The Integration of Consonants in Greek Loanwords in Syriac

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Abstract

The present study analyses the integration of consonants in Greek loanwords in Syriac. It is shown that in the vast majority of cases each Greek consonantal phoneme is represented by a single consonant in Syriac. Correspondences that deviate from this are usually the result of one of two causes. First, a Koinē form of Greek, instead of Attic, likely served as the source for some of the words that *prima facie* seem to exhibit irregular correspondences. Second, some of the seemingly irregular correspondences are due to secondary developments in Syriac. This study is based on a corpus of more than eight hundred Greek loanwords and their derivatives found in pre-eighth-century Syriac texts that were not translated from Greek.

Keywords

Syriac – Greek – loanword – Latin – language contact

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1 Introduction

Syriac underwent a prolonged period of contact with Greek. This resulted in, *inter alia*, a large number of Greek loanwords in Syriac.¹ There are in fact more than eight hundred Greek loanwords attested in pre-eighth-century Syriac texts that were not translated from Greek. Many more are to be found in translated texts from this period or in later Syriac literature (whether translated or not). While a fair amount of literature has been devoted to Greek loanwords in Syriac,² very little attention has thus far been paid to their phonological integration. In the standard grammar of Syriac, Nöldeke discusses this topic in only a handful of paragraphs.³ Other grammars, such as by Brockelmann and Muraoka, offer even fewer remarks.⁴ In the only monographic study of Greek loanwords in Syriac, Schall makes a number of passing references to phonological integration,⁵ but he never provides a systematic treatment. More recently, Brock and Voigt have provided additional insights.⁶ Neither, however, offers a comprehensive description. The present study aims to provide an updated analysis of the phonological integration of consonants in Greek loanwords in Syriac. In particular, the sections below provide a description of how each Greek consonantal phoneme is represented in Syriac.

This study is based on a corpus of more than eight hundred Greek loanwords and their derivatives found in pre-eighth-century Syriac texts that were not

- 1 For an analysis of contact-induced changes in Syriac due to Greek, see Aaron M. Butts, *Language Change in the Wake of Empire: Syriac in Its Greco-Roman Context* (Linguistic Studies in Ancient West Semitic, 11, Winona Lake: Eisenbrauns, 2016).
- 2 A useful bibliography is available in R. Voigt, 'Griechische Fremdwörter im Syrischen: Eine Bibliographie', *Graeco-Arabica* 7/8 (1999–2000), pp. 555–570.
- 3 Th. Nöldeke, *Compendious Syriac Grammar. Translated from the second and improved German edition by James A. Crichton* (London: Williams & Norgate, 1904) § 4B, 25, 39, 40H, 46, 51.
- 4 C. Brockelmann, *Syrische Grammatik* (Berlin: Verlag von Reuther & Reichard, 3rd ed., 1912); T. Muraoka, *Classical Syriac. A Basic Grammar with a Chrestomathy* (PLO ns, 19, Wiesbaden: Harrassowitz, 2nd ed., 2005).
- 5 A Schall, *Studien über griechische Fremdwörter im Syrischen* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1960) pp. 37, 42–44, 50–51, 61–62, 80, 93, 99, 104, 107, 108, 109, 110, 111, 120, 121, 135–136, 148–150, 174, 217, 220, 232, 245.
- 6 S.P. Brock, 'Greek Words in Syriac: Some General Features', *Scripta Classica Israelica* 15 (1996), pp. 251–262 (254–257) (reprinted in his *From Ephrem to Romanos. Interactions between Syriac and Greek in Late Antiquity* [Aldershot: Ashgate, 1999] xv); R. Voigt, 'Das emphatische p des Syrischen', in R. Lavenant (ed.), *Symposium Syriacum VII (Uppsala 1996)* (OCA, 256, Rome: Pontificio Istituto Orientale, 1998) pp. 527–537.

translated from Greek.⁷ This corpus has been populated from several sources: concordances to texts;⁸ indices to text editions that list Greek loanwords in Syriac, especially those published in the *Corpus Scriptorum Christianorum Orientalium* (CSCO); the readings of the present author; as well as a systematic exploitation of Michael Sokoloff's *A Syriac Lexicon* (2009) (= *SL*), which is a translation (with correction, expansion, and update) of the *Lexicon Syriacum* by Carl Brockelmann (1895 [1st ed.]; 1928 [2nd ed.]) (= *LS2*). In addition, it has been possible to search for additional occurrences of loanwords in three large 'databases': 1. the Comprehensive Aramaic Lexicon (CAL);⁹ 2. the Oxford-BYU Syriac Corpus;¹⁰ and 3. Sebastian Brock's more than two thousand card files listing Greek loanwords in Syriac.¹¹ These three 'databases' have been consulted on numerous occasions (though not systematically). Throughout this study, citations of Greek loanwords in Syriac are systematically provided with references to *LS2* and *SL* (only rarely is a loanword not found in these lexica). The English translations in this study derive from *SL*. In several instances, it has been important to establish the earliest occurrence of a Greek loanword in Syriac. When this is the case, the earliest text attesting the loanword that is known to the present author is cited with a heading in bold giving the century of composition. Consider, for instance, the following loanword: ἔθος (*LSJ* 480) > ܐܬܘܫܐ *htws* 'custom' (**6th cent.** Eliya, *Life of Yuhanon of Tella*, 84.26 [ed. E.W. Brooks, *Vitae virorum apud Monophysitas celeberrimorum* (CSCO 7–8, Louvain: Peeters, 1907), pp. 29–95]; *LS2* 184; *SL* 356). To the present author's knowledge, this word is not found in Syriac until the sixth century when it occurs in the *Life of Yuhanon of Tella* by Eliya, which was edited by Brooks.

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- 7 The present author hopes to publish a glossary of Greek loanwords in Syriac based on this corpus at some point in the future.
 - 8 For the New Testament, see G.A. Kiraz, *A Computer-Generated Concordance to the Syriac New Testament* (Leiden: Brill, 1993); for the *Book of the Laws of the Countries*, see J.A. Lund, *The Book of the Laws of Countries. A Key-Word-in-Context Concordance* (Piscataway, NJ: Gorgias Press, 2007); for the *Book of Steps*, see M. Kmosko, *Liber Graduum* (PS, 3, Paris: Firmin-Didot, 1907); for the *Demonstrations* by Aphrahat, see I. Parisot, *Aphraatis Sapientis Persae Demonstrationes* (PS, 1.1–2, Paris: Firmin-Didot, 1894–1907).
 - 9 Accessible online at <http://cal.huc.edu/>. I am grateful to Stephen Kaufman (HUC-JIR/Cincinnati) for responding to inquiries on various occasions concerning CAL.
 - 10 I am grateful to Kristian Heal (Brigham Young University), who generously provided me with a Beta-version of the Oxford-BYU Syriac Corpus.
 - 11 I am grateful to Sebastian Brock (Oxford University), who allowed me to digitise his card files over several weeks in August 2011.

It should be stressed that this study is concerned only with Greek *loanwords* in Syriac. It does not attempt to account for words that are closer to the Fremdwort side of the Lehnwort-Fremdwort continuum.¹² The corpus does, however, err on the side of inclusion, and thus some of the words here may ultimately prove to be closer to Fremdwörter than Lehnwörter. In addition, code-switches, including single-word code-switches, have been excluded from the corpus.¹³ Finally, the study has not taken into account the numerous transcriptions of Greek words in Syriac, ranging from Syriac transcriptions of the Greek alphabet to the transcriptions of entire Greek passages in Syriac script.¹⁴ Thus, this study addresses only one piece of a much larger puzzle: it analyses how Greek consonants were integrated into Syriac in *loanwords*.

Before looking at the phonological integration of consonants in Greek loanwords in Syriac, a brief word is necessary on the Greek input form. In a vast majority of cases, Greek loanwords in Syriac reflect Attic Greek. This is perhaps unsurprising, since Attic continued to exert significant influence on the orthography of Koinē Greek. That is, the vast majority of Greek texts, especially literary texts but even documents, from Late Antiquity continue to reflect, or at least strive for, the orthography of Attic Greek, regardless of how well it reflects the actual pronunciation of the language. Occasionally, however, Greek loanwords in Syriac seem to reflect Koinē Greek input forms. In fact, positing a non-Attic input form can account for a number of cases, which *prima facie* seem to be irregular representations of Greek consonants in Syriac.¹⁵ Consider, for instance, the Greek loanword ܩܠܝܨܕܝܩܘܫ *qlysgdyqws* ‘expert in church law’ (LS2 44; SL 92) < ἐκκλησιέδικος (PGL 433).¹⁶ The usual representation of Greek κ is the emphatic velar stop *q* in Syriac, as will be discussed below (see §7). The occurrence of Syriac *g*, which could reflect either a voiced velar stop /g/ or a voiced velar fricative /ɣ/, however, indicates that the Greek source may have been ἐκκλησιέγδικος with the assimilation of κ to γ before the voiced stop δ. Interestingly, an assimilation of κ to γ before a voiced stop is attested in Greek documents from Syria and Mesopotamia. This is reflected in writings such as the following:

12 For this continuum, see Butts, *Syriac in Its Greco-Roman Context*, §4.5.

13 For code-switching in Syriac-Greek language contact, see Butts, *Syriac in Its Greco-Roman Context*, §4.6.

14 For the former, see TS. For the latter, see S.P. Brock, ‘Greek and Latin in Syriac Script’, *Hugoye: Journal of Syriac Studies* 17 (2014), pp. 33–52.

15 For more details, see Butts, *Syriac in Its Greco-Roman Context*, §6.2.7.

16 For additional comments on this word, see Schall, *Studien über griechische Fremdwörter in Syrischen*, p. 153.

3 Greek γ

Greek γ was a voiced velar stop /g/ in Attic Greek.²⁶ During the Roman and Byzantine periods, it was in the process of becoming a voiced velar fricative /ɣ/.²⁷ Greek γ is typically represented in Syriac by *g*,²⁸ which was either a voiced velar stop or a voiced velar fricative, e.g., γυμνάσιον (*LSJ* 362) > ܡܢܨܝܢ *gmnsyn* ‘gymnasia’ (*LS2* 121; *SL* 242) and φλέγμα (*LSJ* 1943) > ܡܠܓܡ *plgm* ‘phlegm’ (*LS2* 571; *SL* 1195).

Greek γ is also represented by the emphatic velar stop *q* in πύργος (*LSJ* 1556) > ܡܘܪܩܐ *pwrqs* ‘tower’ (*LS2* 607; *SL* 1173). This may be the result of an assimilation of [+emphatic] due to the initial “emphatic” *p* (for which, see §12 below).²⁹ It should be noted that this Greek word is realised in Mandaic as *parqsa* (*MD* 365), with the same correspondence, suggesting that the Mandaic is a loanword from Syriac (or less likely, that the same assimilation occurred independently in Mandaic).

Greek γ is also represented by the voiced dental stop *d* in πυργίσκος (*LSJ* 1555–1556) > ܡܘܪܕܝܬܐ *prdysq*, ܡܘܪܕܝܬܐ *pwrdsq* ‘wooden box, storeroom; chest inserted in a wall’ (*LS2* 594; *SL* 1228–1229). Brockelmann explains this as a dissimilation of a velar to a dental in proximity to another velar.³⁰ This is, however, *ad hoc*. It should be noted that the Greek word is realised in Jewish Babylonian Aramaic as *prdysq*’ (*DJBA* 928) and in Mandaic as *pardasa* (*MD* 363), with similar correspondences.

In the sequences γκ, γγ, γχ, and γμ, Greek γ represents the velar nasal η,³¹ which serves as an allophone of the dental nasal ν and the voiced velar stop γ.

26 Allen, *Vox Graeca*, pp. 29–32; Woodard, ‘Attic Greek’, p. 616.

27 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 74–75, 178; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 141–143.

28 Kiraz, *Türrāš Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Voigt, ‘Das emphatische p des Syrischen’, p. 528.

29 Alternatively, it could be the result of an interchange of γ and κ in the Greek source, a change that is attested in Greek documents from Egypt (Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 63, 76–80; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 143–144).

30 C. Brockelmann, *Grundriß der vergleichenden Grammatik der semitischen Sprachen*, Vol. 1. *Laut- und Formenlehre* (Berlin: Reuther & Reichard, 1908) § 86d.

31 Allen, *Vox Graeca*, pp. 33–39; Woodard, ‘Attic Greek’, p. 616. The pronunciation of γ as the velar nasal η is sometimes reflected in spellings in Greek documents, including those from Syria and Mesopotamia: for γγ, see ἀντισύγγραφα for ἀντισύγγραφα (P.Euphrates 6.29–30 [249]; 7.23 [249]); στρουγγυλοπρόσωπον for στρουγγυλοπρόσωπον (P.Euphrates 8.13 [251]; 9.12 [252]); συγγραφήν for συγγραφήν (P.Euphrates 8.17 [251]); for γκ, see ἐγκαλέση for

In the vast majority of cases, the Greek velar nasal is represented in Syriac with the dental nasal *n*, as in the following representative examples:

- (3) a. ἀνάγκη (*LSJ* 101) > ܐܢܩ ʾnnqʾ (with alternative orthographies) ‘necessity’ (*LS2* 29; *SL* 63)
 b. κόγχη (*PGL* 759) > ܩܢܟ qnkʾ ‘the part of the church in which the holy service is preformed and where the altar stands’ (*LS2* 677; *SL* 1385)
 c. μάγγανον (*LSJ* 1070) > ܡܢܓܢܘܢ mngnwn ‘instrument of torture’ (*LS2* 394; *SL* 780)

In the following cases, however, the Greek velar nasal *ŋ* is not represented in Syriac:

- (4) a. Latin *uncinus* (*OLD* 2090; *LD* 1929) > ὄγκινος (*LSJ* 1196) > ܐܘܩܝܢ ʾwqynʾ ‘hook; anchor; sailors’ sounding line’ (*LS2* 9; *SL* 20)
 b. ἄγκών (*LSJ* 10) > ܐܩܘܢ ʾqwnʾ ‘hollow of the arm or knee’ (*LS2* 45; *SL* 92)
 c. λόγχη (*LSJ* 1059) > ܠܘܟܬ lwkytʾ ‘spear’ (*LS2* 361; *SL* 679)³²
 d. σπόγγος (*LSJ* 1628) > ܣܦܘܓ ʾspwgʾ, ܣܦܘܓ spwgʾ ‘sponge’ (*LS2* 35; *SL* 75)

The lack of representation of the Greek velar nasal *ŋ* in these examples is due to its assimilation to a following consonant.³³

4 Greek δ

Greek δ was a voiced dental stop /d/ in Attic Greek.³⁴ During the Roman and Byzantine periods, it was in the process of becoming a voiced dental fricative

ἐγκαλέσῃ (P.Dura 31.int.16 [204]; P.Euphrates 8.25 [251]); ἐγκαλῖν for ἐγκαλεῖν (P.Euphrates 14.17 [241]); ἐγκαλλέσειν for ἐγκαλέσειν (P.Dura 31.int.13 [204]); ἐγκαλοῦμε for ἐγκαλοῦμαι (P.Euphrates 3.12 [252–256]; 4.12; [252–256]); ἐγκλήματα for ἐγκλήματα (P.Euphrates 3.11 [252–256]; 4.12 [252–256]); πάνκαλα for πάγκαλα (P.Euphrates 17.9–10 [mid-3rd cent.]); πάνκαλον for πάγκαλον (P.Euphrates 17.2 [mid-3rd cent.]); συνκαμήται for συγκωμήται (P.Euphrates 1.10–11 [245]); συνκαμήτης for συγκωμήτης (P.Euphrates 4.6 [252–256]); for γχ, see τυγχάνομεν for τυγχάνομεν (P.Euphrates 1.11 [245]).

³² Compare, however, λογχίδιον (*LSJ* 1059) > ܠܘܢܟܕܝ ʾlwnkdyʾ ‘small spears’ (*LS2* 368; *SL* 679).

³³ Alternatively (or additionally), these cases could involve nasalisation of the vowel.

³⁴ Allen, *Vox Graeca*, pp. 29–32; Woodard, ‘Attic Greek’, p. 616.

/ð/.³⁵ Greek δ is typically represented in Syriac by *d*,³⁶ which was either a voiced dental stop or a voiced dental fricative, e.g., ἀντίδοτον (*LSJ* 155) > ܐܢܬܝܕܘܬܘܢ *ḥntydṭwn* ‘antidote’ (*LS2* 28; *SL* 61) and δίπτυχον (*LSJ* 437) > ܕܝܦܬܝܚܐ *dypṭwkʿ* ‘diptych, tablet’ (*LS2* 162; *SL* 298).

Greek δ is also represented by the emphatic dental stop *t* in ποδάγρα (*LSJ* 1425) > ܩܕܐܓܪܐ *pṭgrʿ* ‘gout’ (*LS2* 563; *SL* 1180).³⁷ This is likely the result of an assimilation of [+emphatic] due to the “emphatic” *p* (for which, see § 12 below).³⁸ A similar correspondence is found in πανδοκείον (*LSJ* 1296–1297) > ܩܕܩܐ *pwtqʿ* ‘inn’ (*LS2* 565, 618; *SL* 1162, 1177), but also with assimilation of *n*. The Greek δ in πανδοκείον is also represented in Syriac with *t*, which was realised as either a voiceless dental stop or a voiceless dental fricative, e.g., ܩܕܩܐ *pwtqʿ*. This representation is more difficult to explain; perhaps, it is due to an interchange of δ and θ in the Greek source, a change that is occasionally attested in Greek documents from Egypt.³⁹ It should be noted that these developments are not attested in other dialects of Late Aramaic in which the Greek word is found: Jewish Babylonian Aramaic *puddaq* (*DJBA* 888), Jewish Palestinian Aramaic *pwndq* (*DJPA* 426), and Christian Palestinian Aramaic *pwndq* (*DCPA* 325–326; *LSP* 159).⁴⁰

Greek δ is not always represented in πινακίδιον (*LSJ* 1405) > ܩܕܩܐ *pnqytʿ*, ܩܕܩܐ *pnqydtʿ* ‘writing tablet, treatise; collection; small book, volume’ (*LS2* 580; *SL* 1207). This is due to a regressive assimilation of *d* to *t*.⁴¹ It should be noted, however, that in the later vocalisation tradition ܩܕܩܐ *pnqytʿ* is

35 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 75 with n. 3, 178.

36 Kiraz, *Türrāṣ Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Voigt, ‘Das emphatische p des Syrischen’, p. 528.

37 The expected representation ܩܕܩܐ *pwdgrʿ* also occurs.

38 Alternatively, it could be the result of an interchange of δ and τ in the Greek source, a change that is attested in Greek documents from Egypt (Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 63, 82–83; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 146–147).

39 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 96–97; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 148–149.

40 The developments found in Syriac thus preclude it from being the immediate source of Arabic *funduq*–(BK 638; Lane 2449).

41 So already W. Wright, *Catalogue of Syriac Manuscripts in the British Museum Acquired since the Year 1838*, vol. 2 (London, 1870–1872) 633. For this sound change, see Nöldeke, *Compendious Syriac Grammar*, § 26B and compare, e.g., *ḥadā > *ḥadt > ḥatt > ‘new’, written ܩܕܩܐ *ḥ(d)tʿ*.

realised as /penqitɔ/ with *t* (not *tt*).⁴² The fricativisation of *t* is to be explained as secondary, likely due to an inner Syriac development whereby the Syriac ending *-itɔ* was used to represent the Greek ending *-ιδιον*. Finally, it should be noted that the non-assimilated spelling ܡܢܩܝܬܐ *pnqydt* is very rare and may well reflect a *Fremdwort* rather than a *Lehnwort*.⁴³

In a few isolated cases, Greek *δ* is not represented in Syriac when it occurs in word initial position:

- (5) a. διαφωνία (LSJ 420) > ܡܢܥܝܢܐ *ypns* ‘discord’ (LS2 305; SL 579; only in Aphrahat, *Demonstrations*, 605.26; 677.5 [ed. Parisot, *Aphraatis Sapientis Persae Demonstrationes*])
 b. δορυφόρος (LSJ 446) > ܠܡܦܪܐܝܐ *hwpr* ‘praetorian guardsman’ (LS2 369; SL 680)

If these are not simply corruptions, which seems most likely, then they could be explained as instances of meta-analysis in which the initial *d* was misanalysed as the nominalising particle *d*-, which allowed it to be deleted from the word.

5 Greek ζ

Greek ζ was a monograph for the consonant cluster /zd/ in Attic Greek.⁴⁴ By the Koinē Greek of the Roman and Byzantine periods, it had developed into a voiced alveolar fricative /z/.⁴⁵ Greek ζ is always represented by the Syriac voiced alveolar fricative *z*,⁴⁶ e.g., ζωνάριον (LSJ 759) > ܙܘܢܪܐ *zwnr* ‘belt’ (LS2 201; SL 373–374) and τραπεζίτης (LSJ 1810) > ܬܪܦܙܝܬܐ *trpzyt* (with alternative orthographies) ‘money-changer’ (LS2 291; SL 556).

42 See, e.g., Luke 1.63 in P.E. Pusey and G.H. Gwilliam, *Tetraeuangelium sanctum; juxta simplicem Syrorum versionem ad fidem codicum Massorae, editionum denuo recognitum* (Oxford: Clarendon Press, 1901).

43 I am grateful to an anonymous reviewer for pointing this out.

44 Allen, *Vox Graeca*, pp. 56–69; Woodard, ‘Attic Greek’, p. 616.

45 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 120; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 176.

46 Kiraz, *Türrâş Mamllâ*, § 603–604.

6 Greek θ

Greek θ was an aspirated voiceless dental stop /t^h/ in Attic Greek.⁴⁷ During the Roman period, it developed into a voiceless dental fricative /θ/,⁴⁸ which became the established pronunciation in the Byzantine period. Greek θ is typically represented in Syriac by *t*,⁴⁹ which was realised as a voiceless dental stop or a voiceless dental fricative, e.g., ἀθλητής (*PGL* 46; *LSJ* 32) > ܐܬܠܬܝܬ ʾtlytʾ ‘athlete, fighter’ (*LS2* 55; *SL* 111–112) and θέατρον (*LSJ* 787) > ܬܝܬܪܘܢ tʾtrwn ‘theater; spectacle’ (*LS2* 813; *SL* 1618).

Greek θ is also represented by the emphatic dental stop *ṭ* in θόρυβος (*LSJ* 803–804) > ܬܘܪܒܐ ṭwrḇ ‘turmoil, uproar’ (*LS2* 287; *SL* 521). According to Brock, this is due to analogy with ܬܘܪܒܐ ṭwrp ‘torment’ (*LS2* 291; *SL* 522).⁵⁰ Alternatively, the spelling with *ṭ* could be due to an interchange of θ and τ in the Greek source, which is occasionally attested in Greek documents from Egypt.⁵¹

7 Greek χ

Greek χ was a voiceless unaspirated velar stop /k/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁵² Greek χ is typically represented in Syriac by the emphatic velar stop *q*,⁵³ e.g., εἰκῆ (*LSJ* 484) > ܩܥܝܩ ʾyqʾ ‘in vain’ (*LS2* 16; *SL* 37–38) and καίρος (*LSJ* 859–860) > ܩܝܪܐ qʾrsʾ (with

47 Allen, *Vox Graeca*, pp. 18–26; Woodard, ‘Attic Greek’, p. 616.

48 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 64, 178.

49 Brock, ‘Greek Words in Syriac: Some General Features’, p. 255; Kiraz, *Türrāṣ Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Voigt, ‘Das emphatische p des Syrischen’, p. 528.

50 S.P. Brock, ‘Greek Words in the Syriac Gospels (vet and pe)’, *Le Muséon* 80 (1967), pp. 389–426 (402).

51 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 86–96, esp. 91 (word initial); Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 147–148.

52 For Attic, see Allen, *Vox Graeca*, pp. 17–18; Woodard, ‘Attic Greek’, p. 616. For Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 63, 178.

53 Brock, ‘Greek Words in Syriac: Some General Features’, p. 255; Kiraz, *Türrāṣ Mamllā*, § 603–604; Schall, *Studien über griechische Fremdwörter im Syrischen*, p. 37; Voigt, ‘Das emphatische p des Syrischen’, p. 528.

case of this representation could potentially be found in ܡܢܟܐ *pynk* ‘dish, writing tablet’ (*LS2* 579; *SL* 1188), if the input form is πίνᾱα, the accusative of πίνᾱξ (*LSJ* 1405). It is, however, preferable to follow Brock in taking the input form to be the nominative πίνᾱξ in which case Greek ξ would be realised as Syriac *ks*, as is typical (see § 11 below), followed by the loss of the case marker -s, leaving only *k*.⁶⁰ If Brock’s proposal is accepted, then Syriac ܡܢܟܐ *pynk* is not an additional example of the correspondence of Greek χ with Syriac *k*.

In the *Ecclesiastical History* by Pseudo-Zacharias (6th cent.), Greek χ is represented by the emphatic dental stop ܬ in γλωσσόκομον (*LSJ* 353) > ܬܠܫܬܡܐ *glwštṁ* ‘chest, box, case’ (*LS2* 119; *SL* 233–234).⁶¹ This representation is difficult to explain. The fact that a similar spelling occurs in Mandaic *gluštuma*, *gluštma* (*MD* 1963) suggests that the Mandaic is a loanword from Syriac.

8 Greek λ

Greek λ was an alveolar lateral approximant /l/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁶² It is typically represented by the Syriac alveolar lateral approximant ܠ,⁶³ e.g., σελλίων (*LSJ* 1590) > ܣܠܝܢ *sylyn* ‘small chair; latrine, toilet’ (*LS2* 476; *SL* 149; 1001) and ὕλη (*LSJ* 1847–1848) > ܠܡܠ ܗܠܠ’ (with alternative orthographies) ‘woods, forest; matter, material; firewood’ (*LS2* 173, 175; *SL* 335, 341).

Greek λ may be represented by the alveolar trill *r* in two words, though both are quite uncertain:

- (8) a. ὑδραύλης (*LSJ* 1884) > ܠܘܕܪܝܢܐ* *’*drwrs* ‘hydraulic organ’ (*LS2* 167; *SL* 11) only possibly in *Acts of Thomas*, 279.8 (ed. W. Wright, *Apocryphal*

60 Brock, ‘Greek Words in the Syriac Gospels (*vet* and *pe*)’, p. 413. For the integration of Greek case endings in Syriac, see Butts, *Syriac in Its Greco-Roman Context*, § 6.2.3.

61 See also Th. Nöldeke, *Mandäische Grammatik* (Halle: Buchhandlung des Waisenhauses, 1875) p. xxx; Brock, ‘Greek Words in the Syriac Gospels (*vet* and *pe*)’, p. 397. The usual spelling in Syriac is ܬܠܫܬܡܐ *glwšqm*, though ܬܠܫܬܡܐ *glwšqm* with assimilation of [+emphatic] is also attested. Compare also Christian Palestinian Aramaic *gwlwšqwmwn* ‘bag, purse’ (*D CPA* 73; *LSP* 38) and Jewish Palestinian Aramaic *glwšqwm* (*DJPA* 129). The *Ecclesiastical History* by Pseudo-Zacharias is edited in E.W. Brooks, *Historia ecclesiastica Zachariae Rhetori vulgo adscripta*, 1–2 (CSCO, 83–84, 87–88, Louvain: Peeters, 1919–1924).

62 For Attic, see Allen, *Vox Graeca*, pp. 39–40; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

63 Kiraz, *Türrāṣ Mamllā*, § 603–604.

Acts of the Apostles [London: Williams and Norgate, 1871]), which Fränkel proposed as an emendation of ܠܡܕܝܢ *dīws*.⁶⁴ Tubach, however, has argued that this emendation is unnecessary, proposing instead that ܠܡܕܝܢ *dīws* represents Greek ὑδραύλης with assimilation of *l* to *s* and the loss of initial *ʾ*.⁶⁵ Finally, it should be noted that ܠܡܕܝܢ *hdrwl* (LS2 172; SL 332) is the more common form of the word.

- b. χαλκηδών (LSJ 1973) > ܠܚܕܢ *qrkdn* 'chalcedony' (LS2 696; SL 1411). This would not be the only irregular consonant correspondence in the word (see fn. 58 above).

If these examples are admitted, they could be explained by an interchange of *p* and *λ* in the Greek source, a change that is attested in Greek documents from Egypt.⁶⁶

Greek *λ* is not consistently represented in βαλανεῖον (LSJ 303) > ܠܒܢ *bn* 'bath' (LS2 78; SL 161) due to haplography.⁶⁷ This haplography is also found in Jewish Palestinian Aramaic *bny* (DJPA 105) and Jewish Babylonian Aramaic *banne*, *b'ny* (DJBA 209). The form without haplography is, however, attested in Syriac *bln* 'bath' (LS2 76; SL 158) as well as in Jewish Palestinian Aramaic *blny* (DJPA 104).

An irregular representation of Greek *λ* with Syriac *n* is found in λαμπτήρ (LSJ 1028) > ܠܡܦܬܝܪ *npṭyr* 'lantern, torch' (LS2 436; SL 930). This representation might possibly be explained by a change of *λ* to *ν* in the Greek source, which is rarely attested in Greek documents from Egypt.⁶⁸

The interchanges of *l*, *n*, and/or *r* in the previously discussed words could also be explained as (irregular) internal changes in Syriac, especially since these three sounds share a number of features.

64 S. Fränkel, 'Beiträge zum syrischen Wörterbuche', ZA 17 (1903), pp. 85–90 (86). Wright (*Apocryphal Acts of the Apostles*, p. 279), Fränkel ('Beiträge zum syrischen Wörterbuche', p. 86), Brockelmann (LS2 167), Schall (*Studien über griechische Fremdwörter im Syrischen*, p. 120), and Tubach ('Zur Interpretation des Perlenliedes. Exegetische Prämissen und ihre Schlussfolgerungen', in D. Bumazhnov and H.R. Seeliger [eds.], *Syrien im 1.–7. Jahrhundert nach Christus. Akten des 1. Tübinger Tagung zum Christlichen Orient* [15.–16. Juni 2007] [Tübingen: Mohr Siebeck, 2011], pp. 231–258 [247 n. 72]) all give the ms. as reading ܠܡܕܝܢ *dīws*, against Sokoloff (SL 11), who has ܠܡܕܝܢ *dīws*.

65 Tubach, 'Zur Interpretation des Perlenliedes', p. 247 n. 72.

66 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 102–107; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 161–162.

67 Brockelmann, *Grundriß der vergleichenden Grammatik der semitischen Sprachen*, § 9712a; Schall, *Studien über griechische Fremdwörter im Syrischen*, pp. 61–62.

68 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 109–110.

9 Greek μ

Greek μ was a bilabial nasal /m/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁶⁹ It is typically represented by the Syriac bilabial nasal *m*,⁷⁰ e.g., γραμματίον (*LSJ* 359) > ܡܬܝܬܝܢ *gimtywn* (PL) ‘promissory note’ (*LS2* 133, 841; *SL* 261) and μέν (*LSJ* 1101–1102) > ܡܢ *mn* ‘indeed’ (*LS2* 393; *SL* 778).

In the following isolated cases, Greek μ is not represented in Syriac:⁷¹

- (9) a. συμφωνία (*LSJ* 1689) > ܣܦܘܢܝܐ *špwny* ‘bagpipe’ (*LS2* 635; *SL* 1297)
 b. Latin *subsellium* (*OLD* 1848; *LD* 1781) > συμψέλλιον (*LLGE* 109; *LSJ* 1690)
 > ܣܦܣܠܐ *spsl* ‘bench’ (*LS2* 455, 491; *SL* 963, 1032), also attested as ܣܦܣܠܐ *sbsl*, which likely represents the Latin

These examples are to be explained as a loss of the bilabial nasal μ before a labial stop in the Greek source, a change that is attested in Greek documents from Egypt.⁷²

Greek μ is represented by Syriac *n* in σύμπονος (*LSJ* 1685; *PGL* 1289) > ܣܘܢܦܢܘܣ *swnpnws* ‘supervisor of the trades people of Constantinople on behalf of the eparch of the city’ (*LS2* 485; *SL* 984). This is due to a dissimilation of μ to ν before a labial in the Greek source, a change which is encountered in Greek documents from Egypt as well as from Syria and Mesopotamia.⁷³

69 For Attic, see Allen, *Vox Graeca*, p. 33; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

70 Kiraz, *Türrāš Mamllā*, § 603–604.

71 See also λαμπτήρ (*LSJ* 1028) > ܠܡܦܬܝܪ *nptyr* ‘lantern, torch’ (*LS2* 436; *SL* 930), which also attests the irregular correspondence of Greek λ with Syriac *n* (see § 8 above).

72 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 117; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 165.

73 For Egypt, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 167–169; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 203–207; for Syria and Mesopotamia, see, e.g., διαπεμφαμένου for διαπεμψαμένου (P.Euphrates 2.20 [mid-3rd]); ἐνποιηθῆ for ἐμποιηθῆ (P.Euphrates 8.24 [251]); ἐνποιούμενον for ἐμποιούμενον (P.Euphrates 9.23 [252]); ἐνπροσθεν for ἐμπροσθεν (P.Euphrates 16.A.2 [after 239]); ἐνφράξι for ἐμφράξει (P.Euphrates 13.16 [243]); συνβά[ν] for συμβάν (P.Euphrates 2.5 [mid-3rd]); συνπαρόντος for συμπαρόντος (P.Euphrates 6.9 [249]; 9.14 [252]).

10 Greek ν

Greek ν was an alveolar nasal /n/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁷⁴ It is typically represented by the Syriac alveolar nasal *n*,⁷⁵ e.g., δρόμων (*LSJ* 450) > ܕܪܡܘܢ *drmw'n* 'ship, boat' (*LS2* 167; *SL* 324) and νομή (*LSJ* 1178–1179) > ܢܡܐ *nwm* 'pasture' (*LS2* 420; *SL* 900).

In rare cases, Greek ν is not represented in Syriac:⁷⁶

- (10) a. ἀνδριάς (*LSJ* 128) → accusative singular ἀνδριάντα > ܕܪܝܢܐ *'drynt'*, ܕܪܝܢܐ *'dryt'* 'statue' (*LS2* 6; *SL* 11), with an additional spelling of ܕܪܝܢܐ *'ndrynt'*
 b. πανδοχείον (*LSJ* 1296–1297) > ܡܡܬܐ *pwtq'*, ܡܡܬܐ *pwtq'* 'inn' (*LS2* 565, 618; *SL* 1162, 1177)
 c. σάνδαλον (*LSJ* 1582) > ܣܕܠܐ *sdl'* 'sandal' (*LS2* 460, 484; *SL* 971, 1022), with an additional spelling of ܣܕܠܐ *sndl'*
 d. σινδών (*LSJ* 1600) > ܣܕܢܐ *sdwn* 'fine linen cloth' (*LS2* 460; *SL* 970)

This is either due to an assimilation of ν to a following dental in the Greek source, a change that is attested in Greek documents from Egypt,⁷⁷ or to an inner Syriac development whereby *n* assimilates to a following consonant. Given the regularity of the latter, it seems more likely.

Initial ν is irregularly deleted in νεανίσκος (*LSJ* 1164) > ܢܝܢܣܩ *ynsq'* 'youth' (*LS2* 304; *SL* 577), which also occurs as ܢܝܢܣܩ *nynsq'* (*LS2* 427; *SL* 915).

11 Greek ξ

Greek ξ is a monograph for the voiceless unaspirated velar stop *x* and the voiceless alveolar fricative *σ* in Attic Greek as well as in the Koinē Greek of the

74 For Attic, see Allen, *Vox Graeca*, pp. 33–39; Woodard, 'Attic Greek', 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

75 Kiraz, *Türrāṣ Mamllā*, § 603–604.

76 See also Latin *mansio* (*OLD* 1074; *LD* 1109) > ܡܣܝܘܢ *msywn* 'journey of ten parasants' (*LS2* 396; *SL* 790). It should be noted that Latin *ns* is normally realised simply as *σ* in Latin loanwords in Greek (Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 117–118).

77 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 116; L.R. Palmer, *A Grammar of the Post-Ptolemaic Papyri* (London: Oxford University Press, 1945) p. 2. This change in Greek may additionally involve nasalisation of the vowel.

Roman and Byzantine periods.⁷⁸ Greek ξ is typically represented in Syriac by two consonants: *k*, which was realised as a voiceless velar stop or a voiceless velar fricative, and the voiceless alveolar fricative *s*,⁷⁹ e.g., Latin *dux* (*OLD* 582; *LD* 621) > δούξ (*LLGE* 41–42; *LSJ* 447) > ܕܘܟܝܬܐ *dwks* ‘leader’ (*LS2* 153; *SL* 281) and παράδοξον (*LSJ* 1309) > ܡܪܕܘܟܝܬܐ *prdwksn* ‘paradox’ (*LS2* 593; *SL* 1228). The use of *k*, instead of the emphatic velar stop *q*, suggests that the initial segment of Greek ξ was at least partially aspirated, i.e., /k^hs/, a realisation that is supported by other evidence.⁸⁰

Greek ξ is represented by the emphatic velar stop *q* and the voiceless alveolar fricative *s* in κόραξ (*LSJ* 980) > ܩܪܩܝܬܐ *qrqs* ‘raven, crow; jay, magpie’ (*LS2* 701; *SL* 1416). This representation corresponds to the expected representation of a monograph for the voiceless unaspirated velar stop *x* and the voiceless alveolar fricative *σ*.

In a few rare cases, Greek ξ is represented by *s*, without *k*:

- (11) a. Latin *excubitor* (*OLD* 637; *LD* 680) > ἐξκούβιτωρ (*LLGE* 44–45) > PL ܩܘܒܝܬܐܩܩܝܬܐ *sqwbytrws* (*sic*; without *syome*), ܩܘܒܝܬܐܩܩܝܬܐ *sqwbytrws*, ܩܘܒܝܬܐܩܩܝܬܐ *sqwbytrws* (*sic*; with two *syome*), ܩܘܒܝܬܐܩܩܝܬܐ *sqwbytrws* ‘excubitores, Byzantine palace guards’ (*LS2* 493; *SL* 1037)
 b. λῶταξ (*LSJ* 1069; *PGL* 818) > ܠܘܬܐܩܩܝܬܐ *lwts* ‘beggar, idler’ (*LS2* 365; *SL* 677), also occurring more rarely is the expected ܠܘܬܐܩܩܝܬܐ *lwts* ‘ks

There are no sound changes in Greek or Syriac that can account for this representation. Perhaps the former is due to the complex initial syllable cluster whereas the latter represents the triradicalisation of a Greek loanword.

Greek ξ is irregularly represented by the emphatic velar stop *q*, without the voiceless alveolar fricative *s*, in Latin *sextarius* (*OLD* 1751; *LD* 1688) > ξέστης (*LLGE* 76–77) > ܩܩܬܐ *qst* ‘vase, urn; measure’ (*LS2* 679; *SL* 1387).⁸¹ The same correspondence is found already in Palmyrene *qstwn* (*PAT* 406) as well as

78 For Attic, see Allen, *Vox Graeca*, pp. 59–60; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 139–141; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 184–185.

79 Brock, ‘Greek Words in Syriac: Some General Features’, p. 255; Kiraz, *Türrāš Mamllā*, § 12, 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Voigt, ‘Das emphatische p des Syrischen’, pp. 529–531.

80 See T. Harviainen, ‘On the Loss of the Greek /h/ and the So-called Aspirated Rhō’, *Studia Orientalia* 45 (1976), pp. 1–88 (20 with the references in n. 3).

81 Brock, ‘Some Aspects of Greek Words in Syriac’, p. 83 n. 20; Voigt, ‘Das emphatische p des Syrischen’, p. 530. Various Greek sources have been proposed, for which, see *PAT* 1018.

in Jewish Palestinian Aramaic *qsyṭ* (*DJPA* 498), Christian Palestinian Aramaic *qyst* (*DCPA* 372; *LSP* 181), and Jewish Babylonian Aramaic *qistō*, *qyst* (*DJBA* 1014). This representation is difficult to account for, but it may be due to the triradicalisation of a Greek loanword.

Greek ξ is irregularly represented by the voiceless palatal fricative š in χαλιξ ‘gravel’ (*LSJ* 1972) > ܠܝܠܟܐ *klš* ‘lime’ (*LS2* 330; *SL* 627).⁸²

12 Greek π

Greek π was a voiceless unaspirated bilabial stop /p/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁸³ It is typically represented in Syriac by *p*,⁸⁴ which was realised either as a voiced bilabial stop or a voiceless bilabial fricative in native Syriac words, e.g., δίπτυχον (*LSJ* 437) > ܕܝܦܬܝܚܐ *dypṭwk* ‘diptych, tablet’ (*LS2* 162; *SL* 298) and πότε (*LSJ* 1454) > ܡܘܬܐ *pwṭ* ‘ever’ (*LS2* 559; *SL* 1162).

Greek π is left unrepresented in κάμπτριον (*LSJ* 873) > ܩܡܬܪܢ *qmṭrn* ‘small chest’ (*LS2* 672; *SL* 1377). This reflects the deletion of π in the cluster μπτ in the Greek source, a change that is well attested in Greek documents from Egypt.⁸⁵

Syriac *p* was realised as a voiced bilabial stop /p/ or a voiceless bilabial fricative /p̥/ (= IPA /ɸ/) in native Syriac words. There is, however, evidence that suggests that Syriac *p*, when representing Greek π, was an *emphatic* bilabial stop. The clearest support for this from the period that is of interest to this study derives from cases of the assimilation of the feature [+emphatic] due to the presence of this “emphatic” *p* (< Greek π), as is illustrated in the following words:⁸⁶

- (12) a. ποδάγρα (*LSJ* 1425) > ܡܬܓܪܐ *ptgr* ‘gout’ (*LS2* 563; *SL* 1180), as well as the expected representation ܡܬܕܓܪܐ *pwdgr*

82 See also Schall, *Studien über griechische Fremdwörter im Syrischen*, p. 111.

83 For Attic, see Allen, *Vox Graeca*, pp. 14–16; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

84 Brock, ‘Greek Words in Syriac: Some General Features’, p. 255; Kiraz, *Türrāš Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; R. Voigt, ‘Das emphatische p des Syrischen’.

85 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 64; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 152.

86 Brock, ‘Greek Words in the Syriac Gospels (vet and pe)’, p. 420; Schall, *Studien über griechische Fremdwörter im Syrischen*, p. 80; Voigt, ‘Das emphatische p des Syrischen’, pp. 531–532.

- b. $\pi\rho\acute{o}\sigma\omega\pi\omicron\nu$ (LSJ 1533) > ܠܥܨܝܬܐ *pršwp* ‘face, countenance; person, party’ (LS2 605; SL 1249–1250), for expected ܠܥܨܝܬܐ* **pršwp*
- c. $\pi\rho\acute{\upsilon}\rho\gamma\omicron\varsigma$ (LSJ 1556) > ܠܥܡܝܬܐ *pwrqs* ‘tower’ (LS2 607; SL 1173), for expected ܠܥܡܝܬܐ* **pwrqs*
- d. $\sigma\upsilon\mu\phi\omega\eta\acute{\iota}\alpha$ (LSJ 1689) > ܠܥܦܢܝܐ *špwny* ‘bagpipe’ (LS2 635; SL 1297), for expected ܠܥܦܢܐ* **špwny*, compare Aramaic of Daniel *sumponyā* (Dan. 3:5, 15), *syprnyh* (Dan. 3:10 [k]), *supponyā* (Dan. 3:10 [q]) (HALOT 1937–1938) without emphatic *š*

In each of these cases, the presence of an “emphatic” *p* (< Greek π) led to the assimilation of a stop (whether voiced or voiceless) to its emphatic counterpart. An additional assimilation of [+emphatic] occurs systematically in the CT-stem of $\pi\epsilon\acute{\iota}\sigma\alpha\iota$ (LSJ 1353–1354) > rt. ܥܦܝܣ ܥ *pys* C ‘to persuade, to convince; to demand, seek, beseech’ (LS2 567; SL 1188), which is usually written ܥܦܝܣܬܐ *ʔtpys*.⁸⁷

In the later Syriac vocalisation traditions, the “emphatic” *p* is marked with the same diacritic point that is used to distinguish the non-emphatic voiceless stops from their fricative counterparts.⁸⁸ In his grammatical works, Bar ʿEbroyo (d. 1286) speaks on several occasions about the “Greek *pe*” (ܠܥܦܝܬܐ *pe yawnṣyṭo*) that is found in ܠܥܨܝܬܐ *pršwp* ‘face, countenance; person, party’ (LS2 605; SL 1249–1250) < $\pi\rho\acute{o}\sigma\omega\pi\omicron\nu$ (LSJ 1533) and other Greek loanwords.⁸⁹

An “emphatic” *p* also occurs with Greek loanwords in Christian Palestinian Aramaic,⁹⁰ e.g., $\acute{\alpha}\sigma\pi\acute{\iota}\varsigma$ (LSJ 259) > *ʾšpys* ‘snake’ (DCPA 23; LSP 15). In the Christian Palestinian Aramaic script, this “emphatic” *p* can be written either with the sign of the voiceless bilabial stop (ܥ) or with a reversed form of this sign (ܥ̡). The “emphatic” *p* in Syriac and Christian Palestinian Aramaic can be compared to the Classical Ethiopic (Gəʿəz) characters that are usually transcribed as *p* (ፐ) and *p̣* (ፑ).⁹¹ These characters occur almost exclusively in loanwords of

87 See already Schall, *Studien über griechische Fremdwörter im Syrischen*, p. 80.

88 Kiraz, *Türrāš Mamllā*, § 214; cf. § 63, 68; Nöldeke, *Compendious Syriac Grammar*, § 15; J.B. Segal, *The Diacritical Point and the Accents in Syriac* (London Oriental Series, 2, London: Oxford University Press, 1953) 488. In the later West-Syriac tradition, this point is placed in the middle of *p* thereby differentiating it from both the voiceless bilabial stop and the voiceless bilabial fricative (Kiraz, *Türrāš Mamllā*, § 214).

89 See Voigt, ‘Das emphatische p des Syrischen’, pp. 532–536 with additional references.

90 Ch. Müller-Kessler, *Grammatik des Christlich-Palästinisch-Aramäischen* (Hildesheim: G. Olms, 1991), § 2.1.2.4.

91 It should be noted that the Classical Ethiopic reflex of the Proto-Semitic voiceless bilabial stop **p* is /f/.

various origins, including from Greek,⁹² e.g., πνεῦμα ‘spirit’ (*LSJ* 1424) > *penamu* ‘Satan’ (*CDG* 413) and πόλις ‘city’ (*LSJ* 1433–1434) > *polis* ‘capital city’ (*CDG* 414). Christian Palestinian Aramaic, Syriac, and Classical Ethiopic each underwent a prolonged period of contact with Greek that resulted in, *inter alia*, the presence of a number of Greek loanwords in these languages. Each of these languages dealt in similar but distinct ways with Greek π: Classical Ethiopic went the furthest in innovating two characters to represent the foreign sound; Christian Palestinian Aramaic used an existing character, both in its normal form and in an inverted form; and Syriac used an existing character, which in the later tradition was marked with a diacritical point.

Since there is no independent sign for the “emphatic” *p* in the Syriac script and since Syriac *p* also represents Greek φ (see § 16 below), a few homographs result:⁹³

- (13) a. ܣܦܝܪ *ʾsphy*, ܣܦܝܪ *ʾsphy* ‘troop, cohort’ (*LS2* 36, 493; *SL* 76, 1031) < σπεῖρα (*LSJ* 1625) vs. ܣܦܝܪ *ʾsphy*, ܣܦܝܪ *ʾsphy*, ܣܦܝܪ *ʾsphy* ‘sphere; circle; ball; pine cone; cake’ (*LS2* 36, 493; *SL* 76, 1031) < σφαῖρα (*LSJ* 1738)
 b. ܬܪܦܐ *trwp* ‘solstice’ (*LS2* 291; *SL* 550) < τροπή (*LSJ* 1826) vs. ܬܪܦܐ *trwp* ‘nourishment, support’ (*LS2* 291; *SL* 550) < τροφή (*LSJ* 1827–1828)

This homography is limited to the bilabial triad since the emphatic members of the dental and velar triads have an independent sign in the Syriac consonantal script.

13 Greek ρ

Greek ρ was a voiced alveolar trill /r/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.⁹⁴ In Attic Greek, a voiceless allophonic realisation, i.e., /r̥/, also occurred when in word initial position or when geminated.⁹⁵ This allophone was lost during the Roman period.⁹⁶ When not clause

92 G. Gragg, ‘Ge’ez (Aksum)’, in Woodard, *The Cambridge Encyclopedia of the World’s Ancient Languages*, pp. 427–453 (435); J. Tropper, *Altäthiopisch: Grammatik des Ge’ez mit Übungstexten und Glossar* (ELO 2, Münster: Ugarit-Verlag, 2002) § 31.1.

93 Brock, ‘Greek Words in Syriac: Some General Features’, p. 255.

94 For Attic, see Allen, *Vox Graeca*, pp. 39–45; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

95 Allen, *Vox Graeca*, pp. 41–45.

96 For discussion, see Harviainen, ‘On the Loss of the Greek /h/ and the So-called Aspirated Rhō’.

initial and not geminated, Greek ρ is typically represented in Syriac by the alveolar trill r ,⁹⁷ e.g., ἀήρ (*LSJ* 30) > ܐܝܪ 'air' (*LS2* 1; *SL* 1) and συνήγορος (*LSJ* 1715) > ܣܢܗܓܪ *sngʾr* (with alternative orthographies) 'advocate' (*LS2* 483; *SL* 1022).

Greek ρ is represented by the voiced alveolar lateral approximant l in δορυφόρος (*LSJ* 446) > ܠܡܦܪ ܠܡܦܪ *lwpr* 'praetorian guardsman' (*LS2* 369; *SL* 680).⁹⁸ The representation of Greek ρ with Syriac l may be due to a dissimilation of ρ preceding another ρ in the Greek source, a change that is attested in Greek documents from Egypt.⁹⁹ It should be noted, however, that there is an additional irregularity in this case with the loss of the initial syllable $\delta\sigma$ - (see § 4 above).

Greek ρ is represented by the alveolar nasal n in μαργαρίτης (*LSJ* 1080) > ܡܪܓܪܝܬܝܢ *mrgnyʾt* 'pearl; Eucharistic wafer' (*LS2* 402; *SL* 826).¹⁰⁰ This is traditionally said to be due to a dissimilation of r to n following another r in Syriac.¹⁰¹ It should be noted, however, that this dissimilation is mostly, if not entirely, limited to loanwords in Syriac.

When word initial, Greek ρ occurs with *spiritus asper* and was realised as a voiceless alveolar trill $/r̥/$ in Attic Greek.¹⁰² During the Roman period, the allophonic realisation was lost and initial Greek ρ was a voiced alveolar trill $/r/$.¹⁰³ Greek ρ can be represented either with *rh* or *r* in Syriac. In loanwords that are first attested in Syriac by the fifth century, initial Greek ρ with *spiritus asper* is represented in Syriac with *rh*.¹⁰⁴

97 Kiraz, *Türrāš Mamllā*, § 603–604.

98 A similar representation also occurs in πρόεδρος (*LSJ* 1476) > Palmyrene **plhdr* → *plhdrw* 'presidency' (*PAT* 400; see also S.P. Brock, 'Greek and Latin Words in Palmyrene Inscriptions: A Comparison with Syriac', in E. Cussini [ed.], *A Journey to Palmyra: Collected Essays to Remember Delbert R. Hillers* [Leiden: Brill, 2005] pp. 11–25 [20, 24]).

99 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 103–104; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 161. Harviainen ('On the Loss of the Greek $/h/$ and the So-called Aspirated Rhō', p. 19) argues that the Palmyrene form in the previous footnote is due to a dissimilation in Semitic; the sound change is, however, better attested in Greek.

100 For the related Iranian forms, see C.A. Ciancaglini, *Iranian Loanwords in Syriac* (Wiesbaden: Harrassowitz, 2008) p. 207.

101 See, e.g., Brockelmann, *Syrische Grammatik*, p. 35; Ciancaglini, *Iranian Loanwords in Syriac*, p. 78.

102 Allen, *Vox Graeca*, pp. 41–42.

103 Harviainen, 'On the Loss of the Greek $/h/$ and the So-called Aspirated Rhō'.

104 Brock, 'Greek Words in Syriac: Some General Features', p. 256; Harviainen, 'On the Loss of the Greek $/h/$ and the So-called Aspirated Rhō', p. 66; Nöldeke, *Compendious Syriac Grammar*, § 39; Schall, *Studien über griechische Fremdwörter im Syrischen*, p. 99. See also

- (14) a. ῥήτινη (*LSJ* 1569) > ܠܬܝܢܐ *rhṭn'*, ܠܬܝܢܐ *rhṭn'* 'resin' (5th cent. *Julian Romance*, 51.12 [ed. Hoffmann, *Julianos der Abtruennige*], already in Gen 37.25; 43.11; *LS2* 727; *SL* 1460)¹⁰⁵
- b. ῥήτωρ (*LSJ* 1570) > ܠܬܝܢܐ *rhṭr'*, ܠܬܝܢܐ *rhṭr'* 'orator, rhetorician' (4th cent. Ephrem, *Prose Refutations*, Discourse 1, 58.21 [ed. J.J. Overbeck, *S. Ephraemi Syri Rabulae episcopi Edesseni Balaei aliorumque Opera selecta* (Oxford: Clarendon Press, 1865), 21–58]; *LS2* 727; *SL* 1442)

This representation reflects the older pronunciation.¹⁰⁶ In loanwords that are not attested until after the fifth century, however, initial Greek ῥ with *spiritus asper* can be represented simply with *r* in Syriac,¹⁰⁷ e.g., ῥογα (*PGL* 1217) > ܠܬܝܢܐ *rwg'* 'pay, wages; paying of wages' (6th cent. Yuhanon of Ephesus, *Ecclesiastical History*, Part 3, 129.26; 270.26 [ed. E.W. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae. Pars Tertia* (CSCO 105, Louvain: Peeters, 1935)]; *LS2* 711; *SL* 1443). The representation with *r* (without *h*) reflects the loss of the allophonic realisation of word-initial ρ in the Greek source.

As in the case of word-initial ρ, geminated Greek ρρ (written ῥῥ in Byzantine orthography) was realised as a voiceless alveolar trill /ʀ/ in Attic Greek.¹⁰⁸ The allophonic realisation was lost in the Roman period. Harviainen dates this change to the fourth century.¹⁰⁹ Medial ῥῥ is represented in Syriac by the alveolar trill *r* with a following voiceless glottal fricative *h* in ἄρροβών (*LSJ* 146) > ܠܬܝܢܐ *rhbwn'* 'pledge, deposit' (*LS2* 716; *SL* 1439), which is common from the fourth century onward in Syriac. This spelling reflects the older Attic pronunciation.¹¹⁰ Medial ῥῥ is represented by the Syriac alveolar trill *r* without *h* in the following words:

-
- ῥητορεία (*LSJ* 1569) → accusative singular ῥητορείαν > ܠܬܝܢܐ* **rhṭryn* 'oratory, set speech' (5th cent. *Julian Romance*, 99.4 [ms. ܠܬܝܢܐ *hṭryn*] [ed. G. Hoffmann, *Julianos der Abtruennige. Syrische Erzählungen* (Leiden: Brill, 1880)]; only here; *LS2* 727; *SL* 1441).
- 105 The spelling ܠܬܝܢܐ *rhṭn'* also occurs in later literature.
- 106 In his *Letter on Syriac Orthography*, Ya'qub of Edessa (d. 708) refers to writings of ῥ with *rh* as 'according to ancient custom' (*meṭṭol m'ayyduṭo 'attiqtō*) (ed. G. Phillips, *A Letter by Mār Jacob, Bishop of Edessa on Syriac Orthography* [London: Williams and Norgate, 1869], p. 6.7–10).
- 107 Brock, 'Greek Words in Syriac: Some General Features', p. 256; Harviainen, 'On the Loss of the Greek /h/ and the So-called Aspirated Rhō', p. 66.
- 108 Allen, *Vox Graeca*, pp. 44–45.
- 109 Harviainen, 'On the Loss of the Greek /h/ and the So-called Aspirated Rhō', pp. 29–32.
- 110 Again, in his *Letter on Syriac Orthography*, Ya'qub of Edessa (d. 708) refers to writings of ῥῥ with *rh* as 'according to ancient custom' (*meṭṭol m'ayyduṭo 'attiqtō*) (ed. Phillips, *A Letter by Mār Jacob, Bishop of Edessa on Syriac Orthography*, p. 6.7–10).

- (15) a. Latin *birrus* (LD 239) > βίρρος (LSJ 316) > ܠܝܪܝܐ *byrwn*, ܠܝܪܝܐ *brwn* ‘toga, cloak, patriarch’s chlamys’ (5th cent. *Life of Rabbula*, 184.26 [ed. Overbeck, *S. Ephraemi Syri Rabulae episcopi Edesseni Balaei aliorumque Opera selecta*, 157–248]; LS2 69, 97; SL 143, 187)
- b. καταβράκτης (LSJ 908–909) > ܩܬܪܩܬܐ *qtrqt* ‘sluice, floodgate; step of stairs’ (Bible 1 Kgs 6.8; LS2 664; SL 1359)

The representation of ρρ by Syriac *r* (without *h*) reflects the later Koinē pronunciation after the allophonic realisation was lost. It should be noted that the representation of Greek ρρ with Syriac *r* (without *h*) in ܩܬܪܩܬܐ *qtrqt* from the Old Testament Peshiṭta does not necessarily reflect the date of composition (ca. 200), but rather may be due to a scribal update in the manuscripts, the earliest of which stem from the sixth century.¹¹¹

Various representations of ρρ are attested for παρρησία (LSJ 1344). Table 1 provides a diachronic synopsis of these. In addition to *rh* and *r* (without *h*), Greek ρρ is represented by Syriac *rr* in this word. This is an unusual representation of Greek gemination in Syriac.¹¹² Thus, it is likely a reflection of the allophonic realisation of ρρ.

TABLE 1 Diachronic synopsis of spellings of παρρησία in Syriac¹¹³

Pre-4th cent.	Old Syriac Gospels <i>Acts of Thomas</i> (ca. 200–250 CE)	ܠܝܪܝܐ <i>prrsy</i> ’ (John 11.54 [S]) ܠܝܪܝܐ <i>prrsy</i> ’ (212.12; <i>passim</i>), ܠܝܪܝܐ <i>prrsy</i> ’ (192.10)
4th cent.	<i>Demonstrations</i> by Aphrahat (fl. 337–345) <i>Memrō on our Lord</i> by Ephrem (d. 373)	ܠܝܪܝܐ <i>prhsy</i> ’ (1.545.12) ܠܝܪܝܐ <i>prhsy</i> ’ (11.24; 46.21)

111 For further discussion, see the comments in Butts, *Syriac in Its Greco-Roman Context*, § 5.1 with n. 6.

112 For the representation of Greek gemination in Syriac, see Butts, *Syriac in Its Greco-Roman Context*, § 5.2.8.

113 The following editions were used: Old Syriac Gospels, ed. G.A. Kiraz, *Comparative edition of the Syriac Gospels* (Leiden: Brill, 1996); the *Acts of Thomas*, ed. Wright, *Apocryphal Acts of the Apostles*; *Demonstrations* by Aphrahat, ed. Parisot, *Aphraatis Sapientis Persae Demonstrationes*; *Memrō on our Lord* by Ephrem, ed. E. Beck, *Des heiligen Ephraem des*

TABLE 1 *Diachronic synopsis of spellings of παρρησία in Syriac (cont.)*

5th cent.	<i>Teaching of Addai</i> (ca. 420)	ܠܫܡܝܐ ܡܪܝܫܝ' (46.1; 50.18)
	<i>Julian Romance</i> (5th cent.)	ܠܫܡܝܐ ܡܪܝܫܝ' (14.7; <i>passim</i>)
	<i>Life of Rabbula</i> (ca. 450)	ܠܫܡܝܐ ܡܪܝܫܝ' (186.13; 198.26)
6th cent.	<i>Lives of Eastern Saints</i> by Yuḥanon of Ephesus (d. ca. 589)	ܠܫܡܝܐ ܡܪܝܫܝ' (23.2, 12; <i>passim</i>)
	<i>Life of Yuḥanon of Tella</i> by Eliya (mid-6th cent.)	ܠܫܡܝܐ ܡܪܝܫܝ' (77.12)
7th cent.	<i>Part 3</i> by Ishāq of Nineveh (late 7th cent.)	ܠܫܡܝܐ ܡܪܝܫܝ' (99.9, 14)
	<i>Life of Marutha</i> by Denḥa (d. 649)	ܠܫܡܝܐ ܡܪܝܫܝ' (76.9)
	<i>Letter on Syriac Orthography</i> by Ya'qub of Edessa (d. 708)	ܠܫܡܝܐ ܡܪܝܫܝ' (6.9)

14 Greek σ

Greek σ was a voiceless alveolar fricative /s/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.¹¹⁴ It is typically represented

Syrers Sermo de Domino Nostro (CSCO, 270–271, Louvain: Peeters, 1966); *Teaching of Addai*, ed. G. Howard, *The Teaching of Addai* (Chico: Scholars Press, 1981); *Julian Romance*, ed. Hoffmann, *Julianos der Abtruennige*; *Life of Rabbula*, ed. Overbeck, *S. Ephraemi Syri Rabulae episcopi Edesseni Balaei aliorumque Opera selecta*, pp. 159–209; *Lives of Eastern Saints* by Yuḥanon of Ephesus, ed. E.W. Brooks, *John of Ephesus. Lives of the Eastern Saints*, 1–3 (PO, 17.1; 18.4; 19.2, Paris: Brepols, 1923–1925); *Life of Yuḥanon of Tella* by Eliya, ed. Brooks, *Vitae virorum apud Monophysitas celeberrimorum*, pp. 29–95; *Part 3* by Ishāq of Nineveh, ed. S. Chialà, *Isacco di Ninive. Terza collezione* (CSCO, 637–638, Louvain: Peeters, 2011); *Life of Marutha* by Denḥa, ed. F. Nau, *Histoires d'Ahoudemmeh et de Marouta* (PO, 3.1, Paris: Brepols, 1905) pp. 52–96; *Letter on Syriac Orthography* by Ya'qub of Edessa, ed. Phillips, *A Letter by Mār Jacob, Bishop of Edessa on Syriac Orthography*.

114 For Attic, see Allen, *Vox Graeca*, pp. 45–46; Woodard, 'Attic Greek', p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 176.

by the Syriac voiceless alveolar fricative *s*,¹¹⁵ e.g., ἀσπίς (*LSJ* 259) > ܐܣܦܝܣ *ʾsps* ‘snake’ (*LS2* 36; *SL* 77) and χρήσις (*LSJ* 2006) > ܠܚܝܫܝܬܐ *kršys* ‘evidence, testimony’ (*LS2* 348; *SL* 652).

Greek σ is represented by the emphatic alveolar fricative *ṣ* in the following words:

- (16) a. γλωσσόκομον (*LSJ* 353) > ܠܗܠܟܝܬܐ *glwṣqm* ‘chest, box, case’ (*LS2* 119; *SL* 234), but more commonly ܠܗܠܟܝܬܐ *glwsqm*’ (*LS2* 119; *SL* 234) as well as rarely ܠܗܠܟܝܬܐ *glwṣtm*’ (*LS2* 119; *SL* 233–234)
 b. πρόσωπον (*LSJ* 1533) > ܩܪܝܬܐ *prṣwp* ‘face, countenance; person, party’ (*LS2* 605; *SL* 1249–1250)
 c. συμφωνία (*LSJ* 1689) > ܣܦܘܢܝܐ *spwny* ‘bagpipe’ (*LS2* 635; *SL* 1297), already in Aramaic of Daniel *sumponyā* (Dan. 3:5, 15), *syponyh* (Dan. 3:10 [k]), *supponyā* (Dan. 3:10 [q]) (*HALOT* 1937–1938) without emphatic *ṣ*

In each of these cases, the emphatic *ṣ* is due to the assimilation of [+emphatic] in the context of another emphatic consonant, including the “emphatic” *p* (< Greek π).

Greek σ is represented by the voiced dental fricative *z* in the following cases:

- (17) a. προθεσμία (*LSJ* 1481) > ܩܪܝܬܐ *prtwzmy* ‘fixed time period’ (*LS2* 610; *SL* 1256), with an alternative spelling of ܩܪܝܬܐ *prwtzmy*’ (*LS2* 610; *SL* 1235)
 b. σμάραγδος (*LSJ* 1619) > ܙܡܪܕܐ *zmrgd* ‘emerald’ (*LS2* 200; *SL* 387), also in Samaritan Aramaic *zmrgdy* (*DSA* 234); Christian Palestinian Aramaic *zmrgd* (*DCPA* 111; *LSP* 56); Jewish Palestinian Aramaic *zmrgd* (*DJPA* 179), but note also ܙܡܪܕܐ *smrgd*’ (*LS2* 44; *SL* 482)
 c. σμίλη (*LSJ* 1619) > ܙܡܠܐ *zmly* ‘small knife, scalpel’ (*LS2* 199; *SL* 385), also in TgJon *ʾuzmil* (Jer 36:23); Jewish Palestinian Aramaic *ʾwzmyl* (*DJPA* 38); Late Jewish Literary Aramaic *ʾzml* (TgJob 16:9; Jastrow 46)

This representation is due to an assimilation of σ to ζ before μ in the Greek source, a change that is well attested in Greek documents from Egypt.¹¹⁶

Greek σ is represented by the voiceless palatal fricative *š* in εἶδος (*LSJ* 482) > ܕܝܫܐ *ʾdš* ‘form in the Platonic sense; species, kind; character, nature; fruit’

¹¹⁵ Kiraz, *Türrāš Mamllā*, § 603–604.

¹¹⁶ Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 120–121; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 177.

(*LS2* 6; *SL* 11). This representation also occurs in Mandaic *aṭšia* ‘crops, fruits’ (*MD* 14).¹¹⁷

An initial consonant cluster that begins with *σ* in Greek may be optionally represented in Syriac with a prothetic voiceless glottal stop, as in the following representative examples:¹¹⁸

- (18) a. *σάμνιον* (*PGL* 1235) > ܣܡܢܝܢ *sqmyn*, ܣܡܢܝܢ *'sqmnyn* ‘seat’ (*LS2* 37, 495; *SL* 79, 1040)
 b. *σπόγγος* (*LSJ* 1628) > ܣܦܘܓܐ *'spwg*, ܣܦܘܓܐ *spwg* ‘sponge’ (*LS2* 35; *SL* 75)
 c. *στολή* (*LSJ* 1648) > ܣܬܠܐ *'stl*, ܣܬܠܐ *stl* ‘robe’ (*LS2* 33; *SL* 69)
 d. *σφαῖρα* (*LSJ* 1738) > ܣܦܝܪܐ *'spyr*, ܣܦܝܪܐ *spyr* (with alternative orthographies) ‘sphere; circle; ball; pine cone; cake’ (*LS2* 36, 493; *SL* 76, 1031)
 e. *σχολή* (*LSJ* 1747–1748) > ܣܟܠܐ *'skwl*, ܣܟܠܐ *skwl* ‘lecture hall’ (*LS2* 34, 474; *SL* 73, 1008)

As these examples illustrate, the prothetic voiceless glottal stop is optional. The appearance of the voiceless glottal stop in these words represents an inner Syriac (or better: Aramaic) development according to which a consonant cluster beginning with a sibilant optionally occurs with a prothetic glottal stop, e.g., **s,atiya* > **šəṭī* > **šṭi* > Syriac *'ešṭi* ‘he drank’.

15 Greek τ

Greek τ was a voiceless unaspirated dental stop /t/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.¹¹⁹ Greek τ is typically represented in Syriac by the emphatic dental stop *t*,¹²⁰ e.g., *πιττάχιον* (*LSJ* 1409) > ܡܬܩܐ *ptq* ‘letter; inscription’ (*LS2* 564; *SL* 1182–1183) and *στρατιώτης* (*LSJ* 1652–

¹¹⁷ A parallel might possibly be found in *μόσχος* (*LSJ* 1148) > ܡܘܨܚܐ *mwšh* ‘calf’ (*LS2* 407; *SL* 731), though the correspondence of Greek χ with Syriac *h* would also be irregular.

¹¹⁸ Brock, ‘Greek and Latin Words in Palmyrene Inscriptions’, p. 24; Kiraz, *Türrāš Mamllā*, § 90; Nöldeke, *Compendious Syriac Grammar*, § 51.

¹¹⁹ For Attic, see Allen, *Vox Graeca*, pp. 16–17; Woodard, ‘Attic Greek’, p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 178.

¹²⁰ Brock, ‘Greek Words in Syriac: Some General Features’, p. 255; Kiraz, *Türrāš Mamllā*, § 603–604; Voigt, ‘Das emphatische p des Syrischen’, p. 528.

1653) > ܠܬܪܬܝܬܐ *ʾstrtywt* (with alternative orthographies) ‘soldier’ (*LS2* 34, 469; *SL* 71, 998).

Greek τ is represented with Syriac *t*, which was either a voiceless dental stop or a voiceless dental fricative, in several different groups of words. First, this representation occurs in words in which τ follows σ.¹²¹

- (19) a. Latin *domesticus* (*OLD* 570; *LD* 607–608) > δομεστικός (*LLGE* 41; *PGL* 380) > ܠܡܕܡܬܝܩ *dwmstyq* ‘domesticus, a Byzantine imperial guard soldier’ (*LS2* 158; *SL* 283), as well as ܠܡܠܬܡܬܝܩ *dwmstyq*
 b. προστάς (*LSJ* 1526) → accusative singular προστάδα > ܠܦܪܘܨܬܐ *prwstd* ‘doorpost, lintel; vestibule, portico’ (*LS2* 603; *SL* 1233)
 c. πιστικός ‘faithful’ (*LSJ* 1408) > ܠܡܕܡܬܝܩ *pstyq* ‘sailor to whom responsibility for a ship is entrusted’ (*LS2* 585; *SL* 1215–1216)

The representation of Greek τ with Syriac *t* in these cases is due to a change of Greek τ to θ after σ in the Greek source, a change which is attested in Greek documents from Egypt as well as from Syria and Mesopotamia.¹²² There are several additional words in which Greek τ is represented by Syriac *t*:

- (20) a. κιβωτός (*PGL* 753; *LSJ* 950) > ܩܒܘܬܐ *qbwt* (with alternative orthographies) ‘box; ark; chest; Ark of the Covenant; Noah’s Ark’ (*LS2* 44; *SL* 1306)
 b. μαργαρίτης (*LSJ* 1080) > ܡܪܓܪܝܬܐ *mrgnyt* ‘pearl; Eucharistic wafer’ (*LS2* 402; *SL* 826)
 c. μηλωτή (*LSJ* 1127) > ܡܝܠܬܐ *mylt* ‘carpet; covering; pillow’ (*LS2* 383; *SL* 752)

In each of these cases, the irregular correspondence likely has a morphological motivation, i.e., *t* is the Syriac feminine ending *-(a)*t*. Finally, Greek τ is represented with Syriac *t* in τάγμα (*LSJ* 1752) > ܬܓܡܬܐ *tgm* ‘order, class; command, precept; troop, cohort’ (*LS2* 816; *SL* 185, 1623).¹²³ The representation of Greek τ with Aramaic *t* in this word is already found in Palmyrene Aramaic *tgm* ‘asso-

121 See also σπατήρ (*LSJ* 1634) > ܣܬܝܪ *ʾstyr*, ܣܬܪ *ʾstr* ‘stater, coin, weight’ (*LS2* 38; *SL* 80), though the immediate source may be Iranian and not Greek (so *SL* 80). For immediate versus ultimate source, see n. 22 above.

122 For Egypt, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, p. 87; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 154; for Syria and Mesopotamia, see, e.g., κατεσθάθην for κατεστάθην (P.Dura 46.r5 [early 3rd]); ἀφείσθασθαι for ἀφίστασθαι (P.Dura 31.int.7, ext.33 [204]).

123 Occasionally, however, ܬܓܡܬܐ *tgm* (*LS2* 268; *SL* 512) is found. Compare also διάταγμα (*LSJ*

ciation' (*PAT* 418). Brock suggests that this representation is due to assimilation of [-emphatic].¹²⁴

16 Greek φ

Greek φ was an aspirated voiceless bilabial stop /p^h/ in Attic Greek.¹²⁵ During the Roman period, it developed into a voiceless bilabial fricative /ɸ/,¹²⁶ which became the established pronunciation in the Byzantine period. Greek φ is typically represented in Syriac by *p*,¹²⁷ which was realised as a voiceless bilabial stop or a voiceless bilabial fricative, e.g., ἀπόφασις (*LSJ* 225–226) > ܡܦܥܝܣܐ *ḥwp-p-sys* 'judgment; negation' (*LS2* 42; *SL* 83) and φιλόσοφος (*LSJ* 1940) > ܦܝܠܫܘܦܝܐ *pylhwswp* 'philosopher' (*LS2* 575; *SL* 1187).

17 Greek χ

Greek χ was an aspirated voiceless velar stop /k^h/ in Attic Greek.¹²⁸ During the Roman period, it developed into a voiceless velar fricative /x/,¹²⁹ which became the established pronunciation in the Byzantine period. Greek χ is typically represented by Syriac *k*,¹³⁰ which was realised as a voiceless velar stop or a

414) > ܕܝܬܓܡ *dytgm* 'order, charge' (*LS2* 150; *SL* 294) and πρόσταγμα (*LSJ* 1525–1526) > ܕܡܡܝܐ *prwstgm* 'command' (*LS2* 601; *SL* 1232).

124 S.P. Brock, 'Some Aspects of Greek Words in Syriac', in A. Dietrich (ed.), *Synkretismus im syrisch-persischen Kulturgebiet* (Göttingen: Vandenhoeck & Ruprecht, 1975) pp. 80–108 (83 n. 20) (reprinted in his *Syriac Perspectives on Late Antiquity* [London: Variorum Reprints, 1984], IV); 'Greek Words in Syriac: Some General Features', pp. 255–256; 'Greek and Latin Words in Palmyrene Inscriptions', p. 22.

125 Allen, *Vox Graeca*, pp. 18–26; Woodard, 'Attic Greek', p. 616.

126 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 64, 86–96, 178.

127 Brock, 'Greek Words in Syriac: Some General Features', p. 255; Kiraz, *Türrāṣ Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Voigt, 'Das emphatische p des Syrischen', pp. 528–529.

128 Allen, *Vox Graeca*, pp. 18–26; Woodard, 'Attic Greek', p. 616.

129 Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 64, 86–96, 178.

130 Brock, 'Greek Words in Syriac: Some General Features', p. 255; Kiraz, *Türrāṣ Mamllā*, § 603–604; Nöldeke, *Compendious Syriac Grammar*, § 25; Schall, *Studien über griechische Fremdwörter im Syrischen*, pp. 42–44; Voigt, 'Das emphatische p des Syrischen', p. 528.

voiceless velar fricative, e.g., χεῖμών (*LSJ* 1983) > ܟܝܡܘܢ *kymwn* 'storm' (*LS2* 332; *SL* 619) and μοχλός (*LSJ* 1149) > ܡܡܠܟܐ *mwkl'* 'bolt for fastening door' (*LS2* 385; *SL* 724).

Greek χ is represented by the emphatic velar stop *q* in the following words:¹³¹

- (21) a. χαλκηδών (*LSJ* 1973) > ܟܪܟܕܢ *qrkdn* 'chalcedony' (*LS2* 696; *SL* 1411). This would not be the only irregular consonant correspondence in the word (see fn. 58 above).
- b. χερσάκωμα (*LSJ* 1977) > ܟܪܟܡܐ *qlqwm* 'siege engines, entrenchments' (*LS2* 670; *SL* 1375), compare the expected correspondence in TgJon *krqwm* (1Sm 26:7; Jastrow 669) and Late Jewish Literary Aramaic *krqwm* (TgJob 20:24; Jastrow 669), as well as Jewish Palestinian Aramaic *krkwm* (*DJPA* 270), where however the correspondence of *κ* is irregular
- c. χάρτης (*LSJ* 1980), cf. Latin *charta* (*OLD* 309; *LD* 325) > ܟܪܬܝܫ *qrtys* 'sheet of paper; papyrus' (*LS2* 695; *SL* 1405–1406), with the same correspondence in Jewish Palestinian Aramaic *qrtys* (*DJPA* 269) and Jewish Palestinian Aramaic *qrtys* (*DJPA* 269), though ܟܪܬܝܫ *kr̥tys* (*LS2* 344; *SL* 650) also occurs in Syriac, with the same correspondence in Jewish Palestinian Aramaic *kr̥tys* (*DJPA* 269) and Christian Palestinian Aramaic *kr̥tys* (*DCPA* 185)

This seemingly irregular correspondence is due to a change of χ to *κ* before a liquid in the Greek source, a change that is attested in Greek documents from Egypt.¹³²

18 Greek ψ

Greek ψ is a monograph for the voiceless unaspirated bilabial stop π and the voiceless alveolar fricative σ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.¹³³ It is represented in Syriac by two

¹³¹ See also Schall, *Studien über griechische Fremdwörter im Syrischen*, 232.

¹³² Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 86–96, esp. top of 91; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, pp. 144–145.

¹³³ For Attic, see Allen, *Vox Graeca*, pp. 59–60; Woodard, 'Attic Greek', p. 616; for Koinē, see Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, vol. 1, pp. 141–142; Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit*, p. 185.

consonants: *p*, which was realised as a voiceless bilabial stop or a voiceless bilabial fricative, and the voiceless alveolar fricative *s*,¹³⁴ e.g., ψήφισμα (*LSJ* 2022) > ܡܫܦܝܣܡܐ *pspysm* ‘suffrage, vote’ (*LS2* 582; *SL* 1210) and ὁψώνιον (*LSJ* 1283) > PL ܡܫܘܢܐ *pswnyt* ‘wages’ (*LS2* 41; *SL* 87–88).

19 Greek Word-initial *spiritus asper*

Greek words with initial *spiritus asper* were realised with an initial voiceless glottal fricative /h/ in Attic Greek,¹³⁵ e.g., ὄρος /horos/ ‘boundary’ (*LSJ* 1255–1256). During the Late Antique period, *spiritus asper* in word initial position ceased to be pronounced.¹³⁶ Greek *spiritus asper* is usually represented with *h* in Syriac,¹³⁷ e.g., ἡνίοχος (*LSJ* 775) > ܠܗܢܝܡܠܗ *hnywk* ‘charioteer’ (*LS2* 179; *SL* 348) and ὄμηρος (*LSJ* 1221) > ܠܡܝܪܗܡ *hmyr* ‘hostage, pledge’ (*LS2* 178; *SL* 345). The representation of Greek *spiritus asper* with Syriac *h* reflects the earlier Attic pronunciation.¹³⁸ In some manuscripts, the initial *h* is marked with a sub-linear dot to indicate that it represents *spiritus asper*,¹³⁹ and perhaps that it should not be pronounced.

Greek *spiritus asper* is, however, not represented with *h* in the following words:¹⁴⁰

- (22) a. ἔνωσις (*PGL* 486–489; *LSJ* 579) > ܠܡܫܝܣܝܢ *nwsys* ‘combining into one, union’ (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 27.23 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS2* 30; *SL* 60)
- b. ἑορταστικός (*PGL* 504; *LSJ* 601) > ܡܠܟܝܬܝܩܐ *wit’styq’s* (pl.) ‘festal’ (7th cent. Ya‘qub of Edessa, *Letter 13, to Yuḥanon the Stylite of Litarba*)

134 Kiraz, *Türrāṣ Mamllā*, § 603–604; Voigt, ‘Das emphatische p des Syrischen’, pp. 529–531.

135 Allen, *Vox Graeca*, pp. 52–56. It has also been reconstructed as a voiceless laryngeal fricative /h/ (see, e.g., Harviainen, ‘On the Loss of the Greek /h/ and the So-called Aspirated Rhō’, p. 1 with n. 2).

136 Harviainen, ‘On the Loss of the Greek /h/ and the So-called Aspirated Rhō’.

137 Brock, ‘Greek Words in Syriac: Some General Features’, p. 256; Harviainen, ‘On the Loss of the Greek /h/ and the So-called Aspirated Rhō’, pp. 59–61.

138 In his *Letter on Syriac Orthography*, Ya‘qub of Edessa (d. 708) refers to representations of *spiritus asper* with *h* in Syriac as ‘according to ancient custom’ (*meṭṭol m’ayyduṭā attiqṭā*) (ed. Phillips, *A Letter by Mār Jacob, Bishop of Edessa on Syriac Orthography*, p. 6.6–10).

139 Kiraz, *Türrāṣ Mamllā*, § 203; Segal, *The Diacritical Point and the Accents in Syriac*, p. 26.

140 Brock, ‘Greek Words in Syriac: Some General Features’, p. 256; Brock, ‘Greek Words in Syriac: Some General Features’, pp. 61–63.

- on eighteen biblical questions, 8.15 [ed. W. Wright, 'Two Epistles of Mār Jacob, Bishop of Edessa', *Journal of Sacred Literature and Biblical Record* 10 (1867), pp. 430–460]; only here; *LS* 2 48; *SL* 9)¹⁴¹
- c. ἱερατεῖον (*LSJ* 820) > ܐܝܪܬܝܢ 'yrtywn 'sacristy' (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 12.16 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS* 2 16; *SL* 38;)
- d. ἵππιος (*LSJ* 834) > ܡܥܥܬܐ 'pyqws 'horse' (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 114.26 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS* 2 42; *SL* 87)
- e. ἵπποδρομος (*LSJ* 834) → accusative singular ἵππόδρομον > ܐܝܪܬܝܢ 'ypdrmw 'hippodrome' (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 151.7 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS* 2 40; *SL* 81)
- f. ὀλοσηρικόν (*LSJ* 1218) > ܐܝܪܬܝܢ 'lysryqwn, ܐܝܪܬܝܢ 'lwsryqwn, ܐܝܪܬܝܢ 'lsyryqwn 'garment entirely of silk' (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 139.27 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *Lives of the Eastern Saints*, 538.10; 540.10 [ed. Brooks, *John of Ephesus. Lives of the Eastern Saints*]; *LS* 2 22; *SL* 49)
- g. ὁμολογία (*PGL* 957–958; *LSJ* 1226) > ܡܡܠܝܥܐ 'mwlwgy' 'confession of faith' (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 117.26; 131.20 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS* 2 25; *SL* 53), note already Palmyrene 'mlgy' (*PAT* 339–340; see also Brock, 'Greek and Latin Words in Palmyrene Inscriptions', p. 19)
- h. ὁρίζων (*LSJ* 1251) > ܐܝܪܬܝܢ 'wryzwn 'horison' (7th cent. Ya'qub of Edessa, *Scholia*, 4.150.43 [ed. P. Benedictus, *Sancti patris nostri Ephraem Syri Opera omnia quae exstant Graece, Syriace, Latine* (Rome: J.M.H. Salvioni, 1732–1746)]; *Hexaameron*, 172.2.23 [ed. J.-B. Chabot, *Iacobi Edesseni Hexaameron* (CSCO 92, 97, Louvain: Peeters, 1953)]; Severos Sebokht, *Treatise on the Astrolabe*, 84.11 [PL ܐܠܦܝܢܐܝܬܐ 'wrwyzwn-ṭws] [ed. F. Nau, 'Le traité sur l'astrolabe plan de Sévère Sébokht', *JA* 9.13 (1899), pp. 56–101, 238–303]; *LS* 2 47; *SL* 22)

In all of these cases, the word in question is not attested until the sixth or seventh century in Syriac. The representation of Greek *spiritus asper* with the Syriac voiceless glottal stop ' reflects the later Koinè pronunciation.

141 The spelling ܐܠܦܝܢܐܝܬܐ 'wrt'stywq's, which is given in *SL* 9, is not found in the edition of Wright.

In addition, occasionally, two forms of a word are attested in Syriac, one with initial *h* and another with initial ܚ.¹⁴²

- (23) a. ἄρσεις (PGL 51; LSJ 41) > ܐܪܫܝܢ *hrsys* ‘difference, opinion; heresies’ (Pre-4th cent. *Book of the Laws of the Countries*, 28.14; 36.17, 36.20 [ed. H.J.W. Drijvers, *The Book of the Laws of the Countries* (Assen: Van Gorcum, 1965)]; LS2 90, 184; SL 180, 355) vs. ܐܪܫܝܢ *ʿrsys* (6th cent. *Life of John bar Aphthonia*, 23.1 [ed. F. Nau, *Vie de Jean bar Aphthonia: Texte syriaque* (Bibliothèque hagiographique orientale 2, Paris, 1902)]; LS2 51; SL 103)
- b. ἀρεσιώτης (PGL 51) > ܐܪܫܝܢ *hrsytʿ* ‘heretical’ (4th cent. Ephrem, *Prose Refutations*, Discourse 1, 47.16 [ed. Overbeck, *S. Ephraemi Syri Rabulae episcopi Edesseni Balaei aliorumque Opera selecta*, pp. 21–58]; LS2 184; SL 355) vs. ܐܪܫܝܢ *ʿrsytʿ* (6th cent. Philoxenos, *Commentary on Matthew and Luke*, 28.26 [ed. J.W. Watt, *Philoxenus of Mabbug. Fragments of the Commentary on Matthew and Luke* (CSCO 392–393, Louvain: Peeters, 1978)]; LS2 51; SL 103)
- c. αἰρετικός (PGL 51) > ܐܪܫܝܢ *hrtyqʿ* ‘heretical, schismatic’ (5th cent. *Julian Romance*, 125.20 [ed. Hoffmann, *Julianos der Abtruennige*]; Narsai, *Memre on Biblical Themes*, 17.459; 18.490, 495, 506 [ed. J. Frishman, *The Ways and Means of the Divine Economy. An Edition, Translation and Study of Six Biblical Homilies by Narsai* (Ph.D. Diss., Leiden, 1992)]; *Life of Rabbula*, 171.9; 193.11; 194.10, 20 [ed. Overbeck, *S. Ephraemi Syri Rabulae episcopi Edesseni Balaei aliorumque Opera selecta*, pp. 157–248]; LS2 183; SL 354) vs. ܐܪܫܝܢ *ʿrtyqʿ* (6th cent. Yuḥanon of Ephesus, *Lives of the Eastern Saints*, 601.10 [ed. Brooks, *John of Ephesus. Lives of the Eastern Saints*]; LS2 48; SL 98)
- d. ἡγεμῶν (LSJ 763) > ܠܗܝܡܢ *hgmwn* ‘prefect’ (4th cent. Aphrahat, *Demonstrations*, 1.973.6 [ed. Parisot, *Aphraatis Sapientis Persae Demonstrationes*]; *Book of Steps*, 645.20; 648.3 [ed. Kmosko, *Liber Graduum*]; LS2 171; SL 340) vs. ܠܗܝܡܢ *ʿygmwn* ‘prefect’ (4th cent. *Book of Steps*, 648.15 [ed. Kmosko, *Liber Graduum*]; LS2 4; SL 31)
- e. ὑπηρέτης (LSJ 1872) > ܠܗܝܡܢ *hwprytʿ* ‘slave, servant’ (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 64.2 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; LS2 182; SL 338) vs. ܠܗܝܡܢ *ʿwprytʿ* ‘slave, servant’ (6th cent. Yuḥanon of Ephesus, *Eccle-*

142 Brock, ‘Greek Words in Syriac: Some General Features’, pp. 203–204. For additional examples involving translation literature, see Butts, *Syriac in Its Greco-Roman Context*, p. 76, n. 41.

siastical History, Part 3, 61.23; 64.20 [ed. Brooks, *Iohannis Ephesini. Historiae Ecclesiasticae*]; *LS2* 43; *SL* 89)

Again, there is a clear diachronic tendency: it is only after the fifth century that *spiritus asper* ceased to be consistently represented with *h*. The one exception to this tendency is ἡγεμών > ܡܗܡܘܢ *ʾygmwn* ‘prefect’, attested in the *Book of Steps*. This spelling in the *Book of Steps*, however, probably reflects the date of the manuscript (ca. 12th cent.) and not the supposed date of composition (ca. 400).¹⁴³ This seems especially likely since the earlier spelling ܡܗܡܘܢ *hgmwn* also occurs in this text and even within the very same passage (648.3; see also 645.20). Moreover, in the 7th- or 8th-cent. ms. Jerusalem Syr. 180, which was not used in the edition, but which the editor was later able to collate, the spelling with initial *h* is found instead of initial *ʾ* at 648.15, again suggesting that the later spelling is due to transmission history.¹⁴⁴

20 Conclusion

The representation of Greek consonants in Syriac is remarkably regular. In the vast majority of cases, each Greek consonantal phoneme is represented by a single consonant in Syriac. These correspondences are summarised in Table 2. Correspondences that deviate from this chart are usually the result of one of two causes. First, a Koinē form of Greek likely served as the source for some of the words that *prima facie* seem to exhibit irregular correspondences. This is, for instance, the case with the initial consonant of ܡܡܪܝܬ *gwbryt* ‘helmsman, pilot’ in Aphrahat’s *Demonstrations* (1.612.2), which does not derive from Attic Greek κυβερνήτης (*LSJ* 1004), but rather from Koinē κυβερνήτης, a form that is attested in a Greek document from Egypt (P.Grenf 1.49.21 [220/221 CE]). Second, some of the seemingly irregular correspondences are due to secondary developments. This is, for instance, the case with σινδών (*LSJ* 1600) > ܣܕܢ *sdwn* ‘fine linen cloth’ (*LS2* 460; *SL* 970), which results from the regressive assimilation of *n* to *d* in Syriac. Excluding cases subsumed under these two categories, there are very few irregular correspondences in the integration of consonants in Greek loanwords in Syriac.

143 For arguments against the traditional dating of this text to the fourth century, see K. Smith, ‘A Last Disciple of the Apostles. The “Editor’s” Preface, Rabbula’s *Rules*, and the Date of the *Book of Steps*’, in K.S. Heal and R.A. Kitchen (eds.), *Breaking the Mind. New Studies in the Syriac ‘Book of Steps’* (Washington, DC: CUA Press, 2014) pp. 72–96.

144 See Kmosko, *Liber Graduum*, p. ccciv (s.v. 648.15).

TABLE 2 Representation of Greek consonants in Syriac

Greek	Syriac	Syriac	Greek
β	ܒ <i>b</i>	ܠ' <i>'</i>	<i>spiritus asper</i> (initial)
γ	ܓ <i>g</i>	ܒ <i>b</i>	β
γ /η/	ܢ <i>n</i>	ܓ <i>g</i>	γ
δ	ܕ <i>d</i>	ܕ <i>d</i>	δ
ζ	ܙ <i>z</i>	ܚ <i>h</i>	<i>spiritus asper</i> (initial)
θ	ܬ <i>t</i>	ܙ <i>z</i>	ζ
κ	ܩ <i>q</i>	ܬ <i>t</i>	τ
λ	ܠ <i>l</i>	ܟ <i>k</i>	χ
μ	ܡ <i>m</i>	ܟܣ <i>ks</i>	ξ
ν	ܢ <i>n</i>	ܠ <i>l</i>	λ
ξ	ܟܣ <i>ks</i>	ܡ <i>m</i>	μ
π	ܫ <i>p</i>	ܢ <i>n</i>	ν, γ /η/
ρ	ܝܪ <i>r</i>	ܫ <i>s</i>	σ
ρ̇-	ܡܝܪܗ, ܝܪ <i>ir</i>	ܫ <i>p</i>	π, φ
ρ̇̇	ܡܝܪܗ, ܝܪ <i>ir</i>	ܟܫ <i>ps</i>	ψ
σ	ܫ <i>s</i>	ܩ <i>q</i>	κ
τ	ܬ <i>t</i>	ܝܪ <i>r</i>	ρ
φ	ܫ <i>p</i>	ܡܝܪܗ <i>rh</i>	ρ̇-, ρ̇̇
χ	ܟ <i>k</i>	ܬ <i>t</i>	θ
ψ	ܟܫ <i>ps</i>		
<i>spiritus asper</i> (initial)	ܚ <i>h</i> , ܠ' <i>'</i>		

21 Abbreviations of Lexicographical Resources

- BK* A. de. Biberstein-Kazimirski, *Dictionnaire arabe-français* (Paris: Théophile Barrois, 1860).
- CDG* W. Leslau, *Comparative Dictionary of Ge'ez (Classical Ethiopic)* (Wiesbaden: Harrassowitz, 1987).
- DCPA* M. Sokoloff, *A Dictionary of Christian Palestinian Aramaic* (OLA, 234, Louvain: Peeters, 2014).
- DJBA* M. Sokoloff, *A Dictionary of Jewish Babylonian Aramaic of the Talmudic and Geonic Periods* (Ramat-Gan: Bar Ilan University Press, 2002).

- DJPA* M. Sokoloff, *A Dictionary of Jewish Palestinian Aramaic of the Byzantine Period* (Ramat-Gan: Bar Ilan University Press, 2nd ed., 2002).
- DSA* A. Tal, *A Dictionary of Samaritan Aramaic* (Leiden: Brill, 2000).
- GLBRP* E.A. Sophocles, *Greek Lexicon of the Roman and Byzantine Periods* (New York: C. Scribner's Sons, 1900).
- HALOT* L. Koehler and W. Baumgartner (revised by W. Baumgartner and J.J. Stamm), *The Hebrew and Aramaic Lexicon of the Old Testament* (Leiden: Brill, 1994–2000).
- Jastrow M. Jastrow, *Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature* (New York: G.P. Putnam's Son, 1886–1903).
- Lane E.W. Lane, *An Arabic-English Lexicon* (London: Williams and Norgate, 1863–1893).
- LD* C.T. Lewis and C. Short, *A Latin Dictionary* (Oxford: Clarendon Press, 1969).
- LLGE* Sergio Daris, *Il lessico latino nel greco d'egitto* (Barcelona: Institut de Teologia fonamental, Seminari de Papirologia, 2nd ed., 1991).
- LS2* C. Brockelmann, *Lexicon Syriacum* (Halis Saxonum: Sumptibus M. Niemeyer, 2nd ed., 1928).
- LSJ* H.G. Liddell and R. Scott (revised by H. Stuart Jones and R. McKenzie), *A Greek-English Lexicon* (Oxford: Oxford University Press, 1996).
- LSJ Suppl.* H.G. Liddell and R. Scott (revised by H. Stuart Jones and R. McKenzie; edited by P.G.W. Glare), *Greek-English Lexicon. Revised Supplement* (Oxford: Oxford University Press, 1996).
- LSP* F. Schulthess, *Lexicon Syropalaestinum* (Berolini: G. Reimer, 1903).
- MD* E.S. Drower and R. Macuch, *A Mandaic Dictionary* (Oxford: Clarendon Press, 1963).
- OLD* P.G.W. Glare, *Oxford Latin Dictionary* (Oxford: Clarendon Press, 1982).
- PAT* D.R. Hillers and E. Cussini, *Palmyrene Aramaic Texts* (Baltimore: Johns Hopkins University Press, 1996).
- PGL* G.W.H. Lampe, *A Patristic Greek Lexicon* (Oxford: Clarendon Press, 1961).
- SL* M. Sokoloff, *A Syriac Lexicon. A Translation from the Latin, Correction, Expansion, and Update of C. Brockelmann's Lexicon Syriacum* (Winona Lake: Eisenbrauns—Piscataway: Gorgias Press, 2009).
- TS* R. Payne Smith, *Thesaurus Syriacus* (Oxford: Clarendon Press, 1879–1901).