (from Sibawayhi onwards) reacted,\(^7\) nonetheless most have favoured a largely autochthonous explanation for Arabic grammatical Theory.

This is not a debate that we can here solve, save only to affirm that evidence for the influence of Syriac grammarians on their Arabic counterparts is hardly to be found in the details of linguistic principles, but rather took the form of a shared educational milieu, in which the very notion of the scientific study of a holy tongue developed from the exegetical and reading traditions. Are we to suppose that these parallel developments, by which Syriac, Arabic and Hebrew all developed their indigenous grammatical traditions in the same part of the world (Mesopotamia) and at the same time (the eighth century CE/second century AH in particular), amount to a coincidence of unrelated phenomena?\(^8\)

There is a further possibility, namely that Arabic grammar owes its inception rather to (Syro-) Greek logic. There is a substantial body of literature to defend this proposition,\(^9\) although it has been subject to the accusation of ‘orientalism’. The principal objection is simply what was certainly translated, Brock 1995; while in (2007) he gives an example of the search for yet another. These only scratch the surface.

\(^4\) Degen 1981 for the first; the negative with regard to the second established by Kunitzsch 1974.
\(^5\) No dialogue of Plato was translated as such (though see Hugonnard-Roche 2009), while for an overview of the expanse of Aristotelian material, Hugonnard-Roche 1989.
\(^6\) Hugonnard-Roche 1991.
\(^7\) Talmon 2003; also the summary of his case in Talmon 2000.
\(^8\) I argue in greater detail for this approach in King 2012.
\(^9\) Merx (1889) was the most detailed proponent of the ‘Greek logic’ thesis; Elamrani-Jamal (1983) its most heated opponent. Versteegh (1977) gave support to the former but its conclusions are much softened in Versteegh 1993. For a more recent defence of Hellenogenesis, Rundgren 1976, and a summary of the case now against it, Carter 2007.
a chronological one; Sibawayhi’s *Kitāb* pre-dates the main period of Graeco-Arabic philosophical translation. The upholders of the hypothesis have pointed to the earlier Arabic logical work of Ibn al-Muqaffa’, but the evidence for any direct influence from this direction is slim. The general difficulty in making use of the extant Arabic grammatical texts to reconstruct the very earliest history of the discipline makes it near impossible not only to answer the question of influence and borrowing but even accurately to demarcate these two fields of grammar and logic.

For the Syrians themselves, however, logic and grammar were so tightly knit together that they sometimes appeared indistinguishable. This is the point we shall elaborate briefly in what follows. Whether this exploration throws any light on those larger questions discussed above may be left to the conclusions others may wish to draw. We shall attempt simply to describe some elements of that disciplinary crossover/confusion, starting out first with an exploration of how the same problem affected the history of these disciplines in Greek antiquity. We hope to show that intelligent thinkers who understood the fundamental differences between logic and grammar none the less conflated the disciplines and that the nexus between grammar and logic, in both the Greek and the (Graeco-) Syriac spheres, was so strong and enduring that it is reasonable therefore to suppose that Arabic grammar arose within the context of just such a nexus and that to identify either Syro-Greek logic or Syro-Greek grammar as the primary influence is both meaningless and unnecessary. Scholasticism in the Late Antique Near East was a cross-linguistic phenomenon which never respected the boundaries we like to draw between Greek, Syriac, Hebrew and Arabic worlds. Arabic grammar grew out of this background, albeit driven by its own internal genius.

**Essentialist Views of Grammar in (Greek) Antiquity**

It should occasion no surprise that some readers of Aristotle’s *De Interpretatione*, supposedly a book about the ‘combinations of simple names’, took it to be dealing with grammar as well as logic, the structure of words and propositions being a mirror of the structure

10 Talmon 1990 and see Troupeau 2007.

11 The ‘crossover’ has been noted and assessed more from the philosophical side by Hugonnard-Roche 2002 and more from the grammatical side by Revell 1974. The present work builds upon these articles.
of things as such. To the cursory glance, the statement in the Technē Grammatikē that ‘the verb is an utterance that is without case, possessing tense and persons and numbers, and displaying active and passive’,\(^\text{12}\) might sound disarminglly similar to what Aristotle says at the beginning of his treatise, that ‘a verb is that which indicates a particular time’,\(^\text{13}\) and indeed this seems, as we shall see, to be just the mistake many Syriac intellectuals and scribes did make.

The ‘parallel’ is, of course, hardly fortuitous. Greek philosophy frequently had to deal with the relationship between words and the things they appear to signify, and hence grammar and logic might often appear to be either closely related or even identical. The Cratylus presents the reader with an essentialist view of language in which the names of things are related by nature to the objects represented. Plato himself neither espoused nor defended such a view and by denying the mimetic power of language paved the way for Aristotle’s clear distinction between conventional names and things themselves, although this distinction became less clear among his later commentators.

Bypassing Aristotle’s own insistence that signifiers were arbitrary (‘by convention’),\(^\text{14}\) the Stoics developed the same theme to the point where etymology became for them a central part of the art of dialectic.\(^\text{15}\) The essentialist interpretation of nomenclature which the Stoics popularized was adopted by the intellectuals of the early church, especially so far as this supported one of their primary concerns, the superiority of the Hebrew names for God over those of other languages and cultures.\(^\text{16}\)

Stoicism did not distinguish a separate branch of philosophy for grammar but incorporated elements of grammatical theorizing under both the subdivisions of dialectic, namely the study of utterances (phōnai) and that of the meanings of utterances (lekta, often translated as ‘sayables’).\(^\text{17}\) The sentence ‘Dion is walking’, for instance, might be analysed into its parts of speech as part of the process of analysing the lekta, whereas it could also be analysed phonologically

\(^\text{12}\) φῦμα ἐστὶ λέξις ἀπεικόνισις ἐπιθετικὴ χρόνου τε καὶ προσώπων καὶ ἀριθμῶν. ἐνέργειαν ἢ πάθος παριστάσα; Uhlig 1883: 4–5.

\(^\text{13}\) ὧμα δὲ ἐστὶ τὸ προσημαχὸν χρόνον (De Interpretatione, 16b6).

\(^\text{14}\) ἀνωμα μὲν οὖν ἐστὶ γεωνή σημαντική κατὰ συνθήκην ἀνευ χρόνου (De Interpretatione, 16a20–1).

\(^\text{15}\) For examples of Stoic etymologizing, Lloyd 1971: 62.

\(^\text{16}\) Origen, Contra Celsum I, 24.

\(^\text{17}\) ‘The grammatical distinctions the Stoics make... seem to be made out of a logical interest.’ Frede 1987: 356.
as *phōnai*; hence different parts of the grammatical art might be categorized under different sub-headings of dialectic.

The melding of grammar and logic within this system went deeper, however, than categorization alone. There was also a correlation made between the parts of speech (of which there were generally four in the Stoic system: noun, verb, article, conjunction) and the predicables or categories (which were also four in number: subject, quality, disposition, relative disposition). That these groups of four were correlated seems certain, though exactly how this was achieved is less so. In any case, the categories were placed under dialectic, rather than physics (i.e. metaphysics) on account of their ‘grammatical’ nature as sayable descriptions of things.

Stoic grammar was thus constructed in such a way as to have the universal applicability of logic. The Stoic tradition did not itself necessarily fail to understand that logic and grammar were not the same thing, but it was the applicability of linguistics to the discussion about syllogisms that motivated their interest. When Philo complained that self-styled grammarians had stolen all their notions from philosophy which serves the needs of every science, and then goes on to list all the elements of Stoic grammatical teaching, he is not simply decrying the pedantry of the grammarian against the philosopher’s high art; he is making a valid point about how grammar as a science arose in the first place. Others were disappointed to find that the Stoics sometimes only talked about dialectic when they were meant to be discussing syntax.

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19 This may have been the reason why syntax was omitted from the Stoic-inspired tradition of Greek grammatical handbooks (*Technē Grammatikē*), since it came under the study of the *lekta*. See Frede 1977 and 1978.

20 The meanings of these terms do not exactly match their later usages, e.g. ‘article’ includes pronouns.


22 As argued so cogently in Frede 1978.

23 ‘Since [grammarians] work their way through the parts of speech, are they not thereby appropriating and adopting the findings of philosophy? It is philosophy’s specific task to enquire what a conjunction is, what a noun is, what a verb... etc. [goes on to list the various Stoic parts of speech]’, Philo, *De Congressu Eruditionis Gratia*, 149–50.

The upshot of the Stoic system was that grammar, even once established as a separate discipline, was always built upon the presuppositions of dialectic. Greek punctuation has been described as nothing but ‘an adjunct of Stoic logic’. Luhtala has shown how the Late Antique teaching of Greek grammar, starting with the fundamental work of Apollonius Dyscolus, assumed to itself certain philosophical categories. This, she argues, is the process that lies behind and explains the grammatical handbook attributed to Dionysius Thrax. The confusion that arose around these disciplines within the Syriac milieu is hardly to be wondered at. We shall see, in fact, that both Stoic and Peripatetic logic were involved in the traditions of Syriac grammar.

Among the outworkings of this ‘cross-disciplinarity’ was the fact that the handbooks of grammar made no fundamental distinction between what Aristotle meant by the *logos apophantikos* and its rhetorical manifestation. The above-mentioned debt owed by (ps) Dionysius Thrax to Stoic logic meant that the *Technē* became riddled with expressions drawn from logical terminology (the genera and species of nouns; relative, homonymous, and synonymous nouns; syllogistic conjunctions etc.) and it is abundantly clear from the Byzantine elaborations of the *Technē* that these terms were understood to be equivalent to their Aristotelian counterparts and are explained as such in the scholia. There is thus an underlying assumption about the linguistic nature of logical terms and/or the universal applicability of grammatical terms. The Byzantine grammarians never did ‘devise a set of syntactic terminology or concepts such as a specifically grammatical subject and predicate distinct from logical connotations’.

The relationship between linguistics and logic arose once more in the context of the question, debated within the Neoplatonist school of Peripatetics, of the real meaning of Aristotle’s ten categories. Porphyry shifted the whole direction of future Aristotle interpretation by

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26 Luhtala 2005.
27 I.e. as a description of a type of speech in the *Technē*.
28 E.g. Hilgard 1901: 235, where the relative and quasi-relatives are distinguished using the notion of co-destructibility as described in the *Categories*; the *Scholia Erotemata* quote Aristotle’s definition of the category of ‘relation’ (Uhlig 1883: 35 n. 4); the Vatican scholia’s discussion of the homonymous nouns draws on the Late Antique commentaries on the *Categories* — cf. Hilgard 1901: 236, 4–8; and Ammonius, *In Isagogen* (A. Busse [ed.], Commentaria in Aristotelem Graeca 4.3, Berlin 1891), 48,18–49,6; Stephanus’ discussion of the synonymous nouns compares the grammatical notion with the Peripatetic discussion of polyonyms (Hilgard 1901: 236, 20–5) etc.
29 Robins 1993: 162.
forcefully asserting that these ‘predicables’ were not real genera but rather about words of the first imposition (‘simple words signifying simple things’, as Ammonius would put it), and the De Interpretatione about words of the second imposition, i.e. the complexes of nouns and verbs that constitute propositions, which become in turn the building blocks of syllogisms in the Prior Analytics.\textsuperscript{30} While this extreme version of the linguistic interpretation of the Categories did not convince all members of the later school (e.g. Ammonius who charts a middle course), nonetheless the notion stuck that these works of the Organon were somehow about grammar, the way in which words are formed and connected to mean certain things that might be designated true or false, rather than about the concepts themselves. The result becomes quite evident in, say, Ammonius’ commentary on the De Interpretatione, which contains any number of observations of a grammatical nature.\textsuperscript{31}

It should be noted that Porphyry is not here following the Stoic way, for he is not yet raising grammar to the status of logic (if anything, he does the reverse), and he prefers Aristotle’s conventional interpretation of etymology to the Stoic approach.\textsuperscript{32} Yet the consequences for the discipline of grammar will be broadly similar in either case.

Thus, although for different reasons, both Stoics and Peripatetics conflated grammar and logic — the former because of the way philosophy was divided; the latter rather because they took the predicables to be about words, especially when commenting upon the De Interpretatione.

\textsuperscript{30} ‘If it be the connection of these things that creates an affirmation, and an affirmation subsists only within a signifying expression and an indicative statement, then this text cannot be about the genera of being, nor about things qua things, but rather it is about expressions that signify things,’ (R. Bodéüs [ed.], Porphyre: commentaire aux catégories d’Aristote, Paris 2008, 57, 2–6). ‘Here he bases his argument upon the first imposition of expressions with regard to things, whereas in the De Interpretatione, [it is] about the second [imposition],’ (ibid., 58, 32–4). ‘Aristotle’s purpose, therefore, is not to deal simply with nouns and verbs, but with the first imposition of simple expressions signifying simple things by means of simple mediating concepts’, Ammonius, In Categorias (A. Busse [ed.], Commentaria in Aristotellem Graeca 4.4, Berlin 1895), 11, 17–12, 1.

\textsuperscript{31} Ammonius, In De Interpretatione, 11, 8–16 (A. Busse [ed.], Commentaria in Aristotellem Graeca 4.5, Berlin, 1897), is an attempt to bring the grammatical parts of speech into the centre of the Aristotelian theory of the predicables — they ‘assist of the construction of the indicative sentence (logos apophantikos)’. Of course, this does not mean that the commentators did not appreciate the difference between the analysis of words and things, such as is abundantly clear from, e.g., what Iamblichus has to say about predication, apud Simplicius, In Categorias (as n. 18), 23,13–24.

\textsuperscript{32} Porphyry, Catégories (as n. 30), 57, 29 (συμβολικῶς).
Grammar and Logic in the Syriac Tradition

It will come as no surprise that the Syriac grammatical tradition was deeply, perhaps inextricably, affected by this state of affairs which it inherited from Hellenistic scholasticism. This may be straightforwardly illustrated in the case of one ancient and important codex in which a Syriac version/adaptation of the *Technē* is to be found huddling between a translation of the *Categories* and a short treatise on syllogisms (related to *Prior Analytics*), precisely where we should expect to find material pertinent to the *De Interpretatione*.33 Even the manuscript’s original cataloguer failed to notice that the text had nothing to do with Aristotle.34

Now the Syriac version of the *Technē* itself (translated most likely in the sixth century) indicates the nature of the problem and reveals for us the ways in which logical theory affected grammatical reflection.35 Some of the witnesses to the text attribute its translation to Joseph Huzaya, one of the ‘readers’ (maqreyyane) at the School of Nisibis in the sixth century.36 The text was adapted so as to teach about Syriac rather than Greek, although the two are often explicitly compared.37 As far as future tradents were concerned, the text was simply the first work on Syriac grammar.38

Now Joseph represents only the very first stages in the Syriac merger between grammar and logic. In his day the Syriac logical lexicon was still in its infancy and hardly affected his grammatical terminology.39 Hence, for example, when he translates the ‘relative’,

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33 I have described the MS (BL Add. 14658) in detail in King 2011b.
34 Wright 1870–2: III, 1156. The correct identification of the text was left to Merx (see next note).
35 The Syriac version of Dionysius Thrax may be found in the Appendix to Merx 1889, reprint in translation forthcoming from Gorgias Press. For a discussion of authorship, see p. 8. On the nature of the Syriac adaptation, see Contini 1998 and the updated notes in the reprint of Merx.
36 Although modern literature almost always ascribes the text to Joseph, only the eastern manuscripts of the text make this explicit. Merx doubted the authenticity of the ascription, while Contini 1998 upholds it.
37 We need not give a close description here. I provide a few examples in King 2012, and for a much fuller description see Contini 1998. Contini 1998: 105 notes in particular the Stoic influence on Joseph’s adaptation.
38 That seems to be the case with the oldest manuscript, Add. 14,658, which calls it ‘a treatise on the noun’ but also e.g. in a Baghdad MS which names Joseph explicitly (Völbus 1965: 102, n. 17), if indeed the *Technē* is what is meant here, which seems likely.
39 For the Syriac logical lexicon, Hugonnard-Roche 2001; King 2011a.
‘homonymous’ and ‘synonymous’ noun types, he does not use the expressions later in vogue in texts on logic. Among the sub-varieties of conjunctions, Dionysius Thrax lists some that he calls ‘syllogistic’, i.e. ‘all those that are used in connection with conclusions and collections of demonstrations, e.g., ara.’ The term used by Joseph Huzaya for ‘syllogistic’ is hušbana, a perfectly everyday term for ‘reckoning-up’ which has no special overtones in the area of logical terminology; and for ‘conclusions’ he has hipe, a calqued translation based on the non-technical meaning of the Greek word epiphora (‘onrush/onset’), used by Dionysius here in the sense given it by Stoic dialectic, i.e. as the conclusion to a syllogism. It seems most likely that Joseph was not acquainted with the terminology of logic or, if he was, it would have been Peripatetic only and not the Stoic terminology that had influenced Dionysius.

Accents – Grammarians doing Philosophy

The same appears to be the case with the system of accentuation ascribed to Joseph. The invention and elaboration of the system of Syriac accents was the centre of and the prerequisite for the detailed study of the Biblical textual tradition that constituted the mašlmanuta, the so-called Syriac masoretic system of Biblical reading and exegesis. The mašlmanuta, at least in the Church of the East, was

40 Technē Grammatikē (ed. Uhlig), 86,2 = Merx, Artis Grammaticae, Appendix, p. 7.
41 The word is used directly for συλογισμός in the Peshitta text of Exod. 30:12 (and again in the Syro-Hexapla), on the basis of the Targum; and frequently elsewhere for διαλογισμός and διαλογισμός in their general, non-technical sense in the Bible. One other MS has metamrane, which is equally non-technical.
42 Technē Grammatikē (ed. Uhlig), 95,2 = Merx, Artis Grammaticae, Appendix, p. 9. This calqued translation seems to have had an afterlife in Antony of Tigris’s definition of Rhetoric: see Watt 1993: 585, reprinted in id., Rhetoric and Philosophy from Greek into Syriac (Farnham 2010), ch. VIII.
43 The examples of syllogistical conjunctions he gives are the words that Stoics used to place just before the conclusions (ἐπιφορα) of their dialectical syllogisms.
44 According to Barhebraeus (Abbeloos and Lamy 1877: III, 78), Joseph was also responsible for a change in the standard literary dialect used in the School’s official teaching. This is probably to be associated with the information about his accent system.
45 BL Add.12, 138, f. 312a. A facsimile of this important MS is forthcoming in the Corpus Scriptorum Christianorum Orientalium, together with a study of the Syrian massora, both edited by J. Loopstra. See also the older work of Martin (1875) esp. pp. 184–91.
the preserve of the maqreyyane, men like Joseph who taught the correct recitation of the Scriptures and thus theorized about language perhaps before anyone else. The purpose of the system was to indicate the logical divisions of the verses and to categorize them into rhetorical types, to describe with what modulations of the voice a given sentence should be uttered, e.g. command, prayer, oath etc.

While Joseph’s ‘system’ of nine such accents is relatively self-explanatory and straightforward, his system was increasingly assimilated to the superficially similar list of ‘species of discourse’ which one finds discussed in the Aristotelian tradition, e.g. by Ammonius and other Alexandrian commentators in their elaboration of Aristotle’s discussion of the ‘enunciative sentence’ (logos apophantikos). In his commentary on the De Interpretatione, Ammonius wrote that there are five species of discourse (logos), viz., vocative, imperative, interrogative, preceptive and enunciative.46 This list was copied by his followers among the Syriac commentators, including Paul the Persian, Proba, and Athanasius of Balad, the terms used being respectively qaroya, paqoda, mia’ina, mpisana, pasoqa.47

Joseph Huzaya’s own nine-accent system to some extent overlapped with these five species. Two were identical, mia’ina (interrogative) and paqoda (imperative), and we may assume that he made use of the pasoqa, which was the oldest and most basic of all Syriac accents.48 Hence it began to appear to the Syrians that Aristotle himself had been the one who actually inspired the very idea of accents. It must be borne in mind that the peripatetic commentary tradition was assumed to be an accurate insight into the mind of the Philosopher himself and that Aristotle was generally only read through his interpreters. Once this observation was compounded with the Syrian

46 εικασικός, προστακτικός, ἐρωτεματικός, εἰκτικός, ἀποφαντικός, Ammonius, In De Interpretatione (as n. 31), 2,10–20.
47 The term used for ‘preceptive’ differs in some other strands of the tradition: mpisana in Proba and the anonymous tract mentioned below, but malyana in Sergius of Reś’aina and in Athanasius of Balad. Both can be found in the parallel lists found in Vatican Syriac 158, f. 21r (as ‘persuasive’ and ‘déprecative’ in Hugonnard-Roche 2004: 119). The later accent system included both of these terms but they seem never to have been thoroughly differentiated. Paul’s list can be found at Land 1862–75: IV, 10, 26–11, 1; Proba’s in Hoffmann 1873: 66; and Athanasius’ in Furlani 1916: 732, 7–9.
48 Elsewhere the number of fundamental Syriac accents is given as ten. Phillips 1869: 68, trans., p. 75. This early grammatical text describes twenty-three accents, but cites the early Syriac grammarians and philosophers as having handed down ten, which we can conjecture are the nine given in the aforementioned masoretic treatise about Joseph Huzaya, plus the omnipresent pasoqa.
penchant for ascribing all intellectual achievements to the Greeks, a variety of explanations arose, including the assertion that the system had been passed on, after Aristotle’s division, by the fourth century heresiologist Epiphanius. The anonymous author of this account seems to have borrowed his information about Aristotle’s species of discourse from Proba’s commentary on the *De Interpretatione* where the five are given in the same order (Ammonius and Paul both give slightly variant orders) and the same Syriac equivalents are used. Proba himself does not, however, make any connection with accents. In this he followed in the footsteps of his predecessor Ammonius and the latter’s students, Philoponus and Sergius of Re’saina, who did not fall into the trap of treating the *De Interpretatione* as if it were about grammar. Paul the Persian is a partial exception, as we shall see.

Once it was assumed that the accents were based on a fundamental linguistic structure described by Aristotle (via the commentators), it was only a matter of time before the philosophical structure became the criterion by which the growth of the accent system was measured. Thus sometimes new accents were invented merely to satisfy the perceived requirements of the system rather than because they served any clear purpose within the context of the public reading of scripture, their original avowed purpose.

If we take a look at the list of twenty-three accents in the above-mentioned anonymous grammatical treatise, we see that all five of Ammonius’ species have now become accent names. The proliferation of accent names found in this obtuse text is evidently somewhat artificial — the four with which we are concerned (*mša’lňa*, *qaroya*, *paqoda*, *mpisana*) are all described as consisting of a single point above the first consonant of the clause. They are really, then, just different interpretations of the same accent; one could not know on visual

49 Phillips 1869: 75. It should be remarked that David bar Paulos, who elsewhere partakes so fully of this Syriac tendency to ascribe inventions to the Greeks, attributes a native origin to the accents (Rahmani, *Studia Syriaca* I, 44–6).

50 The text in question in fact calls them the ‘modes of the verb’ (*znayye d-melta*), whereas Proba calls them ‘species of discourse’ (*âdše d-mimra*), following Ammonius more carefully. In Paul they are ‘species of the verb’ (*âdše d-melta*), which may be a slip.

51 In this they resemble Philoponus as well.

52 Revell 1974 has usefully located this Syriac phenomenon within the context of its relationship to the Hebrew, Arabic and Samaritan grammatical traditions.

53 This process was in full swing by the time of the above-mentioned text relating to Epiphanius, by which time (barely a century at most after Joseph) the number of accents had swelled to twenty three.
The Species of Discourse – Philosophers doing Grammar

Philosophers themselves were by no means immune to these developments. Paul the Persian’s late sixth century *Introduction to Logic* is a case in point. For Paul, ‘logic exists on the basis of the composition of discourse’. This discourse is fundamentally constituted of three ‘parts’, viz. noun, verb, particle, evidently derived from Aristotle’s similar tripartite division (preserved in Dionysius of Halicarnassus, *De Compositione Verborum* 2,6) with the difference that Aristotle’s particle (sundesmos) has become the ‘conjunction’ (esara). Paul takes this latter term in its grammatical sense, for he goes on immediately to describe what the conjunction is and to provide examples, rather in the manner of a grammarian. In his *Explanation of the De Interpretatione*, Paul shows his grammatical colours even more clearly. Here he describes not three but six ‘parts of speech’ (noun, verb, pronoun, adverb, preposition, conjunction), this being a truncated version of the classic eight parts of the Greek grammarians (minus the article and the participle, which are less applicable to Syriac), a position that has been justifiably described as ‘more linguistic than logical’. Later in this rather unusual philosophical tract, Paul describes Aristotle’s three varieties of modal proposition by means of

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54 The accent called *metdamrana* is also used here and was later elaborated as part of the same process (see next paragraph), but that was probably not yet in process in this text.
56 Land 1862–75: 5, 20–3.
57 Although Ammonius’ passage on this topic obviously underlies Paul, here, as so often, Ammonius nowhere develops the definition of the conjunction, and indeed does not allow that conjunctions are really a part of speech in the proper sense (In *De Int.* [as n. 31], 12, 20ff.). Paul does not here seem to be closely following Dionysius Thrax either, although there are some parallels (e.g. one of Dionysius’s sub-types are the maqpāne (affixing), while Paul says that some are ‘like an affixing (nepa); Dionysius says that ‘some are used on account of metre’, while in Paul, some conjunctions are ‘like metre’).
58 Hugonnard-Roche 2011: 213.
a grammatical description of the adverb, the function of which he believes to be fundamentally to signify these modalities.\(^{59}\)

Paul’s treatment of logic and grammar also had an impact on the later elaboration of the Syriac accent systems, in yet another instance of this relationship. In both his logical works, Paul mentions not just the five ‘species of discourse’ which (as we saw above) were well known to the Syrian commentary tradition, but also a further five types derived from the Stoic modes of discourse, again as handed on by Ammonius and the late antique peripatetic school in general.\(^{60}\)

The list is strangely mangled in the *Introduction to Logic*, but rather clearer in the *Explanation of the De Interpretatione*. The terms used in the latter are exclamatory (*metdamrana*), jurative (*yamaya*), institutive (*mettsimana*), hypothetical (*suyama*), and dubitative (*metpaśqana*).\(^{61}\)

The first of these was already the name of one of the early Syriac accents and appears among the nine attributed to Joseph Huzaya. All five, however, reappear in later, more developed, accent systems, notably in the East Syrian grammar of John Bar Zu’bi (thirteenth century), probably in turn taken from that of his master, Elias of Tirhan. In fact, in Bar Zu’bi we find all ten ‘species of discourse’ (the five Peripatetic ones and the five Stoic ones) used together as accent names.\(^{62}\) It is noteworthy also that these ten are described by Bar Zu’bi as being those accents used ‘in the Scriptures’ (he adds a further ten used only in rhetoric, including e.g. the *apofasis* and the *katafasis* and the *sunperisma*, i.e. συμπέρασμα, ‘conclusion’, to a syllogism, another term taken from logical jargon and applied to grammar), although we can see clearly enough that he borrowed them from Paul who in turn had taken them from the Greek tradition before

\(^{59}\) The text in question remains unedited; our knowledge of it is owed to the article mentioned in the foregoing note.

\(^{60}\) Hugonnard-Roche shows that some of Paul’s terms relate to the traditions of the scholiast rather than Ammonius himself. The relationship pertaining between the Alexandrian traditions and the Syriac teaching texts was thus multi-stranded. Schenkeveld 1984 provides a detailed analysis of the Late Antique tradition of these two lists.

\(^{61}\) In Paul’s *Introduction* (Land 1862–75: 11, 3–7), they are *maумата* (jurative), *haw d-iyn* (affirmative/hypothetical), *bpyska* (dubitative), *la mimmly* (incomplete), *paqquduta* (imperative). These thus clearly relate to the same five Stoic types, although the text is corrupt. *Metpaśqana* appears also in the list in the Vatican MS mentioned in n. 48 above.

\(^{62}\) Martin 1877: 12–13. In nine out of ten cases the names are identical; the other is Paul’s *mśaluna* (which is normally the name of an accent) which is called *ṭwitanaya* by Bar Zu’bi, but the terms are synonymous.
incorporating them into his understanding of Aristotelian propositional logic.

Now Bar Zu’bi understood very well the fundamental difference between logic as a philosophical enterprise, and grammar as a purely linguistic and descriptive one. He describes them in his metrical grammar as being two separate and distinct paths of which he is interested only in the latter. Nonetheless, more than any of his predecessors he was responsible for theorizing grammar according to the rules of logic, as Merx has shown in respect of the rest of his grammatical treatise.

The mutual interference of grammar and logic was active in the sphere of lexicon as well as orthography. From time to time, the Syriac version of the Categories makes use of terms drawn from the grammatical tradition to render words which in their Aristotelian context have a quite different connotation. Apodosis, which for Aristotle means simply a response to a formal question, was rendered with pur’ana (lit., response), which in Dionysius Thrax and elsewhere is used as the equivalent for the grammatical apodosis, i.e. a main clause. The same translator’s term for kataphasis is psaqa d-‘iyn (lit., statement of ‘yes’) and appears to be influenced by the parallel already made between logos apophantikos and the name of the main stop accent, pasoqa. The grammarian Elias of Tirhan uses the well-known and contested logical term for quality (‘aynayuta) as a type of adverbial expression. In light of these sorts of parallels between the semantics of the two disciplines, it is hardly surprising that the hand-lists of philosophical terms found scattered through various Syriac manuscripts also contain terms relating to both, as Hugonnard-Roche has shown with regard to a Notre-Dame-des-Semences manuscript.

There are other works of Syriac philosophy in which we can trace the same tendency as we have seen at work in Paul. When the Master

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63 It is ‘for the correction of language’ (mtaruta dalšana), echoing the title of the classic Syriac grammar, the turaša mamilla of Jacob of Edessa. That this was what grammar was is enshrined in the Greek notion of hellenizmos. Quoted in Merx 1889: 158.

64 Merx 1889, ch. 10.

65 King 2010: 69. This parallel may lie at the root of the crossover between logical terminology and accent names, since this is the most fundamental Syriac accent, the one not even given in the oldest lists for this reason. In terms of logical propositions, its use was seen to signify that the sentence in question was a logos apophantikos and hence could be used in the construction of syllogisms.


of the famous monastery of John Bar Aphthonia at Qenneère, Athanasius of Balad, wrote his general introduction to logic, he dedicated the majority of the section on the De Interpretatione to a summary grammar based on the adapted version of the Technē Grammatikē. Now Athanasius was a pupil of Severus Sebokht, who had been responsible for translating the works of Paul the Persian into Syriac (from the original Persian) and this no doubt had its influence on subsequent thinking within his school, whose pupils included Jacob of Edessa, author of what was then comfortably the most complete Syriac grammar ever written as well as an eminent philosopher and logician.

But to return to Athanasius’ Introduction. Just as Bar Zu’bi distinguished carefully between grammar and logic, so Athanasius too realizes that his digression into grammar must stop and another route (that of logic) be followed. For that part of logic, however, that deals with the explanation and division of ‘discourse’ itself, Dionysius is as much a guide as Aristotle, hence the structure of Athanasius’ work.

It would appear from Athanasius’ way of constructing his Introduction that he saw the study of grammar as in some way forming the basis for logical reasoning. The same observation has been made on the part of one of the lesser known Syriac grammarians, John the Stylite. His work appears to differ from Jacob of Edessa’s precisely in that while the latter was aimed at the ‘correction of language’ (compare Bar Zu’bi above) John’s was designed as a first step in logical studies.

In this necessarily brief survey of some of the ways in which Syriac grammar and logic overlap, we have noted some grammarians applying a logical analysis of sentence types to develop a more ‘philosophically-grounded’ system of grammatical accentuation, while on the other side of the equation there are philosophers making use of grammatical notions to describe the propositions which constitute the raw material of syllogistic logic.

One can hardly in this light criticise Joseph Huzaya for having adapted Greek grammar in such a way as to make it fit the Syriac language, nor the Syriac teachers and philosophers who saw a fundamental

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68 Edition in Furlani 1916 (as n. 47). In doing this he may well be following his Greek source. This does not appear to be any extant text but must have shared elements with the sources used by John of Damascus in the philosophical part of his Fount of Knowledge.

69 Hugonnard-Roche 2002: 224.

70 Moberg 1909, esp. p. 30.
Grammar and Logic in Timothy I

Whilst the interrelationship between the two disciplines can therefore be glimpsed only sporadically in the early period, e.g. in Paul the Persian and the anonymous treatise on the accents, Timothy I (Catholicos of the Church of the East from 780–823) offers us a window onto how the Syriac tradition made use of its logical studies in the early Abbasid period.

In a letter in which he formulates a plan to write a new Syriac grammar, the Catholicos bemoans the lack of a ‘distinctive form’ (adša miyaqmana) for the Syriac language, by which he means a scientifically-based grammar to match the language’s ‘material abundance’ (mēšarthta hulanyata: the terminology is, of course, Aristotelian). Moreover, this grammar is to be structured around the binary oppositions of Aristotelian logic, as read in the Porphyrian tradition, e.g.

[We should check] whether both the composed and the simple elements are such in their composition or simplicity because of the excess or because of the defect, in relation to something or as they are in themselves. And then [we must] assemble them according to the primary genera as far as simplicity and composition are concerned, in relation to the affirmation or to the negation, totally or partially.

Timothy had plans to write a Syriac grammar explicitly based on logical models because he believed this to have been the secret of the success of both Greek and Arabic grammatical traditions. He freely used logical terminology for grammar and tried to turn the latter into a science of divisions such as we see in many logical texts of the same period. Timothy thus exemplifies an approach to grammar in which the elements of language are tied to reality in such a way that terms applicable to physics and logic are not only usable in grammar but

71 The letter is number 19 in Braun’s edition. Braun 1914: 126–30, trans., 84–6. This, together with Timothy’s whole interaction with profane literature, has been expertly analysed in Berti 2009: 309–21.
become a necessary part of the elaboration of an effective description of a specific language.

While Timothy’s plan should probably be viewed within the context of the emergence and growth of Arabic logic and grammar, his approach had a strong afterlife within Syriac grammar itself. We have seen how later grammarians such as John Bar Zu’bi became the recipients of this approach in its strongest form and attempted a full rapprochement with Aristotelian logic. We do not know whether Timothy’s plans ever came to fruition, but they confirm for us the way in which the Syrian educational system conceived of the relationship between grammar and logic, or between language and thought.

Conclusions

What are the ramifications of the observations made above?

First, that the close relationship pertaining between grammar and logic in the Syriac tradition was inherited from the Greek educational system and is not attributable to a Semitic ‘watering-down’ of the Greek heritage.

Second, that the debate about the origins of Arabic grammar which too often revolves around distinctions between an origin in Syro-Greek grammar and an origin in Syro-Greek logic needs to be reconsidered in the light of this evidence, especially since the merging of the disciplines was a profoundly embedded feature of Syriac education and scholarship. This is true even if the Arabs did indeed ‘leapfrog’ the Syriac tradition and rely on Greek ideas directly.

Third, the development of Arabic grammar should be seen as a natural development taking place within a wider cultural and pedagogical environment which involved the study of grammar and logic largely in bilingual monastic circles throughout Mesopotamia in Late Antiquity. The sheer diversity of Syriac texts designed for beginning students in these fields is testimony to this.

The more one becomes familiar with the ‘secular’ side of Syriac literary production, the more it becomes clear that, even in a field such as grammar, linguistic boundaries were not seen as especially

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72 Although he sought his sources of learning amongst the Syriac monasteries, Timothy was an active member of the Caliph’s court and translated the *Topics* for al-Mahdi. His plan for a Syriac grammar arose partly out of conversations he claims to have had with Arabic scholars at court (Berti 2009: 311).

73 This point has hardly been developed in this paper, but is dependent on the arguments in King 2012.
divisive and the learning traditions of classical antiquity were still accepted broadly as the norm in the (ex) eastern provinces of the empire even far into the Islamic era.

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REFERENCES


Hilgard, A. 1901. *Scholia in Dionysii Thraci Artem grammaticem*. (Grammatici Graeci 3.1. Leipzig)
GRAMMAR AND LOGIC IN SYRIAC (AND ARABIC)

Hoffmann, J.G.E. 1873. *De Hermeneuticis apud Syros Aristotelis*. (Leipzig)
—— 1991. 'Contributions syriques aux études arabes de logique à l’époque abasside', *Arama* 3, 193–210


Land, J.P.N. 1862–75. *Anecdota Syriaca*, 4 vols. (Leiden)


Luhtala, A. 2005. *Grammar and Philosophy in Late Antiquity: A Study of Priscian’s Sources*. (Amsterdam)

Martin, J.P.P. 1875. 'Histoire de la ponctuation, ou de la massore chez les Syriens', *Journal Asiatique* 7:5, 81–208


Moberg, A. 1909. 'Die syrische Grammatik des Johannes Estonaja', *Le monde oriental* 3, 24–33


Uhlig, G. (ed.). 1883. *Dionysii Thracis Ars Grammatica* (Grammatici Graeci 1, Leipzig)