THE UNIVERSITY OF CHICAGO

LANGUAGE CHANGE IN THE WAKE OF EMPIRE:
SYRIAC IN ITS GRECO-ROMAN CONTEXT

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE HUMANITIES
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF NEAR EASTERN LANGUAGES AND CIVILIZATIONS

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Abstract

Greek-Aramaic bilingualism was wide-spread throughout Late Antique Syria and Mesopotamia. Among the various Aramaic dialects, Syriac underwent a particularly intense and prolonged period of contact with Greek. This contact led to changes in both languages. The present study provides a new analysis of contact-induced changes in Syriac due to Greek, from the earliest attestations of Syriac at the turn of the Common Era up until the beginning of the eighth century when the socio-linguistic situation changed due to the Arab conquests. More specifically, the study argues that Syriac is the outcome of a particular socio-linguistic situation in which inherited Aramaic material was augmented and adapted through contact with Greek. Augmentation refers to the fact that Syriac-speakers added a large number of Greek loanwords to their inherited Aramaic vocabulary. Greek loanwords in Syriac are the subject of Chapters §4-7 of the study. Adaptation, in contrast, refers to instances in which speakers of Syriac replicated inherited Aramaic material on the pattern of Greek. This type of change, which is termed grammatical replication in this study, is the subject of Chapters §8-10. It is proposed that the augmentation and adaptation of inherited Aramaic material was a factor in the development of Syriac as it is now known.

This study is located at the intersection of two fields: contact linguistics and the study of ancient languages. It is based on the premise that these two fields can, and should, exist in a mutually beneficial symbiotic relationship. To this end, the study analyzes the relevant data within a contact-linguistic framework. This enables a more precise description of the changes than has previously been possible. In addition, by analyzing the data from the perspective of contact linguistics, the study has been able to illuminate part of the previously hidden socio-
historical context of ancient Syriac-speakers. This study also shows how an ancient language such as Syriac, with its large and diverse written record, can inform the field of contact linguistics as well as historical linguistics more generally. It documents in detail various types of contact-induced change over a relatively long period of time with a wealth of data. Of particular interest to the field of contact linguistics, the study presents several examples of the transfer of semantic-conceptual grammatical structure in a contact situation in which the agents of change were linguistically dominant in the recipient language.
Abbreviations for Bibliography

AfO Archiv für Orientforschung.
ANRW Aufstieg und Niedergang der römischen Welt.
CAL Comprehensive Aramaic Lexicon (CAL), accessible online at <http://cal.huc.edu/>.
CBM Chester Beatty monographs.
CCSG Corpus Christianorum. Series Graeca.
CSCO Corpus Scriptorum Christianorum Orientalium.
CSS Cistercian Studies Series.
ELO Elementa Linguarum Orientis.
ETL Ephemerides Theologicae Lovanienses.
FC Fontes Christiani.
GOFS Göttinger Orientforschungen, I. Reihe. Syriaca.
HSS Harvard Semitic Studies.
Hugoye Hugoye: Journal of Syriac Studies [http://syrcom.cua.edu/syrcom/Hugoye].
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<td><em>Journal asiatique.</em></td>
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<td>JAOS</td>
<td><em>Journal of the American Oriental Society.</em></td>
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<td>JECS</td>
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<td>JEOL</td>
<td><em>Jaarbericht Ex Oriente Lux.</em></td>
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<td>JNES</td>
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<td>JSS</td>
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<td>JTS</td>
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<td>LAWS</td>
<td>Linguistic studies in ancient West Semitic.</td>
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<td>LCL</td>
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<td>MDOG</td>
<td><em>Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin.</em></td>
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<td>MPIL</td>
<td>Monographs of the Peshïtta Institute Leiden.</td>
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<td>OCA</td>
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<td>Théologie historique</td>
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<td>WO</td>
<td>Welt des Orients</td>
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<td>ZAC</td>
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Abbreviations in Linguistic Glosses

All examples larger than one word are provided with word-by-word or morpheme-by-morpheme glosses. Some examples are given inline in square brackets, especially for short examples or examples in footnotes. The Leipzig Glossing Rules have been followed as far as possible. It has, however, been necessary to introduce a number of categories for the Semitic languages. A full list of abbreviations occurring in linguistic glosses is as follows:

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<td>first person</td>
<td>DAT</td>
<td>dative</td>
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<td>2</td>
<td>second person</td>
<td>DOM</td>
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<td>3</td>
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<td>EMP</td>
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<td>status absolutus</td>
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<td>ABSTRACT</td>
<td>Aramaic abstract suffix *ūt</td>
<td>F</td>
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<tr>
<td>ACC</td>
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<td>GEN</td>
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<td>active</td>
<td>GN</td>
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<td>ADJ</td>
<td>Aramaic adjectival suffix *āy</td>
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<td>INT</td>
<td>interrogative marker</td>
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<td>CND</td>
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<td>N</td>
<td>neuter</td>
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<td>COM</td>
<td>comparative</td>
<td>NEG</td>
<td>negation</td>
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<tr>
<td>CON</td>
<td>status constructus</td>
<td>NML</td>
<td>nominalizer, i.e., the Aramaic particle *ḏī (Wertheimer 2001b)</td>
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<tr>
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<td>SUF</td>
<td>suffix-conjugation</td>
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<td>passive</td>
<td>VBLZ</td>
<td>verbalizer</td>
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<tr>
<td>PRE</td>
<td>prefix-conjugation</td>
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Abbreviations and Citations of Biblical Books

Following the Society of Biblical Literature (SBL), Biblical books are abbreviated as follows:

HEBREW BIBLE / OLD TESTAMENT

<table>
<thead>
<tr>
<th>Hebrew</th>
<th>English</th>
<th>Hebrew</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen</td>
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<td>Eccl</td>
<td>Ecclesiastes</td>
</tr>
<tr>
<td>Exod</td>
<td>Exodus</td>
<td>Song</td>
<td>Song of Solomon</td>
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<tr>
<td>Lev</td>
<td>Leviticus</td>
<td>Is</td>
<td>Isaiah</td>
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<td>Num</td>
<td>Numbers</td>
<td>Jer</td>
<td>Jeremiah</td>
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<tr>
<td>Deut</td>
<td>Deuteronomy</td>
<td>Lam</td>
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<td>Ezek</td>
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<td>Judges</td>
<td>Dan</td>
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<td>Ruth</td>
<td>Hos</td>
<td>Hosea</td>
</tr>
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<td>1 Samuel</td>
<td>Joel</td>
<td>Joel</td>
</tr>
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<td>2Sam</td>
<td>2 Samuel</td>
<td>Amos</td>
<td>Amos</td>
</tr>
<tr>
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<td>1 Kings</td>
<td>Obad</td>
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<tr>
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<td>2 Kings</td>
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<td>Zech</td>
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<td>Old Testament</td>
<td>Septuagint Additions / Apocrypha</td>
<td>New Testament</td>
<td></td>
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<tr>
<td>---------------</td>
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<tr>
<td>Ps Psalms</td>
<td>Mal Malachi</td>
<td>Matt Matthew</td>
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<tr>
<td>Prov Proverbs</td>
<td></td>
<td>Mark Mark</td>
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<td></td>
<td></td>
<td>John John</td>
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<td></td>
<td></td>
<td>Acts Acts</td>
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<td></td>
<td></td>
<td>Rom Romans</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1Cor 1 Corinthians</td>
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<tr>
<td></td>
<td></td>
<td>2Cor 2 Corinthians</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gal Galatians</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1Jn 1 John</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bar Baruch</td>
<td>Jdt Judith</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pr Azar Prayer of Azariah</td>
<td>1-2 Macc 1-2 Maccabees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bel Bel and the Dragon</td>
<td>1-2 Macc 3-4 Maccabees</td>
<td></td>
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<tr>
<td></td>
<td>Sg Three Song of the Three Young Men</td>
<td>Pr Man Prayer of Manasseh</td>
<td></td>
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<tr>
<td></td>
<td>Sus Susanna</td>
<td>Ps 151 Psalm 151</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-2 Esd 1-2 Esdras</td>
<td>Sir Sirach</td>
<td></td>
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<tr>
<td></td>
<td>Add Esth Additions to Esther</td>
<td>Tob Tobit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ep Jer Epistle of Jeremiah</td>
<td>Wis Wisdom of Solomon</td>
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</table>

xxvi
Transliteration

The Syriac consonants are transliterated ḫ, b, g, d, ḥ, w, z, ṭ, y, k, l, m, n, s, ḫ, ṣ, q, r, š, and ṭ. The fricative realization of the non-emphatic voiceless stops b, g, d, k, p, and t are transliterated ḫ, ḡ, ḏ, k, ṭ, and ṭ, respectively (i.e. ‘spirantization’ or rukkɔʃɔ). The Syriac vowels are transliterated a, ō, e, ē, i, o, and u. The symbol ō is used instead of the traditional ā (or o in West Syriac) because ā implies a quantitative distinction with a that is not synchronically accurate; historic *ā had become ō already in early Syriac (Nöldeke 1904: §11; Boyarin 1978: 149). The symbol e is used for the vowel in the first syllable of rešɔ ‘head’ and kepɔ ‘rock’ in contrast with ē in helmɔ ‘dream’ (on the history of this ē, see Blau 1969).

The vowels in the Tiberian sub-linear system and the Babylonian supra-linear system are transliterated the same as Syriac, i.e., a, ō, e, ē, i, o, and u (Babylonian lacks ē). When indicated in the Babylonian system, the reduced vowel schwa is transliterated as x; reduced vowels are not transliterated for the Tiberian system. In addition, matres lectionis are not represented in transliteration for either system.

Mandaic is transliterated according to the system developed by Macuch in the Mandaic Dictionary (Drower and Macuch 1963) and his Handbook of Classical and Modern Mandaic (1965); note that the matres lectionis ḫ, w, and ṭ are transliterated as a, u, and i, respectively. The only departure from Macuch’s system is the use of e for ē following Burtea (2004: 92-93; 2011) and Voigt (2007: 150).

With the individual Semitic languages, one of the standard transliteration systems is generally followed: Hebrew according to Huehnergard 2002a (with the difference that reduced vowels are transliterated as a, ā, ā, and ū); Gəʿaz according to Leslau 1987; and Arabic according
to Fox 2003: xvi-xvii.

1 Introduction

“Language has a setting” (Sapir 1921: 207)

It is well-documented that one of the primary catalysts of intense language contact is the expansion of empire. This is true not only of recent history, as in the many examples of Western European colonization in the Americas, Oceania, India, and Africa, but it is equally applicable to the more remote past. An exemplary case, or better cases, of language contact in the wake of expanding empires is Aramaic. Aramaic is a member of the Semitic language family and is related to modern languages such as Hebrew, Arabic, and Amharic. It is first attested in written records from the tenth century BCE in Syria and Mesopotamia and has continued to be spoken in this region until the present day. Throughout its long history, Aramaic has been in contact with a variety of languages due to the expansions of empires. These include Akkadian under the Neo-Assyrian (10th-7th cent. BCE) and Neo-Babylonian (7th-6th cent. BCE) Empires, Iranian under the Achaemenid (6th-4th cent. BCE), Parthian (3rd cent. BCE-3rd cent. CE), and Sassanian (3rd cent.-7th cent. CE) Empires, Greek under the Seleucid (4th-1st cent. BCE) and (Eastern) Roman (1st cent. BCE-7th cent. CE) Empires, and Arabic beginning with the Arab conquests in the seventh century and continuing until today. Each of these languages – and so also each of these empires – left its imprint on Aramaic in some way. The present study focuses on one particular episode in this long history of Aramaic language contact: the Syriac dialect of Aramaic in contact with Greek.

1 Overviews of the various dialects of Aramaic are available in Beyer 1986; Brock 1989; Fitzmyer 1979b; Kaufman 1992; 1997.
Syriac is the best documented dialect of Aramaic. It likely originated in or around Edessa (Syriac ‘urhay), present-day Urfa in south-eastern Turkey. From there, it spread, as a language of Christianity, over most of Mesopotamia and Syria reaching as far as Ethiopia, India, and Central Asia. Syriac is first attested in non-Christian tomb inscriptions that date from the first to the third centuries. The majority of Syriac literature, however, stems from the Christian communities that emerged in Mesopotamia and Northern Syria by the second century. The ‘Golden Age’ of Syriac spanned from the fourth to the seventh centuries and produced a considerable corpus of original prose and poetry as well as translations from Greek and occasionally Middle Persian. After the Arab conquests in the seventh century, Syriac was gradually replaced by Arabic though it lived on for several centuries and even witnessed a renaissance in the twelfth and thirteenth centuries. Alongside the numerous Neo-Aramaic dialects, classical Syriac still functions today as a liturgical and literary language for Syriac Christians both in the Middle East and the worldwide diasporas.

Throughout its long history, Syriac has been in contact with an array of different languages. In addition to inheriting words from Akkadian, Sumerian (via Akkadian), and different forms of Iranian, Syriac transferred words from a variety of languages, including Hebrew, Middle Persian, and – later in its history – Arabic. The language that has had the most

2 Edited in Drijvers and Healey 1999.
3 Unfortunately, there is no up-to-date history of Syriac literature (so also Van Rompay 2000: sec. 1; 2007a: sec. 9); for now, see Assemani 1719-1728; Barsoum 2003; Baumstark 1922; Brock 1997; Macuch 1976; Ortiz de Urbina 1958; Wright 1894. In addition, the recently published Gorgias Encyclopedic Dictionary of the Syriac Heritage (GEDSH) contains entries for most authors of Classical Syriac (Brock, Butts, Kiraz, and Van Rompay 2010). For a valuable bibliography of published Syriac text editions, see Brock apud Muraoka 2005: 144-155.
4 For this renaissance, see recently Teule and Tauwinkl 2010.
5 Brock 1989a; Kiraz 2007.
significant impact on Syriac is, however, Greek. It is widely acknowledged that a prolonged period of contact with Greek resulted not only in a large number of loanwords in Syriac but also in changes to Syriac morphology and syntax. In the preface to his classic treatment of Syriac grammar, for instance, Nöldeke states, “[t]he influence of Greek is shown directly, not merely in the intrusion of many Greek words, but also in the imitation of the Greek use of words, Greek idiom and Greek construction, penetrating to the most delicate tissues of the language (bis ins feinste Geäder der Sprache)” (1904: XXXII).

Although it is widely acknowledged that Syriac was influenced by Greek, the specific contours of this interaction remain unclear. The present study aims to present a fresh analysis of contact-induced changes in Syriac due to Greek. More specifically, the study intends to show that Syriac is the outcome of a particular socio-linguistic situation in which inherited Aramaic material was augmented and adapted through contact with Greek. Augmentation refers to the fact that speakers of Syriac added a large number of Greek loanwords to their inherited Aramaic vocabulary. Greek loanwords in Syriac are the subject of Chapters §4-7. Adaptation, in contrast, refers to instances in which speakers of Syriac replicated inherited Aramaic material on Greek. This type of change, which will be termed grammatical replication in this study, is the subject of Chapters §8-10.

The time frame for the present study extends from the earliest attestations of Syriac at the beginning of the Common Era up to Yaʿqub of Edessa who died in 708. The Arab conquests in the seventh century (Seleucia-Ctesiphon fell in 637) set into action a number of changes that would dramatically affect the Syriac-speaking population, including its interaction with the Greco-Roman world. These changes, however, took time. In the realm of language use, the Syriac Chronicle of 1234 reports that Greek was not officially replaced by Arabic as
the language of civil service until 708. Eventually, however, the context of Syriac and Greek interaction changed due to the Arab conquests. Given the coincidence of the date of the introduction of Arabic as the language of civil service with the date of his death, Yaʿqub of Edessa provides a convenient end point for this study. This is not, however, to imply that Syriac and Greek did not continue to be in contact past the beginning of the eighth century. In fact, the contrary is certainly known to be true. The later contact between Greek and Syriac can be illustrated by the role that Syriac-speakers played in the Greco-Arabic translation movement in the early ʿAbbāsid period (8th-10th cent.). Or, to take even later examples, a number of previously unattested Greek loanwords appear in the poems of two fifteenth-century authors, Ishāq Shbadnaya of the Church of the East and Dawid Puniqoyo of the Syriac Orthodox Church. These different historical contexts, however, call for separate studies.

This study of contact-induced changes in Syriac due to Greek is both comparative and diachronic. It is comparative in that it locates Syriac within the context of its Late Aramaic sister dialects of Jewish Palestinian Aramaic, Christian Palestinian Aramaic, Samaritan Aramaic, Jewish Babylonian Aramaic, and Mandaic. It will be shown that Syriac as well as Christian Palestinian Aramaic differ from their sister dialects of Late Aramaic due to contact with Greek. This study is also diachronic in that particular attention is paid to changes in the way Syriac interacted with Greek over time. While diachrony has played a role in some studies

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6 The Syriac text is found in Chabot 1916: 298.28-299.1.
7 For a similar cut-off date, see Brock 1996: 253. An additional reason to set 708 as an endpoint is that many Syriac texts from the eighth century and onwards have not yet been edited (cf. Brock 2010: 124).
8 In general, see Gutas 1998.
9 For the former author, see recently Carlson 2011, esp. at 200 n. 41 (Greek loanwords); for the latter, see Butts, in GEDSH, 177 and (with more detail) Butts 2009b.
10 For the importance of this, see Brock 1996: 262.
of Syriac-Greek language contact, especially those by Brock, more work remains to be done in this area.\textsuperscript{11}

There are at least two loci for contact between Syriac and Greek. The first is interactions between Syriac-speakers, Greek-speakers, and bilingual Syriac-Greek-speakers. Syriac was the native language of a large portion of the population in Late Antique Syria and Mesopotamia; Greek was the language of Empire. Given this situation, many native Syriac-speakers learned Greek to one degree or another, with some becoming fully bilingual whereas others had a more limited knowledge of Greek.\textsuperscript{12} In addition, even individuals who had no knowledge of Greek would likely have been exposed to the language to some degree. Ephrem (d. 373), the most well-known Syriac author, for instance, is usually said to have known little to no Greek,\textsuperscript{13} but he must have at the very least seen written Greek, since the baptistery in the Church at Nisibis where he was a deacon contains a Greek building inscription dated to 359/360.\textsuperscript{14} This Greek inscription illustrates how far Greek had penetrated into the Syriac-speaking world. The interactions between Syriac-speakers, Greek-speakers, and bilingual Syriac-Greek-speakers provide one locus for the introduction of contact-induced changes in Syriac due to Greek.

\textsuperscript{11} In one of his earliest papers on Greek-Syriac language contact, Brock states, “I have mentioned here only some of the more outstanding features a diachronic study of Greek words in Syriac would throw up; it remains a subject that has been almost completely untouched” (1975: 90). For Brock’s diachronic work on Syriac-Greek language contact, see 1975; 1982; 1990 [diachronic changes more generally]; 1996; 1999-2000; 2003 [diachronic changes more generally]; 2004; 2010.
\textsuperscript{12} This topic is examined in detail in §3.4 below.
\textsuperscript{13} See, e.g., Pat-El 2006: 43. For additional references, see below at pp. 403-405.
\textsuperscript{14} Bell 1982: 143-145 with plates 70-83; Canali De Rossi 2004: 39 (no. 62).
A second locus for contact between Greek and Syriac is translation. A small body of Syriac literature was translated into Greek, including the *Dialogue on Fate* attributed to Bardaišan (d. 222), works by Ephrem (d. 373), the *Apocalypse of Pseudo-Methodius* (written in the late seventh century), the works of Ishāq of Nineveh (late seventh century), as well as various hagiographical texts. A much larger body of literature was translated from Greek into Syriac from the late fourth to the late ninth century. These translations fall into three broad categories: 1. Biblical, 2. Patristic, including Basil of Caesarea, Cyril of Alexandria, Eusebius of Caesarea, Evagrius of Pontus, Gregory of Nazianzus, Gregory of Nyssa, Severus of Antioch, and Theodore of Mopsuestia; and 3. so-called Secular, including Aristotle, Galen, Isocrates, Lucian, Plutarch, Porphyry, and Themistius. The translation technique from Greek to Syriac changed from ‘free’ reader-oriented translations to ‘literal’ text-oriented ones over time. This culminated in the seventh century with translations in which the lexical and morphological material of Syriac was mapped onto the semantic and grammatical categories of Greek producing what resembles a sub-type of mixed language called converted language. The translations from the early ‘Abbasid period (8th-10th cent.), associated above all with Ḥunayn b. Ishāq (d. 873), returned to more reader-oriented translations. The large number of translations from Greek to Syriac provides a second locus for the introduction of contact-induced changes in Syriac due to Greek.

Like other studies of ancient language contact, this study does not have access to native speakers and must rely entirely on written documents. In the case of Syriac, written documents

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15 For overviews with further references, see Brock, in *GEDSH*, 180-181 as well as Brock 2007a.
16 A number of studies are available on Syriac translation technique; for a general orientation, see the classic study of Brock (1979) and the recent monograph of King (2008).
17 For converted language, see Bakker 2003: 116-120.
represent a highly standardized literary language. Written Syriac is, thus, remarkably uniform with almost no dialectical variation. In the context of a study analyzing contact-induced changes in Syriac due to Greek, it is interesting to note that texts written in the Roman Empire, where Greek was an official language, show only a few differences from those written in the Sassanian Empire, where Greek was much less prominent, though not non-existent. Written Syriac is not only a standardized literary language, but there is also evidence to suggest that it does not reflect, at least not exactly, the spoken variety – or better varieties – of the language in Late Antiquity. The orthography of written Syriac, for instance, is extremely conservative resembling the Standard Literary Aramaic of centuries earlier more than its late Aramaic sister dialects. The fact that written Syriac is a literary language that does not entirely reflect the spoken language(s) has repercussions for this study since many of the contact-induced changes in the written literary language would have been mediated by the spoken language(s), which remain inaccessible to the modern researcher. This is especially the case for changes in which the locus of change was contact between speakers, though perhaps less so for changes in which the locus of change was translation. Thus, throughout this work, it must be borne in mind that the object of study is not the everyday spoken language of Syriac-speakers in Late Antiquity but their standardized literary language.

This study is located at the intersection of two fields: contact linguistics and the study of ancient languages. It is based on the premise that these two fields can, and should, exist in a mutually beneficial symbiotic relationship. The study of one can, and should, inform the study of the other and vice versa. It is worth-while to treat each aspect of this intersection separately.

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18 For Syriac as a standard language, see the influential study of Van Rompay 1994 as well as the recent remarks in Taylor 2002: 325.
19 Beyer 1966. For the term Standard Literary Aramaic, see Greenfield 1974.
First, contact linguistics can inform the study of ancient languages. Following the publication of Thomason and Kaufman’s classic *Language Contact, Creolization, and Genetic Linguistics* (1988), the field of contact linguistics has seen a surge in research.\(^{20}\) This has resulted in an increasingly robust theory of language contact that is, *inter alia*, better able to correlate socio-historical factors with particular types of contact-induced change. This development is particularly useful for the modern researcher of ancient languages, since it is precisely the concrete socio-historical background of the speakers that often remains opaque due to the passage of time. Within Syriac Studies, for instance, it continues to be debated when Syriac-speakers first had intense contact with the Greco-Roman world, with proposals ranging from the turn of the Common Era to the fifth century.\(^{21}\) Notwithstanding the sparseness of the at times conflicting socio-historical information about this question, there is an abundance of linguistic data for contact-induced changes in Syriac due to Greek. If these data are analyzed from the perspective of contact linguistics, it is possible to illuminate the previously hidden socio-historical context of ancient Syriac-speakers. This question is addressed in detail in the Conclusion (§11.3). This is but one way in which the current study employs contact linguistics to inform the study of an ancient language as well as the socio-historical background of its speakers.

The study of ancient languages can also inform the field of contact linguistics. The linguist who studies only modern languages often lacks adequate historical data to outline in detail diachronic changes, including contact-induced changes. In the field of contact linguistics, this has proven to be a difficulty particularly in discussions of contact-induced changes in

\(^{20}\) For a recent survey, see Hickey 2010b.
\(^{21}\) For the former, see, e.g., Drijvers 1992; for the latter, see, e.g., Brock 1982a.
(morpho-)syntax. To put the matter simply, the contact linguistic literature contains far too few cases in which a proposed contact-induced (morpho-)syntactic change has been systematically described with the support of convincing historical data.\textsuperscript{22} This topic is addressed in detail in the Conclusion (§11.2). It is here that an ancient language such as Syriac can be put to good use. Syriac boasts an extensive written record spanning more than two millennia, a sizeable portion of which can be reliably dated. Written records also survive for five sister dialects of Syriac in addition to more fragmentary evidence for earlier Aramaic dialects. This considerable body of data often enables the historical linguist to trace changes, including contact-induced changes, step-by-step from their pre-history through their completion. The sister dialects of Syriac, in turn, provide an important control on determining whether or not a given change is contact-induced. Thus, the study of an ancient language such as Syriac, with its large and diverse written record, can inform the field of contact linguistics as well as historical linguistics more generally.

Given its location at the intersection of contact linguistics and the study of ancient languages, this study envisions several audiences. The primary audience is the field of Syriac Studies. In particular, this study aims to contribute to the ongoing contextualization of the Syriac Heritage – one of the primary exponents of which is the Syriac language – within its Greco-Roman milieu. In addition, this study addresses secondarily contact linguists and scholars in the field of ancient languages, especially Semitic Studies. For scholars in these two

\textsuperscript{22} So recently Poplack and Levy 2010. This holds true outside of (morpho-)syntactic contact-induced change as well. In their typological study of loanverbs, for instance, Wichmann and Wohlgemuth (2008: 113) note that the lack of adequate diachronic data limited the definitiveness of the conclusions that could be drawn.
fields, the study aims to document in detail various types of contact-induced change over a relatively long period of time with a wealth of data.

Finally, a word about the organization of this study is in order. The study is divided into three parts: Prolegomena (§2-3), Loanwords (§4-7), and Grammatical Replication (§8-10). Part I sets the background for the study. Chapter §2 develops the contact-linguistic framework, and Chapter §3 outlines the socio-historical context for the Syriac-Greek contact situation. Part II, which consists of the next four chapters (§4-7), is dedicated to the topic of Greek loanwords in Syriac. Chapter §4 discusses the methodological framework for the study of loanwords. The next three chapters serve as a grammar of Greek loanwords in Syriac. Chapter §5 analyzes the phonological integration of Greek loanwords in Syriac, while Chapter §6 focuses on morphosyntactic integration. Chapter §7 looks at secondary developments in Syriac involving Greek loanwords. Part III, which consists of the next three chapters (§8-10), turns to another category of contact-induced change termed grammatical replication, in which speakers of Syriac created new grammatical structures on the model of structures in Greek. Chapter §8 develops the methodological framework for grammatical replication. Chapter §9 presents a case study of the grammatical replication of the Syriac copula ‘itaw(h)y on Greek ἔστιν, and Chapter §10 presents a case study of the grammatical replication of the Syriac conjunctive particle den on Greek δέ. Conclusions of the study are presented in Chapter §11.
Part I: Prolegomena
2 The Contact-Linguistic Framework

“It cannot be doubted that contact-linguistics is badly in need of a general theory” (Van Coetsem 2000: 39)

2.1 Overview

This chapter establishes the contact-linguistic framework that is employed in this study. It begins with a brief discussion of terminology (§2.2). It then turns to the various typologies of language contact that have been proposed, looking first at early typologies (§2.3), then the typology of Van Coetsem (§2.4), and finally the typology of Thomason and Kaufman (§2.5). In §2.6, these typologies are evaluated, and it is argued that Van Coetsem’s typology is the most robust.

2.2 Contact-Linguistic Terminology

Before looking at the various typologies of language contact, it is necessary to say a few words about terminology. There unfortunately continues to be no common or standard terminology in the field of contact linguistics. This is at least partly a reflection of the fact that there is no generally agreed upon theory of language contact (see the quote by Van Coetsem at the beginning of the chapter). One example is sufficient to illustrate this lack of a unified terminology: borrowing. This seemingly benign term has been used in a multitude of ways throughout the contact-linguistic literature, not to mention beyond it. In The Dictionary of Historical and Comparative Linguistics, for instance, Trask defines borrowing as “[b]roadly,
the transfer of linguistic features of any kind from one language to another as the result of contact” (2000: 44). Thus, borrowing is a cover-term for any type of contact-induced change, ranging from loanwords to lexical calques to the transfer of morpho-syntax. Borrowing is used in this sense by a number of other scholars.¹ In contrast, Heine and Kuteva restrict borrowing to the transfer of “phonetic substance, that is, either sounds or form-meaning units such as morphemes, words, or larger entities.”² In this narrow definition, borrowing is restricted to a subset of the various categories of contact-induced change.³ It includes only the transfer of “phonetic substance” whether in the form of a morpheme, a lexeme, or multiple lexemes. Thus, Heine and Kuteva exclude changes such as lexical calques and the transfer of morpho-syntax, which Trask’s definition would include. Yet a third definition of borrowing is found in Thomason and Kaufman’s classic Language Contact, Creolization, and Genetic Linguistics (1988), in which the term is said to refer to one of the types of language contact – in the sense of a typology of language contact situations – that involves “the incorporation of foreign features into a group’s native language by speakers of that language” (1988: 37; cf. 21). For them, borrowing is to be contrasted with interference through shift in which “a group of speakers shifting to a target language fails to learn the target language (TL) perfectly” (1988: 38-39). Thus, interference through shift refers to a situation in which non-native speakers of the recipient language transfer features of their native language into the recipient language. This contrasts with their borrowing, which occurs when native speakers of the recipient language

² Heine and Kuteva 2006: 49. See also 2008: 59; 2010: 86.
³ A similar definition is found in Ross 2001: 145.
transfer features from another language into the recipient language. Thomas and Kaufman’s definition of borrowing as one type of contact-induced change has been adopted by other contact linguists as well. Thus, while Trask’s and Heine and Kuteva’s definitions of borrowing differ primarily in scope, Thomason and Kaufman use the term in an entirely different way to refer to a particular socio-historical setting for language contact and the changes associated with it. This example involving three very different – and at times mutually exclusive – definitions of the term borrowing illustrates the importance of defining terminology at the outset of any work on contact linguistics.

In this study, the broadest category covering all ways in which one language influences another is termed contact-induced change. This is used similarly by other contact linguists. Rough equivalents found in the (contact-)linguistic literature include ‘interference’, ‘borrowing’, ‘transfer’, ‘transference’, and ‘diffusion’ to name only a few. Contact-induced change involves the transfer of a feature from the source language (SL) to the recipient language (RL). Feature is a cover term for all types of linguistic material from phonology to morphology to syntax to discourse-pragmatics (Stolz 2008). Rough equivalents found in the (contact-)linguistic literature include ‘material’ and ‘element’. Transfer is used similarly by a

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4 This typology is discussed in greater detail in §2.5-2.6 below.
8 See footnote 1 above.
12 For the former, see Wohlgemuth 2009: 51; for the latter, see Weinreich 1953: 7. Van Coetsem (2000: 51) combines them.

2.3 Early Typologies of Language Contact

The fact that certain linguistic features tend to be transferred in certain linguistic contexts was already recognized in some early works in the field of contact linguistics. One of the more influential such observations was that of Windisch (1897), who was a student of H. Schuchardt, a well-known figure in the field of contact linguistics. In his paper entitled “Zur Theorie der Mischsprachen und Lehnwörter” (1897), Windisch expounded the following principle: “Nicht die erlernte fremde Sprache, sondern die eigene Sprache eines Volkes wird unter dem Einfluss der fremden Sprache zur Mischsprache” (1897: 104). This principle was intended to account for the fact that bilingual speakers often introduce features of a foreign language into their own language, but they do not typically introduce features of their own language into a foreign language. As an example of this principle, Windisch cites the case of Frederick the Great (1712-1786) who introduced French lexemes into his native German, but not German lexemes into his French. Based on the examples that he cites, it seems that

Windisch had primarily loanwords in mind when formulating this principle, not other features, such as phonology or syntax.¹⁵

Windisch’s principle, which is sometimes known under the moniker ‘Windisch’s Law’, was subsequently adopted by a number of linguists. It was, for instance, included almost verbatim in the *Grundriss der romanischen Philologie*: “Nicht die erlernte fremde Sprache, sondern die einheimische Sprache wird unter dem Einflusse der Sprache einer überlegenen Kultur zur Mischsprache” (Gröber 1904-1906: 1.404). Similarly, in his *Language. Its Nature, Development and Origin*, Jespersen cites Windisch before proceeding to explain:

“When we try to learn and talk a foreign tongue we do not introduce into it words taken from our own language; our endeavour will always be to speak the other language as purely as possible, and generally we are painfully conscious of every native word that we intrude into phrases framed in the other tongue. But what we thus avoid in speaking a foreign language we very often do in our language. Frederick the Great prided himself on his good French, and in his French writings we do not find a single German word, but whenever he wrote German his sentences were full of French words and phrases” (1922: 208).¹⁶

The principle as well as the example in this quote are a direct reflection of Windisch’s work. Similar applications of Windisch’s Law can be found elsewhere in the linguistic literature.¹⁷

The influence of Windisch’s principle was not restricted to the field of linguistics in the narrow sense, but was also employed in more practical applications. In a still important article entitled “Grec biblique” (1938), Vergote invoked Windisch’s formulation in order to explain the contact-situation of Greek in Egypt. According to Vergote’s analysis, an Egyptian who

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¹⁵ Sandfeld (1938: 61) later argued that Windisch’s principle only applied to loanwords (cf. Vildomec 1963: 96). Haugen states the problem in a different way by noting that Windisch’s principle “does not apply to the mature language learner” (1950a: 280-281).
¹⁶ This same paragraph is repeated almost verbatim in Jespersen’s *Growth and the Structure of the English Language* (1948: §37).
¹⁷ See, e.g., Dillon 1945: 13; Flom 1905: 425.
spoke Greek would not introduce Egyptian loanwords into Greek, though this person’s native Egyptian language might occasionally influence Greek in other domains: “un bilingue égyptien, écrivant en grec, se gardait bien d’introduire des mots coptes dans cette langue étrangère (= Greek), mais il ne pouvait pas toujours se soustraire à certaines réactions de sa langue maternelle dans le domaine de la sémantique, de la syntaxe et de la phraséologie” (1365). Conversely, Egyptian, more specifically Coptic, does contain a number of Greek loanwords: “… l’action du grec sur le copte se manifeste en premier lieu par les mots d’emprunt …” (1365). Thus, by recourse to Windisch’s principle, Vergote is able to explain the fact that Coptic contains numerous Greek loanwords whereas Greek texts in Egypt contain few Egyptian, including Coptic, words. Vergote also augments Windisch’s principle by noting that Greek texts in Egypt do exhibit influence from Egyptian in other linguistic domains, such as semantics, syntax, and phraseology. This marks an important advancement in constructing a typology of contact-induced change, calling to mind later developments such as Van Coetsem’s imposition and Thomason and Kaufman’s interference through shift and imperfect learning.  

The distinction observed by Vergote, building upon Windisch, was further abstracted and systematized by Vildomec (1963: 80-86). Citing Windisch 1897, Vildomec notes that, “[t]here often is tendency for a multilingual to use words of an L^e [= foreign language] when he speaks (or writes) his L^m [= mother language], but this tendency does not always operate with the same intensity in the opposite direction” (80). Thus, loanwords are not typically introduced from the “mother language” into the “foreign language”; “[i]f an educated adult has to use an L^e [= foreign language] he will usually try to handle it as well as possible; he is unlikely, therefore, to use many words of his L^m [= mother language] when talking the L^e [=  

18 These are discussed in §2.4 and §2.5, respectively.
foreign language]” (81). What is transferred in this situation, however, is “accent” (82-84) and especially syntax (84). Thus, Vildomec distinguishes two broad types of language contact: 1. transfer from “foreign language” to “mother language” that involves primarily lexical features; 2. transfer from “mother language” to “foreign language” that involves primarily “accent” and syntactic features. This distinction is roughly equivalent to that which would later be established in the work of Van Coetsem and of Thomason and Kaufman.

The same binary noted by Vildomec was observed by several other scholars prior to the late 1980s. In a study of Eastern-European Jewish immigrants in the USA, for instance, Rayfield (1970) noted that when the primary language was the recipient language and the secondary language was the source language, it was lexical material that was typically transferred with the transfer of “structural” and “phonetic” material being less prominent (103-106).19 When the situation was reversed, however, and the primary language was the source language and the secondary language was the recipient language, the types of change encountered were also reversed, i.e., “structural” and especially “phonetic” material were transferred, and the transfer of lexical material was less prominent. He attributes this distribution to the fact that “[t]he bilingual retains most persistently the earliest learned systems of his primary language” (106), arguing that the systems are learned in the following order: phonology, syntax, morphology, and lexicon (103). This last argument marks an early forerunner of Van Coetsem’s stability gradient of language, which will be discussed in §2.4.

19 Rayfield never defines primary language and secondary language, and thus it is unclear whether these refer to language proficiency or native–foreign language. This is an important distinction, as will become clear in the discussion of Thomas and Kaufman’s native language vs. Van Coetsem’s linguistic dominance (§2.6).
Prior to the late 1980s, then, a number of scholars noticed that loanwords tended to be transferred in certain contact situations whereas phonology, syntax, and (rarely) morphology were transferred in others.\textsuperscript{20} Notwithstanding these developments, a comprehensive typology of language contact was not formulated until 1988 with the publication of two important monographs, one by Van Coetsem and a second by Thomason and Kaufman. These two works commenced a discussion on the typology of language contact that has not yet abated, now two and a half decades later.\textsuperscript{21} Though the typologies proposed by Van Coetsem and by Thomason and Kaufman share a number of similarities, it is important to review each of them individually.

2.4 The Typology of Van Coetsem

Van Coetsem first proposed a typology of language contact in his \textit{Loan Phonology and the Two Transfer Types in Language Contact} (1988). The basic typology that Van Coetsem espouses in this monograph is unfortunately at times obscured by his complicated argumentation as well as the many tangential discussions accompanying it. This led Van Coetsem to outline a more concise version of his typology in 1995 in an article that serves as a précis of his earlier monograph. Van Coetsem then revisited the typology of language contact in his \textit{A General and Unified Theory of the Transmission Process in Language} (2000) along with its accompanying summary article (1997). These later two works do not in general depart from his earlier work, but rather provide an updated, more integrated analysis of the earlier

\textsuperscript{20} See also Bátori 1979; Janda 1976: 590; Lado 1957: 2; Winter 1973: 145-146.

typology. Finally, in 2003, a lengthy article by Van Coetsem was published posthumously in which he treats a variety of issues related to language contact, including some further comments on his typology. In addition to his own work, brief overviews of Van Coetsem’s typology of language contact are available by others.\footnote{See particularly Smits 1996: 30-33; 1998: 378-380; Winford 2005: 376-382; 2007: 25-28; 2009: 283-285.}

According to Van Coetsem, language contact can be divided into three basic types. First, there is \textit{borrowing} or \textit{recipient language agentivity}.\footnote{Van Coetsem 1988: 10-11; 1995: 77-80; 1997: 358-359; 2000: 53, 67-73, 137-166.} Borrowing occurs when the agents of change are dominant speakers of the \textit{recipient language}. In cases of borrowing, it is the less stable domains of language, such as lexical items, that are transferred from the source language to the recipient language. To illustrate borrowing, Van Coetsem (2000: 53) refers to the case of a native speaker of French who incorporates an English lexeme into his language.

The second broad category of language-contact in Van Coetsem’s typology is \textit{imposition} or \textit{source language agentivity}.\footnote{Van Coetsem 1988: 9-10; 47-76; 1995: 73-77; 1997: 358-359; 2000: 53-54, 73-82, 167-212.} Imposition occurs when the agents of change are dominant speakers of the source language. In imposition, the more stable domains of language, such as grammatical and phonological features, are transferred from the source language to the recipient language. Imposition is usually associated with second language acquisition, though this is not necessarily the case. To illustrate imposition, Van Coetsem (2000: 53-55) refers to the case of a speaker of French who learns English and transfers some articulation habits to English, such as pronouncing the \textit{p} of the English word \textit{pear} without aspiration.
These two types of language contact are summarized in Table 2-1, where A and B refer to different languages, underscoring indicates linguistic dominance, and the double-arrow (⇒) indicates transfer in contact-induced change:

Table 2-1  Van Coetsem’s Typology of Language Contact

<table>
<thead>
<tr>
<th>agentivity</th>
<th>A is linguistically dominant</th>
<th>B is linguistically dominant</th>
</tr>
</thead>
<tbody>
<tr>
<td>domain of transfer</td>
<td>B ⇒ A</td>
<td>A ⇒ B</td>
</tr>
<tr>
<td>type of transfer</td>
<td>recipient lang.</td>
<td>source lang.</td>
</tr>
<tr>
<td></td>
<td>less stable</td>
<td>more stable</td>
</tr>
<tr>
<td></td>
<td>borrowing</td>
<td>imposition</td>
</tr>
</tbody>
</table>

In any contact situation involving two languages, there are then four basic forms of interaction (2000: 54-55): borrowing from B into A, imposition of A into B, borrowing of A into B, and imposition of B into A.

Van Coetsem’s distinction between borrowing and imposition is based on what he terms *linguistic dominance.*

26 Linguistic dominance refers to the greater proficiency that a speaker has in one language as compared to another language. Van Coetsem’s concept of linguistic dominance derives from Weinreich’s claim that “[a] bilingual’s relative proficiency in two languages is easily measured … one of the languages can hence be designated as dominant by virtue of the speaker’s greater proficiency in it” (1953: 75). In many cases, a speaker will be linguistically dominant in her native language or first acquired language. Van Coetsem (1988: 15), however, notes that this is not necessarily the case.

27 This means, then, that an individual’s

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25 This summary is based on one of the additional synthesizing diagrams at the end of Van Coetsem 2000.


27 So already Weinreich 1953: 75 n. 1.
linguistic dominance can change over time. Van Coetsem illustrates the change in linguistic dominance with the example of an immigrant in the United States whose native language is not English, but who over time becomes more fluent in English than in her native language. The fact that an individual’s linguistic dominance can change over time has important implications for the analysis of cases of language attrition, as will become clear below when comparing Van Coetsem’s typology with that of Thomason and Kaufman (see §2.5). At this point, however, it is important to note that in Van Coetsem’s framework linguistic dominance is not necessarily the same as native language (or first language). In addition to a diachronic change in linguistic dominance, it is also possible for a speaker’s linguistic dominance to change according to register or context (1988: 16-17). That is, a speaker can be linguistically dominant in one language in one context, but linguistically dominant in another language in another context (2000: 84). To illustrate this change in linguistic dominance, Van Coetsem (2000: 84) refers to Weinreich’s example in which “[a] child learning both languages in its familial and play environment … may be equipped to deal with everyday things in both tongues; but if it studies certain subjects in a unilingual school, it will have difficulty in discussing these ‘learned’ topics in the other language” (1953: 81). Finally, it should be noted that linguistic dominance is to be distinguished from social dominance (Van Coetsem 1988: 13; 2000: 57), which refers to the political or social status of one of the languages.

Alongside linguistic dominance, the other major factor that leads to the different effects between borrowing and imposition is what Van Coetsem calls the stability gradient of

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The stability gradient of language refers to the fact that certain features of language, such as phonological and grammatical features, are more stable and resistant to change than others, such as lexical items, especially contentive words. The concept of the stability gradient of language has long been recognized in the study of language contact, even if it has not always been termed as such. Already in the late 19th century Whitney (1881: 19-20) proposed a hierarchy of borrowing according to which nouns were transferred before adjectives, adjectives before verbs, verbs before adverbs, adverbs before prepositions and conjunctions, and so forth. Similar hierarchies have been proposed by a number of other scholars. Though the concept of the stability gradient of language has long been recognized, the exact ranking of each feature of language remains controversial, as Van Coetsem correctly recognizes (1988: 34; 1995: 67-68). Despite the lack of a generally accepted ranking of features, the stability gradient of language has important implications for which features of language will be transferred in the different types of language contact. This is because in a contact situation the stable features of the dominant language will tend to be retained. If the agent of change is linguistically dominant in the source language, then the more stable elements of the source language, such as phonological and grammatical features, will be preserved and so transferred to the recipient language. This explains why source language agentivity, or imposition, results primarily in the transfer of phonological and grammatical features. If, however, the agent of change is linguistically dominant in the recipient language, then the more stable elements of the recipient language will be preserved while the less stable elements, such as lexical items, will be

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31 For citations and discussion, see Campbell 1993: 100; Matras 2010: 76-82; Wohlgemuth 2009: 11-17.
transferred from the source language to the recipient language. This explains why recipient language agentivity, or borrowing, results primarily in the transfer of lexical items.

Alongside borrowing and imposition, Van Coetsem recognizes a third type of transfer called *neutralization*. Neutralization occurs when an individual is equally dominant in two languages. In neutralization, the distinctions between recipient language agentivity and source language agentivity are no longer relevant, and any feature can be transferred. Van Coetsem uses this third category to explain contact situations such as Media Lengua, Mednyj Aleut (also called Copper Island Aleut), Michif, and Ma’a, which are more often termed “mixed languages” in the linguistic literature. In his earlier work (1988: 87-91; 1995: 81), Van Coetsem limits the transfer types to borrowing and imposition and argues that neutralization is the state that occurs when the distinction between these two types is no longer clear. In his later work (1997, especially 2000), however, Van Coetsem follows Buccini (1992: 329-332) in recognizing neutralization as a third transfer type, with the caveat that it is of a different order than borrowing and imposition (2000: 43). He illustrates this difference between borrowing and imposition, on the one hand, and neutralization, on the other hand, by invoking the image of a triptych with the two outer panels corresponding to borrowing and imposition and the central panel representing neutralization (1997: 360; 2000: 42).

To summarize, then, for Van Coetsem, borrowing occurs in situations of recipient language agentivity and results in the transfer of the less stable domains of language, such as lexical items. Imposition, in contrast, occurs in situations of source language agentivity and results in the transfer of the more stable domains of language, such as phonological and grammatical features. Finally, neutralization occurs when the distinction between recipient language agentivity and source language agentivity is no longer relevant, i.e., it is neutralized. In situations of neutralization, any feature can be transferred. These three types of transfer are based on the linguistic dominance of the agents of change. The different linguistic effects of each of these three types of transfer are determined by the interplay between the linguistic dominance of the agents of change and the stability gradient of language.

2.5 The Typology of Thomason and Kaufman

In the same year that Van Coetsem published his *Loan Phonology and the Two Transfer Types in Language Contact*, Thomason and Kaufman published their *Language Contact, Creolization, and Genetic Linguistics* (1988). In this influential book, they proposed a typology of contact-induced change that distinguishes two primary types. First, there is *borrowing* which involves “the incorporation of foreign features into a group’s native language by speakers of that language” (1988: 37). In this case, the native language is maintained, i.e., there is *language maintenance*. The primary effect of borrowing is the transfer of lexemes (loanwords), though in cases of “strong long-term cultural pressure” anything can be transferred, including phonology, syntax, and even morphology. While the borrowing of

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38 The foundation for this typology was already laid in Thomason 1986: 265-274, where a distinction was made between borrowing and substratum interference, or more fully “interference that results from imperfect group learning during language shift.”
vocabulary can occur quickly, longer periods of intense contact are needed for the borrowing of phonology, syntax, and morphology. To capture this continuum, Thomason and Kaufman propose a Borrowing Scale that on one extreme has casual contact involving loanwords only and on the other extreme has heavy structural borrowing in situations of very strong cultural pressure (1988: 74-109; cf. Thomason 2001: 69-71). Borrowing, then, occurs in situations in which native speakers maintain their language, and it is primarily associated with the transfer of lexemes, though structure can be transferred as well, especially in situations of longer, more intense contact.

The second type of language contact for Thomason and Kaufman is *interference through shift*, which is defined as a type of language contact “that results from imperfect group learning during a process of language shift. That is, … a group of speakers shifting to a target language fails to learn the target language (TL) perfectly. The errors made by members of the shifting group in speaking the TL then spread to the TL as a whole when they are imitated by the original speakers of that language” (1988: 38-39). The primary effect of interference through shift is the transfer of phonology and syntax as well as occasionally morphology. These changes can take place in a relatively short period of time, in fact, as little as a generation. Interference through shift, then, occurs during cases of language shift when shifting speakers have imperfect knowledge of the recipient language, and it is associated primarily with the transfer of structure, such as phonology, syntax, and occasionally morphology.

The key variables for Thomason and Kaufman, then, are native language and maintenance vs. shift. In cases of language shift, non-native speakers of the recipient language transfer features of their native language (= source language) into the recipient language. This is *interference through shift*. In cases of language maintenance, native speakers of the recipient
language transfer features from another language (= source language) into the recipient language. This is *borrowing*. Finally, it should be noted that Thomason and Kaufman’s binary only includes cases of what they call “normal transmission” excluding mixed languages, pidgins, and creoles, which they argue are the result of different processes.39

2.6 Synthesis

The typology of Van Coetsem and of Thomason and Kaufman share a number of similarities. In a review of Thomason and Kaufman’s monograph, Van Coetsem notes that their typology “basically agrees” with the one that he espouses (1990: 261). Similarly, Thomason (2003: 691; cf. 2001: 95) observes that Van Coetsem argues for “a nearly identical distinction” to that proposed in her joint work with Kaufman. The similarities between the typologies of Van Coetsem and of Thomason and Kaufman are also recognized by others working in the field of contact linguistics. Guy (1990) and subsequently Ross (1991), for instance, attempt to combine the two proposals into a unified typology of language contact. Applying the typology of language contact to a practical problem, Louden (2000) also combines Van Coetsem’s proposal and Thomason and Kaufman’s into a single typology. Notwithstanding their many similarities, however, there is a fundamental difference between the typology of Van Coetsem and that of Thomason and Kaufman. Van Coetsem’s typology is based on the variable of linguistic dominance whereas Thomason and Kaufman’s is based on the variables of native language and of language maintenance vs. shift.

39 For an important critique of this false dichotomy between normal transmission and whatever its presumable counterpart would be (ab-normal transmission?!?), see Mufwene 2001.
The difference between the two typologies is most apparent in cases of language attrition. Consider, for instance, the case discussed by Ross (1991, with more details in 1987) in which the inter-clausal syntax of the Bel Group of Austronesian languages corresponds not to languages belonging to the same language family, but to the unrelated Papuan languages with which they are in contact. Ross describes the sociolinguistic situation as one in which the socially dominant Papuan speakers did not learn the Bel languages whereas the socially-subordinate speakers of the Bel languages often learned Papuan. Thomas and Kaufman would classify the changes in the Bel languages as borrowing since it is a situation of language maintenance involving native speakers. That is, the Bel languages continue to be spoken by the population. The difficulty, however, is that the contact-induced changes that occur are more in line with their shift-induced interference: systematic changes in syntax. It is in fact this difficulty that prompts Ross to classify this as an instance of imposition within the typology of Van Coetsem (in conversation with Guy 1990). What is important in this case, as Ross notes, is that native speakers of the Bel languages have become linguistically dominant in Papuan. In Ross’ words, speakers of the Bel languages “were already more at home in the Papuan language than in their inherited Austronesian language” (1991: 122). Thus, native speakers of the Bel languages are switching to Papuan and concomitantly losing their native language. In Van Coetsem’s typology, then, this is simply a case of imposition in which native speakers of the Bel languages have become linguistically dominant in Papuan. In Thomason and Kaufman’s typology, however, the changes in the Bel languages must be analyzed as borrowing since the Bel languages are maintained and since the changes involve “the incorporation of foreign features into a group’s native language by speakers of that language” (1988: 37) – their very definition of borrowing. For Thomason and Kaufman, changes
associated with interference through shift would only apply to changes in the Papuan language due to shifting native-speakers of the Bel languages. Thus, this case illustrates that the important variable in the typology of contact-induced change is the linguistic dominance of the agents of change (in this case, Papuan), and that the variables of language maintenance vs. shift (in this case, language maintenance) and of native language (in this case, the Bel languages) are not viable indicators of the type of change to be expected.\textsuperscript{40}

Thomas and Kaufman’s model, then, does not provide an economic account of cases of language attrition.\textsuperscript{41} In Thomas and Kaufman’s model, language attrition is to be classified as borrowing since it occurs in situations of language maintenance, and the agents of change are native speakers of the recipient language. Cases of language attrition, however, usually witness systematic changes in phonology and/or syntax, which are more in line with their category of shift-induced interference that occurs in situations of language shift and that involves agents of change that are non-native speakers. Van Coetsem’s typology, in contrast, does not face the same difficulty, since cases of language attrition are classified as imposition with the expected outcome. Van Coetsem’s imposition then is wider than Thomason and Kaufman’s interference through shift, whereas Van Coetsem’s borrowing is narrower than Thomason and Kaufman’s borrowing.\textsuperscript{42} Crucially, Van Coetsem’s typology is able to account for the fact that language shift and language attrition both involve linguistic dominance of the source language and that consequently language shift and language attrition both witness the same effects in the recipient language: systematic changes primarily in phonology and syntax as well as more rarely in

\begin{flushleft}
\begin{enumerate}
\item See also Ross 1991: 125-126.
\item So also Smits 1996: 52-54 where similar cases are discussed, including Iowa Dutch and Asia Minor Greek.
\item Louden 2000: 95; Smits 1996: 52-53.
\end{enumerate}
\end{flushleft}
morphology. As Smits notes, “[a]n important similarity between acquiring a language and ‘losing’ a language is that in both cases the recipient language is the linguistically non-dominant language. That is, in both cases knowledge of the recipient language is imperfect” (1996: 33). The inability of the typology of Thomason and Kaufman to account for cases of language attrition is indicative of a deeper theoretical problem. The crucial variable for a typology of language contact is not that of native language nor that of maintenance vs. shift, but rather it is that of linguistic dominance. Thus, the typology of Van Coetsem, with its basis on the variable of linguistic dominance, is the more robust typology of language contact.43

Finally, it should be noted that in her more recent work Thomason points out that the typology in Thomason and Kaufman 1988 needs to be revised since the crucial variable is not whether or not shift takes place, but whether or not there is imperfect learning.44 Thomason’s variable of imperfect learning is a close negative counterpart to Van Coetsem’s linguistic dominance. Thus, Thomason’s revised typology of contact-induced change closely approximates that of Van Coetsem. In Thomason’s revised typology, borrowing occurs when “the agents of change are fully fluent in the receiving language” and “imperfect learning plays no role in the transfer process” (2004: 7). This is similar to Van Coetsem’s borrowing in which the agents of change are dominant speakers of the recipient language, i.e., there is not imperfect learning in Thomason’s revised framework. Thomason’s second type of contact-induced change is shift-induced interference, which occurs in situations of imperfect learning. In contrast to her earlier views (see §2.5), her revised shift-induced interference does not necessarily involve language shift: “[w]hen imperfect learning enters the picture, I call the process shift-induced

interference, though sometimes there is no actual shift of one population to another group’s language because the L2 learners maintain their original L1 for in-group usage” (2004: 7). This is similar to Van Coetsem’s imposition in which the agents of change are dominant speakers of the source language, i.e., there is imperfect learning of the recipient language in Thomason’s revised framework. Thomason’s revised category of shift-induced interference without actual shift is able to capture situations of language attrition, such as that involving the Bel Group of Austronesian languages discussed above (p. 28-30). Thus, in adopting imperfect learning as the key variable, Thomason’s revised typology is very similar to Van Coetsem’s typology that adopts linguistic dominance as the key variable.45

2.7 Conclusion

This chapter has focused on establishing a contact-linguistic framework for the study of contact-induced changes in Syriac due to Greek. After a brief discussion of terminology (§2.2), the chapter turned to the various typologies of language contact (§2.3-§2.5). It was argued that the typology of Van Coetsem, with its basis on the variable of linguistic dominance, is the most robust. Thus, following Van Coetsem, this study adopts a three-fold typology of contact-induced change. First, there is borrowing (recipient language agentivity) in which the agents of change are dominant speakers of the recipient language. Borrowing results primarily in the

45 It should be noted that this revised typology has not been consistently implemented in Thomason’s more recent work. In a 2003 paper, for instance, Thomason classifies a case in which a native speaker of Italian began to have an “American accent” in her Italian after spending twelve years in the United States as borrowing. This case should, however, be classified as imposition – or in Thomason’s revised framework as shift-induced interference without actual shift – since the native Italian speaker arguably became linguistically dominant in the source language English.
transfer of lexemes. The second broad category of language-contact is that of imposition (source language agentivity), in which the agents of change are dominant speakers of the source language. Imposition results primarily in the transfer of phonology, syntax, and to a more limited extent morphology. Finally, there is neutralization in which an individual is equally dominant in two languages. Any feature can be transferred in neutralization.
3 The Socio-Historical Setting

“… the linguist who makes theories about language influence but neglects to account for the socio-cultural setting of the language contact leaves his study suspended, as it were, in mid-air …”
(Weinreich 1953: 4)

3.1 Overview

This chapter outlines the socio-historical context for the contact-induced changes that will be the subject of this study. It begins with a brief historical narrative of Syria and Mesopotamia from the beginning of the Seleucid Empire up to the Roman Empire (§3.2). It, then, turns to the topic of Greco-Roman influence on early Syriac-speaking culture (§3.3). The final and longest section of the chapter investigates language use among the inhabitants of Late Antique Mesopotamia and Syria with an eye towards establishing how contact-induced changes in Syriac due to Greek are to be classified within the typology of Van Coetsem (§3.4).

3.2 Historical Narrative

In November of 333 BCE, Alexander the Great defeated the Persian army led by Darius III at the plain of Issos in northwest Syria. Two years later, Alexander again defeated Darius III, this time in Gaugamela, east of the Tigris near Arbela (modern Erbil, Iraq). The outcome of these battles set into motion a number of changes that would affect the entire Near East.1 It

1 See Briant 1979; 1999.
marked the beginning of the end of the Achaemenid Empire. It also ushered in the Seleucid Empire, which would control Syria and Mesopotamia for the next two centuries. With the Seleucid Empire came the foundation of Hellenistic cities throughout Syria and Mesopotamia. In the case of Edessa, which would eventually become the geographic center of Syriac-speaking culture, Seleucus I Nicator transformed the older settlement of ʾUrhɔy (earlier Adme) into a Greek polis in 303/2 BCE and gave it the name of the ancient Macedonian capital. Hellenistic cities were also established at Antioch, Apamea, Ḥarran (Carrhae), Nisibis, Resḥ'ayna, Seleucia-Ctesiphon, and Singara, all of which were Aramaic-speaking at the time and would be at least partially Syriac-speaking in Late Antiquity. The Seleucids also brought the Greek language to Syria and Mesopotamia as the language of empire. Even though it never fully supplanted Aramaic in Syria and Mesopotamia, Greek became a well-established language of communication and commerce throughout the area. Already by the last quarter of the fourth century BCE, then, the Aramaic-speaking population of Syria and Mesopotamia came into contact with the Seleucid Empire and its Greek language.

Greek influence in the Near East became even more pronounced with the Roman conquest of the area. The second century BCE witnessed the partial disintegration of the Seleucid Empire. By 133 BCE, the region of Osroene and its important center of Edessa were

2 For an excellent history of the Achaemenid Empire, see Briant 2002.
3 For Hellenistic Syria and Mesopotamia, see Bowersock 1990: 29; Millar 1987; Sartre 2001: 60-63; 2005: 5-12.
4 See Briant 1978; Grainger 1990.
5 For the connection of Edessa with cuneiform Adme, see Harrak 1992.
6 It should be noted that Greek was present in Syria and Mesopotamia before the Seleucid Empire, as can be established by the existence of Greek loanwords in Aramaic beginning already in the mid-first millennium BCE (see §4.9).
7 For the Roman Near East in general, see Millar 1993; Sartre 2001; 2005.
ruled by the Abgarid dynasty. The area survived more or less as an independent state between the Roman Empire in the West and the Parthian Empire in the East until the middle of the third century. By the beginning of the second century CE, however, Rome began to play a more prominent role in the area. This reached a climax with the Abgarid ruler Abgar VIII (r. 177-212), who maintained close ties with the Roman Empire and was even granted Roman citizenship. Following the death of Abgar VIII and the short reign of his successor, Edessa was declared a Roman *colonia* in 212/213. Though the Abgarid dynasty was briefly restored in 239, Rome was again in power by 242. The (Eastern) Roman Empire would continue to control Syria and Mesopotamia up to the Arab conquests in the seventh-century (Seleucia-Ctesiphon fell in 637).

Prior to the establishment of Roman control of Edessa, Greek was the language of international communication and commerce throughout the Seleucid Empire. The Roman Empire did not significantly alter this. In general, the Roman Empire did not force the Greek-speaking provinces to adopt Latin. Rather, Greek remained the official language of empire in the eastern provinces. Latin had a more restricted use, being employed primarily in military matters. The use of Greek and Latin in a Roman city in Mesopotamia from the first centuries of the Common Era can be illustrated by the more than 150 documents discovered at Dura-Europos, an important military outpost on the Euphrates until its destruction in 256 CE. A

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8 In general, see Millar 1993: 457-467, 472-481; Ross 2001; Segal 1970: 1-61.
9 Unfortunately, there continues to be no comprehensive study of the history of Syria and Mesopotamia during the Late Antique period. For Edessa during this period, see Segal 1970: 110-216. For the Late Antique world more broadly, see the excellent overviews in Brown 1989 and Cameron 2012.
10 For the following, see Rochette 2010: 289-290.
11 All the texts are edited in Welles, Fink, and Gilliam 1959.
majority of the documents from this site are written in Greek or Latin. The documents from the archives of the Cohors Vicesima Palmyrenorum (a Roman military troop) are primarily in Latin (P.Dura 54-150). All of the texts associated with official military business are in Latin, including reports (P.Dura 82-97) and rolls and rosters (P.Dura 98-124). The famous Feriale Duranum, which is a calendar of official religious observances, is also in Latin (P.Dura 54). Correspondences by military officials are primarily in Latin though some are in Greek (P.Dura 55-81). Finally, judicial business and receipts from the archives of the Cohors Vicesima Palmyrenorum are primarily in Greek though a few are in Latin (P.Dura 125-129). In contrast to the predominance of Latin in the archive of the Cohors Vicesima Palmyrenorum, a vast majority of the texts found outside of this archive are in Greek (P.Dura 1-52). Thus, all of the texts from the registry office are in Greek (P.Dura 15-44), which include individual documents, such as a gift, loans, deeds of sale, deposits, a marriage contract, and divorce contracts. The lists and accounts are also in Greek (P.Dura 47-53) as are the texts associated with civil administration (P.Dura 12-14). Two letters are also in Greek, one of which may be an official letter (P.Dura 45) and the other of which is from a soldier (P.Dura 46). The documents from Dura-Europos, thus, illustrate the degree to which Latin was restricted to the military and even then to official military matters. Greek, on the other hand, was used by the military in some correspondences as well as in legal matters. Outside of the military, Greek was the official language for a vast majority of tasks. Thus, in Syria and Mesopotamia, Greek would have been the language of the Roman Empire with Latin restricted more or less to official military matters.
3.3 ʿUrhāy is Edessa

The Syriac-speaking culture that comes into view in the first centuries of the Common Era was one that had been in contact with the Greco-Roman world for centuries. The effects of these centuries of contact can be seen in various places. The art and architecture from the region, for instance, reflect significant Greco-Roman influence.\(^\text{12}\) This is perhaps most clear in the mosaics from the region around Edessa.\(^\text{13}\) A recently discovered mosaic, dated to 194, for instance, depicts Orpheus charming wild animals.\(^\text{14}\) Another depiction of Orpheus is known from a mosaic dated to 227/228.\(^\text{15}\) Finally, a mosaic dated to 235/236 depicts a Phoenix.\(^\text{16}\) Each of these mosaics has an inscription in Syriac; each, however, also depicts a clearly Greco-Roman motif. Thus, these mosaics reflect the influence of Greco-Roman culture in Edessa already from the late second century CE.\(^\text{17}\)

A further indication of Greco-Roman influence is found in early Syriac literature. One of the earliest texts to survive is the *Book of the Laws of the Countries*.\(^\text{18}\) The text is a philosophical-theological discussion, in the form of a Platonic dialogue, on fate and freewill. The main protagonist is Bardaişan (154-222), the earliest known author of classical Syriac, who was active in the court of the previously mentioned Abgar VIII (r. 177-212). The *Book of the

\(^{12}\) See Possekel 1999: 28 and especially Mango 1982. Images of many of the relevant pieces are available in the plates in Segal 1970.

\(^{13}\) See Bowersock 1990: 31; Possekel 1999: 28.

\(^{14}\) Published in Healey 2006, with further discussion in Possekel 2008.

\(^{15}\) Image in Segal 1970: pl. 44; Drijvers and Healey 1999: pl 53.

\(^{16}\) Image in Segal 1970: pl. 43; Drijvers and Healey 1999: pl 52.

\(^{17}\) This is not to minimize the Parthian features, which are also very much present.

Laws of the Countries was probably written in Edessa in ca. 220. Based on its form as a Platonic dialogue and its philosophical subject matter, it is a clear example of Greco-Roman influence in Edessa during the first centuries of the Common Era.\textsuperscript{19} Moving a little later in time, a more concrete example of Syriac and Greek interaction is found in the earliest extant dated Syriac manuscript (Brit. Libr. 12,150), which was written in Edessa in 411 CE.\textsuperscript{20} This manuscript contains numerous translations of Greek works, including Against the Manichaeans by Titus of Boṣra, selections of the Pseudo-Clementine Recognitions and Homilies, as well as the Theophany, the History of the Martyrs in Palestine, and the Panegyric on the Christian Martyrs all by Eusebius of Caesarea. This manuscript establishes the existence of a well-developed translation program from Greek into Syriac by at least the fourth century CE in Edessa and is thus a testament to the interaction of Syriac-speakers in Edessa with the Greco-Roman world at this time.

In their literature and in their art and architecture, then, the Syriac-speaking population of the early centuries of the Common Era show signs of significant contact with the Greco-Roman world. This contact was not limited, however, to literature, art, and architecture, but it also extended to language. It is clear from inscriptions and documents that the Greek language was present throughout the Syriac-speaking world of Late Antiquity. A vast majority of the inscriptions west of the Euphrates are written in Greek.\textsuperscript{21} In addition, a more limited number of Greek inscriptions come from east of the Euphrates, stretching from the Roman provinces of

\textsuperscript{20} For description, see Wright 1870-1872: 2.631-633. A color plate is available in GEDSH, 457.
\textsuperscript{21} The inscriptions are currently being collected in Inscriptions grecques et latines de la Syrie (1929-). Various inscriptions are also discussed in Bowersock 1990: 29-30; Kennedy and Liebeschuetz 1988: 69-70; Millar 1987; 2007; Possekel 1999: 27-28; Taylor 2002: 304-317 as well as in the Supplementum Epigraphicum Graecum (SEG).
Osrhoene and Mesopotamia to the Sasanian Empire and beyond.\textsuperscript{22} Greek inscriptions are, for instance, known from Syriac-speaking centers such as Edessa, Tella, Amid, and Nisibis, to name only a few. As expressions of the so-called ‘epigraphic habit’, inscriptions are not necessarily indicative of language use.\textsuperscript{23} These inscriptions do, however, at the very least establish that Greek was present in the Syriac-speaking world.

More compelling evidence for the interaction of Greek and Syriac derives from papyrological documents.\textsuperscript{24} As already mentioned, more than 150 documents were discovered at Dura-Europos. A majority of these are written in Greek or Latin though there are also a few in Iranian or Aramaic.\textsuperscript{25} In addition, one of the documents is (mostly) in Syriac: P.Dura 28, which is a bill of sale for a female slave dated 9 May 243.\textsuperscript{26} The main text of the document is in Syriac as are most of the signatures; the signature of the στρατηγός Aurelius Abgar, however, is in Greek as is that of Aurelius Mannos, who is described in Greek as ‘the one in charge of the sacred and civic (archives)’ (ὁ ἐπὶ τοῦ ἱεροῦ καὶ τοῦ πολείτικοῦ). An even higher degree of interaction between Greek and Syriac is found in the third-century cache of texts known as P.Euph that likely originated from Appadana (Neapolis), just north of Dura-Europos on the Euphrates. This cache includes two Syriac parchments (P.Euph 19, 20),\textsuperscript{27} as

\begin{itemize}
\item A useful collection is available in Canali De Rossi 2004. A number of these inscriptions are found with additional discussion in Merkelbach and Stauber 2005.
\item Fraade 2012: 22*-23*. For the ‘epigraphic habit’, see MacMullen 1982; Meyer 1990.
\item For a general discussion of papyrology in the Roman Near East, see Gascou 2009. A checklist of papyrological texts is available in Cotton, Cockle, and Millar 1995.
\item All are edited in Welles, Fink, and Gilliam 1959.
\item The most accessible version of the text is Drijvers and Healey 1999: 232-236 [s.v. P1]. See also Bellinger and Welles 1935; Goldstein 1966; Healey 2009: 264-275; Torrey 1935; Welles, Fink, and Gilliam 1959: 142-149 with pl. LXIX, LXXI. Plates are also found in Moller 1988: 185-186.
\item P.Euph 19 is a transfer of debt dated 28 Dec. 240 (the most accessible version of the text is Drijvers and Healey 1999: 237-242 [s.v. P2]; see also Aggoula 1992: 391-399; Brock 1991;
\end{itemize}
well as nineteen Greek papyri and parchments. On several of the Greek documents, there is additional writing in Syriac. P.Euph 6, for instance, along with its duplicate P.Euph 7, records the sale of a slave in Greek, which is followed by seven lines of Syriac summarizing the sale. These two caches of documents illustrate the high degree of interaction between Greek-speakers and Syriac-speakers, at least on the official level of administration, already in the third century CE.

3.4 Analyzing Contact-Induced Changes in Syriac due to Greek

Based on inscriptions and documents, it can be established that Greek and Syriac co-existed in Late Antique Syria and Mesopotamia. It is now necessary to investigate how best to classify contact-induced changes in Syriac due to Greek within the typology of Van Coetsem. Based on the arguments presented in Chapter §2, this study adopts the three-fold typology of contact-induced change proposed by Van Coetsem. First, there is borrowing (recipient language agentivity) in which the agents of change are dominant speakers of the recipient language. Borrowing results primarily in the transfer of lexemes. The second broad category of language contact is that of imposition (source language agentivity), in which the agents of change are dominant speakers of the source language. Imposition results primarily in the transfer of phonology, syntax, and to a more limited extent morphology. Finally, there is neutralization in

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28 These are edited in Feissel and Gascou 1989; 1995; 2000; Feissel, Gascou, and Teixidor 1997.
which an individual is equally dominant in two languages. Any feature can be transferred in neutralization.

The question to be addressed now is how best to classify contact-induced changes in Syriac due to Greek. Is this a situation of borrowing, imposition, or neutralization in Van Coetsem’s typology? It is proposed that this contact situation is best analyzed as a situation of borrowing in which speakers linguistically dominant in the recipient language, Syriac, transferred features from the source language, Greek. This analysis is supported by the socio-linguistic context as well as by the linguistic data.

The evidence for this question is unfortunately slim being almost entirely restricted to literary sources that do not provide unbiased accounts of language use. In addition, the meager evidence that is available is not representative of the population as a whole, but rather it relates exclusively to a restricted subset of the population, particularly authors and public figures. Notwithstanding these difficulties, it is important to see what the literary sources can reveal about language use among the Late Antique population of Syria and Mesopotamia.²⁹

It is convenient to divide the population of Late Antique Syria and Mesopotamia into two categories: those whose native language was Greek and those whose native language was Syriac.³⁰ The latter group is discussed first. Among the segment of the population whose native language was Syriac, there was a continuum of knowledge of Greek. On one end of the continuum, there were those who had little to no knowledge of Greek. Included in this group was the ‘Persian sage’ Aphrahat (fl. 337-345), author of 23 Demonstrations (taḥwyḵ̄to)³¹ who

²⁹ For the following, see the earlier discussion in Brock 1994: 153-158; 1998: 714-717.
³⁰ It should be recalled from the previous chapter that native language is not necessarily the same as dominant language (see p. 21-22, 28-30 above).
³¹ Edited in Parisot 1894-1907. Several scholars, most notably Fiey (1968), have argued that the text transmitted as Demonstration 14 may have been written by a different author and only
lived in the Sassanian empire and who probably did not know any Greek. Similarly, the well-known author and poet Ephrem the Syrian (d. 373), who spent most of his life in Nisibis, is usually said to have known little to no Greek. It should be noted, however, that the baptistery in the Church at Nisibis where Ephrem was a deacon contains a Greek building inscription dated to 359/360. So, at the very least, Ephrem must have been exposed to written Greek. Moving a little later in time, the influential West-Syriac poet Yaʿqub of Serugh (d. 521) likely had no knowledge of Greek (Brock 1994: 157), even though he studied Syriac translations of Greek writings in Edessa. Undoubtedly, a large number of other individuals in Late Antique Syria and Mesopotamia could be added to these who spoke (and wrote) in Syriac, but who had little to no knowledge of Greek. These people were all linguistically dominant in Syriac.

Among the people whose native language was Syriac, there were also those who learned some Greek but likely lacked a high degree of proficiency in the language. Within this group was likely Philoxenos (d. 523), bishop of Mabbug. Philoxenos was born outside of the Roman Empire in Beth Garmai, and he was educated in Edessa at the School of the Persians. Throughout his career, Philoxenos was actively involved in trying to incorporate Greek

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33 See, e.g., Pat-El 2006: 43. For additional references, see below at pp. 403-405. For Ephrem more generally, see, Brock, in GEDSH, 145-147; a guide to Ephrem’s works is available in Brock 2007b; a bibliography on Ephrem is available in den Biesen 2011.
36 For Philoxenos, see de Halleux 1963; Michelson 2007.
37 For the School of the Persians, see Becker 2006.
theological idioms into Syriac and even sponsored new translations of Greek works, including a new translation of the New Testament by Polykarpos (the now lost Philoxenian Version). Philoxenos’s writings survive only in Syriac, but it is clear that he knew some Greek. There are, however, indications that his knowledge of Greek was limited. In his *Commentary on John*, for instance, Philoxenos discusses the similarity in spelling between the Greek words γένεσις ‘becoming’ (Liddell and Scott 1996: 343) and γέννησις ‘birth’ (Liddell and Scott 1996: 344), stating:

‘The reading of the words “becoming” and “birth” are similar to one another in the Greek language, because two η’s are placed one after another in “becoming,” but only one in “birth”’ (de Halleux 1977: 43.17-19).

Philoxenos is correct to point out that Greek γένεσις and γέννησις are similar in spelling; he, however, confuses the two words claiming that the former has two η’s and the latter only one.38

It should be noted that this is not an isolated slip, but that other such mistakes involving Greek are found in Philoxenos’s writings.39 A further indication that Philoxenos had a limited knowledge of Greek is that he did not undertake translations from Greek himself, but rather he commissioned translators such as Polykarpos.40 Finally, when writing to Maron of Anazarbus, Philoxenos mentions that his letter would be translated from Syriac to Greek, which was presumably the language that Anazarbus read.41 This likely implies that Philoxenos was unable to respond in Greek, and so he wrote the letter in Syriac and then had it translated into Greek.42 Thus, though he clearly had some knowledge of Greek, Philoxenos seems to have lacked a high degree of proficiency in the language, probably to the point that he could not write or speak

38 For discussion, see de Halleux 1963: 22.
41 The relevant passage is found in Lebon 1930: 55.21.22 (Syr.); 80.12-13 (LT).
42 For a similar interpretation, see de Halleux 1963: 21; Lebon 1930: 80 n. 2.
fluently. This is likely the case for a number of other native Syriac-speakers in Late Antique Syria and Mesopotamia. People at this point of the continuum were linguistically dominant in Syriac even if they had some knowledge of Greek.

There were also native Syriac-speakers who learned enough Greek to be able to speak and/or write in the language. One such person was Yuḥanon of Tella (d. 538), who was born in Kallinikos in 482. According to his Vita, Yuḥanon’s father died when he was only two and half years old, but his mother and grandparents ‘educated him in the writing (seḇra) and wisdom of the Greeks’ (Brooks 1907: 39.22). The word ‘writing’ (seḇra) in this passage could refer to writing in the sense of ‘literature’, but it could also refer to writing in the sense of ‘literacy’. His education was facilitated by a ‘teacher’ (Syriac pdgwg’ < παιδαγωγός [Liddell and Scott 1996: 1286]), who was charged with instructing him in the pagan Greek authors. Yuḥanon was also employed in the praetorium of the dux in Kallinikos (Brooks 1907: 39.23-24) and had all of the preparation necessary for a profitable secular career. Against his mother’s wishes, Yuḥanon adopted a monastic life and eventually became bishop of Tella. His writings that survive are only in Syriac, and there is no evidence that he ever wrote in Greek. It


\[\text{\footnotesize{44}}\] In a passage of special interest to literacy and gender in Late Antiquity, P.Dura 28 concludes: ‘I PN confess that I wrote on behalf of PN my wife in the subscription because she does not know “writing” (spr’ )’ (Ins. 20-22). This clearly establishes one of the meanings of seḇra as ‘literacy’, a definition not found, for example, in Sokoloff 2009: 1035.

is, however, clear that he could speak Greek, because Greek is said to serve as the common language between Yuḥanôn and his Persian captors in one episode in his \textit{Vita}:

\begin{quote}
‘When the Marzaban heard this, he immediately commanded that he (\textit{viz.} Yuḥanôn of Tella) sit before him on the ground, and he spoke with him through an interpreter. That one said to him in Greek, “How did a man such as you dare to cross into our place without us? Do you not know that this is another polity?”’\textsuperscript{46} The blessed one said to him through the interpreter in Greek, “It is not the first time that I have crossed into this land…” (Brooks 1907: 71.21-72.2).
\end{quote}

This passage establishes that Yuḥanôn of Tella could speak Greek; it also provides an interesting glimpse into the use of Greek in the Sassanian Empire in the early sixth century. Thus, Yuḥanôn of Tella provides an example of a native Syriac-speaker who received a Greek education as a child that enabled him to communicate in Greek later in life. It seems clear that people like Yuḥanôn of Tella, who knew enough Greek to communicate, would still have been dominant speakers of Syriac.

Moving along the continuum, there were those whose native language was Syriac and who also had a high degree of knowledge of Greek. To this group, one could point to translators such as Pawlos of Kallinikos (first half of 6th cent.) and Sergios of Reshʿayna (d. 536), both of whom clearly had high facility in Greek.\textsuperscript{47} Unfortunately, little is known about their biographies so it is difficult to say much about their language use. More is, however, known about the language use of Rabbula (d. 435/436), the controversial bishop of Edessa.\textsuperscript{48} In his \textit{Vita}, Rabbula is said to have been instructed in Greek ‘writing’ as part of his education.\textsuperscript{49}

\textsuperscript{46} The word translated here as ‘polity’ is Syriac \textit{pwlyty} < πολιτεία (Liddell and Scott 1996: 1434).

\textsuperscript{47} For the former, see Van Rompay, in \textit{GEDSH}, 323-324 and (with more detail) King 2007; 2008: 175-177, \textit{passim}. For the latter, see Brock, in \textit{GEDSH}, 366 with additional references.


‘When he grew up, he was instructed in Greek “writing” (σεφρα) as a child of rich nobles of the city of Qenneshrin’ (Overbeck 1865: 160.25-27).

As in the case of Yuhanon of Tella (discussed above), the word ‘writing’ (σεφρα) in this passage could refer to ‘literature’ or ‘literacy’. A clearer picture of Rabbula’s language use can be obtained from the fact that Rabbula wrote and spoke in both Greek and Syriac. Several of his works related to regulating clergy and monastics were written in Syriac (CPG 6490-6492).\(^{50}\) His Vita relays that he also wrote 46 letters in Greek.\(^ {51}\) In addition, he is said to have translated Cyril of Alexandria’s ‘On Orthodox Faith’ from Greek to Syriac (CPG 6497).\(^ {52}\) Finally, it is known that he preached a homily in Constantinople in Greek (CPG 6496).\(^ {53}\)

The homily that Rabbula preached in Constantinople in Greek provides further evidence concerning his language use. He begins this homily by expressing hesitancy about speaking Greek in front of a native Greek-speaking audience:

‘We are small in our word (mëltθ) and in our knowledge. You, however, are great in spiritual wisdom and in acuteness of language (ltišuθ dleššom). Because of this, who would not be afraid in a church such as this!’ (Overbeck 1865: 239.5-8).

The contrast between Rabbula being small in word (mëltθ) and his audience being large in acuteness of language (ltišuθ dleššom) suggests that Rabbula was not entirely comfortable speaking Greek and that he probably would have preferred to deliver his homily in Syriac. A little later in the homily he goes on to apologize more explicitly for his facility in Greek, since he was a ‘man of the countryside (qurywyθ) and living among country-folk (qurywyye) (where) it...’


\(^{51}\) Overbeck 1865: 200.18-23. Several letters that are attributed to him, or selections thereof, are preserved in Syriac (CPG 6493-6495; ed. Overbeck 1865: 222-238).


\(^{53}\) The text survives only in Syriac translation (ed. Overbeck 1865: 239-244). For discussion, see Blum 1969: 131-149.
is Syriac that we mostly speak’ (Overbeck 1865: 241.11-12). While these statements likely involve some rhetorical modesty, they do still seem to suggest that Rabbula was linguistically dominant in Syriac. Thus, when Rabbula was speaking Greek in Constantinople, it would be a situation of imposition, since he had linguistic dominance in the source language, Syriac. This would have resulted in the transfer of Syriac phonology and syntax into his Greek, changes of which Rabbula himself seems to have been all too well aware. When Rabbula was speaking Syriac, however, it would be a situation of borrowing since he had linguistic dominance in the recipient language. Thus, Rabbula seems to have had linguistic dominance in Syriac and so could borrow from Greek into Syriac; he also spoke Greek, though not as his linguistically dominant language, in which case he would have imposed Syriac features onto Greek.

Rabbula fell far along on the continuum of knowledge of Greek among native Syriac-speakers. He was not, however, at the end of this continuum. There were native speakers of Syriac who wrote exclusively in Greek and seem to have been more a part of the Greco-Roman world than the Syriac-speaking one. One such person is Eusebius of Emesa (died before 359). Eusebius was born in Edessa around 300, and so his native language would have been Syriac. In addition, Eusebius spoke Greek fluently and wrote, it seems, entirely in that language.

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54 So already Brock 1967: 155. In his The Orator’s Education (4.1.9; ed. Russell 2001), for instance, Quintilian notes that a standard rhetorical ‘trick’ (simulatio) of the προοίμιον is to feign to be inexperienced or incompetent. As a Syriac comparison, many of the memre by Yaʿqub of Sarug (d. 521) begin with a προοίμιον in which he declares his inadequacy for expressing his subject matter (see Blum 1983: 308-309). For Greek rhetorical training in the Syriac milieu, see Watt 1985; 1986; 1987; 1989; 1990; 1993a; 1993b; 1994a; 1994b; 1995; 1998; 1999; 2005; 2009.

55 As a comparison, the “Syrian rhetor” Lucian of Samosata mentions his foreign accent when speaking Greek (The Double Indictment, ed. Harmon 1921: 136-137; cf. Becker 2006: 11).

56 For Eusebius of Emesa, see ter Haar Romeny 1997: 7-12; Petit, Van Rompay, and Weitenberg 2011: xxiii-xxix; Van Rompay, in GEDSH, 155; Winn 2011.
Unfortunately, little else can be definitively said about Eusebius’s language use.\(^{57}\) A clearer picture of language use, however, can be found with Theodoret of Cyrrhus (393-466).\(^{58}\) Theodoret was born in Antioch to wealthy parents, and he seems to have received a thoroughly Greek education. He wrote a number of works in Greek, including biblical commentaries, dogmatic works, an ecclesiastical history, a hagiography of monks from Syria, as well as the \textit{Cure for Hellenic Maladies}, which engages with pagan Greek thought and philosophy. His written Greek is of a very high literary character.\(^{59}\) Notwithstanding his facility in Greek, it is known that Theodoret also spoke Syriac. This is clear from a number of passages in his \textit{History of the Monks of Syria} in which he converses with monks in Syriac.\(^{60}\) In one instance, Theodoret even understands a demon speaking to him in Syriac (21.15-16).\(^{61}\) What is especially important for the argument being made here is that Theodoret not only spoke Syriac, but that Syriac seems to have been his native language. The clearest evidence for this derives from a passage in the \textit{Cure for Hellenic Maladies}, in which Theodoret states:

\begin{quote}
καὶ ταῦτα λέγω οὐ τὴν Ἑλλάδα σμικρύνων φωνήν ἢς ἀμηγέπη μετέλαχον οὐδὲ έναντία γε αὐτῇ ἕκτινων τροφεία ... ‘I say these things not to belittle the Greek language, \textit{in which I have obtained a share to some extent}, nor to not make a return to it for bringing me up ...’ (Canivet 1958: 5.75).\(^{62}\)
\end{quote}

\(^{57}\) For discussion, see ter Haar Romeny 1997: 9-10 along with Brock 1998: 715 with n. 15.
\(^{58}\) For Theodoret, see Urbainczyk 2002.
\(^{59}\) Photius (d. ca. 893) praises it in his \textit{Bibliotheca}, 31 (Henry 1959-1991: 1.17-18).
\(^{61}\) It should be noted that Brock uses this as evidence that Theodoret “normally spoke Syriac” (1994: 154 n. 27).
\(^{62}\) It remains unclear what exactly Theodoret intends with ἀμηγέπη, which typically means ‘in one way or another’ (Liddell and Scott 1996: 82). The translation above follows Urbainczyk (2002: 17) and Millar (2007: 117) in rendering it ‘to some extent’. Canivet translates ‘qui est bien un peu la mienne’ (1958: 250).
In its most straight-forward interpretation, this passage implies that Greek was not Theodoret’s native language.\textsuperscript{63} Thus, Theodoret’s native language seems to have been Syriac. In addition, based on his use of Syriac in the \textit{History of the Monks of Syria}, it can be surmised that Theodoret continued to speak this language well into his adult life. Finally, it is clear that Theodoret also had a very high knowledge of Greek. Given these points, Theodoret would represent the very far end of the continuum of Syriac-speakers who learned Greek. In Van Coetsem’s typology, he would probably be approaching neutralization in which an individual is equally dominant in two languages.

So, to summarize up to this point, there was a continuum of knowledge of Greek among people whose native language was Syriac in Late Antique Syria and Mesopotamia. At one end of the continuum, there were those like Aphrahat, Ephrem, and Yaʿqub of Serugh, who likely had little to no knowledge of Greek. At the other end of the continuum, there was someone like Theodoret, whose native language seems to have been Syriac, but who wrote extensively in a very high register of Attic Greek and who was fully at home in the Greco-Roman world. In between these two poles, there were a number of native Syriac-speakers who had some knowledge of Greek, from Philoxenos and his limited facility in the language to Rabbula and

\textsuperscript{63} So also Bardenhewer 1924: 221; Bardy 1948: 19; Brock 1998: 714; Canivet 1977: 38-39 with n. 11. More recently, however, this interpretation has been questioned. Urbainczyk (2002: 16-17), for instance, accepts the straight-forward interpretation of the sentence, but proposes that it is to be understood ironically, since Theodoret is after all writing in Greek. Similarly, Millar (2007: 117) argues that this is ‘a conventional expression of modesty’ on the part of Theodoret. It should be noted, however, that both Urbainczyk and Millar have an ulterior motive for rejecting the straight-forward interpretation of the passage: neither thinks that Syriac was in fact Theodoret’s first language. Their arguments for this are, however, insufficient, being built around the logic that Theodoret is a major author of literary Greek, \textit{ergo} he must have been a native speaker of Greek. This argument does not hold up, since literary ability and native language are not directly correlated.
his ability to write and speak fluently. Thus, there is ample – albeit mostly anecdotal – evidence that a number of native Syriac-speakers learned Greek to varying degrees, but remained linguistically dominant in Syriac.

Shifting now to the segment of the Late Antique population whose native language was Greek, an interesting difference emerges. There are no attested cases in which a native Greek-speaker is known to have learned Syriac. This is of course an argument from silence, but it is striking nonetheless. The lack of evidence for Greek-speakers learning Syriac provides an important contrast for the situation described above for Syriac-speakers learning Greek. One particularly remarkable foil is Severus (d. 538), who was patriarch of Antioch between 512 and 518 and who continued to serve as the leader of the anti-Chalcedonians until his death.\(^{64}\) Severus was born to a pagan family in Sozopolis in Pisidia, a region in south-western Anatolia. As a native of Pisidia, his native language would have been Greek. He was educated in Alexandria and then in Beirut. While in Beirut, he converted to Christianity and eventually became a monk. He was elected Patriarch of Antioch in 512, but in 518 with the ascension of the pro-Chalcedonian Justin I he was forced to flee to Egypt, where he spent the remainder of his life. Of particular interest to the current discussion is Severus’s time in Antioch as Patriarch. While Antioch had a large Greek-speaking population, many members of Severus’s patriarchate would have been Syriac-speaking, especially moving east. Thus, he would have had good reasons to learn Syriac. There is, however, no indication that he ever did this. All of Severus’s oeuvre was written in Greek and then translated into Syriac during his lifetime. In addition, and more importantly to the point being made here, there is no evidence that he had

\(^{64}\) For Severus, see Brock, in *GEDSH*, 368-369 and (with more detail) Allen and Hayward 2004.
the ability to use Syriac in any capacity. This is particularly interesting since Syriac-speakers were extremely receptive to Severus, who became one of the most popular and influential leaders of the anti-Chalcedonians. Thus, Severus provides an instructive contrast to Syriac-speakers learning Greek. He is a native speaker of Greek who had various reasons to learn Syriac, but there is no indication that he actually did so. Severus is not an isolated example; he seems to be representative of Greek-speakers in Late Antique Syria and Mesopotamia in that he did not learn Syriac.

With the socio-linguistic evidence now laid out, the discussion turns to how contact-induced changes in Syriac are to be analyzed within Van Coetsem’s typology. There are no known examples in which a native Greek-speaker learned Syriac. Thus, there is no occasion for imposition with native Greek-speakers. With native Syriac-speakers, there is a continuum of knowledge of Greek. In a vast majority of the known cases, if not all of them, these speakers remained linguistically dominant in Syriac. Thus, they would have borrowed from Greek into Syriac when using Syriac and imposed from Syriac into Greek if using Greek. Based on the socio-linguistic evidence that is available, then, contact-induced changes in Syriac due to Greek

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65 It is, of course, likely that there were at least a few native Greek-speakers who learned Syriac. Their numbers would, however, have been very small, and thus it is unlikely that any changes in their Syriac due to imposition would have spread throughout the Syriac-speaking population. For the distinction between contact-induced change on the individual level and the diffusion of those changes to the broader community, see Van Coetsem 2000: 40, 57, 281.

66 At the very far end of the continuum of knowledge of Greek among native Syriac-speakers, there may have been a small segment of the population who had equal linguistic dominance in Greek and Syriac, such as perhaps Theodoret, or who even had a switch of linguistic dominance from Syriac to Greek. In these limited cases, there would have been neutralization or imposition, respectively. It should be noted, however, that the number of such individuals would again have been so small that it is unlikely that any changes in their Syriac would have spread throughout the Syriac-speaking population as a whole.
should be analyzed as borrowing in which the agents of change were dominant speakers of the recipient language.

The linguistic data corroborate this analysis of borrowing. Syriac contains a large number of Greek loanwords. There are in fact more than eight-hundred Greek loanwords attested in pre-eighth-century Syriac texts that were not translated from Greek.67 As discussed earlier, the transfer of lexemes is the expected effect of borrowing.68 In contrast, the types of changes that are associated with imposition are not found in Syriac: there is no evidence for the systematic transfer of phonological, morphological, or syntactic features from Greek to Syriac. The only phonological features transferred are associated with loanword integration, such as the ‘emphatic’ ρ (see §5.2.12). The only Greek morphological features in Syriac are secondary developments due to analogy, such as the Berufsnamen suffix -ορ (see §7.3.3). The syntactic features transferred are cases of grammatical replication in which speakers of Syriac created a new grammatical structure on the model of a structure in Greek (see §8-10). These cases of grammatical replication, however, are isolated, non-systematic, and of limited scope in contrast to the transfer typically witnessed in imposition.69 Thus, the linguistic evidence also suggests that the contact-induced changes in Syriac due to Greek should be analyzed as borrowing and not as imposition or neutralization.

67 These are analyzed in detail in §3-7.
69 For a discussion of how grammatical replication (or the transfer of structure more generally) fits within a situation of borrowing, see §11.2.
3.5 Conclusion

Aramaic-speakers were in contact with the Greek language from the middle of the first millennium BCE. Alexander the Great’s defeats of Darius III in the 330s BCE ultimately led to the establishment of Seleucid control over Syria and Mesopotamia. With the Seleucid Empire came the foundation of Hellenistic cities and the use of Greek as the official language of Empire in the region. Contact between Aramaic and Greek became even more pronounced with the Roman conquest of the area in the first centuries of the Common Era. Thus, the Syriac-speaking culture that comes into view in the first centuries of the Common Era was one that had been in contact with the Greco-Roman world and its Greek language for centuries. Given that Greek was the official language of the (Eastern) Roman Empire, it is no surprise that many native Syriac-speakers learned it to one degree or another. Interestingly, there are no indications that Greek-speakers ever learned Syriac. This suggests that the contact-induced changes in Syriac due to Greek should be analyzed as the result of borrowing within the typology of Van Coetsem. That is, they are the result of dominant speakers of Syriac transferring features from Greek into their own language. This analysis is corroborated by the linguistic data, since it is primarily loanwords, which are more common in borrowing, that were transferred into Syriac from Greek and not phonology or syntax, which are more common in imposition.
Part II: Loanwords
“No language is entirely free from borrowed words, because no nation has ever been completely isolated” (Jespersen 1922: 208 n. 1)

4.1 Overview

It is widely recognized that one of the most basic effects of language contact is the transfer of lexemes from one language to another. In his *Language*, for instance, Sapir notes that “[t]he simplest kind of influence that one language may exert on another is the ‘borrowing’ of words” (1921: 193). Given the prolonged period of contact between Syriac and Greek described in Chapter §3, it comes as no surprise that Syriac contains numerous Greek loanwords. There are in fact more than eight-hundred Greek loanwords attested in pre-eighth-century Syriac texts that were not translated from Greek. The passage in (4-1) provides several examples of Greek loanwords in Syriac:

(4-1) *Memra on Elijah and his Ascension into Heaven* by Ya’qub of Serugh (d. 521; ed. Bedjan 1905-1910: 4.226-259; see also Kaufman 2009: 349-427)
kmɔ  ʾgwɔn’  wqʾrs’  pgaʾ( w)  beh
how  contest-M.PL.EMP  and  +  battle-M.PL.EMP  encounter-SUF.M.PL  in  +  him
bʾɔlmɔ  bišɔ
in  +  world-M.SG.EMP  evil-M.SG.EMP
whayden  ʾaḥreh  ʾaṭrɔ  dmawtɔ
and  +  then  cross-SUF.3.M.SG  +  him  to  +  place-M.SG.EMP  NML  +  death-M.SG.EMP
wʾaghi  menneh
and  +  escape-SUF.3.M.SG  from  +  him
laḵmɔ  pahḥe  bʾurḥeh  dʾɔlmɔ
to  +  how  trap-M.PL.EMP  in  +  way-F.SG.CON  +  him  NML  +  world-M.SG.EMP
hzɔ  daṭmirin
see-SUF.3.M.SG  NML  +  be.hidden-PART.M.PL.ABS
wašwar  ʾennon  bʾamlɔ  rabbɔ
and  +  leap-SUF.3.M.SG  them-M  in  +  world-M.SG.EMP  great-M.SG.EMP
wken  ʾetnasṣah
and  +  then  succeed-SUF.3.M.SG
kmɔ  kyriwɔn’  nahzuh  ʾellpẽh
how  storm-M.PL.EMP  shake-SUF.3.M.PL  +  her  to  +  boat-F.SG.CON  +  his
byammɔ  mičɔ
in  +  sea-M.SG.EMP  dead-M.SG.DET
How many **contests** and **battles** encountered him in this evil world until he crossed over the place of death and escaped it?

How many hidden traps did he see in the path of the world until he jumped over them with great effort and so succeed?

How many **storms** shook his boat in the mortal sea until he arrived at the **harbor** of the immortals?

How much did he struggle with the ruler who guards the **air** ...’ (233.11-17)

This seven line excerpt derives from a *memra*, or metrical homily, written in Syriac by the influential West-Syriac poet Yaʿqub of Serugh (d. 521). The author was a native Syriac-speaker who probably had no knowledge of Greek.¹ In all likelihood, this homily was preached to a Syriac-speaking congregation located somewhere near the Euphrates, perhaps in either Ḥawra or Batnan da-Serugh. Five of the sixteen substantives in the excerpt have a Greek origin:

(4-2)  a. ʾr ‘air’ < ἀήρ (Liddell and Scott 1996: 30)


a. ʾkmw ‘storm’ < χειμών (Liddell and Scott 1996: 1983)

c. ʾlm ʾ ‘harbor’ < λιμήν (Liddell and Scott 1996: 1050)

d. ʾqš ‘battle’ < καιρός (Liddell and Scott 1996: 859-860)

These words illustrate the topic of the next four chapters (§4-7): Greek loanwords in Syriac. The current chapter begins with a brief overview of the history of research on Greek loanwords in Syriac, and then it turns to the relevant methodological issues.

4.2 History of Research

The Greek loanwords in Syriac have been an object of study for more than a millennium. Already in the ninth century, the well-known translator Ḫunayn b. Ishāq (d. 873) wrote several treatises on Syriac lexicography that likely touched upon Greek loanwords in Syriac. In addition to his work on homographs Ḫṭḥḥ ḏšṁḥ ḏḥṁyʿe ‘Book of Similar Words’, he wrote a Compendious Lexicon (ḥḥḵṣyqWN ḏḥḥṣqṭḥ), which unfortunately does not survive, though it in all likelihood included lemmata for Greek loanwords in Syriac. In addition, Ḫunayn authored a work entitled ṭḥḥ ᶠḣḥ ḏẖ hdc ḥṣḥyʿc ‘Explanation of Greek words with (or in?) Syriac’. Though again this work does not survive, it may well have been an early treatment dedicated solely to Greek loanwords in Syriac.

Ḫunayn’s lexicographical work was incorporated into a number of later lexica. This includes the Lexicon of his student Ishoʿ bar ‘Ali, who lived in the second half of the ninth century. In the introduction to his Lexicon, Bar ‘Ali states that he employed the Lexicon of Ḫunayn as well as that of another ninth-century lexicographer, Ishoʿ of Merv, when compiling

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² Edited in Hoffmann 1880a: 2-49 along with Gottheil 1887: *61-*67; 1889.
³ So Taylor, in *GEDSH*, 392.
⁴ The Lexicon is edited in Hoffmann 1874; Gottheil 1910-1928. There has been a good deal of confusion in the secondary literature concerning the biography and identity of the lexicographer Bar ‘Ali; for which, now see Butts, in *GEDSH*, 53-54 and (with more detail) Butts 2009a.
his own *Lexicon.* Bar ʿAli’s *Lexicon* includes a number of Greek loanwords that are explained in Syriac and/or in Arabic. In the mid-tenth century, another lexicographer ʿHasan bar Bahlul composed a large *Lexicon,* which relied on Hunayn as well as other sources. Bar Bahlul’s *Lexicon,* like Bar ʿAli’s, contains a considerable number of Greek loanwords with Syriac and/or Arabic definitions. The lexica of Bar ʿAli and Bar Bahlul represent extensive treatments of Greek loanwords in Syriac within the Syriac tradition itself.

The lexica of Bar ʿAli and Bar Bahlul were incorporated into the two large Syriac lexica that were published at the end of the nineteenth century: the *Thesaurus Syriacus* by Robert Payne Smith (1879-1901), which appeared in an English abridgment as *A Compendious Syriac Dictionary* by his daughter Jessie (1903), and, to a lesser extent, the *Lexicon Syriacum* by Carl Brockelmann (1895 [1st ed.]; 1928 [2nd ed.]), which was recently translated into English, with substantial updates and corrections, as *A Syriac Lexicon* by Michael Sokoloff (2009). These two large Latin lexica, along with their English versions, include lemmata for most of the Greek loanwords that are found in Syriac texts.

Outside of the standard Syriac lexica, the only monographic study of Greek loanwords in Syriac is A. Schall’s *Studien über griechische Fremdwörter im Syrischen* (1960). This book is divided into two parts. The first provides an inventory of Greek loanwords found in non-translated Syriac literature up to Ephrem in the middle of the fourth century. The second lists Greek loanwords related to religion, cult, and myth that are found throughout Syriac literature, (unfortunately) disregarding diachronic considerations. While the first part is relatively

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5 Ishoʿ of Merv is probably to be distinguished from Zekarya of Merv, who is often cited in the *Lexicon* of ʿHasan bar Bahlul (mid-tenth century). See Baumstark 1922: 241-242; Butts, in *GEDSH*, 216-217, against Duval 1907: 297.
6 Edited in Duval 1888-1901.
7 A valuable Greek-Syriac index for this work is provided in Voigt 1998a.
comprehensive, the second is not only limited in scope, but it also lacks a number of words and references.\(^8\)

Since Schall’s monograph, a number of studies have appeared that analyze Greek loanwords in individual corpora or authors.\(^9\) The greatest bulk of this work has been carried out by Brock.\(^{10}\) Despite this ever growing body of literature, a contact-linguistic analysis of Greek loanwords in Syriac continues to be a desideratum.\(^{11}\)

4.3 Definition

In this study, a loanword is defined as a lexeme that has been transferred from the source language into the recipient language.\(^{12}\) Loanwords always involve the transfer of phonetic material. That is, they are instances of *global copying*, as opposed to *selective copying*, in the Code-Copying Model developed by Johanson (see, e.g., 2002a) and *matter borrowing*, as opposed to *pattern borrowing*, in the framework of Matras and Sakel (2007b; 2007c). If phonetic material is not transferred, then it is not a case of lexical-transfer, but of lexical calque, grammatical replication (see §8-9), or other kinds of change.\(^{13}\)

In the scholarly literature, the terms loanword and lexical borrowing have often been employed interchangeably.\(^{14}\) This is unfortunate since the term borrowing has been used in so

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\(^{8}\) So already Brock 1967: 389 with n. 5.

\(^{9}\) A useful bibliography is available in Voigt 1999-2000.


\(^{12}\) A similar definition is found in Haspelmath 2008: 46. See also Haugen 1950b: 213-214. It should be noted that occasionally the input involves more than one lexeme. This is, for instance, the case with ܡܕܝܫܘܪ ܕܝܛܣܪܘܢ ‘Diatessaron’, from the Greek phrase διὰ τεσσάρων, which literally means ‘through (the) four (Gospels)’.

\(^{13}\) For some of these, see §8.5.

\(^{14}\) See, e.g., Haspelmath 2009: 36.
many (contradictory) ways throughout the contact-linguistic literature (see §2.2). In this study, borrowing refers to a type – in the sense of typology – of contact-induced change in which the agents of change are dominant speakers of the recipient language (see §2.3-2.6). Since the transfer of lexemes is attested not only in situations of borrowing but also in situations of imposition and of neutralization, this study avoids the use of the term lexical borrowing. Thus, the lexeme that is transferred from the source language to the recipient language is termed a loanword (never a lexical borrowing), and the process is termed lexical transfer (never lexical borrowing).

4.4 Corpus

The four chapters in this study that deal with loanwords (§4-7) are based on a corpus of more than 800 Greek loanwords and their derivatives found in pre-eighth century Syriac texts that were not translated from Greek. This corpus has been populated from several sources: concordances to text; 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

15 New Testament (Kiraz 1993); Book of the Laws of the Countries (Lund 2007); Book of Steps (Kmosko 1926); Demonstrations by Aphrahat (Parisot 1894-1907).
16 Ephrem (Beck 1955; 1957a; 1957b; 1959a; 1960; 1961a; 1961b; 1962; 1963; 1964a; 1964b; 1966; 1970a; 1970b; 1979; Brock 1976); Yoḥannan Ihidaya (Strothmann 1972; 1988); Philoxenos (Watt 1978); Yaʿqub of Sarug (Alwan 1989); Apocalypse of Pseudo-Methodius (Reinink 1993); Ishaq of Nineveh (Brock 1995a; Chialà 2011); Memra on Alexander the Great (Reinink 1983).
17 The most important additions – but not all – include (in chronological order): the Odes of Solomon (ed. Charlesworth 1973); the Book of the Laws of the Countries (ed. Drijvers 1965); Discourse 1 of Ephrem’s Prose Refutations (ed. Overbeck 1865: 21-58); Teaching of Addai (ed. Howard 1981); Life of Rabbula (ed. Overbeck 1865: 159-209); Letter on the Himyarete Martyrs by Shemʿun of Beth Arsham (ed. Guidi 1881); Life of Yuḥanan of Tella by Eliya (ed. 61
Lexicon (2009), which is a translation (with correction, expansion, and update) of the Lexicon Syriacum by Carl Brockelmann (1895 [1st ed.]; 1928 [2nd ed.]). Some lemmata in the corpus contain only a few references (or sometimes only one) whereas others contain more than a hundred.

In addition, it has been possible to search for additional occurrences of loanwords in three large ‘databases’: 1. the Comprehensive Aramaic Lexicon (CAL);\(^{18}\) 2. the Oxford-BYU Syriac Corpus;\(^{19}\) and 3. Dr. Sebastian Brock’s more than two-thousand card files listing Greek loanwords in Syriac.\(^{20}\) These three ‘databases’ have been consulted on numerous occasions (though not systematically) and have proven especially useful for establishing the first occurrence of a loanword in Syriac.

In the following chapters, citations of Greek loanwords in Syriac are systematically provided with references to Sokoloff 2009 (only rarely is a loanword not found in this Lexicon). The English translations in this study also derive from Sokoloff 2009. At times, secondary literature relevant to the particular point being made is cited; these citations are not


\(^{18}\) Accessible online at <http://cal.huc.edu/>. I am grateful to Stephen Kaufman (Professor Emeritus of Bible and Cognate Literature at HUC-JIR/Cincinnati) not only for developing and curating this important resource, but also for responding to inquiries on various occasions.

\(^{19}\) I am grateful to Kristian Heal (Brigham Young University), who was generous enough to provide me with a Beta-version of the Oxford-BYU Syriac Corpus.

\(^{20}\) I am grateful to Sebastian Brock (Emeritus Reader in Syriac Studies at Oxford University), who allowed me to digitize his card files over several weeks in August of 2011.
intended as exhaustive histories of scholarship of the loanword in question. In a number of 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 (Liddell and Scott 1996: 480) > ܗܬܘܣ htdocs ‘custom’ (6th cent. Eliya, Life of Yuhanon of Tella, 84.26 [ed. Brooks 1907: 29-95]; Sokoloff 2009: 356). To the present author’s knowledge, then, 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 (1907: 29-95).

4.5 Lehn- oder Fremdwörter?

In the scholarly literature, a distinction is usually made between Lehnwörter and Fremdwörter. The former are said to have been integrated, to one degree or another, into the recipient language, whereas the latter remain foreign words in the recipient language. Though scholars have at times considered this to be a binary opposition, it is more likely that Lehnwörter and Fremdwörter represent a continuum.

Within the context of Syriac-Greek language contact, it is often difficult to distinguish where a given word falls on the continuum between Lehnwörter and Fremdwörter. There are, however, occasional clues. One such clue is the degree of integration, especially on the morpho-syntactic level. Some Greek loanwords in Syriac, for instance, do not regularly occur

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22 So Brock 1975: 81. For similar remarks concerning Syriac and Iranian, see Ciancaglini 2008: 5.
23 This is analyzed in detail in §6.
with the synthetic suffixed genitive pronouns, but rather prefer analytic independent possessive pronouns based on dil-, as in the following examples from the Lives of the Eastern Saints by Yuḥanan of Ephesus (ca. 589) (ed. Brooks 1923-1925):

(4-3) a. ʾyswn dilhen ‘a copy of them’ (143.7-8)

b. pltyn dilḥ ‘her palace’ (430.7)

c. sqlr’ dilḥ ‘her treasurer’ (420.9-10)

The use of dil- in these examples suggests that ʾyswn (< ἵσων [Liddell and Scott 1996: 839]), pltyn (< παλάτιον [Daris 1991: 85; Liddell and Scott 1996: 1291] < Latin palatium [Glare 1982: 1284; Lewis and Short 1969: 1291]), and sqlr’ (< σακκελάριος [Lampe 1961: 1221]) are not fully incorporated into the Syriac of the author, and thus that they are closer to the Fremdwörter side of the continuum.24

The most compelling reason for which a particular word is analyzed as a Fremdwort and not as a Lehnwort in this study is that it is specifically designated as Greek.25 Consider, for instance, Greek κῆτος ‘sea-monster’ (Liddell and Scott 1996: 949-950), which occurs several times in Letter 13 on biblical questions by Yaʿqub of Edessa.26 In the first occurrence, the word appears as a gloss:

(4-4) Letter 13 by Yaʿqub of Edessa (d. 708; ed. Wright 1867)

| haw dalwɔt ʿebɾɔye man meštammah |
| that-M NML + toward hebrew-M.PL.EMP on.the.one.hand be.named-PART.M.SG.ABS |

24 See similarly Brock 1967: 390 n. 7.

25 For a similar criterion with Iranian words in Syriac, see Ciancaglini 2008: 23-25.

26 This is edited in Wright 1867; a French translation is available in Nau 1905b: 198-208, 258-277.
In the next four occurrences, the word is again designated as a gloss, either with metqre ‘it is called’ (13.27; 14.28) or with an equation formulation, e.g., tannino 'awket qytwss 'the sea-serpent, that is qytwss’ (14.5; similarly in 14.8). In the final instance, the
word is not marked as a gloss:

(4-5) Letter 13 by Yaʿqub of Edessa (d. 708; ed. Wright 1867)

‘this was not said about this qytwss, the great animal of the water, … ’ (15.2)

The previous context and the referential demonstrative pronoun hanco ‘this’ suggest that qytwss is also marked as a Fremdwort in this instance. In this study, then, qytwss would be considered a Fremdwort in each of these cases since the author specifically designates it as Greek. In other contexts with other authors, qytwss could be a Lehnwort, but in the passages cited above Yaʿqub clearly demarcates it as a Fremdwort.
4.6 Code-Switching

Connected to the question of *Lehnwörter* and *Fremdwörter* is the topic of code-switching and its relationship to lexical transfer. In the past two decades, a large body of literature has developed on code-switching.\(^{27}\) In general, code-switching refers to cases in which lexical items and grammatical features from at least two languages appear in rapid succession in a single speech event.\(^{28}\) Different types of code-switching are encountered in Syriac.

Several cases of discourse-related code-switching are found among the cache of documents from the Middle Euphrates region (P.Euph).\(^{29}\) P.Euph 6, for instance, along with its duplicate P. Euph 7, records the sale of a slave on Nov. 6, 249.\(^{30}\) The document begins with the text of the sale in Greek, and it continues with a Syriac summary. There is then a list of witnesses, which is again in Syriac, but with a significant number of Greek loanwords. The recto concludes with a single line in Greek stating that the document was written by Balesos the notary. Thus, the document switches from Greek to Syriac and then back to Greek again. Each switch involves not only a change in language, but also a change in script.

\(^{27}\) See, e.g., Muysken 2000; Myers-Scotton 1993; 2002; 2006; Winford 2003: 101-167. The vast majority of this research has dealt with code-switching in spoken conversations. A few studies have, however, dealt with code-switching in ancient documents. Yakubovich (2010), for instance, invokes code-switching on numerous occasions in analyzing the linguistic situation in ancient Anatolian involving Luwian and Hittite. Additional cases of code-switching are found in a wide-array of ancient documents, including Hurrian in Ugaritic texts, Greek in Demotic texts, and Aramaic in the Hebrew Bible and Rabbinic literature, to name only a few.

\(^{28}\) This definition is adapted from Muysken 2000: 1, combining his code-mixing and code-switching.

\(^{29}\) These are edited in Feissel and Gascou 1989; 1995; 2000; Feissel, Gascou, and Teixidor 1997. See also the discussion above at pp. 39-40.

\(^{30}\) The text is edited in Feissel, Gascou, and Teixidor 1997: 6-18.
There are also examples of intra-clause code-switching in Syriac. When discussing the monastic communities in the area around Amid (modern Diyarbakır, Turkey), Yuḥanôn of Ephesus (d. ca. 589) relates the following:

(4-6) *Lives of Eastern Saints* by Yuḥanôn of Ephesus (d. ca. 589; ed. Brooks 1923-1925)

‘and all of the brotherhood stood on the tables along with all of the elderhood, the heads of the monasteries, and they called out, “Lord, have mercy!” with great fear, many times, with many tears’ (414.9-11)

Embedded within this Syriac sentence is the Greek phrase κύριε ἐλέησον ‘Lord, have mercy!’.

Thus, this sentence is entirely in Syriac with the exception of a two word island that is in Greek.

Instances of code-switching such as these are generally easy to identify since they involve multiple words. It is, however, more difficult to distinguish single word code-switches from loanwords. In fact, this is the topic of one of the re-occurring theoretical discussions in the linguistic literature on code-switching and one without a clear consensus.31 Myers-Scotton has, however, convincingly argued that code-switching and lexical transfer do not form a binary, but rather they represent a continuum (see especially 1993: 163-207). Thus, single word code-switches can eventually develop into loanwords when the frequency of their use increases and they are adopted by monolinguals (1993: 182, see also 174-176).

The theoretical question of distinguishing lexical-transfer from single word code-switching becomes a practical one when analyzing contact-induced changes in Syriac due to Greek: how can one determine if a given word is closer to a loanword or to a single word code-switch? The most convincing criterion that has been suggested is relative frequency (Myers-Scotton 1993: 191-205). This, however, proves impractical in Syriac due to the nature of the corpus. The sixth-century Syriac Life of Yuhanon of Tella, for instance, contains several words that are not otherwise attested in Syriac:

(4-7) a. ἀκατάστασις (Liddell and Scott 1996: 48) > ܐܩܛܣܛܝܐ ’disorder’ (75.7; 80.5; Sokoloff 2009: 92)
b. Latin ducatus (Glare 1982: 576; Lewis and Short 1969: 615) > δουκάτον (Lampe 1961: 384) > ܕܘܩܛܘܢ ‘military command’ (87.2; Sokoloff 2009: 287)
c. ἔθος (Liddell and Scott 1996: 480) > ܐܟܠܐ .SceneManagement ‘custom’ (84.26; Sokoloff 2009: 356)

Given the nature of the composition, i.e., hagiography, it is unlikely that the author Eliya intended to restrict his work to an exclusively bilingual audience, excluding monolingual Syriac-speakers. Thus, these are in all likelihood loanwords and not single word code-switches. The fact that these words are not otherwise attested in Syriac seems, then, to be only an accident of survival. Cases such as this have important implications for the use of relative frequency as a criterion to distinguish single word code-switches from loanwords in a corpus such as Syriac. This study chooses to err on the side of loanwords. Thus, the study takes as a

32 See also ἀκριβῶς (Liddell and Scott 1996: 55) > ܩܪܝܒܘܣ ‘exactly’ (91.2; Sokoloff 2009: 93), which is otherwise only found in the Lexicon of Bar Bahlul (ed. Duval 1888-1901: 278.2).
33 For monolingualism as a criterion for distinguishing single word code-switches from loanwords, see Haspelmath 2009: 40; Myers-Scotton 1993: 193.
default that a Greek word in a Syriac text is a loanword (and not a code-switch), and the burden of proof lies on establishing that a particular Greek word is a code-switch.

4.7 Immediate Source and Ultimate Source

In this study, a loanword is defined as a lexeme that has been transferred from the source language into the recipient language. It is important to clarify what exactly is meant by source language in this context. In particular, it is necessary to distinguish between immediate source and ultimate source.\(^\text{34}\) Immediate source refers to the language from which a lexeme was transferred to the recipient language whereas ultimate source is a reflection of a word’s etymology. In many instances, the immediate source and the ultimate source are the same. This is the case, for instance, with Syriac ܚܪܛܝܩܐ (*hrtyq* ‘heretical; heretic’ (Sokoloff 2009: 354), which was transferred from Greek σιρετικός (Lampe 1961: 51). Greek is the immediate source since the word was transferred from Greek to Syriac, and Greek is the ultimate source since the word is a native Greek formation. There are, however, a number of loanwords in Syriac for which Greek is the immediate source, but it is not the ultimate source. Syriac ܣܛܪܦܐ (*strt*) ‘satrap’ (Sokoloff 2009: 998), for instance, is a loanword from Greek σατράπης (Liddell and Scott 1996: 1585). The Greek word, however, is itself a loanword from Old Iranian *xšaθra-pā*.\(^\text{35}\) Thus, Greek is the immediate source of Syriac ܣܛܪܦܐ (*strt*), but Old Iranian is the ultimate source.\(^\text{36}\) The largest group of words for which Greek is the immediate source, but it is not the ultimate source are the Latin words that are found in Syriac.\(^\text{37}\) Conversely, there are

\(^{34}\) For this distinction, see Wohlgemuth 2009: 51.
\(^{35}\) Ciancaglini 2008: 28, 220-221. For the Iranian form, see Tavernier 2007: 436.
\(^{36}\) For additional cases like this, see Ciancaglini 2008: 28.
\(^{37}\) These are discussed in §4.8 and collected in Appendix 1.
loanwords in Syriac for which Greek is the ultimate source, but it is not the immediate source. Greek κλῃθρον (Liddell and Scott 1996: 957), for instance, is the ultimate source of Syriac ܩܪܩܠ qrql ‘grated cover’ (Sokoloff 2009: 1416). This Greek word, however, reached Syriac by way of Late Latin cracli, a form attested in the Appendix Probi.38 Included within the group of words for which Greek is the ultimate source but not the immediate source are the Aramaic inheritances in Syriac that derive ultimately from Greek.39

4.8 Latin Loanwords in Syriac

More than one hundred Latin words are found in non-translated Syriac texts written up to Yaʿqub of Edessa (d. 708).40 Most of these Latin words likely reached Syriac via Greek.41 That is, Greek is usually the immediate source for Latin loanwords in Syriac.42 In some cases, the phonology of the Syriac form is an indication that the word was transferred via Greek. The nasal n in Syriac ܡܠܛܝܢ pltn ‘palace’ (Sokoloff 2009: 119), for instance, indicates that the immediate source was Greek παλάτιον (Daris 1991: 85; Liddell and Scott 1996: 1291; cf. Mason 1974: 74) and not Latin palatium (Glare 1982: 1284; Lewis and Short 1969: 1291).43 In

39 These are discussed in §4.9 and collected in Appendix 2.
40 These are collected in Appendix 1.
42 For immediate source, see §4.7. A similar situation is attested for other Aramaic dialects; all of the Latin words in Palmyrene Aramaic, for instance, likely arrived by way of Greek (Brock 2005: 23).
43 There are occasional cases in which the phonology points to Latin as the immediate source. The initial voiced bilabial stop of Syriac ܒܘܪܓܐ ‘tower’ (Sokoloff 2009: 130) suggests, for
addition, a majority of the Latin words found in Syriac are also attested in Greek as loanwords. Thus, a possible Greek intermediary is known to have had existed. It is interesting to note in this regard that most of the Latin words in Syriac are attested in the Greek papyrological record from Egypt. This suggests that these Latin loanwords were used in the Koinê Greek of the Eastern Roman Empire (see §4.10), and it is in this way that many of them entered Syriac.

Latin words are already found in the Peshitta Bible, whether Old or New Testament. Given their appearance in the biblical texts, many of these Latin loanwords also appear in later Syriac compositions. Latin loanwords continued to be introduced in Syriac in the fourth and fifth centuries. The sixth century saw a large increase in the number of new Latin loanwords. This increase is, however, largely due to Yuḥanōn of Ephesus (d. 581), who is known to have resided for a number of years in Constantinople, which was Greek speaking, but whose imperial court was officially Latinate. The Latin loanwords in Yuḥanōn’s writings may be due to the particular socio-lect of Syriac that was in use in Constantinople by Yuḥanōn and his audience, which was more influenced by the imperial language of Latin.

4.9 Greek Loanwords as Inheritances in Syriac

Greek had been in contact with the Semitic languages of the Near East for at least half a millennium by the time that Syriac emerged in the first centuries of the Common Era. Thus, it

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instance, that the immediate source is Latin burgus (Glare 1982: 245; Lewis and Short 1969: 255) and not Greek πύργος (Liddell and Scott 1996:1556) (cf. Schall 1960: 50-51).
45 For Yuḥanōn of Ephesus, see Harvey 1990.
46 The Ecclesiastical History of Pseudo-Zacharias (6th cent.) is similar in this regard (ed. Brooks 1919-1924).
47 Brock 1996: 251; 1998: 713. See also §3.2.
comes as no surprise that Greek loanwords are found in Aramaic dialects prior to Syriac. The earliest Greek loanword in Aramaic is the monetary term στατήρ (Liddell and Scott 1996: 1634), which is first attested on the Abydos Lion Weight from ca. 500 BCE (KAI 263). This loanword is also found in the Imperial Egyptian Aramaic texts (TAD C3.7Ar2:3; 3.7Br1:13, 20) as is an additional Greek loanword: πίναξ > pynk ‘plate’ (TAD D7.57:8). The Aramaic of Daniel attests (at least) three Greek loanwords:

(4-8)  a. κιθάρα, κιθαρίς (Liddell and Scott 1996: 950) > qytrws (k), qaθros (q) ‘zither’ (Koehler and Baumgartner 2000: 1970), compare Syriac ܩܝܛܪܐ qytrʾ (Sokoloff 2009: 1366)

b. συμφωνία (Liddell and Scott 1996: 1689) > sumponyɔ (Dan. 3:5, 15), syphony (Dan. 3:10 [k]), suponyɔ (Dan. 3:10 [q]) ‘symphony’ (Koehler and Baumgartner 2000: 1937-1938), compare Syriac ܨܦܘܢܝܐ pwnyʾ (Sokoloff 2009: 1297)


Other dialects of Middle Aramaic also attest Greek loanwords, including the Aramaic of Targum Onqelos and Jonathan (Dalman 1905: 182-187), Nabatean Aramaic (Healey 1995), Palmyrene Aramaic (Cantineau 1935: 155; Brock 2005), Ḥatran Aramaic, and Judaean Aramaic. Finally, Greek loanwords are found not only in Syriac, but they occur in all of the Late Aramaic dialects.

In the current study, it is important, whenever possible, to account for how a particular Greek loanword in Syriac relates to the same Greek loanword in other Aramaic dialects, whether contemporary or earlier. Consider, for instance, the Greek word πίναξ ‘board, plank’ (Liddell and Scott 1996: 1405). In Aramaic, it first appears as a loanword in an Imperial Aramaic text from Egypt that dates to the late third century BCE (TAD D7.57:8). In Syriac, the Greek loanword is found already in the New Testament translations, both Old Syriac and Peshiṭṭa (Brock 1967: 413-414), as well as in non-translated texts, beginning with the fourth-century authors Aphraḥaṭ (Demonstrations, 1.729.3 [citing Mt 23:25] [ed. Parisot 1894-1907]) and Ephrem (Maḏrāše on the Nativity, 104.13 [ed. Beck 1959]; Maḏrāše on Nisibis, 2.87.12 [Beck 1963]). In addition to Syriac, the Greek word appears in the Late Aramaic dialects of Jewish Babylonian Aramaic (Sokoloff 2002a: 901), Jewish Palestinian Aramaic (Sokoloff 2002b: 431), Christian Palestinian Aramaic, (Schulthess 1903: 156), and Samaritan Aramaic (Tal 2000: 690). So, was this Greek word transferred into each of these dialects independently? Or, was it transferred into one early dialect and then inherited into later dialects? Or, is some combination of these two options possible? Or, is there another explanation altogether?

There is evidence suggesting that Greek loanwords were transferred between Aramaic dialects. This, for instance, seems to be the case with the verbal root √qṯrg ‘to accuse’, which is found in Syriac (Sokoloff 2009: 1348, 1358-1359) as well as Jewish Palestinian Aramaic (Sokoloff 2002b: 489), Christian Palestinian Aramaic (Schulthess 1903: 178), and Samaritan Aramaic (Tal 2000: 775). The Greek source for this root is either the noun κατήγορος (Liddell and Scott 1996: 927) or the infinitive κατηγορεῖν (Liddell and Scott 1996: 926-927). The

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52 For similar questions involving Iranian loanwords in Syriac, see Ciancaglini 2008: 25-28.
53 This is discussed in §6.3.3.
Greek source, regardless of whether it was a noun or infinitive, has the voiced velar stop \( \gamma \) followed by the alveolar trill \( \rho \). Each of the Aramaic dialects, however, attests the reverse order, with the alveolar trill preceding the voiced velar stop.\(^{54}\) There is no regular sound change in Aramaic to account for this development, and so it is necessary to posit an \emph{ad hoc} change. Given that it is such an irregular change, it is unlikely that this root metathesis would have occurred independently in each of the four Late Aramaic dialects that attest the word; this would after all be an extreme example of drift. It is more likely that the Greek word was transferred into one dialect of Aramaic, then the (irregular) root metathesis occurred, and only then the word was transferred to other dialects of Aramaic.

The example of \( \sqrt{qtrg} \) establishes that in at least some cases Greek loanwords were transferred among Aramaic dialects. This leads to a new series of questions: are these cases of transfer inheritance from mother language to daughter language? Or, are they contact-induced transfer among Aramaic dialects? As established by Boyarin (1981), the Late Aramaic dialects cannot be divided into traditional sibling-type relationships with a mother in the Middle Aramaic period. That is, the late West Aramaic dialects of Samaritan Aramaic, Christian Palestinian Aramaic, and Jewish Palestinian Aramaic do not share a common genetic source that is attested in the previous period of Middle Aramaic. This has important implications for the current series of questions, since it renders it impossible for a Greek word to have been transferred into a hypothetical proto-Late Aramaic, or even proto-Late West Aramaic, and then inherited in each of the daughter languages. Rather, a Greek loanword would have had to have been transferred into an Aramaic dialect, then transferred from there to other dialects of

\(^{54}\) It should be noted that an unmetathesized form is occasionally found in Syriac with the noun \( \kappa \alpha \tau \iota \gamma \gamma \omicron \omicron \omicron \) (Liddell and Scott 1996: 927) + -\( \varsigma \omicron \omicron \omicron \) > \( \dot{\kappa} \dot{t} \dot{g} \dot{r} \dot{m} \) (Sokoloff 2009: 1350), alongside \( \dot{\kappa} \dot{t} \dot{g} \dot{r} \dot{m} \) (Sokoloff 2009: 1359).
Aramaic, and only from these other dialects inherited into the Late Aramaic dialects attested in the historic record. This scenario was likely facilitated by the existence of Standard Literary Aramaic.\footnote{For Standard Literary Aramaic, see Greenfield 1974.} This supra-dialect could have served as a repository of Greek loanwords, which would then have been transferred into other dialects, such as the dialect that would later have become Syriac.

To illustrate this process, it is worth returning to the example of πίναξ ‘board, plank’. Given the history of Aramaic, one possible scenario would involve the transfer of this word from Greek into the Aramaic dialect attested in TAD D7.57. From this dialect, the word would then have been transferred into other Aramaic dialects, including potentially the ancestors of Syriac, Jewish Babylonian Aramaic, Jewish Palestinian Aramaic, Christian Palestinian Aramaic, and Samaritan Aramaic. From these proto-languages, the Greek word would have been inherited in the dialects of Late Aramaic that preserve the word. This scenario could of course be complicated by inter-dialectical transfer at various stages, including in earlier times with Standard Literary Aramaic serving as a conduit as well as in Late Aramaic times. This would not, however, significantly affect the outcome. In the case of πίναξ, then, it is incorrect to suppose that Syriac, as well as the other Late Aramaic dialects, inherited the loanword directly from the dialect of Aramaic attested in TAD D7.57, where the word is first found. This cannot be the case since Syriac is not a later form of the Aramaic dialect attested in TAD D7.57. At the same time, however, this dialect could have served as the source for the word in Syriac. In this scenario, Syriac would have inherited the word from Proto-Syriac, which received the word from the Aramaic dialect attested in TAD D7.57, possibly via Standard
Literary Aramaic. Thus, Greek would not be the immediate source of the word, but rather it would be an inheritance from earlier Aramaic in Syriac.

It can be concluded, then, that Syriac likely contains Greek loanwords that were inherited from an earlier stage of Aramaic as well as Greek loanwords for which Greek was the immediate source. The question is how to identify the inherited words. One potential criterion is the attestation of Greek loanwords in other dialects of Aramaic. More than sixty Greek loanwords that are found in non-translated Syriac texts from before Yaʿqub of Edessa (d. 708) are also attested in Aramaic dialects prior to Late Aramaic, i.e., Imperial Aramaic (ca. 600 – 200 BCE) and Middle Aramaic (ca. 200 BCE – 200 CE). The vast majority of these are attested in Syriac by at least the fourth century. This is, for instance, the case with the previously discussed example of πίναξ ‘board, plank’ (Liddell and Scott 1996: 1405) > نَحْزَبَ بَيْنَكُم ‘dish, writing tablet’ (Sokoloff 2009: 1188). So, if a Greek loanword is attested both in an Aramaic dialect from the Middle Aramaic period or earlier and in Syriac by the fourth century, then it seems likely that it was transferred into Aramaic at an earlier period and inherited in Syriac. A list of all the words fulfilling these criteria is given in Appendix 2 at the end of this study.

There are a few Greek loanwords that are attested in Aramaic dialects prior to Late Aramaic, but are not attested in Syriac by the fourth century:


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56 For immediate source, see §4.7. Syriac could of course also contain Greek words from different immediate sources, such as Latin or another Late Aramaic dialect.

57 These chronological divisions roughly follow Fitzmyer 1979b.
Given that these words are not attested in Syriac until a later period, it is less certain that Syriac inherited them from earlier Aramaic. In fact, these may well be instances in which a word was independently transferred from Greek into different dialects of Aramaic. This is almost certainly the case for some of the words, such as δόγμα, since the loanword in Syriac differs in meaning from the other Aramaic dialect.

Moving into the Late Aramaic period, it becomes more difficult to use comparative...
Aramaic evidence to determine whether or not a Greek loanword in Syriac is an inheritance. This is due to the fact that each of the Late Aramaic dialects is known to have had contact with Greek, though to varying degrees. Given this contact, it is impossible to exclude that a given loanword underwent cases of independent transfer from Greek into multiple dialects of Late Aramaic. Independent cases of transfer in fact seem likely in a number of cases based on the late date of first occurrence for a loanword in Syriac. Consider, for instance, Greek ταξιώτης, ταξεώτης ‘imperial bodyguard’ (Liddell and Scott 1996: 1756), which occurs in Jewish Palestinian Aramaic (Sokoloff 2002b: 230) and in Syriac (Sokoloff 2009: 529). Theoretically, this word could have been inherited from earlier Aramaic or transferred into each of the two dialects independently. The latter is, however, by far the more likely scenario in this case since the word in question is not attested in Syriac until the sixth century when it appears in the Ecclesiastical History by Yuḥanan of Ephesus (Part 3, 9.18; 158.17 [ed. Brooks 1935]). Thus, given their individual histories of contact with Greek, the Late Aramaic dialects do not provide reliable evidence for determining whether or not a Greek loanword in Syriac is an inheritance from earlier Aramaic.

In the end, comparative Aramaic evidence provides a criterion for identifying some of the Greek loanwords in Syriac that were inherited from earlier Aramaic. It is not, however, possible to identify all of them. Many of the Greek loanwords that are attested in the earliest layer of Syriac could well have been inherited from earlier Aramaic, and so they would not be the result of language contact between Syriac and Greek. Nevertheless, pending the discovery of extensive documentation of the Aramaic ancestor of Syriac, it is unlikely that it will ever be possible to identify these inheritances with any degree of certainty.

\footnote{58 It is also possible that the word was transferred from one of the dialects to the other.}
4.10 The Greek Source

The Greek language with which Syriac-speakers were in contact was not the Attic of the classical period, but rather Koinē and then early Byzantine Greek. Koinē Greek developed from Attic in the Hellenistic period and quickly spread over the classical world as well as over much of the Ancient Near East. Koinē Greek eventually gave way to the Greek of the Byzantine Era. The best source for the Greek with which Syriac-speakers were in contact is the inscriptions and documents that were written in Late Antique Syria and Mesopotamia.

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. Occasionally, however, Greek loanwords in Syriac reflect non-Attic forms that also appear in the inscriptions and documents from Late Antique Syria and Mesopotamia. Greek documents from Syria and Mesopotamia, for instance, attest an assimilation of κ to γ before a voiced stop. This assimilation of [+voice] is also reflected in the g in Aleppo ʾqlysgdyqws ‘expert in church law’ (Sokoloff 2009: 92). This suggests that the Syriac word was transferred from a Koinē form of Attic ἐκκλησιεκδίκος (Lampe 1961: 433). Or, to take a different example, μ assimilates to ν before a labial in the Koinē of Syria and Mesopotamia.

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61 Publication information for these Greek texts is discussed above on p. 38-40.
62 This is reflected in writings such as ἐγδικίας for ἐκδικίας (P.Euph. 2.13 [mid-3rd]); διεγδικήσειν for διεκδικήσειν (P.Euph. 9.22-23 [252]); ἐγβένω for ἐκβάινω (P.Euph. 17.22 [mid-3rd]); ἐγ διακληρώσεως for ἐκ διακληρώσεως (P.Dura. 19.6 [88-89]). This assimilation of [+voice] is also found in the Koinē Greek of Egypt (Gignac 1976: 6-80; Mayser 1970: 143-144).
63 This assimilation is reflected in writings such as διαπεμψαμένου for διαπεμψαμένου (P.Euph. 2.20 [mid-3rd]); ἐνποιηθῇ for ἐμποιηθῇ (P.Euph. 8.24 [251]); ἐνποιούμενον for ἐμποιούμενον (P.Euph. 9.23 [252]); ἐνποιοθέσθαι for ἐμποιοθέσθαι (P.Euph. 16.A.2 [after 239]); ἐνπράξεως for ἐμπράξεως (P.Euph. 13.16 [243]); συνβά[ν] for συμβάν (P.Euph. 2.5 [mid-3rd]);
This assimilation accounts for the first ι in Syriac ܣܘܢܦܢܘܣ swnwnws ‘supervisor of the trades people of Constantinople on behalf of the eparch of the city’ (Sokoloff 2009: 984), which can be contrasted with the μ in the Attic form σύμπονος (Liddell and Scott 1996: 1685; Lampe 1961: 1289). To give one final example, τ is occasionally written as θ after σ in the Greek documents from Syria and Mesopotamia. This Koiné feature is reflected in the following Greek loanwords in Syriac:


b. προστάς (Liddell and Scott 1996: 1526) → accusative singular προστάδα > ܐܦܪܘܣܛܐ prwstdt ‘doorpost, lintel; vestibule, portico’ (Sokoloff 2009: 1233)

c. πιστικός ‘faithful’ (Liddell and Scott 1996: 1408) > ܦܣܛܝܩܐ pstyq ‘sailor to whom responsibility for a ship is entrusted’ (Sokoloff 2009: 1215-1216)

The ι in each of these Syriac forms corresponds to Greek θ not τ (§5.2.6; 5.2.15), and so these forms reflect a Koiné form with θ after σ instead of τ. Thus, while in most cases Greek loanwords in Syriac reflect Attic Greek, occasionally they do reflect the Koiné of Late Antique Syria and Mesopotamia.

The Greek loanwords in Syriac, thus, serve as a witness to the Greek of Late Antique Syria and Mesopotamia (as so-called Nebenüberlieferungen). This is important because the

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64 See, e.g., κατεσθάθην for κατεστάθην (P.Dura. 46.r5 [early 3rd]; ἀφείσθασθαι for ἀφίστασθαι (P.Dura. 31.int.7, ext.33 [204]). This change is also attested in the Koiné of Egypt (Gignac 1976-: 1.87; Mayser 1970: 154).
number of Greek documents from Syria and Mesopotamia is quite limited compared to the extensive material found in Egypt. One of the questions that the abundance of the Egyptian material and the paucity of other material often raises is whether or not the Greek documents from Egypt are representative, in language, history, economics, etc., of the broader Late Antique Near East.

The Greek loanwords in Syriac, as *Nebenüberlieferungen* for the Greek of Syria and Mesopotamia, suggest that the Egyptian papyri are in some respects representative of a Koinē Greek spread across the Roman Near East. In Greek documents from Egypt, for instance, π is commonly deleted in the cluster μπτ.⁶⁵ This deletion is also attested in Syriac ܩܡܛܪܢ $qmrn$ ‘small chest’ (Sokoloff 2009: 1377), which can be compared with the Attic form κάμπτριον (Liddell and Scott 1996: 873). Syriac ܩܡܛܪܢ $qmrn$, thus, suggests that κάμπτριον was the Koinē form in Late Antique Syria and Mesopotamia. The fact that the Greek loanword in Syriac reflects a sound change attested in the Greek papyri from Egypt implies that this sound change was not restricted to Egypt, but rather it extended across the Roman Near East. Similarly, Greek γ is occasionally written instead of κ in word initial position in the Greek papyri from Egypt, as in γυβερνήτης (P.Grenf. 1.49.21 [220/221 CE]) for Attic κυβερνήτης (Liddell and Scott 1996: 1004).⁶⁶ The voiced velar stop, as opposed to the voiceless velar stop, is also found for this same word in Syriac ܓܘܒܪܢܝܛܐ  $gb′elmsm$,  which is attested once in Aphrahat’s *Demonstrations* (1.612.2; ed. Parisot 1894-1907), against the much more common spelling ܩܘܒܪܢܝܛܐ  $qbrnyt$ (with orthographic variants) (Sokoloff 2009: 1323). Again, the agreement between the Greek loanword in the Syriac of Aphrahat and

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⁶⁵ Gignac 1976-: 1.64; Mayser 1970: 152.
⁶⁶ Gignac 1976-: 1.77; Mayser 1970: 143-144.
the writing in the Greek papyri from Egypt suggests that ἀγβερνήτης with its initial voiced velar stop was a common Koinē form across the Roman Near East.67

The correspondence between the Greek papyri from Egypt and the Greek loanwords in Syriac is not restricted to phonology but extends also to morphology and lexicon. In the Greek papyri from Egypt, for instance, the ending -ιν is often realized as -υν.68 Thus, the frequent use of Syriac -υν to represent this ending almost certainly reflects a Koinē form -υν and not the Attic form -ιν (see §6.2.3.9). This is, for instance, the case with γυμνάσιον (Liddell and Scott 1996: 362) > ܓܡܢܣܝܢ ‘gymnasia’ (Sokoloff 2009: 242) and Latin palatium (Glare 1982: 1284; Lewis and Short 1969: 1291) > παλάτιον (Daris 1991: 85; Liddell and Scott 1996: 1291) > هليوس plyyn ‘palace’ (Sokoloff 2009: 1199). Thus, Syriac loanwords establish that, like the Greek of Egypt, the Greek of Syria and Mesopotamia had -υν for Attic -ιν.69

With regard to lexicon, it is well known that Latin had a significant influence on Koinē Greek.70 This is probably nowhere more evident than in the large number of Latin loanwords that occur in Greek papyrological texts from Egypt.71 Interestingly, a vast majority of the Latin words in Syriac are also attested in the Greek papyri from Egypt (cf. §4.8).72 This suggests that these Latin words were part of the broader Koinē of the Eastern Roman Empire.

67 The voiced velar stop is also reflected in Latin gubernare (Lewis and Short 1969: 831), which is a loanword from Greek.


69 This is confirmed by the Greek documents from Syria and Mesopotamia, which also have -υν for Attic -ιν (Welles, Fink, and Gilliam 1959: 48), e.g., δελματίκινον for δελματίκιον (P.Dura. 30.17 [232]); σεισύριον for σεισύριον (P.Dura. 33.13 [240-250]).


71 These are collected in Daris 1991.

72 This can be illustrated by the numerous references to Daris 1991 in Appendix 1, which collects all of the Latin loanwords in non-translated Syriac texts up to Yaʿqub of Edessa (d. 708).
To summarize, then, most Greek loanwords in Syriac reflect the Attic Greek of the classical period. Occasionally, however, the Greek loanwords in Syriac reflect forms found in the inscriptions and documents that were written in Late Antique Syria and Mesopotamia. This suggests that Greek loanwords in Syriac are an indirect witness to the Greek of Late Antique Syria and Mesopotamia (as *Nebenüberlieferungen*). In addition, the Greek loanwords in Syriac at times attest a form that is also found in the Greek papyri from Egypt. In these cases, it is possible to posit a common Koinē form that was spread through the Eastern Roman Empire. Given this situation, throughout this study, Greek forms are cited not only from Attic Greek but also at times from the Greek documents from Syria and Mesopotamia as well as from Egypt.

4.11 Conclusion

With the methodological framework now established, the next four chapters (§5-7) provide a contact-linguistic analysis of the Greek loanwords in Syriac. Chapter §5 analyzes the phonological integration of Greek loanwords in Syriac, while Chapter §6 focuses on morpho-syntactic integration. Chapter §7 looks at secondary developments in Syriac involving Greek loanwords.
“Likewise, other languages have certain letters that the rest of languages are unable to pronounce. As for Syriac-speakers, by which I mean the speech of Edessa, it is not their language that prevents them [from this], but it is their writing system because of its incompleteness and its lack of vowel signs” (Yaʿqub of Edessa, The Correctness of Speech)\(^1\)

5.1 Overview

While a fair amount of literature has been devoted to Greek loanwords in Syriac (see §4.2), very little attention has thus far been paid to their phonological integration. In the standard grammar of Syriac, Nöldeke (1904) discusses this topic in only a handful of paragraphs.\(^2\) Other grammars, such as by Brockelmann (1981) and Muraoka (2005), offer even fewer remarks. In the only monographic study of Greek loanwords in Syriac, Schall (1960) makes a number of passing references to phonological integration,\(^3\) but he never provides a systematic treatment. More recently, Brock (1996: 254-257) and Voigt (1998b) have provided additional insights; neither, however, offers a comprehensive description. Given the current

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\(^1\) The Syriac text is edited in Wright 1871b: 2*.a.5-12. An English translation of the same quote can be found in Kiraz 2012: 59, where it is mistakenly said to come from Yaʿqub’s *Letter on Syriac Orthography* (ed. Phillips 1869).


state of affairs, the present chapter aims to supply for the first time a systematic description and
analysis of the phonological integration of Greek loanwords in Syriac. It begins with the
integration of consonants (§5.2) and then turns to vowels (§5.3). It concludes with a brief
treatment of the integration of Greek syllable initial vowels in Syriac (§5.4).

In contrast to changes in syntax or lexicon, diachronic changes in orthography present a
special challenge since even meticulous Syriac scribes, who were loathe to make drastic
changes at the word level, were prone to update the orthography of the manuscript before them.⁴ This is known anecdotally through Yaʿqub of Edessa (d. 708), who in his Letter on
Syriac Orthography implores later scribes not to change his chosen orthography for various
words, including Greek loanwords (Phillips 1869: 6.1-8-7). In addition, many cases of textual
transmission betray scribal updates of orthography.⁵ Given that scribes are known to have
updated the orthography of Greek loanwords, it has been necessary in a few instances in this
chapter to account not only for the date of composition of a work but also for the date of the
manuscript that contains the work.⁶

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⁴ This is not to say that scribes did not also make changes on the word level. To give but one
example, ms. New Haven, Yale Syriac 5 (1888 CE) preserves the same recension of the Syriac
History of Cyriacus and his mother Julitta as the earlier manuscript in London, Library of the
Royal Asiatic Society (1569 CE); it, however, attests extensive syntactical and lexical variants
that are best explained as scribal interference.

⁵ This is especially clear in the works of Ephrem where the fifth- and sixth-century manuscripts
from Dayr al-Suryān often preserve an older orthography compared to the later liturgical
instance, appears in the earlier spelling of ܐܝܓܘܢܐʾygwn in ms. Brit. Libr., Add. 14,627 (sixth
century) but in the standardized spelling of ܐܓܘܢܐ ʾgwn in the later liturgical ms. Brit. Libr.,
Add. 14,506 (ninth-tenth century) (Beck 1964b: 10.14). For the dates of these manuscripts, see
Wright 1870-1872: 2.415, 1.247-249, respectively.

⁶ Ideally, future studies of Greek loanwords in Syriac – or for that matter Syriac grammatical
studies more generally – will be able to account better for both date of composition and date of
copying. A good model is provided by Hittotology, where it has become increasingly common
5.2 Consonants

5.2.1 Overview

The consonantal inventory of Koinē Greek contained sixteen phonemes, which are summarized in Table 5-1.\(^7\) The consonantal inventory of Koinē Greek differs only slightly from that of Attic Greek. Attic Greek was characterized by a symmetrical system of nine stops, with three manners of articulation (voiceless unaspirated [κ, π, τ], voiceless aspirated [θ, φ, χ], and voiced [β, γ, δ]) and three places of articulation (bilabial [β, π, φ], dental [δ, θ, τ], and velar [γ, κ, χ]). By the Koinē Greek of the Roman period, the voiceless aspirated stops had become voiceless fricatives, i.e., *pʰ > f, *tʰ > θ, and *kʰ > x. Similarly, the voiced stops eventually became fricatives, as in Modern Greek, i.e., *b > β, *g > γ, and *d > δ, though it is difficult to establish a precise *terminus post quem for this change.\(^8\) In addition to the stops, there were four sonorants in Attic Greek as well as in Koinē Greek. Two of these were liquids, one being an alveolar lateral approximant (λ) and the other being a voiced alveolar trill (ρ). The remaining two liquids were nasals, one being bilabial (μ) and the other being alveolar (ν). Alongside these two nasal phonemes, there was a velar nasal, which was an allophone of the alveolar nasal and the voiced velar stop. In addition to the stops and sonorants, there were two voiceless fricatives in Attic Greek, one alveolar (σ) and the other glottal (spiritus asper). The latter was lost sometime in the Late Antique period.\(^9\) Attic and Koinē Greek also possess several monographs: ξ represents the voiceless unaspirated velar stop κ plus the voiceless

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\(^{7}\) In general, see Allen 1987; Gignac 1976-: 1.63-179; Mayser 1970: 141-217.

\(^{8}\) See the discussions in Allen 1987: 29-32; Browning 1983: 26-28; Gignac 1976-: 1.68-76.

\(^{9}\) In general see, Harviainen 1976 as well as §5.2.13, 5.4.1.
alveolar fricative σ; ψ represents the voiceless unaspirated bilabial stop π plus the voiceless alveolar fricative σ. In Attic Greek, ζ was a monograph for /zd/; it had, however, developed into a voiced alveolar fricative /z/ by the Koinē Greek of the Roman and Byzantine periods.

Table 5-1 Consonantal Inventory of Koinē Greek

<table>
<thead>
<tr>
<th>stop</th>
<th>voiceless unaspirated</th>
<th>voiceless</th>
<th>voiced</th>
</tr>
</thead>
<tbody>
<tr>
<td>bilabial</td>
<td>p (π)</td>
<td>t (τ)</td>
<td>k (κ)</td>
</tr>
<tr>
<td>dental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alveolar</td>
<td></td>
<td>s (σ)</td>
<td></td>
</tr>
<tr>
<td>velar</td>
<td></td>
<td>x (χ)</td>
<td>h (spiritus asper)</td>
</tr>
<tr>
<td>glottal</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| fricative         |                       |           |        |
| voiceless         | φ (φ)                 | θ (θ)     |        |
| voiced            |                       |           |        |
|                  | z (ζ)                 |           |        |

| liquid            |                       |           |        |
| trill             |                       |           |        |
|                  | r (ρ)                 |           |        |

| lateral approximant |                       |           |        |
| m (μ)               |                       |           |        |
| n (ν)               |                       |           |        |

The consonantal inventory of Classical Syriac included twenty-eight phonemes, which are summarized in Table 5-2. Syriac was characterized by several sets of consonantal triads consisting of a voiceless, voiced, and emphatic member. The emphatic member, which is traditionally represented with an under-dot in Semitic Studies, was likely glottalic/ejective in earlier stages of Semitic; it was, however, probably realized as pharyngeal in Syriac, as in

\[10\] In general, see Daniels 1997; Muraoka 2005: §3; Nöldeke 1904: §2.
Arabic. Triads were found for the dental stops (\( t, s, d, \lambda \)), the velar stops (\( k, g, q \)), and the alveolar fricatives (\( s, z, s \)). In Syriac, the bilabial stops (\( p, b \)) and pharyngeal fricatives (\( h [= \text{IPA} \ h], \underline{c} \)) lacked an emphatic member and so had only voiced and voiceless members. It should be noted, however, that an emphatic member did exist for the bilabial stop series in Greek loanwords in Syriac (see §5.2.12). Following the Old Aramaic period, the non-emphatic bilabial, dental, and velar stops developed fricative allophones post-vocally when ungeminated. By the time of Syriac, these fricatives (both voiced and voiceless) had become phonemic, since the conditioning factor of the allophone was in many cases lost due to a regular vowel deletion rule. This led to minimal pairs such as *\( \text{garbā} > \text{garbā} \) ‘leper’ (Sokoloff 2009: 255) versus *\( \text{garbā} > \text{garbā} \) ‘leprosy’ (Sokoloff 2009: 255) and *\( \text{qataltih} > \text{qataltēh} \) ‘she killed him’ versus *\( \text{qataltih} > \text{qataltēh} \) ‘I killed him’. The innovative bilabial, dental, and velar fricatives (both voiced and voiceless) were not distinguished from their stop counterparts in the consonantal writing system of Syriac, though diacritics were eventually developed to differentiate them. In addition to the stops and fricatives that occur in triads or biads, there were two glottal phonemes, one being a voiceless stop (\( \lambda \)) and the other being a voiceless fricative (\( h \)), as well as a palato-alveolar voiceless fricative (\( s \)). Alongside the stops and fricatives, there were six sonorants in Classical Syriac. Two of these

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11 For the emphatic consonants in Semitic, see Kogan 2011: 59-61 with further references.
12 An emphatic velar fricative *\( x \)' may well have existed in Proto-Semitic, as argued by Huehnergard (2003) on the basis of correspondences of Akkadian \( h \) and West-Semitic \( h \). The existence of an emphatic bilabial stop *\( p \)' in Proto-Semitic is unlikely (see the discussion, with literature, in Kogan 2011: 80-81; Militarev and Kogan 2000: cv-cvicxvi).
13 In Semitic Studies, these fricatives are traditionally indicated by underline or overline, i.e., \( \tilde{p} = \text{IPA} \ f; \tilde{b} = \text{IPA} \ \beta; \tilde{t} = \text{IPA} \ \theta; \tilde{d} = \text{IPA} \ \chi; \tilde{k} = \text{IPA} \ x; \tilde{g} = \text{IPA} \ y \).
14 This distinction was extended by analogy to other places in the verbal system: \( \lambda \text{̃} \text{h} \text{d̂t} \) ‘I rejoiced’ vs. \( \lambda \text{̃} \text{h} \text{d̂t} \) ‘you (m.sg.) rejoiced’.
15 Kiraz 2012: §210-216.
were liquids, one being an alveolar lateral approximant (\(\Delta\)) and the other being an alveolar trill (\(\mathfrak{r}\)). Two of these were nasals, one being bilabial (\(\mathfrak{m}\)) and the other being alveolar (\(\mathfrak{n}\)). The remaining two were glides, one being bilabial (\(\omega\)) and the other being palatal (\(\iota\)).

Table 5-2 Consonantal Inventory of Syriac

<table>
<thead>
<tr>
<th></th>
<th>bilabial</th>
<th>dental</th>
<th>alveolar</th>
<th>palato-alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>pharyngeal</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>stop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>voiceless</td>
<td>p ((\phi))</td>
<td>t ((\theta))</td>
<td></td>
<td>k ((\varepsilon))</td>
<td></td>
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<td>(\chi)</td>
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<tr>
<td>voiced</td>
<td>b ((\varphi))</td>
<td>d ((\delta))</td>
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<td>g ((\zeta))</td>
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</tr>
<tr>
<td>emphatic</td>
<td>[(\tilde{p})] ((\tilde{\phi}))</td>
<td>[(\tilde{t})] ((\tilde{\theta}))</td>
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<td></td>
<td>q ((\sigma))</td>
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<tr>
<td>fricative</td>
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</tr>
<tr>
<td>voiceless</td>
<td>(\tilde{p}) ((\tilde{\phi}))</td>
<td>(\tilde{t}) ((\tilde{\theta}))</td>
<td>s ((\sigma))</td>
<td>(\tilde{s}) ((\tilde{\varsigma}))</td>
<td>k ((\varepsilon))</td>
<td>h ((\omicron))</td>
<td>h ((\omicron))</td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>b ((\varphi))</td>
<td>d ((\delta))</td>
<td>z ((\iota))</td>
<td>g ((\zeta))</td>
<td>(\tilde{g}) ((\tilde{\zeta}))</td>
<td>(\iota) ((\iota))</td>
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<td></td>
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<td>emphatic</td>
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<tr>
<td>liquid</td>
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</tr>
<tr>
<td>trill</td>
<td>r ((\iota))</td>
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<td></td>
</tr>
<tr>
<td>lateral approximant</td>
<td></td>
<td>l ((\Delta))</td>
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<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m ((\mu))</td>
<td>n ((\nu))</td>
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<td></td>
</tr>
<tr>
<td>glide</td>
<td>w ((\omega))</td>
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<td></td>
<td></td>
<td></td>
<td>y ((\iota))</td>
</tr>
</tbody>
</table>

In the vast majority of cases, each Greek consonantal phoneme is regularly represented by a single consonant in Syriac. The following sections provide a detailed description of how each Greek consonantal phoneme is represented in Syriac.
5.2.2 Greek β

Greek β was a voiced bilabial stop /b/ in Attic Greek.\(^{16}\) The documentary record suggests that, at least in Egypt, it had changed into a voiced bilabial fricative /β/ by the first century CE.\(^{17}\) Greek β is typically represented in Syriac by \(b\),\(^{18}\) which was realized either as a voiced bilabial stop or a voiced bilabial fricative, e.g., \(βῆμα\) (Lampe 1961: 295-296; Liddell and Scott 1996: 314) > \(ܒܝܡ\) (with alternative orthographies) ‘tribunal, raised platform, bema of a Church’ (Sokoloff 2009: 141) and συλλαβή (Liddell and Scott 1996: 1672) > \(swlb\) ‘syllable’ (Sokoloff 2009: 979-980).

Greek β is also represented in Syriac by \(p\), which was realized either as a voiceless bilabial stop or a voiceless bilabial fricative, in the following words:\(^{19}\)

\[(5-1)\]
\[\begin{align*}
&\text{a. } κάνναβις (Liddell and Scott 1996: 874) > \text{\textit{qnp}} \text{‘hemp’ (Sokoloff 2009: 1386)}
\&\text{b. } κύβος (Liddell and Scott 1996: 1005) > \text{\textit{qwps}} \text{‘cube; piece on a draft board; tessera, mosaic tile; mosaic work; hard stone, flint’ (Sokoloff 2009: 1340), with derivatives}
\end{align*}\]

This correspondence is likely due to an interchange of β and π in the Greek source, a change that is sporadically attested in Greek documents from Egypt.\(^{20}\)

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\(^{16}\) Allen 1987: 29-32; Woodard 2004b: 616.

\(^{17}\) Gignac 1976-: 1.63, 178; Mayser 1970: 145.

\(^{18}\) Kiraz 2012: §603-604; Nöldeke 1904: §25; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §2).

\(^{19}\) This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §154).

\(^{20}\) Gignac 1976-: 1.83; Mayser 1970: 145. Alternatively, the presence of \(p\) in \(\text{\textit{qwps}}\) (< \(κύβος\)) could be due to the assimilation of [-voice]: \(*qubṣā > qubṣā*
Greek β is also represented in Syriac by the bilabial glide w in Latin velum (Glare 1982: 2024; Lewis and Short 1969: 1965-1966) > βηλον (Lampe 1961: 295) > ܢܠܐ wʾl ‘veil, curtain’ (Sokoloff 2009: 358).\(^{21}\) This irregular correspondence may be due to the ultimate Latin source that begins with consonantal v, which was probably a voiced bilabial fricative /β/ by this time.\(^{22}\) Thus, Syriac ܢܠܐ wʾl may be a direct transfer from Latin velum with Syriac w representing Latin v (see §4.8) or the ultimate Latin source may have influenced the representation in Syriac.\(^{23}\)

5.2.3 Greek γ

Greek γ was a voiced velar stop /g/ in Attic Greek.\(^{24}\) During the Roman and Byzantine periods, it was in the process of becoming a voiced velar fricative /ɣ/.\(^{25}\) Greek γ is typically represented in Syriac by g,\(^{26}\) which was either a voiced velar stop or a voiced velar fricative, e.g., γυμνάσιον (Liddell and Scott 1996: 362) > ܓܡܢܣܝܢ gmnsyn ‘gymnasia’ (Sokoloff 2009: 358).

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\(^{21}\) This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §156).

\(^{22}\) Gignac 1976-: 1: 68 with n. 2.

\(^{23}\) Compare Latin velarium (Glare 1982: 2022; Lewis and Short 1969: 1964) > ܢܠܐ wʾlr ‘curtains’ with no attested Greek intermediary as well as Latin names such as Valens (Syriac ܢܠܐ wʾys [Payne Smith 1879-1901: 1064]) and Valentinus (Syriac ܘܠܢܛܝ ܢܘܣ lwnws [Payne Smith 1879-1901: 1064]). A datum against this analysis would, however, be Latin vestiarium (Glare 1982: 2048; Lewis and Short 1969: 1981) > ܒܣܛܝܪܝܢ bsṭyyn ‘wardrobe’ (Sokoloff 2009: 163), where Latin v is represented by Syriac b without a known Greek intermediary, though it could of course just be unattested.


\(^{25}\) Gignac 1976-: 1.74-75, 178; Mayser 1970: 141-143.

\(^{26}\) Kiraz 2012: §603-604; Nöldeke 1904: §25; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §3).
Greek γ is also represented by the emphatic velar stop q in πύργος (Liddell and Scott 1996: 1556) > ܡܦܪܘܩܐ (Sokoloff 2009: 1173; cf. Schall 1960: 50-51). This may be the result of an assimilation of [+emphatic] due to the initial “emphatic” p (see §5.2.12). It should be noted that this Greek word is realized in Mandaic as parqsa (Drower and Macuch 1963: 365), with the same correspondence, suggesting that the same assimilation occurred in Mandaic or that the Mandaic is a loanword from Syriac.

Greek γ is also represented by the voiced dental stop d in πυργίσκος (Liddell and Scott 1996: 1555-1556) > ܡܦܪܕܝܣܩܐ; ܡܦܘܪܕܣܩܐ ‘wooden box, storeroom; chest inserted in a wall’ (Sokoloff 2009: 1228-1229). Brockelmann (1908: §86d) explains this as a dissimilation of a velar to a dental in proximity to another velar. This is, however, ad hoc. It should be noted that the Greek word is realized in Jewish Babylonian Aramaic as prdysq’ (Sokoloff 2002a: 928) and in Mandaic as pardasa (Drower and Macuch 1963: 363), with similar correspondences.

In the sequences γκ, γγ, γχ, and γμ, Greek γ represents the velar nasal ɲ, which serves as an allophone of the dental nasal n and the voiced velar stop γ. In the vast majority of

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27 This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §162).
28 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 1976-: 1.63, 76-80; Mayser 1970: 143-144).
29 Allen 1987: 33-39; Woodard 2004b: 616. The pronunciation of γ as the velar nasal ɲ is sometimes reflected in spellings in Greek documents, including those from Syria and Mesopotamia: for γγ, see ἀντισύγγραφα for ἀντισύγγραφα (P.Euph. 6.29-30 [249]; 7.23 [249]); στρογγυλοπρόσωπον for στρογγυλοπρόσωπον (P.Euph. 8.13 [251]; 9.12 [252]); συγγραφήν for συγγραφήν (P.Euph. 8.17 [251]); for γκ, see ἐνκαλέσῃ for ἐγκαλέςῃ (P.Dura.
cases, the Greek velar nasal is represented in Syriac with the dental nasal \( n \), as in the following representative examples:

(5-2) a. ἀνάγκη (Liddell and Scott 1996: 101) \( \rightarrow \) ʾnnq ‘necessity’ (Sokoloff 2009: 63)

b. κόγχη (Lampe 1961: 759) \( \rightarrow \) qnk ‘the part of the church in which the holy service is performed and where the altar stands’ (Sokoloff 2009: 1385)

c. μάγγανον (Liddell and Scott 1996: 1070) \( \rightarrow \) mngnwn ‘instrument of torture’ (Sokoloff 2009: 780)

In the following cases, however, the Greek velar nasal \( h \) is not represented in Syriac:

(5-3) a. Latin uncinus (Glare 1982: 2090; Lewis and Short 1969: 1929) \( \rightarrow \) ὄγκινος (Liddell and Scott 1996: 1196) \( \rightarrow \) ὑ当场 ‘hook; anchor; sailors’ sounding line’ (Sokoloff 2009: 20)

b. ἀγκών (Liddell and Scott 1996: 10) \( \rightarrow \) ὁ当场 ‘hollow of the arm or knee’ (Sokoloff 2009: 92)

c. λόγχη (Liddell and Scott 1996: 1059) \( \rightarrow \) lwkyt ‘spear’ (Sokoloff 2009: 679)

d. σπόγγος (Liddell and Scott 1996: 1628) \( \rightarrow \) spwg’, spwgc

31.int.16 [204]; P.Euph. 8.25 [251]; ἕνκαλιν for ἐγκαλεῖν (P.Euph. 14.17 [241]); ἕνκαλλέσειν for ἐγκαλέσειν (P.Dura. 31.int.13 [204]); ἕνκαλούμε for ἐγκαλοῦμαι (P.Euph. 3.12 [252-256]; 4.12; [252-256]); ἕνκλήματα for ἐγκλήματα (P.Euph. 3.11 [252-256]; 4.12 [252-256]); πάνκαλα for πάγκαλα (P.Euph. 17.9-10 [mid-3rd cent.]); πάγκαλον for πάγκαλον (P.Euph. 17.2 [mid-3rd cent.]); συγκωμῆται for συγκωμήται (P.Euph. 1.10-11 [245]; συγκωμήτης for συγκωμήτης (P.Euph. 4.6 [252-256]); for γχ, see τυνχάνομεν for τυγχάνομεν (P.Euph. 1.11 [245]).

30 Compare, however, λογχίδιον (Liddell and Scott 1996: 1059) \( \rightarrow \) lwkdy ‘small spears’ (Sokoloff 2009: 679)
'sponge’ (Sokoloff 2009: 75)

The lack of representation of the Greek velar nasal ŋ in these examples is due to its assimilation to a following consonant (see also §5.2.10).

5.2.4 Greek δ

Greek δ was a voiced dental stop /d/ in Attic Greek. During the Roman and Byzantine periods, it was in the process of becoming a voiced dental fricative /ð/. Greek δ is typically represented in Syriac by d, which was either a voiced dental stop or a voiced dental fricative, e.g., ἀντίδωτον (Liddell and Scott 1996: 155) > ܢܛܝܕܛܘܢ ‘antidote’ (Sokoloff 2009: 61) and δἰπτυχον (Liddell and Scott 1996: 437) > ܕܝܦܛܘܟܐ ‘diptych, tablet’ (Sokoloff 2009: 298).

Greek δ is also represented by the emphatic dental stop t in ποδάγρα (Liddell and Scott 1996: 1425) > ܦܛܓܪܐ ‘gout’ (Sokoloff 2009: 124, 1180). This is likely the result of an assimilation of [+emphatic] due to the “emphatic” p (see §5.2.12). A similar correspondence is found in πανδοκεῖον (Liddell and Scott 1996: 1296-1297) > ܡܘܛܩܐ ‘inn’ (Sokoloff 2009: 1162, 1177), but also with assimilation of n (see §5.2.12). The Greek δ in

31 Alternatively, these cases could involve nasalization of the vowel.
33 Gignac 1976: 1.75 with n. 3, 178.
34 Kiraz 2012: §603-604; Nöldeke 1904: §25; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: § 5).
35 The expected representation ܦܘܠܐ ܫܡא pwl ܩ is also occurs.
36 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 1976-: 1.63, 82-83; Mays 1970: 146-147).
πανδοκεῖον is also represented in Syriac with 𝐭, which was realized as either a voiceless dental stop or a voiceless dental fricative, e.g., ܡܡܝܝ pwtq' . 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.37 It should be noted that these developments are not attested in the other dialects of Late Aramaic in which the Greek word is found: Jewish Babylonian Aramaic ܡܡܚܒܙܡ ʩ (Sokoloff 2002a: 888), Jewish Palestinian Aramaic ܡܡܚܒܙܡ (Sokoloff 2002b: 426), and Christian Palestinian Aramaic ܡܡܚܒܙܡ (Schulthess 1903: 159).38

Greek δ is not always represented in πανδοκεῖον (Liddell and Scott 1996: 1405) > ܡܡܐܘܝܐ pnqyt', ܡܡܐܘܝܐ pnqydt' 'writing tablet, treatise; collection; small book, volume' (Sokoloff 2009: 1207). This is due to a regressive assimilation of d to t.39 It should be noted, however, that in the later vocalization tradition ܡܡܐܘܝܐ pnqyt' is realized as /pɛŋqitɔ/ with t (not tt).40 The fricativization 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 -디ον.41

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

(5-4) a. διαφωνία (Liddell and Scott 1996: 420) > ܡܡܐܝ ypsns ‘discord’ (Sokoloff 2009: 579; only in Aphrahat, Demonstrations, 605.26; 677.5 [ed. Parisot 1894-1907])

38 The developments found in Syriac thus preclude it from being the immediate source of Arabic ܦܲܲܘܕܩ - (Biberstein-Kazimirski 1860: 638; Lane 1863-1893: 2449).
39 So already Wright 1870-1872: 2.633. For this sound change, see Nöldeke 1904: §26B and compare, e.g., *ḥaadā > *ḥaadɔ > ḫattɔ ‘new’, written ܡܡܐܘܝܐ h(ɔ) t.'
41 So, Van Rompay (personal communication). For similar cases, see p. 118 below.
b. δορυφόρος (Liddell and Scott 1996: 446) > legate < Arabic الـِسَكَانْدَارِيَّة < Greek Ἀλεξάνδρεια, in which the initial syllable in Greek was mis-analyzed as the Arabic definite article الـِ, which was then removed in legate.

(42) For a similar phenomenon, compare جَعْوَز ِالـِسَكَانْدَارِيَّة < Arabic الـِسَكَانْدَارِيَّة- < Greek Ἀλεξάνδρεια, in which the initial syllable in Greek was mis-analyzed as the Arabic definite article الـِ, which was then removed in جَعْوَز.

44 Gignac 1976-: 1.120; Mayser 1970: 176.
45 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §7)
47 Gignac 1976-: 1.64, 178.

If these are not simply corruptions, then they can be explained as instances of meta-analysis in which the initial δ was mis-analyzed as the nominalizing particle δ-, which allowed it to be deleted from the word.42

5.2.5 Greek ζ

Greek ζ was a monograph for the consonant cluster /zd/ in Attic Greek.43 By the Koinē Greek of the Roman and Byzantine periods, it had developed into a voiced alveolar fricative /z/.44 Greek ζ is always represented by the Syriac voiced alveolar fricative instancetype e.g., ζωνάριον (Liddell and Scott 1996: 759) > ܙܘܢܪܐ zwnr ‘belt’ (Sokoloff 2009: 373-374) and τραπεζίτης (Liddell and Scott 1996: 1810) > ܛܪܦܙܝܛܐ pztʾ ‘money-changer’ (Sokoloff 2009: 556).

5.2.6 Greek θ

Greek θ was an aspirated voiceless dental stop /θ/ in Attic Greek.46 During the Roman period, it developed into a voiceless dental fricative /θ/,47 which became the established
pronunciation in the Byzantine period. Greek θ is typically represented in Syriac by т, which was realized as a voiceless dental stop or a voiceless dental fricative, e.g., ἄθλητής (Lampe 1961: 46; Liddell and Scott 1996: 32) > ܐܬܠܝܛܐ ʾtlʾτ ‘athlete, fighter’ (Sokoloff 2009: 111-112) and θέατρον (Liddell and Scott 1996: 787) > ܬܐܛܪܘܢ tʾrwn ‘theater; spectacle’ (Sokoloff 2009: 1618).

Greek θ is also represented by the emphatic dental stop т in θόρυβος (Liddell and Scott 1996: 803-804) > ܛܘܪܒܐ wrbʾ turmoil, uproar’ (Sokoloff 2009: 521). According to Brock (1967: 402), this is due to analogy with ܛܘܪܦܐ wrpʾ ‘torment’ (Sokoloff 2009: 522). Alternatively, the spelling with т could be due to the loss of aspiration of θ in the Greek source, which is occasionally attested in Greek documents from Egypt.49

5.2.7 Greek κ

Greek κ was a voiceless unaspirated velar stop /k/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.50 Greek κ is typically represented in Syriac by the emphatic velar stop ṣ, e.g., εἰκῇ (Liddell and Scott 1996: 484) > ܐܝܩܐʾ yqʾ ‘in vain’

48 Brock 1996: 255; Kiraz 2012: §603-604; Nöldeke 1904: §25; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §8).

49 Gignac 1976: 1.86-96, esp. 91 (word initial); Mayser 1970: 147-148. It should be noted that this irregular representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §8, 164).


51 Brock 1996: 255; Kiraz 2012: §603-604; Schall 1960: 37; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §9).
(Sokoloff 2009: 37-38) and καιρός (Liddell and Scott 1996: 859-860) > καιρός qʾrsʾ (with alternative orthographies) ‘time; mischance; distress, difficulty; war’ (Sokoloff 2009: 1308).

In a few isolated cases, Greek κ is represented by the voiced velar stop g:52

(5-5) a. ἐκκλησιέκδικος (Lampe 1961: 433) > ܩܐܪܣܐ qʾsʾ ‘expert in church law’ (Sokoloff 2009: 92)

b. καλλίας (Liddell and Scott 1996: 867) > ܓܠܣ gls ‘ape, monkey’ (Sokoloff 2009: 238)


This representation is to be explained by an interchange γ for κ in the Greek source, which is encountered in Greek documents from Egypt as well as from Syria and Mesopotamia.53 It should be noted that for at least one of the words in (5-5) the Greek form with γ is actually attested in a Greek document from Egypt: γυβερνήτης (P.Grenf. 1.49.21 [220/221 CE]).54

52 This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §9). See also Latin scutum (Glare 1982: 1714; Lewis and Short 1969: 1651) > σκοῦτα (Liddell and Scott 1996: 1616), cf. σκουτάριον (Daris 1991: 104) > σκουτάριον sgwfwʾš ‘shield’ (Sokoloff 2009: 967).

53 For Egypt, see Gignac 1976-: 6-80; Mayser 1970: 143-144; for Syria and Mesopotamia, see, e.g., ἐγνεικήτα for ἐκνικῆται (P.Dura. 26.ext.r.23 [227]); ἐγδικίας for ἐκδικίας (P.Euph. 2.13 [mid-3rd]); διεγδικήσειν for διεκδικήσειν (P.Euph. 9.22-23 [252]); ἐγβένω for ἐκβαίνω (P.Euph. 17.22 [mid-3rd]); ἐγδιακληρώσεως for ἐκ διακληρώσεως (P.Dura. 19.6 [88-89]).

54 The change from voiceless to voiced velar stop is also reflected in Latin gubernare (Lewis and Short 1969: 831), which is a loanword from Greek.
Greek κ is represented in Syriac by \( k \), which was realized as a voiceless velar stop or a voiceless velar fricative, in the following isolated cases.\(^{55}\)

(5-6) a. \( \kappa \varepsilon \rho \kappa \iota \zeta \) (Liddell and Scott 1996: 943) \( \rightarrow \) accusative singular \( \kappa \varepsilon \rho \kappa \iota \delta \alpha \) \( \rightarrow \) \( \kappa r k y d' \) ‘weaver’s come’ (Sokoloff 2009: 654-655)\(^{56}\)

b. \( \chi \alpha \lambda \kappa \eta \delta \omega \nu \) (Liddell and Scott 1996: 1973) \( \rightarrow \) \( q r k d n' \) ‘chalcedony’ (Sokoloff 2009: 1411; cf. Joosten 1998: 47; Schall 1960: 121). This would not be the only irregular consonant correspondence in the word: \( \chi = \) Syriac \( q \), but usually \( k \) (see §5.2.17); \( \lambda = \) Syriac \( r \), but usually \( l \) (see §5.2.8). The phonology is a better fit for \( \kappa r \chi \eta \delta \omicron \omicron \omicron \) ‘Carthaginian’ (Liddell and Scott 1996: 881) or the like.

The seeming irregular correspondence found in these words is likely due to an interchange of \( \kappa \) and \( \chi \) in the presence of a liquid in the Greek source, a change that is sporadically attested in Greek documents from Egypt.\(^{57}\) A third case of this representation could potentially be found in \( p y n k' \) ‘dish, writing tablet’ (Sokoloff 2009: 1188; cf. Schall 1960: 104), if the input form is \( \pi \nu \alpha \kappa \alpha \), the accusative of \( \pi \nu \alpha \xi \) (Liddell and Scott 1996: 1405). It is, however, preferable to follow Brock (1967: 413) in taking the input form to be the nominative \( \pi \nu \alpha \xi \) in which case Greek \( \xi \) would be realized as Syriac \( k s \), as is typical (§5.2.11), followed by the loss of the case marker -\( s \), leaving only \( k \) (see §6.2.3.12). If Brock’s proposal is accepted, then Syriac \( p y n k' \) is not an additional example of the correspondence of Greek \( \kappa \) with Syriac \( k \).

In the *Ecclesiastical History* by Pseudo-Zacharias (6th cent.), Greek \( \kappa \) is represented by the emphatic dental stop \( \theta \) in \( \gamma \lambda \omega \sigma \sigma \sigma \kappa \omicron \omicron \omicron \omicron \) (Liddell and Scott 1996: 353) \( \rightarrow \) \( \zeta \lambda \alpha \rho \omicron \omicron \omicron \omicron \). \(^{58}\)

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\(^{55}\) See Schall 1960: 37, 220. This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §9).

\(^{56}\) This representation is also found in Jewish Palestinian Aramaic \( k r k d \) ‘staff used for beating’ (Sokoloff 2002b: 269-270).

\(^{57}\) Gignac 1976-: 1.89-90; Mayser 1970: 144-145.
glwšṭm’ ‘chest, box, case’ (Sokoloff 2009: 233-234; cf. Nöldeke 1875: xxx; Brock 1967: 397).\(^{58}\) This representation is difficult to explain. The fact that a similar spelling occurs in Mandaic glušṭuma, glušṭma (Drower and Macuch 1963) suggests that this is a loanword from Syriac.

5.2.8 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.\(^{59}\) It is typically represented by the Syriac alveolar lateral approximant ṭ,\(^{60}\) e.g., σελλίον (Liddell and Scott 1996: 1590) > سلیون sylín ‘small chair; latrine, toilet’ (Sokoloff 2009: 149; 1001) and ظل hwl (Liddell and Scott 1996: 1847-1848) > ظل hwl’ (with alternative orthographies) ‘woods, forest; matter, material; firewood’ (Sokoloff 2009: 335, 341).

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

(5-7) a. υδραύλης (Liddell and Scott 1996: 1884) > حوضة *’dwrs ‘hydraulic organ’ (Sokoloff 2009: 11) only possibly in Acts of Thomas, 279.8 (ed. Wright 1871a), which Fränkel (1903: 86) proposed as an emendation of حوضة dwrs;\(^{61}\) Tubach (2011: 247 n. 72), however, has argued that this emendation is unnecessary.

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\(^{58}\) The usual spelling in Syriac is حوضة glwsqm, though حوضة glwsqm with assimilation of [+emphatic] is also attested. Compare also Christian Palestinian Aramaic gw/wsqwmwn ‘bag, purse’ (Müller-Kessler and Sokoloff 1998a: 227; Schultess 1903: 38) and Jewish Palestinian Aramaic gw/wsqwm (Sokoloff 2002b: 129).

\(^{59}\) For Attic, see Allen 1987: 39-40; Woodard 2004b: 616; for Koinē, see Gignac 1976-: 1.178.

\(^{60}\) Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §10).
proposing instead that $\text{др̈ωσܐ}$ represents Greek υδραύλης with assimilation of l to s and the loss of initial ʾ. Finally, it should be noted that $\text{др̈ωσܐ} \text{hdrwl}$ (Sokoloff 2009: 332) is the more common form of the word.

b. $\chi\lambdaκηδ\omegaν$ (Liddell and Scott 1996: 1973) > $\text{др̈ωσܐ qrkdn}$ ‘chalcedony’ (Sokoloff 2009: 1411). This would not be the only irregular consonant correspondence in the word (see p. 99).

If these examples are admitted, they could be explained by an interchange of ρ and λ in the Greek source, a change that is attested in Greek documents from Egypt.62

Greek λ is not consistently represented in $\chi\lambda\nuείον$ (Liddell and Scott 1996: 303) > $\text{ὸ bn}$ ‘bath’ (Sokoloff 2009: 161) due to haplography.63 This haplography is also found in Jewish Palestinian Aramaic $\text{bny}$ (Sokoloff 2002b: 105) and Jewish Babylonian Aramaic $\text{banne}$, $\text{b\'ny}$ (Sokoloff 2002a: 209). The form without haplography is, however, attested in Syriac $\text{bln}$ ‘bath’ (Sokoloff 2009: 158) as well as in Jewish Palestinian Aramaic $\text{blny}$ (Sokoloff 2002b: 104).

An irregular representation of Greek λ with Syriac n is found in $\lambda\mu\nuτ\nu\rho$ (Liddell and Scott 1996: 1028) > $\text{nftyρ}$ ‘lantern, torch’ (Sokoloff 2009: 930).64 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.65

61 Wright (1871a: 279), Fränkel (1903: 86), Brockelmann (1928: 167), Schall (1960: 120), and Tubach (2011: 247 n. 72) all give the ms. as reading $\text{др̈ωσܐ d̆rws}$, against Sokoloff (2009: 11), who has $\text{др̈ωσܐ d̆rws}$.


63 Brockelmann 1908: §9711α; Schall 1960: 61-62.

64 This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §161).

5.2.9 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.\(^{66}\) It is typically represented by the Syriac bilabial nasal m,\(^{67}\) e.g., γραμμάτιον (Liddell and Scott 1996: 359) > ܓܪ̈ܡܛܝܘܢ (pl.) ‘promissory note’ (Sokoloff 2009: 261) and μέν (Liddell and Scott 1996: 1101-1102) > ܡܢ ‘indeed’ (Sokoloff 2009: 778).

In the following isolated cases, Greek μ is not represented in Syriac:\(^{68}\)

(5-8) a. συμφωνία (Liddell and Scott 1996: 1689) > ἵππος ἱππ’ ‘bagpipe’ (Sokoloff 2009: 1297)

b. Latin subsellium (Glare 1982: 1848; Lewis and Short 1969: 1781) > συμψέλλιον (Daris 1991: 109; Liddell and Scott 1996: 1690) > σῆλος spsl ‘bench’ (Sokoloff 2009: 963, 1032), also attested as σῆλος sbsl, which likely represents the Latin

These examples are to be explained by 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.\(^{69}\)

Greek μ is represented by Syriac n in σύμπονος (Liddell and Scott 1996: 1685; Lampe 1961: 1289) > ἱππαῖος ‘supervisor of the trades people of Constantinople on behalf of the

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\(^{66}\) For Attic, see Allen 1987: 33; Woodard 2004b: 616; for Koinē, see Gignac 1976-: 1.178.

\(^{67}\) Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §11).

\(^{68}\) See also λαμπτήρ (Liddell and Scott 1996: 1028) > ἱππαῖος nptyr ‘lantern, torch’ (Sokoloff 2009: 930), which also attests the irregular correspondence of Greek λ with Syriac n (see §5.2.8).

\(^{69}\) Gignac 1976-: 1.117; Mayser 1970: 165.

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eparch of the city’ (Sokoloff 2009: 984). This is due to a dissimilation of \( \mu \) to \( \nu \) before a labial in the Greek source, which is encountered in Greek documents from Egypt as well as from Syria and Mesopotamia.

5.2.10 Greek \( \nu \)

Greek \( \nu \) was an alveolar nasal /n/ in Attic Greek as well as in the Koinê Greek of the Roman and Byzantine periods. It is typically represented by the Syriac alveolar nasal ʼn, e.g., δρόμων (Liddell and Scott 1996: 450) > ܕܪܡܘܢ ’drmwn ‘ship, boat’ (Sokoloff 2009: 324) and νομή (Liddell and Scott 1996: 1178-1179) > ܢܘܡܐ nwm ʼpasture’ (Sokoloff 2009: 900).

In rare cases, Greek \( \nu \) is not represented in Syriac:

(5-9) a. ἀνδριάς (Liddell and Scott 1996: 128) → accusative singular ἀνδριάντα > ܐܕܪܝܢܛܐ ʾʾ, ܐܕܪܝܛܐ ʾʾ ‘statue’ (Sokoloff 2009: 11), with an additional spelling of ܐܡܪܝܢܛܐ ʾʾ

b. πανδοκεῖον (Liddell and Scott 1996: 1296-1297) > ܡܘܛܩܐ pwtq, ܡܘܛܩܐ p’tq

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70 This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §160).

71 For Egypt, see Gignac 1976-: 1.167-169; Mayser 1970: 203-207; for Syria and Mesopotamia, see, e.g., διαπενσαμένου for διαπεμψαμένου (P.Euph. 2.20 [mid-3rd]); ἐνποιηθῆ for ἐμποιηθῆ (P.Euph. 8.24 [251]); ἐντοιχισμένου for ἐμμοιχισμένου (P.Euph. 9.23 [252]); ἐντροσθῆνεν for ἐμπροσθῆ (P.Euph. 16.Α.2 [after 239]); ἐνπράξει for ἐμπράξει (P.Euph. 13.16 [243]); συνβά[ν] for συμβάν (P.Euph. 2.5 [mid-3rd]); συμπαρόντος for συμπαρόντος (P.Euph. 6.9 [249]; 9.14 [252]).


73 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §12).

74 See also Latin mansio (Glare 1982: 1074; Lewis and Short 1969: 1109) > ܡܣܝܘܢܐ msywn ʼjourney of ten parasants’ (Sokoloff 2009: 790). It should be noted that Latin ns is normally realized simply as σ in Latin loanwords in Greek (Gignac 1976-: 1.117-118).
‘inn’ (Sokoloff 2009: 1162, 1177)

c. σάνδαλον (Liddell and Scott 1996: 1582) > ܠܐ ܣܕ ʾsandl’ ‘sandal’ (Sokoloff 2009: 971, 1022), with an additional spelling of ܠܐ ܣダンlʾ‘sandl’

d. σινδών (Liddell and Scott 1996: 1600) > ܣܕ ܘܢܐ ʾsdwn’ ‘fine linen cloth’ (Sokoloff 2009: 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,75 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 (Liddell and Scott 1996: 1164) > ܐܢܣܩܐ ܝܢܣܩʾ’youth’ (Sokoloff 2009: 577), which also occurs as ܢܝܢܣܩܐ nynsqʾ(Sokoloff 2009: 915).

5.2.11 Greek ξ

Greek ξ is a monograph for the voiceless unaspirated velar stop κ and the voiceless alveolar fricative σ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.76 Greek ξ is typically represented in Syriac by two consonants: κ, which was realized as a voiceless velar stop or a voiceless velar fricative, and the voiceless alveolar fricative σ,77 e.g., Latin dux (Glare 1982: 582; Lewis and Short 1969: 621) > δοὖξ (Dariss 1991: 41-42; Liddell and Scott 1996: 447) > ܕܘܟς dwks ‘leader’ (Sokoloff 2009: 281) and παράδοξον

75 Gignac 1976-: 1.116; Palmer 1945: 2. This change in Greek may additionally involve nasalization of the vowel.
76 For Attic, see Allen 1987: 59-60; Woodard 2004b: 616; for Koinē, see Gignac 1976-: 1.139-141; Mayser 1970: 184-185.
77 Brock 1996: 255; Kiraz 2012: §12, 603-604; Nöldeke 1904: §25; Voigt 1998b: 529-531. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §13).
(Liddell and Scott 1996: 1309) > ܦܪܕܘܟܢ prdwkn ‘paradox’ (Sokoloff 2009: 1228). The use of ݂, instead of the emphatic velar stop ܩ, suggests that the initial segment of Greek ξ was at least partially aspirated, i.e., /kʰs/, a realization that is supported by other evidence.⁷⁸

Greek ξ is represented by the emphatic velar stop ܩ and the voiceless alveolar fricative ݂ in κόραξ (Liddell and Scott 1996: 980) > ܩܪܩܣܐ qrqs ‘raven, crow; jay, magpie’ (Sokoloff 2009: 1416). This representation corresponds to the expected representation of a monograph for the voiceless unaspirated velar stop ݂ and the voiceless alveolar fricative ݂.⁷⁹

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


b. λῶταξ (Liddell and Scott 1996: 1069; Lampe 1961: 818) > ἑλῶται λῶται ‘beggar, idler’ (Sokoloff 2009: 677), also occurring more rarely is the expected ἑλῶται ἑλῶταξ

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 triradicalization of a Greek loanword.

Greek ξ is irregularly represented by the emphatic velar stop ܩ, without the voiceless alveolar fricative ݂, in Latin sextarius (Glare 1982: 1751; Lewis and Short 1969: 1688) > ܠܘܛܐܟܣ lʾks

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⁷⁸ See Harviainen 1976: 20 with the references in n. 3.
⁷⁹ This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §13).
The same correspondence is found already in Palmyrene \textit{qst\textit{wn}} (Hillers and Cussini 1996: 406; cf. Brock 2005: 19) as well as in Jewish Palestinian Aramaic \textit{qsy\textit{f}} (Sokoloff 2002b: 498), Christian Palestinian Aramaic \textit{qsy\textit{f}} (Müller-Kessler and Sokoloff 1997: 288; Schulthess 1903: 181), and Jewish Babylonian Aramaic \textit{qis\textit{st}}, \textit{qis\textit{st}} (Sokoloff 2002a: 1014). This representation is difficult to account for, but it may be due to the triradicalization of a Greek loanword.

Greek $\xi$ is irregularly represented by the voiceless palatal fricative $\mathfrak{s}$ in $\chi\alpha\lambda\xi\xi$ ‘gravel’ (Liddell and Scott 1996: 1972) $\rightarrow$ $\kappa\lambda\mathfrak{s}\mathfrak{t}$ ‘lime’ (Sokoloff 2009: 627; cf. Schall 1960: 111).

5.2.12 Greek $\pi$

Greek $\pi$ was a voiceless unaspirated bilabial stop /p/ in Attic Greek as well as in the Koinê Greek of the Roman and Byzantine periods.\footnote{Brock 1975: 83 n. 20; Voigt 1998b: 530. Various Greek sources have been proposed, for which, see Hillers and Cussini 1996: 1018.} It is typically represented in Syriac by $\mathfrak{p}$,\footnote{For Attic, see Allen 1987: 14-16; Woodard 2004b: 616; for Koinê, see Gignac 1976-: 1.178.} which was realized either as a voiced bilabial stop or a voiceless bilabial fricative in native Syriac words, e.g., $\delta\iota\pi\tau\chi\omicron\omicron\upsilon$ (Liddell and Scott 1996: 437) $\rightarrow$ $\kappa\partial\lambda\nu\mathfrak{m} \mathfrak{d}y\mathfrak{p}t\mathfrak{w}k$ ‘diptych, tablet’ (Sokoloff 2009: 298) and $\pi\omicron\omicron\tau\epsilon$ (Liddell and Scott 1996: 1454) $\rightarrow$ $\kappa\rho\nu\mathfrak{s} \mathfrak{p}w\mathfrak{t}$ ‘ever’ (Sokoloff 2009: 1162).
Greek π is left unrepresented in κάμπτριον (Liddell and Scott 1996: 873) > qmtrn ‘small chest’ (Sokoloff 2009: 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.83

Syriac p was realized as a voiced bilabial stop /p/ or a voiceless bilabial fricative /p/ (= IPA /φ/) in native Syriac words. There is, however, evidence suggesting 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:84

(5-11) a. ποδάγρα (Liddell and Scott 1996: 1425) > pîgrʾ ‘gout’ (Sokoloff 2009: 124, 1180), as well as the expected representation pwdgrʾ

b. πρόσωπον (Liddell and Scott 1996: 1533) > prswpʾ ‘face, countenance; person, party’ (Sokoloff 2009: 1249-1250), for expected *prswpʾ

c. πύργος (Liddell and Scott 1996: 1556) > pwrgsʾ ‘tower’ (Sokoloff 2009: 1173), for expected *pwrgsʾ

d. συμφωνία (Liddell and Scott 1996: 1689) > spwnyʾ ‘bagpipe’ (Sokoloff 2009: 1297), for expected *spwnyʾ; cf. Aramaic of Daniel sumponyɔ (Dan. 3:5, 15), sypnyh (Dan. 3:10 [k]), suponyɔ (Dan. 3:10 [q]) (Koehler and Baumgartner 2000: 1937-1938) without emphatic s

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

83 Gignac 1976-: 1.64; Mayser 1970: 152.
[+emphatic] occurs systematically in the Ct-stem of πεῖσαι (Liddell and Scott 1996: 1353-1354) > rt. ἐστὶ psyς C ‘to persuade, to convince; to demand, seek, beseech’ (Sokoloff 2009: 1188), which is written ἐστὶ psyς.\textsuperscript{85}

In the later Syriac vocalization 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.\textsuperscript{86} In his grammatical works, Bar 'Ebroyo (d. 1286) speaks on several occasions about the “Greek \( pe \)” (καπνὸς καὶ \( pe \) αὐθαίνως) that is found in ἀκαθάρτωσις prōwp ‘face, countenance; person, party’ (Sokoloff 2009: 1249-1250) < πρόσωπον (Liddell and Scott 1996: 1533) and other Greek loanwords.\textsuperscript{87}

An “emphatic” \( p \) also occurs with Greek loanwords in Christian Palestinian Aramaic,\textsuperscript{88} e.g., ἀσπίς (Liddell and Scott 1996: 259) > ἅπις ‘snake’ (Müller-Kessler and Sokoloff 1997: 241; Schulthess 1903: 15). In the Christian Palestinian Aramaic script, this “emphatic” \( p \) can be written either with the sign of the voiceless bilabial stop (ܭ) or with a reversed form of this sign (ܭ). The “emphatic” \( p \) in Syriac and Christian Palestinian Aramaic can be compared to the Classical Ethiopic (Goʿaz) characters that are usually transcribed as \( p \) (ܘ) and ṭ (ܐ).\textsuperscript{89} These characters occur almost exclusively in loanwords of various origins, including from Greek,\textsuperscript{90} e.g., πνεῦμα ‘spirit’ (Liddell and Scott 1996: 1424) > penemtu ‘Satan’ (Leslau 1991: 413) and

\textsuperscript{85} See already Schall 1960: 80.

\textsuperscript{86} Kiraz 2012: §214; cf. §63, 68; Nöldeke 1904: §15; Segal 1983: 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 2012: §214).

\textsuperscript{87} See Voigt 1998b: 532-536 with additional references.

\textsuperscript{88} Müller-Kessler 1991: §2.1.2.4.

\textsuperscript{89} It should be noted that the Classical Ethiopic reflex of the Proto-Semitic voiceless bilabial stop \(*p*\) is /ʃ/.

πόλις ‘city’ (Liddell and Scott 1996: 1433-1434) > *polis ‘capital city’ (Leslau 1991: 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 (§5.2.16), a few homographs result:

(5-12) a. ܐܣܦܝܪ ʾ spyr, ܣܦܝܪ spyr ‘troop, cohort’ (Sokoloff 2009: 76, 1031) < σπεῖρα (Liddell and Scott 1996: 1625) vs. ܐܣܦܝܪ ʾ spyr’, ܣܦܝܪ spyr’, ܐܣܦܝܪ ʾ spyr ‘sphere; circle; ball; pine cone; cake’ (Sokoloff 2009: 76, 1031) < σφαῖρα (Liddell and Scott 1996: 1738)


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.

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91 Brock 1996: 255.
5.2.13 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. In Attic Greek, a voiceless allophonic realization, i.e., /ʔr/, also occurred when in word initial position or when geminated. This allophone was lost during the Roman period. When not clause initial and not geminated, Greek ρ is typically represented in Syriac by the alveolar trill r, e.g., ἀήρ (Liddell and Scott 1996: 30) > ʾʾr ‘air’ (Sokoloff 2009: 1) and συνήγορος (Liddell and Scott 1996: 1715) > ʾʾsngrʾ (with alternative orthographies) ‘advocate’ (Sokoloff 2009: 1022).

Greek ρ is represented by the voiced alveolar lateral approximant l in δορυφόρος (Liddell and Scott 1996: 446) > ἀργάν lwrʾ ‘praetorian guardsman’ (Sokoloff 2009: 680). 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. It should be noted, however, that there is an additional irregularity in this case with the loss of the initial syllable δο- (see §5.2.4).

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92 For Attic, see Allen 1987: 39-45; Woodard 2004b: 616; for Koinē, see Gignac 1976:-: 1.178.
94 For discussion, see Harviainen 1976.
95 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §15).
96 This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §159). A similar representation also occurs in πρόεδρος (Liddell and Scott 1996: 1476) > Palmyrene *plhdr → plhdrw ‘presidency’ (Hillers and Cussini 1996: 400; cf. Brock 2005: 20, 24).
97 Gignac 1976:-: 1.103-104; Mayser 1970: 161. Harviainen (1976: 19) argues that the Palmyrene form (see previous footnote) is due to a dissimilation in Semitic; the sound change is, however, better attested in Greek.
Greek ρ is represented by the alveolar nasal n in μαργαρίτης (Liddell and Scott 1996: 1080) > ܡܪܓܢܝܬܐ mrgnyt‘pearl; Eucharistic wafer’ (Sokoloff 2009: 826). According to Ciancaglini (2008: 78), this is due to a dissimilation of r to n following another r in Syriac. 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 realized as a voiceless alveolar trill /t/ in Attic Greek. During the Roman period, the allophonic realization was lost and initial Greek ρ was a voiced alveolar trill /r/. 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. (5-13) a. ῥητίνη (Liddell and Scott 1996: 1569) > ῥητίνιοι rhtnι, ῥητίνιος rhtnις ‘resin’ (5th cent. Julian Romance, 51.12 [ed. Hoffmann 1880b], already in Gen 37.25; 43.11; Sokoloff 2009: 1460)


98 For the related Iranian forms, see Ciancaglini 2008: 207. This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §161).
100 Harviainen 1976.
102 The spelling ῥητοριά ryn’ also occurs in later literature.
This representation reflects the older pronunciation. In loanwords that are not attested until after the fifth century, however, initial Greek ρ with *spiritus asper* is represented simply with *r* in Syriac, e.g., ῥογά (Lampe 1961: 1217) > ܪܘܓܐ rwg ‘pay, wages; paying of wages’ (6th cent. Yuḥanon of Ephesus, *Ecclesiastical History*, Part 3, 129.26; 270.26 [ed. Brooks 1935]; Sokoloff 2009: 1443; cf. Harviainen 1976: 66). The representation with *r* (without *h*) reflects the loss of the allophonic realization of word-initial ρ in the Greek source.

As in the case of word-initial ρ, geminated Greek ρρ (written ρ̣ρ in the Byzantine orthography) was realized as a voiceless alveolar trill /ɾ/ in Attic Greek. The allophonic realization was lost in the Roman period. Harviainen (1976: 29-32) dates this change to the fourth century. Medial ρ̣ is represented in Syriac by the alveolar trill *r* with a following voiceless glottal fricative *h* in ἀῤῥαβών (Liddell and Scott 1996: 146) > ῥ хозάν ρhbn, ‘pledge, deposit’ (Sokoloff 2009: 1439; cf. Harviainen 1976: 66), which is common from the fourth century onward in Syriac. This spelling reflects the older Attic pronunciation. Medial ρ̣ is represented by the Syriac alveolar trill *r* without *h* in the following words:


103 In his *Letter on Syriac Orthography*, Yaʿqub of Edessa (d. 708) refers to writings of ρ with *rh* as ‘according to ancient custom’ (*μεττῷο λαύδυτῳ ἀττίγτῳ*) (ed. Phillips 1869: 5.-10).


106 In his *Letter on Syriac Orthography*, Yaʿqub of Edessa (d. 708) refers to writings of ρ̣̣ with *rh* as ‘according to ancient custom’ (*μεττῷο λαύδυτῳ ἀττίγτῳ*). (ed. Phillips 1869: 5.-10).
1976: 66)

b. καταῤῥάκτης (Liddell and Scott 1996: 908-909) > ملاجمق qtrqṭ ‘ sluice, floodgate; step of stairs’ (Bible 1 Kg 6:8; Sokoloff 2009: 1359; cf. Harviainen 1976: 66)

The representation of ῥῤ by Syriac r (without h) reflects the later Koinē pronunciation after the allophonic realization was lost. It should be noted that the representation of Greek ῥῤ with Syriac r (without h) in ملاجمق qtrqṭ from the Old Testament Peshīṭta 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.

Various representations of ῥῤ are attested for παῤῥησία (Liddell and Scott 1996: 1344). Table 5-3 provides a diachronic synopsis of these. In addition to rh and r (without h), Greek ῥῤ is represented by Syriac rr in this word. This is an unusual representation of Greek gemination in Syriac (§5.2.19); thus, it is likely a reflection of the allophonic realization of ῥῤ.
Table 5-3 Diachronic Synopsis of Spellings of παῤῥησία in Syriac

<table>
<thead>
<tr>
<th>Period</th>
<th>Work</th>
<th>Syriac Spellings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-4th cent.</td>
<td>Old Syriac Gospels (ed. Kiraz 1996)</td>
<td>prṛsʾy (John 11:54 [S])</td>
</tr>
<tr>
<td></td>
<td>Acts of Thomas (ca. 200-250 CE) (ed. Wright 1871a)</td>
<td>prṛsyʾ (212.12; passim), prṛsyʾ (192.10)</td>
</tr>
<tr>
<td>4th cent.</td>
<td>Demonstrations by Aphrahat (fl. 337-345) (ed. Parisot 1894-1907)</td>
<td>prṛsʾy (1.545.12)</td>
</tr>
<tr>
<td></td>
<td>Memra on our Lord by Ephrem (d. 373) (ed. Beck 1966)</td>
<td>prṛsʾy (11.24; 46.21)</td>
</tr>
<tr>
<td>5th cent.</td>
<td>Teaching of Addai (ca. 420) (ed. Howard 1981)</td>
<td>prṛsʾy (46.1; 50.18)</td>
</tr>
<tr>
<td></td>
<td>Julian Romance (5th cent.) (ed. Hoffmann 1880b)</td>
<td>prṛsʾy (14.7; passim)</td>
</tr>
<tr>
<td>6th cent.</td>
<td>Life of Rabbula (ca. 450) (ed. Overbeck 1865: 159-209)</td>
<td>prṛsʾy (186.13; 198.26)</td>
</tr>
<tr>
<td></td>
<td>Lives of Eastern Saints by Yuhanon of Ephesus (d. ca. 589) (ed. Brooks 1923-1925)</td>
<td>prṛsʾy (23.2, 12; passim)</td>
</tr>
<tr>
<td></td>
<td>Life of Yuhanon of Tella by Eliya (mid-6th cent.) (ed. Brooks 1907: 29-95)</td>
<td>prʾrsʾy (77.12)</td>
</tr>
<tr>
<td>7th cent.</td>
<td>Part 3 by Ishaq of Nineveh (late 7th cent.) (ed. Chialà 2011)</td>
<td>prṛsʾy (99.9, 14)</td>
</tr>
<tr>
<td></td>
<td>Life of Marutha by Denha (d. 649) (ed. Nau 1905a: 52–96)</td>
<td>prṛsʾy (76.9)</td>
</tr>
<tr>
<td></td>
<td>Letter on Syriac Orthography by Yaʿqub of Edessa (d. 708) (ed. Phillips 1869)</td>
<td>prʾrrysʾy (6.9)</td>
</tr>
</tbody>
</table>

5.2.14 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. It is typically represented by the Syriac voiceless alveolar fricative s, e.g., ἀσπίς (Liddell and Scott 1996: 259) > ʾsps ‘snake’ (Sokoloff 107)

107 For Attic, see Allen 1987: 45-46; Woodard 2004b: 616; for Koinē, see Gignac 1976:-: 1.178; Mayser 1970: 176.
108 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §16A).

Greek σ is represented by the emphatic alveolar fricative ˢ in the following words:¹⁰⁹


b. πρόσωπον (Liddell and Scott 1996: 1533) > ܦܪܨܘܦܐ prwfnp’ ‘face, countenance; person, party’ (Sokoloff 2009: 1249-1250)

c. συμφωνία (Liddell and Scott 1996: 1689) > ܨܦܘܢܝܐ sypnym (Dan. 3:10 [k]), supnyc (Dan. 3:10 [q]) (Koehler and Baumgartner 2000: 1937-1938) without emphatic ˢ

In each of these cases, the emphatic ˢ is due to the assimilation of [ + emphatic] in the context of another emphatic consonant.

Greek σ is represented by the voiced dental fricative ʢ in the following cases:¹¹⁰

(5-16) a. προθεσμία (Liddell and Scott 1996: 1481) > ܦܪܬܘܙܡܝܐ prtwzmy’ ‘fixed time peric spelling of prwtsmy’ (Sokoloff 2009: 1235).

b. σμάραγδος (Liddell and Scott 1996: 1619) > ܙܡܪܓܕܐ zmrgdy ‘emerald’ (Sokoloff 2009: 387), also in Samaritan Aramaic zmrgdy (Tal 2000: 234); Christian

¹⁰⁹ This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §16C).
¹¹⁰ This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §17D).
Palestinian Aramaic *zmrgd* (Müller-Kessler and Sokoloff 1997: 254; Schulthess 1903: 56); Jewish Palestinian Aramaic *zmrgd* (Sokoloff 2002b: 179), but note also *smrd* (Sokoloff 2009: 1021)

c. *σμίλη* (Liddell and Scott 1996: 1619) > *ςμή* ‘small knife, scalpel’ (Sokoloff 2009: 385), also in Targum Jonathan ʿuzmil (Jer 36:23); Jewish Palestinian Aramaic ʿwzmyl (Sokoloff 2002b: 38); Late Jewish Literary Aramaic ʿzml (TgJob 16:9; Jastrow 1886-1903: 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.\(^\text{111}\)

Greek σ is represented by the voiceless palatal fricative š in εἶδος (Liddell and Scott 1996: 482) > *ςδ* ‘form in the Platonic sense; species, kind; character, nature; fruit’ (Sokoloff 2009: 11; cf. Schall 1960: 245). This representation also occurs in Mandaic atšia ‘crops, fruits’ (Drower and Macuch 1963: 14).\(^\text{112}\)

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:\(^\text{113}\)

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\(^\text{111}\) Gignac 1976-: 1.120-121; Mayser 1970: 177.

\(^\text{112}\) A parallel might possibly be found in μόσχος (Liddell and Scott 1996: 1148) > *ςδ* *mwsḥ* ‘calf’ (Sokoloff 2009: 731), though the correspondence of Greek χ with Syriac ḫ would also be irregular (see §5.2.17).

\(^\text{113}\) Brock 2005: 24; Kiraz 2012: §90; Nöldeke 1904: §51. This representation is also found in other dialects of Aramaic, such as Palmyrene (Brock 2005: 24), as well as in Post-Biblical Hebrew (Krauss 1898: §261-264).
(5-17) a. σκάμνιον (Lampe 1961: 1235) > ܣܩܡܢܝܢ sqmyn, ܐܣܩܡܢܝܢʾ sqmnyn ‘seat’ (Sokoloff 2009: 79, 1040)
b. σπόγγος (Liddell and Scott 1996: 1628) > ܐܣܦܘܓܐ spgwʾ, ܣܦܘܓܐʾ spgʾ ‘sponge’ (Sokoloff 2009: 75)
c. στολή (Liddell and Scott 1996: 1648) > ܠܐ ܐܣܛʾ slʾ, ܠܐ ܣܛʾ slʾ ‘robe’ (Sokoloff 2009: 69)
d. σφαῖρα (Liddell and Scott 1996: 1738) > ܐܣܦܝܪܐ spyrʾ, ܣܦܝܪܐʾ sp yʾ (with alternative orthographies) ‘sphere; circle; ball; pine cone; cake’ (Sokoloff 2009: 76, 1031)
e. σχολή (Liddell and Scott 1996: 1747-1748) > ܠܐ ܐܣܟܘʾ skwlʾ, ܠܐ ܣܟܘʾ skwlʾ ‘lecture hall’ (Sokoloff 2009: 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., *satiya > *šati > *ši > Syriac ’ešī ‘he drank’.

5.2.15 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.114 Greek τ is typically represented in Syriac by the emphatic dental stop ṭ,115 e.g., πιττάκιον (Liddell and Scott 1996: 1409) > ܐܦܛܩܐ pṭqʾ

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114 For Attic, see Allen 1987: 16-17; Woodard 2004b: 616; for Koinē, see Gignac 1976-: 1.178.
115 Brock 1996: 255; Kiraz 2012: §603-604; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §17).

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:116


e. προστάς (Liddell and Scott 1996: 1526) → accusative singular προστάδα > ܢݍܐܒܫܐ prwstdʾ ‘doorpost, lintel; vestibule, portico’ (Sokoloff 2009: 1233)

f. πιστικός ‘faithful’ (Liddell and Scott 1996: 1408) > ܦܣܛܝܩܐ pstyqʾ ‘sailor to whom responsibility for a ship is entrusted’ (Sokoloff 2009: 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, which is attested in Greek documents from Egypt as well as from Syria and Mesopotamia.118 There are several additional examples in which Greek τ is represented by Syriac t:

116 This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §165).
117 See also στατήρ (Liddell and Scott 1996: 1634) > ܪܐܒܫܐ strʾ, ܪܐܒܫܐ strʾ ‘stater, coin, weight’ (Sokoloff 2009: 80), though the immediate source may be Iranian and not Greek (so Sokoloff 2009: 80).
118 For Egypt, see Gignac 1976-: 1.87; Mayser 1970: 154; for Syria and Mesopotamia, see, e.g., κατεσθάθην for κατεστάθην (P.Dura. 46.r5 [early 3rd]); ἀφείσθαι for ἀφίστασθαι (P.Dura. 31.int.7, ext.33 [204]).

b. μαργαρίτης (Liddell and Scott 1996: 1080) > ܡܪܓܢܝܬܐ mrgnytʾ ‘pearl; Eucharistic wafer’ (Sokoloff 2009: 826)

c. μηλωτή (Liddell and Scott 1996: 1127) > ܡܝܠܬܐ myltʾ ‘carpet; covering; pillow’ (Sokoloff 2009: 752; cf. Schall 1960: 62)

In each of these cases, the irregular correspondence likely has a morphological motivation, i.e., Syriac t is used as a derivational/inflectional morpheme. Finally, Greek τ is represented with Syriac t in τάγμα (Liddell and Scott 1996: 1752) > ܬܓܡܐ tgmʾ ‘order, class; command, precept; troop, cohort’ (Sokoloff 2009: 185, 1623; cf. Schall 1960: 80). The representation of Greek τ with Aramaic t is already found in Palmyrene Aramaic tgmʾ ‘association’ (Hillers and Cussini 1996: 418). Brock suggests that this representation is due to assimilation of [−emphatic].

5.2.16 Greek φ

Greek φ was an aspirated voiceless bilabial stop /pʰ/ in Attic Greek. During the Roman period, it developed into a voiceless bilabial fricative /φ/, which became the

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119 Occasionally, however, ܓܐܠܬܐ tgmʾ (Sokoloff 2009: 512) is found. Compare also διάταγμα (Liddell and Scott 1996: 414) > ܕܝܛܓܡܐ dygmʾ ‘order, charge’ (Sokoloff 2009: 294) and πρόσταγμα (Liddell and Scott 1996: 1525-1526) > ܡܪܘܡܛܓܡܐ prwstgmʾ ‘command’ (Sokoloff 2009: 1232).
122 Gignac 1976-: 1.64, 86-96, 178.
established pronunciation in the Byzantine period. Greek φ is typically represented in Syriac by p,\textsuperscript{123} which was realized as a voiceless bilabial stop or a voiceless bilabial fricative, e.g., ἀπόφασις (Liddell and Scott 1996: 225-226) > ܡܘܦܣܘܛ ‘judgment; negation’ (Sokoloff 2009: 83) and φιλόσοφος (Liddell and Scott 1996: 1940) > ܡܳܠܿܳܐܠܳܠܳܐܳܡܳܦܐ ‘philosopher’ (Sokoloff 2009: 1187).

5.2.17 Greek χ

Greek χ was an aspirated voiceless velar stop /kʰ/ in Attic Greek.\textsuperscript{124} During the Roman period, it developed into a voiceless velar fricative /x/,\textsuperscript{125} which became the established pronunciation in the Byzantine period. Greek χ is typically represented by Syriac ܐ (Liddell and Scott 1996: 1983) > ܟܝܡܘܢܐ ‘storm’ (Sokoloff 2009: 619) and ܡܘܟ ‘bolt for fastening door’ (Sokoloff 2009: 724).

Greek χ is represented by the emphatic velar stop q in the following words:\textsuperscript{127}

(5-20) a. χαλκηδών (Liddell and Scott 1996: 1973) > ܩܪܟܕܢܐ ‘chalcedony’ (Sokoloff 2009: 1411). This would not be the only irregular consonant correspondence in the word (see p. 99).

\textsuperscript{123} Brock 1996: 255; Kiraz 2012: §603-604; Nöldeke 1904: §25; Voigt 1998b: 528-529. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §20).

\textsuperscript{124} Allen 1987: 18-26; Woodard 2004b: 616.

\textsuperscript{125} Gignac 1976-: 1.64, 86-96, 178.

\textsuperscript{126} Brock 1996: 255; Kiraz 2012: §603-604; Nöldeke 1904: §25; Schall 1960: 42-44; Voigt 1998b: 528. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §21).

\textsuperscript{127} Schall 1960: 232. This representation is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §163).
b. χαράκωμα (Liddell and Scott 1996: 1977) > ܩܠܩܘܡܐ qlqwm’ ‘siege engines, entrenchments’ (Sokoloff 2009: 1375), compare the expected correspondence in Targum Jonathan krqwm’ (1 Sm 26:7; Jastrow 1886-1903: 669) and Late Jewish Literary Aramaic krqwm’ (TgJob 20:24; Jastrow 1886-1903: 669), as well as Jewish Palestinian Aramaic krkwm’ (Sokoloff 2002b: 270), where however the correspondence of κ is irregular


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. 128

5.2.18 Greek ψ

Greek ψ is a monograph for the voiceless unaspirated bilabial stop π and the voiceless alveolar fricative ζ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods. 129 It is represented in Syriac by two consonants: p, which was realized as a voiceless

129 For Attic, see Allen 1987: 59-60; Woodard 2004b: 616; for Koinē, see Gignac 1976--: 1.141-142; Mayser 1970: 185.
bilabial stop or a voiceless bilabial fricative, and the voiceless alveolar fricative s,\(^{130}\) e.g., ψήφισμα (Liddell and Scott 1996: 2022) > ܡܦܣܦܝܣܡܐ pspysm’ ‘suffrage, vote’ (Sokoloff 2009: 1210) and ὀψώνιον (Liddell and Scott 1996: 1283) > pl. ܡܦܣܘܢܝʾ pswny̱r’ ‘wages’ (Sokoloff 2009: 87-88).

5.2.19 Gemination in Greek

With the exception of γγ and ρρ,\(^{131}\) Greek gemination, which is written with two consonants, was realized as a lengthened sound.\(^{132}\) In the vast majority of cases, Greek gemination is represented by a single consonant in Syriac,\(^{133}\) e.g., κόσσος (Liddell and Scott 1996: 985; Lampe 1961: 772) > ܩܣܘܣ qsws ‘blow on the ear’ (Sokoloff 2009: 1386) and τύραννος (Liddell and Scott 1996: 1836) > ܛܪܘܢܐ twn’ ‘tyrant’ (Sokoloff 2009: 549). The Syriac consonantal script does not indicate gemination (Kiraz 2012: §217), and thus it cannot be determined whether or not gemination is represented in these cases without recourse to the later vocalization traditions.

Occasionally, Greek gemination is represented by two consonants in Syriac, as in μᾶλλον (Liddell and Scott 1996: 1076) > ܡܐܠܠܘܢ mʾll, ܡܠܠܘܢ mllwn ‘rather, more’ (Sokoloff 2009: 766), as well as ܡܠܘܢ mlwn. The spelling of this word with two ˡ’s in Syriac is not found until the sixth century. In contrast, the spelling with one ˡ is already attested in the fourth century in Ephrem’s *Commentary on the Diatessaron* (ed. Leloir 1990: 30.19). This

\(^{130}\) Kiraz 2012: §603-604; Voigt 1998b: 529-531. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §22).

\(^{131}\) These were discussed in §5.2.3 and §5.2.13, respectively.


\(^{133}\) Kiraz 2012: §603-604. For the representation of Greek gemination in Post-Biblical Hebrew and in various dialects of Jewish Aramaic, see Krauss 1898: §41.
suggests that the representation of Greek gemination with two consonants in Syriac is a late phenomenon.\textsuperscript{134} This aligns with the trend that the Greek source tends to be represented more closely in Syriac over time.

5.2.20 Summary

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. The regular correspondences are summarized in the column labeled ‘common’ in Table 5-4. Correspondences that are labeled ‘rare’ in this table are usually the result of one of two causes. First, a Koiné form of Greek served as the source for some of the words that 

\textit{prima facie} seem to exhibit irregular correspondences. This is, for instance, the case with the initial consonant of \textit{gwbrnyt} ‘helmsman, pilot’ in Aphrahat’s \textit{Demonstrations} (ed. Parisot 1894-1907: 1.612.2; cf. Sokoloff 2009: 210), which does not derive from Attic Greek \textit{κυβερνήτης} (Liddell and Scott 1996: 1004), but rather from Koiné \textit{γυβερνήτης}, a form that is attested in Greek documents from Egypt (P.Grenf. 1.49.21 [220/221 CE]). Second, some of the irregular correspondences are due to secondary developments. This is, for instance, the case with \textit{πινακίδιον} (Liddell and Scott 1996: 1405) > \textit{pnqyt}, writing tablet, treatise; collection; small book, volume’ (Sokoloff 2009: 1207), which results from the regressive assimilation of \textit{d} to \textit{t} in Syriac. Excluding cases subsumed under these two categories, very few of the secondary correspondences remain unexplained.

\textsuperscript{134} It should be noted that, among the many spellings of \textit{παῤῥησία} (Liddell and Scott 1996: 1344), \textit{prsy} and \textit{prssy} are found already in the third-century \textit{Acts of Thomas} (ed. Wright 1871a: 212.12 and 192.10, respectively; see Table 5-3). This unusual spelling for consonantal gemination is, however, probably due to the voiceless pronunciation of \textit{ρ̣ρ} (see §5.2.14).
Table 5-4 The Representation of Greek Consonants in Syriac

| Greek | | Syriac | | Greek | | Syriac |
|-------|----------------|-------|----------------|----------------|-------|
| | common | rare | | common | rare | |
| β | ω b | ω p, ω w | | β | ω b | |
| γ | ω g | ω q, ω d | | γ | ω g | γ |
| γ /ŋ/ | ω n | ω | | γ /ŋ/ | ω n | ω |
| δ | ω d | λ t, ω t, ω | | δ | ω d | δ |
| ζ | ω z | ζ | | ζ | ω z | ζ |
| θ | ω t | θ t | | θ | ω t | θ |
| κ | ω q | λ g, ω k, λ t | | κ | ω q | κ |
| λ | λ l | λ r, ω | | λ | λ l | λ |
| μ | μ m | μ | | μ | μ m | μ |
| ν | ω n | ν | | ν | ω n | ν |
| ξ | μ μ kς | μ μ qs, μ s, μ q, μ š | | ξ | μ μ kς | ξ |
| π | μ p | μ | | π | μ p | π |
| ρ | μ r | Δ l, μ n | | ρ | μ r | ρ |
| ρ- | μ μ rh, μ r | | | ρ- | μ μ rh, μ r | |
| ρρ | μ μ rh, μ r | μ μ rr | | ρρ | μ μ rh, μ r | |
| σ | μ s | μ s, μ z | | σ | μ s | σ |
| τ | μ t | μ t | | τ | μ t | τ |
| φ | μ p | μ p | | φ | μ p | φ |
| χ | μ k | μ q | | χ | μ k | χ |
| ψ | μ μ ps | μ μ ps | | ψ | μ μ ps | ψ |

The vast majority of common correspondences in Table 5-4 are unremarkable since Greek phonemes tend to be represented by similar Syriac phonemes, e.g., the Greek bilabial nasal μ by the Syriac bilabial nasal μ μ m, the Greek alveolar trill ρ by the Syriac alveolar trill μ r, etc. One set of correspondences does, however, require further comment. As discussed in §5.2.1, Attic Greek was characterized by a symmetrical system of nine stops, with three manners of articulation (voiceless unaspirated [κ, π, τ], voiceless aspirated [θ, φ, χ], and voiced [β, γ, δ]) and three places of articulation (bilabial [β, π, φ], dental [δ, θ, τ], and velar [γ, κ, χ]). By the Koinē Greek of the Roman period, the voiceless aspirated stops had become voiceless
fricatives, i.e., \( *p^h > f, *t^h > \theta, \) and \( *k^h > x \). Similarly, the voiced stops eventually became voiced fricatives, i.e., \( *b > \beta, *g > \gamma, \) and \( *d > \delta \). The Greek voiced stops \( \beta, \delta, \) and \( \gamma \) are regularly represented by the corresponding Syriac voiced stops \( \overline{b}, \overline{d}, \) and \( \overline{g} \). Similarly, the Greek voiceless fricatives \( \phi, \theta, \) and \( \chi \) are regularly represented by the corresponding Syriac voiceless fricatives \( \overline{p}, \overline{t}, \) and \( \overline{k} \). In contrast, however, the Greek voiceless stops \( \pi, \tau, \) and \( \kappa \) are not regularly represented by the Syriac voiceless stops \( \overline{p}, \overline{t}, \) and \( \overline{k} \), as might be expected, but by the Syriac emphatic stops \( \overline{p}, \overline{t}, \) and \( \overline{k} \).135 The Greek voiceless stops and the Syriac emphatic stops, thus, share the features of voiceless and non-fricative (Voigt 1998b: 528); they differ, however, in that the Syriac representations of the Greek voiceless stops are ‘emphatic’, i.e., pharyngealized.136 This unexpected representation may have at least a partial orthographic motivation, since the signs for the Syriac voiceless stops were already being employed for the the Greek voiceless fricatives. One way to avoid ambiguity would have been to employ the signs for the emphatic stops, which like the Greek voiceless stops \( \pi, \tau, \) and \( \kappa \) were voiceless and non-fricative.

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135 It should be noted that these correspondences are found in other dialects of Aramaic, e.g., Palmyrene (Brock 2005: 23), as well as in other Semitic languages (Marrassini 1990: 39-41; 1999: 329-330).

136 It is of course possible, though unlikely, that this representation indicates that the Syriac emphatic stops were in fact no longer realized as emphatic, i.e., pharyngealized, but simply as voiceless non-fricative stops.
5.3 Vowels

5.3.1 Overview

The vocalic inventory of Koinē Greek in the Roman period contained six phonemes, which are summarized in Table 5-5. The Koinē vocalic system is the result of a number of developments from the much more complicated system of Attic Greek, which had five short and seven long vowels, plus five short diphthongs and five long diphthongs. In the Koinē Greek of the Roman period, there were two high front vowels /i/ and /y/, which are distinguished by the presence or absence of rounding. The high front unrounded /i/ in the Koinē Greek of the Roman period is written with ι, which was a high front unrounded vowel, either short /i/ or long /iː/, in Attic Greek, as well as with η, which was a long open-mid front /ɛː/ in Attic Greek, and with ηι, which was a long close-mid front /eː/ in Attic Greek. The high front rounded /y/ in the Koinē Greek of the Roman period is written with υ, which was a high front rounded vowel, either short /y/ or long /yː/, in Attic Greek, as well as with οι, which was a diphthong /oi/ in Attic Greek. By the middle of the Byzantine period, /y/ lost its rounding and so merged with /i/. Mid front /e/ in the Koinē Greek of the Roman and Byzantine periods is written with ε, which was a mid-front short /e/ in Attic Greek, as well as with οι, which was a diphthong /ai/ in Attic Greek. Low central /a/ in the Koinē Greek of the Roman and Byzantine periods is written with α, which was a low central vowel, either short /a/ or long /aː/, in Attic Greek. Mid back /o/ in the Koinē Greek of the Roman and Byzantine periods is written with ο, which was a short mid-back /o/ in Attic Greek, as well as with ω, which was a long open-mid back /ɔː/ in Attic Greek. High back /u/ in the Koinē Greek of the Roman and Byzantine periods.

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138 For the more complicated vowel inventory of Attic Greek, see Allen 1987: 62-95; Woodard 2004b: 617.
is written with ου, which was a long high-back /uː/ in Attic Greek. In addition to these six vowel phonemes, the Koinē Greek of the Roman and Byzantine periods has two diphthongs: αυ /au/ and ευ /eu/.

Table 5-5  Vowel Phonemes of Koinē Greek in the Roman Period

<table>
<thead>
<tr>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i (ι, η, ει) / y (υ, οι)</td>
<td>u (ου)</td>
</tr>
<tr>
<td>mid</td>
<td>e (ε, αι)</td>
<td>o (ο, ω)</td>
</tr>
<tr>
<td>low</td>
<td></td>
<td>a (α)</td>
</tr>
</tbody>
</table>

The vocalic inventory of fourth-century Classical Syriac can be reconstructed with eight phonemes, which are summarized in Table 5-6.\footnote{In general, see Daniels 1997; Muraoka 2005: §4; Nöldeke 1904: §8-10.} High back /u/ is the reflex of earlier Aramaic *ū as well as *u in unaccented syllables. Close-mid back /o/ is the reflex of earlier Aramaic *u in accented syllables as well as earlier Aramaic *aw in closed syllables. In later West Syriac, close-mid back /o/ merged with high back /u/. Open-mid back /ɔ/ is the reflex of earlier Aramaic *ā. In later West Syriac, this vowel was raised to close-mid back /o/. Low central /a/ is the reflex of earlier Aramaic *a. Open-mid front /e/ is the reflex of earlier Aramaic *i. High front /i/ is the reflex of earlier Aramaic *i. Close-mid front /e/ results from several different contractions, including non-final *-a’ and word final *-āyu and *-āyu.\footnote{These are discussed in Blau 1969.} In later West Syriac,
close mid front /e/ merged with /e/. Mid front ɛ results from other contractions,\footnote{There is no IPA symbol that represents the mid front unrounded vowel between close-mid e and open-mid ɛ. This is, however, often represented as ɛ, i.e., greater tongue lowering of close-mid e, or less commonly as ę, i.e., increased tongue height of open-mid ɛ (Roca and Johnson 1999: 127).} including non-final *-i', but it merges with /i/ in later West Syriac instead of /e/.

The vowel system described in the previous paragraph and summarized in Table 5-6 must be reconstructed. This is because the written Syriac vocalization traditions were not developed until after the period that is of interest to this study.\footnote{The use of diacritic points for specific vowel phonemes does not appear until the eighth and ninth centuries (Kiraz 2012: §34). Traces of the five-vowel Greek system are also found at this time though it is not systematically in use until the tenth century (Coakley 2011; Kiraz 2012: §44).} These vocalization traditions involve the layering of vowel signs, either in the form of diacritic points (East Syriac) or adapted Greek vowels (West Syriac), onto an inherited consonantal skeleton.\footnote{For these systems, see Kiraz 2012: §138-157, 174-83; Segal 1953: 24-47.} Since all data for these vocalization traditions derive from well after the time period that is of interest to this study, these vocalization traditions must be reconstructed.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
 & front & central & back \\
\hline
high & i & u & \\
close-mid & e & o & \\
mid & ɛ & \\
open-mid & ɛ & ɔ & \\
low & a & \\
\hline
\end{tabular}
\caption{Reconstructed Vowel Phonemes of 4th-Century Syriac}
\end{table}
study, this chapter does not analyze the use of Syriac vowel signs to represent vowels in Greek loanwords. The primary evidence for Syriac vowels prior to the late seventh century is the use of so-called *matres lectionis*. In scholarship on Northwest Semitic languages, the term *matres lectionis* (sin. *mater lectionis*), literally ‘mothers of reading’, refers to the use of certain consonants to mark vowels in a consonantal script. In the word ܓܘܫܡܐ /gšmʾ/ ‘body’ (Sokoloff 2009: 222-223), for instance, the bilabial glide w indicates the vowel /u/, and the voiceless glottal stop ʾ indicates the final /ɔ/. In native Syriac words, the sign for the bilabial glide w serves as a *mater lectionis* for almost all cases of high back /u/ and close-mid back /ɔ/;\(^{144}\) the sign for the palatal glide y serves as a *mater lectionis* for all cases of high front /i/ as well as for some cases of close-mid front /e/ and mid front /ɛ/; and the sign for the voiceless glottal stop ʾ serves as a *mater lectionis* for all cases of open-mid back /ɔ/ in final position as well as for many cases of close-mid front /e/ and mid front /ɛ/.\(^{145}\) These same consonants also serve as *matres lectionis* in Greek loanwords in Syriac. In addition, toward the end of the seventh century, the sign for the voiceless glottal fricative h came to be used as a *mater lectionis* in Greek loanwords. The following sections are primarily concerned with outlining the use of *matres lectionis* in Greek loanwords in Syriac.

The orthography of native Syriac words is in general extremely stable with little to no variation for the vast majority of words in the lexicon. With Greek loanwords, however, variation in orthography is much more common. This variation revolves primarily around the use of *matres lectionis* for representing vowels.\(^{146}\) Consider, for instance, Greek τῆγανον

\(^{144}\) The only regular exceptions are kol ‘all’ and mettol ‘because of’, where a *mater lectionis* is optional (Kiraz 2012: 101A).

\(^{145}\) For the system of *matres lectionis* in Syriac, see Kiraz 2012: §23-26, 33, 131-137.

\(^{146}\) See already Brock 1996: 256; 2004: 31 n. 5.
(Liddell and Scott 1996: 1786), which appears in Syriac as ܐܓܢܐ ʾgn’, ܐܓܢܐ ʾgn’, and ܝܓܢܐ ygn’ ‘frying pan’ (Sokoloff 2009: 513). Greek η in this example is represented in three different ways in Syriac: with a mater lectionis of y, with a mater lectionis of ʾ, and without a mater lectionis. This type of variation is simply unattested for native Syriac words, but it is not atypical of many Greek loanwords in Syriac. There are good indications that the representation of Greek vowels by matres lectionis in Syriac changed diachronically.\textsuperscript{147} Table 5-7 provides a diachronic synopsis of various spellings of Greek διαθήκη in Syriac. In the fourth century, there is variation in the representation of the final η with either ʾ or y in Syriac. The orthography then stabilizes as ܕܝܬܩܐ dytqʾ. Beginning in the sixth century, a new orthography ܕܝܐܬܝܩܝ dyʾtyqy is found in the West-Syriac tradition.\textsuperscript{148} This new orthography provides a fuller representation of the vowel hiatus ια.

\textsuperscript{147} Brock 1996: 256-257.
\textsuperscript{148} Brock 1996: 257.
<table>
<thead>
<tr>
<th>Century</th>
<th>Text</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-4th</td>
<td>Peshîṭta Old Testament</td>
<td>dytq’ (1 Chr 15:25, 26, 28, 29)</td>
</tr>
<tr>
<td>4th cent.</td>
<td>Demonstrations by Aphrahat (fl. 337-345) (ed. Parisot 1894-1907)</td>
<td>dytq’ (1.52.19; passim), dytyq (1.533.11)</td>
</tr>
<tr>
<td>4th cent.</td>
<td>Book of Steps (ca. 400) (ed. Kmosko 1926)</td>
<td>dytq’ (40.7; passim), dytyq (201.3; passim)</td>
</tr>
<tr>
<td>4th cent.</td>
<td>Madraše against Heresies by Ephrem (d. 373) (ed. Beck 1957a)</td>
<td>dytq’ (103.18; passim)</td>
</tr>
<tr>
<td>5th cent.</td>
<td>Teaching of Addai (ca. 420) (ed. Howard 1981)</td>
<td>dytq’ (35.9; 36.17)</td>
</tr>
<tr>
<td>5th cent.</td>
<td>Julian Romance (5th cent.) (ed. Hoffmann 1880b)</td>
<td>dytq’ (75.18)</td>
</tr>
<tr>
<td>5th cent.</td>
<td>Memre, Narsai (d. ca. 500) (ed. Frishman 1992)</td>
<td>dytq’ (73.60)</td>
</tr>
<tr>
<td>5th cent.</td>
<td>Life of Rabbula (ca. 450) (ed. Overbeck 1865: 159-209)</td>
<td>dytq’ (172.18)</td>
</tr>
</tbody>
</table>
Table 5-7, continued

<table>
<thead>
<tr>
<th>7th cent.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 2</strong> by Ishāq of Nineveh (late 7th cent.) (ed. Brock 1995)</td>
<td>ܕܝܬܩܐ dytqʾ (46.19, 20; passim)</td>
</tr>
<tr>
<td><strong>Letters</strong> by Ishoʿyahb III of Adiabene (d. 659) (ed. Duval 1904-1905)</td>
<td>ܕܝܬܩܐ dytqʾ (31.14; passim)</td>
</tr>
<tr>
<td><strong>Letter 13</strong> by Yaʿqub of Edessa (d. 708) (ed. Wright 1867: *1-*24)</td>
<td>ܕܝܬܩܝ dytyqy (19.12)</td>
</tr>
</tbody>
</table>

The previous example of διαθήκη not only shows that the orthography of Greek loanwords in Syriac changed diachronically, but it also points to a more specific trend: over time vowels in Greek loanwords tend to be represented more fully in Syriac. This trend can be exemplified by the representation of vowels in Greek loanwords in the *Letter on Syriac Orthography* by Yaʿqub of Edessa (d. 708).\(^{149}\) Table 5-8 illustrates the orthography preferred by Yaʿqub, in which every Greek vowel is represented by a Syriac mater lectionis. This is the extreme end of the spectrum in the representation of Greek vowels in Syriac. It should, however, be noted that this is only Yaʿqub’s ideal, which was never fully realized in Syriac.

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\(^{149}\) The text is edited in Phillips 1869.
Table 5-8 Yaʿqub of Edessa’s Preferred Orthography for Greek Loanwords

<table>
<thead>
<tr>
<th>Greek Source</th>
<th>Yaʿqub’s Orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>σύνοδος</td>
<td>ܣܘܢܘܕܘܣ (6.8)</td>
</tr>
<tr>
<td>παράσια</td>
<td>ܡܢܓܢܘܢ (6.9)</td>
</tr>
<tr>
<td>κατάστασις</td>
<td>ܩܐܛܐܣܛܐܣܝܣ (7.3)</td>
</tr>
<tr>
<td>φαντασία</td>
<td>ܦܐܪܪܝܐ (7.3)</td>
</tr>
<tr>
<td>θεολογία</td>
<td>ܦܝܠܘܣܘܦܝܐ (7.4)</td>
</tr>
<tr>
<td>πληροφορία</td>
<td>ܦܠܝܪܘܦܘܪܝܐ (7.4)</td>
</tr>
<tr>
<td>φιλοσοφία</td>
<td>ܦܝܠܘܣܘܦibase5(7.4)</td>
</tr>
<tr>
<td>εὐαγγέλια</td>
<td>ܐܘܐܢܓܠܝܣܛܐ (7.7)</td>
</tr>
<tr>
<td>διαθήκη</td>
<td>ܕܝܐܬܝܩܝ (7.7)</td>
</tr>
</tbody>
</table>

The following sections detail how each Greek vowel is represented in Syriac with *matres lectionis*.

5.3.2 Greek α

In Attic Greek, α was a low central vowel, either short /a/ or long /aː/.\(^{150}\) By the Koinē Greek of the Roman and Byzantine periods, the length distinction had been lost, and α was low central /a/.\(^{151}\) In the vast majority of cases (over 95%), Greek α is left unrepresented in the consonantos text of Syriac, e.g., μάγγανον (Liddell and Scott 1996: 1070) > ܡܢܓܢܘܢ ‘instrument of torture’ (Sokoloff 2009: 780) and κάν (Liddell and Scott 1996: 873) > ܩܢ ‘and if’ (Sokoloff 2009: 1379).

Very rarely (less than 5%), Greek α is represented with the voiceless glottal stop ’ in Syriac:\(^{152}\)

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\(^{152}\) Kiraz 2012: §133E, 603-604; Nöldeke 1904: §4B. The same representation is found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §23). See also


c. ἐπαρχία (Liddell and Scott 1996: 611) > ἐπαρχίας ʾp’rky’ ‘province; provence’ (7th cent. Ya’qub of Edessa, Hexaemeron, 104b.4 [ed. Chabot 1953]; Sokoloff 2009: 89, 353), with additional spellings of ἐπαρχίας ʾprky as well as ἐπαρχία hprky (Sokoloff 2009: 89, 353)


e. καταβιβάζων (Liddell and Scott 1996: 885) > q’ṭʾb byzw’n ‘descending note of the zodiac’ (7th cent. Severos Sebokht, Treatise on the Astrolabe, 247.4 [ed. Nau 1899]; Sokoloff 2009: 1348)


153 The spelling ܘܬܝܕܕܛܝܘܩܐ ʾwṯʾstypʾqʾs, which is given in Sokoloff 2009: 9, is not found in the edition of Wright 1867.


j. Table 5-2)

k. περάτης (Liddell and Scott 1996: 1365) > ܡܠܝܝܐ pʾrṭys ‘wanderer, emigrant’ (7th cent. Yaʿqub of Edessa, *Letter 12, to Yuḥanon the Stylite of Litarba on eighteen biblical questions*, 21.7 [ed. Wright 1867: *1-*24]; only here; Sokoloff 2009: 1226)

l. πλάκιον (Liddell and Scott 1996: 1411) > pl. ܡܠܝܐ plʾqy’slab, plank’ (7th cent. Yaʿqub of Edessa, *Hexaemeron*, 117b.9, 120b.27 [ed. Chabot 1953]; not common; Sokoloff 2009: 1192)

m. μᾶλλον (Liddell and Scott 1996: 1076) > ܡܠܠܘ’n mıllwn ‘rather, more’ (7th cent. Denḥa, *Life of Marutha*, 68.7; 73.12; 79.4, 11; 83.8 [ed. Nau 1905a: 52-96]; Marutha of Tagrit, *Homily on the Blessing of the Waters at Epiphany*, 59.4 [ed. 135
As these examples illustrate, the use of the Syriac voiceless glottal stop ʾ as a mater lectionis to represent Greek α is first attested in Yaʿqub of Edessa, Letter on Syriac Orthography, 7.3 [ed. Phillips 1869]; Sokoloff 2009: 1205), with an alternative orthography of ܡܛܘܢܝܐ mwny.

In a few rare cases, Greek α is represented by the bilabial glide w in Syriac:

(5-22) a. ἀναχωρητής (Lampe 1961: 129) > ܢܘܛܪܐ ntwr ʿnotarius, a Byzantine official’ (Sokoloff 2009: 898, 911), with an additional spelling of ܢܘܛܪܐ ntwr
b. ἀρειομανίτης (Lampe 1961: 224) > ܐܪܝܡܘܢܝܛܐ ʾArimonian’ (Sokoloff 2009: 99)
c. μετάνοια (Liddell and Scott 1996: 1115) > ܡܛܘܢܝܐ mwny (with alternative spellings) ‘bending, inclination; worship, adoration’ (Sokoloff 2009: 745)

154 For this distinction, see §4.5.
The use of Syriac as a mater lectionis for Greek α in these examples is due to an assimilation of the low central vowel to a back vowel.155

Greek α is represented by the Syriac palatal glide  y in ἀγών (Lampe 1961: 25; Liddell and Scott 1996: 18-19) > ʾygwn ʾ ‘struggle’ (Sokoloff 2009: 6). According to Brockelmann (1908: §94r), this is due to the dissimilation of the vowel in the initial syllable to e before the back vowel. It should be noted that the expected spelling ʾgwn ʾ occurs much more commonly, especially later.

5.3.3 Greek ε

In Attic Greek, ε was a mid-front short /e/.156 In the Koinē Greek of the Roman and Byzantine periods, ε continued to be a mid-front /e/,157 with which α merged (§5.3.9). In a majority of cases (over 85%), Greek ε is left unrepresented in the consonantal text of Syriac, e.g., μέν (Liddell and Scott 1996: 1101-1102) > ʾmn ‘indeed’ (Sokoloff 2009: 778) and φλέγμα (Liddell and Scott 1996: 1943) > ʾplgm ʾ ‘phlegm’ (Sokoloff 2009: 1195).

Greek ε is occasionally represented by the palatal glide  y in Syriac:158

155 This assimilation is discussed in more detail in §5.3.16.
158 Nöldeke 1904: §46; Schall 1960: 33-34. The same representation is found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §24).


This representation is not attested until the fifth-century *History of Shem'on bar Šabba*’e, and it becomes common only in the sixth century, especially with Yuḥanon of Ephesus (d. ca. 589). This representation illustrates the diachronic increase in the use of *matres lectionis* to represent Greek vowels.

Greek ε is represented in Syriac with the voiceless glottal stop ʾ in the following cases.\(^{159}\)

\(^{159}\) Kiraz 2012: §603-604. The same representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §24).
As these examples illustrate, this representation is not attested until the sixth century in Syriac and is rare even then.

Greek ε is occasionally represented in Syriac by the voiceless glottal fricative h.¹⁶⁰


As these examples illustrate, this representation is not attested until the sixth century in Syriac and is rare even then.

Greek ε is occasionally represented in Syriac by the voiceless glottal fricative h.¹⁶⁰


This representation is, however, not attested until the seventh century, and it is rare in non-translated texts even from this time. In addition, both of the words in (5-25) may be closer to *Fremdwörter* than *Lehnwörter.*

In the following examples, Greek ε is represented in Syriac by the bilabial glide w:

(5-26) a. Latin *speculator* (Glare 1982: 1802; Lewis and Short 1969: 1739) > σπεκουλάτωρ (Daris 1991: 106; Liddell and Scott 1996: 1626) > ἱσπουλάτωρ *spwqltr*, ἱσπουλάτωρ *spwqltr* ‘executioner’ (Sokoloff 2009: 75), compare Late Jewish Literary Aramaic ʾ*spqlwr* (TgEsth2 5:2; Jastrow 1886-1903: 56); Jewish Palestinian Aramaic ʾ*spqlwr* (Sokoloff 2002b: 68); Christian Palestinian Aramaic (*ʾ*spqlwr* (Schulthess 1903: 15)

b. δεσποτικός (Liddell and Scott 1996: 381) > ἐκατοστός *dwspwtyq* ‘servant of a master; imperial’ (Sokoloff 2009: 284-285)

c. προθεσμία (Liddell and Scott 1996: 1481) > ἐκατοστός *prtwzmy* ‘fixed time period’ (Sokoloff 2009: 1256)

This use of Syriac w as a *mater lectionis* for Greek ε is due to an assimilation of the mid-front vowel to a back vowel.

5.3.4 Greek η

In Attic Greek, η was a long open-mid front /e/. Though some Koinē dialects preserved η as an open-mid front /e/ into the Roman period, most Koinē dialects attest a merger

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161 For this distinction, see §4.5.
162 This assimilation is discussed in more detail in §5.3.16.
of η with /i/.\textsuperscript{164} Based on forms attested in Greek documents from Syria and Mesopotamia, Greek η seems to have merged fully into /i/ in this area by the Roman period.\textsuperscript{165} Greek η can be represented in Syriac in three primary ways. In more than half of the cases, it is represented by the palatal glide \( y \),\textsuperscript{166} e.g., ὄμηρος (Liddell and Scott 1996: 1221) > ܢܚܡܝܪܐ ܐܡܐ ʾ ‘hostage, pledge’ (Sokoloff 2009: 345) and νῆμα (Liddell and Scott 1996: 1173) > ܢܝܡܐ ܢ ’ ‘thread’ (Sokoloff 2009: 915). In 40% of the cases, Greek η is left unrepresented in the consonantal text of Syriac, e.g., δημόσιον (Liddell and Scott 1996: 387) > ܕܡܘܣܝܢ ‘public, state; public baths’ (Sokoloff 2009: 307-308) and χρῆσις (Liddell and Scott 1996: 2006) > ܟܪܣܝܣ ‘evidence, testimony’ (Sokoloff 2009: 652). The rarest representation of η is with the voiceless glottal stop \( ', \) e.g., λιμήν (Liddell and Scott 1996: 1050) > ܠܡܐܢܐ ܠ ’ ‘harbor’ (Sokoloff 2009: 691-692; cf. Schall 1960: 108) and Latin velum (Glare 1982: 2024; Lewis and Short 1969: 1965-1966) > βῆλον (Lampe 1961: 295) > ܠܐ ܘܐ ܠ ’ ‘veil, curtain’ (Sokoloff 2009: 358). Many words are attested with multiple representations of η, and some in fact attest all three:

(5-27) a. κατήγορος (Liddell and Scott 1996: 927) + -ον > ܩܛܓܪܢܐ ܩܛܡܐ ܩܛܪܐ ܩܛܐ ܩܛܐ ‘accuser’ (Sokoloff 2009: 1350, 1359)

b. συνήγορος (Liddell and Scott 1996: 1715) > ܩܛܪܐ ܩܛܪܐ ܩܛܪܐ ܩܛܪܐ ‘advocate’ (Sokoloff 2009: 1022)

\textsuperscript{165} See Welles, Fink, and Gilliam 1959: 47 as well as the following spellings: ἱ for εἰ (P. Euph. 11.24 [232]); καθαροποιήσει for καθαροποιήσῃ (P. Euph. 8.27 [251]); ύστερεσει for ύστερήσῃ (P. Euph. 16.A.5 [after 239]).
\textsuperscript{166} Kiraz 2012: §603-604. This representation is common in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §25).
There are no clear factors (diachronic or otherwise) dictating the choice of the three representations. The multiple representations of Greek η may, however, be partially motivated by the fact that both the voiceless glottal stop ʾ and the palatal glide  yardı serve as *matres lectionis* for close-mid front /e/ and mid front /ɛ/ in native Syriac words.\(^{167}\)

Greek η is occasionally represented by the voiceless glottal fricative ʰ. This is, however, not regularly found until the seventh century, and it is still rare in non-translated texts from this time.\(^{168}\)

Greek η is represented by the bilabial glide ʷ in καμηλαύκιον (Lampe 1961: 699) > ܩܡܘܠܘܩܝܐ *qmlwqy* ‘broad brimmed felt hat’ (Sokoloff 2009: 1376).\(^{169}\) This is due to an assimilation of the high front vowel to a back vowel.\(^{170}\)

In word final position, Greek η is represented by either the palatal glide ӡ or the voiceless glottal stop ʾ,\(^{171}\) e.g., ἀνάγκη (Liddell and Scott 1996: 101) > ܐܢܢܩܝ ʾ ’nnqʾ, ܘܐܢܢܩܝ ʾ ’nnqʾ.

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\(^{167}\) In West Syriac, this situation is further exacerbated since mid front /ɛ/ merges with /i/.

\(^{168}\) Brock 1996: 256. A potential exception might be found in παῤῥησία (Liddell and Scott 1996: 1344) > ܦܪܗܣܝܐ *prhsʾ*, a spelling attested already in *The Demonstrations* by Aphrahat [fl. 345-367] (ed. Parisot. 1894-1907: 1.545.12). Wasserstein (1993: 206; 1995: 135 n. 58) has proposed that Syriac ʰ in this case represents Greek η. It is, however, more likely, following Brock (1996: 256 n. 20), that Syriac ʰ here represents Greek *spiritus asper* (see §5.4.2.1) and not Greek η.

\(^{169}\) See also σωλήν (Liddell and Scott 1996:1748-1749) > ܣܝܠܘܢܐ *sylwn* ‘pipe, conduit; stream, brooklet’ (Sokoloff 2009: 1000-1001).

\(^{170}\) This assimilation is discussed in more detail in §5.3.16.

\(^{171}\) Kiraz 2012: §133D. See also §6.2.3.2 below.
ʾnnqy ‘necessity’ (Sokoloff 2009: 63). Occasionally, final Greek η is additionally indicated by the Syriac plural marker syōme.  


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172 Kiraz 2012: §158. Compare also σφυρισθῆναι > ɾ̣sϕ̣ṛṣṭỵṇ ’sp̣ṭỵṇ’ with ɾ̣ṿh̀ẉỵ ‘to be struck with hammers, beat’ (6th cent. Yuhanon of Ephesus, Ecclesiastical History, Part 3, 15.28 [ed. Brooks 1935]; Sokoloff 2009: 1057), where Greek -α/ε/ is marked by Syriac syōme.

173 The singular is assured by the following adjective that does not have syōme as well as by the witnesses of other manuscripts that have ܪܝܒܘܢ dytq without syōme (Yale Syriac 5 [1888 CE] and Sachau 222 [CE 1881; ed. Bedjan 1890-1897: 3.272.21]). A critical edition of this text, taking into account the various manuscripts, is currently in preparation by Aaron Butts, Daniel Schriever, Karen Connor, and Shana Zaia.

174 See also 94.14, 20; 146.20; 147.30; 162.21; 172.4.

175 The singular would seem to be assured by the common idiom of ɾ̣ṿh̀ḍ ‘to take’ plus nwm ‘pasture’ to mean ‘to spread’ (Sokoloff 2009: 900). The editor’s emendation (Chialà 2011: 104 n. 38) to ܪܝܒܘܢ nwm’ should be rejected.
The use of  syscall as a phonological marker for final /e/ in Syriac also occurs with various proper nouns of Greek origin:

(5-29)

a. Κρήτη ‘Crete’ > ܢܐ qît’ (Zeph 2:5, 6)

b. Κύρος ‘Cyrus’ → vocative Κύρε > ܕܝ qywr’ (Qiyore of Edessa, Six Explanations of the Liturgical Feasts, 1.1 [ed. Macomber 1974]) [standardized as the normal form of the name, regardless of context]

c. Παῦλος → vocative Παῦλε > ܠܐ pwlʾ (Acts 27.24, according to Brit. Libr. Add. 12,138, fol. 303b [reading according to Segal 1953: 99]) [in a vocative context]

d. Σκήτη ‘Skete’ > ܐܢܛܐ sūt’ (History of Abba Marcus of Mt. Tharmaka, according to ms. Yale Syriac 5, p. 36 [ed. Look 1929: 1])

In all of these cases, syscall serves as a phonological marker for final -e. It thus disambiguates the consonantal script of these Greek loanwords, which could be read with either final -ơ or
final -e, in the same way as it disambiguates the consonantal script of many masculine nouns, e.g., singular مَلِكَة malk‏ة ‘king’ vs. plural مَلِكَات malke ‘kings’. Occasionaly, the use of syome with singular nouns ending in Greek η led them to be used with pronominal suffixes as if they were plural, as in the following example:

(5-30) *Maḏroše on Virginity* by Ephrem (d. 373; ed. Beck 1962)

\[ \text{dýtqwhy} \quad \text{dmušё} \quad \text{lasbārēh} \quad \text{sakkyāṭ} \]

\[ \text{convenant-FEM.SG.CON} \text{+ his} \quad \text{NML + PN} \quad \text{to + good.news-F.SG.CON} \text{+ his wait-SUF.3.F.SG} \]

‘The covenant of Moses awaited His good news’ (32.1)

In this example, مَلِكَة dýtqwhy must be analyzed as a singular noun given the verbal agreement with sakkyāṭ (3.F.SG), but it takes the pronominal suffixes of a plural noun, i.e., -aw(hy) instead of -eh. Thus, in this case, the use of syome as a phonological marker has led to the noun adopting plural morphology.

5.3.5 Greek ι

In Attic Greek, ι was a high front unrounded vowel, either short /i/ or long /ii/. By the Koinē Greek of the Roman period, the length distinction had been lost, and ι was a high front unrounded /i/, with which η (§5.3.4) and ι (§5.3.11) merged. By the middle of the Byzantine period, /y/, which was written υ (§5.3.7) or ι (§5.3.13), lost its rounding and so also merged with /i/. Greek ι can be represented in Syriac in two primary ways. First, it can be represented

176 The connection of syome with final -e is also found in the numerals for the feminine teens, which end in -e and usually take syome (Nöldeke 1904: §16), unlike their masculine counterparts, which do not end in -e and thus do not usually have syome.


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with the palatal glide $y$,\textsuperscript{179} e.g., ἴσον (Liddell and Scott 1996: 839) > ܝܣܘܢ ʿỵsẉn ʿỵswn ‘copy’ (Sokoloff 2009: 37) and φύσις (Liddell and Scott 1996: 1964-1965) > ܦܘܣܝܣ ʿpwṣ ʿpṣ ‘nature’ (Sokoloff 2009: 1167). Second, it can be left unrepresented in the consonantal text of Syriac, e.g., ἀσπίς (Liddell and Scott 1996: 259) > ܐܣܦܣ ʾsps ‘snake’ (Sokoloff 2009: 77) and πιττάκιον (Liddell and Scott 1996: 1409) > ܦܛܩܐ ʾłql ʾyslw ʾe ‘letter; inscription’ (Sokoloff 2009: 1182-1183). Many words are attested with both representations of $i$,\textsuperscript{180} e.g., χριστιάνος (Lampe 1961: 1530) > ܟܪܣܛܝܢܐ ʾsyls ʾyslw ʾe ‘Christian’ (Sokoloff 2009: 652) and κελλαρίτης (Liddell and Scott 1996: 937; Lampe 1961: 741) > ܩܠܪܛܝܣ ʾqlsls ʾỵḷỵ ʾyslw ʾe ‘steward’ (Sokoloff 2009: 1376). There are no clear factors (diachronic or otherwise) dictating the choice of the two representations. The representation with $y$ is, however, approximately three times as common as $i$ being left unrepresented.

Rarely, Greek $i$ is represented with the voiceless glottal stop $ʾ$ in Syriac, e.g., κιβωτός (Lampe 1961: 753; Liddell and Scott 1996: 950) > ܩܐܒܘܬܐ ʾbwt ʾbwt ‘box; ark; chest; Ark of the Covenant; Noah’s Ark’ (Sokoloff 2009: 1306), with additional spellings of ܩܘܢܕܝܢܘܣ ʾqwndynws ʾỵḍẉ ʾe and ܩܝܢܕܘܢܘܣ ʾqyndynws ʾỵḍẉ ʾe. This may be due to the fact that both the voiceless glottal stop $ʾ$ and the palatal glide $y$ serve as matres lectionis for close-mid front /e/ and mid front /e/ in native Syriac words, the latter of which merged with /i/ in West Syriac.

In the following examples, Greek $i$ is represented by the bilabial glide $w$ in Syriac:

(5-31) a. κίνδυνος (Liddell and Scott 1996: 952) > ܩܘܢܕܝܢܘܣ ʾqwndynws ʾỵḍẉ ʾe ‘danger’ (Sokoloff 2009: 1363-1364), with additional spellings of ܩܝܢܕܘܢܘܣ ʾqyndynws and ܩܢܕܝܢܘܣ ʾqndynws

\textsuperscript{179} Kiraz 2012: §603-604; Nöldeke 1904: §4B. This is the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §26).

\textsuperscript{180} Kiraz 2012: 105.

c. περίζωμα (Liddell and Scott 1996: 1374) > ܡܪܙܘܡܐ prwzm ‘belt, girdle’ (Sokoloff 2009: 1238-1239), with additional spellings of ܡܡܘܝܢܐ przwmm’

This is due to an assimilation of the high front vowel to a back vowel.\(^{181}\)

5.3.6 Greek ϕ

In Attic Greek, ϕ was a short mid-back /o/.\(^ {182}\) In the Koinê Greek of the Roman and Byzantine periods, ϕ continued to be a short mid-back /o/,\(^ {183}\) with which ω merged (§5.3.8). Greek ϕ is represented in two primary ways in Syriac. First, it can be represented by the bilabial glide w,\(^ {184}\) e.g., ὅρχηστής (Liddell and Scott 1996: 1258) > ܐܘܪܟܝܣܛܐ ʾwksṭ ‘dancer’ (Sokoloff 2009: 101) and χυμός (Liddell and Scott 1996: 2013) > ܟܘܡܘܣ kwmws ‘humory, fluid, juice’ (Sokoloff 2009: 608). Second, it can be left unrepresented in the consonantal text of Syriac,\(^ {185}\) e.g., δρόμων (Liddell and Scott 1996: 450) > ܕܪܡܘܢ drmwn ‘ship, boat’ (Sokoloff 2009: 324) and Latin *stabulum* (Glare 1982: 1813; Lewis and Short 1969: 1749-1750) > στάβλον (Daris 1991: 107; Liddell and Scott 1996: 1631) > ܐܣܛܒܠܢ sблn ‘stable’ (Sokoloff 2009: 67). Many words are attested with both representations of ϕ,

\(^{181}\) This assimilation is discussed in more detail in §5.3.16.

\(^{182}\) Allen 1987: 63-64; Woodard 2004b: 617.


\(^{184}\) Kiraz 2012: §603-604. This is the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §27).

\(^{185}\) Nöldeke 1904: §4B.

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e.g., ὀργανόν (Liddell and Scott 1996: 1245) > ܐܘܪܓܢܘܢ ʾwrgnwn, ܐܪܓܢܢʾ ʾrgnwn, ܐܪܓܢܘܢ ʾwrgnwn ‘instrument, tool’ (Sokoloff 2009: 21) and ἕνοδοξεῖον (Liddell and Scott 1996: 1189) > ܟܣܢܘܕܘܟܝܢ ʾksnwdwkyn, ܟܣܢܕܟܝܢ ʾksndkyn, ܟܣܢܕܟܝܢ ʾksndkyn, ܟܣܢܘܕܘܟܝܢ ʾksnwdwkyn ‘hospital’ (Sokoloff 2009: 44, 640). The representation of ο with w is approximately twice as common as ο being left unrepresented. There are no clear factors (diachronic or otherwise) dictating the choice of the two representations.

Rarely, Greek ο is represented with the palatal glide y in Syriac:


c. ὁλοσηρικόν (Liddell and Scott 1996: 1218) > ܝܠܘܣܪܝܩܘܢ ʾlysryqwn ‘garment entirely of silk’ (Sokoloff 2009: 49), with an additional spelling of ܠܘܣܪܝܩܘܢ

d. πόρφυρον (Liddell and Scott 1996: 1452) > ܦܝܪܦܪܘܢ pyrprwn ‘purple garment’ (Sokoloff 2009: 1191)

These examples may be due either to an interchange of ο and ε or of ο and υ in the Greek source; both interchanges are attested in Greek documents from Egypt.

Rarely, Greek ο is represented with the voiceless glottal stop ʾ in Syriac:

(5-33) a. Latin moneta (Glare 1982: 1130; Lewis and Short 1969: 1161) > μονήτα (Daris

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186 For the former, see Gignac 1976-: 1.289-292; Mayser 1970: 72-73; for the latter, see Gignac 1976-: 1.211-214; Mayser 1970: 74-75, 77-78.
These examples are likely the result of an interchange of ο and α in the Greek source, a spelling that is attested in Greek documents from Egypt.\(^{187}\)

5.3.7 Greek \(\upsilon\)

In Attic Greek, \(\upsilon\) was a high front rounded vowel, either short /y/ or long /yː/.\(^{188}\) By the Koinē Greek of the Roman period, the length distinction had been lost, and \(\upsilon\) was a high front rounded /y/,\(^{189}\) with which οι merged (§5.3.13). By the middle of Byzantine Greek, \(\upsilon\) had lost its rounding and so merged with /i/.\(^{190}\) Greek \(\upsilon\) can be represented in Syriac in three primary ways. Most commonly (ca. 60%), it is represented by the bilabial glide \(w\),\(^{191}\) e.g., ύπατισσά (Lampe 1961: 1436) > ܗܘܦܛܝܣܐ .

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\(^{190}\) Gignac 1976-: 1.267 with n. 1; Horrocks 2010: 162-163. For this merger in the Greek of Syria and Mesopotamia, see Welles, Fink, and Gilliam 1959: 47 as well as the following spellings: κατηρτικεία for κατηρτικύιαν (P.Euph. 10.3 [250]); κατηρτικείαν for κατηρτικύιαν (P.Euph. 10.11 [250]); κρύσεως for κρύσεως (P.Dura. 31.ext.46; 31.int.18 [204]); συμβίωσιν for συμβίωσιν (P.Dura. 31.ext.33 [204]); συνοικισμόν for συνοικισμόν (P.Dura. 31.ext.31 [204]); συνοικισμόι for συνοικισμού (P.Dura. 31.int.14 [204]); ύποχρογραφήκοτων for ύποχειρογραφήκοτων (P.Dura. 31.ext.28-29; 31.int.2-3 [204]); φύσκον for φύσκον (P.Dura. 31.ext.48 [204]). It should be noted that most of these spellings are found in P.Dura. 31, a text which departs in other ways from standard orthography (Welles, Fink, and Gilliam 1959: 163).

\(^{191}\) Kiraz 2012: §603-604. This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §28)
(Liddell and Scott 1996: 1665) > ܣܘܢܩܠܝܛܘܣ ܣܘܢܩܠܝܛܘܣ ‘senate; senator’ (Sokoloff 2009: 984-985). Second most commonly (ca. 30%), Greek υ is left unrepresented in the consonantal text of Syriac, e.g., σκῦτος (Liddell and Scott 1996: 1618) > ܐܣܩܛܐ ܐܣܩܛܐ ‘whip; blows’ (Sokoloff 2009: 78) and γυμνάσιον (Liddell and Scott 1996: 362) > ܓܡܢܣܝܢ ܓܡܢܣܝܢ ‘gymnasia’ (Sokoloff 2009: 242). Least commonly (ca. 10%), Greek υ is represented by the palatal glide y.102


b. κίνδυνος (Liddell and Scott 1996: 952) > ܩܕܝܢܘܣ, ܩܘܢܕܝܢܘܣ ‘danger’ (5th cent. Julian Romance, 169.25 [ed. Hoffmann 1880b]; but already in NT; Sokoloff 2009: 1363-1364), with an additional spelling of ܩܝܢܕܘܢܘܣ


d. υλή (Liddell and Scott 1996: 1847-1848) > ܗܝ ‘woods, forest; matter, material; firewood’ (4th cent. Ephrem, Madra xe against Heresies, 51.26 [variant] [ed. Beck 1957a]; 5th cent. Narsai, Memre, 2.218.21 [ed. Mingana 1905]; Sokoloff 2009: 335, 341), with alternative spellings of ܗܘ ܗ⻝ and ܗܘܠܝ

e. φυλή (Liddell and Scott 1996: 1961) → genitive singular φυλῆς > ܦܝܠܝܣ ‘tribe’ (Pre-4th cent. Old Syriac Parchments, 1.21 [ed. Drijvers and Healey 1999:

102 Brock 1996: 256 with n. 18. This representation is also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §28).
231-248), with an alternative spelling of φλυς (Pre-4th cent. P.Euph 10.21 [ed. Feissel, Gascou, and Teixidor 1997])


g. χλαμύς (Liddell and Scott 1996: 1993) → accusative singular χλαμύδα > ψλυς klmyd ‘cloak’ (Pre-4th cent. Ezra 9:3; Sokoloff 2009: 626)

Even though it did not fully merge with /i/ until the Byzantine period, Greek υ often interchanges with η and ι already in the Roman Period. This explains the early examples in (5-34) in which Greek υ is represented with γ. As the examples in (5-34) show, many words are attested with multiple representations of υ. There are no clear factors (diachronic or otherwise) dictating the choice of the various representations.

5.3.8 Greek ω

In Attic Greek, ω was a long open-mid back /ɔ/. By the Koinē Greek of the Roman and Byzantine periods, ω had merged with ο as a short mid-back /o/. Greek ω is represented in two primary ways in Syriac. First, it can be represented by the bilabial glide w; e.g.,

195 Mayser 1970: 75-76, 117-119; Gignac 1976-: 1.275-277, 325. For this merger in the Greek of Syria and Mesopotamia, see Welles, Fink, and Gilliam 1959: 47 as well as the following spellings: άκολούθος for άκολούθως (P. Euph. 12.24 [244]); άπωδώσω for άπωδώσω (P.Euph. 17.9 [mid-3rd]); μείζονος for μείζονος (P. Euph. 4.13 [252-256]); χρεωστεῖν for χρεώστεῖν (P.Dura. 30.r.27 [232]).
196 Kiraz 2012: §603-604. This is the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §29).
ἄσωτος (Liddell and Scott 1996: 267) > ḍwš’t ‘intemperate’ (Sokoloff 2009: 66-65) and κανών (Lampe 1961: 701-702; Liddell and Scott 1996: 875) > ḍwš’n ‘rule, canon; order; tribute’ (Sokoloff 2009: 1381). Second, it can be left unrepresented in the consonantal text of Syriac, e.g., Latin speculator (Glare 1982: 1802; Lewis and Short 1969: 1739) > σπεκουλάτωρ (Daris 1991: 106; Liddell and Scott 1996: 1626) < ḍwšql’t, ḍwšql’t ‘executioner’ (Sokoloff 2009: 75) and δρομωνόριος (Lampe 1961: 388) > ḍwš’nr ‘sailor’ (Sokoloff 2009: 324). Some words are attested with both representations of ω, e.g., ἀγωνιστής (Lampe 1961: 26; Liddell and Scott 1996: 19) > ḍgns’t, ḍgn’s’t ‘combatant, rival’ (Sokoloff 2009: 6) and Latin custodia (Glare 1982: 478; Lewis and Short 1969: 504-505) > κουστωδία (Daris 1991: 63) > ḍwst’dy, ḍwst’dy ‘guard’ (Sokoloff 2009: 1387). There are no clear factors (diachronic or otherwise) dictating the choice of the two representations, though the representation of ω with w is more than six times as common as ω being left unrepresented.

Given its merger with o, it is expected that ω would be represented in Syriac in the same way as Greek o (§5.3.8). The more frequent representation of ω with w compared to o (see §5.3.8) may be explained by a tendency to imitate the written form of a Greek loanword, which in this case reflects the earlier length distinction between o and ω. It is probably not to be understood as evidence for the lack of a merger of ω with o in the Greek of Syria and Mesopotamia.
5.3.9 Greek αι

In Attic Greek, αι was a diphthong /ai/.197 By the Koinē Greek of the Roman and Byzantine periods, αι had merged with ε as a mid-front short /e/.198 Greek αι is represented in three primary ways in Syriac.199 In a majority of cases (ca. 80%), Greek αι is left unrepresented in the consonant text of Syriac, e.g., παιδαγωγός (Liddell and Scott 1996: 1286) > ܡܕܓܘܓܐ pdgwg ‘teacher’ (Sokoloff 2009: 1155-1156) and Latin caesar (Glare 1982: 254; Lewis and Short 1969: 265) > καῖσαρ (Liddell and Scott 1996: 860) > ܩܣܪ qsr ‘Caesar, emperor’ (Sokoloff 2009: 1388). Greek αι is occasionally (ca. 15%) represented by the palatal glide ʸ in Syriac, e.g., σφαίρα (Liddell and Scott 1996: 1738) > ܐܣܦܝܪܐ, ܣܦܝܪܐ spyr ’sphere; circle; ball; pine cone; cake’ (Sokoloff 2009: 76, 1031) and φαιλόνης (Liddell and Scott 1996: 1912) > ܡܠܘܢܐ pylwn ‘woolen outer garment, cloak’ (Sokoloff 2009: 1187). Finally, Greek ε is represented with the voiceless glottal stop ʾ in καιρός (Liddell and Scott 1996: 859-860) > ܩܐܪܣܐ qʾsʾ ‘time; mischance; distress, difficulty; war’ (Sokoloff 2009: 1308; cf. Nöldeke 1904: §46), with an additional spelling of ܩܘܝܐ qwsʾ.

198 Allen 1987: 79; Gignac 1976: 1.191-193; Mayser 1970: 83-87. For this merger in the Greek of Syria and Mesopotamia, see Welles, Fink, and Gillam 1959: 47 as well as the following selected spellings from the P.Euph. documents: αἰωνημένης for ἐωνημένης (P.Euph. 6.17 [249]; 7.10 [249]); ἀναπέμψε for ἀναπέμψαι (P.Euph. 4.14 [252-256]); ἀσπάζομε for ἀσπάζομαι (P.Euph. 16.A.2 [after 239]); ἐκαλοῦμε for ἐγκαλοῦμαι (P.Euph. 3.12 [252-256]; 4.12 [252-256]); εὐχομε for εὐχομαι (P.Euph. 16.B.7 [after 239]; P.Euph. 17.2 [mid-3rd]); κελεῦσε for κελεύσαι (P.Euph. 2.15 [mid-3rd]); ται for τε (P.Euph. 9.27 [252]); ύπόκειτε for ύπόκειται (P.Euph. 2.14-15 [mid-3rd]); χέρειν for χάρειν (P. Euph. 11.11 [232]).
199 In addition to these three representations, Greek αι is represented by the voiceless glottal fricative ʰ in texts after 708 (Nöldeke 1904: §4; Wasserstein 1993: 205), just like Greek ε (§5.3.3). For comparisons with Post-Biblical Hebrew and various dialects of Jewish Aramaic, see Krauss 1898: §30.
5.3.10 Greek αυ

Greek αυ was a diphthong /au/ in Attic Greek as well as in the Koinē Greek of the Roman and Byzantine periods.\(^{200}\) Greek αυ is always represented in Syriac with the bilabial glide \(w\),\(^{201}\) e.g., αὐτοκράτωρ (Liddell and Scott 1996: 280-281) > ܐܘܛܩܪܛܘܪ ʾywr ‘emperor’ (Sokoloff 2009: 14) and ναύκληρος (Liddell and Scott 1996: 1161) > nwqlr ‘captain of a ship’ (Sokoloff 2009: 882).

5.3.11 Greek ει

In Attic Greek, ει was a long close-mid front /eː/.\(^{202}\) By the Koinē Greek of the Roman and Byzantine periods, ει had merged with ι as a high unrounded short /i/.\(^{203}\) Greek ει is represented in two primary ways in Syriac.\(^{204}\) First, it can be represented with the palatal glide \(y\),\(^{205}\) e.g., εἰκῇ (Liddell and Scott 1996: 484) > ܝܥܩܐ ʾyq ‘in vain’ (Sokoloff 2009: 37-38) and


\(^{201}\) For comparisons with Post-Biblical Hebrew and various dialects of Jewish Aramaic, see Krauss 1898: §33.


\(^{203}\) Allen 1987: 70; Gignac 1976-: 1.189-191, 235-262; Mayser 1970: 54-65; Palmer 1934: 170; 1945: 1. For this merger in the Greek of Syria and Mesopotamia, see Welles, Fink, and Gilliam 1959: 47 as well as the following selected spellings from the P.Euph. documents: ἀποδώσει (P.Euph. 17.9-10 [mid-3rd]); γένι for γένει (P.Euph. 8.12 [251]); εἴμει for εἴμι (P.Euph. 3.16 [252-256]; 4.17 [252-256]); ἐκτίσει for ἐκτίσει (P.Euph. 7.16 [249]; 9.23 [252]; 10.19 [250]); ἐνεί for ἐνει (P.Euph. 16.A.4 [after 239]); ἐνκαλίν for ἐγκαλίν (P.Euph. 14.17 [241]); ἐπὶ for ἐπεῖ (P.Euph. 3.11 [252-256]; 4.12 [252-256]; 5.4 [243]; 14.7 [241]); ἵππα for ὑψίλα (P.Euph. 17.9-10 [mid-3rd]); πίστι for πίστει (P.Euph. 8.29, 30 [251]); σημεῖον for σημεῖον (P.Euph. 10.12 [250]); ύμεῖν for ύμίν (P. Euph. 11.12 [232]).

\(^{204}\) For comparisons with Post-Biblical Hebrew and various dialects of Jewish Aramaic, see Krauss 1898: §31.

\(^{205}\) Kiraz 2012: §603-604.
κλείς (Liddell and Scott 1996: 957) → accusative singular κλείδα > ܩܠܝܕܐ qlyd, ܐܩܠܝܕܐ ʾqlyd ‘key; clasp, buckle’ (Sokoloff 2009: 1370). Second, it can be left unrepresented in the consonantal text of Syriac, e.g., μάγειρος (Liddell and Scott 1996: 1071) > ܡܓܪܣܐ mgrs ‘cook’ (Sokoloff 2009: 711). Some words are attested with both representations of ει, e.g., χειροτονία (Lampe 1961: 1523) > ܟܪܛܢܝܐ ny, ܟܝܪܘܛܘܢܝܐ wn (with alternative orthographies) ‘ordination’ (Sokoloff 2009: 650). There are no clear factors (diachronic or otherwise) dictating the choice of the two representations, though the representation with y is significantly more common than it being left unrepresented (approximately 85% vs. 15%).

5.3.12 Greek ευ

Greek ευ was a diphthong /eu/ in Attic Greek as well as in the Koine Greek of the Roman and Byzantine periods. 206 Greek ευ is always represented in Syriac with the bilabial glide w, e.g., εὐχαριστία (Liddell and Scott 1996:738) > ܐܘܟ𝙧ܐܣܛܝܐ ‘Eucharist’ (Sokoloff 2009: 16) and πραγματευτής (Liddell and Scott 1996: 1458) > ܦܪܓܡܛܘܛܐ ‘agent, merchant’ (Sokoloff 2009: 1227).

5.3.13 Greek οί

In Attic Greek, οί was a diphthong /oi/. 208 By the Koine Greek of the Roman period, οί had merged with υ as a high front rounded /y/. 209 By the middle of Byzantine Greek, οί had lost

207 For comparisons with Post-Biblical Hebrew and various dialects of Jewish Aramaic, see Krauss 1898: §34.
its rounding and so merged with /i/.\textsuperscript{210} Greek οὐ can be represented in Syriac in two primary ways.\textsuperscript{211} By far the most common, it is represented by the bilabial glide \textit{w}, \textit{e.g.}, οἰκονόμος (Liddell and Scott 1996: 1204) > \textit{hwqwnm}, \textit{hwqwnm} ‘steward’ (Sokoloff 2009: 339) and κληρικός (Lampe 1961: 756) → nominative plural κληρικοί > pl. \textit{qlÿyqw} ‘cleric’ (Sokoloff 2009: 1371). Much less common, Greek οὐ is represented by the palatal glide \textit{y}:


Even though it did not merge with /i/ until well into the Byzantine period, Greek οὐ interchanges with \textit{η} and \textit{ι} already in the Roman Period,\textsuperscript{213} and this explains the early examples in (5-35) in which Greek οὐ is represented with \textit{y} in Syriac.

5.3.14 Greek οὐ

In Attic Greek, οὐ was a long high-back /u/.\textsuperscript{214} By the Koinē Greek of the Roman and Byzantine periods, the length distinction had been lost, and οὐ was a high-back /u/ without

\textsuperscript{209} Allen 1987: 81; Mayser 1970: 87-91; Gignac 1976-: 1.197-202. For this merger in the Greek of Syria and Mesopotamia, see perhaps οὐ for σοι (SB 12.10772.14 [251-300?]).

\textsuperscript{210} Gignac 1976-: 1.267 with n. 1; Horrocks 2010: 162-163. For this merger already in the Roman period in the Greek of Syria and Mesopotamia, see διδῖ for διδοῖ (SB 12.10772.14 [251-300?]).

\textsuperscript{211} For comparisons with Post-Biblical Hebrew and various dialects of Jewish Aramaic, see Krauss 1898: §32.

\textsuperscript{212} Kiraz 2012: §603-604.

\textsuperscript{213} Gignac 1976-: 1.262-275, 330 and footnote 210 above.

\textsuperscript{214} Allen 1987: 75-79; Woodard 2004b: 617.
phonemic length. Greek οὐ can be represented in Syriac in two primary ways. First, it can be represented with the bilabial glide w; e.g., οὐσία (Liddell and Scott 1996: 1274-1275) > ܐܘܣܝܐʾ ʾwsyʾ ‘essence, substance; wealth’ (Sokoloff 2009: 18) and ἀκ(κ)οὺβιτον (Lampe 1961: 63) > ʾqwbyfwʾ ‘couch, bed’ (Sokoloff 2009: 91). Second, it can be left unrepresented in the consonantal text of Syriac, e.g., Latin illustris (Lewis and Short 1969: 887; Glare 1982: 830) > ἰλλούστριος (Lampe 1961: 673) > ܐܠܣܛܪ̈ܝܘʾ ʾlsyw ’bearers of title of “illustrious ones”’ (Sokoloff 2009: 50). Some words attest both representations of οὐ, e.g., πολύπους (Liddell and Scott 1996: 1441-1442) > ܦܐܠܘܦܣ pʾlwps, ܦܐܘܠܘܣ pʾwlws, ܦܝܠܝܦܘܣ pylypws ‘polyp’ (Sokoloff 2009: 1163) and Latin custodia (Glare 1982: 478; Lewis and Short 1969: 504-505) > κοστώδια (Daris 1991: 63) > ܩܘܣܛܘܕܝܐ qsdyʾ, ܩܣܛܘܕܝܐ qswdyʾ ‘guard’ (Sokoloff 2009: 1387). There are no clear factors (diachronic or otherwise) dictating the choice of the two representations; the representation with w is, however, more than four times as common as leaving οὐ unrepresented.

5.3.15 Accent

In Attic Greek, accent was related to pitch (melody) and was fixed on one of the last three syllables of a word. By at least the end of the fourth century CE, Greek accent changed from melodic to stress, as it is in modern Greek. In Syriac, accent is related to word stress

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216 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §35).
and falls almost always on the last syllable.\textsuperscript{219} There is almost no evidence for how Greek accent was accommodated in Syriac.\textsuperscript{220} Accent could be used to explain the rare representation of Greek ε by Syriac γ in a word such as ἐπιθέτης (Liddell and Scott 1996: 634) > ʾp̄ytть ‘imposter’ (Sokoloff 2009: 87).\textsuperscript{221} Counter examples are, however, numerous, e.g., φλέγμα (Liddell and Scott 1996: 1943) > ʾpl̄gm’ ‘phlegm’ (Sokoloff 2009: 1195) with no mater lectionis. The distribution could theoretically be explained by the former word preserving the Greek accent (by this time word stress), possibly as a Fremdwort, and the latter adopting Syriac stress as a fully accommodated Lehnwort.\textsuperscript{222} This hypothesis is, however, difficult, if not impossible, to prove.\textsuperscript{223}

A place where accents does seem to play a clearer role is in the apocopeation of final Greek vowels in Syriac. There are a few Greek loanwords in Syriac in which a final vowel is apocopated:224

(5-36) a. βῆμα (Lampe 1961: 295-296; Liddell and Scott 1996: 314) > ʾb̄m’ ‘tribunal, raised platform, bema of a Church’ (Sokoloff 2009: 141), singular also attested as ʾb̄m’, ʾb̄m’

b. σπεῖρα (Liddell and Scott 1996: 1625) > ʾsp̄r, ʾsp̄r ‘troop, cohort’

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\textsuperscript{219} There are only a few exceptions, such as the imperatives, e.g., qтólayn(y) ‘kill (ms) me!’.

\textsuperscript{220} For the accommodation of accent in Post-Biblical Hebrew and invarious dialects of Jewish Aramaic, see Krauss 1898: §36.

\textsuperscript{221} For the representation of Greek ε in Syriac, see above at §5.3.3.

\textsuperscript{222} For the distinction between Fremdwörter and Lehnwörter, see §4.5.

\textsuperscript{223} In fact, ʾp̄ytть can undergo secondary nominal derivations with suffixes (§7.2.3), suggesting that it is a Lehnwort and not a Fremdwort. See ἐπιθέτης (Liddell and Scott 1996: 634) > ʾp̄ytь ‘imposter’ (Sokoloff 2009: 87) + -uṣ > ʾp̄ytь ‘imposture’ (Sokoloff 2009: 87).

\textsuperscript{224} See also παράλια (Liddell and Scott 1996: 1316) > ʾpr̄ly ‘seashore’ (Lk 6:17 [S]; Sokoloff 2009: 1229; cf. Brock 1967: 411).
In all of these cases, the final \( \alpha \) is unaccented and thus had the potential to be apocopated. It should be noted that this is only a potential since there are numerous examples of final unaccented \( \alpha \) not being apocopated, e.g., \( \varepsilon \tau \sigma \) (Liddell and Scott 1996: 498) > \( \overline{\text{있}} \) ‘then’ (Sokoloff 2009: 33), where the preservation of final \( \alpha \) cannot be accounted for by Syriac morphology. In contrast to unaccented vowels, which have the potential to be apocopated, there are no examples in which a final accented Greek vowel is apocopated in Syriac.

5.3.16 Assimilation of Front and Central Vowels to a Back Vowel

In just over a dozen Greek loanwords in Syriac, Greek low central \( a (\alpha) \), mid central \( e (\epsilon) \), and high front \( i (\iota \) and \( i) \) are irregularly represented in Syriac with the bilabial glide \( w \). The relevant forms are summarized in Table 5-9. In a vast majority of these words, the Greek source has a high back \( u (ou) \) or a mid back \( o (o, \omega) \) in an adjacent syllable.\(^{225}\) Thus, this would seem to be a clear case of assimilation of front and central vowels to back vowels. A similar assimilation is occasionally attested in Syriac, e.g., \( *la + *qub(a)l > *laqabal \) > Syriac \( luqbal \) ‘in front of’ (Sokoloff 2009: 680-681) and \( *la + *qudâm > *laqdâm > *luqdom \) Syriac ‘before’ (Sokoloff 2009: 681).\(^{226}\) This assimilation is, however, rare in Syriac.\(^{227}\) In Greek documents from Egypt, a number of forms attest an

\(^{225}\) The one exception is \( \kappa \alpha \mu \eta \lambda \alpha \upsilon \kappa \iota \nu \) (Lampe 1961: 699) > \( \overline{\text{있}} \) ‘broad brimmed felt hat’ (Sokoloff 2009: 1376), where there is the diphthong \( aw \).

\(^{226}\) For this assimilation, see Brockelmann 1908: §68g(1) (p. 185); 1981: §52.

\(^{227}\) The one exception is nouns of the pattern \( *C_1uC_2C_3 \), which regularly undergo the following developments in Aramaic: \( *C_1uC_2C_3V (V = \text{case vowel}) > *C_1uC_2C_3 > *C_1uC_2iC_3 > *C_1uC_2uC_3 > *C_1C_2uC_3 > C_1C_2oC_3 \). The assimilation of the epenthetic vowel \( i \) to \( u \), however,
assimilation of front and central vowels to back vowels (regressive or progressive). Thus, it seems likely that the assimilations collected in Table 5-9 occurred in the Greek source. It cannot, however, be ruled out that some of the cases are the result of a secondary development in Syriac. Finally, it should be noted that this assimilation is not regular, and that the vast majority of Greek central and front vowels are not represented with a *mater lectionis* of *w* in Syriac.

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probably occurred much earlier in the history of Aramaic, since it is attested in all of the later dialects.

228 For the relevant forms, see Mayser 1970: §24a-b.
<table>
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<tr>
<th>vowels</th>
<th>examples</th>
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<td>low central a (a)</td>
<td>άναξωρητής (Lampe 1961: 129) &gt; ἀναξωρητής ‘anchorite, monk’ (Sokoloff 2009: 899), contrast Mandaic nakrija (Drower and Macuch 1963: 283)</td>
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<td>Άρεομανίτης (Lampe 1961: 224) &gt; ἀρεόμανίτης ‘Arian and Manichean’ (Sokoloff 2009: 99)</td>
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<td></td>
<td>μετάνοια (Liddell and Scott 1996: 1115) &gt; μετάνοια ‘bending, inclination; worship, adoration’ (Sokoloff 2009: 745)</td>
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<td></td>
<td>Latin notarius (Glare 1982: 1192; Lewis and Short 1969: 1217) &gt; νοταρίος (Lampe 1991: 74-75; Lampe 1961: 922-923) &gt; ἀρεόμανίτης, a Byzantine official’ (Sokoloff 2009: 898, 911), with an additional spelling of μετάνοια nwtr’</td>
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<td></td>
<td>παυδοκεῖον (Liddell and Scott 1996: 1296-1297) &gt; παυδοκεῖον πωταρία, ‘inn’ (Sokoloff 2009: 1162, 1177), see also Jewish Babylonian Aramaic puddeqa (Sokoloff 2002a: 888), Jewish Palestinian Aramaic pwndq (Sokoloff 2002b: 426), and Christian Palestinian Aramaic pwndq (Schulthess 1903: 159), as well as Arabic funduq- (Biberstein-Kazimirski 1860: 638; Lane 1863-1893: 2449)</td>
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<td></td>
<td>τύραννος (Liddell and Scott 1996: 1836) &gt; τυραννος ‘tyrant’ (Sokoloff 2009: 549)</td>
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<td>mid front e (ε)</td>
<td>Latin speculator (Glare 1982: 1802; Lewis and Short 1969: 1739) &gt; σπεκτυρία, ‘executioner’ (Sokoloff 2009: 75), compare Late Jewish Literary Aramaic ’spqtlwr’ (TgEsth2 5:2; Jastrow 1886-1903: 56); Jewish Palestinian Aramaic ’spqtlwr (Schulthess 1903: 15)</td>
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<tr>
<td></td>
<td>διστατικός (Liddell and Scott 1996: 381) &gt; διστατικός δουστατικός, ‘servant of a master; imperial’ (Sokoloff 2009: 284-285)</td>
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<tr>
<td></td>
<td>προθεσμία (Liddell and Scott 1996: 1481) &gt; προθεσμία ‘fixed time period’ (Sokoloff 2009: 1256)</td>
</tr>
<tr>
<td>high front i (i, η)</td>
<td>καμηλάκιον (Lampe 1961: 699) &gt; καμηλάκιον qmwhwy ‘broad brimmed felt hat’ (Sokoloff 2009: 1376)</td>
</tr>
<tr>
<td></td>
<td>κύλινδρος (Liddell and Scott 1996: 952) &gt; κυλίνδρος qwνδynws ‘danger’ (Sokoloff 2009: 1363-1364), with additional spellings of κυλίνδρος qwνδyνws and κυλίνδρος qndynws</td>
</tr>
<tr>
<td></td>
<td>περιξωμα (Liddell and Scott 1996: 1374) &gt; περιξωμα πρωθύμω ‘belt, girdle’ (Sokoloff 2009: 1238-1239), with additional spellings of περιξωμα πρωθύμω and περιξωμα πρωθύμω</td>
</tr>
</tbody>
</table>
5.3.17 Summary

In contrast to the consonants, where the representation of Greek consonants in Syriac is remarkably regular, there is a great deal of variation in the representation of the Greek vowels in the Syriac script. The various possibilities are summarized in Table 5-10. The variety in the representation is due to at least two causes. First, the vowel system of Greek was far from stable, experiencing significant changes from Attic to the Koiné Greek of the Roman Period and then more changes into the Byzantine period. The changes in the Greek vowel system can account for a number of the variations in the representation of the Greek vowels. This is, for instance, the case with the various Syriac representations of Greek υ: the use of y in Syriac as a mater lectionis reflects the later pronunciation /i/ (unrounded), whereas the use of w in Syriac reflects the earlier pronunciation /y/ (rounded), which was likely reinforced by the written orthography of Greek. The second and greater source of variation in the representation of Greek vowels in Syriac stems from the optional use of matres lectionis for each of the Greek vowels (excluding diphthongs). Though there are clear tendencies for certain vowels (e.g., usually no mater lectionis with η and ε) and though certain words have a stable orthography (e.g., νόμος [Liddell and Scott 1996: 1180] > ܢܡܘܣܐ nmws ‘law’ [Sokoloff 2009: 921-922]), a mater lectionis is entirely optional for the representation of many vowels in many Greek loanwords. This is, for instance, the case with the o’s in Greek ὄργανον (Liddell and Scott 1996: 1245) > ܐܘܪܓܢܘܢ wrgnwn, ܐܪܓܢܘܢ rgnwn, ܐܪܓܢܢ rgnn ‘instrument, tool’ (Sokoloff 2009: 21). The optional use of matres lectionis in Greek loanwords in Syriac diverges starkly from their use in native Syriac works, where the orthography is extremely stable. In some

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229 Noting the exceptions of kol ‘all’ and metṭol ‘because of’, where a mater lectionis is optional for o (Kiraz 2012: 101A).
cases, the instability of the orthography of a Greek loanword may indicate that the word in question is closer to a *Fremdwort* than a *Lehnwort* (see §4.5). In other cases, however, the changing orthography of Greek loanwords in Syriac shows that Syriac-speakers continued to interact with the Greek source by updating a loanword. This is, for instance, the case with διαθήκη, which had a stable orthography of ܡܕܝܬܩܐ dy’tqʾ from the late fourth to the sixth century, but then developed a new orthography of ܡܕܝܐܬܝܩܝ dyʾtyqy in the later West-Syriac tradition. This update in orthography represents a more specific diachronic trend: Greek vowels tend to be represented more closely in Syriac over time.
Table 5-10 The Representation of Greek Vowels in Syriac

<table>
<thead>
<tr>
<th>Greek</th>
<th>Syriac</th>
<th></th>
<th>Greek</th>
<th>Syriac</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>common</td>
<td>rare</td>
<td></td>
<td>common</td>
</tr>
<tr>
<td>α</td>
<td>ø</td>
<td>α, ø, w</td>
<td>ε</td>
<td>ø</td>
</tr>
<tr>
<td>η</td>
<td>ø</td>
<td>α, ε, η, l, o, u, ω, αι, ει, ου</td>
<td></td>
<td></td>
</tr>
<tr>
<td>λ</td>
<td>ø</td>
<td>α, ε, η, l, o, αι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ι</td>
<td>ø</td>
<td>α, ε, η, l, o, αι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ο</td>
<td>w, ø</td>
<td>α, ε, η, l, o, αι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ω</td>
<td>w, ø</td>
<td>α, ε, η, l, o, αι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>αι</td>
<td>ø</td>
<td>αι, ει, ου</td>
<td></td>
<td></td>
</tr>
<tr>
<td>αυ</td>
<td>ø</td>
<td>αι, ει, ου</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ει</td>
<td>w</td>
<td>α, ε, η, l, οι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>οι</td>
<td>w</td>
<td>α, ε, η, l, οι</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ου</td>
<td>w, ø</td>
<td>α, ε, η, l, οι</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.4 Syllable-Initial Vowels

5.4.1 Overview

Greek allows vowel-initial syllables in word-internal and in word-initial position. Syriac, in contrast, does not tolerate vowel-initial syllables in any context. Thus, Syriac must resort to various strategies to accommodate Greek vowel-initial syllables. The following sections describe these strategies, beginning with vowel-initial syllables in word-initial position (§5.4.2) and then turning to vowel-initial syllables in word-internal position (§5.4.3).

5.4.2 Word-Initial Vowels in Greek

In Attic Greek, every word-initial vowel has either *spiritus lenis* (smooth breathing),
e.g., ὀρός /ōros/ ‘mountain’ (Liddell and Scott 1996: 1255), or spiritus asper (rough breathing), e.g., ὀρός /hóros/ ‘boundary’ (Liddell and Scott 1996: 1255-1256). These are realized differently in Syriac.

5.4.2.1 Spiritus Asper

Greek words with initial spiritus asper were realized with an initial voiceless glottal fricative /h/ in Attic Greek, e.g., ὀρός /horos/ ‘boundary’ (Liddell and Scott 1996: 1255-1256). During the Late Antique period, spiritus asper in word initial position ceased to be pronounced. Greek spiritus asper is usually represented with h in Syriac, e.g., ἡνιόχος (Liddell and Scott 1996: 775) > اەنەوەکە hnywk ‘charioteer’ (Sokoloff 2009: 348; cf. Harviainen 1976: 59) and ὁμήρος (Liddell and Scott 1996: 1221) > اەمەرە hmyr ‘hostage, pledge’ (Sokoloff 2009: 345; cf. Harviainen 1976: 59). The representation of Greek spiritus asper with Syriac h reflects the earlier Attic pronunciation. In some manuscripts, the initial h is marked with a sub-linear dot to indicate that it represents spiritus asper, and perhaps that it should not be pronounced.

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

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230 Allen 1987: 52-56. It has also been reconstructed as a voiceless laryngeal fricative /h/ (see, e.g., Harviainen 1976: 1 with n. 2).
231 Harviainen 1976.
232 Brock 1996: 256; Harviainen 1976: 59-61; Wasserstein 1993: 204. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §78).
233 In his Letter on Syriac Orthography, Yaʿqub of Edessa (d. 708) refers to representations of spiritus asper with h in Syriac as ‘according to ancient custom’ (meṭṭol mʾayyduṭ ṣʿattiṭṣa) (ed. Phillips 1869: 5.-10).
235 Brock 1996: 256; Harviainen 1976: 61-63. This is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §79).


236 For the spelling, see footnote 153 above.
In all of these cases, the word in question is not attested until the sixth or seventh century. The representation of Greek *spiritus asper* with the Syriac voiceless glottal stop ʾ reflects the later Koinē pronunciation.

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

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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 > 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). This seems especially likely since the earlier spelling ܗܓܡܘܢܐ *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 *ḥ* is found instead of initial ’, again suggesting that the latter spelling is due to transmission history.\(^{238}\) In addition, it should be noted that the existence of two forms for the loanwords in (5-38), one with initial ’ and the other with initial *ḥ*, suggests either that the orthography of these words was updated over time or that these words were transferred from Greek to Syriac on more than one occasion.

Harviainen (1976: 25-29, 31) has proposed that Greek *spiritus asper* was lost in the Greek of Syria and Mesopotamia by the mid-fourth century. Greek *spiritus asper* is not commonly represented by the Syriac voiceless glottal stop, however, until the sixth century in

\(^{238}\) See Kmosko 1926: ccciv (s.v. 648.15).
Greek loanwords in Syriac texts. This points to the conservative nature of Greek loanwords in Syriac, which often reflect a more Attic form and not necessarily the spoken Koinè form.

5.4.2.2 Spiritus Lenis

Greek words with *spiritus lenis* are realized as vowel initial, e.g., ὀρος/órós/ ‘mountain’ (Liddell and Scott 1996: 1255). Word initial vowels are not, however, tolerated in Syriac. Thus, Greek words with *spiritus lenis* are usually realized with an initial voiceless glottal stop in Syriac,239 e.g., εἰκῇ (Liddell and Scott 1996: 484) > ʾyq ‘in vain’ (Sokoloff 2009: 37-38) and εξορία (Liddell and Scott 1996: 598) > ʾkswry (Sokoloff 2009: 43) ‘exile’. In a few cases, however, Greek *spiritus lenis* is represented in Syriac with an initial *h*:240


239 Kiraz 2012: §603-604. This is also the most common representation in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §77).

Initial \( h \) is the usual representation of *spiritus asper* in pre-sixth-century Syriac texts (see §5.4.2.1), not of *spiritus lenis*.\(^{241}\) In some cases, the irregular correspondences in (5-39) are due to so-called Vulgāraspiration, i.e., Koinē Greek has aspiration in cases where Attic Greek does not.\(^{242}\) The word *ἰδιώτης*, for instance, likely had *spiritus asper* in Koinē Greek, as reflected in

\[^{241}\text{It should be noted that similar cases of Greek *spiritus lenis* being represented by initial *h* are found in Greek loanwords in Coptic (Brock 1996: 256; Harviainen 1976: 37, 75).}\]

Syriac ܐܕܝܘܛܐ ـ hdywṭ as well as in Coptic hēdiōtēs (Förster 2002: 344), in other cases, however, examples of initial h for *spirītus lenīs* may represent hypercorrections in which Syriac-speakers introduced h (mistakenly) supposing that the Greek source had once had *spirītus asper* though it was no longer pronounced. This hypercorrection in language contact can be compared to English-speakers pronunciation of French *coup de grâce* as /kuː də gʁaː/, in which the final sibilant of French *grace* /gʁas/ has been deleted by hypercorrection on the basis of the many French loanwords in English in which a final consonant is not pronounced, e.g., *foie gras* /fwaː grɑː/, *faux pas* /foː pɑː/, *coup d’état* /kuː də taː/, etc. The cases of hypercorrection involving Greek *spirītus lenīs* provide additional support for the loss of *spirītus asper* in the Greek of Syria and Mesopotamia.

5.4.2.3 Deletion

In rare cases, an initial Greek vowel is lost in Syriac, e.g., ἀῤῥαβών (Liddell and Scott 1996: 146) > ܪܗܒܘܢܐ ‘pledge, deposit’ and ἀναχωρητής (Lampe 1961: 129) > ܢܘܟܪܝܛܐ ‘anchorite, monk’ (Sokoloff 2009: 899).

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243 See also Harviainen 1976: 26 with n. 5.
244 Wasserstein (1993: 204) prefers to see the h in these cases as a representation of Greek ε, η, or ο. This is, however, quite unlikely since h does not represent these vowels until well into the seventh century (see §5.3.3, 5.3.4, 5.3.9).
245 See Harviainen 1976 and §5.4.2.1.
246 This is also attested in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §226-230).
5.4.3 Vowel Hiatus

In Attic Greek as well as in the Koiné Greek of the Roman and Byzantine periods, vowel-initial syllables can occur within words, e.g., δι | α | θή | Κη. This results in hiatus (also called diaeresis). Syriac, in contrast, does not tolerate vowel-initial syllables in any context, including within words. The accommodation of Greek hiatus in Syriac is accomplished in two ways. First, the vowel hiatus can be resolved by epenthesis of a voiceless glottal stop ’ or a palatal glide y. This is, for instance, the case in πατριάρχης (Lampe 1961: 1051-1052) > ܡstringLiteralt’ ‘patriarch’ (Sokoloff 2009: 1184), where the consonant y resolves the hiatus in Greek ια. Second, Greek vowel hiatus can be contracted in Syriac into a monosyllable. This is, for instance, the case with Latin quaestor (Glare 1982: 1534-1535; Lewis and Short 1969: 1502-1503) > ܟܫܘܛܝܠqšwr ‘quaestor, Byzantine head of judiciary’ (Sokoloff 2009: 1322), where neither a glide nor the voiceless glottal stop appears in the first syllable of the Syriac. The following sections describe the Syriac representation of various Greek vowel sequences.

5.4.3.1 Greek /ai/

The Greek sequence /ai/, which can be written αι, αει, or αη, is represented in Syriac with the voiceless glottal stop ’ in ἀηρ (Liddell and Scott 1996: 30) > ܗܪ h’r ‘air’ (Sokoloff 2009: 1). This is a case of epenthesis of a voiceless glottal stop ’ to resolve the Greek vowel hiatus.

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247 Nöldeke 1904: §40H. For the accommodation of Greek vowel hiatus in Post-Biblical Hebrew and in various dialects of Jewish Aramaic, see Krauss 1898: §138-151.
5.4.3.2 Greek /ao/

The Greek sequence /ao/, which can be written αο or αω, is represented in Syriac with the bilabial glide w, e.g., ταῶς (Liddell and Scott 1996: 1763) > ܛܘܣܐ tawṣ ‘peacock’ (Sokoloff 2009: 519) and ναός (Liddell and Scott 1996: 1160) > ܢܘܣܐ nωṣ ‘temple; fortress, citadel’ (Sokoloff 2009: 901). In the later vocalization tradition, these words are vocalized as /tawsɔ/ and /nawsɔ/, respectively, suggesting that they were accommodated by contraction in Syriac. Greek ταῶς, however, is realized as wɔs in Targum Jonathan (1 Kings 10:22), which represents accommodation by epenthesis. The Syriac vocalization /tawsɔ/, as well as mutatis mutandis /nawsɔ/, may then represent secondary developments in which the words were accommodated to a common Syriac nominal pattern (*C₁aC₂C₃).

5.4.3.3 Greek /ea/

The Greek sequence /ea/, which can be written εα or αα, is represented in Syriac by the voiceless glottal stop ʾ in θέατρον (Liddell and Scott 1996: 787) > ܬܐܘܪܝܐ tawry ‘theater; spectacle’ (Sokoloff 2009: 1618), but by the palatal glide ʾ in δαφνηδαία (Lampe 1961: 334) → accusative singular δαφνηδαίαν dpnydyn ‘laurel’ (Sokoloff 2009: 316). In both of these cases, the Greek vowel hiatus seems to have been resolved by epenthesis.

5.4.3.4 Greek /eo/

In the vast majority of cases, the Greek sequence /eo/, which can be written εο, εω, αο, or αω, is represented in Syriac by the voiceless glottal stop ʾ followed by the bilabial glide w, e.g., θεωρία (Liddell and Scott 1996: 797) > ܬܐܘܪܝܐ tawry ‘contemplation, theory, speculation’ (Sokoloff 2009: 1618) and θεολογία (Lampe 1961: 627) > ܬܐܘܠܘܓܐ tawly ‘faith’.
‘theology’ (Sokoloff 2009: 1617). In these cases, the voiceless glottal stop ʾ is epenthetic to resolve the Greek hiatus, and the bilabial glide w serves as a mater lectionis for Greek /o/. Rarely, the Greek sequence /eo/ is represented in Syriac by the palatal glide y, e.g., ημίσεον (Liddell and Scott 1996: 773-774) > ܒܝܡܫܝܢ hmysyn ‘half’ (Sokoloff 2009: 341). The palatal glide y in this cases is likely epenthetic to resolve the Greek vowel hiatus.

5.4.3.5 Greek /ia/

In the vast majority of cases, the Greek sequence /ia/, which can be written ια, εια, or ηα, is represented in Syriac by the palatal glide y, e.g., ἐκκλησιατική (ιστορία) (Lampe 1961: 433) > ܓܠܣܝܣܛܝܩܝ ʾqls s tyqy ‘Church (history)’ (Sokoloff 2009: 92) and ἀνδριάς (Liddell and Scott 1996: 128) → accusative singular ἀνδριάντα > ܐܢܕܪܝܢܛܐ ʾndryn (with orthographic variants) ‘statue’ (Sokoloff 2009: 11). In a few cases, Greek /ia/ is represented in Syriac by the palatal glide y followed by the voiceless glottal stop ʾ, e.g., ἀμίαντος (Liddell and Scott 1996: 83) → accusative singular ἀμίαντον > ܐܡܝܐܢܛܘܢ ʾwn ‘salamander, creature which is not consumed in fire’ (Sokoloff 2009: 54-55) and διάμεσον (Liddell and Scott 1996: 403) > ܕܝܐܡܣܘܢ dymswn ‘middle’ (Sokoloff 2009: 292). In isolated cases, Greek /ia/ is left unrepresented, e.g., καλλίας (Liddell and Scott 1996: 867) > ܓܠܣ gls ‘ape, monkey’ (Sokoloff 2009: 238). Thus, in a vast majority of cases, the hiatus in Greek /ia/ is resolved in Syriac by an epenthetic palatal glide y (whether with or without a mater lectionis of ʾ for α). In only a few cases is it left unrepresented, where it has contracted.

5.4.3.6 Greek /io/

The Greek sequence /io/, which can be written ιο, ειο, ηο, ιω, ειω, and ηω, is usually
represented in Syriac by the palatal glide \( \gamma \) followed by the bilabial glide \( \omega \), e.g., ἐυαγγέλιον (Lampe 1961: 555-559; Liddell and Scott 1996: 705) > ܐܘܢܓܠܝܘܢ ʾ glʾ g spel’ (Sokoloff 2009: 17-18) and ἴδιωτης (Liddell and Scott 1996: 819) > ܗܕܝܘܛܐ ʾ ʾ s ʾ lle, s ʾ mple, ʾ s t p ʾ s ʾ ll ff 2009: 331). In this representation, the palatal glide \( \gamma \) is epenthetic to resolve the vowel hiatus whereas the bilabial glide \( \omega \) is a mater lectionis for the following /o/. In addition, there are several rare representations of Greek /io/. It is, for instance, represented by Syriac \( \omega \) in a few cases, e.g., κοινεῖον (Liddell and Scott 1996: 968) > ܩܘܢܘܢ qwnwn ʾ meet ʾ g, c ʾ c l’ S ʾ l ff 2009: 1336, 1337), l ʾ g s e ܩܘܢܝܢ qwnyn. It is represented by Syriac ʾyw in θεῖος (Liddell and Scott 1996: 788) > ܬܐܝܘܣ tʾyws ʾ p te ʾ l cle’ S ʾ l ff 2009: 1618, 1641), here the voiceless glottal stop ʾ is a mater lectionis for ε (see §5.3.11). In some cases, a word is attested with multiple representations of Greek /io/, e.g., Latin centurio (Glare 1982: 300; Lewis and Short 1969: 316) > κεντυρίων (Daris 1991: 53; Lampe 1961: 744) > ܩܢܛܪܝܘܢ qntywn, ܩܢܛܪܘܢܐ qntwn ʾ ce t ʾ c e t S ʾ l ff 2009: 1382-1383). Thus, in a vast majority of cases, the hiatus in Greek /io/ is resolved in Syriac by an epenthetic palatal glide \( \gamma \).

In the Koinē Greek of the Roman and Byzantine periods, the Greek ending -ιον is often realized as -ιν.\(^{248}\) Thus, the frequent use of Syriac -yn to represent this ending almost certainly reflects the Koinē form -ιν and not the Attic form -ιον (see §6.2.3.9). This is, for instance, the case with γυμνάσιον (Liddell and Scott 1996: 362) > ܓܡܢܣܝܢ gmnsyn ʾ g m ʾ s ʾ ll ff 2009: 242) and Latin palatium (Glare 1982: 1284; Lewis and Short 1969: 1291) > παλάτιον (Daris 1991: 85; Liddell and Scott 1996: 1291) > ܒܠܝܢ plyn ʾ p l ce ʾ s ʾ ll ff 2009: 1199).

\(^{248}\) Gignac 1976-: 2.25-29. This is also found in the Greek documents from Syria and Mesopotamia (Welles, Fink, and Gilliam 1959: 48), e.g., δελμάτικιν for δελματίκιον (P.Dura. 30.17 [232]); σεισύρι for σεισύριον (P.Dura. 33.13 [240-250]).
5.4.3.7 Greek /ye/

Two possible representations of the Greek sequence /ye/, which can be written υε, υαι, οιε, or οιαι, are attested in Latin quaestor (Glar 1982: 1534-1535; Lewis and Short 1969: 1502-1503) > κυαίστωρ (Daris 1991: 63; Lampe 1961: 784) > ܩܘܐܣܛܘܪ and ܩܣܛܘܪ ‘quaestor, Byzantine head of judiciary’ (Sokoloff 2009: 1322). In the former, hiatus is resolved by epenthesis of the voiceless glottal stop ʾ, whereas in the latter it has been contracted.

5.4.3.8 Greek /yi/

Three possible representations of Greek /yi/, which can be written υι, υει, υη, οιι, οιει, or οιη, are attested in ποιητής (Liddell and Scott 1996: 1429) > ܡܡܐ ܡܐ ܡܐ, ܡܡܐ ܡܐ, ܡܡܐ ܡܐ ‘poet’ (Sokoloff 2009: 1158). In the first two, hiatus is resolved by epenthesis of the voiceless glottal stop ʾ, whereas in the latter it has presumably been resolved by epenthesis of the palatal glide y.

5.4.4 Summary

There is a large amount of variation in the accommodation of Greek vowel hiatus in Syriac. The various possibilities are summarized in Table 5-11. In most cases, Greek vowel hiatus is accommodated by epenthesis in Syriac. The voiceless glottal stop ʾ is attested as an epenthetic consonant to accommodate /ai/ (αι, αει, αη), /ea/ (εα, αια), /eo/ (εο, εω, αιο, αιω), and /yi/ (υι, υει, υη, οιι, οιει); the palatal glide y is attested as an epenthetic consonant to accommodate /eo/ (εο, εω, αιο, αιω), /ia/ (ια, εια, ηα), /io/ (ιο, ειο, ηο, ιω, ειω, ηω), and /yi/
In cases in which Greek vowel hiatus is accommodated by epenthesis, a *mater lectionis* can optionally occur to express one or more of the vowels, e.g., ποιητής (Liddell and Scott 1996: 1429) > ܦܘܐܝܛܐ, where Syriac ʾ is an epenthetic consonant to accommodate Greek vowel hiatus, and Syriac w and y are *matres lectionis* for Greek οι /y/ and η /i/, respectively. In addition to epenthesis, Greek vowel hiatus is accommodated by contraction into a monosyllable in a number of cases in Syriac. This is, for instance, a possibility with /ia/ (ια, εια, ηα), /io/ (ιο, ειο, ηο, ιω, ειω, ηω), and /ye/ (υε, υαι, οιε, οιαι). The Greek sequence /ao/ (αο or αω) is realized as w in Syriac; it remains unclear whether this represents contraction into a monosyllable, i.e., /aw/ (as the later Syriac vocalization traditions suggest), or epenthesis of w, i.e., /awo/ (as the Aramaic of Targum Jonathan suggests).

Table 5-11 Syriac Representations of Greek Vowel Hiatus

<table>
<thead>
<tr>
<th>Greek Sequence</th>
<th>Common</th>
<th>Rare</th>
</tr>
</thead>
<tbody>
<tr>
<td>ai (αι, αει, or αη)</td>
<td>ωʾ</td>
<td></td>
</tr>
<tr>
<td>ao (αο or αω)</td>
<td>ω</td>
<td></td>
</tr>
<tr>
<td>ea (εα or αια)</td>
<td>ωʾ, ωγ</td>
<td></td>
</tr>
<tr>
<td>eo (εο, εω, αιο, or αιω)</td>
<td>ωʾ</td>
<td></td>
</tr>
<tr>
<td>ia (ια, εια, or ηα)</td>
<td>ωγ, ωγ</td>
<td></td>
</tr>
<tr>
<td>io (ιο, ειο, ηο, ιω, ειω, and ηω)</td>
<td>ωγ, ωγ</td>
<td></td>
</tr>
<tr>
<td>ye (υε, υαι, οιε, or οιαι)</td>
<td>ωγ</td>
<td></td>
</tr>
<tr>
<td>yi (υι, υει, υη, οιι, οιει)</td>
<td>ωγ, ωγ, ωγ</td>
<td></td>
</tr>
</tbody>
</table>

5.5 Conclusion

In the scholarly literature, very little attention has thus far been paid to the phonological integration of Greek loanwords in Syriac. This chapter has sought to fill this gap in the literature by providing a systematic description and analysis of the phonological integration of Greek loanwords in Syriac. It began with the integration of Greek consonants. It was shown
that the representation of Greek consonants in Syriac is remarkably regular, and that almost all seeming deviations can be explained either by positing a Koinê Greek source that differs from Attic Greek or by appealing to secondary developments in Syriac. The vast majority of regular consonant correspondences are unremarkable, since Greek phonemes tend to be represented by very similar Syriac phonemes. The one exception to this is the series of Greek voiceless stops (π, τ, and κ), which are not represented by the expected Syriac voiceless stops (יו p, י t, and כ k) but by the Syriac emphatic stops (יו p, י t, and כ q).

In contrast to the consonants, the representation of Greek vowels, including Greek vowel hiatus, in Syriac is much less regular. While some Greek loanwords in Syriac exhibit a stable orthography, the representation of Greek vowels with Syriac matres lectionis varies significantly in a large number of words. In some cases, this variation suggests that a word is closer to a Fremdwort than a Lehnwort. In other cases, however, the orthography of Greek loanwords in Syriac was clearly updated over time. Often, this update resulted in an orthography that more closely represents the vowels in the Greek source, in line with the diachronic trend that Greek vowels tend to be represented more fully over time in Syriac. This contrasts with a number of contact situations cross-linguistically in which loanwords tend to become increasingly integrated over time. Thus, Syriac-writers can be seen updating the orthography of Greek loanwords, even well-established ones, as the mechanisms for phonological integration shifted. Phonological integration – and by extension lexical transfer more broadly – was, then, not a one-point-in-time event for Syriac-speakers. Rather, over time, they continued to interact with the Greek language not only by transferring new loanwords into their language but also by updating the loanwords that were already in their language. The

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249 For this distinction, see §4.5.
dynamic nature of Greek loanwords in Syriac will continue to be explored over the next two chapters, which deal with the morpho-syntactic integration of Greek loanwords in Syriac (§6) and secondary developments involving Greek loanwords in Syriac (§7).
6 Morpho-Syntactic Integration of Greek Loanwords in Syriac

“If loanwords are to be incorporated into
the utterances of a new language, they must
be fitted into its grammatical structure”
(Haugen 1950b: 217)

6.1 Overview

The previous chapter (§5) analyzed the phonological integration of Greek loanwords in Syriac. The current chapter turns to their morpho-syntactic integration. In the scholarly literature, morpho-syntactic integration has garnered the least attention of all the topics related to Greek loanwords in Syriac. Nöldeke (1904) devotes only a few sections to this subject throughout his grammar.1 Schall (1960) fails to provide more than a couple of passing remarks. More recently, Brock (1996: 254-256) has added several important pages to the discussion.2 Despite the value of the overviews of Nöldeke and of Brock, a detailed description and analysis of the morpho-syntactic integration of Greek loanwords in Syriac is needed. The present chapter takes up this task. Given the lack of previous work on the topic, the chapter cites a large amount of data, which is not otherwise available in the secondary literature. The summaries at the end of each section provide an overview of the collections of data.

The chapter is organized according to part of speech: nouns, verbs, and then particles. Nouns are treated in §6.2. Since the vast majority of Greek loanwords in Syriac are nouns, their

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1 See, e.g., Nöldeke 1904: §88-89, 202L.
2 See earlier Brock 1967: 392-393.
discussion is the most extensive. The accommodation of verbs is treated in §6.3. The Syriac verbs of ultimate Greek origin are divided into two broad categories: denominative verbs (§6.3.2) and loanverbs (§6.3.3-6.3.5). Greek loanverbs are accommodated in Syriac according to three different strategies in the typology developed by Wohlgemuth (2009): direct insertion (§6.3.3), indirect insertion (§6.3.4), and light verb strategy (§6.3.5). The chapter concludes with the accommodation of particles §6.4.

6.2 Nouns

6.2.1 Overview

Greek nouns are marked for case, gender, and number. Five different grammatical cases are distinguished: vocative, nominative, genitive, dative, and accusative. Three genders are distinguished: masculine, feminine, and neuter. Two numbers are distinguished: singular and plural.³

Syriac nouns are marked for gender, number, and state. Two genders are distinguished: masculine and feminine. Two numbers are distinguished: singular and plural. Three states are distinguished: status absolutus, status emphaticus, and status constructus. State is a morpho-syntactic category. The status constructus marks a noun that is dependent on a following noun, as in ܡܠܟܘܬ malku in the following example:

(6-1) Peshiṭa Gospels (ca. 400 CE; ed. Kiraz 1996)

\[
\text{زًٔرًَّ دَنِّ ٌمًْلكعَّ ٌسُمٌٓآٓ ٌرَبِّٓ حَّٓآٓ} \\
\text{small-M.SG.DET but in+\textbf{kingdom-F.SG.CON} heaven-M.PL.EMP great-M.SG.DET he}
\]

³ An earlier dual is preserved in a few remnants.
menneh

from + him

But, the least in the kingdom of heaven is greater than he’ (Matt 11:11)

In earlier Aramaic, the *status absolutus* was the unmarked form of the noun. In Syriac, however, it occurs in a limited number of syntactic uses, including distributive repetition, after the quantifier *kol* ‘all’ and cardinal numerals, with negatives, in idiomatic expressions introduced by a preposition, predicate adjectives, and in adverbial forms. In earlier Aramaic, the *status emphaticus* was the definite form of a noun. In Syriac, however, it is the unmarked form of the noun.

The following sections detail how Greek nouns are morpho-syntactically integrated in Syriac. The topics dealt with are input forms (§6.2.2), the accommodation of Greek case endings (§6.2.3), the accommodation of gender (§6.2.4), plural formations of Greek loanwords (§6.2.5), and the inflectional category of state with Greek loanwords (§6.2.5.5).

6.2.2 Input Forms

6.2.2.1 Overview

Various input forms are attested for Greek loanwords in Syriac. Several of the possibilities can be illustrated with Greek χλαμύς, which entered Syriac in multiple forms:

(6-2) a. nominative singular χλαμύς (Liddell and Scott 1996: 1993) > ܟܠܡܝܣ *klmys* ‘cloak’ (Sokoloff 2009: 626)

b. nominative singular χλαμύς (Liddell and Scott 1996: 1993) → diminutive

nominative singular χλαμύδιον (Liddell and Scott 1996: 1993) > ܟܠܡܝܕܝܢ *klmydyn*

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In this example, the nominative singular χλαμύς and the accusative singular χλαμύδα each served as an input form as well as the nominative singular diminutive χλαμύδιον.

6.2.2.2 Nominative Singular

The most common input form is the Greek nominative singular. Table 6-1 provides examples of nominative singular input forms for each of the three Greek declensions.\(^5\) The nominative singular is the citation form in Greek and so the most unmarked form. Thus, the Syriac situation fits well with the cross-linguistic tendency for the unmarked form to serve as the input form.\(^6\)

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\(^5\) Several of the following nouns could also be interpreted as vocative singular; this, however, seems unlikely given the rarity of the vocative as an input form.

\(^6\) The nominative singular is also the most common input form for Greek loanwords in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §87-93).
### Table 6-1 Nominative Singular Input Forms

<table>
<thead>
<tr>
<th>First Declension</th>
<th>ἀνάγκη (Liddell and Scott 1996: 101) &gt; ܐܢܢܩܐ ’nnq’, ܐܢܢܩܝ ’nnqy ‘necessity’ (Sokoloff 2009: 63)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Declension</td>
<td>θρόνος (Liddell and Scott 1996: 807) &gt; ܬܪܘܢܘܣ (with alternative orthographies) ‘throne’ (Sokoloff 2009: 1665)</td>
</tr>
<tr>
<td></td>
<td>θέατρον (Liddell and Scott 1996: 787) &gt; ܬܐܛܪܘܢ ‘theater; spectacle’ (Sokoloff 2009: 1618)</td>
</tr>
<tr>
<td>Third Declension</td>
<td>ἀήρ (Liddell and Scott 1996: 30) &gt; ܐܐܪ ’r ‘air’ (Sokoloff 2009: 1)</td>
</tr>
<tr>
<td></td>
<td>ἀῤῥαβών (Liddell and Scott 1996: 146) &gt; ܪܗܒܘܢܐ ‘pledge, deposit’ (Sokoloff 2009: 1439)</td>
</tr>
<tr>
<td></td>
<td>κόραξ (Liddell and Scott 1996: 980) &gt; ܩܪܩܣܐ ‘raven, crow; jay, magpie’ (Sokoloff 2009: 1416)</td>
</tr>
<tr>
<td></td>
<td>ἱερεύς (Liddell and Scott 1996: 821) &gt; ܗܝܪܘܣ ‘priest’ (Old Syriac Parchments 3.5 [ed. Drijvers and Healey 1999: 231-248])</td>
</tr>
</tbody>
</table>

#### 6.2.2.3 Nominative Plural

The nominative plural also serves as an input form for some Greek loanwords in Syriac. The Greek nominative plural ending -οι, for instance, is attested as an input form for Greek second declension nouns in -ος, e.g., κληρικός (Lampe 1961: 756) → nominative plural κληρικοί > pl. ܩܠܝܪ̈ܝܩܘ ‘clerics’ (Sokoloff 2009: 1371), singular attested as ܩܠܝܪ̈ܝܩ, ܩܠܝܪ̈ܝܩܘܣ, with additional plurals of ܩܠܝܪ̈ܝܩ, ܩܠܝܪ̈ܝܩܘܣ and

7 The nominative plural is also attested as an input form for Greek loanwords in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §94).
8 Nöldeke 1904: §89.
ὀρθόδοξος (Lampe 1961: 971-972; Liddell and Scott 1996: 1248) → nominative plural ὀρθόδοξοι > pl. ὀρθόδοξοι. It should be noted that singular forms exist alongside plural forms in both of these examples, suggesting that Syriac-speakers manipulated the Greek loanwords in their language on the basis of the Greek source language. In addition, the existence of singular forms alongside plural forms in both of these examples enabled the analogical creation of a new plural ending -w in Syriac (see §6.2.5).

Other nominative plural forms may occasionally serve as an input form. The Greek nominative plural third declension ending -ες could, for instance, be attested as an input form in σειρήν (Liddell and Scott 1996: 1588) → nominative plural σειρῆνες > pl. syỳns ‘Sirens, name of an animal’ (Sokoloff 2009: 1007), with an additional plural of syỳnws. Alternatively, however, syỳns could be analyzed as an instance of the analogically created plural ending -(ς) or -(w).9

To the proceeding nominative plural input forms, Nöldeke (1904: §89) proposes that the nominative plural -αι occurs in cases such as διαθήκη (Lampe 1961: 348; Liddell and Scott 1996: 394-395) → nominative plural διαθήκαι > pl. dy’tqs ‘covenant’ (Sokoloff 2009: 301), singular attested as dy’tq (with alternative orthographies), with additional plurals of dy’tqs, dy’tq.10 There is, however, no clear evidence to substantiate Nöldeke’s  

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9 For the development of these endings, see §7.3.2.
10 It should be noted that the plural dy’tq is very rare. The form is mentioned in the lexicon of Bar Bahlul (Duval 1888-1901: 1.574). The absolute form dy’tqyn is, however, found in Ephrem, e.g., Madroše against Julian the Apostle, 73.20 (ed. Beck 1957b), suggesting that the plural dy’tq also existed at this time.
claim, especially since the plural ܐܕܝܬܩ could be analyzed as a Syriac plural formation with the masculine plural status emphaticus ending -e (see §6.2.5).

6.2.2.4 Accusative Singular

In addition to the nominative, the accusative is the only other case that commonly serves as an input form.\textsuperscript{11} Table 6-2 provides examples of accusative singular input forms for each of the three Greek declensions. The accusative singular also serves as an input form in other dialects of Aramaic, e.g., ἀνδριάς (Liddell and Scott 1996: 128) → accusative singular ἀνδριάντα > Palmyrene ḏṛṭ ‘statue’ (Hillers and Cussini 1996: 335; cf. Brock 2005: 12, 25).

\textsuperscript{11} Brock 1967: 393; 1996: 254-255. The accusative is also an input form for Greek loanwords in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §97).
Table 6-2 Accusative Singular Input Forms

<table>
<thead>
<tr>
<th>First Declension</th>
<th>δαφνηδαία (Lampe 1961: 334) → accusative singular δαφνηδαίαν &gt; ܕܦܢܝܕܝܢ ‘laurel’ (Sokoloff 2009: 316)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Declension</td>
<td>ἁμίαντος (Liddell and Scott 1996: 83) → accusative singular ἁμίαντον &gt; ܐܡܝܐܢܛܘܢ ‘salamander, creature which is not consumed in fire’ (Sokoloff 2009: 54-55)</td>
</tr>
<tr>
<td></td>
<td>πάπυρος (Liddell and Scott 1996: 1302) → accusative singular πάπυρον &gt; ܦܦܪܘܢ ‘papyrus’ (Sokoloff 2009: 1218)</td>
</tr>
<tr>
<td>Third Declension</td>
<td>ἀνδριάς (Liddell and Scott 1996: 128) → accusative singular ἀνδριάντα &gt; ܐܢܕܪܝܢܛܐ, ܐܕܪܝܢܛܐ, ܐܕܪܝܛܐ ‘statue’ (Sokoloff 2009: 11, 99)</td>
</tr>
<tr>
<td></td>
<td>κλείς (Liddell and Scott 1996: 957) → accusative singular κλεῖδα &gt; ܩܠܝܕܐ ‘key; clasp, buckle’ (Sokoloff 2009: 1370)</td>
</tr>
<tr>
<td></td>
<td>πλάξ (Liddell and Scott 1996: 1411-1412) → accusative singular πλάκα &gt; ܦܠܩܐ ‘slab; tablet’ (Sokoloff 2009: 1203)</td>
</tr>
<tr>
<td></td>
<td>σπυρίς (Liddell and Scott 1996: 1631) → accusative singular σπυρίδα &gt; ܣܦܪܝܕܐ, ܣܦܪܝܕܐ ‘bask’ (Sokoloff 2009: 77)</td>
</tr>
<tr>
<td></td>
<td>σῦριγξ (Liddell and Scott 1996: 1731) → accusative singular σῦριγγα &gt; ܣܪܘܓܐ ‘portico’ (Sokoloff 2009: 1043-1044)</td>
</tr>
</tbody>
</table>

6.2.2.5 Accusative Plural

The accusative plural also serves as an input form for some Greek loanwords in Syriac. This is, for instance, the case with Greek first declension nouns that end in -ας in the accusative plural,12 as in the following representative examples:

(6-3) a. διαθήκη (Lampe 1961: 348; Liddell and Scott 1996: 394-395) → accusative plural διαθήκας > pl. ἰτας dýtqs ‘covenant’ (Sokoloff 2009: 301), singular attested as

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12 Nöldeke 1904: §89.
<p>variants of dytq, ḏytyq (with alternative orthographies), with additional plurals of ḏytyq̱is and ḏytyqyn (absolute)</p>


c. μ[ο]ίρα (Liddell and Scott 1996: 1140-1141) → accusative plural μ[ο]ίρ[α]ς > pl. ẃy̱is, ḏyty̱is ‘step, stage, degree; share, portion’ (Sokoloff 2009: 729), singular attested as ḏytyq̱ṟ

d. ο[ῦ]σια (Liddell and Scott 1996: 1274-1275) → accusative plural ο[ῦ]σι[α]ς > pl. ḏyty̱s, ḏyty̱s ‘essence, substance; wealth’ (Sokoloff 2009: 18), singular attested as ḏytyq̱ṟ, with an additional plural of ḏytyq̱ys


f. σ[χο]λή (Liddell and Scott 1996: 1747-1748) → accusative plural σ[χו]λ[ά]ς > pl. ḏyty̱s, ḏyty̱s ‘lecture hall’ (Sokoloff 2009: 73, 1008), singular attested as ḏytyq̱ṟ, ḏytyq̱ṟḻ

g. ḏ[l]η (Liddell and Scott 1996: 1847-1848) → accusative plural ḏ[l]a[ς] > pl. ḏyty̱s ḏyty̱s ‘woods, forest; matter, material; firewood’ (Sokoloff 2009: 335, 341), singular attested as ḏytyq̱ṟ with alternative orthographies

h. φ[ων]ή (Liddell and Scott 1996: 1967-1968) → accusative plural φ[ων][ά]ς > pl. ḏyty̱s ḏyty̱s ‘voice; (with ḏyty̱) to promise’ (Sokoloff 2009: 1166), singular attested as ḏytyq̱ṟ, with an additional plural of ḏytyq̱ns

i. χ[ώρα] (Liddell and Scott 1996: 2015) → accusative plural χ[ώρα][ς] > pl. ḏyty̱s ḏyty̱s ‘land, province’ (Sokoloff 2009: 612), singular attested as ḏytyq̱ṟ
As these examples illustrate, alternative plurals are attested in many cases. In addition, it should be noted that a singular is attested for a number of these words, which enabled the analogical creation of a new plural ending -ʾς in Syriac.¹³

The accusative plural -ῶς serves as an input from in some cases for Greek second declension masculine and feminine nouns:

(6-4)  
\[ \text{a. κληρικός (Lampe 1961: 756) \rightarrow accusative plural κληρικῶς > pl. κληρικο qxys 'cleric' (Sokoloff 2009: 1371), singular attested as κληρικ qlyryq' , κληρικ qlyryqs, with additional plurals of κληρικ qlyryq', κληρικ qlyryqw} \]

\[ \text{b. Latin uncinus (Glare 1982: 2090; Lewis and Short 1969: 1929) \rightarrow óγκινος (Liddell and Scott 1996: 1196) \rightarrow accusative plural óγκινους > pl. óγκιν wqynw 'hook; anchor; sailors’ sounding line' (Sokoloff 2009: 20), singular attested as óγκιν wqyn'} \]

\[ \text{c. σύγκλητος (Liddell and Scott 1996: 1665) \rightarrow accusative plural σύγκλητους > pl. σύγκλητ wqny} 'senate; senator' (Sokoloff 2009: 984-985), singular attested as σύγκλητ wqnyws \]

\[ \text{d. τόνος (Liddell and Scott 1996:1804) \rightarrow accusative plural τόνους > pl. τόν wns 'syllables' (Sokoloff 2009: 518), singular attested as τόν wns, with additional plurals of τόν wns, τόν tiis} \]

The existence of a nominative singular form alongside the accusative plural enabled the analogical creation of a new plural ending -ws in Syriac.¹⁴ The forms τόν wns and τόν tiis in (6-4d) could also be cases of the Greek accusative plural -ους, since Greek ou is not always

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¹³ For this development, see §7.3.2.  
¹⁴ For this development, see §7.3.2.
represented with a *mater lectionis* in Syriac (§5.3.14). Following this logic, the following examples could be added to (6-4):

(6-5) a. ἀγωγός (Liddell and Scott 1996: 18) → accusative plural ἀγωγόνας > pl. ʾgwgs ‘aqueduct’ (Sokoloff 2009: 6), singular attested as ʾgwg’

b. κλῆρος (Lampe 1961: 757) → accusative plural κλῆρον > pl. qlis ‘clergy’ (Sokoloff 2009: 184, 1371), singular attested as qlyrs, qlyrs

Alternatively, these examples, along with ᵐ�数 and ᵯlis, could be instances of the analogically created plural ending -(?)s (for which, see §7.3.2).

6.2.2.6 Nominative/Accusative Plural

The Greek nominative plural ending -ες or the accusative plural ending -ας serves as an input form for the following third declension noun: πολύπους (Liddell and Scott 1996: 1441-1442 → nominative plural πολύποδες, accusative plural πολύποδας > pl. ᵉˡˡὡᵖᵈˢ ‘polyp’ (Sokoloff 2009: 1163), singular attested as ᵉˡˡὡᵖˢ, ᵉˡˡὡᵖˢ. One of these endings may also serve as an input form for the following third declension nouns ending in a consonant:

(6-6) a. ἀήρ (Liddell and Scott 1996: 30) → nominative plural ἀἐρες, accusative plural ἀἐρας > pl. ᵈˡˡὡᵖˢ ‘air’ (Sokoloff 2009: 1), singular attested as ᵈˡˡὡᵖ, with an additional plural of ᵉˡˡὡᵖˢ

Alternatively, these examples could be analyzed as instances of the analogically created plural ending -(ʾ)s or -(w)s.\(^\text{15}\)

The Greek plural ending -ματα serves as an input form for some Greek third declension neuter nouns with stems in τ, e.g., δόγμα (Lampe 1961: 377-378; Liddell and Scott 1996: 441) → nominative/accusative plural δόγματα > pl. δόγματα, δόγματα "doctrine" (Sokoloff 2009: 277-278), singular attested as δόγμα with additional plurals of δόγματα, δόγματα and φλέγμα (Liddell and Scott 1996: 1943) → nominative/accusative plural φλέγματα > pl. φλέγματα "phlegm" (Sokoloff 2009: 1195),

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\(^{15}\) For the development of these endings, see §7.3.2.
singular attested as ܡܠܓܡܐ (plgm). The input form in each of these cases could be analyzed as either nominative or accusative.

The Greek plural ending -εις probably serves as an input form for some Greek third declension nouns with stems in ι, e.g., αἵρεσις (Lampe 1961: 51; Liddell and Scott 1996: 41) → nominative/accusative plural αἵρεσις > pl. αἵρεσεις, hрис, ρσys ‘difference, opinion; heresies’ (Sokoloff 2009: 103, 180, 355), singular attested as hрис, ρσys and τάξις (Liddell and Scott 1996: 1756) → nominative/accusative plural τάξις > pl. τάξεις ‘order; rank’ (Sokoloff 2009: 181, 529), singular attested as ρσys, ῥσys, with an additional plural of ῥσys. The input form in each of these cases could be analyzed as either nominative or accusative. In addition, each of these cases could be alternatively analyzed as instances in which the singular and plural have the same form (see pp. 237-237). If so, the input form is the nominative singular.

To the proceeding nominative/accusative plural input forms, Nöldeke (1904: §89) proposes that the nominative/accusative plural -α occurs in cases such as εὐαγγέλιον (Lampe 1961: 555-559; Liddell and Scott 1996: 705) → nominative/accusative plural εὐαγγέλια > pl. εὐαγγελθν ‘gospel’ (Sokoloff 2009: 17-18), singular attested as εὐαγγελθν. In this case, however, the plural εὐαγγελθν could be analyzed as a Syriac plural formation with the masculine plural status emphaticus ending -e (see §6.2.5). Thus, it is impossible to determine whether or not the nominative/accusative plural -α also serves as an input form.

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16 Nöldeke 1904: §89.
17 It should be noted that in his Letter on Syriac Orthography Ya'qub of Edessa (d. 708) vocalizes as if the source is εὐαγγελία (ed. Phillips 1869: 7.6).
6.2.2.7 Genitive

Cases other than the nominative and accusative only rarely serve as input forms. The genitive, for instance, occurs in the initial formula of P.Dura 28:18

(6-7) Old Syriac Parchment (9 May 243; ed. Drijvers and Healey 1999: 231-248)

In this example, 입ול pylys reflects an input form of φυλῆς, the genitive singular of φυλή (Liddell and Scott 1996: 1961) (cf. Brock 1996: 255). This may, however, represent a case of code-switching since the word follows Greek morpho-syntactic rules.19

6.2.2.8 Diminutives

Leaving aside inflection, it should be noted that the diminutive serves as an input form for a number of Greek loanwords in Syriac, as in the following representative examples:

(6-8) a. ζώνη (Liddell and Scott 1996: 759) → ζωνάριον (Liddell and Scott 1996: 759) > ܙܘܢܪܐ zwnr ‘belt’ (Sokoloff 2009: 373-374)

b. θρόνος (Liddell and Scott 1996: 807) → θρονίον (Liddell and Scott 1996: 807) > ܬܪܘܢܝܘܢ trwnywn ‘seat, chair’ (Sokoloff 2009: 1665)

c. κάραβος (Liddell and Scott 1996: 877) → καράβιον (Liddell and Scott 1996: 877) > ܩܪܒܝܢ qrbyn ‘pot’ (Sokoloff 2009: 1401)

18 The genitive is also attested as an input form for Greek loanwords in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §95).

19 For code-switching, see §4.6.
...than earlier dialects.

This likely explains the relatively high number of diminutives that serve as input forms for Greek loanwords in Syriac.

**Summary**

The various input forms attested for Greek loanwords in Syriac are summarized in Table 6-3. The most common input form is by far the nominative singular. This fits well with...
the cross-linguistic tendency that the most unmarked form usually serves as the input form. The accusative singular is the next most common input form. In addition to singular input forms, a number of Greek loanwords also entered Syriac as plurals. Interestingly, in most (if not all) of these cases, the plural is attested as an input form only when the singular is also found. This suggests that there were multiple transfers of the same lexeme in (at least) two different forms. This is a reflection of the dynamic nature of lexical transfer in Greek-Syriac language contact. Over time, Syriac-speakers continued to manipulate the Greek loanwords in their language on the basis of the Greek source language. In the case of input forms, they did this by transferring Greek plural forms into Syriac for Greek loanwords that already existed in their language in the singular. These Greek plurals forms came to be used as plurals for the words in question (§6.2.5.3) as well as provided the basis for the analogical creation of new plural markers in Syriac (§7.3.2).
### Table 6-3 Summary of Input Forms for Greek Nouns

<table>
<thead>
<tr>
<th>Case Form</th>
<th>nom. sg.</th>
<th>nom. pl.</th>
<th>acc. sg.</th>
<th>acc. pl.</th>
<th>nom. / acc. pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Declension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in -η (or -α)</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>in -ης</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Declension</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
</tr>
<tr>
<td>in -ος</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
</tr>
<tr>
<td>in -ον</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
</tr>
<tr>
<td>Third Declension</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
</tr>
<tr>
<td>with stems in liquids</td>
<td>✓</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>with stems in a nasal</td>
<td>✓</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with stems in velars</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with stems in dentals</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>with stems in -ι</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>with stems in -υ</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 6.2.3 Accommodation of Greek Case Endings

#### 6.2.3.1 Overview

A Greek case ending can be accommodated in four possible ways in Syriac. First, it can be removed with the addition of a native Syriac ending, e.g., ἴδιωτης (Liddell and Scott 1996: 819) > ḥḏywaṯ ‘unskilled, simple, ordinary; stupid’ (Sokoloff 2009: 331). Second, it
can be removed without the addition of a native Syriac ending, e.g., βῆμα (Lampe 1961: 295-296; Liddell and Scott 1996: 314) > ܒܝܡ bêm ‘tribunal, raised platform, bema of a Church’ (Sokoloff 2009: 141), alongside ܒܝܡܐ bêmaʾ and ܒܐܡܐ bêmaʾ. Third, it can be kept with the addition of a native Syriac ending, e.g., νόμος (Liddell and Scott 1996: 1180) > ܢܡܘܐ nmwāʾ ‘law’ (Sokoloff 2009: 921-922). Fourth, it can be kept without the addition of a native Syriac ending, e.g., φύσις (Liddell and Scott 1996: 1964-1965) > ܦܘܣܝܣ pwysā ‘nature’ (Sokoloff 2009: 1167). The following sections outline the accommodation of Greek case endings in Syriac for each class of Greek noun attested in Syriac.

6.2.3.2 Greek First Declension Nouns in -η

In the vast majority of cases, Greek first declension nouns in -η end in -ʾ in Syriac, e.g., ἄκμη (Liddell and Scott 1996: 51) > ܐܩܡܐ ʾqmāʾ ‘highest point, prime of life’ (Sokoloff 2009: 92-93, 193) and κόγχη (Lampe 1961: 759) > ܩܢܟܐ qnkaʾ ‘the part of the church in which the holy service is performed and where the altar stands’ (Sokoloff 2009: 1385). In the vocalization tradition, the final mater lectionis is realized either as /e/, e.g., ἱλῶν ʾšlwʾ /eskole/ ‘lecture hall’ (Sokoloff 2009: 73, 1008), or as /ɔ/, ἅγιον ʾšlɔʾ /eslɔ/ ‘robe’ (Sokoloff 2009: 69). Nouns that are realized in Syriac with final -e occasionally take the Syriac plural marker syćme, e.g., διαθήκη > ܕܝܛܝܩ dîtqāʾ ‘covenant’. The vocalization with final /e/ represents the Greek ending, whereas the vocalization with final /ɔ/ represents the Syriac status emphaticus ending, at least in most cases. The latter, then, show a greater degree of integration compared to the former.

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22 For discussion with additional examples, see §5.3.4.
This scenario is slightly more complicated for Latin loanwords of the first declension that arrived in Syriac via Greek since these can be realized in Greek with either -η (a more Greek-type declension) or -α (a more Latin-type declension).\(^{23}\) Latin *scala* (Glare 1982: 1698; Lewis and Short 1969: 1638), for instance, is attested both as σκάλη (Daris 1991: 104) and σκάλα (Liddell and Scott 1996: 1603) in Greek. Thus, if Syriac ܐܠܬܐܣܩ is in fact to be vocalized as /sqɔlɔ/ as given by Brockelmann (1928: 495) and Sokoloff (2009: 1039),\(^{24}\) then two scenarios are possible: 1. the source is σκάλη (Daris 1991: 104), which has been accommodated with the Syriac *status emphaticus* ending; or 2. the source is σκάλα, which is accommodated according to the usual pattern for nouns ending in -α (for which, see §6.2.3.3).

Greek first declension nouns ending in -η occasionally end in -y in Syriac, e.g., ἀνάγκη (Liddell and Scott 1996: 101) > ܢܢܩܝʾ *nnqy* ‘necessity’ (Sokoloff 2009: 63), singular also attested as ܢܢܩʾ *nnq* and ὑλη (Liddell and Scott 1996: 1847-1848) > ܚܘܠܝ *hwly* ‘woods, forest; matter, material; firewood’ (Sokoloff 2009: 335, 341), singular also attested as ܚܘܠ *hwl*. In the vocalization tradition, the final *mater lectionis* -y is realized as -e representing Greek -η. As is illustrated by both of these examples, the same word can be accommodated by both -ʾ and -y.

The feminine ending -τɔ is occasionally added to Greek first declension nouns ending in -η, e.g., λόγχη (Liddell and Scott 1996: 1059) > ܠܘܟܝܬܐ *lwkyt* ‘spear’ (Sokoloff 2009: 679) and φερνή (Liddell and Scott 1996: 1922) > ܦܪܢܝܬܐ *prnyt* ‘dowry, marriage gift’ (Sokoloff 2009: 679).

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\(^{23}\) This flexibility exists in Greek due to the fact that first declension nouns in -η derive from nouns in -α by a regular sound change in Attic (and Ionic).

\(^{24}\) The vocalization of ܐܠܬܐܣܩ as /sqɔlɔ/ is quite uncertain. The end of the word is not vocalized in the lexicon of Bar Bahlul (Duval 1888-1901: 2.1385), and thus, the only evidence for the final -σ seems to be the input form, which could be either σκάλη (Daris 1991: 104) or σκάλα (Liddell and Scott 1996: 1603).
This accommodation strategy achieves a congruence between the Syriac feminine ending and the feminine gender of Greek first declension nouns in -η.

6.2.3.3 Greek First Declension Nouns in -α

In the vast majority of cases, Greek first declension nouns ending in -α are realized with final -ʾ in Syriac, 25 e.g., θήρα (Liddell and Scott 1996: 799) > ܬܪܐ trʾ ‘hunt’ (Sokoloff 2009: 1663) and σειρά (Liddell and Scott 1996: 1588) > ܣܝܪܐ syrʾ ‘thread; chain’ (Sokoloff 2009: 1007). In the vocalization tradition, the final mater lectionis ʾ is realized as /ɔ/, i.e., the status emphaticus ending.

Greek first declension nouns ending in -α are also occasionally found without any ending in Syriac, as in σπεῖρα (Liddell and Scott 1996: 1625) > ܐܣܦܝܪ spyr, ܣܦܝܪ spyr ‘troop, cohort’ (Sokoloff 2009: 76, 1031). A similar case is found with the indeclinable noun πάσχα (Lampe 1961: 1046-1049) > ܦܣܟ psk ‘Passover of the Jews’ (Sokoloff 2009: 1210), singular also attested as ܦܣܟܐ pskʾ. It is important to note that the final -α could apocopate only when short and unaccented (see §5.3.15). Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6).

As is the case with Greek first declension nouns in -η (§6.2.3.2), the feminine ending -ʾ is sometimes added to Greek first declension nouns in -α, e.g., Latin tabula (Glare 1982: 1898-1899; Lewis and Short 1969: 1832) > ܬܵܒܠܐ (Daris 1991: 109; Liddell and Scott 1996: 1752)

25 The ending -(ε)α is set aside for a moment; see §6.2.3.4.
Again, this reflects an accommodation of the feminine gender of τάβλα.

6.2.3.4 Greek First Declension Nouns in -(ε)ια

A sub-category of Greek first declension nouns in -α are those with the ending -(ε)ια. In the vast majority of cases, Greek -(ε)ια is realized as -yʾ in Syriac, e.g., θεωρία (Liddell and Scott 1996: 797 > ܛܒܠܝܬܐ tble ʾ, L ʾ, g b 2009: 10). 26 Again, this reflects an accommodation of the feminine gender of τάβλα.

6.2.3.5 Greek First Declension Nouns in -ης

Greek first declension nouns in -ης are accommodated in two different ways in Syriac. First, the Syriac ending of the status emphaticus can replace Greek -ης, e.g., ἀγωνιστής.


Second, the Greek ending -ης can be realized as Syriac -(y)s without the addition of a Syriac morphological ending: 30

(6-9) a. εὐτυχής (Liddell and Scott 1996: 736) > ܐܘܛܘܟܣ ʾwks ‘fortunate’ (Old Syriac Parchments 1.1 [ed. Drijvers and Healey 1999: 231-248])


a. μητροπολίτης (Lampe 1961: 870) > ܡܛܪܘܦܘܠܝܛܐ ʾmtplʾys ‘metropolitan’ (Sokoloff 2009: 749-750), singular also attested as ܡܛܪܘܦܘܠܝܛܝܣ ʾmtplytys.

c. παραβάτης (Liddell and Scott 1996: 1305) > ܦܪܐܛܝܣ prʾys ‘wicked’ (Sokoloff 2009: 1226)

d. πατριάρχης (Lampe 1961: 1051-1052) > ܦܛܪܝܪܟܐ ptyrkʾ, singular also attested as ܦܛܪܝܪܟܝܣ ptyrkyys.

e. περάτης (Liddell and Scott 1996: 1365) > ܡܪܛܝܣ prʾys ‘wanderer, emigrant’ (Sokoloff 2009: 1226)

f. πλήρης (Liddell and Scott 1996: 1419) > ܡܠܝܪܐ plyrys ‘full’ (Sokoloff 2009: 1201)

g. στρατηλάτης (Liddell and Scott 1996: 1652) > ܣܛܪܛܠܛܝܣ ʾstrlʾys ‘commander’ (Sokoloff 2009: 71)

Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6). This is the less common of the two strategies accounting for less than 10% of the examples. As is illustrated by the forms cited in (6-9), several words attest both accommodation strategies.

6.2.3.6 Greek Second Declension Nouns in -ος

Greek second declension nouns in -ος are accommodated in three different ways in Syriac.\(^{31}\) First, the Syriac ending of the *status emphaticus* can replace Greek -ος,\(^{32}\) e.g., μοχλός (Liddell and Scott 1996: 1149) > ܠܐ ܡܘܟ ʾb lt f ־ ́ S ʃ ff 2009: 724) and παιδαγωγός (Liddell and Scott 1996: 1286) > ܦܕܓܘܓܐ pdgwg ʿteacher’ (Sokoloff 2009: 1155-1156). This is the most common of the three strategies accounting for almost 60% of the cases.

The second accommodation strategy for Greek second declension nouns in -ος involves retaining the Greek ending -ος as Syriac -ws without the addition of a Syriac morphological ending,\(^{33}\) e.g., ἔθος (Liddell and Scott 1996: 480) > ܗܬܘܣ htws ʿcustom’ (Sokoloff 2009: 36) and ὀχλος (Liddell and Scott 1996: 1281) > ܐܟܠܘܣ ʾklws, ܐܘܟܠܘܣ wklws ʿcrowd; rebellion’ (Sokoloff 2009: 42). This is the second most common strategy accounting for just over 25% of the examples. The plural of these nouns is typically formed with the ending -w and syɔme (see §6.2.5). Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6).

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\(^{33}\) Brock 1996: 254, which includes additional examples from a later period.
Third, the Syriac ending of the *status emphaticus* can be added to Greek -ος.\(^{34}\) This is the rarest of the three strategies occurring less than 15% of the time. In a majority of these cases, the Greek consonant -ς was kept to create a triliteral root:\(^{35}\)

(6-10) a. βωμός (Liddell and Scott 1996: 334) > ܒܘܡܣܐ bwms\(^3\) ‘altar’ (Sokoloff 2009: 127)

b. γένος (Liddell and Scott 1996: 344) > ܓܢܣܐ gns\(^3\) ‘kind, species; family; race, nation’ (Sokoloff 2009: 179, 249)

c. δόμος (Liddell and Scott 1996: 444), cf. Latin *domus* (Glare 1982: 572; Lewis and Short 1969: 609-610) > ܕܘܡܣܐ dwms\(^3\) ‘house; foundation, basis’ (Sokoloff 2009: 283)

d. εἶδος (Liddell and Scott 1996: 482) > ܐܕܫܐ ʾedš\(^3\) ‘form in the Platonic sense; species, kind; character, nature; fruit’ (Sokoloff 2009: 11)

e. κάδος (Liddell and Scott 1996: 848) > ܕܘܡܣܐ dwms\(^3\) ‘cauldron, kettle; helmet’ (Sokoloff 2009: 1319)

f. καιρός (Liddell and Scott 1996: 859-860) > ܩܪܣܐ qrs\(^3\), ܩܪܣܐ qrs\(^3\) ‘time; mischance; distress, difficulty; war’ (Sokoloff 2009: 1308)

g. κύδος (Liddell and Scott 1996: 1005) > ܩܘܦܣܐ qwps\(^3\) ‘cube; piece on a draft board; tessera, mosaic tile; mosaic work; hard stone, flint’ (Sokoloff 2009: 1340)

h. μίμος (Liddell and Scott 1996: 1135; Lampe 1961: 872), cf. Latin *minus* (Glare 1982: 1110; Lewis and Short 1969: 1145) > ܡܝܡܣܐ myms\(^3\) ‘mimic actor, mime’ (Sokoloff 2009: 753)

i. ναός (Liddell and Scott 1996: 1160) > ܢܘܣܐ nws\(^3\) ‘temple; fortress, citadel’

\(^{34}\) Brock 1996: 254.  
In each of these cases, Greek -ος was incorporated into the Syriac root. The Syriac ending of the status emphaticus can be added to Greek -ος for other reasons as well. In the following cases, Greek -ς seems to have been retained in order to avoid homophony, or near homophony, with native Syriac words:

(6-11) a. ἀγρός (Liddell and Scott 1996: 15-16) > (`<agro`) ḫwrs` ‘field; estate, country house; poorhouse, hospital’ (Sokoloff 2009: 6-7), compare `<agro` `ʔ-mar `wages’ (Sokoloff 2009: 318), note also the homograph `<agro` `<aggar` ‘roof’ (Sokoloff 2009: 318)

b. δεκανός (Liddell and Scott 1996: 376) > (`<dekano`) dqns` ‘Decan; messenger’ (Sokoloff 2009: 318), compare `<kan` daqna `beard’ (Sokoloff 2009: 318)

c. πύργος (Liddell and Scott 1996: 1556) > (`<pyrgo`) pwrs` ‘tower’ (Sokoloff 2009: 1173), compare `<pyrgo` `purq` ‘loosening’ (Sokoloff 2009: 1172)

Finally, in the following cases, it is less clear why the final Greek -ς was retained:

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37 An additional case of the retention of Greek -ος could potentially be found in 럿 되 발견 `bd `to make a public case of’ in Eliya, Life of Yuhanon of Tella, 77.7 (ed. 206
It remains unclear why Greek -ς was retained in these words.

In a few cases, the Greek case ending -ος is accommodated in two different ways:\(^{38}\)

(6-12) a. εὐνοῦχος (Lampe 1961: 572; Liddell and Scott 1996: 724) > ܐܘܢܟܣܐ ʾwnks\(^1\), ܐܘܢܟܣܐ ʾwnks ‘eunuch’ (Sokoloff 2009: 18)
   a. θεολόγος (Lampe 1961: 628) > ܬܐܘܠܓܘܣܐ t’wlgws ‘theologian’ (Sokoloff 2009: 1617), singular also attested as ܬܐܘܠܘܓܘܣ t’wlgw
   b. ψήφος (Liddell and Scott 1996: 2022-2023) > ܬܐܘܠܘܓܘܣ psps ‘small pebble; game with dice’ (Sokoloff 2009: 1212), perhaps mimicking a native Semitic pattern of C\(_1\)C\(_2\)C\(_1\)C\(_2\)

(6-13) b. δημόσιος (Liddell and Scott 1996: 387) > ܕܝܡܘܣܝܐ dymwsy\(^2\), ܕܡܣܝܣ dmsys ‘public’
   (Sokoloff 2009: 296, 311)
   c. ἐξάρχος (Liddell and Scott 1996: 586) > ܐܟܣܪܟܐ ʾksrk\(^3\), ܐܟܣܪܟܣ ʾksrks ‘rector’
   (Sokoloff 2009: 45), both forms in the
   d. θεολόγος (Lampe 1961: 628) > ܬܐܘܠܘܓܘܣ t’wlgw, ܬܐܘܠܘܓܘܣܐ t’wlgws ‘theologian’ (Sokoloff 2009: 1617)
   e. σεβαστός (Liddell and Scott 1996: 1587-1588) > ܣܒܣܛܘܣ sbs\(_1\)ws, ܣܒܣܛܐ sbs\(_2\) ‘emperor; sebastus, a high rank in the Byzantine Empire’ (Sokoloff 2009: 963)
   f. σύγκελλος (Lampe 1961: 1270) > ܣܘܢܩ swnql, ܣܘܢܩܠܘܣ swnqlw ‘syn cellulus’
   (Sokoloff 2009: 984)

Brooks 1907: 29-95), if it derives from τίτλος (Liddell and Scott 1996: 1799). Nevertheless, since there would not be a motivation for the preservation of -ς in this case, it seems more likely that the Greek source is the aorist infinitive τιτλῶσαι and that this a loan verb (see §6.3.5). So also Ghanem 1970: 142 n. 268; Sokoloff 2009: 1057.

There are no discernible motivations for the use of two different strategies. The two forms of ἐξάρχος, for instance, occur on the same page of the Julian Romance (Hoffmann 1880b: 25.9, 19). It should be noted, however, that the use of multiple accommodation strategies for the same word suggests that these words either entered Syriac on multiple occasions or that Syriac-speakers re-adjusted them on the basis of the Greek source.

6.2.3.7 Greek Second Declension Nouns in -ως

Greek second declension nouns in -ως are extremely rare in Syriac. An example, however, can be found in ταῶς (Liddell and Scott 1996: 1763) > ṭῶς 'peacock' (Sokoloff 2009: 519). In this case, Greek σ is represented by Syriac s, and the ending of the status emphaticus is added. This creates a triliteral root in Syriac and so can be compared with similar cases in which Greek σ was retained to create a trilateral root.39

6.2.3.8 Greek Second Declension Nouns in -ον

Two strategies are attested for accommodating Greek second declension nouns in -ον.40 First, the Greek ending -ιον can be retained as Syriac -(w)n without the addition of a Syriac morphological ending,41 e.g., θεατρον (Liddell and Scott 1996: 787) > ܬܐܛܪܘܢ tʾrn ‘theater; spectacle’ (Sokoloff 2009: 1618) and παράδοξον (Liddell and Scott 1996: 1309) > ܦܪܕܘܟܣܢ prdwkn ‘paradox’ (Sokoloff 2009: 1228). This is the more common of the two strategies accounting for approximately 75% of the examples. Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6). Second, the Syriac ending of the status

39 See above at p. 205-206.
40 The ending -ον is set aside for a moment; see §6.2.3.9.
emphaticus can replace Greek -ον, e.g., γλωσσόκομον (Liddell and Scott 1996: 353) > ܓܠܘܣܩܡܐ glwsqm’ (with alternative orthographies) ‘chest, box, case’ (Sokoloff 2009: 233-234) and πρόσωπον (Liddell and Scott 1996: 1533) > ܡܦܪܨܘܦܐ prywp’ ‘face, countenance; person, party’ (Sokoloff 2009: 1249-1250). This is the less common of the two strategies, accounting for 25% of the examples. In several cases, the Greek case ending -ον is accommodated in two different ways:42

(6-14) a. διάμετρον (Liddell and Scott 1996: 403) > ܕܝܡܛܪܘܢ dymtrwn, ܕܝܡܛܪܐ dymtr’ ‘diameter; diametrically opposed elements’


c. συνοδικόν (Lampe 1961: 1334) > ܣܘܢܗܕܝܩܘܢ swndyq, ܣܘܢܗܕܝܩܐ swndyqwn ‘synodical epistle; synodical one’ (Sokoloff 2009: 982)

d. δίπτυχον (Liddell and Scott 1996: 437) > ܕܝܦܛܘܟܐ dwptkwn ‘diptych, tablet’ (Sokoloff 2009: 298)


There are no discernible motivations for the use of two different strategies. The two forms of τρακτάτον, for instance, both occur in Yuḥanon of Ephesus’s Ecclesiastical History, Part 3 (Brooks 1935: 73.2; 319.8). Again, the use of multiple accommodation strategies for the same word suggests that these words either entered Syriac on multiple occasions or that Syriac-speakers re-adjusted them on the basis of the Greek source.

6.2.3.9 Greek Second Declension Nouns in -ιον (Koiné -ιν)

A sub-category of second declension nouns in -ιον are those with the ending -ιον. In the Koiné Greek of the Roman and Byzantine periods, the Greek ending -ιον is often realized as -ιν.43 These nouns are accommodated in three different ways. First, Greek -ιον can be represented in Syriac as -(y)/w/ιν, as in the following representative examples:

(6-15) a. ἀρχεῖον (Liddell and Scott 1996: 251) > ʾrkywn ‘archive’ (Sokoloff 2009: 100-101)
   c. θρονίον (Liddell and Scott 1996: 807) > trwnywn ‘seat, chair’ (Sokoloff 2009: 1665)
   d. κοιμητήριον (Liddell and Scott 1996: 968) > qwmtryn, qmtrn ‘cemetery’ (Sokoloff 2009: 1334)
   e. κοινεῖον (Liddell and Scott 1996: 968) > qwnyn, qwnwn ‘meeting, council’ (Sokoloff 2009: 1336, 1337)
   f. κρανίον (Liddell and Scott 1996: 989) > qrnyn ‘blad scalp’ (Sokoloff 2009: 1413)
   g. μαγειρεῖον (Liddell and Scott 1996: 1071) > mygrywn ‘cook-shop, kitchen’ (Sokoloff 2009: 148)
   h. Latin palatium (Glare 1982: 1284; Lewis and Short 1969: 1291) > παλάτιον

43 Gignac 1976: 2.25-29. This is also found in the Greek documents from Syria and Mesopotamia (Welles, Fink, and Gilliam 1959: 48), e.g., δελματίκιον for δελματίκιον (P.Dura. 30.17 [232]); σεισύριον for σεισύριον (P.Dura. 33.13 [240-250]).
This is the most common of the three strategies accounting for almost 60% of the examples. The forms -wn and -n are rare; -yn occurs slightly more often than -ywn. The fact that -yn is the most commonly occurring representation likely reflects the Koinê form -yν (< -ων). As the examples illustrate, the phonological accommodation of Greek -ων can vary in the same word.

Second, Greek -ων can be entirely replaced by the ending of the Syriac status emphaticus, e.g., βαλανείον (Liddell and Scott 1996: 303) > ܒܠܢܐ bln; ܒܢܐ bn ‘bath’ (Sokoloff 2009: 158, 161) and Latin subsellium (Glare 1982: 1848; Lewis and Short 1969: 1781) > συμψέλλιον (Daris 1991: 109; Liddell and Scott 1996: 1690) > ܣܦܣܠ spsl; ܣܒܣ sl ‘bench’ (Sokoloff 2009: 963, 1032). This is the second most common of the accommodation strategies accounting for almost 30% of the examples.

Third, the -(ο)ν part of Greek -(ο)ν can be replaced by the ending of the Syriac status emphaticus with the ı represented by Syriac -γ, e.g., καμηλαύκιον (Lampe 1961: 699) > ܩܡܘܠܘܩܝܐ qmw/lwy ‘broad brimmed felt hat’ (Sokoloff 2009: 1376) and πλουμίον (Liddell and Scott 1996: 1422) > ܦܠܘܡܝܐ plwmy ‘embroidery work’ (Sokoloff 2009: 1196). This is the least common of the three strategies accounting for just over 10% of the examples. It should be
noted that all of these forms may be representations of Koinē -ν (< -ον).

In several cases, multiple accommodation strategies are attested for the same word:

(6-16) a. δικαστήριον (Liddell and Scott 1996: 429) > ܕܝܩܣܛܪܝܢ dyqstryn, ܕܝܩܣܛܪܝܢ ‘court, tribunal’ (Sokoloff 2009: 299)
b. κλωβίον (Liddell and Scott 1996: 963) > ܩܠܘܒܝܐ qlwbyʾ, ܩܠܘܒܝܘܢ qlwbywn ‘cage, den’ (Sokoloff 2009: 1368)
c. ξενοδοχεῖον (Liddell and Scott 1996: 1189) > ܟܣܢدواܟ ksnwdwkywn, ܟܣܢدواܟ ksndkyn, ܟܣܢدواܟ ksnwdwkywn ‘hospital’ (Sokoloff 2009: 44, 640)
d. στάδιον (Liddell and Scott 1996: 1631) > ܐܣܛܕܐʾ sṭdyʾ, ܐܣܛܕܝܐʾ sṭdyʾ, ܐܣܛܕܝܘܢ sṭdywn, ܐܣܛܕܝܢ sṭdyn ‘stade (length of measure); stadium’ (Sokoloff 2009: 68, 995)

There are no discernible motivations for the use of different strategies, though the existence of multiple strategies again shows that Syriac speakers either transferred these words on multiple occasions or that they never entirely disconnected the loanwords from their Greek source.

6.2.3.10 Greek Third Declension Nouns in -ρ

Greek third declension nouns in -ρ are accommodated in two ways in Syriac. First, Greek -ρ is represented by Syriac -r without the addition of the Syriac status emphaticus ending, e.g., ἀίρ (Liddell and Scott 1996: 30) > ܐܝܪʾ ‘air’ (Sokoloff 2009: 1) and Latin praetor (Glare 1982: 1448; Lewis and Short 1969: 1436) > πραήτωρ (Daris 1991: 92; Lampe 1961: 1126) > ܡܠܟܐ prtwr ‘praetor’ (Sokoloff 2009: 1237). Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6). Second, Greek -ρ is represented by
Syriac -r with the addition of the Syriac status emphaticus ending, e.g., ῥήτωρ (Liddell and Scott 1996: 1570) > ῥ Retorna rhrt,’ ῥ Retorna rhrt’ ‘orator, rhetorician’ (Sokoloff 2009: 1442) and Latin speculator (Glare 1982: 1802; Lewis and Short 1969: 1739) > σπεκουλάτωρ (Daris 1991: 106; Liddell and Scott 1996: 1626) > ṣpwałtr, ṣpwałtr’ ‘executioner’ (Sokoloff 2009: 75). The former is about twice as common as the latter.

6.2.3.11 Greek Third Declension Nouns in -υ

Greek third declension nouns in -υ are accommodated in two ways in Syriac. First, Greek -υ is represented by Syriac -υ with the addition of the Syriac status emphaticus ending, e.g., ἀῤῥαβών (Liddell and Scott 1996: 146) > ῥ Retorna ῥ Retorna rhbwν ‘pledge, deposit’ (Sokoloff 2009: 1439) and λιμήν (Liddell and Scott 1996: 1050) > λ Luật lμν’ ‘harbor’ (Sokoloff 2009: 691-692). Second, Greek -υ is represented by Syriac -υ without the addition of the Syriac status emphaticus, e.g., δρόμων (Liddell and Scott 1996: 450) > δrtype δrtype drmwn ‘ship, boat’ (Sokoloff 2009: 324) and ὁρίζων (Liddell and Scott 1996: 1251) > ὁrtype ὁrtype wryzwν ‘horizon’ (Sokoloff 2009: 22). Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6). The former is about three times as common as the later. Some words attest both accommodation strategies, e.g., Latin centurio (Glare 1982: 300; Lewis and Short 1969: 316) > κεντυρίων (Daris 1991: 53; Lampe 1961: 744) > κrtype κrtype qntywn, κrtype qntywn’ ‘centurion’ (Sokoloff 2009: 1382-1383) and Latin patronus (Glare 1982: 1311; Lewis and Short 1969: 1316-1317) > πάτρων (Daris 1991: 88; Liddell and Scott 1996: 1349) > ptywn, ṵ ptywn ‘patron’ (Sokoloff 2009: 1184).
6.2.3.12 Greek Third Declension Nouns with Stems in Velars

Only a limited number of Greek third declension nouns with stems in velars are found in Syriac, as in the following representative examples:


b. κόραξ (Liddell and Scott 1996: 980) > ܩܪܩܣܐ qrqs ‘raven, crow; jay, magpie’ (Sokoloff 2009: 1416)

c. πίναξ (Liddell and Scott 1996: 1405) > ܦܝܢܟܐ pynk ‘dish, writing tablet’ (Sokoloff 2009: 1188)

These three nouns follow patterns seen with other noun types. In the case of δοὺξ, Greek ξ is represented by Syriac k and s without the addition of the *status emphaticus* ending. Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6). In contrast, in the case of κόραξ, the *status emphaticus* ending is added to qs, which represents ξ.44 Finally, in the case of πίναξ, the case ending -s is removed, and the *status emphaticus* ending is added.45

6.2.3.13 Greek Third Declension Nouns with Stems in Dentals


44 It should be noted that the representation with q is irregular (see §5.2.11).
45 For this analysis, see p. 99 above as well as Brock 1967: 413. Alternatively, the accusative singular πίνακα could have served as the input form.
In the vocalization tradition, the final mater lectionis ʾ is realized as /ɔ/, i.e., the status emphaticus ending.

Greek third declension nouns with stems in a dental are also occasionally found without any ending in Syriac, as in βῆμα (Lampe 1961: 295-296; Liddell and Scott 1996: 314) > ܒܝܡ bym ‘tribunal, raised platform, bema of a Church’ (Sokoloff 2009: 141), singular also attested as ܒܝܡܐ bymʾ; ܒܐܡܐ bʾmʾ. It should be noted that the final -α is apocopated only when short and unaccented (see §5.3.15). Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6).

Other categories of Greek third declension nouns with stems in dentals are rare in Syriac, but include πολύπους (Liddell and Scott 1996: 1441-1442) > ܦܐܠܘܦܣ pʾlwps, ܦܐܘܠܘܣ pʾwlws, ܦܝܠܝܦܘܣ pylypws ‘polyp’ (Sokoloff 2009: 1163) and χλαμύς (Liddell and Scott 1996: 1993) > ܟܠܡܝܣ klmys ‘cloak’ (Sokoloff 2009: 626). In both of these cases, the ending -υς is represented in Syriac without the ending of the status emphaticus.

6.2.3.14 Greek Third Declension Nouns with Stems in ι

Greek third declension nouns with stems in ι are accommodated in three different ways in Syriac. First, the Greek ending -ις can be represented in Syriac as -(y)s without the addition of a Syriac ending,46 e.g., ἀσπίς (Liddell and Scott 1996: 259) > ܐܣܦܣʾsps ‘snake’ (Sokoloff 2009: 77) and χρῆσις (Liddell and Scott 1996: 2006) > ܟܪܣܝܣ krsys ‘evidence, testimony’ (Sokoloff 2009: 652). This is the most common of the three strategies accounting for over 80% of the cases. Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6).

Second, the Greek ending -ις can be replaced by the Syriac status emphaticus ending:


b. κάναβις (Liddell and Scott 1996: 874) > ܩܢܦܐ qnp’ ‘hemp’ (Sokoloff 2009: 1386)

c. τάξις (Liddell and Scott 1996: 1756) > ܛܟܣܐ tks’ ‘order, rank’ (Sokoloff 2009: 181, 529), singular also attested as ܛܟܣܝܣ tksys

This strategy is rare accounting for only 10% of the cases. As τάξις demonstrates, the same word can occur with different accommodation strategies.

Finally, the Syriac status emphaticus ending can be added to the Greek ending -ις:

(6-19) a. μαγίς (Liddell and Scott 1996: 1071) > ܡܓܣܐ mgs’ ‘jar, dish’ (Sokoloff 2009: 710)


This strategy is rare accounting for fewer than 10% of the cases. This accommodation strategy incorporates the Greek consonant -ς into a Semitic triliteral root.

6.2.3.15 Greek Third Declension Nouns with Stems in υ

Greek third declension nouns with stems in υ are rare in Syriac. Two are, however, found in the Old Syriac parchments (ed. Drijvers and Healey 1999: 231-248): ἱερεύς (Liddell and Scott 1996: 821) > ܗܝܪܘܣ hyrws ‘priest’ (3.5) and ἵππεύς (Liddell and Scott 1996: 833) >

47 Brock 1996: 254 n. 15. Perhaps also κιθάρις (Liddell and Scott 1996: 950) > ܩܝܬܪܐ qytr’ ‘cither, lyre’ (Sokoloff 2009: 1366), though κιθάρις is also a potential input form.

48 Sokoloff (2009: 112) gives the input form as the aorist infinitive ἀθλησαι. Since the word is more often used as a substantive ‘fight, struggle’, Brock’s proposed input of ἀθλησις seems more likely (1996: 254 n. 15). For the use of ܐܬܠܝܣܐ ʾtlys’ with a form of √ʾbd in the meaning ‘to fight, struggle’, compare ܓܘܢܐ gwn’ plus √ʾbd ‘to struggle’ (see §6.3.5).
In both cases, Greek -ς is represented by Syriac -ws without the addition of the *status emphaticus* ending. Nouns accommodated with this strategy are not declined for state in Syriac (see §6.2.6).

A different strategy is found in ἀμφορεύς (Liddell and Scott 1996: 95) > ʾmpwrʾ ‘measure of tonnage of a ship’ (Sokoloff 2009: 56), where Greek -ς is replaced by the *status emphaticus* ending. Finally, a third strategy is encountered in ἔγχελυς (Liddell and Scott 1996: 475) > ʾnklsʾ ‘eel’ (Sokoloff 2009: 62), where Greek -ς is represented by Syriac s with the addition of the ending of the *status emphaticus*. This can be compared with βυρσεύς (Liddell and Scott 1996: 333) + adjectival ending -ɔy > ʾbwsyʾ ‘tanner’ (Sokoloff 2009: 131), where Greek ɔ was retained, undoubtedly to create a triliteral root.

6.2.3.16 Summary

The accommodation of Greek case endings in Syriac is accomplished by either the removal or retention of the Greek case ending as well as by the addition or non-addition of a Syriac ending. This results in four possibilities: 1. removal of the Greek case ending with the addition of a native Syriac ending; 2. removal of the Greek case ending without the addition of a native Syriac ending; 3. retention of the Greek case ending with the addition of a native Syriac ending; 4. retention of the Greek case ending without the addition of a native Syriac ending. The distribution of each of these four possibilities across the various Greek noun types is summarized in Table 6-4. The removal of the Greek case ending without the addition of a native Syriac ending is rare throughout all Greek noun types, being restricted to Greek nouns ending in unaccentend short -α (whether first declension or third). The next rarest category is the retention of the Greek case ending with the addition of a native Syriac ending. In these
cases, the accommodated loanword has both a Greek case ending and a Syriac ending. This is attested with various noun types, but it is not of high frequency with any of them. In most of these cases, the Greek case ending was retained in order to create a triliteral root in Syriac. The two most common accommodation strategies for Greek case endings in Syriac involve either the removal of the Greek case ending with the addition of a native Syriac ending or the retention of the Greek case ending without the addition of a native Syriac ending. That is, both result in an ending from only one of the languages, whether fully Greek or fully Syriac. In most cases, there is a clear tendency to associate one of these strategies with a particular noun class. Third declension nouns in -ις, for instance, tend to retain the Greek ending without the addition of a Syriac ending whereas first declension nouns in -ης tend to replace the Greek ending with a Syriac ending. The motivating factors for this distribution, however, remain unclear. Finally, it should be noted that it is not rare for the same Greek loanword to be accommodated according to different strategies. This suggests either that the same Greek loanword was transferred into Syriac on multiple occasions or that Syriac-speakers re-accommodated a Greek loanword on the basis of the Greek source.
6.2.4 Gender

6.2.4.1 Overview

Greek has three genders (masculine, feminine, and neuter), whereas Syriac has only two
genders (masculine and feminine). Most Greek masculine nouns are realized as masculine in Syriac, though the feminine is rarely found (§6.2.4.2). Similarly, most Greek feminine nouns are realized as feminine in Syriac, though the masculine is also found (§6.2.4.3). Greek neuter nouns are realized as both masculine and feminine, with the former being more common than the latter (§6.2.4.4).

6.2.4.2 Greek Masculine Nouns

Greek masculine nouns are usually realized as masculine in Syriac,\(^49\) e.g., masc. γένος (Liddell and Scott 1996: 344) > masc. ܓܢܣܐ gns ‘kind, species; family; race, nation’ (Sokoloff 2009: 179, 249) and masc. τύπος (Liddell and Scott 1996: 1835) > masc. ܛܘܦܣܐ twps ‘example, copy; shape, form; symbol; edict’ (Sokoloff 2009: 520, 1464). Rarely, however, Greek masculine nouns are realized as feminine in Syriac: \(^50\)

(6-20) a. masc. διαβήτης (Liddell and Scott 1996: 390) > fem. ܕܝܒܛܐ dybt ‘scale’ (Sokoloff 2009: 293)

b. masc. δρόμων (Liddell and Scott 1996: 450) > fem. ܕܪܡܘܢ drmwn ‘ship, boat’ (Sokoloff 2009: 324)

c. masc. θρόνος (Liddell and Scott 1996: 807) > fem. ܬܪܘܢܘܬܐ trwnws (with alternative orthographies) ‘throne’ (Sokoloff 2009: 1665)


e. masc. κηρός (Liddell and Scott 1996: 948) > fem. ܩܪܘܬܐ qrwrt ‘wax’ (Sokoloff

\(^49\) Nöldeke 1904: §88.
Several of these cases may be due to secondary developments in Syriac, e.g., fem. *ܕܪܡܘܢ* *(Gelb et al. 1956: 90-95; cf. Kaufman 1974: 48). In addition, the feminine gender of *ܡܪܓܢܝܬܐ* may have been phonologically motivated, since the Syriac form has the feminine ending *-t* presumably (though irregularly) corresponding to Greek *τ* (see §5.2.15).

6.2.4.3 Greek Feminine Nouns

Greek feminine nouns are usually realized as feminine in Syriac, e.g., fem. *πολιτεία* (Liddell and Scott 1996: 1434) > fem. *ܦܘܠܝܛܝܐ* (Liddell and Scott 1996: 1847-1848) > fem. *ܠܐܗܘ* (with alternative orthographies) ‘woods, forest; matter, material; firewood’ (Sokoloff 2009: 335, 341). Occasionally, however, Greek feminine nouns are realized as masculine in Syriac:


b. fem. *εἰκών* (Liddell and Scott 1996: 485) > masc. *ܝܩܘܢܐ* ‘image,

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51 Nöldeke 1904: §88.
52 Nöldeke 1904: §88; Brock 1996: 256.
representation’ (Sokoloff 2009: 38, 569)
c. fem. κάθεδρα (Liddell and Scott 1996: 851) > masc. ἕδρα qtdr ‘seat’ (Sokoloff 2009: 1421)
d. fem. κάττα (Liddell and Scott 1996: 930) > masc. ἔτα qτ ‘cat’ (Sokoloff 2009: 1347)
e. fem. κλείς (Liddell and Scott 1996: 957) → accusative singular κλείδα > masc. κλεῖδα qlyd, κλεῖδα qlyd ‘key; clasp, buckle’ (Sokoloff 2009: 1370)
f. fem. λίτρα (Liddell and Scott 1996: 1054) > masc. λυτρό lytr ‘Roman pound’ (Sokoloff 2009: 688)
g. fem. προστάς (Liddell and Scott 1996: 1526) → accusative singular προστάδα > masc. προστάδα prwsd ‘doorpost, lintel; vestibule, portico’ (Sokoloff 2009: 1233)
h. fem. σινδών (Liddell and Scott 1996: 1600) > masc. σινδών sδν ‘fine linen cloth’ (Sokoloff 2009: 970)
i. fem. σπυρίς (Liddell and Scott 1996: 1631) → accusative singular σπυρίδα > masc. σπυρίδα spryd, σπυρίδα spryd ‘basket’ (Sokoloff 2009: 77)
j. fem. στάσις (Liddell and Scott 1996: 1634) > masc. στάσις sτσ, στάσις sτσ, στάσις sτσ ‘uproar, disturbance’ (Sokoloff 2009: 69-70, 997)
k. fem. στοά (Liddell and Scott 1996: 1647) > masc. στοά sτw ‘portico’ (Sokoloff 2009: 68)
l. fem. συμβολή (Liddell and Scott 1996: 1676) > masc. συμβολή swbl ‘revelry, feast; share, lot’ (Sokoloff 2009: 974-975)
m. fem. τάξις (Liddell and Scott 1996: 1756) > masc. τάξις tks, τάξις tks ‘order; rank’ (Sokoloff 2009: 181, 529)
This occurs more commonly than the opposite phenomenon (see §6.2.4.2), but it is still relatively rare. Most of the cases are probably to be explained by the accommodation of final Greek -α by Syriac -’, which is the ending of masculine singular nouns in the status emphaticus.

6.2.4.4 Greek Neuter Nouns

Syriac has no neuter gender, and so Greek neuter nouns must be accommodated in Syriac either as masculine and/or feminine. Greek neuter nouns are usually realized as masculine in Syriac, as in the following representative examples:


c. neut. ἐντολικόν (Liddell and Scott 1996: 576) > masc. ܐܢܛܘܠܝܩܘܢ *ntwlyqwn* ‘authorization, power of attorney’ (Sokoloff 2009: 61)

d. neut. ζωνάριον (Liddell and Scott 1996: 759) > masc. ܙܘܢܪܐ *zwnr* ‘belt’ (Sokoloff 2009: 373-374)

e. neut. θρονίον (Liddell and Scott 1996: 807) > masc. ܬܪܘܢܝܘܢ *trwnywn* ‘seat, chair’ (Sokoloff 2009: 1665)

f. neut. κλίμα (Liddell and Scott 1996: 960) > masc. ܩܠܝܡܐ, ܩܠܡܐ *qlm* ‘clime; region, zone’ (Sokoloff 2009: 1371)

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Greek neuters are, however, also realized as feminine in Syriac, as in the following representative examples:

(6-23) a. neut. βαλανεῖον (Liddell and Scott 1996: 303) > fem. ܒܠܢܐ ܒܢ ‘bath’ (Sokoloff 2009: 158, 161)

b. neut. βῆμα (Lampe 1961: 295-296; Liddell and Scott 1996: 314) > fem. ܒܝܡ ܒܐܡܐ ‘tribunal, raised platform, bema of a Church’ (Sokoloff 2009: 141)

c. neut. δημόσιον (Liddell and Scott 1996: 387) > fem. ܕܡܘܣܝܢ ‘public baths’ (Sokoloff 2009: 307-308)

d. neut. θέατρον (Liddell and Scott 1996: 787) > fem. ܬܐܛܪܘܢ ‘theater; spectacle’ (Sokoloff 2009: 1618)

e. neut. καυκίον (Liddell and Scott 1996: 931) > fem. ܩܘܩܝܢ ‘jar’ (Sokoloff 2009: 1250)

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The realization of Greek neuter nouns as masculine is more common than feminine by approximately a three to two margin. There are no discernible motivations for the accommodation of a particular Greek neuter noun as either masculine or feminine.

In a few rare cases, a Greek neuter noun is found with both genders in Syriac, e.g., neut. ξένοδοχεῖον (Liddell and Scott 1996: 1189) > masc./fem. ܐܟܣܢܘܕܘܟܐ ʾ, ܐܟܣܢディング ʾ, ܟܣܢܕܟܝܢ ʾ, ܐܟܣܢܕܟܝܢ ʾ, ܟܣܢܘܕܘܟܝܢ ʾ 'hospital’ (Sokoloff 2009: 44, 640) and neut. τάγμα (Liddell and Scott 1996: 1752) > masc./fem. ܬܓܡܐ ʾ, ܛܓܡܐ ʾ 'order, class; command, precept; troop, cohort’ (Sokoloff 2009: 68, 995)

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6.2.4.5 Summary

The accommodation of Greek gender in Syriac is uneventful. Most masculine nouns in Greek are realized as masculine in Syriac, and most feminine nouns in Greek are realized as feminine in Syriac. Exceptions are, however, found. In some cases, these exceptions are due to the association of a loanword with another word in the lexicon, e.g., fem. ܩܪܩܘܪܐ qrqwr ‘light boat’, both of which are from masculine Greek words, but are feminine in Syriac due to association with feminine ܐܠܦܐ ʾɛlpp ‘boat’ (Sokoloff 2009: 50-51) < Akkadian elippu (Gelb et al. 1956: 90-95; cf. Kaufman 1974: 48). In other cases, differences in gender between the Greek source and Syriac can be explained by phonological accommodation and secondary developments. This is the case, for instance, with masc. ܐܘܣܝܐ ʾwsy ‘essence, substance; wealth’ (< fem. οὐσία), where the masculine gender can be explained by the accommodation of the final Greek -α with Syriac -ʾ, which is the ending of the masculine singular status emphaticus. Finally, some cases of incongruence between the gender of a noun in the Greek source and in Syriac remain unexplained. The fact that a vast majority of Greek loanwords in Syriac retain the gender of the Greek source suggests a relatively high degree of bilingualism for at least part of the Syriac-speaking population.  

Greek neuter nouns are realized both as masculine and feminine in Syriac with the former being more common than the latter. In the vast majority of cases, the selection of gender in Syriac remains unclear.

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56 For a similar argument involving French loanwords in Brussels Flemish, see Winford 2003: 49-50.
In addition to the cases discussed above, a Greek loanword is rarely found with both genders in Syriac. This occurs for different reasons. In some cases, this is due to the Greek source, which itself attests multiple genders, e.g., masc./fem. ἀήρ (Liddell and Scott 1996: 30) > mostly fem., occasionally masc. ἀ荄 ‘air’ (Sokoloff 2009: 1).\(^{57}\) In other cases, however, a Greek loanword in Syriac takes both masculine and feminine agreement due to an inner Syriac development. This is most common with feminine Greek nouns that end in final -ʾ in Syriac, e.g., fem. σειρά (Liddell and Scott 1996: 1588) > masc./fem. syrʾ ‘thread; chain’ (Sokoloff 2009: 1007) and fem. χώρα (Liddell and Scott 1996: 2015) > masc./fem. kwrʾ ‘land, province’ (Sokoloff 2009: 612). In both of these cases, the use of the feminine Greek word with a masculine gender in Syriac is to be explained by an inner Syriac development based on the form of the word, i.e., most Syriac nouns ending in -ʾ are masculine (as opposed to feminines in -t'). Finally, there are cases in which it is unclear why a Greek loanword is attested with multiple genders in Syriac, e.g., Latin masc. uncinus (Glare 1982: 2090; Lewis and Short 1969: 1929) > masc. ὄγκινος (Liddell and Scott 1996: 1196) > masc./fem. wqynʾ ‘hook; anchor; sailors’ sounding line’ (Sokoloff 2009: 20).

\(^{57}\) A similar phenomenon is found with masc. χάρτης (Liddell and Scott 1996: 1980) > masc./fem. kτυς, qτυς ‘sheet of paper; papyrus’ (Sokoloff 2009: 650, 1405-1406), where the feminine gender is to be explained by the feminine Latin charta (Glare 1982: 309; Lewis and Short 1969: 325).
6.2.5 Number

6.2.5.1 Overview

Greek loanwords in Syriac are declined for number either according to Syriac morphology (§6.2.5.2) or according to Greek morphology (§6.2.5.3). Many Greek loanwords in Syriac attest multiple plural formations.

6.2.5.2 Syriac Morphology

Most Greek loanwords in Syriac are declined for number according to Syriac morphology.\(^{58}\) The Syriac masculine plural is illustrated in the following representative examples: \(\alpha \gamma \varsigma \omega \nu\) (Lampe 1961: 25; Liddell and Scott 1996: 18-19) \(\rightarrow\) \(ܐܓܘܢܐ\) ʾgwnʾ ‘struggle’ (Sokoloff 2009: 6) \(\rightarrow\) pl. \(ܢܐ ܐܓܘ\) ʾgn and \(\chi e i m ν\) (Liddell and Scott 1996: 1983) \(\rightarrow\) \(ܟܝܡܘܢܐ\) kymwnʾ (Sokoloff 2009: 619) \(\rightarrow\) pl. \(ܢܐ ܟܝܡܘ\) mʾn ’storm’. The Syriac feminine plural is illustrated in the following representative examples: \(\lambda \omicron \gamma \chi \eta\) (Liddell and Scott 1996: 1059) \(\rightarrow\) \(ܠܘܟܝܬܐ\) lwkytʾ ‘spear’ (Sokoloff 2009: 679) \(\rightarrow\) pl. \(ܟܝܬܐ \lambda \omicron \gamma \chi \eta\) lwkytʾ and \(\mu \chi \alpha \nu \nu\) (Liddell and Scott 1996: 1131) \(\rightarrow\) \(ܡܐܟܢܐ\) mʾknʾ, \(ܡܐ Casinos\) mʾkn ’machine, siege engine; irrigated land’ (Sokoloff 2009: 701) \(\rightarrow\) pl. \(ܢܘܬܐ\) nwtʾ, with additional plurals of \(ܡܐ Casinos\) mʾkn and \(ܢܘAttached in the original text. The Syriac masculine plural ending is significantly more common than the feminine plural.

\(^{58}\) This is also the case for Greek loanwords in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §315-325).
6.2.5.3 Greek Morphology

Alongside the singular, the plural also serves as an input form for some Greek loanwords in Syriac.\(^{59}\) This is, for instance, the case with Greek second declension nouns with nominative singular \(-ος\) ~ nominative plural \(-οι\).\(^{60}\) The plural \(αἱρετικοί\), for instance, was transferred into Syriac as \(ܐܗܪ̈ܛܝܩܘ\) along with the singular \(αἱρετικός\) (Lampe 1961: 51) > \(ܐܙܘ\) ‘heretical, schismatic’ (Sokoloff 2009: 354). The ending \(-w\) in \(ܐܗܪ̈ܛܝܩܘ\) marks plurality. This ending \(-w\) functions as a plural marker for many other Greek loanwords in Syriac that have a corresponding Greek plural in \(-οι\). The ending \(-w\) is, however, also found as a plural marker with Greek loanwords that do not have a corresponding plural in \(-οι\) in the source language. This is, for instance, the case with \(δόγμα\) (Lampe 1961: 377-378; Liddell and Scott 1996: 441) > \(ܒܕܘܓܡܐ\) ‘doctrine’ (Sokoloff 2009: 277-278), one of the plurals of which is \(ܒܕܘܓܡ\). The plural ending \(-w\) in \(ܒܕܘܓܡ\) is due to an inner Syriac analogy:

\[(6-24) \text{:\ } ܐܗܪ̈ܛܝܩܘ > ܐܙܘ : X = ܒܕܘܓܡ\]

This analogy led to the creation of a new plural ending \(-w\) that is used with Greek loanwords in Syriac that do not have a Greek plural in \(-οι\):

\[(6-25) \text{:\ } \text{a. } ܐܪܓܘܪܡܐܝܬܐ (Liddell and Scott 1996: 236) > ܐܪܓܘܪܡܐܦܟܪܐ ‘money changer, banker’ (Sokoloff 2009: 95) \rightarrow \text{pl. } ܐܪܓܘܪܡܐܦܟܪ\] [the expected Greek nominative plural is \(ܐܪܓܘܪܡܐܦܟܪ̣\)]

\[\text{b. } ܕܘܓܡܐ (Lampe 1961: 377-378; Liddell and Scott 1996: 441) > ܒܕܘܓܡ > ܒܕܘܓܡ\] ‘doctrine’ (Sokoloff 2009: 277-278) \rightarrow \text{pl. } ܒܕܘܓܡ, with additional plurals

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\(^{59}\) For details, see §6.2.2.

\(^{60}\) See §6.2.2.3.
of ἀήρ ὀσ ἄερ, ἀνάγκη ὀσ ἀνάγκης, ἢς ὀσ ἤς [the expected Greek nominative plural is δόγματα]

c. ψάλτης (Liddell and Scott 1996: 2018) > ἐκλειστὸς ἄερτας ‘player on the cithara’
    (Sokoloff 2009: 1210) → pl. ἐκλειστός ἄερτα [the expected Greek nominative plural is
    ψάλται]

The plural ending -ω is not used with native Syriac words in contrast to the plural
endings -ως and -ʾως.61

In addition to the case above that involves the Greek nominative singular and plural, the
nominative singular and accusative plural serve as input forms for some Greek loanwords in
Syriac.62 This is, for instance, the case with Greek second declension nouns with nominative
singular -ος ~ accusative plural -οντις. The accusative plural σύγκλητοσ, for instance, was
transferred into Syriac as ἐκλειστότας σύγκλητως, along with the nominative singular σύγκλητος
(Liddell and Scott 1996: 1665) > ἐκλειστότας σύγκλητως ‘senate; senator’ (Sokoloff 2009: 984-
985).63 As in the case of -ω discussed above, a new plural ending -ως was created by analogy
in Syriac. This new plural ending -ως is found with the following Greek loanwords in Syriac
that do not have a corresponding Greek accusative plural in -οντις:64

(6-26) a. ἀήρ (Liddell and Scott 1996: 30) > ἄερ ἄρ ρ ‘air’ (Sokoloff 2009: 1) → pl. ἄερ

τως, with an additional plural of ἄερ ἄρως

b. ἀνάγκη (Liddell and Scott 1996: 101) > ἂναγκ ἀναγκ ‘nnq’ (with alternative

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61 This is discussed immediately below as well as in §7.3.2.
62 For details, see §6.2.2.5.
63 For additional examples, see (6-4) above.
64 See already Schall 1960: 99. In the following examples, the ending -ς in some of the
additional plurals could be either a defective writing of -ως or the analogically created plural
ending -ʾως (for this development, see §7.3.2).
orthographies) ‘necessity’ (Sokoloff 2009: 63) → pl. ἁνὴ ἃνης, with an additional plural of ἁνὴ ἃνης

c. ὁξία (Liddell and Scott 1996: 170) > ἁκὴ ὁξύ ‘rank; salary’ (Sokoloff 2009: 43-44) → pl. ἁκὴ ὁξὺ

d. βασιλική (Liddell and Scott 1996: 309-310) > ἁκὴ ὁξύ ‘colonnade, portico’ (Sokoloff 2009: 165) → pl. ἁκὴ ὁξὺ

e. διαθήκη (Lampe 1961: 348; Liddell and Scott 1996: 394-395) > ἁδὴ δῦτα (with alternative orthographies) ‘covenant’ (Sokoloff 2009: 301) → pl. ἁδὴ δῦτα, with additional plurals of ἁδὴ δῦτα, ἁδὴ δῦτα

f. διακονία (Liddell and Scott 1996: 398) > ἁδὴ ἀσκῶν ‘hospital’ (Sokoloff 2009: 299) → pl. ἁδὴ ἀσκῶν, ἁδὴ ἀσκῶν, with an additional plural of ἁδὴ ἀσκῶν ἁδὴ ἀσκῶν

g. ἐξορία (Liddell and Scott 1996: 598) > ἁδὴ ἁσκῶν ‘exile’ (Sokoloff 2009: 43) → pl. ἁδὴ ἁσκῶν, ἁδὴ ἁσκῶν, with an additional plural of ἁδὴ ἁσκῶν ἁδὴ ἁσκῶν

h. τεωρία (Liddell and Scott 1996: 797) > ἁδὴ ἁπωρία ‘contemplation, theory, speculation’ (Sokoloff 2009: 1618) → pl. ἁδὴ ἁπωρία


k. μετάνοια (Liddell and Scott 1996: 1115) > ἁνὴ μέτων ‘bending, inclination;
worship, adoration’ (Sokoloff 2009: 745) → pl. ܡܵܐܟܢܵܐ ܐܘܣܵܐ

1. ܡܵܟܟܪܵܢܵܐ (Liddell and Scott 1996: 1131) > ܡܵܟܟܪܵܢܵܐ ܡܵܟܟܪܵܢܵܐ ‘machine, siege engine; irrigated land’ (Sokoloff 2009: 701) → pl. ܡܵܟܟܪܵܢܵܐ ܡܵܟܟܪܵܢܵܐ, with additional plurals of ܡܵܟܟܪܵܢܵܐ ܡܵܟܟܪܵܢܵܐ, ܡܵܟܟܪܵܢܵܐ ܡܵܡܵܟܟܪܵܢܵܐ

m. ܡܵܘܡܵܡܵܐ (Liddell and Scott 1996: 1274-1275) > ܡܵܘܡܵܡܵܐ ܐܘܣܵܐ ‘essence, substance; wealth’ (Sokoloff 2009: 18) → pl. ܡܵܘܡܵܡܵܐ ܐܘܣܵܐ, with additional plurals of ܡܵܘܡܵܡܵܐ ܐܘܣܵܐ, ܡܵܘܡܵܡܵܐ ܐܘܣܵܐ

n. ܣܟܪܵܒܵܘܳܢ (Lampe 1961: 1242) > ܣܟܪܵܒܵܘܳܢ ܐܣܩܪܵܒܵܘܳܢ ‘attendants of the king’ (Sokoloff 2009: 79) → pl. ܣܟܪܵܒܵܘܳܢ ܐܣܩܪܵܒܵܘܳܢ, with an additional plural of ܣܟܪܵܒܵܘܳܢ ܐܣܩܪܵܒܵܘܳܢ

o. ܘܡܵܪܵܟܵܐ (Liddell and Scott 1996: 1853) > ܗܘܦܪܟܵܝܳܐ ܗܘܦܪܟܵܝܳܐ ‘prefecture; diocese’ (Sokoloff 2009: 19, 338) → pl. ܗܘܦܪܟܵܝܳܐ ܗܘܦܪܟܵܝܳܐ, with an additional plural of ܗܘܦܪܟܵܝܳܐ ܗܘܦܪܟܵܝܳܐ

p. ܦܹܘܺܢܳܐ (Liddell and Scott 1996: 1967-1968) > ܡܵܣܵܒܵܘܳܢ ܒܵܘܳܢ ‘voice; (with ܝܹܒܹ) to promise’ (Sokoloff 2009: 1166) → pl. ܡܵܣܵܒܵܘܳܢ ܒܵܘܳܢ, with an additional plural of ܡܵܣܵܒܵܘܳܢ ܒܵܘܳܢ

The new Syriac plural ending -ws that is illustrated in these examples is also rarely found with native Syriac words.65

The Greek plural also serves as an input form with Greek first declension nouns with nominative singular -η (or -α) ~ accusative plural -ας. The accusative plural ἀνάγκας, for instance, was transferred into Syriac as ܐܢܢܩ ܐܢܢܩ, along with the nominative singular ἀνάγκη (Liddell and Scott 1996: 101) > ܐܢܢܩ ܐܢܢܩ (with alternative orthographies)

65 For this development, see §7.3.2.
‘necessity’ (Sokoloff 2009: 63).\textsuperscript{66} The ending -(\textsuperscript{\textdegree})s is one of the regular plural formations for Greek loanwords in -η (or -α) in Syriac. As is the case with -w and -ws, a new plural ending -(\textsuperscript{\textdegree})s was created by analogy in Syriac:


c. ξενοδοχεῖον (Liddell and Scott 1996: 1189) > ܐܟܣܢܘܕܘܟܐ ‘hospital’ (Sokoloff 2009: 44, 640) → pl. ܐܟܣܢܘܕܘܟ�s

d. προάστιον (Liddell and Scott 1996: 1469) > *prwstwν ‘suburban areas’ (Sokoloff 2009: 1232) → pl. ܡܦܪܘܣܛܝܣ

e. σελλίον (Liddell and Scott 1996: 1590) > ܣܝܠܝܢ ‘small chair; latrine, toilet’ (Sokoloff 2009: 149; 1001) → pl. ܠܝܣ̈, with an additional plural of ܡܠܝܐ

Since the plural ending -ws can be written defectively as -s, it cannot be ruled out that these examples represent the plural ending -ws. The existence of the plural ending -(\textsuperscript{\textdegree})s can, however, be definitively established by the writing of -s, which occurs rarely with native Syriac words.\textsuperscript{67}

The Greek nominative plural ending -ες or the accusative plural ending -άς is found as a plural marker in Syriac for the third declension noun πολύπους (Liddell and Scott 1996:

\textsuperscript{66} For additional examples, see (6-3) above.

\textsuperscript{67} For this development, see §7.3.2.
nominative plural πολύποδες, accusative plural πολύποδας > pl. πολύποδας πωλωπὸς ‘polyp’ (Sokoloff 2009: 1163), singular attested as πωλωπὸς π’lwps, πωλωπὸς pylypws.

One of these endings may also serve as a plural marker for the following third declension nouns ending in a consonant:

6-28 a. ἀήρ (Liddell and Scott 1996: 30) → nominative plural ἀέρες, accusative plural ἀέρας > pl. ἀέρας ἀ’́ς ‘air’ (Sokoloff 2009: 1), singular attested as ἀ’́ρ ἀ’́ς, with an additional plural of ἀ’́ρ ἀ’́ς

b. Latin excubitor (Glare 1982: 637; Lewis and Short 1969: 680) > ἐξκούβιτωρ (Daris 1991: 44-45) → nominative plural ἐξκούβιτορες, accusative plural ἐξκούβιτορας > pl. ἐξκούβιτορας sqwbytwīs ‘Excubitors, Byzantine palace guards’ (Sokoloff 2009: 78, 1037), with additional plurals of ἐξκούβιτορας ἐξκούβιτωρ (sic; without syome), ἐξκούβιτωρ ἐξκούβιτωρ (sic; with two syome), ἐξκούβιτωρ sqwbytwīs


e. πλάξ (Liddell and Scott 1996: 1411-1412) → nominative plural πλάκες, accusative plural πλάκας > pl. πλάκας φίλας ‘slab; tablet’ (Sokoloff 2009: 1203), singular attested
Alternatively, these examples could be analyzed as instances of the analogically created plural ending -ʾs or -(w)s.68

The Greek plural ending -ματα serves as a plural marker for some Greek third declension neuter nouns with stems in τ, as in the following representative examples:

(6-29) a. ἀνάλωμα (Liddell and Scott 1996: 112) → nominative/accusative plural ἀνάλωματα > pl. ἀνάλωματι 'outlay, expense' (Sokoloff 2009: 63), singular attested as ἀνάλωμα

b. δικαιώμα (Liddell and Scott 1996: 429) → nominative/accusative plural δικαιώματα > ἀνάλωματι 'documents' (Sokoloff 2009: 299)

c. δόγμα (Lampe 1961: 377-378; Liddell and Scott 1996: 441) → nominative/accusative plural δόγματα > pl. δόγματι 'doctrine' (Sokoloff 2009: 277-278), singular attested as δόγμα, with additional plurals of δόγματι, δόγμα

d. ζήτημα (Liddell and Scott 1996: 756) → nominative/accusative plural ζήτηματα > pl. ζήτηματι 'inquiry; reproach; fault' (Sokoloff 2009: 377), singular attested as ζήτημα, ζήτημα

e. κλίμα (Liddell and Scott 1996: 960) → nominative/accusative plural κλίματα > pl. κλίματι 'clime; region, zone' (Sokoloff 2009: 1371), singular attested as κλίμα, κλίμα

f. μηχανήμα (Liddell and Scott 1996: 1131) → nominative/accusative plural μηχανήματα > μηχανήματι 'siege) machines, works' (Sokoloff 2009: 760)

68 The analogical developments are discussed in detail in §7.3.2.
In this case, the existence of singular and plural forms did not lead to the analogical creation of a new plural ending.

The Greek plural ending -εις may serve as a plural marker for some Greek third declension nouns with stems in i in Syriac:

(6-30) a. αἵρεσις (Lampe 1961: 51; Liddell and Scott 1996: 41) \(\rightarrow\) nominative/accusative plural αἵρεσεις > pl. αἵρεσις, ἡσυς ἵσις ἵς, ἵς, ὅσις ‘difference, opinion; heresies’, singular attested as ἵσις, ἵς, ὅς

b. σύναξις (Liddell and Scott 1996: 1696) \(\rightarrow\) nominative/accusative plural σύναξεῖς > pl. σύναξις, swāksys ‘religious gathering, assembly’ (Sokoloff 2009: 982), singular attested as σύναξις swāksys

c. τάξις (Liddell and Scott 1996: 1756) \(\rightarrow\) nominative/accusative plural τάξεις > pl. τάξις

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69 Nöldeke 1904: §89.
These examples could alternatively be analyzed as cases in which the singular and the plural are the same.\footnote{For this, see §6.2.5.4 directly below.}

6.2.5.4 No Distinct Plural Form

In a few, rare cases, the singular and the plural are exactly the same for a Greek loanword in Syriac:

\begin{enumerate}[(a)]
\item \textit{γραμμάτιον} \textup{(Liddell and Scott 1996: 359)} \rightarrow \textit{gr\textsuperscript{m}tywn}, pl. \textit{gr\textsuperscript{m}tywn} ‘promissory note’ \textup{(Sokoloff 2009: 261)}
\item \textit{κοιμητήριον} \textup{(Liddell and Scott 1996: 968)} \rightarrow \textit{qm\textsuperscript{t}ryn}, \textit{qm\textsuperscript{t}rn}, pl. \textit{qm\textsuperscript{t}ryn} ‘cemetery’ \textup{(Sokoloff 2009: 1334)}
\item \textit{μάγγανον} \textup{(Liddell and Scott 1996: 1070)} \rightarrow \textit{mng\textsuperscript{n}wn}, pl. \textit{mng\textsuperscript{n}wn} ‘instrument of torture’ \textup{(Sokoloff 2009: 780)}
\item \textit{πατριάρχης} \textup{(Lampe 1961: 1051-1052)} \rightarrow \textit{p\textsuperscript{t}ryk\textsuperscript{y}k\textsuperscript{s}}, pl. \textit{p\textsuperscript{t}ryk\textsuperscript{y}ks} ‘patriarch’ \textup{(Sokoloff 2009: 1184)}
\item \textit{πρόσοδος} \textup{(Liddell and Scott 1996: 1520)} \rightarrow \text{accusative singular} \textit{πρόσοδον} \rightarrow \textit{pr\textsuperscript{w}sd\textsuperscript{n}}, pl. \textit{pr\textsuperscript{w}sd\textsuperscript{n}} ‘revenues’ \textup{(Sokoloff 2009: 1232)}
\end{enumerate}

The only marker of plurality in these cases is \textit{sy\text{\textsuperscript{c}me}}.
6.2.5.5 Summary

As described in the previous sections, most Greek loanwords in Syriac are declined for number either according to Syriac morphology (§6.2.5.2) or according to Greek morphology (§6.2.5.3). Prima facie, one might expect this distinction to correlate roughly with Lehnwörter and Fremdwörter, respectively. That is, Greek loanwords that decline for number according to Greek morphology might be expected to be closer to Fremdwörter than Lehnwörter. Interestingly, however, many of the words that take Greek plural morphology are among the most commonly attested Greek words in Syriac. In addition, they seem to be accommodated fully in Syriac in all other regards. This is, for instance, the case with Greek ἀνάγκη > Syriac ʾnnqʾ (with alternative orthographies) ‘necessity’, which has Greek morphology plurals of ὁὦὤς ἀνᾶγκας and Ὀὤς ἀνᾶγας. Where does a word such as this fall on the continuum of Fremdwörter versus Lehnwörter? Its plural morphology suggests Fremdwort, since Greek plural morphology in Syriac is predominantly linked to words of Greek origin. In all other regards, however, the word is a fully incorporated Lehnwort. It is, for instance, attested in Syriac already in the early third-century Book of the Laws of the Countries (6.17, 60.12; ed. Drijvers 1965), and it occurs frequently in Syriac texts of all genres from all time periods. In addition, setting aside its plural morphology, the word is fully accommodated in Syriac. This situation is not restricted to Syriac ʾnnqʾ but exists for a number of the Greek words in Syriac that attest Greek plural morphology.

The fact that a Syriac word such as ʾnnqʾ ‘necessity’ occurs with Greek plural morphology suggests at the very least that Syriac-speakers categorized it with a number of

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71 There are also a few that have no plural marking other than Syriac syome (§6.2.5.4).
72 For this continuum, see the discussion in §4.5.
73 For the few exceptions that result in new plural endings in Syriac, see §7.3.2.
other words that had marked plural morphology (known by the contact linguist to be ultimately of Greek origin). This could indicate that the word is not entirely on the Lehnwörter side of the continuum, but that it is shaded a little to the Fremdwörter side. Another interpretation is, however, also possible and in fact more likely given what is known about the Syriac-Greek contact situation more generally. The Greek plural morphology of Syriac ʾnnqʾ ‘necessity’ is probably a reflection of the dynamic nature of Greek lexical transfer in Syriac. That is, even though Greek ἀνάγκη was transferred into Syriac by at least the second century, some Syriac-speakers never entirely disconnected the Syriac word from its Greek source since they continued to be in contact with Greek. This connection is what provided the basis for the word to continue to take a Greek type of plural morphology. It is interesting in this regard that Syriac ʾnnqʾ not only attests a plural of ʾnnqš, which accurately reflects the Greek plural ἀνάγκας, but also a plural of ʾnnqws, the ending of which reflects a different Greek plural of -οῦς. The plural ʾnnqws rules out the interpretation as a code-switch. It also indicates that Syriac ʾnnqʾ takes Greek-looking plural morphology that does not necessarily accurately reflect the Greek source. Thus, Syriac-speakers categorized a word such as ʾnnqʾ as taking a special type of plural marking, and it is likely that this categorization was based on an active knowledge that the word was from Greek.

The dynamic nature of Greek lexical transfer in Syriac is also evidenced by the fact that many Greek loanwords in Syriac attest multiple plural formations, as illustrated in many of the examples in the previous sections. The plural of ἰδ. ʾdwgmʾ ‘doctrine’ (< δόγμα [Lampe 1961: 377-378; Liddell and Scott 1996: 441]), for instance, is attested with three different plural endings: 1. the native Syriac plural in ἰδ. ʾdwgmland; 2. the Greek plural in ἰδ. ʾdwgmτα; and 3. the analogically created plural ending -w in ἰδ. ʾdwglmw.
The following examples illustrate additional cases in which a Greek loanword has multiple plural formations in Syriac:


b. κληρικός (Lampe 1961: 756) > ܩܠܝܪܝܩܐ, ܩܠܝܪܝܩܘ, pl. ܩܠܝܪܐ, ܩܠܝܪܘ  ‘cleric’ (Sokoloff 2009: 1371)

c. κλίμα (Liddell and Scott 1996: 960) > ܩܠܡܐ, ܩܠܡܘ, pl. ܠܡܐ, ܠܡܘ  ‘machine, siege engine; irrigated land’ (Sokoloff 2009: 701)

d. μηχανή (Liddell and Scott 1996: 1131) > ܡܐܟܢܐ, ܡܝܟܢܐ, pl. ܢܘܬܐ, ܢܣܘ  ‘clime; region, zone’ (Sokoloff 2009: 1371)

e. ὁρθόδοξος (Lampe 1961: 971-972; Liddell and Scott 1996: 1248) > ܐܪܬܕܘܟܣܐ, ܐܪܬܕܘܟܣܘ, pl. ܐܘܪܬܘܕܘܟܣܘ, ܐܘܪܬܘדוגܣܘ  ‘orthodox’ (Sokoloff 2009: 105)

f. οὐσία (Liddell and Scott 1996: 1274-1275) > ܐܘܣܝܐ, ܐܘܣܝܘ, pl. ܣܐ, ܣܘ  ‘essence, substance; wealth’ (Sokoloff 2009: 18)

g. σκρίβων (Lampe 1961: 1242) > ܣܩܪܝܒܢܘ, ܣܩܘܪܝܒܢܘ, pl. ܣܩܘܪܝܒܢܘ, ܣܩܘܪܝܒܢܘ  ‘attendants of the king’ (Sokoloff 2009: 79)

h. συγκλητικός (Liddell and Scott 1996: 1665) > ܣܘܢܩܠܝܛܝܩܘ, ܣܘܢܩܠܝܛܝܩܘ, pl. ܠܝܛܝܩܣ, ܠܝܩܣ  ‘senate; of senatorial rank’ (Sokoloff 2009: 985)

Native Syriac nouns only rarely have multiple plural formations. Thus, Greek loanwords in Syriac depart from native Syriac nouns in this way. These cases in which Greek loanwords in
Syriac have multiple plural formations again likely reflects the dynamic nature of Greek lexical transfer in Syriac. To return to the example of ܕܘܓܡܐ — δόγμα (Lampe 1961: 377-378; Liddell and Scott 1996: 441)), the native Syriac plural in ܕܘܓܡܐ — δόγμα represents a word fully accommodated in Syriac. In contrast, the Greek plural in ܕܘܓܡܐ — δόγμα (δόγματα) likely reflects that at least some Syriac-speakers never lost sight of the Greek source. Finally, the analogically created plural ending -w in ܕܘܓܡܐ — δόγμα falls somewhere in between, with Syriac-speakers continuing to realize that the word takes marked plural morphology (i.e., Greek-looking morphology), but not actually applying the correct Greek plural.

6.2.6 State

State is a morpho-syntactic category found in Syriac, but not in Greek. Thus, whether or not a Greek loanword in Syriac follows the normal morpho-syntactic rules for state in Syriac depends entirely on whether or not the word in question was accommodated with a Syriac ending.74 Greek loanwords that are accommodated with a Syriac ending occur in all three Syriac states, as the following examples involving ܢܡܘܣܐ — νόμος (Sokoloff 2009: 921-922) illustrate:

(6-33) Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965)

<table>
<thead>
<tr>
<th>legate</th>
<th>nmwsy</th>
<th>ʼatrawweto</th>
<th>maprqin</th>
<th>lhon</th>
</tr>
</thead>
<tbody>
<tr>
<td>₩ NEG</td>
<td>law-M.PL.CON</td>
<td>place-M.PL.EMP</td>
<td>remove-PART.M.PL.ABS</td>
<td>to+them-M</td>
</tr>
</tbody>
</table>

74 The accommodation of Greek endings in Syriac is discussed in detail in §6.2.3 and summarized in Table 6-4.
men  nmws²  damšihon

from  law-M.SG.EMP  NML + messiah-M.SG.CON + their

‘the laws of the places will not separate them from the law of their Messiah’ (60.14-15)

(6-34) Julian Romance (5th cent.; ed. Hoffmann 1880b)

wlo  mekkel ʼit leh  dneṯ’emar  malkɔ

and + NEG therefore  EX to + him  NML + be.called-PRE.3.M.SG  king-M.SG.EMP

ʾellɔ  ṭrnɔ  damḏabbar  ṣḥwɔtɔ

but  tyrant-M.SG.EMP  NML + conduct-PART.3.M.SG.ABS  thing-F.PL.DET

dlɔ  nmws

NML + NEG  law-M.SG.ABS

‘and it is not proper for him to be called a king, but rather a tyrant who conducts affairs lawlessly’ (35.1-2)

In these sentences, nmws² follows the normal morpho-syntactic rules for state in Syriac.

Greek loanwords that are not accommodated with a Syriac ending, in contrast, do not follow the normal morpho-syntactic rules for state in Syriac, but occur only (or mostly) in a bare form without ending.⁷⁵ This is illustrated in the following example:

(6-35) Life of Yuhanon of Tella by Eliya (mid-6th cent.; ed. Brooks 1907: 29-95)

ʼaḇlhu(h)y  bprṯwrn  ddwks  dilɔh

make.work-SUF.3.M.PL + him  in + praetorium  NML + general  her

⁷⁵ Brock 1967: 392; Nöldeke 1904: §202L.
`damdi(n)ttɔ
NML + city.F.SG.DET

‘they made him work in the praetorium of the general of the city’ (39.23-24)

Syriac syntax demands the *status emphaticus* for `كورسپرین `<πραιτώριον `<Latin *praetorium* [Glare 1982: 1448; Lewis and Short 1969: 1436]) and for `دوز `<δούξ `<Latin *dux* [Glare 1982: 582; Lewis and Short 1969: 621]); both, however, occur in a bare form. In addition, the independent possessive pronoun `ديلا `dila `her’ is used instead of a pronominal suffix with `دوز `dwks. Thus, these two nouns do not follow the normal morpho-syntactic rules for Syriac state, but occur in an under-inflected bare form.\(^{76}\) The various noun types that occur in this bare form are outlined in detail in the sections on accommodation of Greek case endings (§6.2.3).

It should be noted that whether or not a Greek loanword obeys the morpho-syntactic rules of Syriac state is not necessarily related to the degree of incorporation of the loanword (see §4.5). This is shown by the fact that some nouns that do not take the *status emphaticus* ending can still be subject to secondary derivations;\(^{77}\)


b. εὐαγγέλιον (Lampe 1961: 555-559; Liddell and Scott 1996: 705) > ܐܘܢܓܠܝܘܢ

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\(^{76}\) A similar situation is attested for Greek loanwords in other dialects of Aramaic, e.g., Biblical Aramaic (for which, see Rosenthal 1995: §46).

\(^{77}\) Brock 1996: 260 n. 32. Secondary derivations involving Greek loanwords in Syriac are analyzed in detail in §7.2.3.


d. ὠκεανός (Liddell and Scott 1996: 2031) > ἡμῶν ʾwqynw ‘ocean’ (Sokoloff 2009: 20) + -ʾyṯ → ܐܘܩܝܢܐܝܬ ’wqyn yṯ ‘like an ocean’ (Sokoloff 2009: 20)

6.3 Verbs

6.3.1 Overview

Syriac contains a number of verbs that are ultimately of Greek origin. A majority of these are denominative formations from nouns transferred from Greek and thus are not in the strict sense loanwords. These are analyzed in §6.3.2. In addition to denominative verbs, there are also verbs in Syriac that are loanwords from Greek. These are analyzed according to the typological study of Wohlgemuth (2009), which distinguishes four major strategies for the accommodation of loanverbs in the world’s languages. Syriac attests three of the four accommodation strategies in Wohlgemuth’s typology: direct insertion (§6.3.3), indirect insertion (§6.3.4), and light verb strategy (§6.3.5).
6.3.2 Denominative Verbs

A majority of the verbal roots in Syriac that are ultimately of Greek origin are
denominative formations.\(^78\) The Syriac verbal root √tg\(n\) D ‘to fry, roast; to torture’, for
instance, is derived from the noun ܢܛܓܢܐ t\(g\)n’ ‘frying pan’, which was transferred from Greek
\(\tau\)ήγα\(ν\)ν ‘frying pan’ (Liddell and Scott 1996: 1786). As this example illustrates, most
transitive denominative roots from Greek loanwords that are triliteral occur in the D-stem in
Syriac; the C-stem and G-stem also occur, though less commonly.\(^79\) Passives of these
denominatives are formed with the respective T-stems. This follows the typical pattern for
denominative verbs in Syriac, e.g., ܐܠܗܐ ʾal\(h\)a ‘god’ (Sokoloff 2009: 47) \(\rightarrow\) ܐܠܗ √ʾlh D ‘to
deify’, Dt ‘to be deified’ (Sokoloff 2009: 47). Denominative verbs from Greek loanwords that
involve more than three root consonants follow the typical pattern for these roots in Syriac.\(^80\)

The following denominative verbs from Greek loanwords are found already by the
fourth-century in Syriac:\(^81\)

(6-37) a. ܙܫܝ_det (Liddell and Scott 1996: 754), ܙܝܒܘv (Liddell and Scott 1996: 757) \(\rightarrow\) ܐܠܗ o

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\(^79\) G-stem corresponds to Syriac p\(’\)al, D-stem to pa\(’\)el, C-Stem to \(\dot{\iota}p\(’\)el. The respective T-stems
are \(\dot{\iota}t\)p\(’\)el (Gt); \(\dot{\iota}t\)pa\(’\)el (Dt), and \(\dot{\iota}t\)tap\(’\)al (Ct).

\(^80\) See Nöldeke 1904: §180-182.

\(^81\) Perhaps also ܡܠܛܐ (Liddell and Scott 1996: 1096) \(\rightarrow\) ܠܡܠܐ √m\(l\)t G ‘give
attention to; attend to’ (4th cent. Ephrem, Ma\(d\)ra\(š\)e on the Fast, 2.23 [ed. Beck 1964b]; Ma\(d\)ra\(š\)e
against Heresies, 4.15 [ed Beck 1957a]; Sokoloff 2009: 768), though it is more likely that this
is a direct insertion (see §6.3.3).
zwg’ ‘yoke, pair; chariot’ (Sokoloff 2009: 180, 369-370) → rt. √zwg D\(^{82}\) ‘to yoke; to join’; Dt ‘to be married’ (Pre-4th cent. Acts of Thomas, 183.7 [ed. Wright 1871a: 2.171-333]; also in NT; Sokoloff 2009: 369; cf. Ciancaglini 2008: 8)\(^{83}\)


c. παῤῥησία (Liddell and Scott 1996: 1344) > prhsy’ (with alternative orthographies) ‘freedom of speech; permission; liberty; familiarity, openness’ (Sokoloff 2009: 1245-1246) → rt. prysy ‘to lay bear, reveal, uncover; to put to shame, expose’ (4th cent. Book of Steps, 113.10; 421.10, 21; 660.17, 24 [ed. Kmosko 1926]; Ephrem, Commentary on Genesis and part of Exodus, 38.16 [ed. Tonneau 1955]; Madrošē against Julian the Apostate, 84.25 [ed. Beck 1957b]; also in OT and NT; Sokoloff 2009: 1245)

d. πόρος (Liddell and Scott 1996: 1450-1451) > pwrs2 ‘means, way, manner; provisions, resources; reason, motive; pretext; work’ (Sokoloff 2009: 1171) → rt. prs Dt ‘to be diligent; to device, invent’ (4th cent. Aphrahat, Demonstrations, 316.16 [ed. Parisot 1894-1907]; Book of Steps, 249.7; 733.3; 736.5; 744.3; 889.10 [ed. Kmosko 1926]; Ephrem, Commentary on Genesis and part of Exodus, 90.1 [ed. Tonneau 1955]; Madrošē on Paradise, 4.16 [ed. Beck 1957b]; Madrošē on the

\(^{82}\) Also rarely C-stem (Brock 2004: 35 n. 9).

\(^{83}\) In several publications, Brock (1975: 88; 1996: 257; 2004: 36) has also seen this as a denominative formation. On one occasion, however, he has argued that it was not denominative but a loanverb from a noun (2004: 31).
The fifth and sixth centuries saw the addition of several additional denominative verbs from Greek loanwords:


f. ταῶς (Liddell and Scott 1996: 1763) > τάξις ‘peacock’ (Sokoloff 2009: 519) → rt. πλύσω ‘to fly around, flutter’ (4th cent. Ephrem, Commentary on Genesis and part of Exodus, 24.18 [ed. Tonneau 1955]; also in OT and NT; Sokoloff 2009: 518)


The fifth and sixth centuries saw the addition of several additional denominative verbs from Greek loanwords:

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(6-38) a. κύβος (Liddell and Scott 1996: 1005) > κυβαλλ qwps ‘cube; piece on a draft board; tessera, mosaic tile; mosaic work; hard stone, flint’ (Sokoloff 2009: 1340) → rt. κυβ novels qwps D ‘to provide with mosaics’; Dt ‘to be provided with mosaics’ (5th cent. Inscription l5-6, r9 [possibly 406/407; ed. Briquel Chatonnet and Desreumaux 2011b]; 6th cent. Inscription 1.5 [dated to 556; ed. Abū ‘Assāf 1972]; Sokoloff 2009: 1394-1395; cf. Briquel Chatonnet and Desreumaux 2011b: 48 n. 3)
d. τύπος (Liddell and Scott 1996: 1835) > τυπΑ twps ‘example, copy; shape, form; symbol; edict’ (Sokoloff 2009: 520, 1464) → rt. τυπΑ tps G ‘to present typologically’; D ‘to represent by a figure; compose; arrange’; Dt ‘to be represented, to be established’ (6th cent. Babai the Great, Life of Giwargis, 542.17 [ed. Bedjan 1895]; Commentary on the ‘Gnostic Chapters’ by Evagrius of Pontus, 422.36;
Finally, a couple of additional denominative verbs from Greek loanwords are found first in seventh-century Syriac:


These denominative verbs represent the vast majority of Syriac verbal roots that are of Greek origin. It should be noted, however, that they are not loanwords in the strict sense, but they are rather secondary formations from Greek loanwords.

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85 Brock (2004: 36) claims that this word is first attested in the fifth century, but this would seem to be in translation literature.
86 Brock 2004: 36. See also πατριάρχης (Lampe 1961: 1051-1052) > ܐܦܛܪܝܪܟܐ ʾprtik; ܐܦܛܪܝܪܟܝܣ ʾprtikys ‘patriarch’ (Sokoloff 2009: 1184) → rt. ܒܦܛܪܟ √ptrk ‘to make patriarch’ (Sokoloff 2009: 1184; cf. Brock 2004: 36), which occurs in a set of Questions and Answers on Liturgical Topics (ed. van Unnik 1937: 48.6 [Syr.]) attributed to Ishoʿyahb III of Adiabene (d. 659). The editor has, however, shown that this text belongs to a later date, and he has identified Ishoʿyahb IV (d. 1025) as the author.
87 Brock (2004: 36) claims that this word is first attested in the sixth century, but this would seem to be in translation literature.
88 Thus, they can be compared to the secondary developments analyzed in detail in §7.
6.3.3 Loanverbs: Direct Insertion

In Wohlgemuth’s typology, *direct insertion* is an accommodation strategy in which a transferred verb is used in the same way as a native verb without any morpho-syntactic adaptation. Direct insertion is illustrated in (6-40).

(6-40) Sahidic Coptic Gospels (ed. Horner 1911-1924)

\[
\text{aupisteue etegrapbē}
\]

believe-PAST.3.M.SG to + ART-F.SG + scripture-F.SG

‘they believed the scripture’ (John 2:22)

In this example, the loanverb *pisteue* ( < Greek πίστευε [Liddell and Scott 1996: 1407-1408]) is inflected in the same way as a native Coptic verb without any morphological adaptation. This is the simplest accommodation strategy and is also the most common cross-linguistically.

Cases of direct insertion are rare in Syriac. The only potential case involving a triliteral root is μέλέτη (Liddell and Scott 1996: 1096) or μέλετᾶν (Liddell and Scott 1996: 1096) > rt. μὴ G ‘give attention to; attend to’ (*4th cent.* Ephrem, *Maḏrāše on the Fast*, 2.23 [ed. Beck 1964b]; *Maḏrāše against Heresies*, 4.15 [ed Beck 1957a]; Sokoloff 2009: 768). This derivation is, however, disputed by Brockelmann (1928: 391), followed by Sokoloff (2009: 768), who propose that Syriac rt. μὴ is a denominative from μῆλον ‘care, attention; zeal’ (Sokoloff 2009: 768), which in turn would derive from μέλέτη (Liddell and Scott 1996: 1096). Nevertheless, based on its vocalization, the noun μῆλον is more likely

89 Wohlgemuth 2009: 87-93; Wichmann and Wohlgemuth 2008: 99-102. This is equivalent to a combination of ‘borrowing of bare verb’ and ‘inserted stems with native affixes’ in Muysken 2000: 185-191.
to be a secondary formation from the verbal root √mlt based on the nominal pattern C₁C₂C₃ɔ.  
Thus, since there is no probable nominal intermediary, Syriac مل ط √mlt is best analyzed as a
verbal transfer either from the noun μελέτη (Liddell and Scott 1996: 1096) or the infinitive
μελετᾶν (Liddell and Scott 1996: 1096).  

Additional cases of direct insertion in Syriac are found with the following quadriliteral
roots:

(6-41) a. δυσκόλως (Liddell and Scott 1996: 458) > rt. دܣܩܠ √dsql T-stem ‘to tarry’ (4th
cent. Ephrem, Commentary on Genesis and part of Exodus, 77.15 [ed. Tonneau
1955]; only here; Sokoloff 2009: 314)
b. θαρσέω (Liddell and Scott 1996: 784-785) > rt. تܪܣܝ √trsy ‘to be courageous’ (5th
cent. Julian Romance, 110.21 [ed. Hoffmann 1880b]; also in Judith 11:1, 3 and NT;
c. καταλαβεῖν (Liddell and Scott 1996: 897) > rt. ﻊ ﻝ ﺖ √q lb ‘to occupy’ (5th cent.
Ishaq of Antioch, Homilies, 1.88.7 [ed. Bedjan 1903]; not uncommon; Sokoloff
2009: 1352-1353)
d. παραγγέλλειν (Liddell and Scott 1996: 1306) > rt. ﻝ ﻝ ﻝ ﻝ √prgl ‘to admonish,
warn; to send a declaration, warning; to excite, urge on; to forbid, prohibit; to hold
back, restrain; to impede, hinder’ (5th cent. Balai, Memre on Joseph, 11.1 [ed.
Bedjan 1891]; Ya`qub of Serugh, Letters, 154.8 [ed. Olinder 1937]; fairly common;

92 For this nominal pattern in Syriac, see Nöldeke 1904: §109; Fox 1996: 185-186, 226-227,
235.
93 For the latter, see Brock 2004: 35 n. 9.
94 Alternatively, this could be a denominative formation from ﻝ ﻝ ﻝ ﻝ prgl ‘whip’ (Sokoloff
2009: 1227) < φραγέλλιον (Liddell and Scott 1996: 1952) < Late Latin fragellum (attested
251
Additional cases of direct insertion involving quadriliteral roots could possibly be found with the following two verbal roots:

(6-42) a. προνοητῆς (Liddell and Scott 1996: 1491) or προνοησαί (Liddell and Scott 1996: 1490-1491) > rt. ἀριάννα πρνς ‘to divide, distribute; to provide for, supply; to manage, administer’ (4th cent. Book of Steps, 4.19; 60.13, 14; 76.19; 381.14 [ed. Kmosko 1926]; common; Sokoloff 2009: 1243), attested already in Palmyrene πρνς (Hillers and Cussini 1996: 401; Hoftijzer and Jongeling 1995: 940); Targum Jonathan πρνς (Ez 34.8 [2x]; Is 57.8; Jastrow 1886-1903: 1231); see also Jewish Palestinian Aramaic πρνς (Sokoloff 2002b: 448, 842); Christian Palestinian Aramaic πρνς (Schulthess 1903: 163); Samaritan Aramaic πρνς (Tal 2000: 704-705); Jewish Babylonian Aramaic πρνς (Sokoloff 2002a: 935); Late Jewish Literary Aramaic πρνς (PsJ Gen 30:30, Lev 25:35; Jastrow 1886-1903: 1231)

b. κατήγορος (Liddell and Scott 1996: 927) or κατηγορεῖν (Liddell and Scott 1996: 926-927) > rt. ἑπικԴαρ qtrg ‘to accuse; to apply’ (4th cent. common in Ephrem; also in NT; Sokoloff 2009: 1348, 1358-1359); see also Jewish Palestinian Aramaic qtrg (Sokoloff 2002b: 489); Christian Palestinian Aramaic qtrg (Müller-Kessler and Sokoloff 1998a: 260; 1998b: 292; 1999: 254; Brock 1999c: 4v.2; Schulthess 1903: 178); Samaritan Aramaic qtrg (Tal 2000: 775)

Both of these verbal roots, however, existed in earlier forms of Aramaic. Given their long history in Aramaic, it is possible that both of these roots are denominative formations from nouns that have been subsequently lost. Thus, it remains unclear whether these roots are


95 For discussion, see §4.9 as well as Appendix 2.
denominative formations or direct insertions. If the latter is the case, then the input form could have been either a noun or a verbal form, such as an infinitive.

6.3.4 Loanverbs: Indirect Insertion

In Wohlgemuth’s typology, indirect insertion is an accommodation strategy in which an affix is required to accommodate loan verbs. This affix may have the sole function of accommodating loanverbs in the recipient language, or it may have additional functions, such as forming causatives, denominative, factitives, etc. Indirect insertion is illustrated in (6-43). (6-43) Alyawarra (central Australian language)

work-ir-iyla ra
work + VBLZ + PRES.CONT he-NOM

‘he is working’ (Yallop 1977: 67; cited in Wohlgemuth 2009: 97)

In this example, the English (possibly via the English-based creole Kriol) loanverb work requires the verbalizing affix -ira, realized here as /ir/. In Alyawarra, -ira is a derivational suffix which forms intransitive verbs from nouns, especially adjectives, as in, e.g., akaltja ‘wise’ → akaltjiriyla ayinga ‘I am learning’ [wise + VBLZ + PRES.CONT I-NOM] (Yallop 1977: 66-67).

Indirect insertion is the third most common of the four strategies cross-linguistically.

Indirect insertion is rare in Syriac being limited to the following cases in non-translated texts up to Ya‘qub of Edessa. Brock 1967: 401; 2004: 31-32. On one occasion, Brock (2004: 31) has argued that rt. \( \sqrt{zwg} \) D ‘to yoke; to join’; Dt ‘to be married’ (Sokoloff 2009: 369) is not a denominative. If that is the case, then it would be another instance of indirect insertion. There does not, however, seem to be any reason not to take the root as denominative from \( \sqrt{zwg} \)

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97 Brock 1967: 401; 2004: 31-32. On one occasion, Brock (2004: 31) has argued that rt. \( \sqrt{zwg} \) D ‘to yoke; to join’; Dt ‘to be married’ (Sokoloff 2009: 369) is not a denominative. If that is the case, then it would be another instance of indirect insertion. There does not, however, seem to be any reason not to take the root as denominative from \( \sqrt{zwg} \)
These cases are analyzed as indirect insertion and not direct insertion, since a derived stem (usually D but also C) is required to accommodate the loan verb.

An additional case of indirect insertion can possibly be found in πεῖσαι (Liddell and Scott 1996: 1353-1354) > rt. √pys C ‘to persuade, to convince; to demand, seek, beseech’; Ct ‘to be persuaded; to obey’ (Pre-4th cent. Acts of Thomas, 172.17; 180.15; 181.19; 182.6; 221.3, 5; 240.6; 241.3 [ed. Wright 1871a: 2.171-333]; Book of the Laws of the Countries, 14x [see Lund 2007: 200-201] [ed. Drijvers 1965]; Odes of Solomon, 8.17; 39.8 [ed. Charlesworth 1973]; extremely common thereafter; Sokoloff 2009: 1188). This verbal root is, however, (6-44) a. καλῶς (Liddell and Scott 1996: 871) > rt. √qls D ‘to praise’ (4th cent. Ephrem, Prose Refutations, Discourse 2, 6.5 [ed. Mitchell 1912-1921]; relatively common thereafter; Sokoloff 2009: 1373)

b. ναυαγός (Liddell and Scott 1996: 1161) > rt. √nwg D ‘to wreck a ship’; Dt ‘to suffer shipwreck’ (7th cent. Isho’yahb III of Adiabene, Letters, 13.7; 89.29; 99.7; 143.17; 145.28 [ed. Duval 1904-1905]; never common; Sokoloff 2009: 895; cf. Brock 2004: 35)

These cases are analyzed as indirect insertion and not direct insertion, since a derived stem (usually D but also C) is required to accommodate the loan verb.


98 Ciancaglini (2008: 9) argues that this is not a loanverb, but rather that it is denominative from a purported noun ρυς “persuasion”, which she claims derives from the aorist infinitive πεῖσαι (Liddell and Scott 1996: 1353-1354). No such noun **pys, however, exists in Syriac. The only possibly nominal intermediary for a denominative verb is ρυς “persuasion, conviction” (Sokoloff 2009: 1188). Given its vocalization, however, this noun is better analyzed as deverbal from √pys according to the nominal pattern C₁C₂C₃ (for which, see Nöeldeke 1904: §109; Fox 1996: 185-186, 226-227, 235) (against Sokoloff [2009: 1188] who sees it as a Greek loanword). The noun ρυς, then, is not the source of √pys, and thus, this verbal root is best analyzed as a transfer from the Greek infinitive.

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almost certainly an inheritance in Syriac given that it already occurs in Targum Onqelos *pys* (Cook 2008: 108 [s.v. *tps*]; see Butts 2012: 158).\(^9\)

6.3.5 Loanverbs: Light Verb Strategy

In Wohlgemuth’s typology, *light verb* is an accommodation strategy in which a loanverb is employed in combination with a light verb such as ‘to do’, ‘to make’, or ‘to be’ from the recipient language, which bears the inflection and/or grammatical information.\(^10\) Light verb accommodation is illustrated in (6-45).

(6-45) Bohairic Coptic

\[
\text{naferdokimazin mmof pe} \\
do-PAST-IMPERFECT.3.M.S + tempt \quad \text{DOM + him} \quad \text{he}
\]

‘he was tempting him’ (ed. Van Rompay *apud* Datema 1978: 275.28)

In this example, *dokimazin* (< δοκιμάζειν ‘to tempt’ [Liddell and Scott 1996: 442]) is used in combination with the native Coptic verb *er* ‘to do’ (Crum 1929-1939: 83-84), which bears the grammatical information. The verb *er* functions almost as an auxiliary with the semantic information contained in the loanverb. Light verb is the second most common strategy cross-linguistically.

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\(^9\) For Greek loanwords as inheritances in Syriac, see §4.9 as well as Appendix 2.

Light verb strategy is occasionally found in non-translated Syriac texts prior to Yaʿqub of Edessa (d. 708). In the active voice, the Syriac verbal root ʿbd ʿto do, make’ (Sokoloff 2009: 1054-1056) is used with a transferred Greek aorist active infinitive:

(6-46) *Scholia* by Yaʿqub of Edessa (d. 708; ed. Phillips 1864)

\[
\text{šōbe} \quad (h)wō \quad \text{dplyrwprys’} \quad \text{neʾbdwiw(hy)}
\]

\begin{tabular}{llll}
\end{tabular}

\‘he wanted to inform him’ (3.17)

In this example, a conjugated form of the verbal root ʿbd occurs with *plyrwprys’*, which derives from the Greek aorist active infinitive πληροφορῆσαι (Liddell and Scott 1996: 1419). The following Greek aorist infinitives occur with ʿbd in non-translated Syriac texts up to Yaʿqub of Edessa (d. 708):


c. προσελθῆναι (with passive morphology), for the expected aorist infinitive προσελθεῖν (Liddell and Scott 1996: 1511) > ΠΡΟΣԷԼTABLE prsltyn’ with ʿbd ‘to


In the passive voice, the Syriac verbal root ܚܘܝ √hwy ‘to be(come)’ (Sokoloff 2009: 333-334) is used with the Greek aorist passive infinitive.103


\[ \text{and+ from paradise-M.SG.DET that-M of Eden-M.SG.EMP to.be.exiled} \]

\[
\begin{array}{cccc}
\text{howenan} & \text{be-PART.M.PL.ABS+we} \\
\text{'and we were exiled from that paradise of Eden’ (365.14)}
\end{array}
\]

In this example, a conjugated form of the verbal root ܣܘܢܩܪܛܝܣܐ ܥܒܕ √bd occurs with ߒܒܫܝʃyν, which derives from the Greek aorist passive infinitive ξορισθῆναι (Liddell and Scott 1996: 598). The

\[ \text{102 Alternatively, this word could derive from τίτλος (Liddell and Scott 1996: 1799). This would, however, be an unmotivated case of the retention of Greek -ς (see §6.2.3.6), and thus it seems more likely that the Greek source is the aorist infinitive τιτλῶσαι (so Ghanem 1970: 142 n. 268; Sokoloff 2009: 1057).} \]

\[ \text{103 For a possible case of the Greek aorist passive infinitive used with Syriac √bd, see n. 104 below.} \]
following Greek aorist passive infinitives occur with ἁυτὸν \( hwy \) in non-translated Syriac texts up to Yaʿqub of Edessa (d. 708):


\[104 \]

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104 The verb occurs in the following passage: Қәсәръстън̄а ʾsprstyn̄’ is used with \( hwy \) ‘and he sent clerics and excubitors commanding them to have him beaten until blood spilt forth unless he be convinced to join them. Thus, he was beaten by twelve excubitors until he fell among them and was silent’ (15.27-16.4). In his Lexicon, Brockelmann (1928: 37), followed by Sokoloff (2009: 1057), cites the first occurrence of Қәсәръстън̄а ʾsprstyn̄’ and gives an active meaning. He does not, however, explain the incongruence of the passive Greek form used with Syriac \( \text{bd} \), which usually occurs with the active voice. In addition, he neglects to mention that the same form occurs several lines later with a passive meaning and with Syriac \( hwy \). Given the context, it is clear that the second occurrence of Қәсәръстън̄а ʾsprstyn̄’ in 16.3 has a passive meaning, which conforms to the general pattern of passive infinitive with \( hwy \). This is the example cited above. As for the first occurrence of Қәсәръстън̄а ʾsprstyn̄’, the sense seems to be ‘…that they make him to be beaten…’. For a similar pattern, compare Biblical Aramaic \text{ub’o doniyye(’)}l \text{wohabrohi lohiqtapo(lo)} ‘and they sought Daniel and his companions to be put to death’ (Dan 2:13) [and + seek-SUF.3.M.PL PN and companion-M.PL.CON + his to + to.be.killed-INF]. In this case, then, Қәсәръстън̄а ʾsprstyn̄’ would still be passive but used with Syriac \( \text{bd} \). It is unclear, however, if this should be interpreted as a light verb strategy or if Syriac \( \text{bd} \) is a full finite verb and Қәсәръстън̄а ʾsprstyn̄’ is a directly inserted infinitive.
Brock has pointed to the late fifth- to early sixth-century translations of the *Didascalia* (ed. Vööbus 1979) and *Athanasius’ Life of Antony* (ed. Draguet 1980) as the earliest texts attesting the light verb strategy in Syriac.\(^{105}\) The example of ܐܟܣܘܪܣܬܝܢܐʾ ʾkswrstynʾ in (6:49a) would represent an earlier, if not the earliest, case of light verb strategy in Syriac, if the work is in fact genuine Rabbula of Edessa (d. 456/6).\(^{106}\) Regardless, the light verb strategy is extremely rare in the fifth century and only becomes more frequent in the sixth and seventh centuries.\(^{107}\) Light verb strategy is, however, never common in non-translated Syriac texts, though it does occur more frequently in texts translated from Greek.\(^{108}\)

The development of the light verb strategy in Syriac has been linked to different external factors. Brock, for instance, has argued that the use of the light verb strategy in Syriac is due to contact with (non-Sahidic) Coptic, where a similar construction exists consisting of the native Coptic verb er ‘to do’ and a Greek infinitive.\(^{109}\) The Coptic construction was illustrated in (6:45). The Coptic construction is indeed structurally similar to the Syriac active-voice construction, and so it could have potentially provided the model for this.\(^{110}\) Coptic could not, however, have served as the model for the passive-voice construction in Syriac, since no


\(^{106}\) Ciancaglini (2006: 175; 2008: 50) claims that the light verb strategy is already attested in Ephrem (d. 373), citing πληροφορήσαι (Liddell and Scott 1996: 1419) > ܦܠܪܘܦܘܪܝܣܐ plrwprs with ܢܢ √bd ‘to inform’ in Benedictus 1732-1746: 4.157.44 (correct the citation of ln. 43 in Sokoloff 2009: 1059). The commentary edited by Benedictus (1732-1746: 4.116-193), however, is not genuine Ephrem, but the scholia of Yaʿqub of Edessa (the title of the work even mentions Yaʿqub of Edessa!).


\(^{108}\) For examples, see Ciancaglini 2008: 49; Sokoloff 2009: 334; 1056-1060.

\(^{109}\) Brock 1975: 88; cf. 2004: 37 n. 13. Citing Brock, Van Rompay similarly notes that the use of the light verb strategy in Syriac “parallels, and may be derived from, a similar structure in all Coptic dialects except Sahidic” (in *GEDSH*, 106).

\(^{110}\) For criticisms, however, see Ciancaglini 2006; 2008: 50.
comparable construction exists in Coptic. Given that contact with Coptic cannot account for the entire Syriac construction (active and passive), it seems more likely that the use of the light verb strategy in Syriac is an internal development. This is especially the case since Syriac follows a well-established pattern of using a light verb meaning ‘to do’ with the active voice and a light verb meaning ‘to be(come)’ with the passive voice.\(^{111}\)

Ciancaglini has also argued that language contact played a role in the introduction of the light verb strategy in Syriac, but in her case it is contact with Iranian, not with Greek.\(^{112}\) Her proposal is, however, unlikely, since most, if not all, of the examples of the light verb strategy in Syriac are found in authors (and translators) who wrote within the Roman Empire, such as Yuḥanan of Ephesus and Yaʿqub of Edessa. If contact with Iranian had played a role in the development of the light verb strategy in Syriac, then one would expect the strategy to feature in texts from Iranian-speaking areas. This is not, however, the case.

In response to arguments that external factors played a role in the development of the light verb strategy in Syriac, it should also be stressed that the light verb strategy is common cross-linguistically – the second most common in fact – occurring in over 104 languages in Wohlgemuth’s sample. Thus, even though two languages with which Syriac was in contact have light verb strategies ([non-Sahidic] Coptic and Iranian) and even though cases of the transfer of accommodation strategies are attested cross-linguistically,\(^{113}\) there is not sufficient evidence to suggest that external factors played a role in the development of the light verb strategy in Syriac. Rather, it seems to have been an internal Syriac development.

\(^{111}\) Wohlgemuth 2009: 109, 253.
\(^{112}\) Ciancaglini 2006; 2008: 48-52.
Finally, it should be noted that in Syriac the verbal root ܥܒܕ √ʿbd is found in several constructions that are superficially similar to the light verb strategy, as in the following example:

(6-50) *Acts of Thomas* (ca. 200-250; ed. Wright 1871a)

\[
\begin{array}{llllll}
\text{haw} & \text{daʿdamnw} & \text{lsawpɔ} & \text{'gwnʾ} & \text{ḥad} \\
\text{that-M.SG} & \text{NML + until} & \text{to + end-M.SG.EMP} & \text{struggle-M.SG.EMP} & \text{do + SUF.3.M.SG} \\
\text{ʿam} & \text{kyɔnɔk} \\
\text{with} & \text{nature-M.SG.CON + your-M.SG} \\
\end{array}
\]

‘who struggled against your nature until the end’ (200.1-2)

In this example, a conjugated form of ܥܒܕ √ʿbd is used with the noun ܐܓܘܢܐ ʾgw’n ʾ < ἀγών (Lampe 1961: 25; Liddell and Scott 1996: 18-19). Cases such as this are not, however, to be analyzed as the light verb accommodation strategy since the Greek source ἀγών is a noun.\(^{114}\) A similar case is found with ἄθλησις (Lampe 1961: 46; Liddell and Scott 1996: 32) > ܐܬܠܝܣܐ ʾtlysʾ with ܥܒד √ʿbd ‘fight, struggle’ (Sokoloff 2009: 112).\(^{115}\)

6.3.6 Summary

The vast majority of Syriac verbal roots that are ultimately of Greek origin are denominative formations. These represent secondary developments in Syriac based on Greek

\(^{114}\) See Wichmann and Wohlgemuth 2008: 91. This contrasts with Ciancaglini (2006; 2008: 48-52) who argues that these are the same phenomenon.

\(^{115}\) Alternatively, Sokoloff (2009: 112) gives the input form as the aorist infinitive ἄθλησαί. Brock’s proposed input of ἄθλησις, however, seems more likely since the word is more often used as a substantive ‘fight, struggle’.
loanwords,116 and they are not in the strict sense loanwords themselves. Most Greek loanverbs in Syriac are accommodated by the light verb accommodation strategy in which the native Syriac verbal roots ʿbd ‘to do, make’ and ḫwy ‘to be(come)’ are used with Greek aorist infinitives. This strategy is perhaps already attested in the fifth century. It, however, only becomes more frequent in the sixth and seventh centuries with authors within the confines of the Roman Empire, and it is never common in non-translated Syriac texts. In this strategy, Greek verbs are not accommodated to the root and pattern morphology of Syriac. Finally, Greek verbs seem to be rarely accommodated by direct and indirect insertion in Syriac. These strategies are both already attested by the fourth century in Syriac. They are, however, extremely infrequent. In addition, several of the examples are clearly inheritances in Syriac from earlier Aramaic. Direct and indirect insertion, then, represent marginal strategies for the accommodation of Greek verbs in Syriac.

In general, the number of Greek loanverbs in Syriac is relatively small. While there are hundreds of Greek nouns and even fifteen Greek particles in Syriac,117 there are only a limited number of Greek loanverbs in Syriac (leaving aside the denominative formations). In addition, the majority of these, those which use the light verb accommodation strategy, are not accommodated to Syriac root and pattern morphology. The relatively small number of Greek loanverbs in Syriac is likely due to the complex morphological structure of the Syriac verb.118 Thus, the higher frequency of the light verb accommodation strategy can be seen as a result of a more simple accommodation process, whereas direct and indirect insertion are more complex and thus more infrequent.

116 Thus, they can be compared to the changes discussed in §7.
117 Greek particles in Syriac are analyzed immediately below in §6.4.
118 For structure playing a role in lexical transfer, see Winford 2003: 52.
6.4 Particles

Approximately fifteen Greek particles are attested in non-translated Syriac texts up to Yaʿqub of Edessa (d. 708).\textsuperscript{119} Several Greek particles are already found in pre-fourth century Syriac:\textsuperscript{120}

(6-51) a. \(\mu \varepsilon \nu\) (Liddell and Scott 1996: 1101-1102) > \(\mathfrak{m}n\) ‘indeed’ (\textbf{Pre-4th cent.} Odes of Solomon, 18.7 [ed. Charlesworth 1973; for this interpretation, see Butts Forthcoming]; \textbf{4th cent.} Ephrem, Prose Refutations, 33.21-27 [ed. Overbeck 1865]; though not common until the sixth and seventh centuries; also in NT; Sokoloff 2009: 778)

b. \(\varepsilon \iota \kappa \eta \) (Liddell and Scott 1996: 484) > \(\mathfrak{yq}\) ‘in vain’ (\textbf{Pre-4th cent.} Acts of Thomas, 220.10 [ed. Wright 1871a]; \textbf{4th cent.} Aphrahat, Demonstrations, 1.568.8, 9 [ed. Parisot 1894-1907]; Book of Steps, 288.20, 308.8 [ed. Kmosko 1926]; Ephrem, Prose Refutations, 44.4; 53.24 [ed. Overbeck 1865], Madrashe against Julian the Apostate, 87.28 [ed. Beck 1957b], Madrashe on Nisibis, 53.1; 122.7; 124.10 [ed. Beck 1963]; also in OT and NT; occurs throughout Classical Syriac; Sokoloff 2009: 37-38; cf. Brock 1967: 398; 1975: 89; 1996: 259)

c. \(\tau \alpha \chi \alpha\) (Liddell and Scott 1996: 1762) > \(\mathfrak{tk}\) ‘perhaps’ (\textbf{Pre-4th cent.} Ex 32:30; Num 23:3; \textbf{4th cent.} Aphrahat, Demonstrations, 1.632.9; 1.696.14; 1.753.20; 2.133.18 [ed. Parisot 1894-1907], Ephrem, Prose Refutations, 34.6 [ed. Overbeck 1865], 2.24.46 [ed. Mitchell 1912-1921]; Memro on our Lord, 31.9 [ed. Beck 1966]; Madrashe on Nisibis, 22.9 [ed. Beck 1961a], 90.9, 15 [ed. Beck 1963]; Madrashe

\textsuperscript{119} Greek particles are also found in Post-Biblical Hebrew and in various dialects of Jewish Aramaic (Krauss 1898: §113-115).

\textsuperscript{120} Brock 1975: 89; Butts Forthcoming.

Several additional Greek particles are first attested in fourth-century Syriac.\footnote{Brock 1975: 89.}

(6-52) a. γοὖν (Liddell and Scott 1996: 358) > ܓܘܢ gwn in ܒܕܓܘܢ bdgwn ‘at any rate’


c. οὖν (Liddell and Scott 1996: 1271-1272) > ܐܘܢ ʾwn ‘really’ (4th cent. Aphrahat, Demonstrations, 328.6 [ed. Parisot 1894-1907]; Ephrem, Commentary on the Diatessaron, 52.7 (quote); 62.21; 68.21; 70.7; 98.21 (quote); 108.2; 116.18; 160.9; 170.12 [ed. Leloir 1963]; 5th cent. Julian Romance, 120.19 [ed. Hoffmann 1880b]; not common; cf. Brock 1975: 89; 1996: 259)

After the fourth century, Greek particles continue to be added to Syriac:


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123 The Narsai example reads: ܢܢ̂ ܐܠܗܝܐ ܠܡܢ ܟܪܝܐ ܠܟܘܢ ܥܠ ܪܘܡܪܡܢ ʾr ‘Therefore, rejoice, people, for you have become divine beings’ [therefore rejoice-IMP.M.PL NML + be-SUF.2.M.PL divine-M.PL.DET]. For the use of ἅρα (Liddell and Scott 1996: 232-233) in first position in Koinē Greek, see Luke 11:48.

124 The Narsai example reads: ܠܡܢ ܟܪܝܐ ܠܡܢ ܒܟܢܝܐ ܠܡܢ ܡܪܡܢ ʾr ܐܠܗܝvecs ʾr sakle lmn kryc ʾlk ʿal rumnm can ‘Why, foolish ones, are you pained by our exaltation?’ [INT foolish-M.PL.DET to + what to.grieve-PART.FEM.SG.ABS to + you-M.PL concerning exaltation-M.S.CON + our].

265
A majority of these particles entered Syriac at the height of Syriac-Greek contact in the sixth century.

Morphologically, the Greek particles in Syriac do not require accommodation. Syntactically, many of them preserve features of their Greek source. The particle μὴ mn ‘indeed’ (< μέν [Liddell and Scott 1996: 1101-1102]), for instance, occurs in second position in Syriac, just as its Greek source does.

In addition to these Greek loanwords in Syriac, there are two frequently occurring Syriac particles that are associated with Greek: δὲ dynam ‘then, but’ (Sokoloff 2009: 296-297) and γὰρ gyr ‘indeed’ (Sokoloff 2009: 230). These two particles function in the same was as Greek δὲ ‘but’ (Liddell and Scott 1996: 371-372) and γάρ ‘for’ (Liddell and Scott 1996: 338-339),
respectively, even to the point of occurring in second position. These Syriac particles are not, however, loanwords from Greek; rather, they represent the adaptation of native Semitic material on the model of Greek.\textsuperscript{125}

It has often been pointed out that the transfer of particles is rarer than the transfer of nouns, adjectives, and verbs cross-linguistically.\textsuperscript{126} Thus, the transfer of these Greek particles into Syriac points to a high degree of contact between Syriac and Greek. Interestingly, three Greek particles were transferred into Syriac already in its earliest history with another four being added by the fourth century. This suggests that there was significant contact between the two languages already at an early period.\textsuperscript{127} In addition, a number of Greek particles were transferred into Syriac in the sixth century pointing to an increase in contact at this period.

6.5 Conclusion

The morpho-syntactic integration of Greek loanwords in Syriac varies significantly by part of speech. Particles require basically no integration. Verbs, in contrast, require more integration. Greek loanverbs that are accommodated by direct and indirect insertion must be integrated into the root and pattern morphology of Syriac. Thus, a root must be created and then a verb can be inflected according to Syriac morphology. Interestingly, this type of accommodation is quite rare in Syriac, probably reflecting the difficulty of integrating Greek verbs into the completely different derivational structure of a Semitic language such as Syriac. In contrast, the majority of Greek loanverbs in Syriac are accommodated by a strategy termed light verb in which the native Syriac verbal roots ʿbd ‘to do, make’ and hwj ‘to

\textsuperscript{125} Their development is discussed in detail in §10.
\textsuperscript{127} This is discussed in more detail in §11.2-11.3.
be(come)’ occur in conjunction with Greek infinitives. This strategy does not require the Greek verb to be integrated into Syriac root and pattern morphology, but rather the Greek verb is left basically un-integrated with a native Syriac light verb containing all of the inflectional information. Thus, for most Greek loanverbs in Syriac, morpho-syntactic integration is minimal.

In contrast to verbs and particles, Greek nouns undergo more involved morpho-syntactic integration in Syriac. In fact, Greek nouns, which are marked for one of five cases (vocative, nominative, genitive, dative, and accusative), one of three genders (masculine, feminine, and neuter), and one of two numbers (singular and plural) are often integrated as fully inflectional Syriac nouns, which are marked for one of two genders (masculine and feminine), one of two numbers (singular and plural), and one of three states (*status absolutus*, *status emphaticus*, and *status constructus*). This requires significant accommodation on the morphological level. It should be noted, however, the Greek nouns are not always – or even usually – accommodated to Syriac derivational structure. Thus, a loanword such as τόμος (Liddell and Scott 1996: 1804) > ܛܘܡܣܐ ِ apsible `tome’ (Sokoloff 2009: 518), where ܛܘܡܣܐ ِ could reflect a native Syriac nominal derivation of the pattern C₁uC₂C₃, represents an exception rather than the rule. Many Greek nouns are integrated into the inflectional structure of Syriac to one degree or another, but far fewer are integrated into the derivational structure of Syriac.

In contrast to the particles and verbs, Greek nouns in Syriac show a significant degree of variation in their accommodation. In fact, in a number of cases, a single Greek noun can attest multiple input forms, multiple accommodations for the Greek case endings, multiple accommodations of gender, and/or multiple plural formations in Syriac. This multiplicity suggests that some Greek nouns was transferred into Syriac on more than one occasion and
accommodated differently at different times. In addition, in some cases, Syriac-speakers seem to have maintained a connection between the loanword in Syriac and its Greek source enabling them to adjust the accommodation of the loanword over time. This type of variety in the morpho-syntactic accommodation of loanwords is only possible in a contact situation that stretches over an extended period of time. The Greek particles and verbs in Syriac, in turn, establish a high level of contact at various times. The existence of Greek particles in the earliest period of Syriac literature suggests a significant degree of contact already in the first centuries of the Common Era. The addition of a number of Greek particles and verbs into Syriac in the sixth century reflects the peak of contact at this time.
7 Secondary Developments Involving Greek Loanwords in Syriac

“Once incorporated, [loanwords] become fair game for both derivational and inflectional processes internal to the recipient language”
(Winford 2003: 59)

“After complete adaptation, the loan-word is subject to the same analogies as any similar native word” (Bloomfield 1933: 454)

7.1 Overview

The previous two chapters analyzed the phonological and morpho-syntactic integration of Greek loanwords in Syriac (§5 and §6, respectively). Integration is not, however, the end of the story for Greek loanwords in Syriac. Rather, integrated loanwords can undergo the same derivational and analogical processes as native Syriac words (see the initial two quotations). The noun ܐܠܦܪܐ ʾɛl̄pɔrɔ ‘sailor’ (Sokoloff 2009: 51), for example, derives from ܪܘܢܘܬܐ ʾrwnɔtʾ ‘tyranny’ (Sokoloff 2009: 1184), for instances, derives from ܒܪܢ tɔrwn ‘tyrant’ (< τύραννος [Liddell and Scott 1996: 1836]) with the addition of the suffix -uɔ, which forms abstract substantives. The use of the abstract suffix -uɔ in ܪܘܢܘܬܐ trwnɔtʾ does not differ from its use with native Syriac words, e.g., ܡܠܟ malkɔ ‘king’ (Sokoloff 2009: 772) + -uɔ → ܡܠܟւ tɔ malkuɔ ‘kingdom’ (Sokoloff 2009: 772-773). In addition to being available for further derivations, integrated Greek loanwords can also serve as the source for analogical developments in Syriac. The Syriac noun ܙܝܠܐ ʾzilɔ ‘tyrant’ (Sokoloff 2009: 1184), for
instance, derives from ʾellp ʾchar ‘boat’ (Sokoloff 2009: 50-51) plus the Berufsname suffix -ɔrɔ. The suffix -ɔrɔ reflects Greek -άριος; its appearance in Syriac, however, is due to an analogical development within Syriac involving pairs of Greek loanwords with and without the suffix.¹ In this case, then, Greek loanwords were the basis of an analogy that created a new suffix that came to be used with Syriac words that are not of Greek origin.

This chapter analyzes secondary developments involving Greek loanwords in Syriac. It begins with secondary nominal derivations involving Greek loanwords, such as ʾtrwnmt ʿtyranny’ mentioned above. The chapter then turns to two cases in which Greek loanwords serve as the basis for analogical developments in Syriac: 1. the development of the plural suffixes -(w)s and -(ɔ)s (§7.3.2); 2. the development of the Berufsname suffix -ɔrɔ (§7.3.3).

7.2 Secondary Nominal Derivations

7.2.1 Overview

This section analyzes secondary nominal derivations involving Greek loanwords in Syriac. These derivations are divided into two categories: 1. nominal derivations involving root and pattern morphology (§7.2.2); 2. nominal derivations involving suffixes (§7.2.3).

7.2.2 Root and Pattern Morphology

Syriac literature up to Yaʿqub of Edessa (d. 708) contains more than twenty verbal roots that are ultimately of Greek origin.² From these verbal roots, various nouns can be derived

¹ For further analysis, see §7.3.3 below.
² These are analyzed in §6.3.2-6.3.4 above.
according to standard Syriac nominal patterns. An active and passive participle can be theoretically derived for all of the verbal roots, e.g., ܓܕܘܙܐ ‘the married one’.

\[
\text{PART.M.SG.EMP} \leftarrow \text{rt. ܓܘZW D ‘to yoke; to join’; Dt ‘to be married’ (Sokoloff 2009: 369)} \leftarrow ܓܘZW ‘yoke, pair; chariot’ (Sokoloff 2009: 180, 369-370) < ܓܝܓܘS (Liddell and Scott 1996: 754), ܓܝܓܘN (Liddell and Scott 1996: 757). \]

In addition, many roots attest a nomen agentis form, e.g., ܡܝܩܢܢܐ ‘characteristic’ (Sokoloff 2009: 754) ← rt. ܝܩܢ√ D ‘to delineate’ (Sokoloff 2009: 582). The nomen agentis can occur with a number of additional suffixes, including ܚܕ (§7.2.3.7), and ܒܚ (§7.2.3.3.9). The following nouns are formed according to this pattern from verbal roots that are ultimately of Greek origin:


b. ܟܠܠܒܢS (Liddell and Scott 1996: 871) > rt. ܟܠܠ√ PQ D ‘to praise’ (Sokoloff 2009: 582)

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3 For Syriac nominal patterns, see Nöldeke 1904: §92-140 as well as Fox 2003, with comparative Semitic evidence.

4 For the suffix -ܢ that is used with nomen agentis in derived stems, see §7.2.3.2.5.

5 For this pattern, see Nöldeke 1904: §117, 123.

6 Brock 2004: 37.
c. κατήγορος (Liddell and Scott 1996: 927) or κατηγορεῖν (Liddell and Scott 1996: 926-927) > rt. qutreío ‘to accuse; to apply’ (Sokoloff 2009: 1348, 1358-1359) 
→ qutreió ‘accusation’ (Sokoloff 2009: 1327)

d. κύβος (Liddell and Scott 1996: 1005) > κυβός qwps‘cube; piece on a draft board; tessera, mosaic tile; mosaic work; hard stone, flint’ (Sokoloff 2009: 1340) 
→ ἱδὲ qups D ‘to be provided with mosaics’ (Sokoloff 2009: 1394-1395) 
→ q uppasc ‘ provision of mosaics’ (Inscription 1.8, 2.9 [dated to 509, 595] [ed. Krebernik 1991]; for this interpretation, see Brock 2004: 37, against the editor)

e. ναυαγός (Liddell and Scott 1996: 1161) > rt. nwg D ‘to wreck a ship’; Dt 
‘to suffer shipwreck’ (Sokoloff 2009: 895) 
→ nuwwgò ‘shipwreck’ (Sokoloff 2009: 896)

f. παραγγέλλειν (Liddell and Scott 1996: 1306) > rt. prgl ‘to admonish, warn; to send a declaration, warning; to excite, urge on; to forbid, prohibit; to hold back, restrain; to impede, hinder’ (Sokoloff 2009: 1226-1227) 
→ purgelo ‘order; precept; confinement; threats’ (Sokoloff 2009: 1169; cf. Brock 2004: 37)

g. παρόνσια (Liddell and Scott 1996: 1344) > prhsy ‘freedom of speech; permission; liberty; familiarity, openness’ (Sokoloff 2009: 1245-1246) 
→ ἵδὲ prsy ‘to lay bear, reveal, uncover; to put to shame, expose’ (Sokoloff 2009: 1245) 
→ pursy ‘revealing, laying bare; uncovering, shame; male genital area, pudenda’ (Sokoloff 2009: 1171)

h. προσντής (Liddell and Scott 1996: 1491) or προνοήσαι (Liddell and Scott 1996: 1490-1491) > rt. prms ‘to divide, distribute; to provide for, supply; to
manage, administer’ (Sokoloff 2009: 1243) → ܐܘܝܐ ܠܫܢܐ ܕܐܬܠܝܐ ‘nourishment, food; help; divine providence; administration; diocese’ (Sokoloff 2009: 1170-1171; cf. Brock 1996: 261)

i. τάξις (Liddell and Scott 1996: 1756) > ܐܬܐ ܐܬܠܝܐ ܐܬܠܐ ‘order; rank’ (Sokoloff 2009: 181, 529) → rt. ܐܬܐ ܠܫܢܐ ܕܐܬܠܝܐ ‘to order’, Dt ‘to be set in order, arranged’ (Sokoloff 2009: 529) → ܐܬܐ ܠܫܢܐ ܐܬܠܝܐ ‘arrangement, rule’ (Sokoloff 2009: 529)

j. τέχνη (Liddell and Scott 1996: 1785) > ܐܬܐ ܠܫܢܐ ܕܐܬܠܝܐ ‘guile’ (Sokoloff 2009: 528-529) → rt. ܐܬܐ ܠܫܢܐ ܕܐܬܠܝܐ ‘to bestow care upon’; Dt ‘to give attention, be busy with; to devise, contrive; to beguile, deceive’ (Sokoloff 2009: 28) → ܐܬܐ ܠܫܢܐ ܕܐܬܠܝܐ ‘guile’ (Sokoloff 2009: 517)


CuCCσC- is the only nominal pattern outside of the participle and nomen agentis that is widely attested with verbal roots that are ultimately of Greek origin.

The nominal pattern C₁C₂C₃- is attested with two verbal roots that do not occur in the D-stem:⁷

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(7-2) a. πείσα (Liddell and Scott 1996: 1353-1354) > rt. πείση \( \sqrt{pys} \) C ‘to persuade, to convince; to demand, seek, beseech’; Ct ‘to be persuaded; to obey’ (Sokoloff 2009: 1188) \( \rightarrow \) ΨΕΙΣΑ \( \sqrt{psy} \) ‘persuasion, conviction’ (Sokoloff 2009: 1188)

b. μελέτη (Liddell and Scott 1996: 1096) or μελέταν (Liddell and Scott 1996: 1096) > rt. μελή \( \sqrt{mlt} \) G ‘give attention to; attend to’ (Sokoloff 2009: 768) \( \rightarrow \) ΜΕΛΗ \( \sqrt{mlt} \) ‘care, attention; zeal’ (Sokoloff 2009: 768)

The use of the pattern \( C_1C_2C_3\sqrt{-} \) (instead of \( CuCCcCc- \)) in these cases is to be explained by the fact that these roots are not associated with the D-stem. In addition, it should be noted that other nouns can be derived from these nouns, e.g., \( psy\alpha\lambda + -(a)t \rightarrow \PsiΕΙΣΑ \PsiΥΡΟΣ\alpha \) ‘persuasion’ (Sokoloff 2009: 1189).

Additional nominal patterns are only sparsely attested with verbal roots of ultimate Greek origin. The \textit{Berufsname} pattern \( CaCCcC- \) is, for instance, attested in ΨΕΙΣΑ \( \sqrt{parnc} \) ‘steward, administrator’ (Sokoloff 2009: 1243-1244) \( \leftarrow \) rt. \( \PsiΩΝ\sqrt{prns} \) ‘to divide, distribute; to provide for, supply; to manage, administer’ (Sokoloff 2009: 1243) \( \leftarrow \) προνοητής (Liddell and Scott 1996: 1491) or προνοήσα (Liddell and Scott 1996: 1490-1491).\(^8\)

In general, then, derivations involving root and pattern morphology with Greek loanwords are restricted in two important ways. First, root and pattern morphology is only attested with Greek loanwords that have an independent verbal root. This shows that the root plays an essential role with internal nominal derivations in Syriac, reflecting the broader Semitic situation more generally.\(^9\) There are no examples in Syriac in which a Greek loanword that does not have an independent verbal root produces internal nominal derivations involving

\(^8\) For the \textit{Berufsname} pattern \( CaCCcC- \) in Syriac, see Fox 2003: 260-261; Nöldke 1904: §115.
\(^9\) For the broader Semitic context, see Fox 2003: 44-45.
root and pattern morphology. That is, a noun **nummos ‘legality’ is never derived from ᵉnmws ‘law’ (Sokoloff 2009: 921-922) < νόμος (Liddell and Scott 1996: 1180) according to the abstract pattern CuCCɔC-, since no independent verbal root **√nms exists in the language. Second, even when an independent verbal root does exist, there are only a limited number of nominal derivations that are possible. Participles, nomina agentis, and abstracts of the pattern CuCCɔC- can be derived for most roots, and the abstract pattern C₁C₂ɔC₃ and the Berufsnamen pattern CaCCɔC- are also found in isolated cases. No other internal nominal patterns are, however, attested, including common substantive patterns such as C₁aC₂C₃, C₁iC₂C₃, and C₁uC₂C₃, and common adjective patterns such as C₁aC₂C₂iC₃. This suggests that internal nominal derivations were not fully productive in creating new nominal derivations synchronically in Syriac. Some patterns could indeed be used, but many patterns were simply not productive. Derivations involving root and pattern morphology with Greek loanwords, then, are restricted in that: 1. they can only occur if there is an independent verbal root; 2. they are only found with a limited set of nominal patterns, including participles, nomina agentis, and abstracts of the pattern CuCCɔC-, and are not attested with most of the internal nominal patterns in Syriac.¹⁰ In both of these ways, nominal derivations involving root and pattern morphology differ from derivations with Syriac suffixes, which is the subject of the next section (§7.2.3).

¹⁰ It is likely that both of these restrictions are not limited to Greek loanwords in Syriac but apply more broadly to all lexemes in the language. That is, even for native Syriac lexemes, it is unlikely that nouns can be derived via root and pattern morphology unless a verbal root exists. In addition, it is likely that synchronically Syriac only has a limited number of productive internal nominal patterns. That is, a Syriac-speaker could not freely form a C₁aC₂C₃ noun from any verbal root in the language, but rather speakers learned a set of lexemes that were C₁aC₂C₃ nouns.
7.2.3 Suffixes

7.2.3.1 Overview

This section analyzes cases in which Greek loanwords in Syriac undergo further derivation with Syriac suffixes. The analysis is organized according to simple suffixes (§7.2.3.2) and complex suffixes (§7.2.3.3). On several occasions, Brock has pointed out that the addition of suffixes to Greek loanwords becomes more frequent over time.\textsuperscript{11} Thus, this section pays particular attention to diachronic developments.\textsuperscript{12} In this context, however, it should be noted that these diachronic developments do not indicate an increase in the intensity of Syriac-Greek contact over time; rather, they are indicative of the degree of integration of Greek loanwords in Syriac as well as of a diachronic change in internal Syriac developments in which the use of derivational suffixes becomes more common over time.\textsuperscript{13}

7.2.3.2 Simple Suffixes

7.2.3.2.1 Overview

The simple suffixes in Syriac are the abstract suffix -uɔr, the adverbial suffix -ɔʾi, the adjectival suffix -ɔyɔ (so-called nisba), and the nomen agentis suffix -ɔnɔ. Each of these occurs with words that are ultimately of Greek origin. The simple suffixes are also incorporated into the complex suffixes discussed in §7.2.3.3.

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\textsuperscript{12} As discussed in §4.4, the earliest text attesting the word in question that is known to the present author is cited with a heading in bold giving the century of composition.

\textsuperscript{13} For the latter change, see Brock 1990; 2010.
7.2.3.2.2 Abstract Suffix \(-u\ɔ\)

The suffix \(-u\ɔ\) (< *-\(u\)\(t\)-) is productive in deriving abstract substantives in Syriac,\(^{14}\) e.g., 
\(\text{malk} \, \text{‘king’ (Sokoloff 2009: 772)} + \text{-u\ɔ} \rightarrow \text{malku\ɔ} \, \text{‘kingdom’ (Sokoloff 2009: 772-773).}\) This suffix occurs not only with native Syriac words, but also with Greek loanwords in Syriac.\(^{15}\) Several Greek loanwords with the abstract suffix \(-u\ɔ\) are attested already in pre-fourth-century Syriac:\(^{16}\)

(7-3) a. \(\text{ἀρχων (Liddell and Scott 1996: 254)} > \text{ܐܪܟܘܢܐ, erno, leader, chief’ (Sokoloff 2009: 100)} + \text{-u\ɔ} \rightarrow \text{ܐܪܟܘܢܘܬܐ} \, \text{‘rulership’ (Pre-4th cent. Old Syriac Parchments, 3.5 [ed. Drijvers and Healey 1999: 231-248]}}\); only here; cf. Brock 2004: 32 with n. 7; 2005: 12; Healey 1995: 81)


c. \(\text{στρατηγὸς (Liddell and Scott 1996: 1652)} > \text{ܣܛܪܛܓܐ, erno, strategos’ (Sokoloff 2009: 71, 998)} + \text{-u\ɔ} \rightarrow \text{ܣܛܪܛܓܘܬܐ} \, \text{‘strategos-ship’ (Pre-4th cent. Old Syriac Parchments, 1.5 [ed. Drijvers and Healey 1999: 231-248]; Sokoloff 2009: 71; cf. Brock 1996: 260; 2004: 32 with n. 7; 2005: 21), already in Imperial Aramaic ‘strtg/w] (Hoftijzer and Jongeling 1995: 87-88); Palmyrene ‘strtgw (Hillers and}

\(^{14}\) Nöldeke 1904: §138.


\(^{16}\) Brock 2004: 32.

\(^{17}\) The reference to Is 28:7 in Brock 2004: 32 is incorrect and should be corrected to the adverbial form erno, see (7-8) with n. 28.
It is interesting to note that two of these types occur already in the Old Syriac documents.

Greek loanwords with the abstract suffix -"uɔ become more common in fourth-century Syriac:18


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The fifth century sees an even larger increase in the use of the abstract suffix -ους with Greek loanwords.19


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2004: 33 [first attested in 4th-5th cent.])


j. ῥήτωρ (Liddell and Scott 1996: 1570) > ιῥήτωρ rhtr (with alternative orthographies) ‘orator, rhetorician’ (Sokoloff 2009: 1442) → ə.pagination. rhtrwt ‘eloquence, rhetoric’ (5th cent. Narsai, Memre, 2.77.9 [ed. Mingana 1905]; Memra

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20 Brock (2004: 33) erroneously states that the word is found in Peshitta Acts; it is ə_pagination. ‘psqwp’ that is found in Peshitta Acts 20:28.


The following examples of the abstract suffix -ւ essa with Greek loanwords are first attested in sixth- and seventh-century Syriac:


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21 This text is attributed to Išaq of Antioch, and this attribution was recently reaffirmed in the study of Bou Mansour (2003). It should be noted, however, that there are at least three persons named Išaqq in the fourth to sixth centuries (see Matthews, in GEDSH, 212-213; Brock 2011: 9) and that one of them, Išaqq of Amid, is known to have spent time in Constantinople. Thus, it seems likely that the memra on Constantinople edited by Moss actually belongs to Išaqq of Amid (so also Brock 1997: 41; 1998: 708; Ortiz de Urbina 1965: 94).


Diachronically, then, the fifth and sixth centuries represent the largest expansion in the use of the abstract suffix 
\(-uṭ\) with a number of forms also being introduced in the fourth century. This shows that many Greek loanwords were already fully incorporated in Syriac by at least the fourth century with many more being fully incorporated by at least the fifth and sixth centuries.

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In addition, it points to a general increase in the frequency of the abstract suffix -\textit{ufo} in the fifth and sixth centuries.

In addition to being used with Greek loanwords, the abstract suffix -\textit{ufo} also occurs with nominal derivations from verbal roots that are ultimately of Greek origin,\textsuperscript{23} e.g., \textit{mzaw\textit{w}q\textit{t}}\textsuperscript{a} ‘matrimony’ (Sokoloff 2009: 733; cf. Brock 2004: 36 [first attested in 6th cent.]) ← rt. \textit{\textit{zw}}\textit{g} D ‘to yoke; to join’; Dt ‘to be married’ (Sokoloff 2009: 369) ← \textit{\textit{zw}}\textit{g} ‘yoke, pair; chariot’ (Sokoloff 2009: 180, 369-370) < \textit{ζευγος} (Liddell and Scott 1996: 754), \textit{ζυγον} (Liddell and Scott 1996: 757).

The abstract suffix -\textit{ufo} also occurs with Greek loanwords in the complex suffixes -\textit{t\textit{ufo}} (§7.2.3.3.3), -\textit{t\textit{w}ufo} (§7.2.3.3.4), -\textit{\textit{w}ufo} (§7.2.3.3.5), -\textit{\textit{w}ufo} (§7.2.3.3.8), and -\textit{\textit{w}ufo} (§7.2.3.3.9).

Outside of Syriac, the abstract suffix *-\textit{\textit{ufo}}- is used with Greek loanwords in other dialects of Aramaic. In Palmyrene Aramaic, for instance, the following words occur with the abstract suffix *-\textit{\textit{ufo}}:-\textsuperscript{24}


c. \textit{στρατηγός} (Liddell and Scott 1996: 1652) > *\textit{\textit{str}t\textit{g}} ‘general’ (Hillers and Cussini 1996: 341) + *-\textit{\textit{ufo}} → *\textit{\textit{str}t\textit{gw}} ‘term as general, command, campaign, expedition’

\textsuperscript{23} Brock 2004: 36.
\textsuperscript{24} Brock 2005: 25. The ending -\textit{w} in the following examples is the \textit{status absolutus} of the abstract suffix *-\textit{\textit{ufo}}.
These words show that external nominal derivations involving Greek loanwords in Aramaic are already attested in the Middle Aramaic period. Outside of Syriac, the abstract suffix *-ūt is used in the Late Aramaic period in Christian Palestinian Aramaic, e.g., ἀθλητής (Lampe 1961: 46; Liddell and Scott 1996: 32) > ἂλητ[ι]ς (Müller-Kessler and Sokoloff 1996: 108; Schulthess 1903: 20) + *-ūt → ἂλητης (Müller-Kessler and Sokoloff 1996: 108). These examples from Palmyrene Aramaic and Christian Palestinian Aramaic are important for establishing that secondary nominal derivations involving the use of native Syriac suffixes with Greek loanwords are not limited to Syriac, but are also found in other dialects of Aramaic, albeit in a limited number. It is interesting to note in this regard that Palmyrene Aramaic and Christian Palestinian Aramaic after Syriac are the two dialects that had the most significant contact with Greek. Thus, the use of secondary nominal derivations involving native suffixes with Greek loanwords correlates with degree of contact with Greek.

7.2.3.2.3 Adverbial Suffix -ṣīṭ

The suffix -ṣīṭ (< *-āyīt) is productive in deriving qualitative adverbs in Syriac, e.g., ἄλλως ‘god’ (Sokoloff 2009: 47) + -ṣīṭ → ἄλλωςἴτ ‘divinely’ (Sokoloff 2009: 47). This suffix occurs not only with native Syriac words, but also with Greek loanwords in Syriac. Greek

25 Compare Brock, who states, “Syriac is the only Late Aramaic dialect which develops this potential” (2004: 32).
26 Nöldeke 1904: §155. Diachronically, the adverbial suffix -ṣīṭ derives from the adjectival suffix *-āy and the feminine ending *-(a)t- (Butts 2010). Synchronically, however, this etymology is opaque; thus, it is considered a simple suffix in this study.
loanwords with the adverbial suffix -ɔʾ are rare in the earliest period of Syriac, with only the following types attested by the fourth century:


Several additional loanwords occur with the adverbial suffix -ɔʾ in fifth-century Syriac:


29 Brock (1999-2000: 441-442) states that there are no examples of -ɔʾ with Greek loanwords in Ephrem; this should be corrected in light of these examples.
30 Brock (2004: 32) includes this reference within texts of the fourth and fifth centuries; the Acts of Thomas, however, likely dates to an earlier period, perhaps the first half of the third century (see the discussion in Bremmer 2001b: 73-77).
The sixth century sees the adverbial suffix -ɔʾ used with several additional loanwords:


c. σῳλήν (Liddell and Scott 1996: 1748-1749) > ṣ cortisol sylwnʾ ‘pipe, conduit;
Finally, new formations involving the use of the adverbial suffix -ʾɔʾ with Greek loanwords are even more common in the seventh century:


Sokoloff (2009: 261) states that ܓܪܐܡܐܛܝܩܐܝܬ  is a loanword from γραμματικῶς (Liddell and Scott 1996: 359); while it may be calqued on Greek, the word is certainly an inner Syriac formation.

Orthography, 68.19 [ed. Phillips 1869]; Sokoloff 2009: 261)


g. πρόσωπον (Liddell and Scott 1996: 1533) > ܦܪܨܘܦܐ ‘face, countenance; person, party’ (Sokoloff 2009: 1249-1250) + ܝExports → ܦܪܨܘܦܐܝܬ ‘according to person’ (7th cent. Yohannan bar Penkaye, World History, 101.14 [ed. Mingana 1907]; Sokoloff 2009: 1250)

h. σφαῖρα (Liddell and Scott 1996: 1738) > ܐܣܦܝܪܐ ‘sphere; circle; ball; pine cone; cake’ (Sokoloff 2009: 76, 1031) + ܝExports → ܐܣܦܝܪܐܝܬ ‘spherically’ (7th cent. Severos Sebokht, Geographical Fragments, 132.10 [ed. Sachau 1870: 127-134]; Yaʿqub of Edessa, Hexaemeron, 97.a.12 [ed. Chabot 1953]; Sokoloff 2009:

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31 Sokoloff (2009: 261) states that ܓܪܐܡܐܛܝܩܐܝܬ is a loanword from γραμματικῶς (Liddell and Scott 1996: 359); while it may be calqued on Greek, the word is certainly an inner Syriac formation.
From these examples, it is clear that the adverbial suffix -\(\text{-\textipa{\textcircled{\textcircled{o}}}}\) came to be used more frequently with Greek loanwords over time. This points to the gradual incorporation of Greek loanwords in Syriac. It is also indicative of the increase in the frequency of the adverbial suffix -\(\text{-\textipa{\textcircled{\textcircled{o}}}}\) throughout the history of Syriac.\(^{32}\)

In addition to being used with Greek loanwords, the adverbial suffix -\(\text{-\textipa{\textcircled{\textcircled{o}}}}\) also occurs with nominal derivations from verbal roots that are ultimately of Greek origin,\(^{33}\) e.g., \(\text{sakato\textipa{\textcircled{\textcircled{o}}}سلاكتا} / \text{sakato\textipa{\textcircled{\textcircled{o}}}سلاكتا}\) ‘in an orderly way’ (Brock 1996: 261; 1999-2000: 442; 2004: 36 [first attested in 5th cent.] \(\leftarrow\) rt. \(\text{\textipa{\textcircled{\textcircled{t}}}kts}\) D ‘to order’, Dt ‘to be set in order, arranged’ (Sokoloff 2009: 529)

\(^{32}\) Cf. Nöldeke 1875: 200 n. 3.

\(^{33}\) Brock 2004: 36.
The adverbial suffix -ɔʾ also occurs with Greek loanwords in the complex suffixes -tɔɔʾ (§7.2.3.3.2) and -ɔɔnɔʾ (§7.2.3.3.7).

7.2.3.2.4 Adjectival Suffix -ɔyɔ

The so-called nisba suffix -ɔyɔ (< *-āy-) is productive in forming various types of adjectives, e.g., ܐܠܗܝܐ ʾ lɔ ɔ ɔ (Sokoloff 2009: 47) ← ܐܠܗܐ `God’ (Sokoloff 2009: 47) + -ɔyɔ. This suffix occurs not only with native Syriac words, but also with Greek loanwords in Syriac. These formations are, however, rare before the sixth century. There are, for instance, no examples in Ephrem, and the only type attested in Narsai is ܢܡܘܣܝܐ nmwsy ʾ `legal’ (5th cent. Narsai, Memre, 1.32.2; 2.74.8, 2.311.17, passim [ed. Mingana 1905]; Sokoloff 2009: 922; Brock 1996: 260 n. 33; 1999-2000: 442 [no less than 27 times in Narsai]; 2004: 32 [pre-6th cent.]; 2010: 13-14) ← ܢܡܘܣ ʾ `law’ (Sokoloff 2009: 921-922) + -ɔyɔ < νόμος (Liddell and Scott 1996: 1180). After the fifth-century, Greek loanwords with the adjectival suffix -ɔyɔ become much more common.


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34 Nöldeke 1904: §80-83; see also p. 325-329 below.
36 Brock 2004: 32.


Sokoloff (2009: 158) states that ܒܠܢܝܐ blny ‘is a loanword from ܒαλανεύς (Liddell and Scott 1996: 303); while it may be calqued on Greek, the word is certainly an inner Syriac formation from ܒܠܢܐ bln ‘bath’ (6th cent. Life of Ephrem, Ch. 12a [P, V] [ed. Amar 2011]; Sokoloff 2009: 158; cf. Brock 2004: 33 [6th cent.])39

39 Sokoloff (2009: 158) states that ܒܠܢܝܐ blny’ is a loanword from ܒαλανεύς (Liddell and Scott 1996: 303); while it may be calqued on Greek, the word is certainly an inner Syriac formation from ܒܠܢܐ bln’ < ܒαλανεύς.


The large number of examples from the sixth and seventh centuries illustrate the degree of incorporation of these loanwords by this time. It also shows that the nisba suffix -ɔyɔ became more common after the fifth century.40

There are a small group of Greek loanwords in Syriac that are only attested with the adjectival suffix -ɔyɔ:


40 In §8.3, it is argued that this increase in frequency is due to contact with Greek.


d. γερδιός, γἐρδιος (Liddell and Scott 1996: 345); cf. Latin *gerdius* (Glare 1982: 761; Lewis and Short 1969: 811) + -ɔyɔ > ܓܪܕܝܝܐ grdyy ‘weaver’ (Pre-4th cent. Jdt 16:14; 1Sam 17:7; 1Chron 11:23; 20:5; Sokoloff 2009: 258)


f. ξένος (Liddell and Scott 1996: 1189) + -ɔyɔ > ܐܟܣܢܝܐ ʾksny ‘strange, foreign; stranger’ (Pre-4th cent. *Acts of Thomas*, 175.5, 7; 183.12; 231.3; 242.11 [ed. Wright 1871a: 2.171-333]; *Odes of Solomon*, 17.6 [ed. Charlesworth 1973]; also in OT and NT; Sokoloff 2009: 44), already in Palmyrene ʾksny (Hillers and Cussini 1996: 337-338; cf. Brock 2005: 19); see also Jewish Babylonian Aramaic ʾaksǝnɔyɔ (Sokoloff 2002a: 131); Jewish Palestinian Aramaic ʾksnyy (Sokoloff 58); Christian Palestinian Aramaic ʾksnʾy (Müller-Kessler and Sokoloff 1996: 106; 1998a: 219; Schulthess 1903: 8)

These words should be distinguished from the examples in (7-12), since they are not cases of secondary developments in Syriac from a loanword, but rather related to the integration of the
loanwords. In addition, it should be noted that several of these words are found early in the history of Syriac.

The adjectival suffix -ɔyɔ also occurs with Greek loanwords in the complex suffixes -ɔyutɔ (§7.2.3.3.5), -ɔnyɔɔ (§7.2.3.3.6), and -ɔnyuutɔ (§7.2.3.3.8).

7.2.3.2.5  Nomen Agentis Suffix -ɔnɔ

The suffix -ɔnɔ (← *-ān-) is used with derived-stem participles to form nomina agentis,41 e.g., mšabhɔnɔ ‘one who praises’ (Sokoloff 2009: 840) ← ṣbh D ‘to praise’ (Sokoloff 2009: 1500-1501). This suffix also occurs with derived-stem nomina agentis from verbal roots that are ultimately of Greek origin,42 e.g., ṭakksɔnɔ ‘someone who puts in order’ (Sokoloff 2009: 747; cf. Brock 1996: 261; 2004: 36 [first attested in 6th cent.]) ← rt. ṭks D ‘to order’, Dt ‘to be set in order, arranged’ (Sokoloff 2009: 529) ← ṭksɔ, ṭksɔs ‘order; rank’ (Sokoloff 2009: 181, 529) < τάξις (Liddell and Scott 1996: 1756).

There are a small group of Greek loanwords in Syriac that are only attested with the adjectival suffix -ɔnɔ:

(7-14) a. κατήγορος (Liddell and Scott 1996: 927) > ṭgrn, ṭgrn' /qtegrɔnɔ/ (with alternative orthographies) ‘accuser’ (Sokoloff 2009: 1350, 1359)

b. ταραχή (Liddell and Scott 1996: 1758) > ṭkn’ ‘whisperer, tale-bearer; shrew, sagacious’ (Sokoloff 2009: 553-554)

The use of -ɔnɔ in these words can be compared to the Greek loanwords in Syriac that only occur with the adjectival suffix -ɔyɔ, which are listed in (7-13).

41 Nöldeke 1904: 128-130.
42 Brock 2004: 36.
In general, then, the suffix -ɔnɔ is quite restricted with Greek loanwords in Syriac, occurring primarily in derived stem *nomina agentis*. This is a reflection of its rather limited use in Syriac more broadly.

The suffix -ɔnɔ also occurs with Greek loanwords in the complex suffixes -tɔnɔ (§7.2.3.3.1), -tɔnɔʾ (§7.2.3.3.2) -tɔnɔ (§7.2.3.3.3), -tɔnɔyuť (§7.2.3.3.4), -tɔnɔyɔ (§7.2.3.3.6), -tɔnɔʾ (§7.2.3.3.7), -tɔnɔyuť (§7.2.3.3.8), and -tɔnuť (§7.2.3.3.9).

7.2.3.3 Complex Suffixes

The complex suffixes in Syriac include the adjectival suffix -tɔnɔ, the adjectival suffix -tɔnɔ, the adjectival suffix -tɔnɔyuť, the adjectival suffix -tɔnɔyuť, the adjectival suffix -tɔnɔyuť, the adjectival suffix -tɔnɔyuť, the adjectival suffix -tɔnɔyuť, and the abstract suffix -tɔnɔyuť. Some of these suffixes are not even attested for native Syriac words until the fifth century or later. All of these are, however, eventually attested with Greek loanwords.

7.2.3.3.1 Adjectival Suffix -tɔnɔ

The adjectival suffix -tɔnɔ (< *-tān-) derives from the feminine suffix -tɔ and the adjectival suffix -ɔnɔ, which is found primarily with derived-stem *nomina agentis* in Syriac (§7.2.3.2.5). Greek loanwords with the adjectival suffix -tɔnɔ are as follows:


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43 Brock 2004: 34.
44 Brock 2004: 35.
While there are no attestations in Ephrem,⁴⁵ the use of -tɔnɔ with Greek loanwords is attested already in the fourth century in Aphrahat. In addition, these formations must go back at least a century earlier, since the adverbial suffix -tɔnɔʾi is found already in the Book of the Laws of the Countries (see §7.2.3.3.2).

7.2.3.3.2 Adverbial Suffix -tɔnɔʾi

The adverbial suffix -tɔnɔʾi (< *-tānāyīt) derives from the feminine suffix -tɔ, the adjectival suffix -ənɔ, and the adverbial suffix -ɔʾi. Greek loanwords with the adverbial suffix -tɔnɔʾi are as follows:⁴⁶


b. σχῆμα (Liddell and Scott 1996: 1745) > ᶜܚȝmʾ ‘skym’ (with alternative

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⁴⁶ Brock 2004: 35.


The pre-fourth-century attestation of ܐܣܟܡܬܢܐܝܬ ʾskmtnʾyt (7-16b) demonstrates that the adjectival suffix -tɔnɔ must also go back to at least this time.\(^{47}\)

7.2.3.3.3 Abstract Suffix -tɔnɔtɔ

The abstract suffix -tɔnɔtɔ (< *-tānūt-) derives from the feminine suffix -tɔ, the adjectival suffix -ɔnɔ, and the abstract suffix -utɔ. Greek loanwords with the abstract suffix -tɔnɔtɔ are only attested in translated literature up to Yaʿqub of Edessa (d. 708), e.g., ܐܣܟܝܡܬܢܘܬܐʾ skymtnwtʾ ‘nature; hypocrisy; irony’ (Sokoloff 2009: 73-74) ← ܪܟܪܡܐ krwmʾ (with alternative orthographies) ‘form’ (Sokoloff 2009: 74, 178) + -tɔnɔyt < ܣχܝܡܐ (Liddell and Scott 1996: 1745).

7.2.3.3.4 Abstract Suffix -tɔnɔyuṭɔ

The abstract suffix -tɔnɔyuṭɔ (< *-tānāyūt-) derives from the feminine suffix -(a)tɔ, the adjectival suffix -ɔnɔ, the adjectival suffix -yuṭɔ, and the abstract suffix -utɔ. Greek loanwords

\(^{47}\) So already Brock 1999-2000: 442.
with the abstract suffix -\textit{tɔnɔyutɔ} are not attested before Yaʿqub of Edessa (d. 708), though they do occur in later Syriac literature.\footnote{Brock 2004: 35.}

7.2.3.3.5 Abstract Suffix -\textit{ɔyuṭa}

The abstract suffix -\textit{ɔyuṭa} (< *- \textit{āyūṭ}-) derives from the adjectival suffix -\textit{ɔyɔ} and the abstract suffix -\textit{utɔ}. Greek loanwords with the abstract suffix -\textit{ɔyuṭa} are as follows:\footnote{Brock 2004: 34.}


As these examples illustrate, the complex suffix -\textit{ɔyuṭa} is not attested with Greek loanwords until the sixth century.

\footnotetext[48]{Brock 2004: 35.}

\footnotetext[49]{Brock 2004: 34.}
The suffix -\textit{ɔ} is also found with Greek loanwords in Syriac that only occur with the adjectival suffix -\textit{ɔ},\textsuperscript{50} e.g., \textit{ܒܝܬܐ} ‘exile; alien status; life as stranger to the world’ (4th cent. Aphrahat, \textit{Demonstrations}, 1.12.19; 2.48.16 [ed. Parisot 1894-1907]; Ephrem, \textit{Commentary on Genesis and part of Exodus}, 148.12 [ed. Tonneau 1955]; Sokoloff 2009: 45; cf. Brock 2004: 34) \textit{ܒܝܬܐ} ‘strange, foreign; stranger’ (Sokoloff 2009: 44) + -\textit{up} < \*\textit{ξένος} (Liddell and Scott 1996: 1189) + -\textit{ɔ}.\

7.2.3.3.6 Adjectival Suffix -\textit{enɔyc}

The adjectival suffix -\textit{enɔyc} (< *-\textit{änỹy}-) derives from the the adjectival suffix -\textit{on} and the adjectival suffix -\textit{ɔy}. Greek loanwords with the adjectival suffix -\textit{enɔyc} are as follows:\textsuperscript{51}


\textsuperscript{50} For these, see (7-13) above.

\textsuperscript{51} Brock 1996: 260; 2004: 34.
As these examples illustrate, the complex suffix -\(\text{ɔnɔyɔ}\) is not attested with Greek loanwords until the sixth century.

7.2.3.3.7 Adverbial Suffix -\(\text{ɔnɔi}^\prime\)

The adverbial suffix -\(\text{ɔnɔi}^\prime\) (< *-\(\text{anayi}^\prime\)) derives from the the adjectival suffix -\(\text{ɔnɔ}\) and the adverbial suffix -\(\text{ɔi}^\prime\). This suffix is most common with nominal derivations from verbal roots that are ultimately of Greek origin,\(^{52}\) e.g., \(\text{\textit{mtappsɔnɔi}^\prime}\) ‘figuratively’ (Brock 1996: 261; 2004: 37 [first attested in 7th cent.]) ← \(\text{rt. \textit{tps}}\) G ‘to present typologically’; D ‘to represent by a figure; compose; arrange’; Dt ‘to be represented, to be established’ (Sokoloff 2009: 547) ← \(\text{\textit{twps}}\) ‘example, copy; shape, form; symbol; edict’ (Sokoloff 2009: 520, 1464) < \(\text{τύπος}\) (Liddell and Scott 1996: 1835). The adverbial suffix -\(\text{ɔnɔi}^\prime\) is also rarely found with Greek loanwords:\(^{53}\)

(7-19)


b. \(\text{σοφιστής}\) (Liddell and Scott 1996: 1622) > \(\text{\textit{swpysp}}\) ‘sophist’ (Sokoloff 2009: 988) + -\(\text{ɔnɔi}^\prime\) → \(\text{\textit{swpsten}^\prime}^\prime\) ‘like a sophist’ (7th cent. Isho’yahb III of Adiabene, \textit{Letters}, 176.20 [ed. Duval 1904-1905])

c. \(\text{στοίχειον}\) (Liddell and Scott 1996: 1647) > \(\text{\textit{stwks}}\) ‘element’ (Sokoloff

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\(^{52}\) Brock 2004: 37.

\(^{53}\) Brock 2004: 34.
As these examples illustrate, the complex suffix -ɔʾi is not attested with Greek loanwords until the sixth century. 7

Abstract Suffix -ɔnɔyuɔ

The abstract suffix -ɔnɔyuɔ (< *-ānāyūt-) derives from the the adjectival suffix -ɔnɔ, the adjectival suffix -ɔyɔ, and the abstract suffix -utɔ. Greek loanwords with the abstract suffix -ɔnɔyuɔ are extremely rare in the time period that is of interest to this study.54 An example can, however, be found in Ꙋhwlɔnwɔtyt ‘material’ (7th cent. Yaʿqub of Edessa, Discourse on the Myron, 28.4 [ed. Brock 1979b]; Sokoloff 2009: 335; cf. Brock 2004: 35 [first attested in 7th cent.]) ← Ꙋhwlɔ t (with alternative orthographies ‘woods, forest; matter, material; firewood’ (Sokoloff 2009: 335, 341) + -ɔnɔyuɔ < ὑλη (Liddell and Scott 1996: 1847-1848).

54 Brock 2004: 35.
7.2.3.3.9 Abstract Suffix -ɔnuτɔ

The abstract suffix -ɔnuτɔ (< *-ānuτ-) derives from the adjectival suffix -őνɔ and the abstract suffix -uτɔ. This suffix is most common with nominal derivations from verbal roots that are ultimately of Greek origin,\(^{55}\) e.g., ܡܬܛܦܝܣܢܘܬܐ mt pysnwt ‘state of being convinced’ (Sokoloff 2009: 880; cf. Brock 1996: 261; 2004: 38) ← rt. ܢܐ ܒܐ ‘to persuade, to convince; to demand, seek, beseech’; Ct ‘to be persuaded; to obey’ (Sokoloff 2009: 1188) < πεῖσαι (Liddell and Scott 1996: 1353-1354). The abstract suffix -ɔnuτɔ also occurs in the following two words:


Both of these words, however, always have the suffix -őνɔ (see §7.2.3.2.5).

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\(^{55}\) Brock 2004: 37.
7.2.3.4 Summary

Greek loanwords in Syriac can undergo derivation with Syriac suffixes, whether simple suffixes or complex suffixes. Table 7-1 summarizes the date that each suffix is first attested with a Greek loanword in Syriac. The date of first attestation of a particular suffix with a Greek loanword is not indicative of an increase in the intensity of Syriac-Greek contact at that time. Rather, these dates reflect changes in the use of Syriac suffixes in nominal derivation more broadly.\textsuperscript{56} In addition, the occurrence of a Greek loanword with a Syriac suffixes shows that the word has been fully incorporated into Syriac by that time. Thus, the occurrence of ʾskmtnʾyt ‘cleverly; in pretense, feignedly’ already in the second-century Book of the Laws of the Countries (6.10; ed. Drijvers 1965) shows only: 1. that ʾskymʾ (with alternative orthographies) ‘form’ was fully incorporated into Syriac at that time; and 2. that the suffix -ʾɔyt was productive in Syriac at that time. Similarly, the fact that the adjectival suffix -ʾyɔ became increasingly common with Greek loanwords after the fifth century does not indicate – at least not directly – an increase in Greek contact at this time, but rather reflects a more general increase in the suffix -ʾyɔ at that time.\textsuperscript{57}

\textsuperscript{56} For this topic, see Brock 1990; 2010.

\textsuperscript{57} In §8.3, it is argued that this increase in frequency is actually due to contact with Greek.
Table 7-1 Summary of Secondary Nominal Derivations with Suffixes

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The distribution of Syriac suffixes with Greek loanwords is similar to their distribution with non-Greek words. The suffix -ɔnɔ, for instance, is used almost exclusively with derived stem nomina agentis in Syriac. This explains its restricted use with Greek loanwords in Syriac. Or to take another example, the suffixes -tɔntɔ and -ɔntɔntɔ are not attested with Greek loanwords in pre-seventh century Syriac texts that were not translated from Greek. This reflects the use of these suffixes more broadly, which are quite rare before the seventh century. Thus, the use of suffixes with Greek loanwords tells more about changes in Syriac nominal derivation than about Syriac-Greek language contact.

As described in §7.2.2, secondary nominal derivations involving root and pattern morphology with Greek loanwords are restricted in Syriac in that: 1. they can only occur if there is an independent verbal root; 2. they are only found with a limited set of nominal
patterns, including participles, *nomina agentis*, and abstracts of the pattern CuCCₜC⁻. Secondary nominal derivations involving suffixes, in contrast, do not show the same restrictions. Syriac suffixes can be used with any incorporated Greek loanword, whether or not it has an independent verbal root. Thus, ܢܡܘܣܐܝܬ *nmwsʾyt* ‘according to the law’ can be derived from ܢܡܘܣܐ *nmws* ‘law’ (Sokoloff 2009: 921-922) < νόμος (Liddell and Scott 1996: 1180), despite the fact that an independent verbal root **√nm** does not exist in the language.

In addition, the set of Syriac suffixes used with Greek loanwords is the same as that used with non-Greek words in Syriac. This indicates that, in contrast to secondary nominal derivations involving root and pattern morphology, secondary nominal derivations involving Syriac suffixes are fully productive in Syriac with Greek loanwords.

7.2.4 Summary

This section has analyzed nominal derivations involving Greek loanwords in Syriac. These were divided into two categories: those involving root and pattern morphology (internal derivation) and those involving suffixes (external derivation). These two categories have a number of differences. To begin, the only Greek loanwords that undergo nominal derivations involving root and pattern morphology are those for which an independent verbal root is also attested in Syriac. That is, a noun **nummɔsc** ‘legality’ cannot be derived from ܢܡܘܣܐ *nmws* ‘law’ (Sokoloff 2009: 921-922) < νόμος (Liddell and Scott 1996: 1180) according to the pattern CuCCₜC⁻, since no independent verbal root exists. This illustrates the essential role that root plays in internal nominal derivations in Syriac. This contrasts with nominal derivations involving suffixes (external nominal derivation) where no such restriction exists, as is illustrated by ܢܡܘܣܐܝܬ *nmwsʾyt* ‘according to the law’. A second difference between the two
categories of nominal derivation relates to the issue of productivity. Roots of ultimate Greek origin are fully productive in Syriac as verbal forms. In addition, participles, nomina agentis, and abstracts of the pattern CuCCɔC- can be derived for most, if not all, roots. Beyond this, however, root and pattern morphology is severely restricted in creating new nouns from verbal roots of ultimate Greek origin. In contrast, nominal derivations from Greek loanwords involving suffixes do not seem to be limited. In fact, suffixes can be productively applied to Greek loanwords already in the earliest period of Syriac. Over time, the use of suffixes with Greek loanwords continues to increase as these suffixes become used more frequently and as Greek loanwords become more integrated into Syriac.

7.3 Structural Consequences of Loanwords

7.3.1 Overview

It is well-known that the incorporation of loanwords can result in structural consequences in the phonology and the morphology of the recipient language.⁵⁸ In English, for instance, there are a number of loanwords from Latin in which both the singular and plural were transferred:

(7-21) a. alumnus ~ alumni
    b. fungus ~ fungi

Based on pairs such as these, English-speakers developed a new plural suffix -i for singular nouns ending in -us. This plural suffix -i is found with Latin loanwords such as status and

apparatus where the plural is occasionally found as stati and apparatus instead of the Latinate
plurals statūs and apparatūs (both fifth declension, not second) or the now common English
plural statuses and apparatuses. The plural suffix -i also occurs with English nouns that are not
of Latin origin, such as the Greek loanword octopus, where the plural octopi is frequently
found instead of the Greek plural octopodes. The plurals stati, apparatus, and octopi are the result
of analogy within English:

\[(7-22) \quad \text{alumnus} : \text{alumni} :: \text{syllabus} : \text{syllabi} :: \text{status} : X = \text{stati} \]
\[:: \text{apparatus} : X = \text{apparati} \]
\[:: \text{octopus} : X = \text{octopi} \]

The plural ending -i does not, then, represent the transfer of a morpheme from Latin to English,
but rather it is the result of analogy in English. This process is no different from analogy
involving native words. Thus, the plural ending -i in English is contact-induced only in the
sense that the words on which the analogy is based are the result of language contact; the
ending does not, however, represent the direct transfer of a morpheme from Latin to English.

Given the substantial number of Greek loanwords in Syriac, it is not surprising that
these words served as the basis for secondary analogical developments in Syriac. This section
discusses two cases of this: 1. the development of the Syriac plural suffixes -(w)s and -(ʾ)s
(§7.3.2); and 2. the development of the Syriac Berufsname suffix -oʾr (§7.3.3).

7.3.2 The Syriac Plural Suffixes -(w)s and -(ʾ)s

The first instance to be discussed in which Greek loanwords provide the basis for
analogical developments in Syriac has already been introduced in the analysis of Greek plural

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morphology with Greek loanwords. As outlined in §6.2.2, the Greek plural at times serves as an input form alongside the singular. The accusative plural κληρικός, for instance, was transferred into Syriac as كَلِئِرِيْكُؤِس١٢ قَلِيرِيْقُوس١٢, along with the nominative singular κληρικός (Lampe 1961: 756) > كَلِئِرِيْقُس١٢ (‘cleric’) (Sokoloff 2009: 1371). In this case, then, the suffix -ws functions as a plural ending. This plural ending -ws also occurs with Greek loanwords that do not have a corresponding Greek plural in -ος, e.g., κληρικός > كَلِئِرِيْقُس١٢, which is one of the plural forms of κληρικός (with alternative orthographies) ‘necessity’ (Sokoloff 2009: 63) < ἀνάγκη (Liddell and Scott 1996: 101). This use of -ws as a plural marker is the result of analogy:

(7-23) كَلِئِرِيْقُس١٢ : كَلِئِرِيْقُوس١٢ : كَلِئِرِيْقُس١٢ : X = كَلِئِرِيْقُس١٢

The plural suffix -ws is found primarily with Greek loanwords in Syriac, as in the examples of كَلِئِرِيْقُوس١٢ and كَلِئِرِيْقُوس١٢. It does, however, also occur with at least one native Syriac word. One of the attested plurals of Syriac كَلِئِرِيْقُس١٢ ‘village, town’, for instance, is كَلِئِرِيْقُس١٢ (5th cent. Life of Rabbula, 161.6 [ed. Overbeck 1865: 157-248]). The form كَلِئِرِيْقُس١٢ derives from the native Syriac plural كَلِئِرِيْقُس١٢ with the analogically created plural suffix -ws. The basis for this analogy is difficult to determine, but it may stem from the fact that Syriac كَلِئِرِيْقُس١٢ has an irregular – i.e., marked – native Syriac plural in كَلِئِرِيْقُس١٢. Thus, the plural suffix -ws is not a direct transfer from Greek, but rather it represents

59 See §6.2.5.3 above.
60 For additional examples of the former, see (6-25); for additional examples of the latter, see (6-26).
61 This is one of the few words in Syriac reflecting the so-called ‘broken plurals’ that are common in Arabic, Ethiopian Semitic (especially Gǝʿǝz), Old South Arabian, and Modern South Arabian and that are probably to be reconstructed to Proto-Semitic. For an analysis of the broken plurals in the Semitic languages, see Ratcliffe 1998a, 1998b. For their reconstruction to Proto-Semitic, see, inter alia, Goldenberg 1977: 473-475 (= 1998: 298-300);
an analogical development in Syriac based on Greek loanwords. This development led to the use of the plural suffix -\(w\)s (ultimately from Greek -\(ου\)ς) with many Greek loanwords, including those that do not have a plural in -\(ου\)ς, as well as to at least one native Syriac word.

A similar development led to the creation of a plural suffix -\((\cdot)\)s in Syriac. The Greek plural served as an input form with Greek first declension nouns with nominative singular -\(η\) (or -\(α\)) ~ accusative plural -\(α\)ς. The accusative plural \(\alphaνάγκας\), for instance, was transferred into Syriac as \(\text{ܣ} \text{ܢܢܩ} \text{š}\), along with the nominative singular \(\alphaνάγκη\) (Liddell and Scott 1996: 101) > \(\text{ܩܘܪ̈ܝܐ} \text{s}\) (with alternative orthographies) ‘necessity’ (Sokoloff 2009: 63). Based on a pair such as this, Syriac-speakers analogically created a new plural suffix -\((\cdot)\)s. This analogically created plural suffix -\((\cdot)\)s is occasionally attested with native Syriac words. Alongside \(\text{ܩܘܪ̈ܝܘ}s\), which was discussed above, one of the attested plurals of Syriac \(\text{ܩܘܘ} \text{招商引� ‘village, town’ is } \text{ܩܘܘ} \text{š/s (7th cent. Apocalypse of Pseudo-Methodius, 8.12 [ed. Reinink 1993]). The form } \text{ܩܘܘ} \text{š/s derives from the native Syriac plural } \text{ܩܘܘ} \text{Interstitially, with the analogically created plural suffix -\((\cdot)\)s. Though outside of the time period that is of immediate interest to this study, the plural suffix -\((\cdot)\)s also occurs in } \text{ܓ} \text{š (8th cent. Chronicle of Zuqnin, 1.131.14 [ed. Chabot 1927-1949]), which is one of the plurals of the native Syriac word } \text{ܓ} \text{Interstitially, ‘garden’ (Sokoloff 2009: 250). While the analogical basis for the extension of the plural -\((\cdot)\)s to } \text{ܩܘܘ} \text{š/s could again be explained by the existence

\begin{footnotesize}
\begin{itemize}
\item 62 For additional examples, see (6-3).
\item 63 An alternative spelling of \(\text{ܩܘܘ} \text{š/s (without sy̌me) occurs in a section from the history of Dionysios of Tel Mahre (d. 845), which is quoted in the twelfth-century Chronicle by Michael Rabo (Chabot 1899-1910: 4.448c.12). It should be noted that the irregular orthography of the first syllable of } \text{ܩܘܘ} \text{š/s is recorded neither in Nöldeke 1904: §89 nor in Brockelmann 1927: 122.}
\end{itemize}
\end{footnotesize}
of an irregular plural in Syriac, it remains much less clear what the analogical basis for the extension of the plural -(ʾ)s to gʾnʾs could have been.

To summarize, the plural suffixes -(w)s and -(ʾ)s derive ultimately from the Greek accusative plural endings -ους and -ας, respectively. These are not, however, direct transfers from Greek. Rather, they represent analogical developments based on a number of Greek loanwords in Syriac that appear both in a singular and plural form. Both plural suffixes occur commonly with Greek loanwords of various types, but they are extremely rare with native Syriac words, being restricted to only a handful of examples.

7.3.3 The Syriac _Berufsname_ Suffix -ʾɔrɔ

The second instance to be discussed in which Greek loanwords provide the basis for analogical developments in Syriac involves the Syriac _Berufsname_ suffix -ʾɔrɔ. The most common nominal formation for _Berufsname_ in Syriac is *C₁aC₂C₃C₄*. e.g., gannobɔ ‘thief’ (Sokoloff 2009: 244) ← √gnb ‘to steal’ (Sokoloff 2009: 243-244). In addition to this nominal pattern, _Berufsname_ are also occasionally formed with the suffix -ʾɔrɔ in Syriac:


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65 Brockelmann 1908: §223b1; Ciancaglini 2008: 7; Nöldeke 1904: §140. Though these words are loanwords, it is improbable that Syriac-speakers would have analyzed all of them as such, especially ʾellʾɔ ‘boat’.
66 This Syriac noun is likely the source of Christian Palestinian Aramaic ʾlprʾ ‘sailor’ (Schulthess 1903: 1; Müller-Kessler and Sokoloff 1998b: 243) (so also Müller-Kessler 1991: §4.2.1.10.2).


d. ʾבּשָזַירָא bəziqɔrɔ ‘quarrelsome, factious’ (Sokoloff 2009: 70) ← ʾבּשָזַיר ʾṣṭṣsys ‘uproar, disturbance’ (Sokoloff 2009: 69-70) < στάσις (Liddell and Scott 1996: 1634)

The Berufsnname suffix -ɔɔr in these words ultimately reflects later Greek -άριος, which itself is from Latin -arius.⁶⁸ The suffix -ɔɔr was not, however, a direct morphological transfer from Greek into Syriac. Rather, the development of the suffix -ɔɔr in Syriac is due to inner-Syriac analogy.

In Syriac, there are a number of Greek loanwords that contain the -άριος suffix, as is illustrated in the following examples:

(7-25) a. ἀποκρισιάριος (Liddell and Scott 1996: 204) > ʾpwr̄yrsr, ʾpqr̄yrsr ‘legate’ (Sokoloff 2009: 89)


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⁶⁷ Compare, however, Jewish Babylonian Aramaic ʾbɔzyɔr ‘falconer’ (Sokoloff 2002a: 182-183), which derives not from an Iranian noun with the Greek suffix -άριος, but rather from an Iranian noun with an Iranian suffix, e.g., Modern Persian bāzyār (Steingass 1892: 146).

⁶⁸ For the relationship between the Latin and Greek suffixes, see Mason 1974: 3; Palmer 1945: 48-49.

d. Latin *galearius* (Lewis and Short 1969: 800) > γα(λ)ιάριος (Daris 1991: 38) > γλύριος glyr ‘galearius, military servant’ (Sokoloff 2009: 237-238)

e. δρομωνάριος (Lampe 1961: 388) > ὁμιλητὴς drwmnr ‘sailor’ (Sokoloff 2009: 324)


k. παραμονάριος (Lampe 1961: 1022) > παραμονάριος Παραμονάριος (Sokoloff 2009: 1040)

l. σακκελάριος (Lampe 1961: 1221) > σακκελάριος Σακκελάριος (Sokoloff 2009: 1040)

m. Latin *silentarius* (Lewis and Short 1969: 1698) > σιλεντιάριος (Liddell and Scott
Given the large number of Greek loanwords that have the suffix -άριος in Syriac and given their consistent semantics, Syriac-speakers would certainly have been able to deduce the meaning of the suffix -άριος. In addition, several of these Greek loanwords in -άριος were also transferred in a form without the suffix:


Based on pairs such as these, Syriac-speakers created a new *Berufsname* suffix -ɔrɔ through analogy:

(7-27) ܐܣܟܠܪܐ ʾsklrʾ : ܐܣܟܘ ʾskwlʾ ‘lecture hall’ :: ܒܪܡܘܢ drmwn ‘ship, boat’
: ܕܪܘܡܢܪܐ drwmnrʾ ‘sailor’ :: ܐܠܦܐ ʾɛlɔ ‘boat’ : X = ܐܠܦܪܐ ʾɛlrɔ ‘sailor’

The Syriac *Berufsname* suffix -ɔrɔ does not, then, represent the direct transfer of Greek -άριος (or Latin -arius), but rather it results from an analogical development in Syriac based on Greek loanwords. This new *Berufsname* suffix -ɔrɔ is only rarely attested with non-Greek words in Syriac, and all of these non-Greek words are not native Aramaic. In cases, such as ܐܣܛܘܢܐ ʾstnɔrʾ ‘stylite’, the motivation for the analogical extention of -ɔrɔ may have been that ܐܣܛܘܢܐ ʾstnɔ ‘pillar’ is obviously not Aramaic. In other cases, however, such as ܐܠܦܡܐ ʾlprɔrʾ ‘sailor’, it seems less likely that Syriac-speakers would have been cognizant of the Akkadian origin of ܐܝܠܒ ʾellpɔ ‘boat’.

7.3.4 Summary

*Prima facie*, the Syriac *Berufsname* suffix -ɔrɔ could represent the direct transfer of the Greek derivational suffix -άριος (or Latin -arius). Similarly, the Syriac plural suffixes -(w)s and -(ʾ)s could represent the direct transfer of the Greek inflectional endings -ος and -ας, respectively. Upon closer examination, however, a different explanation is more likely. These three suffixes in Syriac are not cases of the direct transfer of morphology from Greek to Syriac. Rather, they are instances in which Syriac-speakers analogically created new morphological suffixes on the basis of Greek loanwords in their language. The analogical creation of the plural suffixes -(w)s and -(ʾ)s was made possible by the fact that different input forms exist for the
same Greek loanword in Syriac.\textsuperscript{69} Similarly, the existence of Greek loanwords with the suffix \textendash\textsigma\texthyph\textometa\textnu\textomega as well as without it enabled the analogical creation of the \textit{Beruf\textsc{\textsc{s}}name} suffix \textendash\textsigma\textomega. These changes, then, illustrate the ramifications of the influx of a large number of Greek loanwords into Syriac. While the changes discussed in this section do not represent the transfer of morphology from Greek into Syriac, they do show, in an extended way, the effects that contact with Greek had on Syriac. In these particular cases, this contact resulted in changes that reached all the way to the morphology of Syriac, or in Nöldeke’s words, “to the most delicate tissues of the language (\textit{bis ins feinste Geäder der Sprache})” (1904: XXXII). It should be noted, however, that these new suffixes were never productive in Syriac, but rather they are attested with only a limited subset of words, most of which are not native to Syriac.

7.4 Conclusion

This chapter has analyzed secondary developments in Syriac that involve Greek loanwords. The first half of the chapter (§7.2) discussed secondary nominal derivations involving root and pattern morphology and suffixes. It was shown that these two types of derivation (internal versus external) have significant differences from one another. The former is restricted to verbal roots that are ultimately of Greek origin, and even then it can only be used with a small subset of the Syriac nominal patterns. In contrast, the latter is fully productive in Syriac occurring with the full range of Syriac derivational suffixes and with any incorporated Greek loanword. The second half of the chapter (§7.3) turned to analogical developments in Syriac that were based on Greek loanwords. It was shown that the Syriac \textit{Beruf\textsc{\textsc{s}}name} suffix \textendash\textsigma\textomega and the plural suffixes -(\textomega)\textomega and -(\textomega)\textomega do not represent the direct transfer

\textsuperscript{69} For the multiple input forms, see §6.2.2.
of Greek inflectional endings, but rather are the result of analogical developments within Syriac. In both of these cases, the analogically created suffixes were never fully productive being attested only with a very limited subset of words, most of which are not native to Syriac. These suffixes do, however, represent changes to Syriac morphology that are ultimately the result of contact with Greek.

None of the secondary developments analyzed in this chapter are in the strictest sense related to language contact. That is, these are internal developments in the history of Syriac. From a broader perspective, however, they are concerned with language contact since they involve words that are only in Syriac due to its contact with Greek. In particular, these developments illustrate the way in which Syriac-speakers continued to interact with Greek loanwords long after these words had been integrated into their language. Once integrated into Syriac, Greek loanwords were no longer (only) Greek words; they were rather Syriac words. As Syriac words, they continued to interact with the Syriac language as it changed and developed over the centuries.
Part III: Grammatical Replication
“Knowledge of syntax is important in any language, and in Aramaic where the syntax in particular reflects the history of language most faithfully, it is of crucial significance.”
(Rosenthal 1995: 1)

8.1 Overview

Almost all previous scholarly literature discussing contact-induced changes in Syriac due to Greek has been restricted to loanwords. Loanwords are, however, only one of the many different categories of contact-induced change. The next three chapters discuss a different category of contact-induced change in which speakers of Syriac adapted inherited Aramaic material by replicating it on a model in Greek. This category of change will be termed grammatical replication. The current chapter discusses the methodological framework for grammatical replication. It is followed by two chapters containing case studies of grammatical replication in Syriac due to Greek: the Syriac copula ʾīlaw(hy) replicated on Greek ἐστίν (§9) and the Syriac conjunctive particle den replicated on Greek δέ (§10).

8.2 Definition

This chapter discusses a category of contact-induced change that will be termed grammatical replication, following the work of Heine and Kuteva. Grammatical replication is

defined in this study as a contact-induced change in which speakers of the recipient language create a new grammatical structure on the model of a structure of the source language. Unlike loanwords, which involve the transfer of phonetic material, grammatical replication involves the transfer of semantic-conceptual material from the source language to the recipient language (Heine and Kuteva 2006: 68).

8.3 Change in Frequency of a Pattern

The most basic change in grammatical replication involves an increase in the frequency of a pattern. In such cases, a pattern of low frequency in the recipient language becomes more frequent because it corresponds to a pattern in the source language. This represents a raising of a minor use pattern to a major use pattern. This change often involves the selection and favoring of one pattern in the recipient language at the expense of another pattern. This aspect of grammatical replication includes indirect transfer in the work of Silva-Corvalán (1994), which she defines as “the higher frequency of use of a form in language S … in contexts where a partially corresponding form in language F is used either categorically or preferentially” (1994: 4). It also includes Aikhenvald’s enhancement, “whereby certain marginal constructions come to be used with more frequency if they have an established correspondent in the source language” (2002: 238). Finally, it is similar to Mougeon and Beniak’s covert interference.

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2 Following Weinreich (1953: 30-31), Heine and Kuteva use replica language and model language in lieu of what is here termed recipient language and source language, respectively. The latter terms have been preferred in this study, since they can be used with other types of contact-induced change, such as loanwords (see §2.2).


4 Heine and Kuteva 2006: 52; see also Poplack and Levey 2010: 393 with literature cited therein.

(1991: 10-12, *passim*), in which “a minority-language feature may undergo a gradual decline and eventual loss because it lacks an interlingual counterpart in the majority language … [and which] is accompanied by a concomitant rise in the use of the feature taking over the function vacated by the disappearing feature” (11).

The increase in the frequency of a pattern due to grammatical replication can be illustrated with an example from Syriac-Greek language contact involving Syriac adjectives derived with the so-called *nisba* ending -ḥu (< *-āy*).⁶ In Syriac, as in other dialects of Aramaic, the *nisba* ending -ḥu forms gentilics, as in (8-1a), ordinal numbers, as in (8-1b), and other types of adjectives, as in (8-1c):

(8-1) a. ṣaramyḥ ‘Aramean’ (Sokoloff 2009: 101) < *ʻarām ‘Aram’ + *-āy-

   b. ṣalīṯyḥ ‘third’ (Sokoloff 2009: 1649) < *θalāθ- ‘(passive participle of √θlθ ‘to be three’)’ + *-āy-

   c. ṣalāḥyḥ ‘divine’ (Sokoloff 2009: 47) < *‘alāḥ- ‘God’ + *-āy-

It is the last type, i.e., excluding gentilics and ordinal numbers, that is of concern here. Throughout Classical Syriac, this type of *nisba* adjective increased in frequency (Brock 2010). This increase is illustrated in Table 8-1, which charts the percentage of *nisba* types per total lexeme types (verb, noun, and particle) across a corpus of more than 125,000 tokens from a selection of twelve prose texts.⁷ The same data are charted in Graph 8-1.

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⁶ For the *nisba* ending in Semitic, see Butts 2010: 81-82.

⁷ In this study, ‘type’ refers to a pattern, whereas ‘token’ refers to actual instances of said pattern. Thus, in this case, ‘type’ tracks whether a lexeme occurs in a given corpus (i.e., it is binary), whereas ‘token’ tracks how many times a lexeme occurs in a given corpus. The selection of texts is the same as that used below for the verbless clause (§9.4; 0).
Table 8-1 Frequency of *Nisba* Adjectives (excluding gentilics and ordinal numbers)

<table>
<thead>
<tr>
<th>Source of Literature</th>
<th>total types</th>
<th><em>nisba</em> types</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book of the Laws of the Countries (ca. 220)</td>
<td>740</td>
<td>3</td>
<td>0.43</td>
</tr>
<tr>
<td>Acts of Thomas (ca. 200-250 CE), Acts 1-7</td>
<td>1241</td>
<td>9</td>
<td>0.73</td>
</tr>
<tr>
<td>Selection of Aphrahaṭ (fl. 337-345)</td>
<td>996</td>
<td>4</td>
<td>0.40</td>
</tr>
<tr>
<td>Ephrem (d. 373), <em>Prose Refutations</em>, Discourse 1</td>
<td>992</td>
<td>7</td>
<td>0.71</td>
</tr>
<tr>
<td>Teaching of Addai (ca. 420)</td>
<td>922</td>
<td>7</td>
<td>0.76</td>
</tr>
<tr>
<td>Life of Rabbula (ca. 450)</td>
<td>1512</td>
<td>18</td>
<td>1.19</td>
</tr>
<tr>
<td>Selection of Philoxenos (d. 523)</td>
<td>1006</td>
<td>12</td>
<td>1.12</td>
</tr>
<tr>
<td>Shemʿun of Beth Arsham (d. before 548)</td>
<td>579</td>
<td>3</td>
<td>0.52</td>
</tr>
<tr>
<td>Eliya (mid-6th cent.)</td>
<td>1493</td>
<td>27</td>
<td>1.81</td>
</tr>
<tr>
<td>Selection of Yuḥanon of Ephesus (d. ca. 589)</td>
<td>1087</td>
<td>20</td>
<td>1.84</td>
</tr>
<tr>
<td>Denḥa (d. 649)</td>
<td>1082</td>
<td>21</td>
<td>1.94</td>
</tr>
<tr>
<td>Selection of Yaʿqub of Edessa (d. 708)</td>
<td>1109</td>
<td>22</td>
<td>1.98</td>
</tr>
</tbody>
</table>

Graph 8-1 Diachronic Frequency of *Nisba* Adjectives

As can be seen in the chart, the percentage of *nisba* types per total types increases from
0.43% in the *Book of the Laws of the Countries* (ca. 220) to 1.98% in the selected *Letters* of Ya’qub of Edessa (d. 708). While this may *prima facie* seem to be a small increase, it must be remembered that this represents the increase of types of the *nisba* adjective relative to all of the types in the corpus. In other words, the *Book of the Laws of the Countries* contains 740 different words (or types), and only three of these are *nisba* adjectives (0.43%). In contrast, the selected *Letters* of Ya’qub of Edessa contain twenty-two different *nisba* adjectives (types) in a corpus of 1109 different words (1.98%). This means that the frequency of *nisba* adjectives in the selected *Letters* of Ya’qub of Edessa is more than four times as much as that in the *Book of the Laws of the Countries* (an increase of 460% to be exact). The diachronic increase in the data set is further illustrated by the trend line in Graph 8-1. The relatively high R² value of 0.7257 suggests that the trendline is an accurate representation of the data.⁸ Both the chart and the graph, then, clearly demonstrate that *nisba* adjectives, excluding gentilics and ordinal numbers, became increasingly more common throughout the history of Syriac.⁹

The increase in *nisba* adjectives over the history of Syriac is due to contact with Greek. Syriac, at least in the early period, contained far fewer adjectives than Greek, often using other constructions, such as the so-called adjectival genitive,¹⁰ e.g., *dakyɔnɔ* ‘(lit.) of nature’,¹¹ where

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⁸ For readers less familiar with statistics, the coefficient of determination, or R², ranges from 0 to 1.0 and reflects how well the regression line fits the data, with 1.0 indicating that the line perfectly fits the data.

⁹ It should be noted that there is one statistical outlier in the data: Shem’un of Beth Arsham (d. before 548), who has a relatively low percentage of *nisba* types per total types. This can be explained by the fact that Shem’un is of Persian origin and had less exposure to Greek, the language of the Eastern Roman Empire. If Shem’un of Beth Arsham is excluded from the dataset, the R² value jumps to 0.8633.

¹⁰ For the term adjectival genitive, see Waltke and O’Connor 1990: 148-154.

¹¹ See, e.g., Mešal dakyoɔn ennen ‘because they are natural’ [because NML + NML + nature-M.SG.EMP they-F] (*Book of the Laws of the Countries*, 22.7-8 [ed. Drijvers 1965]).
Greek would use an adjective, e.g., φυσικός ‘natural’ (Liddell and Scott 1996: 1964). Over time, however, Syriac innovated new adjectival formations to replace the adjectival genitives.\textsuperscript{12} Many of these were formed with the \textit{nisba} ending -\textit{ɔy}, e.g., \textit{kyɔnɔyɔ} ‘(lit.) pertaining to nature’ (Sokoloff 2009: 620; cf. Brock 2010: 113). It is the creation of new adjectival formations such as \textit{kyɔnɔyɔ} to replicate Greek adjectives that led to the diachronic increase in the \textit{nisba} adjective discussed in the previous paragraph.

One final piece to this puzzle is that it must be demonstrated that Syriac-speakers actually equated Syriac adjectives, especially those derived with the \textit{nisba} ending -\textit{ɔy}, with Greek adjectives.\textsuperscript{13} They could, of course, have chosen to identify Greek adjectives, such as φυσικός ‘natural’, with Syriac adjectival genitive constructions, such as \textit{dakyɔnɔ} ‘(lit.) of nature’. This did not, however, in fact happen. Rather, it is Syriac adjectives that Syriac-speakers identified with Greek adjectives. This identification can be established from the typology of translation technique, as is illustrated in the following example:

(8-2) \textit{Second Epistle to Succensus} by Cyril of Alexandria (ed. Schwartz 1927: 1.1.6.157-162)

\begin{verbatim}
that be-PRES.ACT.SUBJ.3.SG ART-NOM.SG.NEUT incident-NOM.SG.NEUT

έκούσιον

voluntary-NOM.SG.NEUT
\end{verbatim}

‘s so that suffering would be voluntary’ (161.7)


\begin{verbatim}
 Tunisia Tunisia Tunisia
\end{verbatim}

\textsuperscript{12} This trend was noted already in Brock 1990: 322; 2010; Becker 2006: 136.

‘so that suffering would be of the will’ (51.27-28 [Syr.], 42.32-33 [ET])

(8-4) Later Syriac Translation (Brit. Libr. Add. 12,154, f. 188r, cited according to King 2008: 216)

because NML + voluntary-M.SG.EMP be-PRE.3.M SG suffering-M.SG.EMP

‘so that suffering would be voluntary’

In the earlier translation, cited in (8-3), the Greek adjective ἑκούσιον ‘voluntary’ is rendered by the Syriac adjectival genitive dşęyôc ‘of will’. A different translation of this same word is, however, found in the later translation in (8-4), in which the adjectival genitive was replaced by the Syriac nisba adjective šęyôc ‘(lit.) pertaining to will’. Thus, in the later translation, the Syriac nisba adjective šęyôc replicates the Greek adjective ἑκούσιον in contrast to the earlier translation with the adjectival genitive. According to the well-established typology of Syriac translation technique, later translations, such as that in (8-4), tend to provide a more formal equivalence in comparison with earlier translations, such as that in (8-3), often to the point that the lexical and morphological material of Syriac is mapped onto the semantic and grammatical categories of Greek.\textsuperscript{14} This example, thus, shows that Syriac-speakers equated Greek adjectives with Syriac adjectives, including those derived with the nisba ending -\textsuperscript{y}, rather than, for instance, adjectival genitives.

\textsuperscript{14} On the translation technique in this particular passage, see King 2008: 216, 266-268. For the broader typology, see Brock 1979a; 2007a: 937-942; King 2008: 175-276.
Throughout the history of Syriac, then, the *nisba* ending \(-ɔy\) became more frequent as Syriac speakers attempted to replicate Greek adjectives. This example of grammatical replication did not result in a new function for the *nisba* ending \(-ɔy\) since it already formed adjectives in early Syriac. Rather, contact with Greek resulted in an increase in the frequency of the ending. That is, the *nisba* ending \(-ɔy\) was raised from a minor use pattern to a major use pattern. This example is illustrative of one of the more basic changes in grammatical replication, in which there is a diachronic increase in the frequency of a pattern in the recipient language due to its identification with a pattern in the source language. Additional examples involving a diachronic increase in the frequency of a pattern are illustrated in the case studies following this methodological introduction.

8.4 Creation of a New Structure

In addition to causing a change in frequency of a pattern in the recipient language, grammatical replication can result in the creation of new structures in the recipient language. This occurs when a structure in the recipient language comes to be used in new contexts on the model of the source language.\(^{15}\) This, then, represents an *extension* in the function of a structure in the recipient language due to the function of the corresponding structure in the source language.\(^{16}\)

The creation of a new function due to grammatical replication can again be illustrated with an example from Syriac-Greek language contact, this time involving the use of Syriac *lwɔt* ‘toward; at, with’ with the verbal root √\(mr\) ‘to say’ on the model of the use of Greek πρός ‘on

\(^{15}\) Heine and Kuteva 2006: 52.

\(^{16}\) Weinreich 1953: 30-31. For extension as a mechanism of syntactic change, see Harris and Campbell 1995: 97-119.
the side of, in the direction of” with a verb of speech. The uses of Syriac \textit{lw\textscript{\textbeta}} overlap significantly with those of Greek \textit{\pi\ro\varsigma} in that both can express spatial relations, whether directional or locative.\footnote{For Syriac \textit{lw\textscript{\textbeta}}, see Sokoloff 2009: 682. For Greek \textit{\pi\ro\varsigma}, see Humbert 1960: §544-547; Liddell and Scott 1996: 1496-1499.} Consider, for instance, the following example:

(8-5) Hebrew Vorlage

\begin{verbatim}
w\text{\textw}hinne  \text{\texti\textbs}{\text{\textl{\texty}}\text{\textn\texti\textb\textl\textv}} \text{\textq\v\textb\texte}t \text{\textw} \text{\textm\textg\textl\texto\textt\texty} \text{\textw}y
\end{verbatim}

and + behold woman-F.SG lay.PART.F.SG from + feet-F.PL.CON + his

‘and behold a woman was lying at his feet’ (Ruth 3.8)

(8-6) Greek Septuagint

\begin{verbatim}
k\text{\texta}i  \text{\texti\textd\textw\textv} \text{\textg\v\textn\texti\texth} \text{\textk\texti\textm\textd\textt\texta\texti} \text{\textp\ro\varsigma} \text{\textp\od\textw\textn}
\end{verbatim}

and behold woman-NOM-F.SG sleep-PRES.IND.MID.3.SG \textit{\pi\ro\varsigma} feet-GEN.M.PL

\text{\texta\u\textt\o\textu}

he-GEN.M.SG

‘and behold a woman was sleeping at his feet’ (Ruth 3.8)

(8-7) Old Testament Peshi\textita\ (latter half of 2nd cent.)

\begin{verbatim}
\text{\texta\textn\textt\textt\texti\textc} \text{\textd\textd\texto\textm\textk\texte} \text{\textl\textw\textj} \text{\textr\textg\textl\textw\texta\textl\texthy}
\end{verbatim}

woman-F.SG.EMP NML + sleep-PART.F.SG.ABS \textit{lw\textscript{\textbeta}} feet-F.PL.CON + his

‘a woman, who was sleeping at his feet’ (Ruth 3.8)

The Greek in (8-6) and the Syriac in (8-7) are independent translations of the Hebrew \textit{Vorlage} in (8-5). Thus, it is noteworthy that Syriac \textit{lw\textscript{\textbeta}} and Greek \textit{\pi\ro\varsigma} are used in the exact same context: both are used for a locative relation. In addition, and particularly important for the
point being argued here, Syriac *lwọ* and Greek *πρός* overlap in a large number of verb-preposition combinations (i.e., particle verbs). Both, for instance, are used with verbs of returning, as is illustrated in the following example:

(8-8) Hebrew Vorlage

\[
\text{וָ֑נֶ֖שׁוֹבָ֑ךְ} \quad {ְּֽאָֽלֹ֑קַם}
\]

and + return- PRE.1.C.PL toward + you-M.PL

‘and we will return to you’ (Gen. 22:5)

(8-9) Greek Septuagint

\[
\text{ἀναστρέψωμεν} \quad \text{πρός} \quad \text{ὑμᾶς}
\]

return-FUT.ACT.IND.1.P toward you-ACC.M.PL

‘and we will return to you’ (Gen. 22:5)

(8-10) Old Testament Peshitta (latter half of 2nd cent.)

\[
\text{ܘܢܗܦܘܟ ܠܘܬܟܘܢ}
\]

and + return-PRE.1.C.PL toward + M.PL

‘and we will return to you’ (Gen. 22:5)

This example shows that Greek uses *πρός*, in (8-9), and Syriac uses *lwọ*, in (8-10), in verb-preposition combinations that express ‘return to’, in this case (independently) translating the Hebrew Vorlage in (8-8). There are a number of other verb-prepositions combinations in which Greek uses *πρός* and Syriac uses *lwọ*, including to ‘bring to’ (Gen. 2:19; 43:23); ‘to go to’ (Gen. 15:15); ‘to turn aside to’ (Gen. 19:3); ‘to be gathered to/at’ (Gen. 25:8); ‘to draw near to’ (Gen. 27:22; 37:18; 43:19; 45:4); ‘to send to’ (Gen. 32:4); ‘to go up to’ (Gen. 44:17, 24; 45:9); ‘to go down to’ (Gen. 45:9); and even ‘to cry out to’ (Gen. 4:10).
The uses of Syriac *lwọ*, then, overlap in a number of places with those of Greek *πρός*; they do not, however, overlap entirely. One such use where they do not – or at least, did not initially – overlap is with verbs of speech. In early Syriac texts, the verbal root √ʾmr ‘to say’ governs a dative object marked with the preposition *l-‘to, for’, as in the following example:

(8-11) *Book of the Laws of the Countries* (ca. 220; ed. Drijvers 1965)

’ǝmar  1eh  bar dayšon
say-PART-M.SG.ABS  to + him  PN

‘Bardaiṣan said to him’ (4.14)

In contrast, Greek *πρός* marks the dative object of various verbs of speech, such as λέγειν and εἰπεῖν:

(8-12) Luke

εἰπεῖν  δὲ  πρός  αὐτὸν  ὁ  ἄγγελος
say-AOR.ACT.IND.3.sg  but  to  he-ACC.M.SG  ART-NOM.M.SG  angel-NOM.M.SG

‘and the angel said to him’ (1.13)

This, then, represents a difference between the usage of Greek *πρός* and pre-sixth-century Syriac *lwọ*. By the sixth century, however, the dative object of the verbal root √ʾmr ‘to say’ in Syriac could also be marked with the preposition *lwọ ‘toward’ (Brock 2008: 4), as in the following example:


ʾǝmar  *lwọ*  šemʿon
say-SUF.3.M.SG  toward  PN
'he said to Simon' (20.9)

This represents an extension in the use of *lwɔ* on the model of Greek πρός. This extension resulted in a new function for Syriac *lwɔ* as it came to be used in a new context with the verb √ʾmr ‘to say’.\(^{18}\) The extension was facilitated by the fact that Syriac *lwɔ* and Greek πρός already overlapped in a number of uses, especially for spatial relations (whether directional or locative); the extension merely added one more use to Syriac *lwɔ*. Though admittedly of limited scope, this example is illustrative of a more dramatic type of change in grammatical replication in which a form in the recipient language becomes used in a new context on the model of the source language. Additional examples involving the creation of a new grammatical function are illustrated in the case studies following this methodological introduction.

As this last example illustrates, grammatical replication is not itself a mechanism of change, but rather it involves various mechanisms of change, such as reanalysis and extension. In the case of Syriac *lwɔ*, for instance, the major mechanism of change was extension. In addition to reanalysis and extension, cases of grammatical replication may also involve grammaticalization.\(^{19}\) In these cases, a structure in the source language is replicated in the recipient language by following a common path of grammaticalization. It should be stressed, however, that there are cases in which grammatical replication does not involve

\(^{18}\) Similar cases involving contact-induced changes in verb-preposition combinations in the French of Prince Edward Island are analyzed in detail in King 2000.

grammaticalization. These are called restructuring in the terminology of Heine and Kuteva. Grammatical replication, then, is a broader category which sometimes encompasses grammaticalization. Thus, grammatical replication is not itself a mechanism of change, but rather it can involve various mechanisms of change, such as reanalysis, extension, and/or grammaticalization.

In the contact-linguistic literature, it has become increasingly clear that contact-induced change and internally-motivated change are not mutually exclusive. Thus, this study does not adopt a binary framework according to which a change is either contact-induced or internally-motivated. Rather, a change can be contact-induced, internally-motivated, or both. Nevertheless, it is still important to establish whether or not language contact played a role in a given change. A good deal of scholarly literature has, in fact, been devoted to this question. Establishing that language contact is a factor is especially important in cases involving grammatical replication, since these are often the most difficult to prove. In the case studies of

20 This differs from Sakel who states that cases of pattern replication, which is roughly equivalent to grammatical replication in this study (see below p. 336), “inherently involve a process of grammaticalization” (2007: 17).
22 Heine and Kuteva 2006: 65; see also the diagrams in 2006: 95 (figure 2.1); 2008: 59 (figure 1); 2010: 87 (figure 4.1).
23 See similarly Aikhenvald 2003, esp. 3. This differs from Harris and Campbell (1995) who argue that borrowing, which is roughly equivalent to grammatical replication in this study (see below pp. 336), is itself a mechanism of change alongside extension and reanalysis.
grammatical replication that follow, an attempt has been made to trace systematically the
contact-induced changes in question with the support of historical data. This allows for a
convincing case to be made for language contact playing a role in the described changes. As a
final control for proving contact, the sister dialects of Syriac have also proven useful.

8.5 Alternative Designations for Grammatical Replication

It has already been noted that the field of contact linguistics lacks a uniform
terminology (§2.2). This is particularly the case for changes that are termed grammatical
replication in this study, which it seems that almost every contact linguist calls by a different
name. Thus, it will be useful to conclude this methodological introduction with a survey of
various alternative designations that have been applied to similar types of contact-induced
change in the contact linguistic literature.27

Grammatical replication is similar to the replication of linguistic patterns within Matras
and Sakel’s typological project on Language Convergence and Linguistic Areas.28 In this
framework, the replication of linguistic patterns “pertains to the semantic and grammatical
meanings and the distribution of a construction or structure” in contrast to the replication of
linguistic matter, which involves “actual phonological segments” (2007b: 7; cf. 2007c). Thus,
their replication of linguistic patterns is an exact synonym for grammatical replication as used
in this study.

Grammatical replication also encompasses what Harris and Campbell term borrowing,
which they define as “a change in which a foreign syntactic pattern (either a duplication of the

28 Matras and Sakel 2007a, 2007c; Sakel 2007. See also <http://www.llc.manchester.ac.uk/
research/projects/lcla/>.
foreign pattern or at least a formally quite similar construction) is incorporated into the borrowing language through the influence of a donor pattern found in a contact language” (1995: 122).29 A number of other linguists have also termed types of contact-induced change similar to grammatical replication as ‘structural borrowing’,30 ‘syntactic borrowing’,31 or ‘grammatical borrowing’.32

Grammatical replication also shares similarities with *metatypy*, a type of contact-induced change which has been described in a series of studies by Ross and also employed by others.33 Ross defines metatypy as “a diachronic process whereby the morphosyntactic constructions of one of the languages of a bilingual speech community are restructured on the model of the constructions of the speakers’ other language” (2007: 116). In his various publications, Ross vacillates over whether this restructuring affects morpho-syntactic constructions, as in this definition, or is restricted to “syntax” (2006: 95) or is extended to “semantic and morphosyntactic structure” more generally (1996). In his work before 2006, Ross included varying degrees of restructuring within the category of metatypy. Since 2006, however, Ross has narrowed his definition of metatypy to include only such restructuring that results in a change in type, with type to be understood in the sense of typology, e.g., a change from SOV to SVO word order. Ross now refers to similar kinds of contact-induced change that do not result in a change in type as *calquing* or more specifically *grammatical calquing*. Thus,

29 For a slightly different definition that incorporates “replication,” see Harris and Campbell 1995: 51.
32 See, e.g., King 2000; Matras and Sakel 2007a: 1; Wohlgemuth 2009: 224, 272.
in Ross’ more recent work, grammatical calquing and metatypy result in similar changes, but differ in degree (occasional vs. systemic). Grammatical replication as defined in this study, then, is a broader category of contact-induced change, which encompasses both Ross’ metatypy and grammatical calquing.

A number of linguists in addition to Ross have labeled contact-induced changes similar to grammatical replication as calques. Some prefer to further qualify the term calque, such as ‘lexicon-syntactic calques’ (Silva-Corvalán 1994: 174-184).

Grammatical replication is similar to selective copying in the Code-Copying Model developed by Johanson (see, e.g., 2002a) and subsequently employed by others. The Code-Copying Model describes contact-induced change in terms of “elements of a foreign code being copied into the code of the recipient language” (Johanson 2002a: 8-9). This copying can be either global or selective. In global copying, a unit of a foreign code is copied into the basic code in its entirety, i.e., as “a block of material, combinational, semantic and frequential structural properties” (2002a: 9). The most common examples of global copying are what are called loanwords in this study. In selective copying, in contrast, the original is only one of these selected properties. Johanson’s selective copying is a broader category than grammatical replication in that it can also include, inter alia, copies of phonology and semantics; nevertheless, grammatical replication, as employed in this study, is similar to the selective copying of (morpho-)syntax in Johanson’s Code-Copying Model.

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36 For the relationship between grammatical replication and Johanson’s Code-Copying Model, see Heine and Kuteva 2005: 6-7.
Grammatical replication overlaps with what a number of scholars term *convergence*. Though the term convergence was employed in earlier contact-linguistic literature (e.g., Weinreich 1953: 113), its more recent use seems to be based primarily on the influential study of language contact in the Kupwar village (India) by Gumperz and Wilson (1971). In their study, Gumperz and Wilson use convergence to refer to a series of contact-induced changes that led Marathi, Hindi, and Kannada to develop the same surface syntactic structure resulting in the intertranslatability of the three languages. This use of convergence has been adopted by a number of linguists. Silva-Corvalán, for instance, defines convergence as “the achievement of greater structural similarity in a given aspect of the grammar of two or more languages, assumed to be different at the onset of contact” (1994: 4-5; 1995: 8). Similarly, Thomason (2007: 187; cf. 2003: 700) uses convergence to refer to a type of contact-induced change that usually occurs in situations of long-term bilingualism in which structures common to both languages are favored, often resulting in a change of frequency of existing patterns and not in the addition of new patterns. In addition, Aikhenvald employs convergence in the sense of “structural isomorphism, whereby the grammar and semantics of one language are almost fully replicated in another” (2002: 6). Matras (2010) has also used convergence in the sense of his pattern replication, which was mentioned above (p. 336). Convergence is used in similar senses by a number of scholars.\(^{37}\) In many of these cases, convergence involves systemic changes.\(^{38}\)

Thus, grammatical replication would be a broader category, including convergence.

Grammatical replication is similar to *indirect diffusion* in the work of Aikhenvald (2002; cf. Heath 1978). In Aikhenvald’s framework, indirect diffusion refers to the transfer “of

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\(^{38}\) See also Matras 2010: 68.
categories, or of terms within a category” (2002: 4). Indirect diffusion can involve a number of
different changes, including 1. “the emergence of new categories and new paradigms …
through reanalysis of existing grammatical patterns and through shared grammaticalization
processes” (2002: 237); 2. “the creation of new categories – by what can be called ‘loan
translation’ … or by introducing new morphemes” (2002: 237); and 3. “changes known as
‘enhancement’ – whereby certain marginal constructions come to be used with more frequency
if they have an established correspondent in the source language” (2002: 238). In each of these,
Aikhenvald’s indirect diffusion is similar to grammatical replication, as used in this study.

These represent only a few of the many different terms by which contact-induced
changes similar to grammatical replication are known in the contact-linguistic literature.
Others include ‘modelling’,39 ‘convert interference’,40 ‘pattern transfer’,41 ‘indirect transfer’,42

From all of these various terms, grammatical replication has been adopted in this study
because it is broad enough to include various kinds of change that affect the structural material
of language, especially (morpho-)syntax. In addition, the theory of grammatical replication as
developed by Heine and Kuteva can be equally applied to situations of borrowing, imposition,
and neutralization.48

40 Mougeon and Beniak 1991: 10-11, passim.
42 Silva-Corvalán 1994.
44 Corne 1999: 8, 9, passim; Mufwene 2001: 23, passim.
45 Weinreich 1953: 30-31.
47 Türker 1999.
48 For this typology, see §2.3-2.6.
8.6 Conclusion

This chapter has established the methodological framework for a kind of contact-induced changed termed grammatical replication. Grammatical replication was defined as a contact-induced change in which speakers of the recipient language create a new grammatical structure on the model of a structure of the source language. Grammatical replication can result in various kinds of change in the recipient language. Two in particular were discussed and illustrated: 1. an increase in the frequency of a pattern; 2. the creation of new structures. Grammatical replication, as defined in this study, is similar to a number of other changes discussed in the contact-linguistic literature, including borrowing, metatypy, calque, and convergence. The next two chapters provide extended case studies of grammatical replication in Syriac due to Greek. Chapter §9 argues that the development of the Syriac copula ʿītaw(hy) ‘he is’ is due, at least partly, to its replication on the Greek verbal copula ἔστιν ‘he is’. Chapter §10 discusses the replication of the Syriac conjunctive particle den ‘then, but’ on the model of Greek δὲ ‘but’.
“No doubt even the best original writings in Syriac give evidence of the strong influence of Greek Syntax … The Greek idiom exercised its influence with all the greater force and effect, precisely at those points where Syriac itself exhibited analogous phenomena” (Nöldeke 1904: ix-x)

9.1 Overview

The past several decades have witnessed a number of syntactic studies on Syriac. While Nöldeke’s *Compendious Syriac Grammar* (1904) – with an occasional clarification from Duval (1881) and Brockelmann (1981) – remains unsurpassed in its description of the phonology and morphology of classical Syriac, studies of word order, cleft sentences, and the particle *d*, to name only a few, have not so much refined Nöldeke’s description as entirely replaced it. Within this resurgence of syntactic research on Syriac, the most significant progress has arguably been made in the analysis of the verbless clause. Stemming from the

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3 Goldenberg 1971; 1990; Wertheimer 2001a; 2001c.
4 Wertheimer 2001b.
5 It is for this reason that the present author is currently preparing a new syntax of Classical Syriac to be published with Ugarit-Verlag in the series Lehrbücher orientalischer Sprachen (LOS).
watershed study of Goldenberg (1983) with important additions by others, the Syriac verbless clause has become increasingly well understood. That being said, however, its description is far from complete. In particular, studies of the Syriac verbless clause – like Syriac grammatical studies in general – have been limited by a lack of diachronic perspective. In addition, there continues to be no agreement on the possible role that contact with Greek played in changes in verbless clause formation in Syriac, with some arguing that contact with Greek was a factor, whereas others maintain that it was not. The current chapter explores the role that contact with Greek played in the creation of a fully functioning copula in Syriac from the existential particle ʾiṯ ‘there is’ plus a pronominal suffix. Among the many attested changes in this development, it is argued that two are specifically the result of contact with Greek: 1. the extension of the copulaic use of ʾiṯ to verbless clauses with substantival predicates (§9.3); 2. the raising of copulaic ʾiṯ from a minor use pattern to a major use pattern throughout the history of Syriac (§9.4).

Throughout this chapter, particular attention is paid to establishing that language contact did in fact play a role in the described changes. This is important for the field of Syriac Studies since, as has already been mentioned, this remains an open question in the literature. In addition, this represents a valuable contribution to the field of Contact Linguistics. In the contact-linguistic literature, it continues to be disputed whether or not structure can be transferred in situations of borrowing. In the words of Poplack, “[t]he transfer of grammatical

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8 See most recently Pat-El 2006: 342-344.
structure in a situation of language contact has had a contentious history in linguistic thought, and no consensus has yet been reached regarding its nature, extent, or even its existence” (1996: 285). At least part of this disagreement stems from the fact that many of the purported cases of structural transfer in situations of borrowing are based on insufficient data and lack adequate analysis. This chapter, thus, aims to add an additional example of the transfer of structure in a situation of borrowing.

9.2 Verbless Clause Formation in Syriac

It is necessary to begin with an overview of verbless clause formation in Syriac. In Syriac, verbless clauses can be constructed in two basic ways (Wertheimer 2002), which will be termed Pattern A and Pattern B. Pattern A consists of the word order predicate-subject with the subject restricted to an enclitic personal pronoun, as in the example in (9-1):

(9-1) Syriac Acts of Thomas (3rd cent. CE; ed. Wright 1871a)

\[
\begin{align*}
\text{wga} & \quad \text{ (?,)} & \quad \text{c} & \quad \text{c} \\
\text{and} & \quad \text{man-M.SG.EMP} & \quad \text{I} & \quad \text{Hebrew-M.SG.DET} \\
\text{‘I am a Hebrew man’ (172.13)}
\end{align*}
\]

9 See recently Poplack and Levey 2010.
10 Arguments in favor of analyzing contact-induced changes in Syriac due to Greek as borrowing are presented in §3.4.
In this sentence, the nexus between the subject (��) ‘I’ and the predicate ܓܒܪܐ ‘man’ is expressed by the syntactic juxtaposition of the two terms. The subject in this type of verbless clause is restricted to an enclitic personal pronoun in Syriac. In the example in (9-1), the enclitic status of the pronoun (��) ‘I’ is indicated by its phonologically reduced form – the independent form is ʾenא – as well as by the fact that it interrupts the noun-adjective phrase ܓܒܪܐ ܥܒܪܝܐ ‘Hebrew man’.

When a subject other than a personal pronoun is to be expressed with a Pattern A verbless clause, the logical subject is extraposed either to the front or to the rear of the predicate-subject nucleus with the personal pronoun resuming the extraposed logical subject:

(9-2) Syriac Acts of Thomas (3rd cent. CE; ed. Wright 1871a)

ܢܡܛܠ ܕܛܝܒܘܬܝ ܥܡܟ ܗܝ

because NML + grace-F.SG.CON + my with + you-M.SG she

‘because my grace is with you’ (172.16)

In this example, the predicate is ʿammאק ‘with you’, and the subject is (ܐ) ‘she’, which refers to the extraposed logical subject ܕܝܒܘܬ(y) ‘my grace’. This type of extraposition in verbless clauses is not limited to Syriac, but occurs in other dialects of Aramaic, such as Egyptian

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14 There are rare instances in which the pronoun does not seem to be enclitic: ‘אמ הוי גֵר ד’אֶלַח’ .transparent 4(n)ton [with that-F.SG for NML-god-M.SG.EMP you-M.PL] ‘For, you are with that of God’ (Philoxenos, Letter to the Monks of Beth Gawgal; ed. Vasiškalsde 1902: 158.16). It should be noted that the second person pronouns, including 4(n)ton, do not have a marked non-attached enclitic form of the pronoun (in contrast to the first and third person pronouns); it is, however, still noteworthy that 4(n)ton is not in the enclitic word position in this example. It should also be noted that the pronoun is not enclitic in some other dialects of Aramaic (see fn. 23 below).

Aramaic (Muraoka and Porten 1998: 294-296) and Jewish Palestinian Aramaic (Butts 2006: 61-64).

Verbless clauses belonging to Pattern B are constructed with the existential particle 'ʾit ‘there is’ plus a possessive pronominal suffix:\textsuperscript{16}

(9-3) Syriac Acts of Thomas (3rd cent. CE; ed. Wright 1871a)

\begin{verbatim}
bar ʿesrin ger wahlō šnin
son-M.SG.CON twenty-M.PL.ABS for and + one-F.SG.ABS years-M.PL.ABS
ʾitay yawmōnō
EX + my today
\end{verbatim}
‘for I am twenty-one years old today’ (317.19-20)

In this example, 'ʾit serves as the nexus between the subject ‘I’, which is expressed by a possessive pronominal suffix, and the predicate bar ʿesrin … ‘son of twenty …’. In Syriac, there are also rare examples in which an enclitic personal pronoun occurs instead of a possessive pronominal suffix:\textsuperscript{17}

(9-4) Letter 47 by Timotheos I (d. 823; ed. Braun 1901)

\begin{verbatim}
layt ʿennen den laḡmar bḥaw mō dʾahḍinan
NEG + EX they-F but completely in + that-M.SG what NML + be.held-PART.M.PL + we
\end{verbatim}

\textsuperscript{16} For the various uses of 'ʾit in Syriac, including the copulaic use, see Jenner 2003; Joosten 1996: 97-107; Goldenberg 1983: 117-131; Muraoka 1977; 2006; Nöldeke 1904: §301-308; Wertheimer 2002: 4-5.

\textsuperscript{17} Nöldeke 1904: §302; Goldenberg 1983: 117; Van Rompay 1994: 82-83; Joosten 1996: 107.
‘But, they are not at all in that (book) that we possess’ (306.10-11)\(^{18}\)

(9-5) Syriac Translation of Eusebius’s *Ecclesiastical History* (before 420;\(^{19}\)ed. Wright and McLean 1898)

\[
\text{layt} \quad \text{ʾennon} \quad \text{nbiye}
\]
\[
\text{NEG+EX} \quad \text{they-M} \quad \text{prophet-M.PL.EMP}
\]

‘they are not prophets’ (297.13-14)\(^{20}\)

As the latter example illustrates, most cases of ʾɨt, or the negative *layt (<*lā + *ʾθay)*, with an enclitic personal pronoun occur in translations from Greek. It should be noted that this construction with an enclitic personal pronoun instead of a possessive pronominal suffix is more common in other dialects of Late Aramaic.\(^{21}\)

So, to summarize, the verbless clause in Syriac can be constructed according to two different patterns, which are illustrated in the following examples:

(9-6) *Book of the Laws of the Countries* (ca. 220; ed. Drijvers 1965)

\[
\text{ʾellɔ} \quad \text{mɔ(ʾ)ne} \quad \text{ʾennon}
\]

---

\(^{18}\) Compare this to a similar construction, but with a suffix, several lines later: *wlaytaw(hy) hono petgɔmɔ bšabʾin* [and + NEG + EX + his this-M sentence-M.SG.EMP in + seventy-M.PL.ABS] ‘and this sentence is not in the Septuagint’ (*Letter 47* by Timotheos I; ed. Braun 1901: 306.14). Similarly see Braun 1901: 304.21-22.

\(^{19}\) This translation is preserved in one of the earliest dated Syriac manuscripts, St. Petersburg, Public Library, Cod. Syr. 1 (461/462). The translation must, however, have predated this manuscript by at least half a century since the Syriac version was the basis of an Armenian translation from the first decades of the fifth century (Van Rompay 1994: 73 n. 15; cf. Merx, apud Wright and McLean 1898: xiii-xvii).

\(^{20}\) Translating Greek οὐκ εἰσὶ προφῆται [NEG be-PRES.ACT.IND.3.P prophet-M.P.NOM] ‘they are not prophets’.

\(^{21}\) See below pp. 357-364.
but instruments-M.PL.EMP they-M

‘But, they are instruments …’ (10.10-11)

(9-7) Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965)

EX + they-F.P for instruments-M.P.DET

‘For, they are instruments …’ (12.3)

Based on pairs such as (9-6) and (9-7), it is clear that these two types of verbless clauses are functional equivalents in Syriac. These two patterns, however, have different linguistic histories. Pattern A is an inheritance from earlier Aramaic and is attested already in the Old Aramaic period, as in (9-8):23

(9-8) Zakur (800-775 BCE)

man-M.SG.ABS humble-M.SG.ABS I

‘I am a humble man’ (KAI 202 A 2)

Pattern B, on the other hand, represents one of the final stages in the development of a copula from an earlier existential particle. This is discussed in the next section.


23 As this example illustrates, the subject pronoun in this type of verbless clause is not enclitic in Old Aramaic as it is in Syriac (at least usually, see fn. 14). This is also the case with other dialects of Aramaic, such as Jewish Palestinian Aramaic (Butts 2006: 62 with n. 38).
9.3 Extension in the Copulaic Use of ṣʾṯ

The etymological source of the Syriac particle ṣʾṯ is earlier Aramaic *ʾḏay. In dialects prior to middle Aramaic, the only attested use of *ʾḏay is as an existential particle meaning ‘there exists, there is’.25

(9-9) Egyptian Aramaic (460-459 BCE)

\[\begin{align*}
\text{ʾp} & \quad \text{ʾṯy} & \quad \text{spr} & \quad \text{mrḥq} \\
\text{also} & \quad \text{EX} & \quad \text{document-M.SG.CON} & \quad \text{renunciation-M.SG.ABS} & \quad \text{one}
\end{align*}\]

‘Moreover, there is one document of renunciation’ (TAD B2.3:23)

The particle *ʾḏay is used as an existential particle throughout the history of Aramaic, even up until Neo-Aramaic:


\[\begin{align*}
\text{ʾṭā} & \quad \text{gūrgur} & \quad \text{ʾu-ʾṭā} & \quad \text{xāṭṭā} & \quad \text{grisō} \\
\text{EX} & \quad \text{burghul} & \quad \text{and + EX} & \quad \text{wheat-PL} & \quad \text{be.ground-PART.PL}
\end{align*}\]

‘There is burghul, and there is ground wheat’ (S:50)

In this example, Neo-Aramaic ʾṭā (< *ʾḏay) functions as an existential particle, just like its cognate from Imperial Aramaic almost two and half millennium before, which was illustrated in (9-9).

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25 Proposed examples of the copulaic use of *ʾḏay in Egyptian Aramaic are evaluated and rejected in Muraoka and Porten 1998: 290-291 n. 1141. As per Tropper (1993: 137-138; 1997: 106), lyšḥ in KAI 216.16 should not be analyzed as *ʾḏay plus a pronominal suffix – be it singular (e.g., Gibson 1975: 91; Blau 1972: 60; Hoftijzer and Jongeling 1995: 576) or plural (e.g., Cross and Freedman 1952: 30) – but rather as a non-suffixed form with the final h functioning as a mater lectionis for ʾ < *-ay(V). Similar writings with final h occur in Old Aramaic with the Langimperfekt and some nominal forms from third weak roots; for which, see Cross and Freedman 1952: 31; Degen 1969: §19; Garr 1985: 46.
By the time of the Aramaic of Daniel, *ʾiḥay is also found with possessive pronominal suffixes and a new function as a copula. In the Aramaic of Daniel, however, the copulaic use of *ʾiḥay is limited to adverbial predicates, as in (9-11), and participial predicates, as in (9-12):

(9-11) Biblical Aramaic of Daniel (Middle Aramaic)

\[
\text{mǝdǝRon} \quad \text{ʾim} \quad \text{bišrɔ} \quad \text{lɔ} \quad \text{ʾiḥɔh} \text{ }
\]

dwelling-M.SG.CON + their \quad \text{with} \quad \text{flesh-M.SG.EMP} \quad \text{NEG} \quad \text{EX + his}

‘their dwelling is not with mortals’ (Dan 2.11)

(9-12) Biblical Aramaic of Daniel (Middle Aramaic)

\[
\text{le(ʾ)lɔḥay} \quad \text{lɔ} \quad \text{ʾiṭeḥɔn} \quad \text{pɔlɔhɔn} \text{ }
\]

to + god-M.PL.CON + my \quad \text{NEG} \quad \text{EX + you-PL} \quad \text{serve-PART.M.PL.ABS}

‘you do not serve my gods’ (Dan 3.14; see also Dan. 2.26; 3.15, 18)

There are no examples in Daniel where *ʾiḥay plus a pronoun functions as a copula with a substantival predicate. These types of verbless clauses are constructed without a copula:

(9-13) Biblical Aramaic of Daniel (Middle Aramaic)

\[
\text{dǝnɔ} \quad \text{ḥelǝnɔ} \text{ }
\]

this-M.SG.EMP \quad dream-M.SG.DET

‘this is the dream’ (2.36)

In the Aramaic of Daniel, then, *ʾiḥay plus a pronominal suffix functions as a copula only with adverbial and participial predicates, but not with all predicate types.

\[26\] Bauer and Leander 1927: §68z; Rosenthal 1995: §95. It should be noted that the following developments are only attested in the Biblical Aramaic of Daniel and not that of Ezra. Thus, while many of the phonological – and even morphological – differences between the two corpora have been leveled through their complex transmission history, this represents an important (morpho-)syntactic distinction between the two corpora, suggesting that they represent two different dialects of Aramaic from different time periods.
By the time of Syriac, however, *ʾîthay plus a pronominal suffix also functions as a copula with substantival predicates. This use of *ʾîthay is already attested in early Syriac, as in the following example from the second-century *Odes of Solomon*:

\[(9-14) \textit{Odes of Solomon} \text{ (2nd cent.; ed. Charlesworth 1973)} \]

\[\text{kp̄n̄ \, dmr̄yɔ̌ \, ʾîthay} \]

\[\text{priest-M.SG.EMP \, NML + lord-M.SG.EMP \, ex + mine} \]

‘I am a priest of the Lord’ (20.1)

The use of a Pattern B verbless clause with a substantival predicate, then, represents an innovation in Syriac, already found in the earliest attested layer of the language.

The development of a copula from an existential particle follows a well-attested path of development. This is summarized in Figure 9-1:

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**Figure 9-1  Existential to Copula**

<table>
<thead>
<tr>
<th>Stage 0: existential (± adverbial complement)</th>
<th>‘There is money (on the table)’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>↓</strong> reanalysis <strong>↓</strong></td>
<td></td>
</tr>
<tr>
<td>Stage 1: copula with adverbial predicate</td>
<td>‘Money is on the table’</td>
</tr>
<tr>
<td><strong>↓</strong> extension <strong>↓</strong></td>
<td></td>
</tr>
<tr>
<td>Stage 2: copula with nominal predicate</td>
<td>‘Money is the root of all evil’</td>
</tr>
</tbody>
</table>

---

27 Most scholars date the *Odes of Solomon* to the second century, though slightly later dates are occasionally suggested (see Lattke 1993a; 1995: 20-35; 2009: 6-10 with additional references).

28 The Old Syriac inscription As10, which probably dates to the third century, begins: ‘ʾyt]| 7h] gbr ʼrn  dh] mnhn  … [ex + his grave-M.SG.EMP this-M.SG. NML + PN …]. Based on their translation ‘this is the grave of John …’, Drijvers and Healey seem to analyze the substantival gbr ʼgrave’ as the predicate of the clause. Nevertheless, based on the word order, it seems more likely that gbr ʼrn  is the subject and dh] mnhn  … is the predicate, i.e., ‘This grave is John’s …’. Thus, this is probably not a case of the copulaic use of ʾît with a substantival predicate.
In Stage 0, the existential particle expresses existence: ‘there is money’ or ‘money exists’. This simple existential clause can take various complements, including adverbial complements, as in ‘money is on the table’. This is the stage found with *ʾbday in pre-Middle Aramaic. By the time of Middle Aramaic (= Stage 1), reanalysis has occurred: ‘there is money on the table’ becomes ‘money is on the table’. This does not result in a change to the surface structure, but it does affect the deep structure where the existential particle is now a copula with an adverbial predicate. A further development involving extension occurs in Stage 2 when the predicate type is no longer limited to an adverbial predicate but occurs with other predicate types, such as substantival predicates.

The change that is of primary importance to the current discussion is the extension that occurred in Syriac whereby ʾṯ plus a pronominal suffix came to be used with substantival predicates. It is argued here that this extension is due to its replication on the Greek verbal copula ἐστίν. Before looking at this extension, however, it is necessary to show that Syriac-speakers did in fact equate Syriac ʾṯ plus a pronominal suffix with Greek ἐστίν. This identification can be established from the typology of translation technique, as is illustrated in the following example:

(9-15) Greek

κύριος γάρ ἐστίν τού σαββάτου

lord-NOM.M.SG for be-PRES.ACT.IND.3.SG ART-GEN.M.SG Sabbath-GEN.M.SG

ὁ υἱὸς τοῦ ἀνθρώπου

ART-NOM.M.SG son-NOM.M.SG ART-GEN.M.SG man-GEN.M.SG

‘For, Lord of the Sabbath is the Son of Man’ (Matt 12.8)

(9-16) Old Syriac Sinaiticus (3rd cent. [?]; ed. Kiraz 1996)
In the Old Syriac Sinaiticus version in (9-16), the Greek clause with the verbal copula ἐστίν ‘he is’ is rendered by a Pattern A verbless clause: *breh* ‘his son’ is the predicate and is followed by the subject *(h)u* ‘he’, which refers to the extraposed logical subject ‘Lord of the Sabbath’. In contrast, in the Peshitta version, the Pattern A verbless clause is abandoned, and in its place one finds a form of the existential particle *ʾaw* plus a third person masculine singular pronominal suffix. In the Peshitta version, then, the ‘conjugated’ form of *ʾaw* exactly replicates the Greek verbal copula ἐστίν. Such a replacement is not limited to this one example, but it is indicative of a broader trend. In Matthew, for instance, the copulaic use of *ʾaw* plus pronominal suffix is attested only four times in each of the Old Syriac versions (Curetonianus and Sinaiticus), but twenty-two times in the Peshitta version (Joosten 1996: 150). This replacement is even more
dramatic when one turns to the seventh-century Harqlean version, where most of the verbless clauses without a copula have been replaced by the pattern with a copula. In the book of Psalms, for instance, there is only one token of copulaic ʾi in the Peshitta version compared to more than eighty examples in the Harqlean version (Jenner 2003: 300-307). Given that it is well-established that later Syriac translations tend to provide a more formal equivalence in comparison with earlier translations, this example suggests that Syriac-speakers equated Syriac ʾi plus pronoun with the Greek verbal copula ἐστίν.

Now that it has been established that Syriac-speakers equated ʾi plus a pronominal suffix with Greek ἐστίν, it is possible to turn to the extension whereby Syriac ʾi plus a pronominal suffix came to be used with substantival predicates. It is argued that this extension is due to its replication on Greek ἐστίν, with which it was identified by Syriac-speakers. In Greek, ἐστίν has several uses. First, it can function as a verb of existence, as in (9-18):

(9-18) P.Dura 12 (225-250 CE)

\[
\begin{array}{cccc}
\text{ἐὰν} & \text{δὲ} & \text{μὴθεὶς} & \text{τούτων} \\hline
\text{if} & \text{but} & \text{none-NOM.M.SG} & \text{this-GEN.M.PL} & \text{be-PRES.ACT.SUB.3.SG} \\
\text{ἀδελφοὶ} & \text{ὁμ[οπ]} & \text{ἄτριοι} & \text{brother-NOM.M.PL} & \text{of.the.same.father-NOM.M.PL}
\end{array}
\]

‘If there are none of these, brothers of the same father (receive the inheritance).’ (8-9)

In addition, Greek ἐστίν functions as a copula with various predicate types, including adjectival predicates, as in (9-19), adverbial predicates, as in (9-20), and substantival predicates, as in (9-21).

(9-19) P.Dura 12 (225-250 CE)

\[
\]

---

As outlined above, in Aramaic dialects prior to Syriac, *ʾθay plus a pronominal suffix functions as an existential particle and as a copula with adverbial and participial predicates, but not as a copula with substantival predicates. Thus, Greek ἐστίν and Aramaic *ʾθay plus a pronominal suffix are structural equivalents in a number of uses with the crucial exception of the copulaic use with substantival predicates. This is summarized in Table 9-1. In contrast to earlier dialects of Aramaic, Syriac ʿṯ plus a suffix can function as a copula with a substantival predicate. Thus, it is easy to see how extension could have occurred in Syriac based on the uses of ἐστίν in Greek.

---

30 This leaves aside questions of Tense-Aspect-Mood (TAM). Syriac ʿṯ plus a pronominal suffix often occurs with a conjugated form of √hwy ‘to be(come)’ that marks for TAM, whereas this information is encoded within the conjugated form of ἐστίν in Greek.
Table 9-1  Existentials and Copulas in Middle Aramaic, Syriac, and Greek

<table>
<thead>
<tr>
<th></th>
<th>Middle Aramaic</th>
<th>Syriac</th>
<th>Greek</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*ʾḥday + suffix</td>
<td>ʾḥ + suffix</td>
<td>ἔστιν</td>
</tr>
<tr>
<td>existential</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>copula</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/ adverbial predicate</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>w/ participial predicate</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>w/ substantival predicate</td>
<td>Ø</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

It could be objected, however, that extensions such as this are common cross-linguistically. How then can it be established that this particular extension is the result of language contact and not simply an internal language development? This is of course one of the methodological issues with grammatical replication specifically and so-called ‘structural’ contact-induced changed more generally.\(^{31}\) In this particular case, confirmation that the change is contact-induced is found in the distribution of the pattern among the Late Aramaic dialects.\(^{32}\) In particular, the one dialect that is known to have had as significant contact with Greek as Syriac did, namely Christian Palestinian Aramaic, attests a similar extension. In contrast, the other four dialects of Late Aramaic, which had less contact with Greek than Syriac and Christian Palestinian Aramaic, do not attest the same extention. The following pages briefly outline the use of *ʾḥday in the Late Aramaic dialects (moving from East to West) in order to provide additional support for analyzing the extension of the copulaic use of *ʾḥday to verbless clauses with substantival predicates in Syriac as a contact-induced change due to Greek.

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\(^{31}\) See p. 335, 343-344 as well as §11.2.

\(^{32}\) For earlier surveys, see Joosten 1996: 106-107; Pat-El 2006: 343-344.
In the Late East Aramaic dialects of Jewish Babylonian Aramaic and Mandaic, reflexes of *ʾθay function roughly similar to the uses found in the Aramaic of Daniel. In Jewish Babylonian Aramaic, the reflexes of *ʾθay are restricted to a relatively small set of uses. In positive clauses, Jewish Babylonian ʾyt plus a pronominal suffix functions as a copula with adverbial predicates:

(9-22) Babylonian Talmud (cited according to CAL)

\[
\begin{align*}
\text{ky} & \quad ʾ\text{y} & \quad \text{gbyh} & \quad ʾ & \quad \text{klp} \\
\text{when} & \quad \text{EX+her} & \quad \text{with} & \quad \text{NEG} & \quad \text{eat-PART.F.SG.ABS}
\end{align*}
\]

‘that when she is with him, she may not eat’ (San 51a.23)

Many of these clauses can still be interpreted as existential statements with adverbial complements. This construction with an adverbial predicate is also found in negative clauses:

(9-23) Babylonian Talmud (cited according to CAL)

\[
\begin{align*}
\text{lytyh} & \quad \text{bmtʾ} \\
\text{NEG.EX+his} & \quad \text{in+town-F.SG.DET}
\end{align*}
\]

‘he is not in the town’ (Ket 94a.23)

In addition, in negative clauses, ʾyt occurs with pronouns as a negation of participial predicates:

(9-24) Babylonian Talmud (cited according to CAL)

\[
\begin{align*}
\text{wnysn} & \quad \text{lyt} & \quad ʾ & \quad \text{hzy} \\
\text{and+Nisan} & \quad \text{NEG.EX} & \quad \text{you-2.SG} & \quad \text{see-PART.M.SG.ABS}
\end{align*}
\]

‘and you will not see Nisan’ (Ber 56b.12)

In Jewish Babylonian Aramaic, ʾyt plus a pronoun (whether independent or with a suffix) does not, however, function as a copula with substantival predicates.

\[33\] Schlesinger 1928: 9, 140-142; Sokoloff 2002a: 126-128.
A situation similar to Jewish Babylonian Aramaic is encountered in Mandaic. In Mandaic, reflexes of *ʾθay most commonly function as an existential particle:

(9-25) *Ginza Rba* (ed. Petermann 1867)

\[
\text{laiit} \quad \text{taga} \quad \text{bmalkutai}
\]

NEG + EX crown-M.SG.EMP in + kingdom-M.PL.CON + my

‘there is no crown in my kingdoms’ (1.207.21-22)

In addition to this independent use, reflexes of *ʾθay occur with possessive pronominal suffixes and function as a copula in Mandaic with adverbial predicates, as in (9-26), and participial predicates, as in (9-27).

(9-26) *Ginza Rba* (Late Aramaic; ed. Petermann 1867)

\[
\text{kma} \quad \text{daitinkun} \quad \text{balma}
\]

like + what NML + EX + you-M.P in + world-M.SG.EMP

‘as long as you are in the world’ (1.19.10)

(9-27) *Ginza Rba* (Late Aramaic; ed. Petermann 1867)

\[
\text{ukianh} \quad \text{biša} \quad \text{aitḥ} \quad \text{mn} \quad \text{qudam}
\]

and + nature-M.SG.CON + his evil-M.SG.EMP EX + his from beginning

‘his nature is evil from the beginning’ (1.278.19)

These uses of *ʾθay with pronominal suffixes are, however, relatively rare in Mandaic. As is the case with the Aramaic of Daniel as well as Jewish Babylonian Aramaic, Mandaic reflexes of *ʾθay never function as a copula with substantival predicates.

---

34 Macuch 1965: §294; Nöldeke 1875: §272.
35 For this interpretation, see Nöldeke 1875: §272; Drower and Mauch 1953: 15 (s.v. ait-), both of which erroneously refer to Petermann 1867: 1.155.15.
36 Nöldeke 1875: §272.
The function of *ʾηθ/ in late West Aramaic differs according to the dialect. In Samaritan Aramaic, the positive reflex of *ʾηθ/, which is written ʾyt, is rare, whereas the negative reflex, which is usually written lyt, occurs much more frequently. The negative lyt occurs independently as an existential particle, as in the following example:


<table>
<thead>
<tr>
<th>lyt</th>
<th>hwry</th>
<th>lbr</th>
<th>mnh</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG+EX</td>
<td>another-M.SG.ABS</td>
<td>to+outside-M.SG.ABS</td>
<td>from+his</td>
</tr>
</tbody>
</table>

‘there is none outside of him’ (41.9)

It also occurs in conjunction with two different sets of pronouns, *viz.*, suffixed genitive pronouns, as in lyt in (9-29), and enclitic personal pronouns, as in lytw (< *lyt + *hw) in (9-30):


<table>
<thead>
<tr>
<th>wlyty</th>
<th>sbq</th>
<th>lwn</th>
</tr>
</thead>
<tbody>
<tr>
<td>and+EX+my</td>
<td>leave-PART.M.SG.ABS</td>
<td>to+their</td>
</tr>
</tbody>
</table>

‘I will not leave them’ (53.186)


<table>
<thead>
<tr>
<th>lytw</th>
<th>mšlh</th>
<th>lh</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEG+EX+he</td>
<td>send-PART.M.SG.ABS</td>
<td>to+him</td>
</tr>
</tbody>
</table>

‘he will not send him’ (53.200-201)

With pronouns, the negative lyt occurs with various predicate types, including adverbial predicates, as in (9-31), participial predicates, as in (9-32), and substantival predicates, as in (9-33):


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Negative reflexes of *ʾθay are especially common with participial predicates as in (9-32). As the example in (9-33) illustrates, Samaritan Aramaic does witness *ʾθay plus a pronoun in verbless clauses with substantival predicates. This, however, occurs only in negative clauses. In positive clauses, *ʾθay plus pronoun is not attested as a copula with substantival predicates. This distribution is illustrated by the following example:

(9-34) Samaritan Aramaic Piyyutim (ed. Ben-Ḥayyim 1967)

lytw tʿtyd dmykl mmh dʿtdw

EX + he delicacy-M.SG.ABS of + food-M.SG.ABS from + what NML + prepare-SUF.3.M.PL

mʿṭyn tʿtyd qʿymh hw

die-PART.M.PL.ABS delicacy-M.SG.CON everlasting-M.SG.EMP he

---

37 Reading with a variant ms. (see note 5 in Ben-Ḥayyim 1988: 42).
‘it is not a delicacy of food from what mortals prepare; it is a delicacy of the Everlasting’ (Marq 14.3-5)

The first verbless clause in this example is negative, and thus the existential lytw ‘he is not’ (< *lā + *ʾiṭay + *hū) can be used; in contrast, the second verbless clause is positive and thus the existential *ʾiṭay does not occur. In Samaritan Aramaic, then, the negative lyt (< *lā + *ʾiṭay) can be used with verbless clauses of all predicate types, including those with a substantival predicate. This development represents a generalization of lyt as a negative marker. It does not, however, represent the extension of *ʾiṭay plus pronoun to verbless clauses with substantival predicates more generally. This in fact did not occur: *ʾiṭay plus pronoun is never attested in positive clauses with substantival predicates in Samaritan Aramaic. These types of verbless clauses are formed through the juxtaposition of subject and predicate, as in (9-35).


‘bdk ḫnh

servant-M.SG.CON + you-M.SG I

‘I am your servant’ (57.287)

Samaritan Aramaic, then, presents a complex situation. It is true that lyt, the negative of *ʾiṭay, is used as a copula with substantival predicates in Samaritan Aramaic, as illustrated in (9-33). Given that this expansion in the use of *ʾiṭay is only found in negative clauses, it is best to attribute it to the generalization of lyt as a negative marker. Thus, Samaritan Aramaic does illustrate a general tendency to expand the uses of *ʾiṭay. It does not, however, attest the same extension that is found in Syriac: *ʾiṭay plus a pronoun does not occur in positive verbless clauses with substantival predicates in Samaritan Aramaic.

A situation similar to Samaritan Aramaic is encountered in Jewish Palestinian Aramaic.
In Jewish Palestinian Aramaic, the negative *lyt* occurs with enclitic personal pronouns as a copula in verbless clauses with adverbial predicates, as in (9-36), with participial predicates, as in (9-37), and with substantival predicates, as in (9-38).


⟨wtly⟩ *lyt* ⟨hw⟩ ʿmy

and + boy-M.SG.EMP NEG + EX he with + me

‘and the boy is not with me’ (Gen. 44.34)


lmh *lyt* ʿt sbr

for + what NEG + EX you-M.SG understand-PART.M.SG.ABS

‘Why do you not understand?’ (1/1.60-61)

(9-38) Jewish Palestinian Aramaic *Piyyuṭim* (ed. Yahalom and Sokoloff 1999)

⟨wlyt⟩ ʿt prwq

and + EX.NEG you-M.SG redeemer-M.SG.ABS

‘and you are not a redeemer’ (37.9, 13, 15, 29, 39)

Negative reflexes of *ʾθay* are common with participial predicates as in (9-37). As the example in (9-38) illustrates, the negative *lyt* plus pronoun can be used as a copula in verbless clauses with a substantival predicate. As in Samaritan Aramaic, however, this use is restricted to negative clauses. Positive verbless clauses with substantival predicates are not attested with *ʾθay* plus a pronoun, but are formed through the juxtaposition of subject and predicate:

---

38 On a philological note, it should be added that in each case the manuscript has been secondarily changed to read: *whyk ʿt prwq* [and + how you-M.SG redeemer-M.SG.ABS] ‘and how can you be a redeemer?’

39 For a full description, see Butts 2006.
Like Samaritan Aramaic, then, Jewish Palestinian Aramaic illustrates a general tendency to expand the uses of *ʾiθay. In fact, the two dialects attest the same generalization of lyt as a negative marker. Nevertheless, once again like Samaritan Aramaic, Jewish Palestinian Aramaic does not attest the use of *ʾiθay plus a pronoun in positive verbless clauses with substantival predicates, and thus it does not attest the same extension that is found in Syriac.

In contrast to Mandaic and Jewish Babylonian Aramaic in the East and Samaritan Aramaic and Jewish Palestinian Aramaic in the West, Christian Palestinian Aramaic does witness the extension of *ʾiθay to positive verbless clauses with substantival predicates. In Christian Palestinian Aramaic, the reflexes of *ʾiθay combine with enclitic personal pronouns to form a copula. This copula can be used with adverbial predicates, as in (9-40), and with participial predicates, as in (9-41).


\[
\text{w}^\text{2yt} \quad \text{hw} \quad \text{dy} \quad \text{byt} \quad \text{knw}^3 \quad \text{ṯḥwṭ} \quad \text{ṯwr}^3
\]

and +EX he then house-M.SG.CON congregation-F.SG.ABS under mountain-M.SG.EMP

‘and a chapel is under the mountain’ (22.1.20-22.2.1)


---

40 Nöldeke 1868: 511-512.
These uses are similar to those found in Daniel as well as in the other Late Aramaic dialects. Christian Palestinian Aramaic, however, also attests ʾyt (and the negative lyt) plus a personal pronoun used as a copula with substantival predicates, as in the following examples:


\[ \text{ʾyt, hw, gr, ʾtr, šw} \]

`EX he for place-M.SG.EMP, flat-M.SG.ABS`

‘the place is flat’ (21.1.16-18)

In (9-43), ʾyt expresses the nexus between ʾn ‘I’ and the substantive ʾt ‘woman’. So, like Syriac, Christian Palestinian Aramaic attests an extension whereby the existential particle *ʾḥayy* plus a pronoun came to be used as a copula with substantival predicates.

To summarize, the existential particle *ʾḥayy* plus a pronoun is used as a copula with substantival predicates in two dialects of Late Aramaic, Syriac and Christian Palestinian Aramaic. In Mandaic, Jewish Babylonian Aramaic, Samaritan Aramaic, and Jewish Palestinian Aramaic, it is not. The distribution of this change is indicative of its catalyst. The two dialects, in which the extension occurred, are *a priori* known to have had significant contact with Greek.
In contrast, the other four dialects did not have as extensive contact with Greek, and so the extension did not occur there. This lends additional support to the argument that the extension of the copulaic use of *ʾθay to verbless clauses with substantival predicates that occurred in Syriac, as well as Christian Palestinian Aramaic, was due to language contact with Greek.

9.4 The Increase in the Frequency of ʾiṭaw(hy)

The second contact-induced change involving the copulaic use of ʾiṭ is its change from a minor use pattern to a major use pattern throughout the history of Syriac. As was outlined in §9.2, verbless clauses in Syriac can be formed according to either Pattern A or Pattern B. This does not, however, address the diachronic issue. In earlier Syriac, Pattern B was much less common than Pattern A. Over the course of Classical Syriac, however, this distribution changed, and Pattern B became increasingly more common. This diachronic change can be demonstrated by comparing Syriac compositions from different time periods.

Table 9-2 provides an overview of the distribution of verbless clauses with substantival predicates in a corpus of more than 125,000 tokens from twelve prose texts spanning from the second century up until Yaʿqub of Edessa.41 Graph 9-1 Distribution of Verbless Clauses with Substantival Predicates provides a graphic overview of the same data. Both the chart and the graph clearly bear out a diachronic increase of Pattern B vis-à-vis Pattern A in verbless clauses with a substantival predicate.

41 Negated verbless clauses are included; verbless clauses that are marked for tense with a form of √hwy are not, however, included. References to the individual verbless classes are given in §0.
This increase is not restricted to substantival predicates, but occurs with other predicate types as well. Table 9-3 provides an overview of the distribution of verbless clauses with prepositional phrase predicates in the same corpus spanning from the second century up until

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Yaʿqub of Edessa. Graph 9-2 provides a graphic overview of the same data. Again, the chart and the graph both clearly bear out a diachronic increase in Pattern B vis-à-vis Pattern A, but this time in verbless clauses with the inherited prepositional phrase predicates.

Table 9-3  Distribution of Verbless Clauses with Prepositional Phrase Predicates

<table>
<thead>
<tr>
<th>Source</th>
<th>Pattern A</th>
<th>Pattern B</th>
<th>% of Pattern B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book of the Laws of the Countries</td>
<td>3</td>
<td>2</td>
<td>40.00</td>
</tr>
<tr>
<td>Acts of Thomas (ca. 200-250 CE)</td>
<td>8</td>
<td>4</td>
<td>33.33</td>
</tr>
<tr>
<td>Selection of Aphrahaṭ (fl. 337-345)</td>
<td>7</td>
<td>2</td>
<td>22.22</td>
</tr>
<tr>
<td>Ephrem (d. 373), Prose Refutations</td>
<td>7</td>
<td>3</td>
<td>30.00</td>
</tr>
<tr>
<td>Teaching of Addai (ca. 420)</td>
<td>1</td>
<td>1</td>
<td>50.00</td>
</tr>
<tr>
<td>Life of Rabbula (ca. 450)</td>
<td>1</td>
<td>1</td>
<td>50.00</td>
</tr>
<tr>
<td>Selection of Philoxenos (d. 523)</td>
<td>2</td>
<td>21</td>
<td>91.30</td>
</tr>
<tr>
<td>Shemʿun of Beth Arsham (d. before 548)</td>
<td>0</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Eliya (mid-6th cent.)</td>
<td>3</td>
<td>17</td>
<td>85.00</td>
</tr>
<tr>
<td>Selection of Yuḥanon of Ephesus (d. ca. 589)</td>
<td>3</td>
<td>7</td>
<td>70.00</td>
</tr>
<tr>
<td>Denha (d. 649)</td>
<td>0</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Selection of Yaʿqub of Edessa (d. 708)</td>
<td>2</td>
<td>10</td>
<td>83.33</td>
</tr>
</tbody>
</table>

42 Again, negated verbless clauses are included; verbless clauses that are marked for tense with a form of √hwy are not, however, included. References to the individual verbless classes are given in §0.
When forming verbless clauses, then, Syriac-speakers had the option of either using Pattern A or Pattern B. In an attempt to replicate Greek verbless clauses with the verbal copula ἔστιν, Syriac-speakers constructed verbless clauses according to Pattern B with a copula of ʾi plus pronominal suffix. This attempt to replicate the Greek copula resulted in a diachronic change in Syriac in which Pattern B became increasingly more frequent in verbless clause formation at the expense of Pattern A from the second to the beginning of the eight century.⁴³ This did not result in a new function for the copula ʾi plus pronominal suffix; rather, this is a case in which contact with Greek resulted in the selection and favoring of one pattern in the recipient language (Pattern B) at the expense of another (Pattern A).

⁴³ See similarly Muraoka 2006: 134.
9.5 Conclusion

In the scholarly literature of Semitic Studies as well as of Contact Linguistics, there are far too few cases in which a proposed contact-induced (morpho-)syntactic change has been systematically described with the support of convincing diachronic data. One of the primary aims of this chapter has been to add one such case to the literature: the replication of the Syriac copula ʾiṭaw(hy) on the model of Greek ἔστιν. This grammatical replication resulted 1. in the extension of the copulaic use of ʾiṭ to verbless clauses with substantival predicates by at least the early second century; and 2. the raising of copulaic ʾiṭ from a minor use pattern to a major use pattern throughout the history of Syriac. These two changes are illustrative of two different aspects of grammatical replication. The latter change involved the selection and favoring of one pattern in the recipient language at the expense of another pattern. In contrast, the former change involved the introduction of a new grammatical function for the copula in Syriac. Particular attention was paid to establishing that contact with Greek was a motivating factor in these changes. This case of grammatical replication has implications for the field of Syriac Studies as well as that of Contact Linguistics. For Syriac Studies, it provides arguments in favor of analyzing the development of a fully functioning copula ʾiṭaw(hy) in Syriac as at least partially the result of contact with Greek. In addition, it provides important evidence for determining when Syriac-speakers first had intense contact with the Greco-Roman world. This is addressed in detail in the Conclusion (§11.2). For Contact Linguistics, it serves as an indication that structure can be transferred in situations of borrowing. This issue is also discussed in the Conclusion (§11.3).
10 The Syriac Conjunctive Particle *den* Replicated on Greek δέ

“[Grammatical replication] concerns meanings and the structures associated with them, but not forms, that is, phonetic substance is not involved” (Heine and Kuteva 2006: 49)

10.1 Overview

The present chapter continues to explore the topic of grammatical replication in Syriac due to Greek. It does this by presenting an additional case study involving the replication of the Syriac conjunctive particle *den* ‘then, but’ on the model of Greek δέ ‘but’. As is illustrated in (10-1) – (10-3), both Syriac *den* and Greek δέ are conjunctive particles that introduce clauses and occur in second position:¹

(10-1) Hebrew Vorlage

\[
\text{wattiṣṣaq ʿорפּו laḥāmoṯה ʷוֹרַת}
\]

and + kiss-PRE.3.F.SG PN to + mother-in-law-F.SG.CON + her and + PN

\[
\text{דָּבָאָו בּוֹה}
\]

cling-SUF.3.F.SG in + her

‘Orpah kissed her mother-in-law, and Ruth clung to her’ (Ruth 1.14)

(10-2) Greek Septuagint

\[
\text{kai kατεφιλῆσεν Ὀρφᾶ τὴν πενθερᾶν}
\]

¹ For the term ‘conjunctive particle’, see the discussion in van Peursen and Falla 2009: 66-67.
The Greek in (10-2) and the Syriac in (10-3) are both translations of the Hebrew passage in (10-1). Given that these two translations were conducted independently of one another, it is noteworthy that Syriac employs *den* in the exact same manner as Greek uses δέ: both occur in second position, and both mark a change in topic from the first clause to the second clause. Despite the obvious semantic, syntactic, and phonological similarity between Greek δέ and Syriac *den*, it has long been known that the etymological source of Syriac *den* is not Greek δέ, but earlier Aramaic *ʾidāyn.*

This chapter will explore how earlier Aramaic *ʾidāyn* was replicated on Greek δέ to produce Syriac *den*. This case has been chosen as an example because it clearly involves the transfer of both semantic and syntactic material from Greek to Syriac and so would seem to be

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a case of grammatical replication as defined in this study. It is not, however, entirely removed from the phonological sphere since the motivation for the grammatical replication seems to have been, at least partly, phonological. In addition, the replication may have even led to a phonological change in Syriac. Thus, this case helps to expand the picture of grammatical replication as articulated in the previous two chapters (§8-9).

10.2 Earlier Aramaic Antecedents of Syriac den

The etymological source of Syriac den is earlier Aramaic *ḥḏàyn. Aramaic *ḥḏàyn is to be analyzed as an accretion of *ḥḏ + *(a)y + *n. The *ḥḏ element is probably to be reconstructed as a substantive that originally meant ‘instant, moment’. Several different grammaticalization trajectories are attested for the reconstructed substantive *ḥḏ ‘instant, moment’ in the Semitic languages. First, *ḥḏ was grammaticalized into a temporal adverb meaning ‘then’ in Hebrew ḥz (Koehler and Baumgartner 1994-2000: 26-27), Arabic ḥḏ (Lane 1863-1893: 38c-39c), and Ugaritic ḫḏ (Tropper 2000: 744-745; del Olmo Lete and Sanmartín 2003: 17). A similar development in which *ḥḏ was grammaticalized into a temporal conjunction meaning ‘when’ is attested in Arabic ḥḏ (Lane 1863-1893: 38c-39c) and Sabaic ḥḏ (Beeston et al. 1982: 2). A different grammaticalization trajectory for the reconstructed

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3 Wright 1896-1898: 1.292; Tropper 2000: 377-378; 2003: 66. A different etymology is proposed by Pardee (2003-2004: 207-208), who relates *ḥḏ to the demonstrative element *ḏ. So already Brockelmann 1908: 324. This does not, however, seem as likely since it remains unexplained how a demonstrative element developed into a marked temporal element in various Semitic languages. For the demonstrative element *ḏ in Semitic, see Hasselbach 2007.

4 This is a common grammaticalization trajectory cross-linguistically (Heine and Kuteva 2002: 298). For Semitic examples, see Leslau 1987: 21. This development may perhaps also be found in Ugaritic ḫḏ ‘when’ (Tropper 2000: 796; del Olmo Lete and Sanmartín 2003: 16); Pardee (2000: 208 n. 275, 482-483; 2003-2004: 381) has, however, disputed this analysis preferring to understand all instances of Ugaritic ḫḏ as a temporal adverb meaning ‘then’.

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substantive *ʾiḏ is found in Ugaritic and Sabaic, where it developed into a multiplicative morpheme, e.g., Ugaritic ṣbʾ(ʾ)ḏ ‘sevenfold’ and Sabaic sʾlṭrʾḏ ‘three times’. In Arabic, *ʾiḏ also occurs in a number of frozen expressions, including ‘āmaʾiḏin ‘in that year’, ḥiṣyāṭaʾiḏin ‘on that evening’, ḡadāṭaʾiḏin ‘on that morning’, ḥiṇaʾiḏin ‘at that time’, ḡalṭaʾiḏin, ‘on that night’, sāʾataʾiḏin ‘at that hour’, waqṭaʾiḏin ‘at that time’, and yawmaʾiḏin ‘on that day’. Finally, *ʾiḏ occurs as the middle element in Gǝʾaz ʾyǝʾaze ‘now’ (Leslau 1987: 625), which is most likely a combination of the anaphoric demonstrative pronoun ʾyǝʾ-ṭi (< *hiʾ-ṭi < *siʾā-ṭi, with several ad hoc changes), the substantive *ʾiḏ, and the particle *(a)y.

In Aramaic, *ʾiḏ is attested independently only in Samʿalian, where it is limited to two occurrences, both of which are written ʾz (KAI 214.7; 215.9). Although the context of both passages is broken, in the second instance ʾz seems to occur in clause-initial position. Assuming a proto-form *ʾiḏayn, Tropper (1993: 65, 184) explains the absence of the final n in ʾz by the general weakening of word-final nasals in Samʿalian. If this were the case, however, one would still expect the *ay element in *ʾiḏayn to be represented in the consonantal orthography by y. Thus, it is more likely that the writing ʾz in Samʿalian represents the unexpanded form *ʾiḏ, which only later in the history of Aramaic was expanded to *ʾiḏ-ay-ʾn.

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5 For Ugaritic, see Tropper 2000: 377-379; for Sabaic, see Beeston 1984: 38; Stein 2003: 241.
8 For early interpretations of ʾz, see Dion 1974: 172 with notes 1 and 2.
10 Compare the writing ywmy ‘the days of’ for /yawmay/ (KAI 215.10).
Roughly a century after the attestation of ʾz in Samʿalian, the expanded form ʾzy is attested three times in the Aššur ostracon (KAI 233.6, 14 [2x]). Unfortunately, here again the context is badly broken, though ʾzy seems to occur in clause-initial position as well as other syntactic positions.\(^{11}\) The form ʾzy consists of *ʔid plus the expanding particle *(a)y, the meaning of which remains unclear. The combination of *ʔid and *(a)y is also found in Hebrew ʾāzay ‘then’ (Koehler and Baumgartner 1994-2000: 27), Tigre ʾāze ‘now’ (Littmann and Höfner 1956: 380), and Gaʾez ʾaʾez ‘now’ (Leslau 1987: 625).

The full form *ʔidayn is first attested in Imperial Aramaic. This form consists of earlier *ʔiday plus an expanding particle -*n, the meaning of which remains unclear. A different etymology was proposed by Torczyner (1916: 66-67), who suggested that the final -*n of *ʔidayn is to be analyzed as the accusative ending with nunation. If this were the case, however, one would expect **ʔidayan and not *ʔidayn. Thus, it seems preferable to analyze the final -*n in *ʔidayn as an enclitic particle. A similar accretion of *ʔid and -*n (but without *(a)y) might also be found in Arabic ʾidan ‘then’.\(^{12}\)

\(^{11}\) Hug 1993: 20-21, 73.

\(^{12}\) Brockelmann (1908: §246DAa) analyses the final -*an of Arabic ʾidan as the accusative ending with nunation. Given the parallel with Aramaic *ʔidayn, where such an analysis is impossible, the final -*an in Arabic ʾidan may be better analyzed as an enclitic particle (so already Aartun 1974: 5). Furthermore, it should be noted that the final -*an of ʾidan can be written either with tanwin fatha, i.e. <ʾd>, or with consonantal nūn, i.e. <ʾdn>. This provides additional support that the final -*an is to be analyzed as an enclitic particle and not the accusative ending with nunation, since the latter is always written with tanwin fatha, whereas other particles in Arabic occasionally exhibit variable orthography, such as the Energetic II ending, which can be written either with tanwin fatha or with consonantal nūn (Fischer 2002: §111 note 1).
In Egyptian Aramaic, the reflex of *ʾḏayn, which is written ʾdyn, or more rarely ʾdn, occurs at least nineteen times. In the Aramaic of this period, *ʾḏayn functions as a temporal adverb, which is best glossed ‘then, at that time’:

(10-4) Egyptian Aramaic (5th cent. BCE)

\[
\begin{align*}
\text{hkṣr} & \quad \text{kl} & \quad \text{ksyr} & \quad \text{wʿbd} & \quad \text{kl} \\
\text{harvest-IMP.M.SG} & \quad \text{all-M.SG.CON} & \quad \text{harvest-M.SG.ABS} & \quad \text{and+work-IMP.M.SG} & \quad \text{all-M.SG.CON} \\
\text{ʿbydh} & \quad ʾdyn & \quad tʾkl & \quad wtšb³ \\
\text{work-F.SG.ABS} & \quad \text{then} & \quad \text{eat-PRE.2.M.SG} & \quad \text{and+be.satisfied-PRE.2.M.SG} \\
\end{align*}
\]

‘Harvest every harvest and do every work! Then, you will eat and be satisfied’ (TAD C1.1:127)

As is illustrated by this example, *ʾḏayn occurs in clause-initial position in Egyptian Aramaic. The best attested use of *ʾḏayn in Egyptian Aramaic is to mark the transition from an initial date formula to the main clause at the beginning of a contract:

(10-5) Egyptian Aramaic (402 BCE)

\[
\begin{align*}
b & \quad 10 + 2 & \quad \text{ltḥwt} & \quad \text{šnt} & \quad 3 + 1 & \quad ʾrtḥššš & \quad \text{mlk³} \\
on & \quad 12 & \quad \text{to+Thoth} & \quad \text{year-F.SG.CON} & \quad 4 & \quad \text{PN} & \quad \text{king-M.SG.EMP} \\
\end{align*}
\]

---

13 Attestations include TAD A6.7:6; A6.10:1; B2.8:4; B2.9:1; B2.10:1; B3.6:1; B3.7:1; B3.9:1; B3.10:1; B3.11:1; B3.12:1; B3.12:10; B3.13:1; B4.6:1; B5.5:1; B8.1:8; C1.1:78; C1.1:127; D2.9.1. Porten and Lund (2002: 3-4) list twenty-two total occurrences; three are, however, in lacunae. See also Hoftijzer and Jongeling 1995: 13. The difference between the spelling ʾdyn and ʾdn is merely orthographic, suggesting that the diphthong ay has monophthongized, i.e., /ʾədēn/, and that the /ē/ can be written with or without a mater lectionis.

14 It is unclear if this is to be understood as the primary use of *ʾḏayn in this dialect or if this distribution is the result of the accident of survival. For additional examples, see TAD B2.9:1; B2.10:1; B3.7:1; B3.9:1; B3.10:1; B3.11:1; B3.12:10; B3.13:1; B4.6:1; B5.5:1; B3.6:1; D2.9:1.
As indicated by the double translation, the syntax of the clause in (10-5) is ambiguous since the date formula could be construed either within the clause, as in the former translation, or outside of the clause, as in the latter translation. This syntactic ambiguity likely played a role in the reanalysis of the word order that led to the movement of *ʾidāyn from clause-initial position to other positions in later dialects of Aramaic. In Egyptian Aramaic, then, it can be generalized that *ʾidāyn is a temporal adverb meaning ‘then, at that time’ and is restricted to clause-initial position.

In the Aramaic of both Ezra and Daniel, the reflex of *ʾidāyn is ʾēḏayin. The adverb ʾēḏayin occurs seven times in Ezra and twenty times in Daniel.15 As is illustrated in (10-6) and (10-7), ʾēḏayin occurs exclusively clause-initial and functions as a temporal adverb in both dialects of Biblical Aramaic:

(10-6) Biblical Aramaic of Ezra (Imperial Aramaic)

\[
\begin{align*}
\text{ʾēḏayin} & \quad \text{šelno} & \quad \text{ʾšōbayyo} & \quad ʾillek \\
\text{then} & \quad \text{ask-SUF.1.PL} & \quad \text{to + elder-M.PL.EMP} & \quad \text{that-PL}
\end{align*}
\]

‘Then, we asked those elders’ (5.9)

(10-7) Biblical Aramaic of Daniel (Middle Aramaic)

\[
\begin{align*}
\text{ʾēḏayin} & \quad \text{dɔniye( oltre)} & \quad \text{lḥaytew} & \quad ʾāzal
\end{align*}
\]

15 Ezra 4.9, 23; 5.4, 9, 16 (2x); 6.13; Daniel 2.15, 17, 19 (2x), 25, 48; 3.24; 4.16; 5.6, 8, 9; 6.4, 5, 6, 7, 12, 15, 19, 22; 7.19.
then PN to + house-M.SG.CON + his go-SUF.3.M.SG

‘Then, Daniel went to his house’ (2.17)

In addition to ʾedayin, the composite form beʾdayin, which consists of *ʾiḏayn plus the proclitic preposition b- ‘in’, is first attested in Biblical Aramaic. All instances of beʾdayin in Ezra and Daniel are clause-initial.\(^{16}\)

In Qumran Aramaic, the reflex of *ʾiḏayn, which is written ʿdyn, continues to function as a temporal adverb.\(^{17}\) In addition to occurring in clause-initial position, as in (10-8), ʿdyn is also attested in other syntactic positions, as in (10-9):

(10-8) *Genesis Apocryphon* (ca. 50 BCE; ed. Fitzmyer 2004; Machiela 2009)

\[
\begin{array}{cccc}
\underline{\text{'dyn}} & \underline{\text{bt'nwš}} & \underline{\text{ʾntty}} & \underline{\text{bhšš}} \\
\text{then} & \text{PN} & \text{wife-F.SG.CON} + \text{my} & \text{in} + \text{strength-M.SG.ABS} \\
\text{then} & \text{my} & \text{mllt} & \text{tqyp} \\
\text{then} & \text{with} + \text{me} & \text{spoke-SUF.3.F.SG} & \\
\end{array}
\]

‘Then, Bitenosh, my wife, spoke to me with great vehemence’ (2.8)

(10-9) *Genesis Apocryphon* (ca. 50 BCE; ed. Fitzmyer 2004; Machiela 2009)

\[
\begin{array}{cccc}
\underline{\text{wšgy}} & \underline{\text{lby}} & \underline{\text{ʾly}} & \underline{\text{ʾdyn}} \\
\text{and} + \text{great-M.SG.ABS} & \text{heart-M.SG.CON} + \text{my} & \text{on} + \text{me} & \text{then} \\
\text{then} & \text{be.changed-SUF.3.M.SG} \\
\end{array}
\]

‘And my mind was then greatly changed within me’ (2.11)

The clause-initial position of ʿdyn is the more common of the two. In the *Genesis Apocryphon*, for instance, the example in (10-9) is the only certain case in which ʿdyn is not clause-initial

\(^{16}\) The adverb beʾdayin occurs three times in Ezra (4.24; 5.2; 6.1) and twenty-five times in Daniel (2.14, 35, 46; 3.3, 13 [2x], 19, 21, 26 [2x], 30; 4.4; 5.3, 13, 17, 24, 29; 6.13, 14, 16, 17, 20, 24, 26; 7.1, 11). For additional details on ʾedayin and the related beʾdayin in Biblical Aramaic, see Buth 1990: 35-40.

\(^{17}\) Beyer 1984: 505; Díez Merino 1992: 38.
(perhaps also 5.9) compared to four cases in which it is clause-initial (2.8; 11.11 [probable]; 11.12; 22.20). In Qumran Aramaic, the composite form $b^{d}yn$ occurs more frequently than the simple $^dyn$.\textsuperscript{18} Again, most cases of $b^{d}yn$ are clause-initial, though there are examples where it occurs in second position. In the Genesis Apocryphon, there are at least eight certain cases where $b^{d}yn$ is clause-initial.\textsuperscript{19} In contrast, there are only three cases in which $b^{d}yn$ occurs in second position (2.1; 5.16; 22.2).

10.3 The Replication of Syriac $den$ on Greek δέ

As was illustrated in the previous section, *$i^d$ayn is a temporal adverb meaning ‘then’ in the Aramaic dialects that pre-date Syriac. In a majority of cases, it occurs in clause-initial position though there is a minor use pattern in which *$i^d$ayn occurs outside of initial position. It is this particle *$i^d$ayn that was replicated on Greek δέ to produce Syriac $den$. The identification of Aramaic *$i^d$ayn with Greek δέ is perhaps somewhat surprising given that the former was a clause initial temporal particle and the latter a second-position conjunctive particle that marks a change in topic. They are, however, both function words that mark progression (the former temporal, the latter logical). In addition, their identification was likely facilitated by their phonological similarity. Other cases in which phonological similarity promoted inter-lingual identification are known in the literature;\textsuperscript{20} they are, however, rare.

\textsuperscript{18} According to CAL, $^d$yn is attested 26 times in Qumran Aramaic whereas $b^{d}yn$ occurs 60 times. For an example of $bdyn$ in Middle Aramaic, not from Qumran, see Fitzmyer and Harrington 1978: 40.20. For possible attestations in Ḥatran Aramaic, see Hoftijzer and Jongeling 1995: 13.

\textsuperscript{19} 2.3; 2.13; 2.19; 6.10; 6.18; 10.1; 20.21; 22.18. Less certain examples include 6.6 and 6.8, both of which are at least partially restored, and 10.11 and 10.18, where the context is badly broken.

\textsuperscript{20} See, e.g., Heine and Kuteva 2003: 537-538.
Thus, the identification of Aramaic *ʾîḏayn with Greek δέ, which seems to have been based at least partly on phonology, is noteworthy. Having been identified with one another, Aramaic *ʾîḏayn was replicated on Greek δέ to produce Syriac den. This grammatical replication led to Syriac den more closely resembling Greek δέ than its earlier Aramaic predecessor *ʾîḏayn. The similarities to Greek δέ encompass at least three aspects: syntax, semantics, and phonology.

Syntactically, Syriac den occurs almost exclusively in second position like Greek δέ.21 This is illustrated in the following example:

(10-10) * Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965)

\[
\text{حنن} \quad \text{دان} \quad \text{ةمرون} \quad \text{له}
\]

we you say-SUF.1.C.PL to + him

‘Then, we said to him’ (4.8)

The placement of den in second position marks a significant innovation in Syriac, since conjunctive particles occur almost exclusively in first position in earlier forms of Aramaic, as well as in Semitic more generally. It should also be noted that den is not the only particle that was moved to second position due to contact with Greek, but that this also occurred with Syriac kay ‘surely, therefore’ (Sokoloff 2009: 618), lam ‘clearly, (quotative)’ (Sokoloff 2009: 691), and probably also ger ‘truly, indeed’ (Sokoloff 2009: 230; see also §10.6).

Semantically, Syriac den no longer has the marked temporal meaning that is found in earlier Aramaic reflexes of *ʾîḏayn, but rather it usually functions as a conjunctive particle that

\[\text{21 For minor exceptions, see Nöldeke 1904: §327.}\]
marks a change in topic, just like Greek δέ. This use is illustrated in the following example, which is repeated from (10-1) – (10-3) above:

(10-11) Hebrew Vorlage = (10-1)

wattissaq ʿarə  laḥāmoṯ  wərūṯ
and+kiss-PRE.3.F.SG PN to+mother-in-law-F.SG.CON+her and+PN

δῆəqo  bəh

cling-SUF.3.F.SG in+her

‘Orpah kissed her mother-in-law, but Ruth clung to her’ (Ruth 1.14)

(10-12) Greek Septuagint = (10-2)

καὶ κατεφίλησεν Ορφα τὴν πενθερὰν
and kiss-AOR.ACT.IND.3.SG PN ART-ACC.F.SG mother-in-law-ACC.F.SG

αὐτῆς . . . Ρουθ δὲ ἠκολούθησεν αὐτῇ
she-GEN.SG . . . PN de follow-AOR.ACT.IND.3.SG she-DAT.SG

‘Orpah kissed her mother-in-law . . . but Ruth clung to her’ (Ruth 1.14)

(10-13) Old Testament Peshitta (latter half of 2nd cent.) = (10-3)

wnešqat ʿarə  laḥmoṯ  . . . rʿut  den
and+kiss-SUF.3.F.SG PN to+mother-in-law-F.SG.CON+her . . . PN den

nqepṯəh

cling-SUF.3.F.S + her

---

22 For Greek δέ, see Bakker 1993; Denniston 1996: 162-189; Humbert 1960: §706-712. This use of Syriac den was described by E. Bar-Asher in a paper entitled “The particle den – A diachronic and a synchronic analysis,” which was presented at the Dorushe Annual Graduate Student Conference on Syriac Studies, Yale University, March 29, 2009. See also van Peursen and Falla 2009: 89-91.

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‘Orpah kissed her mother-in-law ... but Ruth clung to her’ (Ruth 1.14)

Syriac *den* in (10-13) does not have the marked temporal meaning of earlier Aramaic reflexes of *Ḥdayn*. Rather, Syriac *den*, like Greek δὲ in (10-12), marks a change in topic from the first clause to the second clause: Orpah is the subject of the first clause, Ruth is the subject of the second clause. In this example, the change in topic is contrastive with a translation equivalent of ‘but’ in English, translating the disjunctive *waw* in the Hebrew Vorlage. The change in topic does not, however, necessarily have to be disjunctive with either Greek δὲ or Syriac *den.* This can be illustrated by the following example from only several verses later in Ruth:

(10-14) Hebrew Vorlage

```
 wattere  ki- mit'ammesēt  hi lōkēt ḫittōh
 and + see-PRE.3.F.SG that be.determined-PART.F.SG she to + go-INF with + her
 wattēhdał  lōdabber ḫelehō
 and + cease-PREF.3.F.SG to + speak-INF toward + her

‘(Naomi) saw that she was determined to go with her, and she stopped speaking to her’
```

(Ruth 1.18)

(10-15) Greek Septuagint

```
 ἰδοὺσα  δὲ νωμιν ὅτι κραταιοῦται
 see-AOR.ACT.PART.NOM.F.SG δὲ PN that strengthen-PRES.PASS.IND.3.SG
 αὐτῆ ἃ τοῦ πορευέσθαι μετ' αὐτῆς ἐκόπασεν
 she-NOM ART-GEN.M.SG go-PRES.MID.INF with she-GEN grow.weary-AOR.ACT.IND.3.SG
 τοῦ ὅ λαλῆσαι πρὸς αὐτῆν ἐτι
 ART-GEN.M.SG speak-AOR.ACT.INF toward she-ACC yet

23 For the disjunctive *waw* in Biblical Hebrew, see Waltke and O’Connor 1990: 650-652.
```
‘When Naomi saw that she was strengthened to go with her, she grew weary of speaking to her again’ (Ruth 1.18)

(10-16) Old Testament Peshitta (latter half of 2nd cent.)

When Naomi saw that she was certainly inclined to go with her, she stopped telling her to go’ (Ruth 1.18)

In the verses directly before this example, Naomi tells Ruth to go back to her people with her sister-in-law Orpah; Ruth, however, responds with a moving speech in which she states her refusal to leave Naomi. The Syriac den in (10-16) and the Greek δὲ in (10-15), then, mark the change in topic from Ruth to Naomi. This is not, however, contrastive, but it is simply a change in topic. Thus, in contrast with earlier Aramaic *ʿðayn, which was a marked temporal particle, the primary function of den in Syriac is marking a change in topic, whether contrastive or not.24 This use of Syriac den is modeled on Greek δὲ, which has the same function.

24 In addition to marking a change in topic, Syriac den has several marginal uses, especially in exclamatory clauses (Nöldeke 1913: 30; Joosten 1988: 180; 1999: 209-210). One such exclamatory clause consists of mon den plus a suffix-conjugation verb with the meaning ‘would that …’ (for this pattern, see Van Rompay 2007b): [who den one-F.SG from eye-F.PL.CON + my blind-SUF.3.M.SG and + eye-F.PL.CON + your-F.SG den your-F.SG look-PART.F.PL.ABS be-SUF.3.F.PL on + me in + custom-M.SG.CON + their-F] ‘Would that someone blind one of my eyes and that your eyes would look upon me according to their custom!’ (Acts of Thomas, 286.12-13; 3rd cent. CE; ed. Wright 1871a).
Finally, and particularly interesting for this study, Syriac *den has been phonologically reduced from earlier Aramaic *ʾiḏayn to resemble more closely Greek δέ. The aphaeresis of the initial glottal stop is not a regular sound change in Syriac. According to regular sound changes, one would expect the following development: *ʾiḏáyn > *ʾiḏáyn > *ʾḏáyn > *ʾḏáyn > **ʾedén.\(^{25}\) It should be noted, however, that there are isolated cases in which an initial glottal stop is lost in Syriac, e.g., *ʾuṃnāšaʾ > ʾnš̱ ‘man, humanity’ (but written <ʾnš̱>) (Sokoloff 2009: 65). This occurs more commonly before ḥ,\(^{26}\) e.g., *ʾaxātaʾ > ʾḥṣ̱ ‘sister’ (Sokoloff 2009: 503) and *ʾaxarataʾ > ʾḥṟτ̱ ‘end’ (Sokoloff 2009: 497). These cases of aphaeresis of the initial glottal stop are, however, irregular phonological developments. This suggests that the aphaeresis of the initial glottal stop in Syriac *den (< *ʾiḏayn) is due to its replication on Greek δέ. One possibility is that the aphaeresis of the initial glottal stop is a result of the phonological erosion that often occurs in grammaticalization.\(^{27}\) This phonological erosion would not be surprising given that many cases of grammatical replication also involve grammaticalization.\(^{28}\) Another possibility is that the initial glottal stop was deleted in an effort to make Syriac *den resemble Greek δέ more closely. This would then be a case in which Syriac *den was replicated phonologically on Greek δέ, which would be significant since grammatical replication involves the transfer of semantic-conceptual material, but it is usually not thought to involve the transfer of phonological material. Given the paucity of comparable cases in the literature, it is difficult to choose between these two options (or perhaps it is not an either/or). Regardless, it is clear

\(^{25}\) For the reduction of the pre-tonic short vowel followed by the secondary epenthesis of *i (or more rarely *a), compare *ʾamārā > *ʾamār > *ʾmār > *ʾimār > ʾemār ‘he said’.


\(^{27}\) For phonological erosion in grammaticalization, see, inter alia, Hopper and Traugott 2003: 154-159; Rubin 2005: 4-5.

that the aphaeresis of the initial glottal stop in Syriac *den* (< *ʾiḏayn*) is due to its replication on Greek δέ and that this development led to the former resembling the latter phonologically.

These developments in the syntax, semantics, and phonology of Syriac *den* can be contrasted with Syriac *ḥayden* ‘then’ (Sokoloff 2009: 340), which derives from *ʾiḏayn* with a prefixed *ḥā-. 29 Syriac *ḥayden* more closely resembles earlier Aramaic reflexes of *ʾiḏayn* than Syriac *den*, as is illustrated in the following example:

(10-17) *Demonstrations* by Aphrahat (336/7; ed. Parisot 1894-1907)

\[
\begin{align*}
\text{wmuše} & \quad (h)wo & \quad \text{bmēgyan} & \quad \text{tłaṭin} & \quad šnin & \quad \text{ḥayden} & \quad \text{kād} \\
\text{and} & + \text{PN} & \quad \text{become-SUF.3.M.SG} & \quad \text{in} + \text{GN} & \quad \text{thirty year-F.PL.ABS} & \quad \text{ḥayden} & \quad \text{when} \\
\text{sgi} & \quad ʿlayhon & \quad ʿulṣono & \quad ʿappeq \\
\text{great-M.SG.ABS} & \quad \text{against} + \text{them-M} & \quad \text{hardship-M.SG.DET} & \quad \text{bring.out-SUF.3.M.SG} \\
\text{ʾennon} & \quad \text{men} & \quad \text{meṣren} \\
\text{them-M} & \quad \text{from} & \quad \text{GN} \\
\end{align*}
\]

‘And Moses was in Midian for thirty years. Then, when the suffering was great against them, he led them out of Egypt’ (65.2-4)

In this example, Syriac *ḥayden* occurs in clause initial position and functions as a temporal adverb meaning ‘then, at that time’, just like earlier Aramaic reflexes of *ʾiḏayn*. 30 In addition, *ḥayden* even preserves a trace of the initial syllable of Aramaic *ʾiḏayn* in the palatal glide *y:*

*ḥā + ʾiḏayn > ʾhāʾiḏayn > ʾhāiḏayn > ḥayden.* 31

The syntacti, semantic, and

\[\text{\textnormal{\footnotesize\textsuperscript{29}} For the broader Semitic context of *ḥā-, see Hasselbach 2007: 21, passim.}\]

\[\text{\textnormal{\footnotesize\textsuperscript{30}} In fact, in his *Letter on Syriac Orthography*, Yaʿqub of Edessa (d. 708) specifically states that *ḥayden* is a *ba(r)t qalə zabnōyto* ‘word of time’ (ed. Phillips 1869: 6.12-13).}\]

\[\text{\textnormal{\footnotesize\textsuperscript{31}} All of these changes are regular, except for the loss of the fricativization of *d, which can be explained by analogy to Syriac *den*.}\]
phonological differences between Syriac heyden and den highlight the degree to which the latter has been replicated on Greek δέ.

Syriac den is already attested in the Peshitta version of the Pentateuch, which was translated (from Hebrew) by the middle of the second century. Thus, these developments in syntax, semantics, and phonology had already occurred in Syriac by at least that time. Nevertheless, den is rare in the Peshitta Pentateuch occurring only 48 times in over 115,000 total tokens. This is less than once every 2,400 tokens. In texts from the third and fourth centuries, den is encountered much more frequently, occurring once every 190 tokens in the Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965), once every 207 tokens in Acts 1-7 of the Acts of Thomas (ca. 200-250 CE; ed. Wright 1871a: 2.171-251 [Syr.]), once every 327 tokens in Demonstrations 1-3 by Aphrahat (fl. 337-345; ed. Parisot 1894-1907), and once every 80 tokens in Discourse 1 of the Prose Refutations by Ephrem (d. 373; ed. Overbeck 1865: 21-58). This is summarized in Table 10-1. Thus, by the third century, Syriac den occurred much more frequently than it did in the second century.

Table 10-1 Frequency of Syriac den in Early Syriac prose

<table>
<thead>
<tr>
<th>Text</th>
<th>tokens of den</th>
<th>total tokens</th>
<th>frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peshitta Pentateuch (ca. 150)</td>
<td>48</td>
<td>115,523</td>
<td>1 : 2,407</td>
</tr>
<tr>
<td>Book of the Laws of the Countries (ca. 220)</td>
<td>39</td>
<td>7,420</td>
<td>1 : 190</td>
</tr>
<tr>
<td>Acts of Thomas (ca. 200-250 CE), Acts 1-7</td>
<td>77</td>
<td>15,721</td>
<td>1 : 204</td>
</tr>
<tr>
<td>Aphrahat (fl. 337-345), Demonstrations, 1-3</td>
<td>36</td>
<td>11,772</td>
<td>1 : 327</td>
</tr>
<tr>
<td>Ephrem (d. 373), Prose Refutations, Discourse 1</td>
<td>118</td>
<td>9,322</td>
<td>1 : 79</td>
</tr>
</tbody>
</table>

32 For the date, see Weitzman 1999: 248-258.
33 These numbers are based on CAL and differ slightly from Taylor 2002.
The dramatic increase in the frequency of Syriac *den* is due to its replication on Greek δέ. Greek δέ occurs at a much higher frequency than once every 2,400, which is the rate of occurrence of *den* in the Peshitta Pentateuch. The comparatively higher frequency of Greek δέ can be illustrated by the following legal text from Dura-Europos, in which δέ is used to introduce most new sentences:

(10-18) P.Dura 12 (225-250 CE)\(^{34}\)

\[\text{τῶν δὲ τελευταῖοι κληρονομεῖας ἀποδίδοσθε τοῖς ἀγνοιχτοῖς γένοις, \(\delta\)) \]

\[\text{ἀγχιστεῖς δὲ όιδε: \(\delta\)} \]

\[\text{εάν μὴ [τέ]κνα λείπησε κατὰ τὸν νόμον πατήρ ἢ μήτηρ, \(\delta\)} \]

\[\text{μὴ ἄλλῳ ἀνδρὶ συνοικούσα: \(\delta\)} \]

\[\text{εάν δὲ μηθεὶς τούτων ἢ ἀδελφοὶ ὁμοσπάτριοι: \(\delta\)} \]

\[\text{εάν δὲ μηθεὶς τούτων ἢ, πατρὸς \(\delta\)} \]

\[\text{πατήρ ἢ πατρὸς μήτηρ ἢ ἀνεψις ἀπὸ πατρὸς γεγενημένος, τούτων ἢ κληρονομία ἔστω. \(\delta\)} \]

\[\text{εάν δὲ μηθεὶς τούτων ὑπάρχῃ βασιλικὴ ἡ οὐσία ἔστω. κατὰ \(\delta\)} \]

\[\text{ταύτα ἔστωσαν καὶ αἱ ἀγχιστίαι. \(\delta\)} \]

‘(δέ) The inheritance of those who have died are to be rendered to the next of kin of the family; (δέ) the next of kin are these: If (the deceased) does not leave children or has not legally adopted a son, the father or the mother who has not been married to another man (receives the inheritance). (δέ) If neither of these is alive, brothers of the same father (receive the inheritance). (δέ) If none of these is alive, sisters of the same father (receive the inheritance). (δέ) If none of these is alive, (δέ) the inheritance belongs to the father’s father, the father’s mother, or a male cousin on the father’s side. (δέ) If

---

\(^{34}\) The text is reproduced as on the actual document; note the following differences from standard Koiné orthography: κληρονομεῖας for κληρονομίας; ἀποδίδοσθε for ἀποδίδοσθαι; ἀγχιστεῖς for ἀγχιστεῖς; υἱοποιήσητε for υἱοποιήσηται; ἀδελφὲ for ἀδελφαὶ; μηθεὶς for μηθεὶς (2χ); ἀγχιστίαι for ἀγχιστεῖαι.
none of these is alive, the property is the king’s. (δέ) The rights of kin should also be according to these things.’ (3-18)

In this text, δέ occurs 8 times, or once every 9.75 tokens. While this very high frequency of occurrence is not representative of all Greek texts, it does clearly illustrate that δέ occurs at a much higher frequency in Greek than den did in the phase of Syriac represented in the Peshīṭṭa Pentateuch. It is the comparatively high frequency of Greek δέ that led to an increase in the frequency of den in the early history of Syriac. Thus, by the third century, Syriac den had not only been replicated on Greek δέ in its syntax, semantics, and phonology, but it had also become more frequent due to contact with Greek.

In addition to being replicated on Greek δέ in its syntax, semantics, and phonology, Syriac den underwent a further development. In Greek, δέ can be used in conjunction with the second-position particle μὲν to form a construction glossed ‘on the one hand ... on the other hand …’ (Smyth 1956: §2904):

(10-19) P.Dura 31 (204 CE):35

\[
\begin{align*}
\text{Ναβουσάμαος μὲν τῇ Ἀκόζζει συνοικεῖν ἐτέρῳ ἄνδρὶ ὃ ἄν αὐτὴ αἱρῆται Ἄκοζζις δὲ τῷ Ναβουσαμάῳ γαμεῖν ἀλλήν γυναῖκαν ὃ ἄν αὐτὸς βούληται} \\
\text{Ναβουσάμαος μὲν τῇ Ἀκόζζει συνοικεῖν ἐτέρῳ}
\end{align*}
\]

PN men ART-DAT.F.SG PN cohabit-INF.PRES.ACT another-M.SG.DAT

άνδρι ὃ ἄν αὐτῇ αἱρῆται Ἄκοζζις δὲ

man-M.SG.DAT REL-ACC.SG CND she-NOM take-PRES.ACT.SUBJ.3.SG PN de

τῷ Ναβουσαμάῳ γαμεῖν ἀλλήν

35 The text is reproduced as on the actual document; note the following differences from standard Koinē: γυναῖκαν for γυναῖκα.
γυναῖκαν ὃ ἄν αὐτὸς βουλήται
woman-ACC.F.SG REL-ACC.SG CND he-NOM want-PRES.ACT.SUBJ.3.S

‘Nabusamaos, on the one hand (μὲν), (gives) to Akozzis to cohabitate with another man whom she chooses; Akozzis, on the other hand (δὲ), (gives) to Nabusamaos to marry another woman whom he wants.’ (9-12)

In Syriac, a similar construction is formed with man (Sokoloff 2009: 778), a loanword from Greek μὲν (Liddell and Scott 1996: 1101-1102), and den.

(10-20) Letter 13 by Ya’qub of Edessa (d. 708; ed. Wright 1867: *1-24)

لامشمة في بيف من ساله لزنكيم. لمتالهتم مي سكانته صمك خروجمن
lqarqose man ṭraḍ men ḥaqleḥ d’abrahom
to + vulture-M.PL.EMP man expel-SUF.3.M.SG from field.M.SG.CON + his NML + PN

l’abrahom den niḥo’iṯ whanyo’iṯ ʾemar ʾabrahom ʾabrahom …
to + PN den gentle-ADV and + pleasant-ADV say-SUF.3.M.SG PN PN

‘On the one hand (man), He (= God) expelled the vultures from the field of Abraham. On the other hand (den), He called out gently and pleasantly to Abraham, “Abraham, Abraham, …”’ (5*10-11)

The Syriac man … den … construction in (10-20) exactly replicates the Greek μὲν … δὲ … construction in (10-19). This construction is already attested in the fourth-century Syriac of Ephrem:

(10-21) Prose Refutations, Discourse 1 by Ephrem (d. 373; ed. Overbeck 1865)
The temporal adverb ܗܝܕܝܢ is written here as two words (for this, see Payne Smith 1879-1901: 1002). In his Letter on Syriac Orthography, Yaʿqub of Edessa (d. 708) seems to imply that when written separately ܗܝ dateString is not marked for time (ed. Phillips 1869: 6.12-15).
‘...hasten then the opposite of this. If a man spares the gathered seed so as not to scatter it, on the one hand (man), it is thought that he acted wisely in sparing (it) so as not to scatter it; on the other hand (den), when we see the scattered investment of the farmer being collected in capital and interest as well as the earth rewarding him, that discernment which spared (the seed) so as not to scatter it (now) appears to be blindness ...
” (33.21-27)

This example establishes that the man … den … construction is already attested in Syriac by the fourth-century. The construction is, however, rare in this period and does not become common until the fifth century.

10.4 Late Aramaic Comparanda

Most dialects of late Aramaic do not exhibit a development with * ʾîdayn similar to that witnessed in Syriac den. In Samaritan Aramaic, for example, the reflex of * ʾîdayn, which is written ʾdyn, functions as a clause-initial temporal adverb meaning ‘then’ (Tal 2000: 8), as is illustrated in the following example:

(10-22) Ms. C of the Samaritan Targum (Late Aramaic; ed. Tal 1980-1983)

ʾdyn šry lmqry bšm yhwh
then begin-SUF.3.M.SG to + call-INF in + name-M.SG.CON PN

‘Then, (the people) began to call upon the name of the LORD’ (Gen. 4.26)38

37 It also shows that man (< Greek μέν) is attested by at least this time in Syriac; for additional details, see Butts Forthcoming.

38 The Hebrew Vorlage reads ʾɔz huḥal liqro(ʾ) bšem YHWH [then begin-SUF.3.M.SG for + call-INF on + name-M.SG.CON PN] ‘Then, (people) began to call on the name of the LORD’, with Samaritan Aramaic ʾdyn translating its Hebrew cognate ʾɔz ‘then’. For this verse more broadly, see Fraade 1984 with comments on the Samaritan version at p. 29.
As this example illustrates, the use of ‘dyn in Samaritan Aramaic is similar to that of *ʾỹḍayn in earlier dialects of Aramaic.

Outside of Syriac, the only late Aramaic dialect in which *ʾỹḍayn may have been replicated on Greek δέ is Christian Palestinian Aramaic. Like Syriac den and Greek δέ, Christian Palestinian Aramaic dy is a conjunctive particle that is restricted to second position:39

(10-23) Christian Palestinian Aramaic (Late Aramaic; ed. Müller-Kessler and Sokoloff 1998a)

\[\text{ʾzlw \quad dy} \]

\[\text{go-SUF.3.M.P \quad then} \]

‘then they went’ (Mark 11.4)40

Unlike Syriac den, Christian Palestinian Aramaic dy does not have a final nasal. Thus, it is impossible to determine whether dy is a loanword from Greek δέ or another example of the grammatical replication of Aramaic *ʾỹḍayn on the model of Greek δέ.41 If the latter is the case, then Christian Palestinian Aramaic dy represents a further step of phonological erosion as compared to Syriac den.

10.5 Conclusion

Both Syriac den and Greek δέ are conjunctive particles that occur in second position and mark a change in topic from the first clause to the second clause. Despite the obvious semantic, syntactic, and phonological similarities between the two, Syriac den is not a

41 For the former interpretation, see Müller-Kessler 1991: 148. For the latter interpretation, see Schulthess 1903: 44. The latter is also implied in Brock 1996: 258.
loanword from Greek, but rather it represents an inheritance from Aramaic *ʾđayn that has been replicated on Greek δέ. This grammatical replication resulted in changes in the syntax, semantics, and phonology of Syriac den. These changes occurred already by the time of the translation of the Old Testament Peshîṭta in the mid-second century. In addition, this grammatical replication resulted in an increase in the frequency of Syriac den from the second century to the third century. Finally, by the fourth century, Syriac den (< *ʾđayn) occurs with man, a loanword from Greek μέν, in a construction that exactly replicates Greek μέν … δέ … ‘on the one hand …, on the other hand …’. This case of grammatical replication is particularly interesting since the identification of Aramaic *ʾđayn with Greek δέ seems to have been at least partly based on phonology. In addition, grammatical replication led to a closer phonological similarity between the two function words, either through grammaticalization or through the transfer of phonology. Thus, this case establishes that, while grammatical replication is primarily related to the semantic-conceptual and results in the transfer of (morpho-)syntactic material, it is not entirely removed from phonology. Rather, in this case, phonology played a key role: it facilitated the grammatical replication and may have even been transferred in the replication process.

10.6 Excursus: Syriac ger and Greek γάρ

It is impossible to discuss the replication of Syriac den on the model of Greek δέ without mentioning Syriac ger ‘truly, indeed’ and Greek γάρ ‘for’. Both of these are
conjunctive particles that occur in second position and introduce a reason or a cause or more generally strengthen a proposition. This is illustrated in the following example:

(10-24) Hebrew Vorlage

\[
\begin{align*}
\text{kol} & \quad \text{‘āšer-} & \quad \text{to(‘)} & \quad \text{मोर} & \quad \text{‘e’ēšē-} & \quad \text{לֹא} & \quad \text{ki} \\
\text{all-M.SG.ABS} & \quad \text{REL} & \quad \text{say-PRE-2.F.SG} & \quad \text{do-PRE-1.C.SG} & \quad \text{to} & \quad \text{you-F.SG} & \quad \text{for} \\
\text{yodea‘} & \quad \text{kol-} & \quad \text{ša‘ar} & \quad \text{‘ammi} & \quad \text{ki} \\
\text{know-PART.M.SG.ABS} & \quad \text{all-M.SG.CON} & \quad \text{gate-M.SG.ABS} & \quad \text{people-M.SG.CON} & \quad \text{+ my that} \\
\text{‘ešēt} & \quad \text{hayil} & \quad \text{‘ot} \\
\text{woman-F.SG.CON} & \quad \text{strength-M.SG.ABS} & \quad \text{you-F.SG} \\
\end{align*}
\]

‘whatever you say, I will do for you, for all of the assembly of my people know that you are a woman of strength’ (Ruth 3:11)

(10-25) Greek Septuagint

\[
\begin{align*}
\text{πάντα} & \quad \text{ὅσα} & \quad \text{ἐὰν} & \quad \text{εἰπήσα} \\
\text{all-ACC.NEUT.PL} & \quad \text{as.great.as-ACC.NEUT.PL} & \quad \text{if} & \quad \text{say-AOR.ACT.SUBJ.2.SG} \\
\text{ποιήσω} & \quad \text{σοὶ} & \quad \text{οἶδεν} & \quad \text{γὰρ} & \quad \text{πᾶσα} \\
\text{do-FUT.ACT.IND.1.SG} & \quad \text{you-DAT.SG} & \quad \text{know-PERF.ACT.IND.3.S} & \quad \text{gar} & \quad \text{all-NOM.F.SG} \\
\text{φυλῆ} & \quad \text{λαοῦ} & \quad \text{μου} & \quad \text{ὅτι} & \quad \text{γυνῆ} \\
\text{tribe-NOM.F.SG} & \quad \text{people-GEN.M.SG} & \quad \text{my-GEN} & \quad \text{that} & \quad \text{woman-NOM.F.SG} \\
\text{δυνάμεως} & \quad \text{εἴ} & \quad \text{σὺ} \\
\text{power-GEN.F.SG} & \quad \text{be-PRES.ACT.IND.2.SG} & \quad \text{you-NOM.SG} \\
\end{align*}
\]

\[\text{42 For Syriac ger, see } \text{Sokoloff 2009: 230. For Greek γάρ, see } \text{Denniston 1996: 56-114; Humbert 1960: §689-696; Liddell and Scott 1996: 338-339.}\]
‘whatever you say, I will do for you, for all of the assembly of my people know that you are a woman of strength’ (Ruth 3:11)

(10-26) Old Testament Peshitta (latter half of 2nd cent.)

The Greek in (10-25) and the Syriac in (10-26) are independent translations of the Hebrew passage in (10-24). Thus, it is noteworthy that Syriac ger and Greek γάρ both occur in second position, and that both introduce the second clause, which gives the reason for the first clause. Thus, like Syriac den and Greek δέ, Syriac ger and Greek γάρ share phonological, syntactic, and semantic similarities. The question here is whether Syriac ger is a loanword from Greek γάρ or whether Syriac ger is an inheritance from earlier Aramaic that has been replicated on
Greek γάρ, just as Syriac δέ was replicated on Greek δέ. Both opinions are found in the literature.

Unfortunately, the wealth of data that are available for tracking the development of *ʾìδάyn to Syriac δέ is lacking for Syriac ger. There is, in fact, no evidence for its pre-Syriac history in Aramaic. This prima facie makes the interpretation of Syriac ger as a loanword appealing. Nevertheless, there are two arguments in favor of analyzing Syriac ger as the replication of earlier Aramaic material on Greek γάρ. First, and most importantly, the representation of Greek α by Syriac y would be quite unusual. It should, however, be noted that two alternative orthographies occur:


b.  ˒gr in Aphrahat’s Demonstrations, variant at 368.17 (ed. Parisot 1894-1907)

These (early) alternative orthographies are, however, exceedingly rare. Thus, the standard orthography of Syriac ger with medial y provides a strong argument against the loanword hypothesis. Second, though earlier Aramaic evidence for Syriac ger is lacking, there is a potential cognate in Arabic jayri, rarely jayra. This particle occurs in clause initial position and can be glossed as ‘verily, truly; yes’, as in the following example:

(10-28) Classical Arabic

<table>
<thead>
<tr>
<th>jayri</th>
<th>lā</th>
<th>ʾafʿalu</th>
<th>ðālika</th>
</tr>
</thead>
<tbody>
<tr>
<td>truly</td>
<td>NEG</td>
<td>do-PRE.1.SG</td>
<td>this-M.SG</td>
</tr>
</tbody>
</table>

---

43 For the former, see, e.g., Brock 1967: 423; 1975: 89; for the latter, see, e.g., Brockelmann 1981: §53; Brock 1996: 258; Ciancaglini 2008: 6.
44 For a discussion of the full possibilities, see §5.3.2.
45 Biberstein-Kazimirski 1860: 361; Lane 1863-1893: 493; Wright 1896-1898: 286B.
‘Truly, I will not do this’ (Lane 1863-1893: 493)

The phonological correspondence between Arabic *jair* and Syriac *ger* is entirely regular, and thus they could well be cognate. Together, these two pieces of evidence suggest that Syriac *ger* is not a loanword from Greek γάρ, but that it is an inheritance from earlier Aramaic that has been replicated on Greek γάρ, just as Syriac *den* was replicated on Greek δέ. In this case, the inter-lingual identification of Syriac *ger* with Greek γάρ would have been due to the fact that they are both function words with an overlapping use of strengthening a proposition. In addition, their phonological similarity would have facilitated their identification, again as in the case of Syriac *den* and Greek δέ. Having been identified with one another, Syriac *ger* was replicated on Greek γάρ leading to the movement of Syriac *ger* to second-position as well as to the new use of Syriac *ger* to introduce a reason or a cause.

The only late Aramaic dialect that attests a cognate to Syriac *ger* is Christian Palestinian Aramaic. Like Syriac *ger* and Greek γάρ, Christian Palestinian Aramaic *g(y)r* is a second position particle that introduces a reason or a cause or more generally strengthens a proposition, as is illustrated in the following example:

(10-29) Christian Palestinian Aramaic (Late Aramaic; ed. Müller-Kessler and Sokoloff 1997)

\[
\text{nty} \quad \text{gr} \quad \text{hw}^3 \quad \text{lm}^r
\]

\[
\text{be.kept-PART.MS.ABS} \quad \text{gr} \quad \text{he} \quad \text{to+lord-M.SG.DET}
\]

---

46 For the monophthongization of the diphthong in Syriac, compare *bayt* > *bet* ‘house of’.

47 The form *gyr* ‘for’ occurs in Targum Proverbs at 29.19 (Jastrow 1886-1903: 241). While this text is written in Late Jewish Literary Aramaic, it is a translation from Syriac. Thus, *gyr* here is to be explained as a loanword from the Syriac *Vorlage*.

‘For, it was kept for the Lord’ (Exod 12:42)\textsuperscript{49}

Christian Palestinian Aramaic $g(y)r$ is likely an inheritance from earlier Aramaic that has been replicated on Greek γάρ, since it is otherwise difficult to explain the orthography with medial $y$.\textsuperscript{50} Thus, both Christian Palestinian Aramaic $g(y)r$ and Syriac $ger$, while cognate with Arabic $jairi$, occur in second position and can introduce a reason or a cause due to their replication on Greek γάρ. The case of Syriac $ger$ and Christian Palestinian Aramaic $g(y)r$ then adds an additional example in which phonological similarity led to inter-lingual identification and ultimately to grammatical replication.

\textsuperscript{49} The Greek Vorlage reads νυκτὸς προφυλακὴ ἐστιν τῷ κυρίῳ [night-GEN.F.SG vigil-NOM.F.SG be-PRES.ACT.IND.3.SG ART-DAT.M.SG lord-DAT.M.SG] ‘it was a vigil of the night for the Lord’, without γάρ.

\textsuperscript{50} In this context, it should be noted that Brock (1996: 258) attributes the spelling without $y$ to a secondary adaptation of the Christian Palestinian Aramaic form to the Greek spelling.
11 Conclusion

“… le grand problème, le problème éternel, celui de la symbiose et de l’interpénétration de la civilisation occidentale, c’est-à-dire grecque, et de la culture orientale dans le Proche Orient, un processus qui commença après la conquête de l’Orient par Alexandre, et qui continue toujours …”
(Rostovtzeff 1943: 44-45)

11.1 Overview

In the Introduction (§1), it was noted that this study is located at the intersection of the fields of contact linguistics and the study of ancient languages. It was also suggested that each of these fields can, and should, inform the study of the other. The first two sections of this conclusion aim to substantiate this claim. Section §11.2 illustrates how Syriac data can add to ongoing debates in the field of contact linguistics concerning the transfer of structure in situations of borrowing. Section §11.3 shows that analyzing Syriac data within a contact linguistic framework can help to answer questions about when Syriac-speakers first had intense contact with the Greek language. After these two sections, the study concludes with a discussion of the Greco-Roman context of Syriac (§11.4).
11.2 The Transfer of Structure in Situations of Borrowing

The transfer of structure has a long and contested history in the field of contact linguistics.¹ This section focuses on one particular aspect of this question that has been raised several times in recent scholarship: Can structure be borrowed? It should be noted that borrowed here refers to the technical sense established in §2, i.e., transferred in situations in which the agents of change are linguistically dominant in the recipient language. Most contact-linguists would seem to agree that structure can be transferred in cases of imposition (source language agentivity), in which the agents of change are linguistically dominant in the source language, or in Thomason and Kaufman’s terms language shift. It, however, remains an open question about whether or not structure can be transferred in borrowing, in which the agents of change are linguistically dominant in the recipient language. On the affirmative side of this question are Thomason and Kaufman, who in their borrowing scale have categories ranging from slight structural borrowing to heavy structural borrowing.² Similarly, Van Coetsem allows for an extended mode of borrowing in which phonological and grammatical material can be transferred alongside lexical material.³ There are, however, a number of linguists who restrict what can be transferred in situations of borrowing. In a study of contact-induced changes in Prince Edward Island French due to English, for instance, King (2000) argues that the seeming cases of grammatical borrowing were not due to the direct transfer of grammatical structure, but rather that they are the result of the transfer of lexical items.⁴ Based on this, she calls into

¹ For a recent overview of the question of what can be transferred, see Curnow 2001.
⁴ A summary article is available in King 2005.
question whether grammatical structure can actually be transferred in situations of borrowing.\footnote{King does not explicitly make a distinction between situations of borrowing (recipient language agentivity) versus imposition (source language agentivity). Nevertheless, she does note that three speakers in her corpus are “not fluent in French” and often transfer “elements or structures” from English into French (2000: 89, 175-176). This forces her to restrict her general conclusion that there is no evidence for the transfer of grammatical structure to “fluent speakers of French,” excluding the three “non-fluent speakers” from this conclusion (2000: 175-176). King thus seems to adopt implicitly a distinction similar to that of borrowing (recipient language agentivity) versus imposition (source language agentivity), and it is for this reason that her thesis has been restricted to borrowing here.}

King concludes her study by stating that, “[i]t is expected that in other case studies of language contact in which structural borrowing seems superficially to have occurred, it will also be discovered that the actual path of change has instead involved core lexical borrowing followed by reanalysis” (2000: 176). This is but one example in which structural borrowing has been questioned in the literature. A discussion of the issue, with similar conclusions, can be found in Winford’s textbook on contact linguistics (2003: 61-100).\footnote{For others, see, e.g., Hickey 2010b; Louden 2000: 96; Silva-Corvalán 1995b.}

At least part of the disagreement over whether or not structure can be transferred in situations of borrowing stems from the fact that many of the purported cases of structural borrowing in the contact-linguistic literature are based on insufficient data and lack adequate analysis. Poplack, in particular, has drawn attention to this, noting that, “[i]n theory, the view that anything can be borrowed under the right circumstances seems uncontroversial. But in practice, when an apparent case of convergence is pursued scientifically, it often disappears” (1996: 304). The question of structural borrowing is then inextricably tied up with the question of proving that a given change is in fact contact-induced.\footnote{See also King 2000: 46-47 as well as the discussion above at p. 335-336.} Poplack and Levey (2010) conclude a recent study that stresses this point by stating, “[c]ontact-induced change is not an inevitable,
nor possibly even a common, outcome of language contact. Only more accountable analyses of more contact situations will tell. In the interim, the burden of proof is on those who claim that it has occurred” (2010: 412). It is here that an ancient language such as Syriac can be of assistance. The extensive written record of Syriac, which spans more than two millennia, combined with the considerable body of comparative data available for earlier and contemporaneous dialects of Aramaic, enables the historical linguist to trace changes, including contact-induced changes, step-by-step from their pre-history through their completion as well as to establish in many cases whether or not contact played a role in these changes.  

The current study has presented several examples in which structure was transferred in a situation of borrowing (§8-10). In §8.3, it was argued that the Syriac adjectival ending -ǝγ became more frequent throughout the history of Syriac due to its identification with the more frequently occurring Greek adjectives. This resulted in its raising from a minor use pattern to a major use pattern. In §8.4, it was shown that Syriac lwɔ ‘toward’ came to be used with the verb √ʾmr ‘to say’ due to its identification with Greek πρός ‘toward’, which could be used with various verbs of speech. Thus, Syriac lwɔ acquired a new function due to its replication on Greek πρός. Chapter §9 presented a more detailed case in which the Syriac copula ʾittaw(ḥy) ‘he is’ was replicated on the model of Greek ἐστίν ‘he is’. This resulted in the extension of the

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8 The Syriac situation, thus, contrasts with that usually encountered by the historical linguist. Dorian, for instance, notes that “… there will seldom be the ideal breadth and depth of material on which to base an assessment of change in terms of external or internal motivation…” (1993: 152). Similarly, Poplack and Levey state that, “[t]he first step in establishing the existence of change is comparison over time. This may not be simple or straightforward, given the often fragmentary nature of surviving diachronic evidence” (2010: 394).

9 It was established in §3.4 that contact-induced changes in Syriac due to Greek are to be analyzed as borrowing, in which speakers linguistically dominant in the recipient language, Syriac, transferred features from the source language, Greek.
copulaic use of ʾt to verbless clauses with substantival predicates and in the raising of copulaic ʾt from a minor use pattern to a major use pattern throughout the history of Syriac. Finally, Chapter §10 showed how earlier Aramaic *ʾīdayn ‘then, at that time’ was replicated on Greek δέ ‘then, but’ to produce Syriac den ‘then, but’. This replication resulted in changes in the syntax, semantics, and phonology of Syriac den as well as in an increase in its frequency. In each of these examples, an attempt was made to trace systematically the contact-induced changes in question with the support of historical data so that a convincing case could be made for language contact playing a role in the described changes.

This study, then, has presented several cases in which structure was transferred in a situation of borrowing. Thus, in answer to the question ‘can structure be borrowed?’, this study responds with a definite ‘yes’. This ‘yes’, however, comes with an immediate caveat, since the structure transferred in each of the cases investigated is quite restricted. Several of the cases discussed in this study do not involve the creation of a new structure but rather a change in the distribution of an existing structure. This is, for instance, the case with the increase in the frequency of the adjectival ending -ɔy (§8.3), the increase in the frequency of the copula ʾitaw(hy) (§9.4), and the increase in frequency of Syriac den (§10.3). Several other changes discussed did involve the creation of a new grammatical function, but only as an extension of an existing grammatical structure. This is, for instance, the case with the extension of Syriac lwɔt to verbs of saying (§8.4) and the extension of the copula ʾitaw(hy) to substantival predicates (§9.3). In general, then, all of the examples of grammatical replication analyzed in this study differ from the transfer typically witnessed in imposition in that they are isolated, non-systematic, and of limited scope.

The cases presented in this study are similar to some of the changes in Los Angeles
Spanish investigated by Silva-Corvalán (1994). The extension of the Syriac copula to verbless clauses with substantival predicates is, for instance, comparable to a case described by Silva-Corvalán in which Spanish cómo acquired an additional meaning due to its replication on English ‘how’ (1994: 176-177). In the case of both Spanish cómo and Syriac ṣîw(hy), there are not radical changes to the grammatical system of the recipient language, but rather extensions of an already existing variant. Once more cases such as these are identified and adequately analyzed in the literature, it will be possible to formulate parameters on how structure is transferred in situations of borrowing. For now, however, this study has provided several cases in which structure was transferred in situations of borrowing, though the structure transferred in each case is quite restricted. In this way, then, this study has also illustrated how an ancient language such as Syriac can contribute to the field of contact linguistics.

11.3 The Beginning of Syriac-Greek Language Contact

Having shown that an ancient language such as Syriac can contribute to the field of contact linguistics (§11.2), it is now fitting to look at how contact linguistics can inform the study of Syriac. One of the more contested questions in the study of Syriac-Greek language contact revolves around when intense contact between Syriac and Greek began. While it is widely accepted that by the fifth century Syriac authors were influenced by Greek, there is no consensus in the scholarly literature concerning how much earlier this intense contact extends back. According to the traditional view, fourth-century Syriac authors such as Aphrahat (fl. 337-345) and Ephrem (d. 373) lived in a purely Semitic (or Aramaic) linguistic and cultural

\footnote{For another potential case, see Smits 1999 with the comments of Van Coetsem 2003: 86-87.}
context that had not yet been influenced by Greek. In his classic study of Greek loanwords in Syriac, for instance, Schall states that, “Afrahāṭ (schrieb zwischen 337 und 345) war wesentlich frei vom Einfluss des griechischen Geistes” (1960: 3). Similarly, in an encyclopedia article on Ephrem from the late 1960s, Murray claims that, “Ephrem knew no Greek, shows no debt to Greek philosophy, and expresses contempt for Greek thought,” and a little later he adds, “Ephrem is heir to a Judaeo-Christian tradition which developed largely in isolation from the Greek-speaking world” (1967: 221, 222). This traditional view was predominant primarily in the twentieth century, but still continues to be held by some scholars today. In a recent article, for instance, Pat-El argues that the development of a productive copula in Syriac, which was discussed in detail in a previous chapter (§9), was not due to contact with Greek, because this verbless clause pattern is already found in the Syriac of Ephrem who, according to her line of thought, was “among writers who have no knowledge of Greek” (2006: 343).

Among the most vocal opponents of this traditional view is H. J. W. Drijvers. Throughout his work, Drijvers maintains that Edessa and the surrounding areas were “thoroughly hellenized” by the turn of the Common Era with wide-spread Syriac-Greek bilingualism. Other scholars have adopted this position, especially in more recent years. In a recent book on Ephrem, for instance, Shepardson notes that “…by the fourth century Edessa

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12 In his later work, Murray steps back from this position conceding that early Syriac authors were influenced by Greek (1982: 9-10). In the new introduction to the reprint of his Symbols of Church and Kingdom, Murray clarifies that “the homelands of the authors studied in this book would have been mainly Syriac-speaking, though with varying knowledge of Greek” (2004: 3).
13 It in fact goes back much earlier. Already in the fifth century, the church historian Sozomen states that Ephrem was ‘ignorant of Greek learning’ (Ἐλληνικῆς παιδείας ἀμοιρός) (Ecclesiastical History, 3.16; ed. Bidez et al. 1983-1996: 2.152).
had been strongly influenced culturally and linguistically by the Greek- and Latin-speaking empire to its west” (2008: 16). She goes on to state that, “[w]hile Ephrem wrote in Syriac, given the multilingual nature of his context, we can no longer imagine that he was wholly unfamiliar with the Greek language or with hellenistic ideas…” (2008: 67). In her recent monograph on Iranian loanwords in Syriac, Ciancaglini moves the date of intense contact even earlier, writing, “[t]he area of western Syria and northern Mesopotamia was once part of the Seleucid empire; linguistic and archaeological evidence shows that the area was thoroughly Hellenized from the beginning of the Christian era” (2008: 6). Thus, there is a growing contingent of scholars who maintain that intense contact between Syriac-speakers and the Greco-Roman world extends back at least to the fourth-century with authors such as Aphrahat (fl. 337-345) and Ephrem (d. 373), if not to the turn of the Common Era.15

Between these two poles of the spectrum, there are a number of intermediate positions. In his most recent work, Brock proposes that Syriac authors from the fourth century had relatively limited contact with Greek, but that a major transition occurred in the fifth century when contact became increasingly more intense: “The earliest major writers, Aphrahat (active 337-345) and Ephrem (d. 373), although far from untouched by the influence of Greek language and culture, are nevertheless comparatively unhellennized in their style and language” (1996: 253). Thus, for Brock, fourth-century Syriac authors were influenced by Greek, just relatively less so than later authors.16

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15 See also Bowersock 1990: 34 (on Ephrem); Bremmer 2001b: 78 (on Acts of Thomas).
16 This marks a departure from Brock’s earlier work in which he adopts the traditional view that Syriac authors from the fourth century were basically devoid of Greek influence. In a study from 1975, he states, “Aphrahat was a writer who was virtually untouched by Greek culture, and one can safely assume that he knew little, if any, Greek” (1975: 81). Similarly, in another study from slightly later, he considers Aphrahat and Ephrem to be “representatives of a Syriac
It is clear, then, that there is no agreement in the scholarly literature over when the period of intense contact between Syriac and Greek began. This study, however, has introduced new evidence pertaining to this question from grammatical replication. The previous chapters have presented several cases in which grammatical replication occurred in Syriac already by the second century. Chapter §9 established that by at least the early second century the Syriac copula ʾitaw(hy) ‘he is’ had been extended to verbless clauses with substantival predicates on the model of Greek ἐστίν ‘he is’. In addition, Chapter §10 showed that, already by the time of the translation of the Old Testament Peshitta in the mid-second century, Aramaic *ʿīdāyn ‘then, at that time’ had been replicated on Greek δέ ‘but, then’ in its syntax, semantics, and phonology to produce Syriac den ‘but, then’. This grammatical replication also resulted in an increase in the frequency of Syriac den from the second century to the third century. Finally, the Excursus in §10.6 argued that by the second century Syriac ger ‘indeed, for’ had been replicated in its syntax and semantics on Greek γάρ ‘indeed, for’.

These cases of grammatical replication have significant implications for establishing a terminus ante quem for extensive contact between Syriac-speakers and the Greek language. It is well-established that for contact-induced changes such as grammatical replication to take place

culture that is still essentially semitic in its outlook and thought patterns” (1982: 17). In a later study, however, he states: “… by the fourth century AD, Greek and Semitic cultures had already been interacting in the Middle East for over half a millennium: no Syriac writer of Ephrem’s time is going to be purely Semitic in character or totally unhellenized…” (Brock 1992: 143). In a more recent study, Brock concludes that, “the fact that Ephrem was evidently heir to a Syriac lexical stock that had already been considerably enriched by borrowings from Greek gives support to the view that he was living in a milieu that was already considerably hellenized” (1999-2000: 449). He, however, adds the caveat that a diachronic perspective still allows one to “characterize the writings of fourth-century Syriac authors as being comparatively unhellenized” (1999-2000: 449 n. 45; italics mine). For the progress in Brock’s thought on this issue, see Possekel 1999: 5-7.

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in a situation of borrowing there must be a high degree of bilingualism that extends over a
considerable period of time.\textsuperscript{17} This is due to the nature of the change itself. In grammatical
replication, speakers of the recipient language equate a grammatical structure in their own
language (the recipient language) with a grammatical structure in the source language. This
necessitates that speakers of the recipient language have a high enough proficiency in the
source language to make such structural equations. In the words of Thomason: “you can’t
borrow what you don’t know” (2010: 41).\textsuperscript{18} In addition, this bilingualism must extend for at
least several generations. In fact, Heine and Kuteva note that in many cases bilingualism lasts
for as many as three to five centuries before grammatical replication occurs.\textsuperscript{19} Even adopting a
more conservative estimate, the cases of grammatical replication that had occurred in Syriac by
the second century indicate that there must have been significant Syriac-Greek bilingualism by
at least the turn of the Common Era. Returning then to the initial question of when intense
contact between Syriac and Greek began, the traditional view that rejects intense Syriac-Greek
contact before the fifth century is in need of revision. In their language, fourth-century Syriac

\textsuperscript{17} See, e.g., Heine and Kuteva 2003: 531; 2005: 13; Johanson 2002a: 50; Poplack 1996: 285;
Thomason 2010: 37. It should be noted that this applies only to contact situations of borrowing
(recipient language agentivity). In situations of imposition (source language agentivity), these
types of changes can occur as quickly as a generation. It was established in §3.4 that contact-
induced changes in Syriac due to Greek are to be analyzed as borrowing in which speakers
linguistically dominant in the recipient language, Syriac, transferred features from the source
language, Greek.

\textsuperscript{18} In less colorful terms, Hickey states, “…it is probably true that the borrowing of ‘systemic’
material – inflections, grammatical forms, sentence structures – can only occur via bilinguals”
(2010b: 8).

\textsuperscript{19} Heine and Kuteva 2003: 531. Similarly, Poplack (1996: 305-306) concludes that, “[a]ll cases
of borrowing involving extensive structural change in the borrowing language have a history of
several hundred years of contact.”
authors such as Aphrahaṭ and Ephrem must have been heirs to an Aramaic culture that had long been in contact with the Greco-Roman world and its Greek language.

11.4 Syriac in its Greco-Roman Context

In a recent article, J. F. Healey discusses “The Edessan Milieu and the Birth of Syriac” (2007). He points out that Syriac began as the local Aramaic dialect of the region around Edessa, being witnessed in the Old Syriac inscriptions and legal documents. The Edessan dialect of Aramaic, according to Healey, was eventually transformed into a prestigious literary language due to several factors, including its use as an administrative language, as a royal language, and above all as a religious language. According to Healey, one factor that did not, however, play a role in this transformation is Syriac’s interaction with Greek. Healey argues that Greek linguistic influence in Edessa is “mostly connected with Romanization in the third century A.D.” (2007: 121). Thus, a figure such as Bardaišan (154-222) represents only a narrow circle associated with the royal court and is not indicative of more widespread Greco-Roman contact at the time (2007: 120). In Healey’s words:

“though Bardaisan may form a prominent peak of Hellenism, it is not clear that he is the tip of an iceberg of any great significance. That there was Greek culture in Edessa is clear, but much more clear is the underlying dominance of native religious and linguistic tradition” (2007:124).

Thus, Healey emphasizes Syriac’s continuity with earlier Aramaic and downplays its Greco-Roman context. Healey concludes his discussion of “The Edessan Milieu and the Birth of Syriac” by stating, “in the formative period the Edessan milieu was not hellenized to any significant extent, while Syriac’s ancestry is to be sought in the local Aramaic dialects of northern Mesopotamia, gradually transformed into a prestige language of religious literature” (2007: 125).
This study proposes a modification to Healey’s picture of the birth of Syriac. As Healey notes, Syriac represents a local Aramaic dialect from the region around Edessa that was transformed into a prestigious literary language during the first centuries of the Common Era. In addition, again as Healey argues, this transformation was motivated by Syriac becoming an administrative language, a royal language, and above all a religious language. This study, however, proposes that an additional factor transformed the local Aramaic dialect of Edessa into the prestigious literary language known as Syriac: its Greco-Roman context and language contact with Greek. This study has argued that Syriac is the outcome of a particular socio-linguistic situation in which inherited Aramaic material was augmented and adapted through contact with Greek. Chapters §3-7 of this study analyzed Greek loanwords in Syriac. These loanwords represent the augmentation of inherited Aramaic material through contact with Greek. Chapter §8-10 discussed instances of grammatical replication in Syriac on the model of Greek. These cases of grammatical replication represent the adaptation of inherited Aramaic material through contact with Greek. It is proposed that this augmentation and adaptation of inherited Aramaic material was also a factor in the development of Syriac.

Aramaic was in contact with Greek already from the mid first millennium BCE when the Greek monetary term στατήρ appears in the Abydos Lion Weight (KAI 263). Contact between Aramaic and Greek increased with Alexander’s defeat of Darius III in the 330s BCE, which brought Syria and Mesopotamia under the control of the Seleucid Empire for the next two centuries. Thus, by the time that Edessa became a Roman *colonia* at the beginning of the third century, the Aramaic-speaking inhabitants of Syria and Mesopotamia had already been in contact with the Greco-Roman world and its Greek language for more than half a millennium. The effects of this contact are witnessed in the more than sixty Greek loanwords that were
transferred into Aramaic prior to Syriac and then inherited in Syriac. These words include typical Greco-Roman cultural terms such as στρατηγός (Liddell and Scott 1996: 1652) > ܣܛܪܛܓܐ (Sokoloff 2009: 71, 998) and ἐπίτροπος (Liddell and Scott 1996: 669) > ܐܦܛܪܘܦܐ (Sokoloff 2009: 86). There are, however, also nouns belonging to more abstract semantic groups, such as γένος (Liddell and Scott 1996: 344) > ܓܢܣܐ ‘kind, species; family; race, nation’ (Sokoloff 2009: 179, 249), κίνδυνος (Liddell and Scott 1996: 952) > ܩܝܢܕܘܢܘܣ ‘danger’ (Sokoloff 2009: 1363-1364), and χρώμα (Liddell and Scott 1996: 2012) > ܟܪܘܡܐ ‘color; nature’ (Sokoloff 2009: 648). In addition, several Greek verbs were inherited in Syriac from earlier Aramaic. The Greek loanwords that were inherited in Syriac from earlier Aramaic point to more than casual contact between Greek and pre-Syriac Aramaic already before the Roman period.

In the first couple of centuries CE, the Roman Empire expanded eastward with the region of Osrhoene and the important Syriac-speaking center of Edessa coming under greater Roman influence in the mid-second century. The earliest Syriac texts, such as the Old Testament Peshīṭta (translated from Hebrew), the Odes of Solomon (ca. 2nd cent.), and the Book of the Laws of the Countries (ca. 220), stem from this period. These texts already show signs of significant contact with the Greco-Roman world and its Greek language. The Book of the Laws of the Countries, for instance, contains 25 different Greek loanwords that occur a

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20 These are collected in Appendix 2 and are discussed more generally in §4.9.
21 The Old Testament Peshīṭta is in the process of being re-edited under the auspices of the Leiden Peshitta Institute (for this text, see also the important monograph by Weitzman 1999). The Odes of Solomon are edited with English translation in Charlesworth 1973; a facsimile edition of the witnesses is also available in Charlesworth 1981. It should be noted that both the date (first to third century) and the original language (Syriac or Greek) of the Odes continues to be disputed. The Book of the Laws of the Countries is edited with English translation in Drijvers 1965.
total of 114 times. This means that 5.26% of the noun types and 5.35% of the noun tokens in this text are Greek loanwords. This can be compared to 4.68% of the noun types and 2.84% of the noun tokens that are Greek loanwords in Discourse 1 of the *Prose Refutations* by Ephrem (d. 373). Thus, the early third-century *Book of the Laws of the Countries* contains a higher percentage of Greek loanwords than the equally philosophical *Prose Refutations* by Ephrem, which stems from the latter half of the fourth century. This illustrates the degree of contact between Greek and Syriac already by the second century CE.

The effects of language contact by at least the first centuries of the Common Era are not limited to loanwords, but also extend to changes such as grammatical replication. Already by the time of the Peshiṭta Pentateuch (ca. 150), for instance, Aramaic *ʾiḏayn* ‘then, at that time’ had been replicated on Greek δὲ ‘but, then’ in its syntax, semantics, and phonology to produce Syriac *den* ‘but, then’. By the time of the *Book of the Laws of the Countries*, Syriac *den* had also become more frequent due to its replication on Greek δὲ. Or, to take a different example, the Syriac copula ʾiṭaw(hy) ‘he is’ is attested with a substantival predicate already in the *Odes of Solomon* (20.1). This is the result of an extension that occurred on the model of Greek ἐστίν ‘he is’. As argued in §11.3, these cases of grammatical replication indicate that there must have been significant Syriac-Greek bilingualism by at least the turn of the Common Era.

During the first centuries of the Common Era, then, the local Aramaic dialect of Edessa was in the process of changing into a prestigious literary language that would come to be known as Syriac. As this study has shown, the Aramaic dialect of Edessa was also changing

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22 For an earlier treatment of the Greek loanwords in this text, see Schall 1960: 71-80.
24 These changes involving Syriac *den* (< *ʾiḏayn*) were analyzed in §10.
25 This was discussed in detail in §9.3.
due to contact with Greek at this very same time. In particular, Greek loanwords were augmenting the native Aramaic vocabulary, and native Aramaic material was being adapted to replicate constructions in Greek. Thus, this study proposes that language contact with Greek, which resulted in the augmentation and adaptation of native Aramaic material, was a factor in the birth of Syriac, as it is now known, in the first centuries of the Common Era.26

According to this scenario, fourth-century Syriac authors such as Aphrahaṭ (fl. 337-345) and Ephrem (d. 373) were heirs to an Aramaic language that had already been significantly changed by the Greek language. It has often been noted that all, or almost all, of the Greek loanwords in Aphrahaṭ are also found in the Syriac Bible.27 It is usually concluded from this that Aphrahaṭ, who lived in the Sassanian Empire and who likely had no knowledge of Greek, adopted these words from the Bible. A different conclusion is, however, possible in light of the scenario being proposed here. The fact that words of ultimate Greek origin occur in the Syriac Bible and in early Syriac literature could well suggest that these words were already part of the Syriac language by Aphrahaṭ’s time. This seems to be the case with Greek loanwords in the Syriac Old Testament Peshiṭta, as it was translated from Hebrew not from Greek.28 This may well also be the case with the Old Syriac Gospels, which are much less tied to the Greek Vorlage than even the fourth-century Peshiṭta translation.29 Similarly, each of the Greek loanwords in Aphrahaṭ could have already been part of Syriac by at least the fourth century.30

26 While social factors inevitably play the largest role in the speciation of a language, linguistic factors are certainly not non-existent. See the discussion in Noonan 2010.
28 There is not yet an exhaustive treatment of the Greek loanwords in the Syriac Old Testament Peshiṭta. See, however, the initial remarks in Joosten 1998.
29 In the preface to the second edition of his grammar, Nöldeke states, “[t]he Syriac Bible has been more largely drawn upon than in the former edition, particularly as regards the Gospels, and especially the Synoptic Gospels. These last exhibit almost invariably an exceedingly
Contact between Greek and Syriac was not restricted to the early centuries of the Common Era, but continued and even increased throughout the period of Classical Syriac. By comparing loanwords in Ephrem (d. 373) and Narsai (d. ca. 500), Brock has convincingly shown that Greek-Syriac contact became more intense in the century after the death of Ephrem. Similar conclusions can be drawn from the Greek loanwords found in other texts. In the first seven acts of the *Acts of Thomas* (ca. 200-250), for instance, 5.03% of the noun types and 2.52% of the noun tokens are of Greek origin. This can be compared with the *Life of Rabbula* (ca. 450), where Greek loanwords account for 6.59% of the noun types and 3.37% of the noun tokens. This demonstrates an increase in Greek loanwords from the third to the fifth century. Moving even later in time, 10.47% of the noun types and 6.00% of the noun tokens are of Greek origin in the mid-sixth-century *Life of Yuḥanan of Tella* by Eliya. This demonstrates flowing, idiomatic style of Syriac, which upon the whole reads better than the Semitic Greek of the original. This feature comes into still stronger relief in the more ancient form of the text – as contained in C. (*Curetonianus*) and S. (*Sinaiticus*) – than in our usual text P. (*Peshitā*) (1904: xiii). For the Greek loanwords in the Old Syriac and Peshīṭṭa Gospels, see Brock 1967.

Brock hints at a similar conclusion when he states that, “the vast majority of Greek words to be found in the Old Syriac and Peshīṭṭa Gospels became well established in the literary language, and *it is very likely that many of them were already so*” (1967: 426; italics mine). He goes on, however, to state that “there is hardly any surviving evidence for this” (1967: 426).

The Syriac text of the *Acts of Thomas* is edited in 1871: 2.171-333 (Syr.); a commentary is available in Klijn 2003. The text was in all likelihood composed in Syriac (Attridge 1990). The date of composition is most likely the first half of the third century (Bremmer 2001b: 73-77). The Syriac original was translated into Greek at an early date (the Greek text is edited in Bonnet 1903: 99-291). The content of the Syriac text that is now extant shows signs of revision, often bringing it more in line with the emerging orthodoxy. The language of the Syriac text, however, contains a number of early forms (Wright 1871a: 2.xiv-xv), which indicate that the language belongs to the earliest period of Syriac.

The Syriac text is edited in Overbeck 1865: 159-209 with an English translation in Doran 2006: 65-105.

the increasingly intense contact between Syriac and Greek throughout the period of Classical Syriac. Similar conclusions can be reached based on the number of Greek particles and Greek verbs that entered Syriac during the sixth century.\textsuperscript{34}

The picture provided by loanwords can be corroborated by two of the cases of grammatical replication presented in this study. In §8.3, it was shown that throughout the history of Syriac the adjectival ending -\textit{ɔy} became increasingly more frequent as Syriac speakers attempted to replicate Greek adjectives. There was, for instance, a 460\% increase in the frequency of \textit{nisba} adjectives from the \textit{Book of the Laws of the Countries} (ca. 220) to the selected \textit{Letters} of Yaʿqub of Edessa (d. 708). This demonstrates an increase in Syriac-Greek contact from the early third century to the beginning of the eighth century. The distribution of verbless clauses points to a similar conclusion. It was argued in §9.4 that Syriac verbless clauses with a copula of \textit{ʾi̯t} plus pronominal suffix became increasingly more common throughout the history of Syriac due to their identification with Greek verbless clauses with the verbal copula \textit{ἐστίν}. In the selections from the fourth-century authors Aphrahat and Ephrem, for instance, less than 20\% of the verbless clauses with substantival predicates are formed with \textit{ʾi̯taw(hy)}. In contrast, \textit{ʾi̯taw(hy)} occurs in just fewer than 40\% of the verbless clauses with substantival predicates in the selections from the sixth-century authors Philoxenos (d. 523) and Shemʿun of Beth Arsham (d. before 548). Finally, almost all (98\%) of the verbless clauses with a substantival predicate are formed with \textit{ʾi̯taw(hy)} in the selection from Yaʿqub of Edessa (d. 708). This again illustrates that contact between Syriac and Greek continued up until at least the beginning of the eighth century.

\textsuperscript{34} See §6.4 and §6.3.5-6.3.6, respectively.
Syriac was, then, in contact with Greek for centuries. One of the many interesting aspects of this continuity of contact is that it enabled contact-induced changes to extend over generations of speakers. This is perhaps most obvious in the cases of grammatical replication involving the increase in the adjectival ending -ɔy (§8.3) and the copula ʾyw(hy) (§9.4), which were mentioned in the previous paragraph. The dynamic nature of contact between Syriac and Greek is, however, also witnessed in the Greek loanwords in Syriac. Since a number of Syriac-speakers knew Greek to one degree or another, some Greek loanwords in Syriac never became entirely disassociated from their Greek source. This can be seen, for instance, in the diachronic changes to the orthography of Greek loanwords in Syriac. In contrast to what is generally witnessed cross-linguistically, Greek loanwords did not always become more integrated in Syriac over time. Rather, in a number of cases, the opposite occurred, and Greek loanwords in Syriac came to represent the Greek source more closely over time. In these cases, some Syriac-speakers never lost sight of the Greek origin of certain loanwords and were thus able to reshape them based on the source language. This trend reaches its apex with the bilingual Yaʿqub of Edessa (d. 708), who in his Letter on Syriac Orthography, uses a mater lectionis in Syriac to represent every vowel in Greek loanwords.

In the end, the Greco-Roman context of Syriac was clearly a factor in the language’s development. As the dialect of Edessa was transformed into the literary language of Syriac during the first centuries of the Common Era, a number of contact-induced changes due to Greek were taking place. These changes led to a dialect of Aramaic that differed in a number of ways from its sister Aramaic dialects of Jewish Babylonian Aramaic and Mandaic in Mesopotamia and of Samaritan Aramaic and Jewish Palestinian Aramaic in the Levant. The vocabulary of Syriac was augmented with a number of Greek loanwords, far exceeding those
found in the other dialects. In addition, inherited Aramaic material was adapted to replicate Greek constructions, thereby departing not only from the earlier Aramaic dialects but also from the other Late Aramaic dialects. Only Christian Palestinian Aramaic, with its similar socio-linguistic context, shares some of these changes with Syriac. The differences between Syriac and the other Late Aramaic dialects – excluding Christian Palestinian Aramaic – were only further accentuated as Syriac continued to be in contact with Greek throughout its history. This study has, thus, shown how contact with Greek led to changes that affected the lexicon, morpho-syntax, and to lesser degrees the morphology and phonology of Syriac. It is for this reason that it is proposed that one of the factors that led to the transformation of the local dialect of Edessa into Syriac is its contact with the Greco-Roman world and its Greek language.
Appendix 1: Latin Loanwords in Syriac

No source is currently available for the Latin loanwords in Syriac. Schall (1960: 244), for instance, lists only fourteen Latin loanwords in the only existing monographic treatment of Greek loanwords in Syriac. Thus, it is useful to collect them here. The following lists include all Latin loanwords found in Syriac texts not translated from Greek up to Yaʿqub of Edessa (d. 708). Based on the discussion in §4.8, it seems likely that the vast majority of these Latin words reached Syriac via Greek. Thus, the probable Greek intermediary is provided for all cases in which the Latin word is actually attested in Greek, usually in the Greek from Egypt. The Latin loanwords are grouped by approximate date of first appearance in Syriac. Latin loanwords that first appear in pre-fourth century Syriac, including the Peshiṭta Bible (both Old and New Testament), are as follows:


g. κλήθρον (Liddell and Scott 1996: 957) > Latin *clathri* (Glare 1982: 333; Lewis and

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i. Latin *collarium, collare* (Glare 1982: 350; Lewis and Short 1969: 365) > κολλάριον (Daris 1991: 56; Liddell and Scott 1996: 972) > ܩܘܠܪܐ qwlr ʾ ‘iron collar’ (*Pre-4th cent.* 1 Chr 20:3; 2 Sam 12:31; Sokoloff 2009: 1330)


k. Latin *copula* (Glare 1982: 443; Lewis and Short 1969: 467) > κῶπλα (Daris 1991: 64) > ܠܐ ܩܘܦ qwpl ʾ ‘band, chain’ (*Pre-4th cent.* 1 Chr 20.3; Sokoloff 2009: 1340)


o. Latin *flagellum* (Glare 1982: 708; Lewis and Short 1969: 755) > Late Latin


q. Latin *lorarius* (Glare 1982: 1043; Lewis and Short 1969: 1078) > lwlr ‘harness or saddle maker’ (*NT* Acts 18:3; Sokoloff 2009: 679)


Latin loanwords that first appear in fourth-century Syriac include:


h. Latin *statio* ‘lit. standing’ (Glare 1982: 1814; Lewis and Short 1969: 1751) >
Latin loanwords that first appear in fifth-century Syriac include:


Latin loanwords that first appear in sixth-century Syriac include:


Latin loanwords that first appear in sixth-century Syriac include:


1925]; Sokoloff 2009: 1334)


s. Latin *illustris* (Glare 1982: 830) > *ილლოუსტრიოს* (Lampe 1961: 673) > nominative plural *ილლოუსტრიო*= *ილლოუსტრო* ‘bearers of title of “illustrious


y. Latin *magister* (Glare 1982: 1062; Lewis and Short 1969: 1097) > μᾶγιστρος
Sokoloff 2009: 708)

z. Latin *magistrianus* (Lewis and Short 1969: 1098) > μαγιστριανός (Daris 1991:
69; Lampe 1961: 819) > ܡܓܝܣܛܪܝܢܐ ‘magistrianos’ *(6th cent.* Yuḥanon
Sokoloff 2009: 708)

aa. Latin *mandatum* (Glare 1982: 1071; Lewis and Short 1969: 1106) > μανδᾶτον
(Daris 1991: 70; Lampe 1961: 825) > ܡܢܕܛܐ ‘command’ *(6th cent.* Yuḥanon
Sokoloff 2009: 780)

bb. Latin *mantele*, *mantile* (Glare 1982: 1075; Lewis and Short 1969: 1110) > ܠܐ ܡܢܕܝ
‘towel, handkerchief, shroud’ *(6th cent.* Yuḥanon of Ephesus, *Lives of the

c. Latin *metatum* (Lewis and Short 1969: 1140 [s.v. meto]) > μῆτατον (Daris 1991:
72) > ܡܝܛܛܘܢ ‘house, dwelling’ *(6th cent.* Yuḥanon of Ephesus, *Lives of the

dd. Latin *notarius* (Glare 1982: 1192; Lewis and Short 1969: 1217) > νοτάριος
‘notarius, a Byzantine official’ *(6th cent.* Yuḥanon of Ephesus,

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jj. Latin *porta* (Glare 1982: 1407; Lewis and Short 1969: 1400-1401) > πόρτα


\textsuperscript{2} Brockelmann (1922: 679), along with Sokoloff (2009: 1322), also list 114.22, but the edition does not contain the word.
Latin loanwords that first appear in seventh-century Syriac include:


Latin loanwords that first appear in seventh-century Syriac include:


Appendix 2: Greek Loanwords Inherited in Syriac

The following words are attested both in an Aramaic dialect prior to the second century CE (Middle Aramaic or earlier) and in Syriac by the fourth century. Thus, based on the arguments presented in §4.9, it is likely that they were transferred into Aramaic at an earlier period and then inherited in Syriac.

(1) a. ἀήρ (Liddell and Scott 1996: 30) > ܐܐรกʾʾර ‘air’ (Pre-4th cent. Odes of Solomon 5.5 [ed. Charlesworth 1973]; also in OT and NT; Sokoloff 2009: 1), already in Targum Onqelos ʾawwr ‘air’ (Cook 2008: 5); see also Christian Palestinian Aramaic ʾr (Schulthess 1903: 1; Müller-Kessler and Sokoloff 1998b: 239; 1999: 223; Brock 1995: 123.22); Jewish Palestinian Aramaic ʾawwr, ʾbyr ‘air, space’ (Sokoloff 2002b: 38); Samaritan Aramaic ʾwyr ‘open space’ (Tal 2000: 13); Jewish Babylonian Aramaic ʾәwәrә (Sokoloff 2002a: 87-88); Mandaic aiar ‘upper atmosphere, air, ether, wind’ (Drover and Macuch 1963: 14)

b. ἀνδριάς (Liddell and Scott 1996: 128) → accusative singular ἀνδριάντα > ܐܢܕܪܝܢܛܐ ʾʾʾʾ本事 ‘statue’ (Pre-4th cent. Old Syriac Inscriptions As1.5 [ed. Drijvers and Healey 1999]; also in 2 Chr 14:2; Sokoloff 2009: 11), already in Palmyrene ʾdrt (Hillers and Cussini 1996: 335; cf. Brock 2005: 12); see also Late Jewish Literary Aramaic ʾndrtʾ (TgEsth1 3:2; Jastrow 1886-1903: 81); Jewish Palestinian Aramaic ʾndrt (Sokoloff 2002b: 64); Jewish Babylonian Aramaic ʾәndrәtә (Sokoloff 2002a: 144)


d. ḧrkhwʾ (Liddell and Scott 1996: 254) > Ḫʾrkwnʾ ‘ruler, archon; leader, chief’ (Pre-4th cent. P.Euph. 6.36, 43; 7.34, 38 [ed. Feissel, Gascou, and Teixidor 1997], also in NT; Sokoloff 2009: 100), already in Palmyrene ḫʾkwʾ (Hillers and Cussini 1996: 343; cf. Brock 2005: 12); see also Late Jewish Literary Aramaic ḥʾkwʾ (TgJob 21:28; Jastrow 1886-1903: 121); Mandaic ḥʾrkwn (Drower and Macuch 1963: 37-38); Christian Palestinian Aramaic ḥʾkwʾ (Müller-Kessler and Sokoloff 1996: 108; 1998b: 245; Schulthess 1903: 18); Jewish Palestinian Aramaic ḥʾkwʾ (Sokoloff 2002b: 75); Judean Aramaic ḥʾkwʾ (Hoftijzer and Jongeling 1995: 109); Jewish Babylonian Aramaic ḫʾkn (Sokoloff 2002a: 881-882)


g. ḫʾṯʾ (Liddell and Scott 1996: 310) > ḫʾṭʾ bss ‘base’ (Pre-4th cent. Ex 25:31; 35:16; 37:17; 38:5; 39:39; etc.; Sokoloff 2009: 166), already in Nabatean bss (Healey 1993: 69-70, 255; 1995: 77); see also Jewish Palestinian Aramaic bʾṣʾ (Sokoloff 2002b: 106); Christian Palestinian Aramaic bʾṣʾ (Müller-Kessler and

i. βωμός (Liddell and Scott 1996: 334) > ܒܘܡܣܐ bwmsʾ ‘altar’ (Pre-4th cent. 2 Chr 14:2; 31:1; Sokoloff 2009: 127), already in Nabatean bms (Hoftijzer and Jongeling 1995: 168; or βῆμα); see also Christian Palestinian Aramaic bwms (Müller-Kessler and Sokoloff 1997: 244; Schulthess 1903: 23); Jewish Babylonian Aramaic bimosʾ (Sokoloff 2002a: 201)

j. γένος (Liddell and Scott 1996: 344) > ܓܢܣܐ gnsʾ ‘kind, species; family; race, nation’ (Pre-4th cent. Acts of Thomas, 201.17; 244.16; 245.5 [ed. Wright 1871a: 2.171-333]; Odes of Solomon, 41.8 [ed. Charlesworth 1973]; also in OT and NT; Sokoloff 2009: 179, 249), already in Palmyrene gns (Hillers and Cussini 1996: 354; cf. Brock 2005: 13); see also Late Jewish Literary Aramaic gynsʾ (TgPJ Ex 12:47; Jastrow 1886-1903: 260); Mandaic ginsa (Drower and Macuch 1963: 91); Jewish Palestinian Aramaic gynws (Sokoloff 2002b: 128); Christian Palestinian Aramaic gns (Müller-Kessler and Sokoloff 1998a: 228; 1999: 230; Schulthess 1903: 39); Jewish Babylonian Aramaic ginsʾ (Sokoloff 2002a: 297); Samaritan Aramaic gnws (Tal 2000: 154)

k. Latin denarius (Glare 1982: 514; Lewis and Short 1969: 545) > δηνάριον (Daris

1. διάταγμα (Liddell and Scott 1996: 414) > ܕܝܛܓܡܐ gm’ ‘order, charge’ (Pre-4th cent. Ezra 4:18; 8:36; Sokoloff 2009: 294), already in Palmyrene ǳytgm’ (Hillers and Cussini 1996: 356; cf. Brock 2005: 14); see also Jewish Palestinian Aramaic ǳyttgmh (Sokoloff 2002b: 145); Late Jewish Literary Aramaic ǳytgm’ (TgEsth2 3:15; Jastrow 1886-1903: 294)

m. ἐξέδρα (Liddell and Scott 1996: 589) > ܐܟܣܕܪܐ ʾksdr’ ‘exedra’ (Pre-4th cent. 1 Kg 7:4; Ezek 40:38, 45, 46; 41:10; 42:1, 4, 5, 7; 44:19; Sokoloff 2009: 43), already in Targum Jonathan ʾaksadrɔ (Judg 3:23; Jastrow 1886-1903: 64); Palmyrene ʾksdr’, ʾkṣdr’ (Hillers and Cussini 1996: 337; cf. Brock. 2005: 15; Blau 1970: 58 n. 17 [on the spelling with ʃ]); see also Jewish Babylonian Aramaic ʾaksadrɔ (Sokoloff 2002b: 131)

Wright and McLean 1898]; Sokoloff 2009: 89, 353), already in Judean Aramaic

\textit{hprkyh} (Sokoloff 2003: 44); Nabatean \textit{hprky} (Hoftijzer and Jongeling 1995: 292); see also Late Jewish Literary Aramaic \textit{ʾprky} (TgLam 1:1; Jastrow 1886-1903: 59); Jewish Palestinian Aramaic \textit{ʾyprkyyh} (Sokoloff 2002b: 53); Christian Palestinian Aramaic \textit{ʾprky}, \textit{hprky} (Müller-Kessler and Sokoloff 1998b: 257)

o. \textit{ἐπίτροπος} (Liddell and Scott 1996: 669) > \textit{ʾpētrwp} ‘prefect; manager’ (\textbf{4th cent.} \textit{Book of Steps}, 464.7, 8, 12, 17, 18, 22; 465.1, 3, 6 [ed. Kmosko 1926]; also in NT; Sokoloff 2009: 86), already in Palmyrene \textit{ʾptp} (Hillers and Cussini 1996: 342; cf. Brock 2005: 16); Judean Aramaic \textit{ʾptp} (Hoftijzer and Jongeling 1995: 94); see also Late Jewish Literary Aramaic \textit{ʾptwrwpws} (TgPJ Gen 39:4; Jastrow 1886-1903: 102); Christian Palestinian Aramaic \textit{ʾpytrwpws, ḥpytrwp} (Müller-Kessler and Sokoloff 1998b: 244; Schulthess 1903: 16); Jewish Babylonian Aramaic \textit{ʾappītroppo} (Sokoloff 2002a: 155); Jewish Palestinian Aramaic \textit{ʾpytrwpws} (Sokoloff 2002b: 69-70)


q. \textit{ἡγεμών} (Liddell and Scott 1996: 763) > \textit{ḥgmwn}, \textit{ʾygmwn}’

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‘prefect’ (4th cent. Aphrahāt, *Demonstrations*, 1.973.6 [ed. Parisot 1894-1907]; *Book of Steps*, 645.20; 648.3; 648.15 [ed. Kmosko 1926]; also in OT and NT; Sokoloff 2009: 31, 340), already in Palmyrene *hgmwn*, *hygmwn* (Hillers and Cussini 1996: 359; Brock 2005: 16); Nabatean *hgmwn* (Hoftijzer and Jongeling 1995: 270); see also Christian Palestinian Aramaic *hyg(y)mwn* (Müller-Kessler and Sokoloff 1998a: 231; 1998b: 256; 1999: 233; Schulthess 1903: 50); Jewish Babylonian Aramaic *hağmona* (Sokoloff 2002a: 360); Late Jewish Literary Aramaic *hgmwn’* (TgEsth2 8:7; Jastrow 1886-1903: 331)


t. κιθάρα, κίθαρις (Liddell and Scott 1996: 950) \textgreater; \textit{ܩܝܬܪܐ} \textit{qytr} ‘cither, lyre’ (Pre-4th cent. \textit{Odes of Solomon}, 6.1; 7.17; 14.8; 26.3 [ed. Charlesworth 1973]; also in OT and NT; Sokoloff 2009: 1366), already in Daniel \textit{qytrws} (k), \textit{qat\textit{\textquad}ros} (Koehler and Baumgartner 2000: 1970); Targum Jonathan \textit{qtrws} (Is 5:12; Jastrow 1886-1903: 1434); see also Christian Palestinian Aramaic \textit{qytr} (Müller-Kessler and Sokoloff 1998b: 292; Schulthess 1903: 186)


v. Latin \textit{collarium, collare} (Glare 1982: 350; Lewis and Short 1969: 365) \textgreater; \textit{κολλάριον} (Daris 1991: 56; Liddell and Scott 1996: 972) \textgreater; \textit{ܩܘܠܪܐ} \textit{qwlr} ‘iron collar’ (Pre-4th cent. 1 Chr 20:3; 2 Sam 12:31; Sokoloff 2009: 1330), already in Targum Jonathan \textit{qol\textit{\textquad}r} (Ezek 19:9; Jastrow 1886-1903: 1330); see also Jewish Palestinian Aramaic \textit{qwlr} (Sokoloff 2002b: 479)

w. Latin \textit{colonia} (Glare 1982: 355; Lewis and Short 1969: 370) \textgreater; \textit{κολωνία} (Daris 1991: 56; Lampe 1961: 766; Liddell and Scott 1996: 974) \textgreater; \textit{ܩܘܠܘܢܝܐ} \textit{qwlwny} ‘colony’ (Pre-4th cent. Old Syriac Parchments, 1.4; 3.4 [ed. Drijvers and Healey 1999: 231-248]; also in NT; Sokoloff 2009: 1329), already in Palmyrene \textit{qlny}’
(Hillers and Cussini 1996: 406; cf. Brock 2005: 18); see also Jewish Babylonian Aramaic \textit{qlbwy} (Sokoloff 2002a: 1021)

\textit{Book of Steps}, 153.9 [ed. Kmosko 1926]; common in Ephrem; also in OT and NT; Sokoloff 2009: 673), already in Palmyrene \textit{lgwn} (Hillers and Cussini 1996: 376; cf. Brock 2005: 18); see also Christian Palestinian Aramaic \textit{lgwn} (Müller-Kessler and Sokoloff 1998a: 243; Schulthess 1903: 101); Jewish Palestinian Aramaic \textit{liqwn} (Sokoloff 2002b: 281); Late Jewish Literary Aramaic \textit{lgwn} (TgJob 15:24; Jastrow 1886-1903: 692)

y. \textit{lēkān̄} (Liddell and Scott 1996: 1037) > \textit{lgpn} ‘platter, basin’ (Pre-4th cent. 
\textit{Acts of Thomas}, 221.14 [ed. Wright 1871a: 2.171-333]; also in OT and NT; Sokoloff 2009: 697), already in Targum Jonathan \textit{lgkna}, variant \textit{liqno} (Jud 6:38; Jastrow 1886-1903: 719); see also Jewish Babylonian Aramaic \textit{liqno} (Sokoloff 2002a: 633); Late Jewish Literary Aramaic \textit{lgyn} (TgJob 32:19; Jastrow 1886-1903: 719)


aa. \textit{μαγίς} (Liddell and Scott 1996: 1071) > \textit{mgs} ‘jar, dish’ (Pre-4th cent. Ex
37.16; Num 4:7; Sokoloff 2009: 710), already in Targum Onqelos *magisw* (Num 4:7; Cook 2008: 144); see also Jewish Babylonian Aramaic *mgisw* (Sokoloff 2002a: 640); Late Jewish Literary Aramaic *mgys* (TgPs 123:2; Jastrow 1886-1903: 728)

bb. *μηλωτή* (Liddell and Scott 1996: 1127) > אֲלַל mlת ‘carpet; covering; pillow’

(4th cent. Ephrem, *Maḏrāšē on the Nativity*, 46.6 [ed. Beck 1959]; Sokoloff 2009: 752), already in Palmyrene *mlt* (Hillers and Cussini 1996:381-382; to be added to Brock 2005); Targum Onqelos *melɔ* ‘fine wool’ (Gen 49:11; Cook 2008: 151); see also Jewish Babylonian Aramaic *melɔ* (Sokoloff 2002a: 669-670); Samaritan Aramaic *mlt* (Tal 2000: 464); Late Jewish Literary Aramaic *mlt* (TgEsth2 1:6; Jastrow 1886-1903: 775)


ee. μοχλός (Liddell and Scott 1996: 1149) > ܠܐܡܘܟ mwkl’ ‘bolt for fastening door’
(Pre-4th cent. Odes of Solomon, 17.10 [ed. Charlesworth 1973]; also in OT; Sokoloff 2009: 724), already in Targum Onqelos mugl̇saya (1 Kg 7:50; Jastrow 1886-1903: 738)


Aramaic nmws’ (TgPs 1:2; Jastrow 1886-1903: 905)

hh. ξένος (Liddell and Scott 1996: 1189) + adjectival ending -οντες > ξένος ‘strange, foreign; stranger’ (Pre-4th cent. Acts of Thomas, 175.5, 7; 183.12; 231.3; 242.11 [ed. Wright 1871a: 2.171-333]; Odes of Solomon, 17.6 [ed. Charlesworth 1973]; also in OT and NT; Sokoloff 2009: 44), already in Palmyrene ξνό (Hillers and Cussini 1996: 337-338; cf. Brock 2005: 19); see also Jewish Babylonian Aramaic ξάνονος (Sokoloff 2002a: 131); Jewish Palestinian Aramaic ξνυ (Sokoloff 58); Christian Palestinian Aramaic ξνύ (Müller-Kessler and Sokoloff 1996: 106; 1998a: 219; Schulthess 1903: 8)

ii. Latin sextarius (Glare 1982: 1751; Lewis and Short 1969: 1688) > ξέστης (Daris 1991: 76-77) > qst ‘vase, urn; measure’ (4th cent. Ephrem, Commentary on Genesis and part of Exodus, 146.21, 22 [ed. Tonneau 1955]; also in OT and NT; Sokoloff 2009: 1387), already in Palmyrene qstwn (Hillers and Cussini 1996: 406; cf. Brock 2005: 19); see also Jewish Palestinian Aramaic qst (Sokoloff 2002b: 498); Christian Palestinian Aramaic qst (Müller-Kessler and Sokoloff 1997: 288; Schulthess 1903: 181); Jewish Babylonian Aramaic qst, qst’ (Sokoloff 2002a: 1014)

jj. πείσάι (Liddell and Scott 1996: 1353-1354) > rt. υπές C ‘to persuade, to convince; to demand, seek, beseech’, Ct ‘to be persuaded; to obey’ (Pre-4th cent. Acts of Thomas, 172.17; 180.15; 181.19; 182.6; 221.3, 5; 240.6; 241.3 [ed. Wright 1871a: 2.171-333]; Book of the Laws of the Countries, 14x [see Lund 2007: 200-201] [ed. Drijvers 1965]; Odes of Solomon, 8.17; 39.8 [ed. Charlesworth 1973]; Sokoloff 2009: 1188), already in Targum Onqelos υpics (Cook 2008: 108 [s.v. υπες];
see Butts 2012: 158); see also Jewish Babylonian Aramaic ḫpyyś (Sokoloff 2002a: 899-900); Christian Palestinian Aramaic ḫyś (Müller-Kessler and Sokoloff 1996: 131; 1997: 283; 1998a: 257; 1998b: 287; 1999: 251; Brock 1999c: 2r.6; 5r.1; 5v.9; Schulthess 1903: 156); Jewish Palestinian Aramaic ḫpyyś (Sokoloff 2002b: 430-431); Samaritan Aramaic Ḫpys (Tal 2000: 676)

kk. πνακίδιον (Liddell and Scott 1996: 1405) > ḫקניא pnqyt ‘writing tablet, treatise; collection; small book, volume’ (Pre-4th cent. Odes of Solomon, 23.21 [ed. Charlesworth 1973]; also in NT; Sokoloff 2009: 1207), already in Targum Jonathan penaqas (Ezek 9:2; cf. Jastrow 1886-1903: 1166); see also Jewish Babylonian Aramaic pinaqs (Sokoloff 2002a: 901); Christian Palestinian Aramaic ḫynqs (Schulthess 1903: 156); Jewish Palestinian Aramaic ḫynqs (Sokoloff 2002b: 431); Late Jewish Literary Aramaic ḫnqs’ (TgEsth2 4:1; Jastrow 1886-1903: 1166)

ll. πίναξ (Liddell and Scott 1996: 1405) > ḫקנת pynk ‘dish, writing tablet’ (4th cent. Aphrahat, Demonstrations, 1.729.3 [citing Mt 23:25] [ed. Parisot 1894-1907]; Ephrem, Maḏršē on the Nativity, 104.13 [ed. Beck 1959]; Maḏršē on Nisibis, 2.87.12 [Beck 1963]; also in NT; Sokoloff 2009: 1188), already in Imperial Aramaic ḫynk (Hoftijzer and Jongeling 1995: 910); see also Jewish Babylonian Aramaic pīnḵ (Sokoloff 2002a: 901); Jewish Palestinian Aramaic ḫynk (Sokoloff 2002b: 431); Christian Palestinian Aramaic ḫynks (Schulthess 1903: 156); Samaritan Aramaic ḫnk (Tal 2000: 690)

mm. πλατεῖα (Liddell and Scott 1996: 1413-1414), cf. Latin platea (Glare 1982: 1388; Lewis and Short 1969: 1385) > ḫלטיא plty ‘open space, square’ (Pre-4th cent. Jer 5:1; 9:20; Song 3:2; Sokoloff 2009: 1199), already in Palmyrene pltý’
(Hillers and Cussini 1996: 400-401; cf. Brock 2005: 20); see also Jewish Palestinian Aramaic *πλύθ* (Sokoloff 2002b: 435); Samaritan Aramaic *πλύθ* (cf. Sokoloff 2002b: 435); Late Jewish Literary Aramaic *πλύθ* (TgJob 29:7; Jastrow 1886-1903: 1179)


oo. πόρπη (Liddell and Scott 1996: 1451) > פֶּרֶפ `clasp, buckle, ring` (Pre-4th cent. Ex 35:11; Sokoloff 2009: 1248), already in Targum Onqelos *purpin* (Ex 26.6; Cook 2008: 229); see also Jewish Palestinian Aramaic *prp* (Sokoloff 2002b: 450)


qq. προνοητής (Liddell and Scott 1996: 1491) or προνοήσαι (Liddell and Scott 1996: 1490-1491) > rt. "הָדַא בָּרֵשָׁה ‘to divide, distribute; to provide for, supply; to manage, administer’ (4th cent. *Book of Steps*, 4.19; 60.13, 14; 76.19; 381.14 [ed. Kmosko 1926]; also in OT; Sokoloff 2009: 1243), attested already in Palmyrene * práns* (Hillers and Cussini 1996: 401; Hoftijzer and Jongeling 1995: 940); Targum Jonathan * práns* (Ez 34.8 [2x]; Is 57.8; Jastrow 1886-1903: 1231); see also Jewish Palestinian Aramaic * práns* (Sokoloff 2002b: 448, 842); Christian Palestinian
Aramaic √prns (Schultthess 1903: 163); Samaritan Aramaic √prns (Tal 2000: 704-705); Jewish Babylonian Aramaic √prns (Sokoloff 2002a: 935); Late Jewish Literary Aramaic √prns (PsJ Gen. 30:30, Lev. 25:35; Jastrow 1886-1903: 1231)

rr. σάνδαλον (Liddell and Scott 1996: 1582) > ܪܠܐ ܣܕ ʾsdl ‘sandal’ (NT Mk 6.9 [S]; Sokoloff 2009: 971, 1022), already in Targum Jonathan sandelin (Is 11:15; Jastrow 1886-1903: 1004-1005); see also Jewish Palestinian Aramaic sndl (Sokoloff 2002b: 383); Late Jewish Literary Aramaic sndl (TaPs 108:10; Jastrow 1886-1903: 1004-1005); Jewish Babylonian Aramaic sandło (Sokoloff 2002a: 821); Mandaic sandla (Drower and Macuch 1963: 313)


tt. στατήρ (Liddell and Scott 1996: 1619) > ܐܣܬܝܪܐ ʾst ʾ, ܐܣܬܪܐ ʾstr ‘stater, coin, weight’ (Pre-4th cent. Ephrem, Prose Refutations, Discourse 2-5, 108.28 [ed. Mitchell 1912-1921]; Sokoloff 2009: 385), also in Targum Jonathan ʾuzmil (Jer 36:23); see also Jewish Palestinian Aramaic ʾwzmyl (Sokoloff 2002b: 38); Late Jewish Literary Aramaic ʾzml (TgJob 16:9; Jastrow 1886-1903: 46)

uu. στατήρ (Liddell and Scott 1996: 1634) [ > Pahlavi stēr (MacKenzie 1971: 77) (?)] > ʾstyr, ʾstr ‘stater, coin, weight’ (4th cent. Ephrem, Madrašė against Julian the Apostate, 75.3 [ed. Beck 1957b]; Ephrem, Madrašė on Nisibis,
2.55.4 [Beck 1963]; also in OT and NT; Sokoloff 2009: 80), already in Imperial Aramaic sttbr (Hoftijzer and Jongeling 1995: 805); Ḥatran ṣtr (Hoftijzer and Jongeling 1995: 92); see also Mandaic astira (Drower and Macuch 1963: 30); Jewish Babylonian Aramaic ḥjstcr (Sokoloff 2002a: 123); Christian Palestinian Aramaic ṣtyr (Schulthess 1903: 15)

vv. στοά (Liddell and Scott 1996: 1647) > ḳqtct lṣtwʾ ‘portico’ (Pre-4th cent. 1 Kg 6:3; passim, also in NT; Sokoloff 2009: 68), already in Palmyrene ṣtwʾ (Hillers and Cussini 1996: 341; cf. Brock 2005: 21); Ḥatran ṣtwʾ (Hoftijzer and Jongeling 1995: 87); Judean Aramaic sutow (Hoftijzer and Jongeling 1995: 783); see also Jewish Palestinian Aramaic ṣtw (Sokoloff 2002b: 372); Christian Palestinian Aramaic ṣtwʾ (Schulthess 1903: 15)


xx. συμφωνία (Liddell and Scott 1996: 1689) > ḳtwʾ swynyʾ ‘bagpipe’ (Pre-4th cent. Acts of Thomas, 174.14 [ed. Wright 1871a: 2.171-333]; also in OT and NT; Sokoloff 2009: 1297), already in Daniel sumponyʾ (Dan. 3:5, 15), sypnyh (Dan. 3:10 [k]), suponyʾ (Dan. 3:10 [q]) (Koehler and Baumgartner 2000: 1937-1938)


ccc. ταῶς (Liddell and Scott 1996: 1763) > ρς taws 'peacock' (4th cent. Ephrem, Commentary on Genesis and part of Exodus, 59.22 [ed. Tonneau. 1955];
Macrobe against Heresies, 170.16 [ed. Beck 1957a]; also in OT; Sokoloff 2009: 519), already in Targum Jonathan twɔsin (1 Kg 10:22); see also Jewish Babylonian Aramaic twws’ (Sokoloff 2002a: 496); Mandaic tawa (Drower and Macuch 1963: 173); Jewish Palestinian Aramaic twws (Sokoloff 2002b: 221); Samaritan Aramaic tws (Tal 2000: 307); Late Jewish Literary Aramaic twws’ (TgEsth2 1:2; Jastrow 1886-1903: 522)

ddd. υπατεια (Liddell and Scott 1996: 1854) > αὴρ ἡπτυ’ ‘consulship; gift of a consul’ (Pre-4th cent. Old Syriac Parchments, 1.2; 2.4; 3.2 [ed. Drijvers and Healey: 231-248]; Sokoloff 2009: 337), already in Judean Aramaic hptyh (Sokoloff 2003: 44)

eee. Latin fascia (Glare 1982: 677; Lewis and Short 1969: 726) > φασκία (Daris 1991: 114) > αὐθόμον psqyt’ ‘bandage used to wrap a corpse’ (NT John 11:44 [SP]; Sokoloff 2009: 1215), already in Targum Jonathan psiqayyo (Is 3:24); see also Christian Palestinian Aramaic psqy’ (Schulthess 1903: 160); Jewish Palestinian Aramaic pysqy (Sokoloff 2002b: 432)

fff. χαράκωμα (Liddell and Scott 1996: 1977) > αἰόλως qlqwm’ ‘seige engines, entrenchments’ (Pre-4th cent. Deut 20:20; passim; Sokoloff 2009: 1375), already in Targum Jonathan karqom (1 Sm 26:7; Jastrow 1886-1903: 669); see also Jewish Palestinian Aramaic krkw (Sokoloff 2002b: 270); Late Jewish Literary Aramaic krqwm’ (TgJob 20:24; Jastrow 1886-1903: 669)

ggg. χιλιαρχος (Liddell and Scott 1996: 1992) > αἰόλως klyrk’, αἰολίκη klyrk’ ‘chiliarch’ (NT Mt 8:5 [S], 8 [S], 13 [S]; Mk 6:21 [SP]; Jn 18:12 [SP]; passim; Sokoloff 2009: 618), already in Nabatean klyrk’ (Hoftijzer and Jongeling 1995: 512;
cf. Healey 1995: 77)

χρῶμα (Liddell and Scott 1996: 2012) >ܟܪܘܡܐ krm ‘color; nature’ (4th cent. Ephrem, Ματθαίος οι Χριστοφόροι, 28.21 [ed. Beck 1960]; Commentary on Genesis and part of Exodus, 127.21; 151.22, 24, 25 [ed. Tonneau 1955]; Ματθαίος against Heresies, 32.1; 46.4; 145.18 [ed. Beck. 1957a]; also in OT; Sokoloff 2009: 648), already in Targum Onqelos kərum (Ex 28:20; 39:13; Cook 2008: 131); see also Jewish Babylonian Aramaic krm (Sokoloff 2002b: 268); Samaritan Aramaic krm ‘gem’ (Tal 2000: 408); Late Jewish Literary Aramaic krwn (TgPJ Ex 28:20; Jastrow 1886-1903: 665)

Appendix 3: Citations for Verbless Clauses

This appendix contains references for the data cited for the diachronic increase in the frequency of Pattern B verbless clauses (§9.4).

**Verbless clauses with substantival predicates are as follows:**

**Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965)**
- Pattern A 25x (4.9, 15, 15-16; 6.5; 10.11; 12.8 [2x]; 14.22, 25; 18.23; 20.14, 15, 16; 22.5, 11, 22.14-15, 16, 17-18; 28.6-7, 25; 32.12; 36.7-9; 50.1 54.6; 60.23)
- Pattern B 1x (12.3-4).

**Acts 1-7, Acts of Thomas (ca. 200-250 CE; ed. Wright 1871a: 2.171-251 [Syr.])**
- Pattern A 34x (172.13; 178.15-16; 179.17-18, 19; 181.1 [negative], 2, 9; 183.8; 185.8; 186.17; 188.3, 5 [2x]; 195.10; 198.2, 3, 5, 6, 8, 9; 199.4-5, 11; 202.10; 213.13; 214.21-215.1; 216.21-217.1; 219.6; 220.18; 223.14; 227.6-7; 236.18; 237.2-3; 240.7-8; 248.17)
- Pattern B 5x (217.2; 240.12, 13-14, 15-16; 249.3)

**Demonstrations 1-3 by Aphrahat (fl. 337-345; ed. Paré 1894-1907)**
- Pattern A 31x (8.5, 9, 12; 9.4 [biblical quotation], 8 [biblical quotation]; 12.5; 13.5, 16-17, 21-22 [biblical quotation], 24; 16.6, 14; 17.26; 21.15 [biblical quotation], 17; 24.14; 24.23-25.1; 25.2 [biblical quotation]; 29.8; 33.1; 45.4; 52.12, 21-22, 25; 57.5, 8; 60.24-25 [biblical quotation]; 96.10; 97.2-3; 101.19; 132.14-15 [biblical quotation]).
- Pattern B 6x (8.5-6; 20.12; 24.8; 52.19; 97.14; 136.7)

**Prose Refutations, Discourse 1 by Ephrem (d. 373; ed. Overbeck 1865: 21-58)**
- without copula 35x (21.12, 14; 22.6, 21; 24.26-27; 30.6, 7-8; 31.2, 4-5; 33.4, 33.27;
34.17-18; 36.4; 37.20; 38.16, 19, 26; 40.12; 41.2, 25; 44.12 [full cleft]; 44.17 [negative], 18; 47.20, 23-24 [negative], 24; 48.2, 3; 49.15-16 [negative]; 52.7; 55.4 [2x], 6; 57.24; 58.14)

- Pattern B 4x (23.2-3, 6; 35.11; 58.21-22)

*Teaching of Addai* (ca. 420; ed. Howard 1981)


- Pattern B 4x (19*.4-5, 6; 27*.1, 4)

*Life of Rabbula* (ca. 450; ed. Overbeck 1865: 159-209)

- Pattern A 1x (197.26)

- Pattern B 15x (162.9, 27; 163.1, 3; 163.8-9 [negative], 9, 10, 12; 173.6, 18; 177.4; 183.20-21; 184.18, 20; 208.14-15)

*Four Letters by Philoxenos* (d. 523; ed. Frothingham 1886: 28-48; Vaschalde 1902: 127-173)

- Pattern A 57x: 30.12; 34.24; 34.24-36.1; 36.19-20; 42.22; 130.18-131.1 [biblical quotation]; 136.18 [2x]; 137.1 [2x], 2, 17; 138.1, 1-2, 12, 13; 139.8, 11, 14; 142.10; 143.16; 145.7; 147.2-3, 14-15; 148.8; 149.3, 17; 150.20; 151.4; 152.14-15, 18, 21; 153.1 [2x], 9, 18-19, 19, 19-20; 154.15-16; 155.3, 6, 8, 9; 156.19-20; 157.5-6, 7; 159.6; 164.6; 166.15; 167.13; 168.15-16, 17; 169.2-3, 18; 170.5, 11; 171.16

- Pattern B 34x: 28.12; 30.5; 30.18; 32.22; 34.9; 40.17; 46.18-20, 22; 129.3-4; 130.9; 131.6-7; 132.4; 133.16-17; 134.6-7; 140.12; 143.16-17; 146.16; 147.7; 148.1-2; 149.6; 151.6; 154.5; 155.1, 11-12; 156.19; 163.6-7, 8, 9; 165.5, 7; 168.2-3, 5-6; 172.2, 10-11

*Letter on Himyarite Persecution* by Shemʿun of Beth Arsham (d. before 548; ed. Guidi 1881)
- Pattern A 11x (3*.12, 12-13, 18 [2x], 22, 22-23; 4*.20; 6*.17; 11*.7; 12*.26; 15*.1)
- Pattern B 7x (1*.4-5; 2*.7-8; 3*.10, 11-12, 25-26; 9*.7, 26)

*Life of Yuḥanan of Tella* by Eliya (mid-6th cent.; ed. Brooks 1907: 29-95)
- Pattern A 16x (44.10-11; 55.24-25; 61.4; 64.13-14 [biblical citation]); 68.17; 71.16 [2x]; 71.25-26; 72.2; 73.24; 81.15; 84.4-5; 85.3; 86.1-2; 89.13; 91.9)
- Pattern B 13x (31.8-9; 34.8-9; 45.6; 53.14; 53.18-19; 71.21; 72.9; 73.19; 78.6-7; 82.13; 84.25-26; 92.11; 94.4-5)

*Lives of Eastern Saints* 10, 24, 36 by Yuḥanan of Ephesus (d. ca. 589; Brooks 1923-1925: 1.137-158, 2.513-526, 2.624-641)
- Pattern A 3x (147.2-3, 3-4; 150.8; 154.10)
- Pattern B 12x (142.4; 145.3; 145.6; 146.11-12; 147.13; 150.5; 151.2; 311.11-312.1; 314.13-315.1; 422.8-9; 423.8-9; 429.9-10)

*Life of Marutha* by Denḥa (d. 649; ed. Nau 1905a: 52–96)
- Pattern A 2x (72.8-9 [citation of Gregory the Theologian]; 72.13)
- Pattern B 7x (63.10; 72.5; 79.6; 86.10-11; 86.14-87.1; 91.13; 94.4)

*Letter* 13 and 18 by Yaʿqub of Edessa (d. 708; ed. Wright 1867: *1-*24; Rignell 1979)
- Pattern A 1x (13.8*.1)
- Pattern B 41x (13.2.22; 13.3.30-13.4.1; 13.5.3; 13.6.11; 13.7.3-4; 13.9.6, 8, 12; 13.12.12-13, 15, 21-23; 13.13.6-7 [biblical quotation]; 13.14.27, 29; 13.15.8, 27; 13.15.28-13.16.1; 13.16.13, 14, 29; 13.17.2-4, 10-11, 15-16, 17-18; 13.18.19; 13.19.1-2, 5, 6; 13.20.3, 6, 10, 13, 20-21; 13.21.8-9; 13.22.5-6; 13.23.15; 18.52.9-10; 18.56.7; 18.62.2; 18.64.12-13; 18.66.13)
Verbless clauses with prepositional phrase predicates are as follows:

*Book of the Laws of the Countries (ca. 220; ed. Drijvers 1965)*
- Pattern A 3x (16.6-7, 17; 58.2)
- Pattern B 2x (18.1-2, 22.8)

*Acts 1-7, Acts of Thomas (ca. 200-250 CE; ed. Wright 1871a: 2.171-251 [Syr.])*  
- Pattern A 8x (172.16; 182.18; 198.1-2; 204.17; 206.7; 209.20; 237.1-2; 244.16)  
- Pattern B 4x (198.8; 204.1; 205.4; 206.8)

*Demonstrations 1-3 by Aphrahat (fl. 337-345; ed. Parisot 1894-1907)*
- Pattern A 7x (9.10 [biblical quotation], 10-11 [biblical quotation]; 49.19-20 [negative]; 61.21-22; 64.5-6; 88.14-15; 132.13-14 [biblical quotation])  
- Pattern B 2x (72.18-19, 23-24; cf. also 61.13-14 but the predicate is probably the adverb *hɔkanɔ* ‘thus’)

*Prose Refutations, Discourse 1 by Ephrem (d. 373; ed. Overbeck 1865: 21-58)*
- Pattern A 7x (39.10 [negative]; 40.17; 43.6-7, 23, 24-25; 55.23-24; 56.21-22)  
- Pattern B 3x (34.25 [negative]; 44.11; 46.27)

*Teaching of Addai (ca. 420; ed. Howard 1981)*
- Pattern A 1x (47*.5-6)
- Pattern B 1x (21*.19)

*Life of Rabbula (ca. 450; ed. Overbeck 1865: 159-209)*
- Pattern A 1x (192.6 [biblical quotation])  
- Pattern B 1x (195.19)

*Four Letters by Philoxenos (d. 523; ed. Frothingham 1886: 28-48; Vaschalde 1902: 127-173)*
- Pattern A 2x (148.11-12 [biblical quotation]; 158.16)
- Pattern B 21x (34.23 [biblical quotation]; 44.4, 8; 130.12-13; 131.8-9; 133.12; 135.5; 138.7; 140.10; 141.13; 148.2; 149.18; 150.3-4; 151.4; 158.10; 161.14; 163.10, 13, 14; 165.17; 171.22-172.1)

*Letter on Ḥimyariite Persecution* by Shemʿun of Beth Arsham (d. before 548; ed. Guidi 1881)

- Pattern A 0x
- Pattern B 2x (10*.18-19, 26)

*Life of Yuḥanon of Tella* by Eliya (mid-6th cent.; ed. Brooks 1907: 29-95)

- Pattern A 3x (77.9-10; 83.24 [biblical quotation]; 91.11-12)
- Pattern B 17x (31.4; 32.24-25; 34.17-18; 42.6; 43.22; 61.20-21; 69.3, 7-8; 70.14; 72.10, 10-11, 11 [2x]; 76.13; 82.18-19; 95.6, 12)

*Lives of Eastern Saints* 10, 24, 36 by Yuḥanon of Ephesus (d. ca. 589; Brooks 1923-1925: 1.137-158, 2.513-526, 2.624-641)

- Pattern A 3x (145.6, 9; 150.4)
- Pattern B 7x (142.5; 146.8-9; 147.14; 150.6; 317.8; 318.9; 424.1;

*Life of Marutha* by Denḥa (d. 649; ed. Nau 1905a: 52–96)

- Pattern A 0x
- Pattern B 2x (71.9; 83.6)

*Letter 13 and 18* by Yaʿqub of Edessa (d. 708; ed. Wright 1867: *1-*24; Rignell 1979)

- Pattern A 2x (13.13.5-6 [biblical quotation]; 13.16.16)
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