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IRANIAN SYNTAX IN CLASSICAL ARMENIAN

*The Armenian Perfect and
Other Cases of Pattern Replication*

ROBIN MEYER

casus 演變與變異 linguistica storica
grammatica linguistica storica Sprachwandel legi fonetice reanálisis variació contact ordre des mots reconstruction
flessione dialectologia exaptation suppleció réglage des paramètres grammatica linguistica storica Sprachwandel legi fonetice reanálisis variació contact ordre des mots reconstruction
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Iranian Syntax in Classical Armenian

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Iranian Syntax in Classical Armenian

*The Armenian Perfect and Other Cases
of Pattern Replication*

ROBIN MEYER

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Meiner Familie gewidmet

In Erinnerung an meine Großeltern

Horst Meyer (1923–1970)

Gerda Meyer geb. Sebastian (1922–2016)

Georg Burkhardt (1929–2020)

Ilse Burkhardt geb. Arlt (1928–2020)

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Series preface

Modern diachronic linguistics has important contacts with other subdisciplines, notably first-language acquisition, learnability theory, computational linguistics, sociolinguistics, and the traditional philological study of texts. It is now recognized in the wider field that diachronic linguistics can make a novel contribution to linguistic theory, to historical linguistics, and arguably to cognitive science more widely.

This series provides a forum for work in both diachronic and historical linguistics, including work on change in grammar, sound, and meaning within and across languages; synchronic studies of languages in the past; and descriptive histories of one or more languages. It is intended to reflect and encourage the links between these subjects and fields such as those mentioned above.

The goal of the series is to publish high-quality monographs and collections of papers in diachronic linguistics generally, i.e. studies focussing on change in linguistic structure, and/or change in grammars, which are also intended to make a contribution to linguistic theory, by developing and adopting a current theoretical model, by raising wider questions concerning the nature of language change or by developing theoretical connections with other areas of linguistics and cognitive science as listed above. There is no bias towards a particular language or language family, or towards a particular theoretical framework; work in all theoretical frameworks, and work based on the descriptive tradition of language typology, as well as quantitatively based work using theoretical ideas, also feature in the series.

Adam Ledgeway and Ian Roberts
University of Cambridge

Preface

For better or worse, many projects, ideas, and plans at Oxford and elsewhere have their beginning in conversations held over a cup of tea or coffee, or alternatively over a glass of wine or beer. It will not surprise anyone, then, that this book, too, was initially conceived at such an occasion. Somewhere between the Oriental Institute and Little Clarendon Street, the first words about the elements of Iranian syntax in Armenian presented in these pages tickled the ears of one of my future supervisors.

The spark that kindled this idea, however, sprang from a different source, emanating from the person who first introduced me to the Iranian languages. Without the instruction in Old and Middle Iranian languages that Ilya Yakubovich provided during my years as an MPhil student, and without his continuous encouragement to write about various matters Armenian and Iranian, the idea for my doctoral thesis, and subsequently for this book, would likely never have taken shape. Thus it is to him, as the prime mover, to whom my initial thanks are due.

During my years as a doctoral student at Wolfson College, it was chiefly my two stellar supervisors, Elizabeth Tucker and Theo Maarten van Lint, who provided much food for thought with their comments on my writing and pointed questions concerning my findings; add to that their sheer inexhaustible patience in waiting for the submission of new chapters, and their speed at considering my outpourings, and you will know why I shall forever be indebted to them for their support and kindness.

Equally, however, thanks are due not only to those who helped feed the proverbial flame, but also to those who kept it in check: Peter Barber, Wolfgang de Melo, John Penney, Philomen Probert, and Andreas Willi—or, in short, all the Oxford philologists—have at some point helped me see flaws in my arguments or errors in my ways, and have provided invaluable insights in one form or another. I am particularly grateful to John Penney and Philomen Probert, as it was they who introduced me to comparative philology during my undergraduate days.

Finally, at least from a purely academic perspective, my thanks are due to James Clackson, who together with Wolfgang de Melo examined my thesis and, under the condition that I talk more about tigers (see p. 54), let it pass, thus confirming that this flame was worth the fuel it had used up. Both James and Wolfgang have been very kind in lending me their support even after the end of my doctoral studies.

As for many young researchers, a project like this rarely takes shape in isolation, but is usually accompanied by smaller projects, which help both to divert the

researcher from the occasional monotony and to provide new insights—academic and otherwise—experiences, and income. I had the great pleasure of working in the Special Collections Department of the Bodleian Library for two years, during which I helped organize the exhibition *Armenia: Masterpieces of an Enduring Culture*; during this time, I learnt much about the matters of (time) management and Armenian manuscripts. My thanks for this opportunity, and for many pieces of wisdom, go to the inimitable Gillian Evison. At the same time, I have taken great joy in teaching Latin and Ancient Greek during the entirety of my degree, and must thank Juliane Kerkhecker for allowing me to do so, and for her kindness and understanding when I had to postpone classes when away for conferences or the like.

Yet, despite ideas, willingness, and very supportive mentors, the spark of this project would not have been able to kindle a flame without considerable support from the Arts and Humanities Research Council, from whose doctoral scholarship I have benefited.

Quite some time has passed between the beginning of my doctoral studies (2013), the submission and approval of the thesis (2017), and the publication of this book (2023). I have no one to blame but myself, of course, but suffice it to say that full teaching schedules, the arrival of our two children, a global pandemic, a new job, and numerous new projects have significantly contributed to this delay. Given all that, I am of course extremely grateful to Julia Steer and Vicki Sunter at Oxford University Press, who have been very patient with me and have helped ensure the best possible outcome for this book. Likewise, I am grateful to the anonymous reviewers, whose constructive suggestions and eagle eyes have most certainly made this book better than it might otherwise have been, and for the financial support of the Swiss National Science Foundation which has allowed it to be published in Open Access.

It is not least because of the above-mentioned circumstances that my final words of thanks must go to my loved ones, who have endured me and my ramblings throughout this project and have stood (or lain, crawled, and waddled) beside me at all times. They, I am sure, are as happy to see it come to fruition as I am, though perhaps for different reasons, and it is they to whom this book is dedicated. My darling wife, Sheera, deserves the lion's share of my thanks, as it was she who kept reminding me to get on with finishing this book.

As is, perhaps, inevitable, much of the research presented in what follows rests on imperfect data: we either don't have enough, or something, but not in enough detail, or something, but from an unsatisfactorily small set of sources. Such, it would appear, is the work of the historical linguist. Recalling some memorable lines from Percy Bysshe Shelley's *Zyzyandias*, we find ourselves linguistic travellers in an antique land, left with little more than Shelley describes below, and wishing there was more.

*'My name is Ozymandias, king of kings:
Look on my works, ye Mighty, and despair!
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare
The lone and level sands stretch far away.*

RM
Lausanne, March 2023

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Abbreviations

Below are set out the glosses and abbreviations used in this study. The transliteration of the Armenian script used here is that of Hübschmann–Meillet–Benveniste with the modifications commonly applied in, for example, the *Revue des Études Arméniennes*. Where transliterations for other languages have been used, they are quoted in the standard format or in the form used in the secondary literature from which examples have been taken. References to Armenian texts follow the *Matenagirk' Hayoc'*.

Glosses

ABL	ablative	IOBJ	indirect object-marker
ABS	absolute	IPFV	imperfective
ACC	accusative	ITR	intransitive
AGR	agreement	JUSS	jussive
ANA	anaphor	LOC	locative
AOR	aoorist	M	masculine
COMP	complementizer	MID	middle
CON	connective	N	neuter
CONJ	conjunction	NEG	negative
CVB	converb	NFUT	non-future
DAT	dative	NOM	nominative
DECL	declarative	OBJ	object marker
DEM	demonstrative	OPT	optative
DET	determiner	PASS	passive
DIR	direct case	PATR	patronymic
DU	dual	PF	perfect
ERG	ergative	PFV	perfective
EZ	<i>ezāfe</i> marker	PL	plural
F	feminine	PN	proper noun
GEN	genitive	POSS	possessive
IMP	imperfect	PRS	present
IMPRS	impersonal	PST	past
IMV	imperative	PTC	particle
INF	infinitive	PTCP	participle
INJ	injunctive	QUOT	quotative
INS	instrumental	REFL	reflexive
INT	intensifier	REL	relativizer

SBJV	subjunctive
SG	singular
SUF	<i>Suffixaufnahme</i> -marker
TR	transitive
VBADJ	verbal adjective

Languages

Alb.	Albanian
Arab.	Arabic
Aram.	Aramaic
Arm.	Armenian
Av.	Avestan
Az.	Azeri
Chin.	Chinese
CIr.	Common Iranian
Cymr.	Welsh
Geo.	Georgian
Gk.	Greek
Goth.	Gothic
IIr.	Indo-Iranian
It.	Italian
Kurm.	Kurmanci
Lat.	Latin
Lith.	Lithuanian
MArm.	Middle Armenian
MEA	Modern Eastern Armenian
MP	Middle Persian
MWA	Modern Western Armenian
NE	Modern English
NHG	Modern High German
NP	Modern Persian
OAv.	Old Avestan
OCS	Old Church Slavonic
OE	Old English
OHG	Old High German
OIc.	Old Icelandic
OIr.	Old Irish
OP	Old Persian
PArm.	Proto-Armenian
PIE	Proto-Indo-European
PT	Proto-Tokharian

Pth.	Parthian
Skt.	Sanskrit
Slav.	Slavonic
Sogd.	Sogdian
Syr.	Syriac
TA/TB	Tokharian A/B
TTurk.	Turkey Turkish
Ved.	Vedic
WMIr.	West Middle Iranian
YAv.	Young Avestan

Texts

A ² Sc	Artaxerxes II (Susa)
Ag.	Agat'angelos
AR	Boyce (1954)
AV	Atharvaveda
BBB	Henning (1937)
DB	Darius (Behistun)
DNa	Darius (Naqš-e Rostam)
Eĭ.	Elišē
EK	Eznik Koľbac'i
GW	Sundermann (1997)
KAP	Grenet (2003)
Kaw	Henning (1943)
Kor.	Koriwn
KPT	Sundermann (1973)
LN	Sundermann (1992)
ĽP'	Ľazar P'arpec'i
M	fragment in the Turfan Collection, Berlin
MKG	Sundermann (1981)
MMi	Andreas and Henning (1932)
MMii	Andreas and Henning (1933)
MMiii	Andreas and Henning (1934)
MX	Movsēs Xorenac'i
P'B	P'awstos Buzand
RV	Ṛgveda
Šbrg	MacKenzie (1979)
ŠKZ	Huyse (1999)
XPb	Xerxes (Persepolis)
Y.	Yasna

Other

A agent

C consonant

Ķ palatal consonant

L1/2 first/second language

ML model language

NP noun phrase

O object

S subject

T dental consonant

TL target language

V vowel

1

Introduction

It is no secret among historical linguists and Indo-Europeanists that Armenian is one of the less stereotypical languages of the Indo-European language family. As a result of contact with a great number of other languages—Hurro-Urartian and Old and Middle Iranian in antiquity, Turkic and Arabic from the Middle Ages onward, Russian in more recent history—Armenian is in some respects a melting pot of linguistic material and structures. Together with its complex historical phonology, described by Olsen as a ‘horror chamber’ (1999: v), its history of external linguistic influence meant that it was recognized as an independent branch of Indo-European only at the end of the 19th century.

Over the course of the late 19th, 20th, and early 21st century, Armenian, particularly in its classical form dating to the 5th century CE, has been explored as thoroughly as time and data permitted. In the dense field of topics that scholarship has explored over this period, one stands out in particular: the contact relationship Armenian had with Parthian, the West Middle Iranian language of the Arsacid elite who for centuries ruled over the Armenians. This relationship, which grew stronger over the course of time, led not only to the eventual integration of the Parthian ruling class into Armenian society, but—more importantly for the present purpose—to a host of Parthian linguistic influences on Armenian. Phonological, lexical, morphological, and phraseological borrowings are myriad, and feature heavily in the research of the past century and a half. The fact that not only peripheral, cultural terms were borrowed, but core vocabulary and closed classes were equally affected by such borrowings speaks to the extent and intensity of Parthian–Armenian contact.

Two aspects of this relationship have been somewhat neglected in the extant literature, however, namely the specific contact dynamic between the two language communities and the influence of Parthian on Armenian syntax. As the title of this book suggests, it is precisely these aspects that form the core interest of the ensuing investigation. Approaching the subject from a theory- and framework-agnostic perspective, one major and three minor Armenian syntagmata are presented, analysed, and shown to be heavily influenced by, if not entirely based on, West Middle Iranian models. These four structures—the periphrastic perfect, nominal relative clauses, intensifiers, and quotatives—were copied into and adapted for Armenian by a process termed ‘pattern replication’: in a bilingual setting, the similarity in usage of one linguistic element (the pivot) in the two languages concerned is used to extend usage patterns ordinarily associated only with one language to the

other. The resulting construction in the copying language is not a perfect copy, but usually adapted to fit the needs of that language.

In order for such processes to take place, the contact relationship between the two languages involved must normally involve well-developed bilingualism. Between the Armenians and Parthians, this is without doubt the case. While there is little direct extralinguistic evidence that can attest the precise extent of this bilingualism, historiographical details provide strong indirect evidence. At the latest after the fall of the Arsacid Empire in 224 CE and the establishment of a hereditary Arsacid dynasty in Armenia at the end of the 3rd century CE, the integration of Parthians and Armenians in one society is undeniable. Together, they convert to Christianity at the beginning of the 4th century, engage in intermarriage, and exchange younger family members as wards and tutees; together they fight against the Sasanian Empire and its forceful reimposition of Zoroastrianism. The literature testifying to these joint experiences, dedicated to or commissioned by the Arsacid rulers, is written in Armenian, whereas contemporaneous Parthian documents are conspicuously absent.

Taken together, the extralinguistic data and the results of contact between the two languages firmly suggest one particular scenario for the interaction between Parthian and Armenian: language shift. Over the course of their relationship, the Parthian-speaking ruling class had reason to associate more closely and finally identify with their Armenian-speaking subjects and, making Armenian their main means of communication, shifted from speaking Parthian to speaking Armenian. Apart from the motivating factors listed already, a clear linguistic separation from their Middle Persian-speaking Sasanian neighbours was likely a contributing factor leading to this shift. Such a superstrate shift, in which the sociopolitically dominant community adopts the language of the less dominant community, does not happen overnight, but over the course of multiple generations. Whilst data does not allow for any precision in dating, the window between the establishment of the above-mentioned dynasty and the integration of the Armenian Kingdom into the Sasanian Empire in 428 CE is a likely contender.

While questions of language contact form the outer core of this study, its inner core is a data-driven corpus study of one ubiquitous and unusual construction of Classical Armenian: its periphrastic perfect. The history and provenance of this construction has been repeatedly and variously debated over the course of the last 150 years, and numerous plausible but imperfect solutions have been offered for the question of why the perfect—consisting of a participle and an optional copulative verb—takes a nominative subject (for intransitive verbs), a genitive agent (for transitive verbs), and an accusative object, while the copula, if present, agrees with the subject, but never with object or agent, for which a fossilized 3sg form is used.

This corpus study of 5th-century historiographical texts reveals that the tripartite alignment pattern presented by the periphrastic perfect shows unequivocal

signs of an alignment change in progress. The tripartite structure, already an adaptation of an earlier ergative–absolutive pattern, is slowly but surely making way for nominative–accusative alignment, as attested a few centuries later. The copula, optional to begin with, becomes more or less obligatory over the course of the period studied. Its development in conjunction with changing morphosyntactic alignment, the clear morphological parallels between the Armenian perfect and the Parthian past tense, and parallel developments in other languages speak in favour of an origin of this perfect in language contact with Parthian.

Armenian did not just copy one construction, however. At least three other syntagmata, to one extent or another, show convincing structural parallels between Armenian and West Middle Iranian that, judging by what other languages do, are unlikely to be coincidental. One type of verbless relative clause in Armenian bears resemblance to the nascent *ezāfe*-construction in West Middle Iranian; the usage of the Armenian intensifier *ink'n* as an anaphor and reflexive shows evident similarities with its Iranian counterparts, Parthian *wxd* and Middle Persian *xwd*; and the Armenian complementizer *(e)t'ē* is used as a quotative marker in a pattern that finds exact parallels in the usage of Iranian *kw*. Together with the perfect, the constructions illustrate that, as far as structural borrowings from Iranian into Armenian are concerned, research is still at its very beginning.

Altogether, this investigation of language contact, multilingualism, and structural borrowings by means of pattern replication demonstrates that even after considerable time, there is room for new approaches to old problems—like the perfect—and that even (or particularly!) in the realm of the well-documented and well-studied Indo-European languages, language contact must be taken seriously and studied in the context of the societies and speaker communities involved.

Even excluding formal theoretical frameworks, the involvement of data from two branches of the Indo-European languages, Armenian and Iranian, as well as methods from contact linguistics, corpus linguistics, and linguistic typology, require a gradual approach to the questions and problems at hand. Accordingly, this study has been structured in such a way as to permit the reader to ease into the field by providing the necessary background information in the first two chapters, before going into detail in the following three and uniting all the data, concepts, and hypotheses in the chapter preceding the conclusions. Still, each chapter begins with a brief résumé of what has been dealt with and proposed so far, and ends with a summary of the new details discussed. Throughout, the guiding questions and hypotheses that require testing are spelled out explicitly and referred back to once dealt with. For ease of reading, in the discussion itself, all hypotheses and conclusions are presented without any undue equivocation or hedging; where, for whatever reason, certain doubts remain or conclusions need to be set against other problems, they are discussed in the summaries at the end of each chapter or in the conclusions to this study.

To get the proverbial ball rolling, Chapter 2 presents the *status quaestionis* of the Iranian–Armenian contact situation. After a very brief sketch of the sociohistorical contact situation and a geographical orientation, the history of scholarship is presented, followed by specific exemplary details of Iranian influence on the Armenian lexicon, morphology, and phraseology. After discussing the diachronic stratification of these influences, the chapter also outlines remaining lacunae in these studies and defines in more concrete terms the reasons for looking into the periphrastic perfect and contact dynamics.

The question of these dynamics is addressed in Chapter 3, which presents all the available extralinguistic, viz. sociohistorical and cultural, data that can be gleaned from contemporary historiographical literature. While Iranian, Graeco-Roman, and even Chinese sources provide some limited evidence concerning the contact dynamics or multilingualism between Armenians and Parthians, or regarding the mutual intelligibility of Parthian and Middle Persian, the study of Armenian sources proves far more fruitful. The Armenian historiographers clearly outline the integration of the Parthian-speaking Arsacid ruling class with the Armenian clans; through their common religion, intermarriage, tutelage system, and the consideration of the Arsacid Parthians as the ‘natural rulers’ over Armenia, a common identity is readily established and speaks in favour of bilingualism, at least in the upper strata of society. At the same time, the absence of Parthian documents from the time and region raises the question of its fate in the Armenian Kingdom.

With the circumstances and details of language contact having been established, Chapter 4 sets the scene for the core of the study. After a review of the basics of morphosyntactic alignment and alignment change, it presents the Armenian periphrastic perfect in its synchronic variety and discusses—and refutes—previously advanced explanations of its aetiology. The Armenian construction is then compared to a similar pattern in West Middle Iranian. Based on this and other comparisons, it emerges that Armenian tripartite alignment in the periphrastic perfect is the result of transitioning between ergative–absolute and nominative–accusative alignment. For this reason, and owing to the valency and historical morphology of the participle and the problems arising from previous explanations, the syntax of the Armenian periphrastic perfect must be an adapted replica of an Iranian model. The chapter ends by outlining hypotheses for testing concerning the usage and distribution of the participle and the perfect construction, as well as their development over time.

The testing of these hypotheses forms the core of this study, presented in Chapter 5. The data gleaned from a corpus study of five major works of Classical Armenian historiographic literature from the 5th and early 6th centuries CE are discussed and evaluated in detail. Next to a statistical analysis of the occurrence of different patterns, and the description of small-scale diachronic trends in their usage, this chapter provides an in-depth, non-framework-specific discussion of all grammatical variants of the periphrastic perfect construction and an explanation

of less common or ‘divergent’ patterns, which are shown to be signs of alignment change in progress. The discussion goes on to show that the general description of the perfect in grammars and textbooks needs to differentiate more clearly the usage of participles in the perfect proper from its converbial use. The statistical data and usage patterns outlined confirm the expectations listed at the end of the previous chapter, and thus speak in favour of an origin of the perfect in contact with Iranian.

To bring home the point that Iranian syntactic interference in Armenian requires more attention, Chapter 6 offers broader discussions of three further syntactic patterns that are based, to one extent or another, on Iranian models. These are: nominal relative clauses, which are modelled on the West Middle Iranian *ezāfe*-construction; the usage of the Armenian pronoun *inkʿn* as intensifier, anaphor, and reflexive in parallel to a similar functional distribution of Pth. *wxd* /*wxad*/, MP *xwd* /*xwad*/; and the occurrence of the Armenian complementizer (*e*)*t’ē* as a quotative marker, including before *wh*-questions, as is the case in West Middle Iranian with the particle *kw* /*kū*/. Owing to the less complex nature of these patterns, the analysis is not based on a large-scale corpus study, but on a discussion of numerous examples illustrating common use patterns. The discussion concludes that, while it is difficult to determine unequivocally whether these three patterns have their sole origin in language contact with Iranian, there are striking functional parallels in Iranian that point to Iranian influence at the very least.

After these three core chapters of data-based discussion, Chapter 7 takes the insights gained there and puts them in the context of more general and theoretical language contact discourse, as well as outlining what all this means for the understanding of Classical Armenian as a language and speaker community. Based on the linguistic and extralinguistic data available, a superstrate shift of Parthian-speakers to Armenian as their main language of communication must have been the origin of at least Iranian syntactic interference in Armenian. This explanation, as well as the proposed contact-origin of the periphrastic perfect, are then corroborated by three discussions of comparative evidence: another oft-cited instance of superstrate shift, namely that of Norman French-speakers to English in post-Conquest Britain; and two instances of contact-induced alignment shift after contact with Iranian languages.

Chapter 8 summarizes the outcomes of this study by providing a clear chronology of changes and developments, and discusses potential issues related to the data, its analysis, and interpretation. It outlines what direction future research into Iranian–Armenian contact, specifically its syntactic manifestations, might take, and which tools might be developed to benefit such future studies.

An [Appendix](#) provides some additional details concerning the morphology of the Armenian *-eal* participle on which the periphrastic perfect is based. Previous explanations have not taken into account all the necessary and available data,

specifically the variability of participial formation and stem choice as well as the valency of the participle, and have thus erroneously related its formation to that of the Armenian aorist. The [Appendix](#) demonstrates clearly that the participle is an independent, originally passive–intransitive formation, likely based on the verbal root with an intransitive suffix *-je-/-jo- and the nominalizing suffix *-lo-.

2

Linguistic evidence for Iranian influence on Armenian

Before the new pastures mentioned in the introduction can be explored, it is useful to remember what is already well known and clearly established about the influence that Iranian languages have had on Armenian in antiquity. The summary provided in this chapter serves both to exemplify the extent and intensity of this influence and to underline that, therefore, any further additions to this list are not only possible but indeed probable.

Unlike many other Indo-European languages, large parts of the lexicon, derivational morphology, and even phraseology and syntax of Armenian cannot be explained on the basis of internal developments alone, but have undergone significant influence from Iranian languages over the course of several centuries of cultural and political domination, chief amongst which is Parthian, a Northwest Iranian language.

As a result of this prolonged contact situation, and the often unfortunately scant evidence, it proves difficult to produce a definitive delineation of the various Iranian influences on Armenian with any certainty. The vast majority of research on Iranian–Armenian contact has thus far dealt with phonological and lexical influence; to a lesser extent, morphological and phraseological aspects have been considered. Without discussing in any depth particular details that do not contribute to the overall picture, this chapter provides a status quo of research into Iranian–Armenian contact, and an assessment of which aspects of contact have not been studied sufficiently to date.

Prior to any consideration of linguistic material, the joint history of the Armenian and Iranian peoples is outlined briefly to provide a setting for their linguistic interactions; similarly, a brief historical account of the scholarship in this field illuminates the course research has taken in the past, and points out directions for the future.

Thereafter, the various stages of Iranian–Armenian language contact are discussed in their historical sequence, from Old Iranian, through early and late Parthian, to Middle Persian; next to the lexicon, phonological correspondences and relative chronology constitute the foci of each section. A brief discussion is dedicated to the question of East Iranian loans and a putative third West Middle Iranian dialect.

Beyond the realm of lexicon and phonology, the relevance of Iranian for Armenian morphology and phraseology is discussed, followed by a short enquiry into the importance of Armenian for the study of Iranian languages (the so-called *Nebenüberlieferung*). The chapter continues by outlining the two fields within language contact studies which have been addressed the least in research to date: syntax, and the sociohistorical and cultural circumstances and effects of Iranian–Armenian contact. The chapter concludes by outlining the reasons why these two under-studied aspects are of particular relevance and how, with the background knowledge provided in this chapter, related questions can be addressed.

2.1 Sketch of Iranian–Armenian interactions

In ancient geographical tradition, the region called Armenia encompasses the territory which borders the Caucasus Mountains in the north and the Taurus Mountains in the south, and is further delimited by Media Atropatene, the modern Azerbaijan, in the east and the upper Euphrates in the west.

This territory, held until at least the late 7th century BCE by the Kingdom of Urartu,¹ came under Iranian influence first during the Median expansion of the late 7th and early 6th century BCE; while Greek historiography suggests Median rule in this region had been established only under Astyages (585–550 BCE),² other sources gave an earlier date of about 612 BCE.³

The first mention of Armenia in historical sources is found in the Behistun inscription of King Darius I (c.550–486 BCE) dating to between 520 and 518 BCE, in which *Armina* is listed as one of the territories under Darius' rule, and later as one of the regions that unsuccessfully rebelled against him.⁴ Part of the Achaemenid Empire throughout its existence, and subsequently of the Macedonian and Seleucid Empires, both Greater and Lesser Armenia, viz. Sophene, gained independence in 189 BCE under Artashes (Artaxias) and Zareh (Zariadres).⁵ Under Tigran II, the Great, the two Armenian kingdoms would be united once more, further incorporating territories previously conceded to the Seleucids; the time of the Armenian Empire (83–69 BCE; see Figure 2.1) was cut short by its defeat at the hands of the Romans during the Third Mithridatic War and Tigran's submission to Pompeius in 66 BCE.⁶

Although nominally a vassal state of Rome, the territory of Armenia and the loyalty of the local *naxarars* were often divided between Roman and Parthian sympathies. After some time as a Roman protectorate, the Parthian king

¹ For the Urartian influence on Armenian, see 4.2.2.8.

² Cf. Xenophon, *Cyropaedia* III.1.7; Strabo, *Geography* XI.3.5. The fact that the Urartian king Rusa IV supposedly ruled until 585 BCE may further substantiate a later date.

³ Cf. Movsēs Xorenac'i, *History of the Armenians* 1.22.

⁴ Cf. DB I.15 and II.29ff.

⁵ Cf. Strabo, *Geography* XI.14.15.

⁶ Cf. Movsēs Xorenac'i, *History of the Armenians* II.15ff.

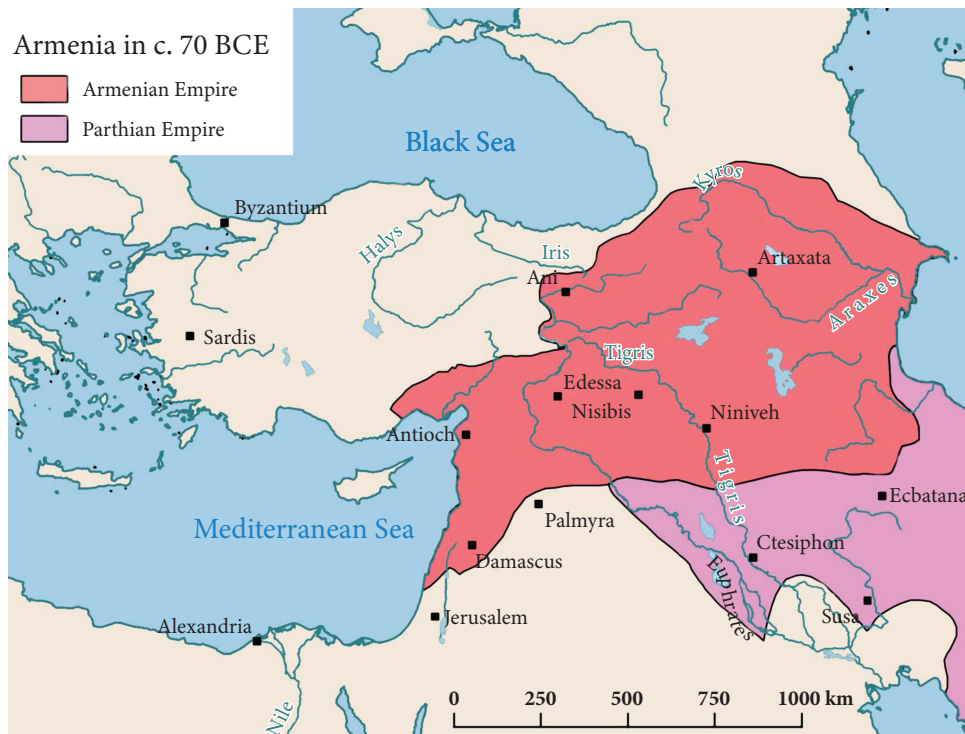


Figure 2.1 Simplified map of Armenia and surrounding area c.70 BCE, at its largest extent under Tigran II, the Great.

Source: based on [Mutafian and van Lauwe \(2001: 29\)](#).

Vologases I installed his younger brother Trdat I on the Armenian throne in 53 CE; this decision would later be ratified in the agreement of Rhandaia in 61 CE and the coronation of Trdat I by Emperor Nero in 66 CE. Henceforth, the Armenian king would be chosen from a minor line of the Parthian Arsacid, viz. Aršakunik, dynasty and his appointment confirmed by Rome. It was under the Arsacids, who ruled Armenia until 428 CE,⁷ that the Armenian language underwent the most intense Iranian influence; they remained in power even after the fall of the Parthian Empire and the succession of the Sasanians in 224 CE, and the Christianization of the Armenians at the beginning of the 4th century. After certain territorial concessions to the East Roman Empire in the late 4th century (see Figure 2.2), and the conversion of the kingdom into a marzpanate in 428 CE, Armenia remained a part of the Sasanian Empire until its fall in 651 during the Arab invasion, after which Armenia was made a principality in 654.

While political and cultural contact with the Iranians did not end then, the linguistic influence of Modern Persian on Armenian would be far more limited than that of earlier Iranian languages.

Although the relationship between the Armenian people and their Iranian overlords may have varied between full acceptance and outright hostility, it must be kept in mind that the Armenian ruling class was Iranian, either in origin or by marriage, since the Orontid dynasty under the Achaemenid Empire, as evidenced among other things by Armenian nobles' names.⁸

For the purpose of this status quo—as for this study as a whole—it must be borne in mind, however, that owing to the kind of literary and linguistic sources available, only the language use and cultural identity of the upper strata of Iranian–Armenian society can be reflected in the findings presented here. The literary works from which most of the data and information are gleaned were written by, at the behest of, and mainly for members of these strata. Accordingly, it is impossible to determine to what extent the language of the majority of the Armenian population at the times in question would have resembled the particular register under investigation here.

2.2 Brief history of scholarship

The history of scholarship concerned with the relationship between Armenian and the Iranian languages proves to be keenly relevant for the understanding of the current state of research.

⁷ This rule was only briefly interrupted between 114–18 CE when the kingdom was integrated into the Roman Empire as a short-lived province under Trajan; cf. Cassius Dio, *Roman History* LXVIII.20.

⁸ Cf. Garsoïan (1997b: 46–7); Martirosyan (2021). The Iranian origin of names such as Artašir (cp. MP *rthštr* /ardaxšir/, a hypocoristic form of Clr. *arta-xšaθra- 'whose rule is order') and Trdat (cp. MP *tyldt* /tirdād/, < Clr. *Tira-dāta- 'given by Tir') had already been recognized by Hübschmann (1897: 28–9, 87–9); further cp. Gignoux (1986, supplement 2003: II/46, II/167).

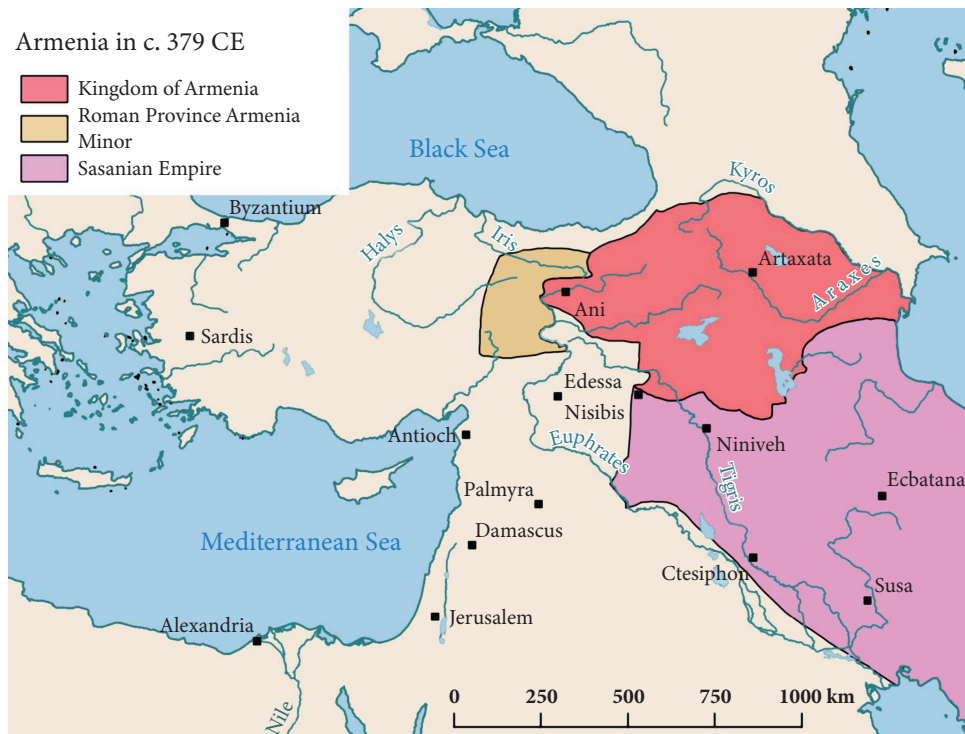


Figure 2.2 Simplified map of Armenia and surrounding area in c.379 CE, at the death of the Sasanian King Šāhpuhr II.

Source: based on [Mutafian and van Lauwe \(2001: 37\)](#).

Until Heinrich Hübschmann's seminal paper *Ueber die stellung des armenischen im kreise der indogermanischen sprachen* from 1875, the Armenian language had been thought to belong to the Iranian group of Indo-European languages, as still asserted by Bopp (1857–61). Yet it is of note that the 'Vater der modernen, wissenschaftlich betriebenen armenischen Sprachwissenschaft' (Bolognesi 1988a: 561) was not the first to recognize that the Armenian lexicon was composed of multiple layers, including inheritance from Indo-European and many other strata of loanwords. In his 1711 treatise,⁹ Johann Joachim Schröder successfully distinguishes a stratum consisting of 'Antiqua Parthica ab Arsacidis in Armeniam introducta vocabula, Persis etiam & Turcis communia' (1711: 46) from lexical items 'ex vocibus ejus propriis' (cf. Bolognesi 1988b: 563)—that is, on the one hand vocabulary items of ancient Parthian origin, introduced into Armenian by the Arsacids and found also in Persian and Turkish; and on the other, words from their own tongue. Schröder's data are based on shared lexical items between Classical Armenian and Modern Persian; nonetheless, his attribution of said loans to the Northwest Iranian language Parthian and to the Arsacid period coincides exactly with the later findings of Hübschmann.

After his proof that Armenian is indeed 'ein eigener zweig des indogermanischen' (its own branch of the Indo-European language family), Hübschmann (1875: 38) went on to provide further material in his *Armenische Studien* (1883), in which are collected 232 words of pure Indo-European heritage; this project was later supplemented by the *Armenische Grammatik* (1897), discussing loanwords and names from Iranian, Syriac, and Greek, as well as *echtarmenische* words.

A pioneer in his field, Hübschmann's work suffered from a lack of Middle Iranian evidence which came to light only over the course of the 20th century and would allow for the differentiation of distinct loan sources of the Iranian material in Armenian.¹⁰ Only the work of Meillet (1911–12) revealed the largely North- and Southwest Middle Iranian (viz. Parthian and Middle Persian) origin of loanwords in Armenian; with the help of the publications of Friedrich W. K. Müller and Friedrich C. Andreas, Meillet established on the basis of phonetic differences between the two Middle Iranian languages that Parthian was the source of most loanwords.¹¹ The work of later scholars interested in Iranian and Armenian, most notably Émile Benveniste, Giancarlo Bolognesi, John A. C. Greppin, and Rüdiger Schmitt, has since sought to develop and refine the understanding of dialect stratification, timeframe and context of language contact, and replicated material. Next

⁹ Cf. Schröder (1711); for a longer discussion of this work, see Bolognesi (1988a). Hübschmann (1897: XII) acknowledges this work only briefly in the foreword to his *Armenische Grammatik*.

¹⁰ As noted by Considine (1979: 213), Hübschmann could not provide Middle Iranian evidence for more than 40 per cent of the lexicon thought to be of Iranian origin.

¹¹ Meillet (1911–12: 245) compares, for example, Arm. *boyr* 'scent, smell' with Manichaean Parthian *bwd-*, found e.g. in *bwdyst'n* /bōdestān/ 'garden', cp. Arm. *burastan* 'id.'; the regular development of Parthian intervocalic -d- /δ/ to Arm. -r- cannot be explained on the basis of the Middle Persian forms, where historical intervocalic *-d- has yielded MP -y-, cp. MP *bwy* /böy/ 'smell, scent'.

to confirmations of Hübschmann's etymologies, much of 20th-century scholarship has been dedicated to the systematization of Iranian–Armenian loan processes, the addition to and rectification of Iranian etymologies for Armenian lexical items, and the expansion of scope to include both morphological items and syntactic calques; research into the latter is, however, still in its infancy.

2.3 Stratification of Iranian lexical and phonological influence on Armenian

As is evident from even this brief account of Armenian and Iranian shared history, the influence of the latter on the former has extended over more than a millennium, albeit ranging in degree and level of attestation from minimal to extensive.

According to the amount of data available, the source languages can be identified either more or less unequivocally, as is the case with Parthian and Middle Persian, or with lesser certainty, particularly as regards very early loans from Old Iranian languages and from East Iranian. In what follows, these strata are discussed individually in their likely chronological order; special attention is given to the type of lexical material that Armenian has borrowed, and the phonological peculiarities of such loans, as both aid in the establishment of the stratification and help with the assessment of the closeness of contact.

2.3.1 Old Iranian

The evidence for Old Iranian words in Armenian is relatively scant; morphological and phonological peculiarities do, however, point to a pre-Middle Iranian, and thus most likely Achaemenid Old Persian, origin for a small number of lexical items.

Attested in OP *ariya-*, Av. *airiia-* ‘Aryan’, this self-designation of the Iranians has been conspicuously borrowed into Armenian twice, first as *Arik*‘ and later as *Eran*.¹² Owing to its GEN.PL form *Areac*‘, an *-ea-* stem like *tehi*, *teleac*‘ ‘place’, the former is deemed to be a reflex of the Old Persian form, where Arm. *-ea-* reflects the Iranian *-ya-* stem.¹³ A similar age is envisaged for Arm. *tʻšnami* ‘enemy, hostile’, cp. Av. *dušmainiiu-* ‘id.’¹⁴

The culturally significant term Arm. *partēz* ‘garden, park; paradise’ is of particular interest for relative chronology; if indeed borrowed in Achaemenid times,

¹² The form Arm. *Eran* derives from inscriptional MP *ʻyrʻn /Ērān/*; inscriptional Pth. *ʻryʻn /Aryān/* cannot be the basis for Arm. *Arik*‘.

¹³ Cf. Meillet (1911–12: 249–50), Schmitt (1983: 77), de Lamberterie (1989).

¹⁴ Cf. Schmitt (1980: 422–3) concerning the derivation of *tʻšnami* through nasal metathesis and assimilation, and its meaning for the history of the Armenian accent.

the word must have undergone an inner-Armenian sound change $*-d-> -t-$ (cp. Av. *pairidaēza-* ‘fenced area’, Gk. *παράδεικος*), but clearly not $*p- > p^{\prime} / h- / \emptyset$.¹⁵

Whilst these few loans from Old Persian are relatively secure, suggestions concerning (Middle) Median material in Armenian are largely unfounded, since knowledge of this language is restricted to a severely limited set of forms attested largely in Old Persian.¹⁶ The Armenian name of the Iberian king *P’arnawaz*, which Frye (1969) takes as a remnant from imperial Median, corresponds far more closely to the Greek *Φαρνάβαζος* than to a hypothetical Median form $*farnah$.¹⁷ Other attempts at demonstrating a distinctly Median stratum in Armenian achieve similarly limited success: on the basis of the name *ʾhštrsr̥t* /Axšhrsart/, cp. Arm. *ašxarh* ‘land; country’, Av. *xšathra-* ‘rule, power’, Périkhanian (1966) suggests that the prothetic vowel *a-* is an indicator of Middle Median origin, as found also in *ašxet* ‘reddish, chestnut-coloured’, cp. Av. *xšāēta-* ‘radiant’. Schmitt expresses his doubts about this analysis owing to the poor evidence.¹⁸

While replication of lexical material from the Old Iranian languages did occur, it was severely limited in its extent and of little overall significance, presumably because Iranian influence at the time of interaction was far less intensive than at later stages; the lack of Median data makes any assertions in relation to that language speculative. There is, however, some evidence for a third West Middle Iranian language which has had some influence on Armenian, and may be related to Median.¹⁹

¹⁵ Cf. de Lamberterie (1978: 246–50), who further advocates a derivation of Arm. *arcat* ‘money, silver’ from Iranian $*\dot{r}dzata-$ at about the same time as the loan of *partēz*; this suggests that the phonological development of the dental series ($*d > \text{Arm. } t, *t > \text{Arm. } t'$) occurred after that of the labials. Schmitt (1983: 77 n. 9) remains sceptical of the early loans suggested by de Lamberterie, but mentions Arm. *gušak* ‘informer, denouncer’ (cp. OP $*gaušaka-$ ‘id.’, preserved in Aram. *gwšk*).

¹⁶ Such Medisms include OP *vazrka* ‘great’ and *xšāyathiya* ‘king’, where the expected outcome of Southwest Iranian Old Persian should be $*vadrka$ and $*xšāyašiya$. Mayrhofer (1968: 22) points out that apart from certain phonological differences, Median and Old Persian were likely very close to one another; mutual intelligibility may have prevented the transmission of Median as a discrete language.

¹⁷ Cf. Movšēs Xorenac’i, *History of the Armenians* I.22 for an Armenian attestation; Thucydides, *Histories* VIII.80ff. for Greek occurrences; and Frye (1969: 84–5) refuted by Schmitt (1983: 78).

¹⁸ Cf. Périkhanian (1966: 23–6). Another such case can be made for Armenian names such as *šawasp* and *šawarš*, cp. Av. *Siiāuāspi-* and *Siiāuuaršan-*; the fricative realization of *šaw-* ‘black’ contrasts with the standard sibilant in Arm. *seaw* ‘black’, cp. Av. *siāuua-* ‘id.’ and Manichaean Pth. *sy’w* /syāw/ ‘id.’; while Bolognesi (1960: 24) argues for an isolated Southwest Iranian origin, and Benveniste (1964: 3) for a Northeastern derivation, Périkhanian (1968: 24–5) maintains a Middle Median interpretation. Mayrhofer (1968: 12) follows Gershevitch (1964) in assuming an Old Persian dialectal differentiation as the origin of this fricative, without however specifying the nature or origin of these dialects.

¹⁹ This is exemplified well by the question of Arm. *-nj-* clusters, e.g. in *ganj* ‘treasure’, which cannot immediately relate to Manichaean Pth. *gzn* /ganz/ ‘id.’. Manichaean MP *gnz* /ganz/ (whence NP *ganj*) must be related to a Median form *ganza-* in Old Persian, whence may be derived the Armenian form; evidence for other loans containing this cluster (e.g. *brinj* ‘rice’, *plinj* ‘bronze’) is scant, however, and thus renders a secure dating of the loan impossible; cf. Henning (1963).

2.3.2 Parthian

Of all the languages that have exerted influence on Armenian over time, Parthian is indubitably the most significant, in terms both of quantity of loan material and of quality, viz. types of loans; in view of the almost 400 years that Armenia was under immediate Parthian rule, this is hardly surprising.

A summary of the common core of sound correspondences between all Parthian loans in Armenian is followed by an account of a small set of features, allowing for a binary stratification of these loans into an early and a late period (cf. [Bolognesi 1951](#)). Finally, owing to the nature of the contact between Armenian and Parthian, a consideration of the word classes affected is called for. Morphological and phraseological influences will be discussed separately in section 2.4.

2.3.2.1 Phonological correspondences and developments

[Schmitt \(1983: 80–1, 96–7\)](#) provides very useful tables delineating both the dialectal differences between Northwest Parthian and Southwest Middle Persian forms and the correspondence of Armenian and Parthian sounds. As a result of the different phonemic inventories of both languages, this correspondence is not biunique, but reasonably straightforward nonetheless. With the exception of *c*, *č*, *c*’, and *l*, all Armenian sounds have at least one correspondence in Parthian, e.g. Arm. *b* < Pth. *b*.²⁰ Where Armenian does not have a sound corresponding to that of Parthian, it is merged with a close approximation, so for example Arm. *g* < Pth. *g*, *γ*.

Table 2.1 provides examples²¹ of and, where necessary, brief commentaries on the correspondences between consonant sounds.

While a large number of the Armenian sounds above occur in both the inherited lexicon and Iranian loanwords, some consonants and consonant clusters are indicative of non-indigenous material; these include Arm. *p* and *č*, and in many instances *š*, *ž*, and *x*.²² Similarly symptomatic are the clusters Arm. *hr* < WMIr. *fr*, and with metathesis²³ Arm. *šx* and *rh* < WMIr. *xš* and *hr*.²⁴ The following consonant

²⁰ No loans from Parthian could be found where Pth. *l* is rendered as Arm. *l*; instead, Arm. *l* appears to be preferred.

²¹ The examples given below are drawn from the font of securely attested Parthian forms; some elements reconstructed on the basis of the *Nebenüberlieferung* are discussed in 2.5. Some of the forms listed as potential reconstructions in [Schmitt \(1983\)](#) have since been attested (cf. e.g. [Durkin-Meisterernst 2004](#)).

²² Arm. *p* can derive from PIE **b* (e.g. Arm. *əmpem* ‘to drink’ < PIE **pi-ph₃*- with analogical nasal infix (cf. [Martirosyan 2010: 277–8](#)), but the latter sound is rare in Indo-European; some lemmata suggest that PIE **p* may result in Arm. *p* in consonant clusters, e.g. Arm. *arəspel* ‘myth, fable’; cp. **spel-*, Goth. *spill* ‘fable’, OE *spell* (cf. [Beekes apud Kortlandt 2003: 197](#)). Arm. *š* occurs in some inherited words such as *šun* ‘dog’ < PIE **k₁uōn*, cp. Gk. *κύων*. These and the other sounds mentioned are, however, only sparsely attested in Indo-European heritage words.

²³ While clusters of occlusive and **r* of Indo-European pedigree regularly undergo metathesis in Armenian (e.g. PIE **bhréh₂tēr* > Arm. *elbayr* ‘brother’), words of Iranian origin do not undergo this change, thus Arm. *draxt* ‘garden, paradise’ < WMIr. *drxt* /*draxt*/ ‘tree’.

²⁴ Cp. Arm. *ašxarh* ‘land, world’ and WMIr. *šhr* /*šahr*/, Av. *xšaθra-* ‘rule, power’; the cluster Ir. **xš* is not always simplified in West Middle Iranian as *š*, cp. Arm. *ašxat* ‘trouble, labour’ and Pth. *xš’dyft*

Table 2.1 Phonological correspondences between Armenian and Parthian consonants

Arm.	Pth.	Examples
<i>b</i>	<i>b</i>	Arm. <i>band</i> ‘prison’ < WMIr. <i>bnd</i> /band/; Arm. <i>baž</i> ‘tax, levy’ < Pth. <i>b’z</i> /bāz/; Arm. <i>biwr</i> ‘10,000’ < WMIr. <i>bywr</i> /bēwar/
<i>g</i>	<i>g, γ</i>	Arm. <i>gund</i> ‘troops’ < WMIr. <i>gwnd</i> /gund/; Arm. <i>marg</i> ‘meadow’ < Pth. <i>mrg</i> /mary/; Arm. <i>črag</i> ‘candle, light’ < WMIr. <i>cr’g</i> /čarāy/
<i>d</i>	<i>d</i>	Arm. <i>dēpk’</i> ‘accident, fate’ < WMIr. <i>dyb</i> /dēb/; Arm. <i>drawš</i> ‘banner, flag’ < WMIr. <i>drfš</i> /drafš/; Arm. <i>azd</i> ‘sensation, advice’ < WMIr. <i>’zd</i> /azd/ ‘known’
<i>z</i>	<i>z</i>	Arm. <i>zawr</i> ‘army’ < Pth. <i>z’wr</i> /zāwar/ ‘force, might’; Arm. <i>bazmim</i> ‘to sit down (to dinner)’ < WMIr. <i>bzm</i> /bazm/ ‘meal, feast’
<i>t’</i>	<i>t^a</i>	Arm. <i>tawt’</i> ‘heat’ < Pth. <i>tft</i> /taft/ ‘burning hot’
<i>ž</i>	<i>ž^b</i>	Arm. <i>žir</i> ‘active, busy’ < Pth. <i>jyr</i> /žir/; Arm. <i>žamanak</i> ‘time’ < Pth. <i>jm’n</i> /žamān/; Arm. <i>aržan</i> ‘worthy, proper’ < Pth. <i>’rjn</i> /aržān/
<i>x</i>	<i>x, xw</i>	Arm. <i>xrat</i> ‘wisdom, reason’ < WMIr. <i>xrd</i> /xrad/; Arm. <i>xoyr</i> ‘head-gear, diadem’ < Pth. <i>xwwd</i> /xōδ/ ‘helmet’
<i>k</i>	<i>k</i>	Arm. <i>patker</i> ‘image’ < WMIr. <i>ptkr</i> /patkar/; Arm. <i>kam</i> ‘wish, will’ < WMIr. <i>k’m</i> /kām/; Arm. <i>bžišk</i> ‘doctor, physician’ < WMIr. <i>bzyšk</i> /bizešk/
<i>h</i>	<i>h, f</i>	Arm. <i>pah</i> ‘guard’ < WMIr. <i>p’hr</i> /pāhr/; Arm. <i>hazar</i> ‘1,000’ < WMIr. <i>hz’r</i> /hazār/; Arm. <i>hreštak</i> ‘angel, messenger’ < Pth. <i>fryštq</i> /frēštq/
<i>j</i>	<i>z</i>	Arm. <i>ganj</i> ‘treasure’, cp. MP <i>gnz</i> /ganz/, Pth. <i>gzn</i> /gzn/ (and fn. 19 above); Arm. <i>brinj</i> ‘rice’, cp. MP <i>brynz</i> /brinz/
<i>ł</i>	<i>l</i>	Arm. <i>salar</i> ‘general in chief’ < WMIr. <i>s’l’r</i> /sālār/; Arm. <i>talawar</i> ‘tent’ < Pth. <i>tlw’r</i> /talawār/
<i>č</i>	<i>č</i>	Arm. <i>čarak</i> ‘meadow, nourishment’ < WMIr. <i>crg</i> /čarag/; ^c Arm. <i>tačar</i> ‘temple’ < Pth. <i>tcr</i> /tažar/
<i>m</i>	<i>m</i>	Arm. <i>hraman</i> ‘command’ < WMIr. <i>frm’n</i> /framān/; Arm. <i>murhak</i> ‘(sealed) deed’ < Pth. <i>mwhrg</i> /muhrag/
<i>y</i>	<i>y</i>	Arm. <i>yawēt</i> ‘always’ < Pth. <i>y’wyd</i> /yāwēd/; Arm. <i>hramayem</i> ‘to command’ < WMIr. <i>frm’y-</i> /framāy-/
<i>n</i>	<i>n</i>	Arm. <i>nizak</i> ‘spear’ < WMIr. <i>nyzg</i> /nēzag/; Arm. <i>zēn</i> ‘weapon, armour’ < WMIr. <i>zyn</i> /zēn/
<i>š</i>	<i>š</i>	Arm. <i>dašt</i> ‘field, plain’ < WMIr. <i>dšt</i> /dašt/; Arm. <i>anoys</i> ‘sweet, fragrant’ < WMIr. <i>’nwšyn</i> /anōšēn/
<i>p</i>	<i>p</i>	Arm. <i>aparank</i> ‘house, palace’ < Pth. <i>’pdn</i> /apađan/; Arm. <i>psak</i> ‘crown’ < WMIr. <i>pwsq</i> /pusaq/ ‘garland’
<i>ǰ</i>	<i>ǰ</i>	Arm. <i>aspnjakan</i> ‘hospitable; host’ < Pth. <i>’spynj</i> /ispinj/, MP <i>’spnc</i> /aspinj/
<i>ř</i>	<i>r, rr</i>	Arm. <i>arat</i> ‘abundant, generous’ < WMIr. <i>r’d</i> /rād/; Arm. <i>pārk’</i> ‘glory’ < WMIr. <i>frh</i> /farrah/; Arm. <i>řot</i> ‘river’ < WMIr. <i>rwd</i> /rōd/
<i>s</i>	<i>s</i>	Arm. <i>seaw</i> ‘black’ < Pth. <i>sy’w</i> /syāw/; Arm. <i>aspar</i> ‘shield’ < WMIr. <i>’spr</i> /ispar/; Arm. <i>aspet</i> ‘knight’ < WMIr. <i>’sppt</i> /asppat/
<i>v</i>	<i>w, b</i>	Arm. <i>hrovartak</i> ‘edict, decree’ < WMIr. <i>frwrđq</i> /frawardaq/; Arm. <i>varagoyr</i> ‘curtain, veil’ < Pth. <i>brywd</i> /baryōδ/
<i>t</i>	<i>t, d</i>	Arm. <i>paterazm</i> ‘battle, war’ < Pth. <i>p’tlcm</i> /pādrasm/; Arm. <i>patmučan</i> ‘garment’ < Pth. <i>pdmwcn</i> /padmōžan/; Arm. <i>tēg</i> ‘spear(head)’ < Pth. <i>tyg</i> /tēy/

Arm.	Pth.	Examples
<i>r</i>	<i>r, δ</i>	Arm. <i>hramatar</i> ‘ruler’, cp. WMIr. <i>frm’nd’r</i> /framāndār/; Arm. <i>burastan</i> ‘garden, orchard’ < Pth. <i>bwdyst’n</i> /bōdēstān/
<i>w</i>	<i>w, β, f</i>	Arm. <i>awrēnk’</i> ‘custom, law’ < Pth. <i>’bdyn</i> /aβdēn/; Arm. <i>awar</i> ‘loot’ < Pth. <i>’w’r</i> /āwār/; Arm. <i>tawt’</i> ‘heat’ < Pth. <i>tft</i> /taft/ ‘burning hot’
<i>p’</i>	<i>f, p</i>	Arm. <i>p’owt</i> ‘rotteness; foul, spoiled’ < Pth. <i>pwd</i> /pūd/ ‘decay’; Arm. <i>p’ark’</i> ‘glory’ < WMIr. <i>frh</i> /farrah/
<i>k’</i>	<i>k</i>	Arm. <i>k’ēn</i> ‘hate, enmity’ < WMIr. <i>kyn</i> /kēn/; Arm. <i>k’anduk</i> ‘jar, vessel for corn’ < Pth. <i>kndwg</i> /kandūg/

^a Parthian loans containing the aspirated dental *t’* are rare; its aspiration may be secondarily effected by its environment. In the majority of instances, *t’* is indicative of loans from Middle Persian; cf. [Pisowicz \(1986; 1987\)](#).

^b For the question of alternative spellings with *j* and phonological considerations, see [Korn \(2010\)](#); [Durkin-Meisterernst \(2014: 90–7\)](#).

^c The unvoiced consonants *p, t, k* undergo voicing to *b, d, g* in intervocalic and postvocalic position in West Middle Iranian ([Durkin-Meisterernst 2014: 87](#)); this is either undone by Armenian, or only occurred after the loans into Armenian were completed. The former option may be more likely in view of the fact that the Parthian voiced consonants *b, d, g* develop to fricatives or approximants *β, δ, γ* in the same position, and are partly reflected as such (e.g. Pth. *δ* > Arm. *r*; [pace Schmitt 1983: 98](#)); whether these non-occlusive sounds have obtained phonemic status or are simply allophones is debated (cf. [Durkin-Meisterernst 2014: 87–90](#)).

clusters are also characteristic of Parthian loans: *-zd, -zm, -xt, -nd, -nj, -šx, -šk, -št, -sp, -st, -rd, -rz, -rk, -rh, -rt*.²⁵

A somewhat more complex correspondence scheme emerges from the consideration of vowels; the basic correspondences are set out in [Table 2.2](#). In a few instances, Armenian creates prothetic vowels (*a-*, *e-*, or *i-*) in loanwords with complex onsets, such as WMIr. *xš*, but also before WMIr. *r*, which have no correspondence in the Iranian source language;²⁶ this prothesis presumably reflects a phonotactic constraint against such onsets.

/ašxādīft/ ‘wretchedness’. The retention of these clusters may point to an early, possibly pre-Middle Iranian age of such loanwords. By contrast, the correspondence of WMIr. *fr* with Arm. *hr* likely reflects dialectal variation or actual pronunciation at the time of borrowing, since the *hr* variant occurs also in Middle Persian, e.g. *hrystg* /hrēstag/ ‘messenger’ (cp. Arm. *hreštak*), and as a loanword in Aram. *hrmn’* ‘command’ (cp. Arm. *hraman*).

²⁵ Cp. e.g. Arm. *azd* ‘sensation, advice’, *uxt* ‘covenant’, *band* ‘prison’, *dašt* ‘field’, *asp-* ‘horse-’, *vard* ‘rose’, *marz* ‘region, border’, *parh* ‘guard’, *ašakert* ‘student, disciple’. While most of these endings are common to both Parthian and Middle Persian, the following, amongst others, are indicative of an originally Parthian word: *-rd* (MP *-l*, cp. MP *gwl* /gul/ ‘flower’), *-nd* (MP *-nn*, cp. MP *bn* /bann/ ‘prison’), *-sp* (MP *-s*, cp. MP *’sw’r* /aswār/ ‘horseman, rider’), *-rh* (MP *-s*, cp. MP *p’s* /pās/ ‘guard’).

²⁶ For prothetic vowels before *r*, see [2.3.2.2](#). Prothesis with *i-* is less common than that with *a-* or *e-*; no conditioning factors for the choice between the three options have as yet been discovered (cf. e.g. [Grepplin 1982](#)). [Périkhanian \(1966\)](#) holds *a*-prothesis to be a sign of very early loans.

Table 2.2 Phonological correspondences between Armenian and Parthian vowels

Arm.	Pth.	Examples
<i>a</i>	<i>a, ā</i>	Arm. <i>azat</i> ‘free, noble’ < WMIr. <i>ʔd</i> /āzād/; Arm. <i>marz</i> ‘border, province’ < WMIr. <i>mrz</i> /marz/
<i>e</i>	<i>e</i>	Arm. <i>pet</i> ‘chief, head’ < WMIr. <i>-byd</i> /-bed/
<i>i</i>	<i>i, ī</i>	Arm. <i>dpir</i> ‘scribe’ < WMIr. <i>d(y)byr</i> /dībīr/; Arm. <i>Mihr</i> ‘Mihr, sun god’ < WMIr. <i>myhr</i> /mīhr/
<i>ea</i>	<i>ya, yā</i>	Arm. <i>seaw</i> ‘black’ < Pth. <i>syāw</i>
<i>u</i>	<i>u, ū</i>	Arm. <i>bun</i> ‘root, origin’ < WMIr. <i>bwn</i> /bun/; Arm. <i>bazuk</i> ‘arm’ < WMIr. <i>bʔzwg</i> /bāzūg/

A further complication is added by the application of ablaut conditioned by word-final stress in Armenian, not infrequently resulting in loss of vowels in pre-tonic syllables. The pattern of regular correspondence in tonic syllables applicable to all stages of contact with Parthian is described in Table 2.2.

In pre-tonic environments, the *a*-correspondence remains unaffected. WMIr. *i*, *u*, however, may be represented in Armenian by *ə* or \emptyset (e.g. *dpir* above; Arm. *vzurk* ‘great’ < WMIr. *wzrg* /wuzurg/), whereas pre-tonic WMIr. *e* results in Arm. *i* (Arm. *nizak* ‘spear’ < WMIr. *nyzg* /nēzag/).

2.3.2.2 Stratal differentiation

Next to the correspondences delineated above, a great number of which also apply to loans from Middle Persian, it is possible to differentiate two chronological strata²⁷ in the material modelled on Parthian, as was demonstrated clearly by [Bolognesi \(1951\)](#). Table 2.2 does not make reference to the treatment of WMIr. *ē* and *ō* (< Ir. *ai and *au, respectively) in Armenian, since their outcomes are at the core of this differentiation.

One set of loans show a correspondence Pth. *ō, ē* ≈ Arm. *oy, ē* (tonic) and *u, i* (pre-tonic): Arm. *boyž* ‘cure, remedy’, *bužem* ‘to cure, heal’ < Pth. *bwj-* /bōž-/ ‘to save, redeem’; Arm. *dēmk* ‘face’ < WMIr. *dym* /dēm/, Arm. *spitak* ‘white’, cp. Pth. *ʔpyd* /ispēd/, MP *spyt* /spēd/. As both sounds undergo ablaut alternation within Armenian (*dēmk*⁶, GEN *dimac*⁶), and coincide with the outcome of the PIE diphthongs *eṷ, *oṷ > PArm. *ou > Arm. *oy* and *oi, *ei > PArm. *ei > Arm. *ē*, the Parthian loans in question must date to a time where Pth. *ō, ē* were still true diphthongs and close to the Proto-Armenian stage described.

The second set of loans, by contrast, yields Arm. *o, e* < Pth. *ō, ē*, and shows no differentiation between tonic or pre-tonic position: Arm. *den*, GEN *deni* ‘religion, faith’ < Pth. *dyn* /dēn/, Arm. *hreštak* ‘angel, messenger’ < Pth. *fryštḡ* /frēštḡ/; Arm.

²⁷ [Bolognesi](#)’s choice of the terms ‘paleopartico’ and ‘neopartico’ for these two strata is unfortunate in that it suggests clearly differentiated stages of the language rather than a fluid development (1951: 162).

Table 2.3 Stratal differentiation of loans from Parthian

Arm. (early loans)	Arm. (later loans)	Pth.
<i>oy, u</i>	<i>o</i>	<i>w /ō/</i>
<i>ē, i</i>	<i>e</i>	<i>y /ē/</i>
<i>er-</i>	<i>ĭ-</i>	<i>r- /r-/</i>

rot ‘river’ < WMIr. *rwd* /rōd/, Arm. *tohm* ‘family, seed’, cp. Pth. *twxm* /tōxm/, MP *twhm* /tōhm/. These developments suggest that at the time these words were replicated in Armenian, ablaut alternation was no longer productive, and the former Parthian diphthongs had completely monophthongized.²⁸

This stratal differentiation finds further expression in the rendition of Pth. *r-* in Armenian. While the chronologically earlier layer of borrowings shows prothetic vowels prepended to *r-*, the later layer uses Arm. *ĭ-* instead: Arm. *eram* ‘troop, flock’ < WMIr. *rm* /ram/ ‘flock; Manichaean community’; Arm. *razm* ‘fight, battle’ < WMIr. *rz m* /razm/.²⁹ Table 2.3 summarizes these findings.

A more than relative dating of the differences between layers of loanwords is, unfortunately, impossible owing to the lack of continuous evidence from Parthian and its imprecise writing system. Bolognesi’s (1960) assertion that both strata date to the Arsacid period is corroborated by the lexical nature of the loans; an earlier import cannot be excluded in principle, but is unlikely for the very same reason.

2.3.2.3 Types of lexical material

The features that distinguish Parthian loanwords in Armenian are their categorical pervasiveness and general abundance;³⁰ Parthian material is not restricted to any part of the lexicon, or indeed to any one grammatical category, but is found across the spectrum in both the basic lexicon (items concerning nature, body parts, abstract vocabulary of everyday life, etc.) and in more specialized segments (e.g. martial and technical vocabulary), in both of which they may occur as nouns, adjectives, adverbs, or verbs, even invading closed classes such as prepositions and

²⁸ In a few instances, mixed (or possibly transitional) forms can be observed, in which Pth. *ē* is still rendered as Arm. *ē*, but shows an ablaut variant Arm. *e* (as opposed to *i*). These include the names *Šahēn*, *Karēn*, and *Surēn* (GEN *-eni*) and Arm. *yawēž* ‘eternal, immortal’ (GEN *yawēži*), cp. Pth. *y’wyd* /yāwēd/. On the issue of Arm. *e* and *ē* in Armenian manuscripts, cf. Weitenberg (2014: 217–21).

²⁹ Contrary to Bolognesi’s belief (1951: 158), Meillet’s proposal (1936: 46) concerning prothetic vowels in, e.g., Arm. *erek* ‘evening’, cp. Skt. *rājas* ‘dust, mist’, Gk. *ἐρεβος* ‘darkness (of the underworld)’ is likely amiss. Word-initial laryngeals explain these ‘prothetic’ vowels more neatly; thus Arm. *erek* < PIE *h₁regw-e/os- (cf. Martirosyan 2010: 259–61).

³⁰ Belardi (2003a: 98–102), based on the lexical material collected in Hübschmann’s etymological dictionary (1897), has calculated that 35 per cent of the entries contained therein are of Middle Iranian origin (with another 9 per cent of Modern Iranian provenance), whereas only 22 per cent are *echtarmenisch*; while these figures are likely imprecise given the more recent corrections to Hübschmann’s work, they are still indicative of the general composition of the Armenian lexicon.

numbers.³¹ These types of loans are not unusual in contact scenarios, but compared to the influence of other contact languages such as Greek, Syriac, Urartian, and Middle Persian, Parthian stands out in terms of the number of borrowings and their spread across lexical categories.

Examples of borrowings in less commonly affected classes are few in number, but significant nonetheless. The preposition Arm. *vasn* ‘on account of, because of’, for instance, has its origin in a form related to Pth. *wsn'd* /*wasnāḏ*/, MP *wšn* /*wašn*/, OP *vašnā* ‘by grace of’, although it formally corresponds to none of the above fully; Szemerényi (1966) suggests that the original Parthian form was **wasn*, which was contaminated by Pth. *r'd* /*rāḏ*/ ‘for, owing to’ to *wsn'd* /*wasnāḏ*/. For numbers, the evidence is even clearer: Arm. *hazar* ‘1,000’ < WMIr. *hz'r* /*hazār*/ and Arm. *biwr* ‘10,000’ < WMIr. *bywr* /*bēwar*/ are exact matches.³²

Since Hübschmann’s (1897) work, there has as yet been no comprehensive study or lexicon that discusses the entirety of Parthian or generally Iranian lexical items borrowed into Armenian; some efforts in this direction have been made in Schmitt (1983), which contains a thematically grouped list of some common loanwords, and in Gippert (1993), discussing Iranian loans common to Georgian and Armenian at some length.³³ Instead, research in the latter half of the 20th century focused on supplementing, specifying, or correcting the compendium provided by Hübschmann in smaller contributions, often etymological studies of a small set of words.³⁴

In a few extreme cases, single words, such as Arm. *napastak* ‘hare’, have received extensive attention. As the suffix *-ak* and the consonant *p* would suggest, the word is likely of Iranian origin, possibly from Pth. **ni-pasta-ka* ‘the one who hides, nests’, and by extension ‘fearful’ (Périkhanian 1982).³⁵ The question is complicated,

³¹ Although adjectives are supposedly less commonly borrowed than nouns (cf. Winford 2010: 176 and a relativization of this claim by Matras and Adamou 2023), Armenian shows a significant number of Iranian adjectives, esp. those referring to colour: Arm. *seaw* ‘black’ < Pth. *sy'w* /*syāw*/, Arm. *spitak* ‘white’, cp. Pth. *špyd* /*ispēd*/, MP *spyt* /*spēd*/. These types of loans, and the invasion of closed classes in particular, illustrate the intensity of the Iranian–Armenian linguistic relationship; cf. e.g. Thomason and Kaufman (1988: 74–5).

³² The etymology of Arm. *hariwr* ‘100’ is far less secure; while an Iranian loan cannot be excluded, the derivation suggested by Bailey (1987) cannot hold for phonological reasons.

³³ For Iranian–Armenian onomastics, cf. Hübschmann (1897), Ačařean (1942–62), Nalbandyan (1971), Schmitt (1984), and Martirosyan (2021); Schmitt rightly points out that a distinction between Iranian names used for Iranians (e.g. Arsacid or Sasanian kings) and those that have found their way into the Armenian language needs to be made. Further details on Parthian lexis in Armenian are gathered in Bailey (1986), Schmitt (1986), Olsen (1999: 857–920). A detailed investigation was promised in Considine (1979), but alas never came to fruition.

³⁴ Some examples of such augmentations and corrections are given by Bolognesi (1991); Arm. *k'rk'um* ‘saffron’, initially thought to reflect Syr. *kurkāmā*, is clearly a better fit for the WMIr. *kwlkwm* /*kurkum*/, a form unknown to Hübschmann. Similarly, the supposed Syriac loanword Arm. *k'nar* ‘lyre’ < Syr. *kennārā*, is more likely to be derived immediately from WMIr. *kwn'r* /*kunār*/ with regular loss of pre-tonic *u*; cf. also Bolognesi (1984; 1990a,b,c); Greppin (1993).

³⁵ Périkhanian (1982) assumes a root **pad-* ‘to fall’ or **pat-* ‘to fly’ with a prefix **ni-*; her argument and the semantic development of the word are based on the assumption that the word for ‘hare’ was taboo, thus receiving a *Deckname*. Although phonologically plausible, the lack of comparative evidence

however, by the existence of dialectal forms with different consonantism: *alapaz-trak* and *lapastak* already in Vardan Aygekč'i (12th–13th century CE), and further *lapastrak* in the Van region, *ələbastrak* in Karabagh, etc. The *n/l*-alternation and *r*-epenthesis are recurring features of Armenian dialects, but raise the question of evidentiary primacy: which forms are original? Bailey (1989), for instance, regards the *l*-forms as primary, arguing for an adjectival derivation in *-e/os-to- related to Pth. *lb* /laβ/ 'lip; hanging organ', nominalized with *-ka.³⁶ Yet another reconstruction suggests a connection to Iran. *tak- 'to run', without, however, providing a precise etymology (cf. Considine 1984).

While the sheer number of Parthian loans in Armenian is immensely important both for the understanding of its linguistic relationship with that language and, by extension, for the relationship between Armenians and Parthians, and often serves as a guideline for the reconstruction of otherwise unattested Middle Iranian forms, the recognition of Iranian loans and the establishment of correct etymologies rely heavily on comparative evidence from other, largely Iranian, languages; unfortunately, such parallels are lacking in a significant number of cases. To add further complication, there is to date no study that approaches the Iranian influence on the Armenian lexicon from a more structured perspective, going beyond matters of etymology and instead quantifying the number of loanwords, the productivity of borrowed derivational morphology, or the appurtenance of such lexical items to the innermost core of the lexicon according to an established means of comparison (e.g. Swadesh-type lists). For the time being, such a study remains a desideratum.

2.3.3 Middle Persian

Direct, extended contact between Armenian and Middle Persian, going beyond interactions resulting from trade relationships, are likely to have commenced only with the fall of the Parthian Empire and the takeover by the Sasanians, but most probably only began properly with the integration of Armenia into the Sasanian Empire as a marzpanate.

Loanwords from Middle Persian are therefore much more restricted in scope, pertaining only to a limited number of lexical fields; between Parthian and Middle Persian loans there is, as Bolognesi summarizes,

for the connection of this root and 'hare' means that the reconstruction must remain speculative (cf. Considine 1984: 55), esp. in view of other Iranian words for the same concept (cp. MP *hlgwš* /xargōš/, NP *xarguš*).

³⁶ Although a greater variety of *l*-forms exists in the dialects, their late attestation and other evidence of such *n/l*-alternations (cf. Martirosyan 2010: 508–9, 734) speak against reconstructions based on these forms.

una differenza qualitativa fondamentale ...: [i prestiti medio-persiani] sono essenzialmente costituiti da nomi di professioni e di monete, titoli onorifici, nomi di mesi, di luoghi e di persone, termini tecnici insomma. (1980: 33)³⁷

They do not show the same categorical diffusion as their Parthian counterparts in only yielding nominal loans. Most borrowings are found in military and administrative terminology;³⁸ examples include: *šah* and *šahanšah* '(high) king' < MP *š'h* /šäh/; Arm. *marzpan* 'governor' < MP *mrzb'n* /marzbän/; Arm. *payman* 'condition, state' < MP *pym'n* /paymān/; Arm. *p'uštīpan* 'defender, bodyguard' < MP *pušt'b'n* /pušt'bän/ (cp. an earlier loan, potentially from Parthian, Arm. *paštpan*); Arm. *tohm* 'family, tribe' < MP *twhm* /tōhm/ (cp. Pth. *twxm* /tōxm/).³⁹

Middle Persian loans can further be differentiated from those of Parthian origin by means of diverging phonological developments, which are particular to Southwest Iranian languages;⁴⁰ the most important of them are illustrated in Table 2.4.⁴¹

Table 2.4 Phonology: Parthian and Middle Persian loans

SWIr. (MP)	NWIr. (Pth.)	Arm.
<i>h</i>	<i>s</i>	<i>akah</i> 'knowledgeable' < MP <i>g'h</i> /āgāh/ (Pth. <i>gs</i> /āgas/)
<i>d</i>	<i>z</i>	<i>dastak</i> 'wrist, palm', cp. MP <i>dst</i> /dast/ (Av. <i>zasta-</i>)
<i>y</i>	<i>δ</i>	<i>spayapet</i> 'general-in-chief', cp. Arm. <i>sparapet</i> (Av. <i>spāda-</i> 'army')
<i>l</i>	<i>rd</i>	<i>salar</i> 'leader' < MP <i>s'l'r</i> /sālār/ (cp. Pth. <i>srd'r</i> /sardār/)
<i>d</i>	<i>b</i>	<i>darapan</i> 'porter', cp. MP <i>dr</i> /dar/ (cp. Arm. <i>baraṗan</i> < Pth. <i>brb'n</i> /barbän/)
<i>s</i>	<i>sp</i>	<i>sah</i> 'army', cp. Av. <i>spāda-</i>

³⁷ 'a fundamental difference in quality ...: [the Middle Persian loans] are essentially made up from designations of professions and coins, honorary titles, the names of the months, places and people—that is, they are technical terms.' *Bolognesi* goes on to point out that such borrowings are frequently either *hapax legomena* or otherwise restricted to specific authors, and are not productive in Armenian, as opposed to their Parthian counterparts.

³⁸ Particularly frequent are loans regarding administrative or military ranks and positions; cf. *Benveniste* (1961); *Gignoux* (1985–8).

³⁹ The case of Arm. *tohm* is curious, since Parthian and Old Iranian forms of the word are attested, cf. OP *taumā-*, Av. *taoxman-*, but do not fit phonologically. This raises the question whether the lemma was newly introduced by Middle Persian, or a previously borrowed form replaced by the Middle Persian variant.

⁴⁰ It must be noted, however, that some Middle Persian forms may have found their way into Armenian through the mediation of Parthian, since both languages were in contact and borrowings in both directions are well attested. Such is the case with Arm. *dast-* < MP *dst* /dast/, where a *z-* anlaut in Parthian would be expected.

⁴¹ For a fuller account, cf. *Bolognesi* (1960).

Further to these differences, there are a number of *Doppelentlehnungen*,⁴² words which have been borrowed from both Parthian and Middle Persian at different stages; they include the above-mentioned Arm. *sparapet* (< Pth.) and *spayapet* (< MP), as well as Arm. *mogpet* (< Pth. *mgpyt* /maybed/) and *movpet* (< MP). As in the case of Arm. *kušt* ‘flank, side, belly’ and *k’ust* ‘region’, cp. MP *kwstg* /kustag/, a differentiation of such terms lies both in their specific meaning and in their respective productivity and frequency: while *kušt* is attested already in the 5th-century Bible translation and in Agat’angelos, *k’ust* only occurs infrequently in the *Ašxarhačoyc’* attributed to Anania Širakac’i (7th century).⁴³

This example also illustrates another indication that an Armenian loanword is of Middle Persian heritage. According to Pisowicz (1986; 1987), Middle Persian unvoiced stops could be rendered as Armenian unvoiced, aspirated stops (as opposed to the expected unaspirated outcome) already in the 5th century; cp. e.g. Arm. *t’ošak* ‘provision, pay’ < MP *twšg* /tōšag/;⁴⁴ this correspondence would later also apply to loans from Modern Persian.⁴⁵

The limited occurrence of Middle Persian loans in Armenian, their categorical restriction to nouns, and their unproductivity are a reflection of the far more basic level of language contact that existed between the two languages, particularly as contrasted with Parthian. Indubitably, this difference was conditioned to some extent by the political and religious differences that put Armenians and Sasanians at odds (cf. Garsoïan 1997a; and see 3.2.2.3 and 3.2.2.5).

2.3.4 Other Iranian influences

2.3.4.1 East Iranian

The considerable influence of Western Iranian, especially Parthian, on the Armenian lexicon is unparalleled by other dialects, whether coeval or not. It is noteworthy, however, that in addition to these loans, a small number of items of East Iranian heritage have been replicated by the Armenians.⁴⁶

These seem to correspond most closely to forms otherwise almost exclusively attested in Sogdian, such as: Arm. *margarē* ‘prophet; sorcerer’, cp. Sogd. *m’rkr’y*

⁴² Schmitt (1983: 81) also mentions the pair Arm. *zawr* and *zōr* ‘army’, suggesting that they relate to the different Iranian words, Pth. *z’wr* /zāwar/ and MP *zwr* /zōr/; given the general tendency for monophthongization of Arm. *aw* > *ō*, this feature may well be an inner-Armenian development.

⁴³ More detailed accounts can be found in Bolognesi (1960: 35), Benveniste (1945: 74–5), and Nyberg (1928–31: II.102).

⁴⁴ For a different opinion, see Greppin (1993); as he points out, the number of words contained in Hübschmann (1897) showing this outcome is small, and not all have clear Iranian counterparts. Despite the lack of other conditioning factors, and the existence of other regular outcomes, the attribution of this spurious correspondence to Middle Persian remains likely in view of later developments.

⁴⁵ Pisowicz (1987: 236) cites as examples of such modern loans MEA *pālas* ‘thick cloth, old carpet’ < NP *palās*, and Arm. (Yerevan) *k’ōr* ‘blind’ < early NP *kōr* (cp. Classical Arm. *koyr*).

⁴⁶ These were first observed by Gauthiot (1916); see also Benveniste (1964: 3) concerning the phonology of compounds in Arm. *šaw-* ‘black-’ and fn. 18.

/mārkarē/ and Pth. *m'rygr* /mārēgar/;⁴⁷ Arm. *kari* 'very' < Sogd. *k'ḍy* /kāḍi/; Arm. *baw* 'enough', cp. Sogd. *β'w* /βāw/ 'satiety' (cf. [Bolognesi 1966](#): 574–5 n. 18). More recent suggestions for East Iranian loans into Armenian, e.g. Arm. *zawr* 'troops, army' < Sogd. *z'wr* /zāwar/, are unlikely to withstand closer scrutiny, since the forms in question are attested as such also in Parthian.⁴⁸

Since direct interactions between Armenians and Sogdians seem unlikely, the *communis opinio* is still based on [Henning's](#) (1958) proposal that the East Iranian material is of Parnian origin. The Parnians, whose language is otherwise unattested, are said to have conquered the Parthians in c.240 BCE, and then to have adopted their language (cf. [Lecoq 1986](#)). Remnants of Parnian vocabulary would thus have found their way into Armenian by mediation of Parthian, in which some Eastern Iranian material is attested, e.g. Pth. *hnd* /hand/ 'blind' (contrast MP *kwr* /kōr/ 'id.').⁴⁹

2.3.4.2 A third West Middle Iranian dialect

Similar to the set of words attributed to Eastern Iranian, certain loanwords from the Middle Iranian period suggest that there must have been a third West Middle Iranian dialect.

On a phonological level, this assumption is based on the development of Clr. *d > h in a small number of Armenian borrowings; these include Arm. *zrahk'* 'cuirass', cp. YAv. *zrāḍa-* (contrast the Aramaic loanword *zrd'* /zardā/), which also occurs in Zoroastrian Middle Persian as *zryh* /zrēh/; Arm. *srah* 'hall, courtyard', cp. Clr. *srāda-, and Zoroastrian MP *sr'd*, *sr'y*. A particularly curious case are the derivations of Clr. *spāda- 'army', cp. OAv. *spāda-*, YAv. *spāda-*, Pth. *sp'd* /ispāḍ/, Zoroastrian MP *sp'h* /ispāh/, since all possible Middle Iranian forms are reflected in Armenian: *spah*, *spar (cp. Arm. *sparapet* 'commander in chief', Arm. *r* < Pth. *ḍ*), and *spay* (reflecting Clr. *d* > MP *y*).

Furthermore, recent forays into this field suggest that the Armenian adjectival suffix *-agin* 'like X, endowed with X' was derived from a third West Middle Iranian variety; a similar suffix, Arm. *-kēn* < Pth. *-gyn* /-gen/, cp. Clr. *-k-aina (Av. *zaran-aēna* 'golden', OP *aθang-aina* 'from stone'), is also attested and illustrates the phonological difficulties of deriving Arm. *-agin* from its known Middle Iranian counterparts, wherefore [Korn and Olsen's](#) (2012) suggestion of an origin in a third dialect is potentially interesting (*pace* [Schmitt 2001](#): 85). Yet there is a caveat: borrowing of derivational morphology usually requires prolonged and extensive

⁴⁷ This etymology is no longer accepted by all scholars. [Korn and Olsen](#) (2012: 212 n. 41) reject it on the basis of [Gippert \(2005a\)](#), who cites the lack of exact phonological correspondence between Parthian and Armenian form, and a potential Caucasian Albanian parallel *marḡaven* 'prophet, augur' as reasons to expect a different etymology.

⁴⁸ Cf. [Ritter \(1997–8\)](#); his suggestion that the East Iranian material found its way into Armenian as part of a Manichaean mission is rather unlikely, particularly since Sogdian missionary activities only commence at a later point in time, and in different regions (as he admits himself).

⁴⁹ For more examples, cf. [Henning \(1958](#): 93–4).

language contact, as in the case of Parthian; it is unclear how the third dialect with its few identifiable loans fits into this picture.⁵⁰

Since this hypothesized dialect has left few traces beyond what has been mentioned above, it cannot be securely identified; a connection to the equally poorly attested Median language as suggested by Périkhanian (1968), e.g. as Middle Median, is not to be excluded a priori, but cannot be verified.

2.4 Iranian morphology and phraseology in Armenian

While the Iranian influence on Armenian is most readily observable in its lexical loans, its derivational morphology has also adopted a significant number of affixes of Iranian, particularly Parthian, origin, which are used productively from the beginning of literary attestation onwards.⁵¹

These derivational affixes can be separated into two groups: that of true affixes, which occur as such also in Parthian, and that of nominal or adjectival compounds, parts of which have been grammaticalized as affixes in Armenian. Some of the affixes belonging to the first group are given in Table 2.5.⁵²

A selection of Armenian affixes going back to parts of Iranian compounds is provided in Table 2.6.⁵³

Both tables further show instances of affixes of Iranian origin combined with Armenian heritage words (*hamajayn*, *graran*, *martik*), which illustrate the productivity and pervasiveness of Parthian influence; some of these suffixes are still productive in Modern Armenian. In the case of the affixes derived from Iranian compounds, the lexical items were reanalysed and reduced to affix status

⁵⁰ Other derivations have been suggested: PIE $*-g^heh_1-ni-$ ‘going; gait’ (Klingenschmitt 1982: 95), or an unspecified substrate influence (Greppin 1974: 65), both of which are successfully rejected by Korn and Olsen (2012: 206–7).

⁵¹ Note that Armenian inflectional morphology is not affected by foreign influence. According to Meillet (1911–12: 249), nominal borrowings are to be subcategorized depending on their stems: the oldest group retains the same stem-class as its Iranian counterpart, e.g. Arm. *ašxarh*, *ašxarhač* and Av. *xšāθra-* (a-stems); Arm. *uxt*, *uxtic* and Av. *uxti-* (i-stem); Arm. *xrat*, *xratuc* and Av. *xratu-* (u-stem); etc. Later loans either exhibit multiple stems, e.g. Arm. *mog*, *mogac* or *moguc* (a-/u-stem) and Av. *magu-*, or a stem different from the original form, e.g. Arm. *dat*, *datic* (i-stem), but Av. *dāta-* (a-stem). Such a chronological stratification, requiring the apocope of final syllables in Armenian to be dated in Arsacid times, is, however, not supported by the evidence, since some unequivocally early loans show unexpected stems. A less problematic explanation, advanced by Bolognesi (1954: 124), suggests that in those cases where stem classes do correspond, they were analogically created or restored on the basis of derivatives or compounds; also cf. Schmitt (1983: 98–9).

⁵² A more complete account of Iranian suffixes adopted in Armenian can be found in Jahukyan (1993); Leroy (1958–60; 1961; 1964); also cf. Greppin (1974–5), with the corrections suggested by Jahukyan, and Olsen (1999: 1097–8).

⁵³ A further frequent suffix, Arm. *-u(r)hi*, marks feminine nouns; the suffix is likely to derive from reanalysis of the loanword Arm. *t’agu(r)hi* ‘queen’ < Ir. $*tāga-brθryā$, the feminine form of *t’agawor* ‘king’, owing to which the suffix was generalized; cf. Benveniste (1945: 74).

Table 2.5 Armenian affixes derived from Iranian affixes

Arm.	CIr.	Examples
-ak ^a / -eak -akan	*-aka- / *-ya-ka- *-akāna-	<i>bažak</i> 'cup'; <i>spaseak</i> 'assistant; guardian' <i>paštonakan</i> 'official, ministerial'; <i>sovorakan</i> 'usual, common'
-ean -ik	*-iyāna- *-ika-	<i>arawelean</i> 'eastern'; used for patronymics <i>spasik</i> 'servant'; <i>martik</i> 'fighter, combatant'
apa- aw- dž- / tš- pat ^b	*apa- / *upa- *abi- *duš- *pati-	<i>aparank</i> 'palace; house'; <i>apagovem</i> 'to blame' <i>awgnem</i> 'to help, assist'; <i>awrēnk</i> 'custom' <i>tšnami</i> 'enemy'; <i>džuar</i> 'difficult' <i>patrastem</i> 'to prepare'; <i>patmučak</i> 'wardrobe keeper'

^a For a dedicated treatise on *-ak*, cf. [Asatryan and Muradyan \(1985\)](#); also cf. [Bolognesi \(1980: 31\)](#).

^b For a more detailed discussion, cf. [Belardi \(1961\)](#), according to whom this prefix is no longer productive already in the Classical period.

Table 2.6 Armenian affixes derived from Iranian compounds

Arm.	Iran.	Examples
-astan	*-stāna-	<i>aspastan</i> '(horse) stable'; <i>datastan</i> 'judgement; lawsuit' (cp. WMIr. <i>d'dyst'n</i> / <i>dādestān</i> / 'id.')
-aran	*dāna-	<i>ganjaran</i> 'treasury'; <i>graran</i> 'library; bookcase' (cp. OP <i>daivadāna</i> - 'daiva temple')
-arēn	*-ādayana-	<i>yunarēn</i> 'Greek language'; <i>asorarēn</i> 'Syriac' (cp. NP <i>āyin</i> 'norm, manner')
-kar / -ker	*-kara- / *-kāra-	<i>koškakar</i> 'boot-maker'; <i>xohaker</i> 'cook' (cp. MP <i>xw'stygr</i> / <i>xwāštigar</i> / 'doer of good actions, beneficent')
-kert	*-kṛta-	<i>dastakert</i> 'building, village'; <i>Tigranakert</i> , city founded by Tigran (cp. WMIr. <i>yzdygyrd</i> / <i>yazdegird</i> / 'divine, made by the gods')
-pan	*-pāna-	<i>partizpan</i> 'gardener'; <i>darapan</i> 'door-keeper' (cp. MP <i>mrzb'n</i> / <i>marzbān</i> / 'governor')
-pet ^a	*pati-	<i>hazarapet</i> 'chiliarch'; <i>nahapet</i> 'patriarch, prince' (cp. Pth. <i>mgpyt</i> / <i>maybed</i> / 'priest')
ham-	*hama-	<i>hamahayr</i> 'with the same father'; <i>hamajayn</i> 'concordant' (cp. Pth. <i>hm'xwnd</i> / <i>hamāxwand</i> / 'united')

^a [Benveniste \(1961: 639–30\)](#) remarks that while *pati- and derivatives are hardly ever found as words in their own right, Arm. *pet* 'chief, commander' does exist as a proper lexeme.

through grammaticalization; in addition to the ones listed above, which tend to occur only in compounds even in Iranian, some words which otherwise occur also on their own in Iranian have similarly been re-interpreted; cp. Arm. *goyñ* 'colour' < MP *gwn* / *gōn*/, and *erknagoyñ* 'sky-coloured, blue', where the word

occurs in its original meaning, both alone and as a compound, and *lawagoyñ* ‘better’, demonstrating the usual comparative force of the suffix.⁵⁴

In addition to the lexical and morphological loans surveyed above, lexical calques (or loan translations) of varying kinds occur as well. Nominal calques occur on a spectrum, from loanword proper (no adaptation to Armenian) to calque proper (replacement of Iranian material with Armenian counterparts); the following sub-types of calques can be recognized:⁵⁵

- (a) loan proper: Iranian words, particularly compounds, are replicated in Armenian without any changes to their composition; e.g. Arm. *vattohmak* ‘of low birth’ < MP *wttwhm* /wattōhm/ (with an optional suffix *-ak*).⁵⁶
- (b) adapted loans: Iranian compounds into which the connective vowel *-a-* has been inserted; e.g. Arm. *barapan* ‘porter’ < Pth. *brb’n* /barbān/, Arm. *vatabaxt* ‘unfortunate’ < MP *wtb’ht* /watbāxt/.
- (c) semi-calques: an Iranian compound is replicated by replacing one of its parts with an Armenian word; e.g. Arm. *čarabaxt* ‘unfortunate’, cp. MP *wtb’ht* /watbāxt/; or Arm. *barekam* (< *bari-a-kam) ‘friend’, cp. Pth. *šyrg’mg* /šīrgāmag/, with an original meaning ‘well-wisher’ (cp. WMIr. *k’m* ‘wish, desire’).⁵⁷
- (d) calque proper: an Iranian compound is replicated through substitution of all its parts by Armenian forms; e.g. Arm. *jerbakal* ‘prisoner (lit. taken by the hand)’, cp. Pth. *dstgrb* /dastgraß/, with an exact correspondence of *jerb-* (cp. *jern* ‘hand’) and *dst* as well as *-kal* (cp. *kalay*, suppletive aorist of *unim* ‘to have, hold’) and *-grb* (cp. Pth. *gyrw-* /gīrw/ ‘to take, seize’); or Arm. *čarakn* ‘envious (lit. evil-eye)’, cp. MP *dwščšmyh* /duščašmih/ ‘envy’, where both *čar-* and *dwš-* ‘evil’, as well as *akn* and *cašm* ‘eye’ correspond.

Type 4 is particularly difficult to recognize owing to the frequent lack of any actual Iranian material in the newly created word; only dedicated search and comparison with possible Iranian models (and lack of comparanda in other related languages) can provide sufficient evidence to allow for a definite designation of origin.⁵⁸

⁵⁴ Similarly, Arm. *pēs* ‘as, like’, which in Modern Armenian still serves as an adverbial suffix, is derived from Iranian, cp. Av. *paēsa(h)-* ‘manner, way’; cp. Arm. *nmanapēs* ‘in like manner’, *mecapēs* ‘greatly’.

⁵⁵ Cf. Bolognesi (1993) for a more detailed discussion of calques and their grouping; also cf. Bolognesi (1988c) for compounds in Arm. *-kal(u)* and Kölligan (2008).

⁵⁶ Adaptation only refers to the morphological alteration of the material; phonological changes, e.g. loss of unstressed vowel, may occur, e.g. Arm. *vātšān* ‘bad sign’ < WMIr. *wat-nišān.

⁵⁷ Cf. Benveniste (1945: 78) which presupposes the existence of an unattested form with different consonantism. In a different analysis, *barekam* could be a calque proper, where both *Vorderglied* and *Hinterglied* have been replaced. Accordingly, *-kam* (cp. Arm. *kamk’* ‘will, wish’) could have been used instead of the phonologically less transparent *-g’mg* to make the calqued compound more readily analysable.

⁵⁸ This presupposes, of course, that the concepts underlying these expressions were borrowed from Iranian too, rather than being indigenous to Armenian thinking.

These lexical calques are accompanied by phraseological calques, largely complex predicates consisting of a noun or adjective and a verb, which are similarly difficult to recognize as being of Iranian origin. The set of verbs is restricted to a handful of common ones, viz. *arnel* ‘to do, make’, *harkanel* ‘to throw’, *unel* ‘to have, hold’, and *tal* ‘to give’;⁵⁹ combinations with other verbs can also be found.⁶⁰ Examples for each verb are provided below; some combinations have no correspondences in the West Middle Iranian languages, and are instead attested in Modern Persian.

- Combinations with *arnel*: Arm. *vatanun arnel* ‘to defame, slander’, cp. *bad nām kardan*; Arm. *azat arnel* ‘to set free, liberate’, NP *āzād kardan*; Arm. *heri arnel* ‘to make remote, remove’, cp. Pth. *dūr kar-*, NP *dūr kardan*; Arm. *yišumn arnel* ‘to make memory, remember’, cp. Pth. *’by’d kr-* /aβyād kar-/, NP *yād kardan*.
- Combinations with *harkanel*: Arm. *xoran harkanel* ‘to strike a tent; to camp’, cp. NP *čādor zadan*; Arm. *hur harkanel* ‘to strike fire; to set alight’, cp. NP *ātaš zadan*; Arm. *’pōl harkanel* ‘to sound the trumpet’, cp. MP *n’y pzd-* /nāy pzd-/.
- Combinations with *unel*: Arm. *gorc unel ənd* ‘to have interest in; to have to do with’, cp. NP *kār dāštan bā*; Arm. *akn unel* (and secondarily *aknkalel*) ‘to have an eye; to hope, expect’, cp. NP *čašm dāštan*; Arm. *pah unel* ‘to keep watch; to watch’, cp. NP *pās dāštan*.
- Combinations with *tal*: Arm. *hraman tal* ‘to give an order, to command’, cp. NP *farmān dādan*; Arm. *patasxani tal* ‘to give an answer, to reply’, cp. NP *pāsox dādan*.

2.5 Relevance of Armenian evidence for Iranian

The above account illustrates to what extent, and in what way, knowledge of Iranian material is important to the study of Armenian and its historical linguistic development. It has been shown that an overwhelming amount of Armenian lexical material has been replicated on the basis of Iranian, largely Parthian, models, and that its morphology and phraseology have similarly had a certain, if less

⁵⁹ Combinations with *arnel* and *harkanel* are particularly common, and frequently correspond directly to phrases retained in Modern Persian containing the verbs NP *kardan* ‘to do’ and *zadan* ‘to beat’; cf. Schmitt (1983: 104), Bolognesi (2006: 264–6).

⁶⁰ For example Arm. *erkiwrac / erkničim i* (with ablative) ‘to be afraid of’, cp. OP *tṛs- hacā* (with ablative), WMIr. *t(y)rs-* č, ž, ž /tirs- az, až/, NP *tarsidan az*; Arm. *i k’un ert’al* ‘to go to sleep’, cp. NP *ba-xvāb raftan*; cf. Bolognesi (1961: 670–84).

thoroughly studied, impact on the historically attested forms of the Armenian language and its onomastics.⁶¹

In turn, the importance of the Armenian evidence for the study of Iranian must not be neglected, nor underestimated:

An der Spitze [der] indirekten mitteliranischen Sprachzeugnisse stehen nach Zahl und Gewicht die ins Armenische übernommenen Wörter und Namen, gegenüber denen die aus anderen Sprachen ... zurücktreten. Von besonderer Bedeutung waren und sind diese iranischen Wörter und Namen armenischer Überlieferung deshalb, weil sie im Armenischen in einer Schrift mit vollständiger und eindeutiger Vokalbezeichnung geschrieben sind, wodurch sich die ... armenische Schrift grundlegend von den auf iranischem Gebiet gebräuchlichen Konsonantenschriften semitischer Herkunft unterscheidet. (Schmitt 1989: 101)⁶²

In like manner, and as shown above, the rendition of Pth. /ō/, /ē/ in Armenian as *oy/o*, *ē/e* serves to show that the monophthongization of certain inherited Iranian diphthongs occurred during the Arsacid period, when interactions between the two languages were at their height.

On the lexical level, Armenian has preserved in their quasi-original forms many words which have not survived into Modern Persian, e.g. Arm. *azd* 'sensation, advice', *bužem* 'to free, save', *oyž* 'force, strength' (so-called *verlorenes Sprachgut*).⁶³ In other instances, words of clearly Iranian origin are not attested in any of the modern or historical Iranian languages, and purely on the basis of their phonology are deemed to be of such an origin, thus providing important comparative data; e.g. Arm. *nirh* 'sleep' < WMIr. **nīhr* < Ir. **nidrā-*, cp. Ved. *nidrā*; Arm. *patuhan* 'window' < WMIr. **pātfrān* < Clr. **pāti-frāna-*, cp. Skt. *prāṇa-* 'breath'.⁶⁴

Beyond the linguistic data, Armenian has also proved invaluable in other regards:

Les iranistes peuvent encore tirer profit de l'arménien en ce qui concerne la sémantique. L'œuvre de Benveniste est vraiment exemplaire à cet égard aussi. Il a

⁶¹ For treatises and short treatments on onomastics, cf. Hübschmann (1897), Ačařean (1942–62), Nalbandyan (1971), Mayrhofer (1979), Schmitt (1984), Martirosyan (2021).

⁶² 'As regards the indirect witnesses of the Middle Iranian languages, the words and names borrowed in Armenian are, by number and relevance, the most important; those borrowed into other languages cannot [...] compare. These Iranian words and names attested in Armenian are of particular importance, because they were written in a script with complete and unambiguous vowel signs; this distinguishes [...] the Armenian script fundamentally from the consonant scripts of semitic origin typically used in the Iranian world.' Also cf. Durkin-Meisterernst (2014: 29–84).

⁶³ Cf. Bolognesi (1980: 32; 1990c); Asatryan (1997–).

⁶⁴ Schmitt (1983: 109), rightly points out that not all such reconstructions are uncontested as a result of the lacking attestation in Iranian. But next to the phonological argument, Benveniste (1964: 2) points out that in cases such as Arm. *surb* 'pure, holy', Ved. *śubhrá-* 'ornament', an Iranian intermediary is most likely, since there are no exclusive lexical isoglosses between Armenian and Old Indic, which cannot sensibly be reduced to a missing Iranian link.

bien compris que l'arménien peut aider à préciser, définir et interpréter le sens des mots non seulement parthes et moyen-perses, mais aussi d'autres dialectes iraniens. (Bolognesi 1990b: 66)⁶⁵

With the continuous discovery of new Middle Iranian evidence of various varietal origins, this statement is likely to remain true for the foreseeable future.⁶⁶

2.6 Lacuna: Iranian syntax in Armenian

As is the case with the study of language contact situations in general, syntax is the least studied aspect of Iranian–Armenian contact. In part, this is due to the fact that the study of syntactical loans of whatever kind is more difficult than that of lexical, phonological, or morphological influences, since its results are less transparent: no immediately ‘visible’ material is taken over, but only less readily recognizable use patterns. Furthermore, syntactic influence in language contact situations is generally less common than other kinds of interactions, owing to the necessary prerequisites, viz. enduring and relatively intense contact with at least some degree of bilingualism (see 7.1.1.2).

To date, investigations into syntactic loans have suggested three potential Armenian patterns that may have been influenced by Iranian to some extent: nominal relative clauses (cf. Benveniste 1964: 35; Ajello 1973; 1997: 251; see 6.1), anaphoric pronouns (cf. Meyer 2013; see 6.2), and the construction of the Armenian periphrastic perfect (cf. Meyer 2016; see also Chapters 4 and 5). The latter, in particular, is a complex topic that has attracted the interest of numerous scholars over the course of the 20th century, and will constitute the main topic and focus of investigation in this study.

The two other topics (relative clauses and anaphoric pronouns) will also be discussed, but in a more concise format. In addition, one further potential syntagma will be considered, namely the use of the complementizer Arm. *(e)t'ē* to introduce reported speech.

⁶⁵ ‘Iranianists can further profit from Armenian in matters of semantics. The works of Benveniste are quite exemplary in that regard. He has truly understood that Armenian can help to specify, to define, and to interpret the meaning not only of Parthian and Middle Persian words, but also those in other dialects.’ See here also for a detailed bibliography of the relevant works of Émile Benveniste.

⁶⁶ On a different, more limited level, Armenian also functioned as a mediating language between Iranian and Georgian; not all Georgian loanwords of Iranian origin have arrived there thus (cf. Andronik'ašvili 1966), but at least a few must have taken this path, esp. owing to phonological correspondences typical of Armenian loans from Iranian (e.g. Ir. /δ/ > Arm. *r*); e.g. Geo. *xoiri* ‘headgear’ < Arm. *xoyr* ‘headgear, diadem’ < Pth. *xwwd* /xōδ/ ‘helmet’; Geo. *ambori* ‘kiss’ < Arm. *hamboyr*, cp. Pth. *mbwy-* /ambōy-/. Iranian loanwords in Georgian are, however, not of an importance comparable to their counterparts in Armenian; for further examples, cf. Schmitt (1983: 87), Gippert (1993).

2.7 Lacuna: the Iranian–Armenian contact situation

As this study aims to provide arguments and data illustrating an Iranian origin of the syntactic structures listed above, it must also elucidate the contact situation in which this kind of syntactic borrowing has taken place. Of course, owing to the lack of attestation of Armenian prior to contact with the Iranian languages, and a lack of documents that show ‘contact in progress’, e.g. code-switching or code-mixing, the explanations and aetiologies presented in what follows cannot be considered as proof, or even evidence beyond reasonable doubt, for an Iranian origin; nevertheless, they and their probative force can and must be compared to other attempts at explaining these syntagmata (where available), or to the assumption of independent parallel developments in Armenian and Iranian. In the light of such comparisons, the contact solutions stand out as the more plausible and better-evidenced suggestion.

Next to the discussion of linguistic data and the contact between Armenian and Iranian, this study will also consider what implications the existence of extensive Iranian–Armenian syntactic borrowings has for the interpretation of historical interactions between speakers of Armenian and Iranian, specifically that of the Armenian and Iranian nobility. This field has, of course, received copious attention from historians, and the evidence from primary sources is not inconsiderable (see Chapter 3). Yet, since the borrowing of syntactic patterns suggests a greater degree of contact and bilingualism than even the extensive lexical and morphological loans discussed above, a thorough (re)consideration of what is and can be known about the cultural interactions between these two peoples is warranted and necessary.

2.8 Filling the lacunae

This chapter has provided an insight into the established facts and problems of Iranian influence on the Armenian language. The Armenian lexicon is replete with Armenian, particularly Parthian, material; its phonology was influenced by that language, too. Numerous productive derivative morphs, nominal calques, and imitations of complex predicates indicate a contact situation that went far beyond the casual exchange of a few choice words. The matters of syntactic borrowings and the extralinguistic specifics of this contact situation are the main areas on which research has to date provided less information.

Based on this outline of the status quo, the following two guiding questions arise naturally:

1. Have any Armenian syntactic patterns been modelled on (or significantly influenced by) similar patterns in an Iranian contact language?

2. What does the existence of such patterns mean for Iranian–Armenian language contact? That is, can the linguistic data provide any insights into the kind and degree of interaction between these languages?

Inevitably, these guiding questions require breaking down into smaller sets of questions, which will be outlined—and subsequently answered—at the beginning of each of the following chapters.

The short and dirty answers are, however, reasonably straightforward: firstly, yes, there are Armenian syntactic patterns modelled on Iranian, as already alluded to in 2.6; and secondly, their existence suggests that the originally Parthian ruling class was bilingual, speaking Armenian as well, and that their Parthian-coloured variety of Armenian was, over generations, adopted as the literary standard at the same time as they adopted Armenian as their main means of communication.

This explanation requires that both Armenian and Parthian society were, if not wholly integrated with each other, then at least in steady and intense contact for an extended period of time. To show that that was indeed the case, the following chapter presents the historical record as it can be gleaned from contemporary primary sources.

Sociohistorical evidence for Iranian influence on Armenian

The linguistic foundation of the Iranian–Armenian contact relationship has been expounded in Chapter 2. Some of the questions raised there require that the circumstances of this relationship be presented in somewhat greater detail. The importance of sociohistorical factors such as duration of language contact, the political circumstances of the coexistence of multiple languages, and the prestige associated with one or other of the languages in question makes it necessary to take into account material and sources going beyond linguistic data. What follows is not intended as a comprehensive history of the interaction between Iranians and Armenians, a brief summary account of which has been given in 2.1;¹ rather, it is meant to serve as background information for the case made later in this study: the borrowing of complex syntactic patterns into Armenian on the basis of Parthian models, and the shift of Parthian-speakers to Armenian as their main means of communication. For this purpose, it will prove useful to investigate whether the notion of societal bilingualism at least within the ruling class(es) can be upheld by epigraphic and literary evidence or not.

This chapter therefore systematically discusses all the potentially relevant mentions of Armenians and Parthians, and especially their languages, in the epigraphic and literary sources of Iranian, Armenian, Graeco-Roman, and select other origins, in this order.² While it offers no groundbreaking revelations, some sources provide a clear corroboration of the notion of a multilingual society in the Armenian cultural sphere.³ The primary goal of this discussion is to outline and

¹ Detailed accounts and discussions of Armenian history can be found in e.g. [Garsoïan \(1989\)](#); [Garsoïan et al. \(1982\)](#); [Hovannisian \(1997\)](#); [Redgate \(1998\)](#); for Parthian history, see [Curtis and Stewart \(2007\)](#); [Ellenbrock and Winkelmann \(2015\)](#); [Schippmann \(1980\)](#).

² No reference is made to Syriac or Georgian sources. Syriac literature has no relevant historiographic tradition, and its hagiographic texts make no reference to the linguistic habits of Iranians or Armenians (David Taylor, p.c.); the only relevant contemporary source in Georgian, *The Passion of Saint Šušanik* attributed to Iakob Tsuraveli, dates to the late 5th century and contains no relevant information either (cf. [Rayfield 2010](#): 44–7).

³ While [Simkin \(2012](#): 104–5) points out, at the example of languages on the Iberian peninsula in contact with Latin, that even few bilingual inscriptions or instances of code-switching can help to elucidate the synchronic sociolinguistic situation of one or more speaker communities, the case of Parthian–Armenian contact affords neither of those. All insights into the contact situation and speaker communities that go beyond immediate linguistic evidence must therefore be gleaned from other facets of historical and literary sources.

contextualize mentions of multilingualism, linguistic prestige, and other language-related facts in these sources to enrich the picture painted by the linguistic data presented in Chapter 2.

A secondary question relates to the mutual intelligibility of the two Iranian languages in significant contact with Armenian, viz. Parthian and Middle Persian. If concrete evidence of intercommunicability between Parthians and Persians, and thus Arsacids and Sasanians, can be provided, this would better explain the ease with which Middle Persian loans have found their way into Armenian;⁴ mutual intelligibility among the West Middle Iranian languages may also be seen as one of the underlying reasons for the demise of Parthian in the West,⁵ since the Arsacids may have sought to set themselves apart even linguistically from their Sasanian cousins; the concurrent adoption of Armenian, in turn, contributes to the adoption of Parthian syntactic patterns into Armenian.

As has been pointed out already in 2.1, in considering the outcome of Iranian–Armenian language contact, it must be borne in mind that only the literary language as preserved in historiographical, poetic, and other texts can be studied and thus analysed; this register may represent the language of the upper classes (royalty, nobility, clergy, etc.), or may be an artifice of literature. Owing to a lack of evidence, it is impossible to determine whether or not the vernacular of the 5th century or before would be as heavily influenced by Iranian.

3.1 Iranian sources

3.1.1 Old Iranian sources

As noted in Chapter 2, the first unequivocal mention of the geographical designation ‘Armenia’ occurs in the Old Persian inscription of Darius I at Behistun, where it features variably as the noun /Armina/ or the derived adjective /Arminiya/; similarly, the term occurs in later inscriptions such as that of Darius at Susa, or that of Xerxes at Persepolis.

Like most Old Persian inscriptions, the instances in which Armenia is mentioned are highly formulaic: both noun and adjective occur either in a list of territories held by the king (e.g. DB I.15, DB II.30, DPe 12, XPh 20), or as a designation of origin for an individual discussed (e.g. DB II.29, DB III.78, DB IV.29).

⁴ Owing to their closely related phonology, morphology, and syntax, as well as a number of common developments, Parthian and Middle Persian have only been considered distinct languages since [Henning \(1958: 102–4\)](#). Their historical relatedness and geographical coexistence make it likely that they were mutually intelligible to at least some extent (cf. also [Sundermann 1989c: 106, 110](#); [Durkin-Meisterernst 2014: 1](#)); further corroboration of this hypothesis may be provided by contemporary Chinese sources (see 3.4).

⁵ Cf. [Meyer \(2022a\)](#) and see 7.2.1.

The same restrictions apply to the Old Persian word for Parthia, /Parθava/, which similarly occurs only in lists or as a designation of origin. No mention is made of interactions between both peoples, nor their respective idioms.

There are no indications that a word for Armenia occurred in any of the Avestan material; Median is not attested in its own right.

3.1.2 Middle Iranian sources

The contemporary Parthian evidence is severely limited.⁶ The most recent summaries (Durkin-Meisterernst 2014: 4; Ellenbrock and Winkelmann 2015: 187–91) list the Nisa ostraka,⁷ three letters from Avroman and one from Dura Europos, a number of inscriptions of Arsacid kings, and Arsacid coin legends.

The latter, owing to their brevity and basic nature, allow for no insight into the question at hand. Similarly, the ostraca from Nisa are both too early and too geographically remote to contain any relevant information; neither Armenia nor any aspect of Iranian–Armenian multilingualism occur in these documents (cf. Diakonov et al. 1976–7).

In like fashion, the extant letters, which deal with the sale of a vineyard, make no mention of either Armenian or Parthian, and generally provide only very spurious evidence (cf. Gignoux 1972: 43–4; MacKenzie 1985).

Similarly, those Parthian inscriptions that predate the Sasanian period are largely executed in Aramaic heterograms and are of very limited use, containing at best personal names and, in later inscriptions, phonetic complements (cf. Schmitt 1998). An example of such an inscription on Armenian territory is the royal inscription of Artāšēs I in Zangezur (Périkhanian 1966), which reveals only his and a few other names, and his dynastic affiliation with the Orontids.⁸

Two Parthian inscriptions contain a toponym and ethnonym relating to Armenia (*ʾrmny* /Armani/ and *ʾrmnyn* /Armanīn/, respectively):⁹ the trilingual Šāhpuhr inscription on the Ka'ba-ye Zardošt (MP, Pth., Gk.; ll. 1, 4, 18, 20, 21) and Narseh's bilingual inscription at Paikuli (MP, Pth.; ll. 9, 17, 18). In the former, Armenia is listed, as in the Achaemenid inscriptions, as one of the territories under control of the Sasanians; further mention is made of the foundation of a fire temple in

⁶ The number of Sasanian Middle Persian inscriptions is larger, and both words for Armenia(n) and Parthia(n) feature, e.g. in the inscriptions of the *mōbed* Kerdīr at Naqš-e Rājab and Naqš-e Rastam (cf. Gignoux 1972); none of them are of relevance, however, since they only list both territories as belonging to Kerdīr's sphere of influence.

⁷ These consist of c.2,000 ostraca (inscribed potsherds) from Nisa (near Ashkhabad, Turkmenistan), dated to the 1st century CE. Their content is largely formulaic, and deals with economic topics, esp. the sale of wine. Owing to the size of the extant ostraca, full sentences are rare, and their usefulness for the present purpose is extremely limited.

⁸ Line 4 reads *mlk ʾrwnd[kn]*, translated by Périkhanian as 'roi, Eruandide', a variant designation of the Orontid dynasty.

⁹ Spelling variations with <l> for <r> exist as well.

Armenia for Hormizd-Ardašir, who ruled Armenia from 251 CE (the beginning of Šāhpuhr's second campaign against Rome)¹⁰ until his succession to the Sasanian throne in 270 CE (cf. [Huysse 1999](#)).

In the Paikuli inscription, which details Narseh's deposing his nephew Wahrām III from the Sasanian throne, Narseh is initially referred to as the king of Armenia; King Trdat, presumably Trdat III of Armenia, is mentioned as one of the kings supporting his accession (cf. [Humbach and Skjærvø 1978–83](#)).

While both inscriptions also make mention of toponyms and ethnonyms relating to the Parthian language, neither of them allows for any further insights into Iranian–Armenian multilingualism. It is noteworthy, however, that after the reign of Narseh (293–302 CE) Sasanian royal inscriptions no longer feature a Parthian version. In view of this fact, and taking into account the two extant multilingual inscriptions already mentioned, [Durkin-Meisterernst](#) suggests that

[d]a die Sasaniden Mp [Middle Persian] sprachen und von keinem Sasanidenkönig nur eine pa [Parthian] Inschrift ohne mp Version (aber auch vor Narseh keine ausschließlich mp. Inschrift) überliefert ist, und da noch vor der letzten pa Inschrift der Oberpriester Kerdīr seine Inschriften nur auf mp anfertigen ließ, scheint das Pa in diesen Inschriften sekundär zu sein oder es zumindest im Laufe der Bezeugung zu werden. Es ist durchaus wahrscheinlich, daß die ersten Sasaniden eine funktionierende parthischsprachige Kanzlei übernahmen, für die es bald keine Fortsetzung mehr gab.¹¹ ([Durkin-Meisterernst 2014: 5](#))

As has been hinted at already, this lack of Parthian inscriptions after the 3rd century CE is of significant interest with regard to the status and fate of the Parthian language in general; this issue is discussed in [7.2.1](#).

In Parthian and Middle Persian Manichaean literature, a word for Armenia (*'rmy*n /armen/) does occur, but only once, in a fragment housed in the Turfan Collection, Berlin (M1524 V 3; cf. [Durkin-Meisterernst 2004: 53](#)). The Parthian language is mentioned twice, once in another Turfan fragment (*phrwg* /pahrawag/ in M871c A i 4, cf. [Durkin-Meisterernst 2004: 274](#)), which does not afford any context, and again as *phlw'ng* /pahlwānag/ in a Manichaean text (MMii M2 I R ii 1; cf. [Andreas and Henning 1933: 302–3](#)), where Mari Amu, one of the main apostles of Mani, is said to be conversant in this language. Neither occurrence sheds any further light on the use of Parthian.

¹⁰ [Shayegan \(2004\)](#) plausibly suggests that this occupation began with the assassination of the Armenian Arsacid King Xosrov II, which may have been instigated by the Sasanians.

¹¹ 'The use of the Parthian language in these inscriptions seems to be of secondary importance or became secondary in this period, since the Sasanians spoke Middle Persian and no Sasanian king left an inscription exclusively in Parthian without a Middle Persian version (but before Narseh, too, there were no exclusively Middle Persian inscriptions); and because even before the last attestation of a Parthian inscription, the high priest Kerdīr had his inscriptions be executed in Middle Persian alone.'

No mention of Armenia is made in Greek inscriptions on the territory of the Parthian or Sasanian Empire (see [Rougemont and Bernard 2012](#); [Morano 1990](#)).

3.2 Armenian sources

3.2.1 Armenian epigraphic sources

Owing to the late date of the invention of the Armenian alphabet at the beginning of the 5th century CE, few inscriptions exist that can be securely dated to the period under consideration here, viz. the 5th and early 6th centuries.

The oldest dateable inscriptions distinctly written in Armenian script stem from Wadi Haggag in the Eastern Sinai and other places of pilgrimage in the Holy Land (cf. [Stone 1990–91](#); [Stone et al. 1996–7](#)); these graffiti of personal names are dateable to the beginning of the 5th century, within a few decades of the invention of the Armenian script. Their content, however, is of no linguistic consequence.

There is but one other inscription from the 5th century, formerly located in the Church of St Sarkis in Tekor (Digor, Turkey) and dateable to the 480s CE (cf. [Greenwood 2004](#): 89–90); the inscription contains statements regarding its builder, Sahak Kamsarakan, and consecrator, Yovhannēs Mandakuni (*in officio* 478–90 CE). The house of Kamsarakan, an offshoot of the Kāren Pahlav, was one of many Armenian noble families of Parthian origin (cf. [Toumanoff 2010](#)). The fact that the dedicatory inscription was composed in Armenian, rather than Parthian or Middle Persian, may reflect the fact that the Kamsarakan were conversant in, and comfortable to be associated with, the Armenian language.¹²

The chronologically next closest inscription, another dedication in the Church of St Hrip'simē, already dates to the early 7th century, and thus has no further relevance.

3.2.2 Armenian literary sources

Since Armenian epigraphic evidence provides no information pertinent to the question of multilingualism in and before the 5th century CE, the only other Armenian language sources available are the same literary works which later in this study are used as the corpus of texts for linguistic analysis. Most of them fall within the genre of historiography (the *Epic Histories* attributed to P'awstos Buzand; the *History of Vardan and the Armenian War* by Elišē; and two works entitled

¹² At the same time, [Greenwood \(2004: 70–1\)](#) notes that the Sasanian *hazarapet* Manan was involved in the erection and dedication of the church; his knowledge of and stance on the Armenian language cannot be gauged. In view of the Sasanian multilingual inscriptions at Paikuli and on the Ka'ba-ye Zardošt, it may be assumed that the Sasanian policy on languages, if such ever existed, was inclusive rather than exclusive.

History of Armenia by Łazar P'arpec'i and Movsēs Xorenac'i), but at times exhibit hagiographical tendencies (the *Life of Maštoc'* by Koriwn; and another *History of Armenia* attributed to Agat'angelos); only one text is entirely different, belonging to the genre of theological or philosophical writing (Eznik Kolbac'i's *Against the Sects*).

While none of these works can make a claim to absolute accuracy and freedom from political or other bias,¹³ they still provide otherwise unavailable and thus crucial evidence that directly or indirectly address the question of multilingualism or (linguistic) identity in different ways. In addition to this, they give a very clear picture of the political and cultural relationship between Armenians, Parthians, and Sasanians, which is essential for the determination of the type of contact situation that obtains in this setting. It must be borne in mind, however, that the picture presented by these texts, especially as regards the representation of society, is heavily restricted and biased, likely to provide information only about the ruling classes.

In the following, the evidence from these literary sources¹⁴ is discussed with a focus on material that can shed light on who spoke what to whom, whether Parthian and Middle Persian were mutually intelligible, whether all Armenians were bilingual and spoke Parthian (or later Middle Persian), and what the perceived relationship was between the three language communities. The question of language will be dealt with first, followed by a brief consideration of kinship relations between Armenians and Parthians and their possible linguistic repercussions. Thereafter, the connection between ethnic appurtenance and language use will be addressed, followed by two sections on the relevance of religion and politics to the language contact situation.

3.2.2.1 Language

Movsēs Xorenac'i provides a clear background for the establishment of the Armenian language as the dominant means of communication in the Armenian highland: the namesake of Armenia, Aram,¹⁵ after his successful fight against the Titans, is said to have ordered the inhabitants of the country to learn the Armenian

¹³ While this is true of any work of literature, Thomson (1978: 7–10, 40–61) makes a particular point about Movsēs Xorenac'i's account of Armenian history, which is not infrequently at odds with other historiographical sources. In part, so Thomson, this is the result of a political agenda favouring the Bagratuni clan, the author's patrons.

¹⁴ Other sources will not be discussed owing to a lack of relevant information. The Armenian synaxarion, for instance, mentions three saints, who are said to have lived in the relevant time period: Astuacatur Istbuzid (5th–6th century), T'ēodoros Salahuni (3rd century), and Xaç'ik Vardapet (6th century); see Nadal Cañellas et al. (1998) and Bayan (1910–30: XXI.81, 438–40, 514–15). Their stories are very short and have no bearing on the present question.

¹⁵ Aram is a character of folklore, and has no clear historic correspondence; a potential date for this character might be the early 9th century BCE, based on his son Araš's liaison with Semiramis, or his identification with Arame of Urartu, a historic king living at the same time as Shalmaneser III of Assyria.

speech and language.¹⁶ Thomson (1978: 95 n. 5) remarks that the Armenian phrasing may well allude to the recognition of multiple dialects, since Arm. *zlezus* must be read as an accusative plural here and in another passage (MX III.60), and elsewhere occurs as an unequivocal genitive plural form (MX III.52). Although significant differences between Armenian dialects are attested in the medieval and modern period, what works survive in Classical Armenian are overall rather uniform in their language.

Indirectly, the predominance and general importance of the Armenian language is attested, for example, in the fact that the history of the Armenian people written by the unknown author called Agat'angelos was, at least notionally, composed in that language for King Trdat III (cf. Ag. foreword, 14–17).¹⁷ To the mind of the author, therefore, it was normal that a work commissioned by the Arsacid (thus presumably Parthian-speaking) king should be written in Armenian, suggesting that he was bilingual.¹⁸

Similarly, the other key persona in Agat'angelos' history and converter of Armenia to Christianity, St Grigor Lusaworič', is said to 'speak Armenian'¹⁹ to the people at large and presumably also to the king. This may be particularly surprising given that Grigor himself is thought to be of Parthian origin by Agat'angelos and Movsēs Xorenac'i, belonging to the clan of Surēn Pahlav (cp. Ag. III.7–10 and MX II.28, 74, 91).²⁰

Further corroboration of the notion that, at least by the 5th century CE, all strata of Armenian society were fluent in Armenian can be found in Koriwn's description of the teaching and missionary work of St Mesrop Maštoc': 'And there they instructed the present royals, together with the entire camp of nobles, in the divine wisdom.'²¹

Since Koriwn's treatment of Maštoc' focuses on the invention of the Armenian alphabet and the subsequent translation of scripture into Armenian, the assumption from context that the teaching was undertaken in Armenian seems plausible. With the crowd addressed being composed both of Parthian families and clans of

¹⁶ *zxawss ew zlezus haykakan*; MX I.14. A similar claim, for a different time period, is made by the Greek geographer Strabo; see 3.3.

¹⁷ As Thomson (2010: 7) points out, in its extant version, the Armenian text cannot have been composed in the 4th century CE owing to the lack of an Armenian script. The identity and dates of the Agat'angelos remain unknown.

¹⁸ A further passage in the Greek version of Agat'angelos notes that Trdat was also conversant in Latin and Greek, having spent his youth in Rome (§183 Vg; cf. Thomson 2010: 485).

¹⁹ *hayabarbar hayerenaxaws*; Ag. CXXIII.1. Thomson (2010: 454) notes that the Armenian phrasing suggests that Grigor only at this point in the story began speaking Armenian, but attributes this to Agat'angelos' 'awkward adaptation' of a similar passage in Koriwn (Kor. XI), where the same phrase refers to the Armenian translation of the Bible.

²⁰ In Ag. V.4–6 (cf. Vg 2), however, Trdat does not recognize Grigor's Parthian–Armenian origins, since he had been brought up in Cappadocian Caesarea during the Sasanian occupation of Armenia. Whether or not this is reflected in his use of language or his accent is uncertain.

²¹ *ew iwreanc' andēn zařant'erakac' ark'unisn, handerj amenayn azatagund banakiwn, astuacelēn imastut'eambn vardapeteal*; Kor. XII.7.

other origins like the Mamikoneans, Maštoc's teaching in Armenian accordingly requires that they understand him.

A similar notion, namely that all of Armenia spoke Armenian, emerges from the description of mourning at the departure of Kat'olikos Nersēs I in the *Epic Histories*, where 'the entire realm of the Armenian tongue'²² is said to be saddened. Hence further emerges the identification of the Armenian people with their native language, and indeed the suggestion that whoever speaks the language at this time may count as an Armenian.

These passages, together with a distinct lack of any evidence to the contrary, suggest that Armenian was the language of general communication even among individuals of Parthian lineage. The absence of any historiography in the Parthian language, and indeed poor epigraphic attestation on Armenian territory,²³ raise the question whether there is any evidence at all of Parthian being spoken by the Parthian–Armenian ruling classes.

References to Parthian itself only occur very rarely, and in combination with place names: in Ag. CX.7 and CXXVI.2, for instance, two villages are mentioned by their Parthian names.²⁴ Other information about the knowledge of Parthian, it seems, can only be gained indirectly.

In the *Epic Histories*, an incident involving the Armenian King Aršak II at the court of the Sasanian King Šāhpuhr II is related as follows:

It then happened that [...] Aršak king of Armenia went for a stroll around one of the stables of the king of Persia, while the chief-stabler of the Persian king sat within the stable house. When [this man] saw the king he in no way honored him or paid him any respect, but displayed contempt and even hostility, saying in the Persian language: You [there], king of Armenian goats, come sit on a bundle of grass. Hardly had the *sparapet* commander-in-chief of Greater Armenia, whose name was Vasak from the house of the Mamikonean, heard these words than he flared up with great fury and rage. He raised the sword that hung by his side, and on the spot he struck off the head of the chief-stabler of the Persian king [...]. (P'B IV.16.5–7)²⁵

²² *ašxarh amenayn Hayoc' lezuin*; P'B IV.12.

²³ What little evidence there is of Parthian epigraphy in Greater Armenia is written in Aramaic heterograms, with only onomastic evidence, formulaic structure, and (later) phonetic complements pointing at a Parthian origin (cf. *Schmitt 1998*: 167–74).

²⁴ The villages in question are Bagayarič in Ekeleac' province, and Dic'awan on the Upper Euphrates, translated as 'worship of the God' (cf. *Thomson 2010*: 388) and 'city of God(s)', respectively.

²⁵ *apa elew dēp ōr mi yawurc' ekn emut t'agaworn Hayoc' Aršak šrjel zaspastanaw miow zark'ayin Parsic' isk axorapetn ark'ayin Parsic' nstēr i nerk's i tan aspastanin: ibrew tesanēr zt'agaworn, oč' inč' ar laws kaleal mecareač' zna, ew oč' inč' šuk's dnēr nma. ayl ew anargans ews dnēr t'snamanac', aselov i parskerēn lezu t'ē aycic' Hayoc' ark'ay, ek nist i xrjan xotoy i veray. zor bans ibrew lsēr sparapetn zōravarn Hayoc' mecac', orum Vasakn koč'ēr, i Mamikonean tohmēn, mecaw barkut'eamb ew bazum srtmtut'eamb barkanayr. i ver areal zsusern, zor and mējn uner, hareal andēn i telwojn zaxorapetn ark'ayin Parsic' glxatēr i nerk's yaspastani and.*

Since Aršak is explicitly insulted in the Persian language, both he and Vasak Mamikonean, who reacts on his behalf, clearly do and are meant to understand the insult, requiring them to have at least a passive knowledge of Middle Persian. Alternatively, assuming that Parthian and Middle Persian were mutually intelligible owing to their close linguistic relationship, knowledge of Parthian may have sufficed. For the Arsacid king of Armenia, an active knowledge of one of the West Middle Iranian languages may be assumed without further question. As for Vasak, it is not implausible to assume that he became bilingual only later in life (maybe in early adolescence), since the Mamikonean family is not of Parthian descent;²⁶ yet, as a senior member of one of the major *naxarar* families and the *sparapet*, acquiring Parthian or Middle Persian is likely to have been an essential part of his upbringing.

That not everyone spoke Middle Persian or Parthian is evident from the story of the captivity of Sahak Part'ev, the head of the Armenian Church at the end of the 4th and beginning of the 5th century. On two occasions, Sahak's proficiency in the Persian language is mentioned: once in a conversation with the Sasanian chief-magus (Eł. VI.110ff.), and a second time when he acts as interpreter for the Armenian priest Levond and his Sasanian interlocutor (Eł. VII.202ff.). Sahak's Parthian descent is reflected in his epithet; and his proficiency in Middle Persian, and thus presumably also Parthian, corroborate the assumption that families of Parthian origin kept their mother tongue alive despite their Armenian-speaking domains. In turn, not all Armenians spoke an Iranian language, as the priest Levond's need for an interpreter suggests.²⁷

Although no Classical Armenian source makes mention of Parthian being spoken,²⁸ historiographers were not as a matter of principle opposed to speaking of other languages. Koriwn, for example, mentions Mesrop Maštoc's mission to convert the inhabitants of the region of Mark', who were difficult to approach 'not only because of their demonic, satanic and evil character, but also owing to their very crude and rough language.'²⁹ It is unclear whether Koriwn's statement is a value judgement of an Armenian dialect, or whether it refers to an entirely different language, especially since the region of Mark', northeast of Lake Urmia, was both a border region between Armenia and Media and not always an integral part of the kingdom. Not even the reassurance that after Maštoc's intervention with multiple generations from Mark' they 'were made to speak clearly and eloquently'³⁰ can

²⁶ The Mamikoneans are said to be of royal ancestry (cf. P'B V.4, 37; MX II.81), specifically descended from the kings of Č'enk'. Movsēs Xorenac'i connects these to the Chinese, which is rather unlikely (cf. Garsoian 1989; Toumanoff 1963; 1969; 1976); an origin in the Caucasus is deemed more likely (cf. Thomson 2000: 54 n. 342).

²⁷ This episode is also mentioned in LP' LV; Thomson (cf. also 1991: 146 n. 2).

²⁸ That is with the exception of the two village names given in Parthian in Agat'angelos; see n. 24.

²⁹ *oč' miayn vasn diwakan satanayakir baruc'n čivalut'ean, ayl ew vasn xec'bekagoyñ ev xošoragoyñ lezuin*; Kor. XIV.1.

³⁰ *parzaxōss, hřetorabans, ... kac'uc'anēin*; Kor. XIV.2.

help in this determination, since it remains unclear whether they were taught Classical Armenian as a second language or were given something akin to elocution lessons.³¹

Next to Armenian itself and the Iranian languages, Greek played a not insignificant role. Graeco-Roman sources suggest that Greek was one of the court languages of Tigranes II (see 3.3), and the dependence on Greek and Syriac as ecclesiastical languages prior to the invention of the Armenian alphabet in the early 5th century CE as well as frequent interactions with the Roman Empire suggest that some knowledge of Greek was maintained among the ruling classes.³² Owing to the political and cultural conflict between the Sasanian and Roman Empire, Greek was, however, also the subject of proscription under Sasanian rule, as attested in both Koriwn and Movsēs Xorenac'i:

There he found Sahak the Great engaged in translating from Syriac, there being no Greek [books available], for the Greek books of the entire land had previously been burned by Mehrujan, and again at the division of Armenia, the Persian governors did not allow anyone to learn Greek in their part but only Syriac. (MX III.54)³³

Despite repeated attempts at converting the Armenians back to Zoroastrianism, the prohibition of Greek language material is more likely to be politically than religiously motivated, since the other language closely associated with Christianity, Syriac, had not been banned. Such a language policy must have been an exceptional occurrence, since the geographical extent of the Sasanian Empire, the diversity of its peoples, and its lack of infrastructure would not have allowed for the enforcement of Persian (or any other) monolingualism.³⁴

The image that emerges from Armenian historiographical literature is, therefore, not as clear as would be ideal for any attempt at determining the status of the various languages spoken by the different peoples living in the Armenian kingdom. For

³¹ Other instances of languages being mentioned explicitly include: the languages of Georgia (Kor. XV); the language spoken in the region of Tayk' (close to the Black Sea and Georgia; LP' LXII); the language spoken in C'opk' (southwest Armenia, between Euphrates and Tigris) in the time of T'argom (Togarmah, the grandson of Noah; P'B III.13). Unfortunately, no further discussion of these languages occurs in the texts, and for geographical reasons none of them is likely to be Iranian in origin.

³² This suggestion finds further corroboration in the writings of Łazar P'arpec'i, where Greek and Syriac are mentioned as the languages in which decrees and accounts were noted (LP' X). Also consider the presence of Armenians at Greek schools in the eastern Mediterranean as described in e.g. Kor. XVII–XIX.

³³ *ew gtanē zmečn Sahak t'argmanu'tean parapeal yasorvoyn, yoč' lineloy yuni. k'ani nax i Mehružanay ayreal linēin andhanur ašxarhis yoyn girk'. darjeal i bažanel zašxarhis Hayoc', č'tayin parsik verakač'uk'n yoyn umek' usanel dpru'tiwn yiwreanc' masinn, ayl miayn asori; cf. Kor.(II) 36.*

³⁴ This is corroborated by Iranian epigraphic sources, such as the trilingual Ka'ba-ye Zardošt inscription of Šāhpuhr I (Middle Persian, Parthian, Greek), and remaining Greek inscriptions in Armenia, e.g. at the temple in Garni.

the most part, sources deal with and are composed by the upper strata of society, so that next to no information is available about society at large.

From what little evidence there is, however, it may tentatively be postulated that Armenian was the predominant language of the upper classes, certainly by the 5th century CE. With literature in Armenian composed for and commissioned by nobles of Parthian origin, the absence of any comparable Parthian literary sources, and a number of clues in the Armenian sources, it is highly likely that even the Parthian ruling families in Armenia spoke the language of their subjects.

In turn, there is good reason to believe that Parthian, or a Middle Iranian language at any rate, was spoken also by the Armenian nobles; bilingualism, whether acquired during childhood or later in life, seems to have been the norm for members of the ruling classes. Whether Greek was an integral part of the set of languages spoken is less clear; continuous contact with the (East) Roman Empire and the spread of Christianity suggest that Greek was highly relevant in some respects; in the absence of a greater number of native speakers, however, it would appear more likely that it served as a language of learning and diplomacy, as opposed to the more ubiquitous use at home and in the company of both Armenian and Parthian.³⁵

3.2.2.2 Marriage, tutelage, and other relationships

One of the key questions regarding the potential multilingualism among the Armenian and Parthian ruling classes is that of its origin: how, and when, did Parthians acquire Armenian, and vice versa? Historiographical sources suggest two main avenues for this linguistic intermix: the creation of multilingual families through intermarriage between Armenian and Parthian speakers;³⁶ and the institution of the tutelage system, whereby one clan's youth was brought up and educated by a different clan.

A prominent example of the establishment of such familial ties is the marriage between Vardanduxt,³⁷ daughter of *sparapet* Manuēl Mamikonean,³⁸ and the

³⁵ There was, without question, a period of Hellenization in Armenia, after the conquests of Alexander the Great (cf. Garsoïan 1997b: 50–2), during which elements of Greek culture were adopted and some awareness of the language must have spread as evidenced by e.g. the Greek letters from Awroman. Yet, the epigraphic evidence of Greek in the Iranian world is quite limited (Huysse 1998; Rougemont 2013), and in Armenia, all Greek inscriptions pre- or postdate the Arsacid period (see Greenwood 2004: 88 for a possible exception in Ereroyk'). The Greek spoken by the Armenian clergy, and used in mass before the translation of the gospels and the liturgy, was likely learnt abroad, e.g. in Samosata or Constantinople (cf. Kor. VII); in her commentary on Koriwn, Winkler (1994: 257) further points out that there were very few cities in Armenia, in which Greek settlers might have resided.

³⁶ For a brief overview of Parthian marriage policy, see Ellenbrock and Winkelmann (2015: 95–7).

³⁷ It is of note that the name Vardanduxt itself is of Iranian origin (Ačařean 1942–62: V.74); since the Mamikonean family is not originally of Iranian descent, this suggests that Iranian names had spread throughout at least this stratum of society, whether by imitation of other noble families, by adoption of names and conventions used in (oral) literature, or by another form of acculturation.

³⁸ A different lineage is suggested by Movsēs Xorenac'i (MX III.41), but Garsoïan (1989: 425) prefers the reading in the *Epic Histories* owing to Movsēs' negative stance towards the Mamikoneans.

Arsacid king Aršak III in the late 4th century, thus establishing a link between the Parthian-speaking Arsacids and the Armenian-speaking Mamikoneans.³⁹ Aršak III's grandfather, Aršak II, was in turn married to, among others,⁴⁰ P'aranjem Siwneč'i, a member of an old Armenian *naxarar* family with lands east of Lake Van (cf. P'B IV.15, MX III.24).

Of course, not all marriages among nobles were between Armenians and Parthians. The union of Yusik, grandson of St Grigor Lusaworič, and the unnamed daughter of the later king Tiran, for instance, was arranged between members of two Parthian families, the Gregorids⁴¹ and the royal Arsacids (cf. P'B III.5; and similarly for Yusik's sons, cf. P'B III.15). Similarly, the marriages of Tačat and Garegin II Rštuni with Mamikonean women (cf. P'B III.18, MX III.7; P'B IV.59) attest bonds between Armenian families.⁴²

Next to marriage between Parthian and Armenian families, the *dayeak* ('tutor') system is the second important pillar of Armenian culture that is likely to have contributed to the establishment and maintenance of societal bilingualism. Garsoian (1989: 521) briefly describes the system as an 'institution [...] whereby *naxarar* youths were raised by foster-fathers of their own social class', a tradition widely attested in Armenia as well as the Sasanian Empire.⁴³

Examples of *dayeaks* are found throughout Armenian literature for youths of both genders.⁴⁴ The Mamikonean family, holding the hereditary office of *sparapet*, were traditionally charged with the upbringing of the Arsacid heir-apparent (cf. P'B IV.2, 11, 47, 53),⁴⁵ but also took in children from other houses, e.g. from the Arcruni or Rštuni families (cf. P'B III.18).⁴⁶ Other Arsacid youths, however, were allotted *dayeaks* from other houses, as is the case of King Varazdat, the nephew of his predecessor, King Pap (whose son, Aršak III, ascended to the throne after Varazdat). Varazdat had been tutored by Bat Saharuni, whose family is of Armenian origin with domains in the Armenian heartland (cf. P'B V.35, 37).

Both intermarriage and the *dayeak* system were, of course, political institutions primarily meant for the establishment of close bonds between the different families in an attempt to assure both peace and stability among the *naxarars*. The

³⁹ As explained in n. 26, the exact origin of the Mamikonean family is unclear; no evidence suggests, however, that they should generally speak a language other than Armenian at the time in question.

⁴⁰ Aršak II's other wife, Olympias, is mentioned elsewhere (MX III.21).

⁴¹ St Grigor, according to tradition, is the son of Anak the Parthian.

⁴² There is some debate about the heritage of the Rštuni family, specifically whether they are of Armenian origin, an offshoot of the Siwni family (cf. MX II.7), or of Urartian origin as argued by Toumanoff (1963: 244–8, *passim*); also cf. Garsoian (1989: 402).

⁴³ Łazar P'arpec'i, for example, notes that the Sasanian general Šāhpuhr was raised by Armenians (cf. ŁP' LXXVII).

⁴⁴ Fewer cases of girls being brought up by other families are attested (Thomson 2010: 214), but cf. Ag. XIII, XX for mentions of Hrip'simē and Xosroviduxt, and P'B IV.59 for Hamazaspuhi Mamikonean.

⁴⁵ Next to pedagogical functions, the *dayeak* also served as a general protector of the ward, as the story of the future king Trdat's rescue suggests (see Ag. III.3–6).

⁴⁶ This traditional role is obscured by Movsēs Xorenac'i, cf. MX II.82 and Garsoian (1989: 521).

opportunity arising from giving Armenian-speaking youths into the care of Parthian speakers and vice versa was certainly advantageous, but is unlikely to have been a primary goal of these liaisons.⁴⁷

Nonetheless, these interfamilial and cross-linguistic ties corroborate the suggestion made above that members of the ruling families spoke both Parthian and Armenian at least to some extent. If indeed some of them were educated in families speaking a language different from the tutee's native tongue, this would speak in favour of their acquiring both Parthian and Armenian at a reasonably young age⁴⁸ from native speakers.

3.2.2.3 Religion

One crucial aspect of Armenian history, as pointed out already, is the process of Christianization that began in the very early 4th century CE. On the surface, the introduction and spread of a new religion does not have an intrinsic bearing on language use, but the Christianization of Armenia is, for a number of reasons, likely to have played a significant role in the increased importance of the Armenian language.

The Armenian language acquires the status of a liturgical language at the beginning of the 5th century CE with the introduction of the Armenian script by Mesrop Maštoc' (cf. Kor. VII–VIII). Prior to the invention of the script, all religious teaching and liturgies were by necessity conducted in either Syriac or Greek, depending on the geographical region in question;⁴⁹ but with the translation of the New and Old Testament into Armenian, it had become possible to preach and teach in Armenian, and thus to reach a wider spectrum of people. The importance of this transition from other languages to Armenian is particularly clear in a passage of Koriwn:

⁴⁷ One explicit mention of the function of intermarriage occurs in Łazar P'arpeci: in the account of Yazkert's installation of Šahpuhr as Armenian king, it is noted that 'through intermarriage they [the Armenians and Iranians] will communicate with each other while those [Armenians] thus separated [from Christianity] will love [their spouses] as well as their [Zoroastrian] customs' (*ayl ew amus-nu'teanc' sturewariwk' halordealk' ar mimeans, zatuc'ealk' aynuhetew orošin i siroy noča ew yawrinac'n*; ŁP' XII.9). There is, therefore, clearly a political agenda behind at least his notion of intermarriage. Note, however, that Łazar also mentions that the spouses will get to talk with each other—could this be an expression of his hope for a spread of Middle Persian?

⁴⁸ There is, unfortunately, no information concerning the age at which children would have been given into the care of *dayeaks*, and it therefore remains unclear whether the other language was indeed acquired in childhood or learned in adolescence. If the situation in Sasanian society is in any way related, education in early childhood (up to age 5) was overseen by the mother or another female relative, whereafter formal education started (Rose 1998: 36–7); Zakarian (2021: 143–51) suggests that in Armenia, too, women were the main educators, but sources do not provide an age range. In this context it is worth noting that as far as language habits are concerned, women often maintain their native language for longer than men under similar circumstances (cf. Langslow 2002: 28); in context, this might mean that Parthian women may still have spoken Parthian whereas their male relatives could already be shifting or have shifted to Armenian.

⁴⁹ Syriac dominated in the south, Greek in the north; vestiges of a Bible translation from Syriac into Armenian can still be found (Cowe 1984; 1990–9; Leloir 1972).

When Moses, teacher of the law, arrived [in Armenia] unexpectedly with a host of prophets, and [with him] the progressive Paul with the entirety of the apostles, together with world-redeeming Gospels of Christ, at the two of them [= Sahak and Maštoc´], they were found to speak and sound Armenian. (Kor. XI.8)⁵⁰

According to this passage, scripture only truly arrived in Armenia with its translation from Greek and Syriac by Maštoc´ and his disciples. In the parallel passage from Agat´angelos, in contrast, it is St Grigor himself who, like Moses and Paul, appears and suddenly speaks and sounds Armenian (Thomson 2010: 454). Between the two texts, it is clear that the conversion of the people and the spread of the faith could only progress in Armenian.

In view of this, it is ever more relevant that this conversion took place at the hands of an ethnic Parthian, and that, according to historic accounts, the Arsacid ruling class was the first to be converted. The Parthian origin of St Grigor is mentioned numerous times, e.g. in Agat´angelos, where, after the murder of King Xosrov and his final command to apprehend his murderers, it is reported that ‘only two infants from among the sons of the Parthian [= Anak] did someone save.’⁵¹ One of the infants was Grigor, who later ‘took the men of the Arsacid family and instructed them in [Christian] doctrine. [...] He persuaded them all to worship only the Lord their God and to serve him alone.’⁵² This conversion and the ensuing baptism are also the occasion for the spread of the faith to the wider masses, especially to the royal army (cf. Ag. CXVIII.8–CXIX.2).

From the perspective of the Sasanians, however, the spread of Christianity in Armenia was not always welcome. While tolerated at certain times, the fact that the Armenian Arsacids belonged to a different faith from that of their Persian relatives and the Sasanian dynasty led to both war and attempts at forced conversion back to Zoroastrianism (cf. Russell 1987 with references). A particularly telling episode occurs in the *Epic Histories*: Šāhpuhr II doubts King Aršak’s loyalty, suspecting him of having sympathies for the Roman emperor, and thus makes him swear an oath on the Gospels, thus acknowledging his Christian faith; shortly thereafter, however, and through the deceit of Vasak Mamikonean, Šāhpuhr sees his doubts confirmed and exclaims:

⁵⁰ *yorum yankarc uremn ōrēnsusoyc´ Movsēs, margarēakan dasun, ew yaʾajadēmn Pawlos bovandak aʾakēlakan gndovn, handerj ašxarhakečoyc´ awetaranawn Kʾristosi, miangamayn ekeal haseal i jern erkuc´ hawasarelocʿn, hayabarbaʾk´ hayerēnaxōsk´ gtan; cp. Ag. CXXIII.1.*

⁵¹ *bayc´ miayn erkus mankuns pokʾrkuns yordwocʿn Partʾewin prceal omn aprečʿucʿanēr; Ag. II.23; cp. also Ag. III.7–10; MX II.80.*

⁵² *ārnoyr aynuhetew zAršakuneac´ tohmi orearn i varžs vardapetuʿean parapecʿucʿeal. [...] apa amenečʿun zays dnēr i mti, zi teaʾn Astucoy iwreanc´ miayn erkir pagčʿen, ew nma miayn spas tarčʿin; Ag. CVIII.21.*

You love him because he belongs to your faith. [...] You desire the dominion of the Aršakuni over yourselves and you seek it. [...] I will not leave a single man alive who belongs to this Christian faith. (P'B IV.16.20–21)⁵³

For Šāhpuhr, religion is associated not only with an individual's personal belief, but also with his loyalties to others of that faith.⁵⁴ Christianity here becomes synonymous with rebellion against tradition, with separatist ideology.⁵⁵

In turn, Zoroastrianism also lost the position it had once had in Armenia.⁵⁶ On multiple occasions, Armenian historiographers make clear their stance against Zoroastrianism in general, but its forceful reintroduction in particular.⁵⁷ After a battle against the Sasanians with heavy losses on both sides, including the *sparapet* Vač'ē Mamikonean, the patriarch Vrt'anēs consoles his people by reminding them that these deaths helped prevent a worse fate:

For if the enemy had taken this realm, they would have implanted here the laws of their lawless, impious, godless religion, which we implore 'May it not be!' (P'B III.11.9)⁵⁸

On other occasions, Armenian nobles agree to accept direct Sasanian rule as long as their religious freedom is respected (cf. LP' XXII), or fallaciously pay lip-service to imposed Zoroastrianism, but not without considerable debate about the righteousness of such an act (cp. LP' LV). Both literary and more theologically minded works in this fashion emphasize that Zoroastrianism was no longer a viable religion for Armenians (cp. EK II.1–2).⁵⁹

The issue of religion is inextricably intertwined with questions of territory and political apurtenance, with the Sasanian Empire and Zoroastrianism on the one

⁵³ *ew or uni zōrēnsn jer, zna sirec'ēk' [...] ew kamik' duk' ztērut' iwn Aršakuneac' i veray jer, ew noynn xndrēk' [...] oč' miayn mardoy, or yaydm ōrēns k'ristonēut'ean ē, oč' tam aprēl.*

⁵⁴ Such a notion of faith is transparent also in another passage, in which are described Mušel Mamikonean's loyalties to his fatherland, his family, his faith, and all those pertaining to it (cf. P'B V.20).

⁵⁵ Here cf. e.g. Thomson (1982: 2), who sums up the theme of Elišē's work as 'the resistance of Christian Armenians to religious persecution'.

⁵⁶ Owing to its political dependency on the Iranian cultural sphere, Armenia was predominantly Zoroastrian prior to its Christianization. Yet, it seems that a particular cult of Anahit had developed in the country that was not as such paralleled in the Parthian or Sasanian empires; cf. Ag. V.10–12; Garsoïan (1989: 347); Russell (1987: 235–60); also cf. Strabo, *Geography* XI.14.16.

⁵⁷ The question of reintroducing Zoroastrianism occurs repeatedly under Šāhpuhr II, but also under Yazkert II, in varying degrees of severity (cp. El. I.3, II.252 and LP' XXII). Freedom from religious oppression was finally granted only under Peroz (cp. LP' Letter); cf. Thomson (1982: 134 n. 3) for further notes on the tolerance of Christianity in Iran after Yazkert.

⁵⁸ *ew etē zašxarhs unīc' in ardewk' t'šnamik'n, ew ziwreanc' zanōrēn zankrōn zanastuac krōnic'n zōrēns ast ardewk' hastatēin. or, zor xndremk's, k'aw ew mi lic'i.*

⁵⁹ One of the exceptions to this assertion is the rule of King Pap' (r. 370–74 CE), during which, it is said, 'many people turned back to the ancient worship of demons, and they erected idols in many places in Armenia with the permission of King Pap' (*bazum mardik i hmut' iwn diwapašut'ean darjan ew and bazum telis Hayoc' kuš kangnec' in i harmarjakut'enē t'agaworin Papay*; P'B V.31.21).

hand, and the Roman Empire and Christianity on the other. Equally, however, religion in this case relates to the self-identification as Armenian. Inevitably, Armenian became the language of Christianity in this region, at the very least after the invention of the Armenian alphabet and even in non-clerical circles. Despite their Parthian, and thus Zoroastrian, origins, the Arsacid rulers of Armenia, and with them the Mamikonean family, were the instigators and staunchest supporters of Christianization. If not before, then at least during the spread of this faith, the converted would have learnt and spoken Armenian to profess their faith, including the Iranian ruling class.

3.2.2.4 Origins and ethnicity

It has so far been assumed that the contact between the Parthian and Armenian language relied largely on its ruling-class speakers—at least as far as evidence can bear witness. This assumption requires, however, that there were sufficient speakers of Parthian, not just the royal Arsacids, and that, in one way or another, these speaker groups can be distinguished from their Armenian-speaking counterparts. To confirm the validity of these assumptions, the following paragraphs enquire into the origins and ethnicity of some of the noble families mentioned in historiographic literature.

First of all, there can be no doubt that both Armenians and Iranians differentiated between Parthians and Persians as different peoples; in Agat'angelos, it is made clear that Ardašir, the first Sasanian king, 'united the forces of the Persians, who abandoned, despised, rejected, and disdained the sovereignty of the Parthians.'⁶⁰ Despite these harsh words, Parthians remain an important part of the Sasanian court,⁶¹ retain their role as rulers over Armenia,⁶² and evidently in other states bordering the Sasanian Empire.⁶³ Together with the existence of bilingual inscriptions in Middle Persian and Parthian from the early Sasanian period, this is a clear indication that the Parthians were still a force to be reckoned with in the Sasanian Empire.

⁶⁰ *miabaneac' zzōrs Parsic, ork' lk'in xotec'in meržec'in anargec'in ztērut'iwinn Part'ewac'*; Ag. I.1. In the Laurentiana MS of the Greek version of Agat'angelos, this disdain is, among other things, related to the origin of the Parthians: 'The Parthians are loathsome to Persian and Assyrian men, having come among us from the land of barbarians' (Thomson 2010: 124–5). This may be a reference to the influence of the Parnian invasion of Parthia, see 2.3.4.1 and n. 54.

⁶¹ See Ag. I.7.

⁶² The tenet that 'whoever was king of Armenia had second rank in the Persian kingdom' (or *Hayoc' tağawor ēr, na ēr erkrord Parsic' tērut'eann*; Ag. I.1–2) was apparently maintained.

⁶³ Agat'angelos (Ag. I.7) mentions King Xosrov's appeal to the Kušans, the empire bordering the Sasanians in the east. While Agat'angelos does not suggest any close relationship between Kušans and Arsacids, other Armenian historiographers differ: in the *Epic Histories*, a war between the Sasanians and the 'Aršakuni king of Kušan' (*aršakunin tağaworn K'ušanac'*; P'B V.7, 37) is mentioned; this, however, is more likely to refer to the invasion of Kušanšāhr by Chionites (cf. Frye 1963: 216–18; Garsoïan 1989: 313, 384). Other branches of the Arsacid family also ruled in the neighbouring regions of Ahuank' and Iberia (Garsoïan 1989: 355). The suggestion that the Kušanšāh at this time may have been an Arsacid Parthian is, however, corroborated further by Movsēs Xorenac'i's (II.67), and supported by Lozinski (1984).

The same is, of course, true for the Parthian rulers of Armenia. Movsēs Xorenac'i, in his genealogy of Armenia, lists great men, 'especially the kings, down to the rule of the Parthians. For these men [descended] from our kings are dear to me as compatriots and kindred.'⁶⁴ While it is acknowledged, therefore, that the Arsacids are of Parthian descent, for Movsēs they are still Armenians. This perception is arguably also reflected in the fine-grained, clan-based designation of most families; with minor exceptions, individuals, and particularly *naxarars*, are identified by their clans (Aršakuni, Mamikonean, Kamsarakan, Surēn, etc.),⁶⁵ rather than by their ethnicity. While it is likely that this reflects the confederative character of the Armenian kingdom, with the Arsacid king as *primus inter pares* (Garsoïan 1976; 2005), it also suggests an incipient concept of identity (if not nationhood) beyond ethnic, tribal, and potentially linguistic boundaries (see 7.2.1).

Nonetheless, tribal appurtenance was of relevance in a number of respects, including inheritance of titles, offices, responsibilities, and precedence at court.⁶⁶ One such instance is the assumption of control over Armenia of Aršavir Kamsarakan after the death of Xosrov II 'as the preeminent and most honourable man after the king',⁶⁷ which Thomson makes out to be a reference to his Parthian origins.⁶⁸ Another case is the formulaic invocation of the 'protection from our heroic Parthians, from the glory of [our] kings and brave ancestors',⁶⁹ with which King Trdat III addresses his *naxarars*; here, the mention of his Parthian origins serves as reminder of their pre-eminence, royal status, and possibly the former empire.⁷⁰ The nature of the Arsacid Parthians' royal status in Armenia is further underlined in the repetition of the phrase 'natural lord' (*bnak tēr*) or variations thereon, which are meant to justify the hereditary Arsacid rule.⁷¹

⁶⁴ *manawand tē t'agaworac', minčew c'tērut'iwonn Part'ewac'. k'anzi inj aysok'ik ark' i meroc' t'agaworac' en sirelik; orpēs bnikk' ew imoy arean aruk'*; MX I.22.

⁶⁵ This clan mentality is particularly pronounced, for example, in Manuēl Mamikonean's speech against King Varazdat, in which the good cooperation of the two clans is mentioned, and Varazdat vituperated for bringing shame to his family name (cf. P'B V.37). The Parthian origin of some clans is further mentioned explicitly, so e.g. the Siwnik; which are supposedly related to the Arsacids (cf. MX I.14); the Surēn Pahlaw (cf. Garsoïan 1989: 409–10 with references); or the Kamsarakan, to whom Trdat III grants *naxarar* status with the request that 'he might banish from his mind the memory of his original land called Pahlaw' (*miayn zi i mtac' nora he'rac'usc'ē zyišatak bnik ašxarhin or Pahlawn koč'i*; MX II.90).

⁶⁶ See e.g. the discussion of the Mamikoneans' hereditary office of *sparapet* and the *dayeak*-ship to the Arsacid heir-apparent, 3.2.2.2. Similarly, consider the heredity of the office of Armenian patriarch (*episkoposapet*) between St Grigor Lusaworič' and St Sahak Part'ew (cf. LP' XIII).

⁶⁷ *orpēs glxawori ew yoyž patuakani yet ark'ayi*; MX III.10.

⁶⁸ Cf. Toumanoff (1963: 206–7); Thomson (1978: 263 n. 4).

⁶⁹ *ew i mer diwčaxa'rn Part'ewac' hasc'ē ayc'elut' iwn, i pa'rac' t'agaworac' ew i ka'j naxneac'*; Ag. XII.2.

⁷⁰ Another passage harkening back to the heyday of the Parthian Empire is found in the *Epic Histories*, when Aršak offers frank words to Šāhpuhr, supposedly under the influence of magic: 'Away from me, malignant, servant, lording it over your lords! (*i bac' kac' yinēn, ca'ray, č'aragorc' tirač'ea' teranc'n k'oc'*; P'B IV.54.29).

⁷¹ Consider e.g. Lazar P'arpec'i's dichotomous description of Armenian subjects: 'some were true to the divine command and stood in obedience to their natural Arsacid kings, while others wanted to serve foreign kings, to the ruination of themselves and their land' (*omanc' ašt astuacayin hramanatowut'ean*

At least in historiographic literature, then, an individual's ethnic origin or clan appurtenance is made out to have an impact on that person's importance, and, in part, trustworthiness. Yet, while the memory of Parthian descent of numerous clans is retained and mentioned, and is reflected in their position at court, it is neither sufficient nor necessary to attain rank and honour, as the Mamikoneans on the one hand and the Sasanian and Kušān Parthians on the other demonstrate. Clearly, then, the ruling class of Armenia was composed of both Armenian and Parthian clans, who at one point in time would have spoken their respective native languages. To what extent, or indeed whether, this was still the case by the end of the 5th century CE is impossible to determine with any certainty. The identification of the various tribes, Parthian and otherwise, with the Armenian kingdom and its Arsacid rulers, the expressed difference between the Armenian Arsacids and other Parthians in the Iranian world, and the emphasis of the natural, i.e. hereditary, rule of the Arsacids over Armenia does, however, suggest a considerable divide between the Iranian and Armenian Parthians, which may also have found expression in the roles of the Parthian and Armenian languages.

3.2.2.5 Politics

Perhaps the overall most complicated issue portrayed in Armenian historiography is the political and diplomatic relationship between the Armenian Kingdom and the Iranian and Roman Empires. To an extent, this is a result of historical fact and the changing allegiance and appurtenance of Armenia over the course of the centuries (see [Garsoïan 1997b](#); [1997a](#) for a summary); on a different level, the political history can be difficult to follow owing to idiosyncrasies of the works which describe them. Movsēs Xorenac'i's political agenda almost completely eradicates the Mamikonean family from his version of history, which in general has some issues, as [Thomson](#) points out ([1978](#); [2001](#); see also n. 13). Others differ on finer points, for example the reasons underlying the persecution of Christian Armenians by Yazkert in the early 5th century: Elišē describes it simply as a plot by a malicious Sasanian king and his councillor intending to eradicate potential rebels; Łazar P'arpec'i, on the other hand, suggests that the issue arose in the Siwnik' family as a dispute between Vasak and his son-in-law Varazvałan (cf. [Thomson 1982](#): 3).

Despite their differences, Armenian historiographical works of the 5th century do have at least one thing in common: they discuss Armenia at its historical turning points, be that the Christianization in Agat'angelos, the struggle of a Christian people in the Zoroastrian Iranian cultural sphere in the *Epic Histories*, or the revolt against the Sasanians in Elišē. Similarly, it emerges quite clearly that the Armenian relationship with the Sasanian Empire is a very fraught one; this, in turn, is of relevance when considering the linguistic developments at issue here.

i hnazandut'iwn bnik iwreanc' Aršakuni t'agaworac'n, ew ayloc' cařayel kamaw awtar t'agaworac'n, i korust anjanc' ew ašxarhis; LP' III.1); see also [Garsoïan \(1976: 180, 196–7; 1989: 517\)](#).

The reasons for the problematic relationship with the Sasanian Empire have, in part, been discussed already; other reasons include the buffer status of Armenia between the Greeks and Romans on the one side and the Parthians and Sasanians on the other, as well as the relegation to lower political and societal status of the Parthians after the fall of their empire and the rise of the Sasanians. More specifically, Łazar suggests two prime motivations for the Armenian dislike of the Sasanians: he laments the fact that the part of Armenia that fell under the influence of the Sasanians after the Peace of Acilisene (c.387 CE) was ‘humbled by the bitter and tyrannical service tendered to the king of the Persians’⁷² before a new king (Xosrov IV) was installed. The second reason, at least in Łazar’s eyes, was the abolition of the Arsacid rule under Vahram V (r. 420–38) at the behest of the Armenian *naxarars* but under protestations of the head of the Armenian Church, St Sahak;⁷³ this resulted in the incorporation of the former kingdom into the Sasanian Empire as a *marz*, i.e. a border region.

It ought to be kept in mind that Łazar’s displeasure at Sasanian rule is founded not only in the loss of Armenian sovereignty but also in the previous history the kingdoms have shared. After the fall of the Parthian Empire in 224 CE, Trdat II and later his son Xosrov II resisted the Sasanian attempts at expanding their territory to include Armenia under Ardašir I, fighting back and ‘for ten years [making] continual incursions [...], plundering all the border land which was under the suzerainty and authority of the Persians.’⁷⁴ Following the death of Xosrov II at the hand of a Sasanian agent, and a period of Sasanian rule (c.252–87), the newly established King Trdat III pursued a similar policy towards the Sasanians, and ‘spent the whole period of his reign devastating the land of the Persian kingdom and the land of Asorestan.’⁷⁵ Descriptions of hostilities, for a variety of reasons, are found also in the *Epic Histories* (cf., e.g., P’B III.21 on Trdat III’s reign), and *passim* in Elišē and Łazar, whose works are, to no small extent, dedicated to the conflicts and wars between Armenians and Sasanians (Hacikyan 2000: 213–17, 239–43).

While there is distrust and hostility towards the Sasanians, the same cannot be said about their Parthian predecessors, or indeed about the Armenian Arsacid rulers. This transpires most clearly in the above-mentioned installation of the Arsacid King Xosrov IV, which according to the *Epic Histories* occurred at the request of the Armenian *naxarars* (cf. P’B VI.1);⁷⁶ this aligns neatly with the notion of the Arsacids as the ‘natural’ rulers of Armenia (see 3.2.2.4). A similar situation

⁷² *zkołmn arewelic’ xonarhec’ucanelov darn ew brnawor carayut’eamb arkayin Parsic’, LP’ VI.1.*

⁷³ Cf. LP’ XIV: ‘they [the *naxarars* and the Sasanian king] wanted to do away with the kingdom, *k’anzi kamēin bairnal i mijoy zt’agaworut’iwinn Hayoc’.*

⁷⁴ *stēp stēp zays awrinak awar a’real awerēin zamenayn erkir sahmanac’n, or ənd t’agaworut’eambn ew ənd išxanut’eambn ēr; Ag. II.2.*

⁷⁵ *isk t’agaworn Trdat zamenayn žamanaks iwroy t’agaworut’eann awerēr kändēr zerkirn Parsic’ t’agaworut’eann ew zašxarhn Asorestani; Ag. XI.6.*

⁷⁶ It must be borne in mind, however, that Xosrov was only a replacement for Aršak, who was considered too weak after the death of the *sparapet* Manuēl Mamikonean.

occurred, according to Łazar, after the rule of Šāhpuhr IV (r. 415–20), who had been imposed on the Armenians by Yazkert I after the death of Xosrov IV (cf. LP⁺ XIII), when the *naxarars* once more requested an Arsacid king, Artašes IV, who would be the last Arsacid ruler of Armenia. Especially in Ehišē, the role of religion, particularly if imposed by force, further emerged as a reason for hostility. After a failed attempt at ransacking a church in Angl (north of Lake Van) owing to a revolt of the Armenian populace against the Sasanian forces, it was the realization of the Sasanian chief-magus that best expresses the Armenian stance on Zoroastrianism and its proselytizers at that time:

even if the gods themselves were to come to our aid, it would be impossible for the religion of magism to become firmly established in Armenia [...] even if the soldiers [...] were magi, these [Armenians] would not spare them in their slaughter—not only the outsiders but also their brothers and sons and all their relatives, and even their own selves. (Eł. III.51–2)⁷⁷

Long-standing as it is, the conflict between Armenians and Sasanians is of a political—and, as shown, religious—nature; questions of history or tradition, viz. the long-lasting rule of Arsacids, do of course play a role, too. Yet, the hostilities, skirmishes, and outright wars are not immediately related to matters of ethnicity or nationalism (insofar as the latter term is even applicable).

Despite these general tendencies, Armenian politics are not monolithic: there is considerable evidence of strife within the Arsacid camp, and occasionally sympathies for the Sasanians. Both the *Epic Histories* and Movsēs Xorenac'i, for instance, mention Sanēsan (or Sanatruk), an Arsacid kinsman of King Xosrov III, and his unfruitful attempt at invading Armenia from the north (MX III.3; P'B III.6–7).⁷⁸ Other instances of discord frequently include: the Siwnik' clan, who, owing to their border territory, on occasion pursued their own policies (cf. the conspiracy of Varazvałan and Vasak Siwnec'i mentioned in 3.2.2.5 and Garsoian 1989: 409); differences concerning the stance towards Christianity; and acts of treason or secession (e.g. the revolt of Bakur, P'B III.9; or the rebellion of Meružan Arcruni, P'B IV.58–9, MX III.26). Of particular note is the resistance to the initial Sasanian takeover under Ardašir of the Parthian Karēn Pahlav clan (cf. MX II.71); since they retained their position at the Sasanian court, however, this is unlikely to refer to the entirety of the clan (cf. also Garsoian 1989: 383 for their relationship with the Kamsarakan clan).

⁷⁷ *et'ē ew ink'eank' astuack'n ekesc'en mez yōgnut'iwn, č'ē hnar ōrinac's mogut'ean i Hays aīnul zhas-tatut'iwn [...] zi t'ē ēin zōrk' [...] mogk', oč' inč' xnayēin sok'a i nosa satakmbamb, oč' miayn zartak'insn, ayl ew yelbars ew yordis ew yamenayn merjawors iwreanc', naew oč' yanjins iwreanc'.*

⁷⁸ For the Arsacid Parthian origins of Sanēsan, see also Lozinski (1984: 126–8); Garsoian (1989: 406).

Overall, therefore, the evidence concerning what might be called politics, viz. the hostility between Arsacid Armenia and the Sasanian Empire, corroborates the outcomes from the previous short discussions on religion, ethnicity, and social relationships. While ties to the Sasanian world existed in one form or another—no matter whether through intermarriage or imposed religious beliefs—Armenian historiography clearly makes the Sasanians out as the enemy.⁷⁹ This doesn't preclude temporary alliances or positive remarks, nor indeed does it render all Arsacids or Armenians proverbial saints. The image presented is that of Christian Armenia and its Arsacid rulers on the one side and Zoroastrian Persia, its Sasanian lords, and at times Parthian subjects on the other side. As will be argued in more detail in 7.2.1, these political and religious tensions, together with the close affiliation of families of both Armenian and Parthian origin in Armenia have had a very clear linguistic impact on the Armenian language.

3.3 Graeco-Roman sources

Greek and Latin literature contains frequent references to Armenians and Parthians owing to, among other things, their frequent military conflicts and political alliances. Not all occurrences of either people can here be dealt with, for one as a result of their sheer number, and further because only a diminishingly small number of them are of relevance for the question of multilingualism.

Strabo in his *Geographica* devotes one chapter to Armenia, describing its location, customs, and, to some extent, its ties to other surrounding cultures, stating for example that Armenians and Medians share the same customs, which are however of Median origin (XI.13.9). Of greater interest, however, is a comment on the expansion of the Armenian sphere of influence under Artaxias and Zariadres, former generals of the Seleucid king Antiochus III:

Ἱστοροῦσι δὲ τὴν Ἀρμενίαν μικρὰν πρότερον οὖσαν αὐξηθῆναι διὰ τῶν περὶ Ἀρταξίαν καὶ Ζαριάδριν, οἱ πρότερον μὲν ἦσαν Ἀντιόχου τοῦ μεγάλου στρατηγοί, βασιλεύσαντες δ' ὕστερον μετὰ τὴν ἐκείνου ἦτταν ὁ μὲν τῆς κωφηνῆς καὶ τῆς Ἀκισηνῆς καὶ Ὀδομαντίδος καὶ ἄλλων τινῶν ὁ δὲ τῆς περὶ Ἀρτάξατα, συνῆρξεν ἐκ τῶν περικειμένων ἐθνῶν ἀποτεμόμενοι μέρη, ἐκ Μήδων μὲν τὴν τε Καπριανὴν καὶ Φαννίτιν καὶ Βασοροπέδαν, [...] ὥστε πάντας ὁμογλώττους εἶναι.⁸⁰ (Strabo, *Geographica* XI.14.5)

⁷⁹ On the political importance of Armenia for the Arsacids prior to the time in question here, see [Dąbrowa \(2021\)](#).

⁸⁰ According to reports, Armenia, though a small country in earlier times, was enlarged by Artaxias and Zariadres, who formerly were generals of Antiochus the Great, but later, after his defeat, reigned as kings (the former as king of Sophenê, Acisenê, Odomantis, and certain other countries, and the latter as king of the country round Artaxata), and jointly enlarged their kingdoms by cutting off for themselves

While Strabo suggests that all the inhabitants of the newly conquered regions spoke the same language, he neglects to specify what language it was. Judging by the fact that this relevant chapter is concerned with Armenia, this seems like the obvious answer. At the same time, it cannot be entirely excluded that Artaxias, whose name is attested in Armenian historiography and in an Aramaic inscription as Artašes, may have been a speaker of an Iranian language.⁸¹ In his commentary on Strabo, [Radt \(2008\)](#) joins [Hübschmann \(1904: 217\)](#) in the assumption that Armenian was spoken by all the peoples of the region governed by the Artaxiads, but was the predominant, presumably native language only of the Armenian core territory, and elsewhere of the ruling classes. [Hewsen \(1978–9: 83\)](#) further suggests that in many instances, Armenian may only have been a second language.

[Hübschmann's](#) assertion

daß sich schon damals eine nach Sprache, Religion und Sitte gleichartige armenische Nationalität entwickelt hatte, die in einigen Provinzen die ganze Masse oder überwiegenden Teil der Bevölkerung, in den anderen wenigstens die herrschende Klasse lieferte⁸² ([Hübschmann 1904: 217](#))

is likely to be too broad in its purview. As mentioned already, a number of the ruling *naxarar* families as well as the ruling royal dynasties, both Artaxiad and Arsacid, were of Iranian origin, and may accordingly have been native speakers of Parthian. Yet, Artaxiad coinage initially bore Greek legends (cf. [Bedoukian 1968](#)),⁸³ and literary evidence suggests that at the court of Tigranes II, Greek was likely to have been one of the main languages of conversation, since Greek philosophers were welcomed at court, Euripides' *Bacchae* was performed at the wedding of Tigranes' daughter, and his son Artawazd is said to have composed in Greek (cf. Plutarch, *Lucullus* 22, 29; *Crassus* 33).

The passage from Strabo given above therefore serves to assert that Armenian was spoken, and even widely, in the territory of Artaxiad Armenia, but cannot be taken as proof that it was either the sole language of the region, nor indeed that it was *the* language of the ruling class or the royal court. Instead, it must be assumed that multilingualism was the norm, certainly at court, and likely also in the peripheral regions of the Armenian kingdom, which changed political appurtenance more frequently.

parts of the surrounding nations,—I mean by cutting off Caspianê and Phaunitis and Basoropeda from the country of the Medes; [...] and therefore they all speak the same language, as we are told' (trans. H. L. Jones).

⁸¹ This suspicion is further exacerbated by the Orontid lineage he claims in the Zangezur stele; see 3.1.2.

⁸² '... that even at that time already an Armenian nation had developed, equal in language, religion and customs, which made up the entirety or majority of the populace in some provinces, and in others at least the ruling class.'

⁸³ The Parthian script on coin legends and inscriptions is not used before Vologases I in the 1st century CE, where it features alongside Greek ([Schlumberger 1983; Curtis and Stewart 2007: 21](#)).

A completely different reference to the Armenian language is found in Varro's discussion of vocabulary for wild beasts: *tigris qui est ut leo varius, qui vivus capi adhuc non potuit. vocabulum e lingua armenia: nam ibi et sagitta et quod vehemētissimum flumen dicitur Tigris*⁸⁴ (Varro, *de lingua latina* V.100). This is of interest only insofar as a word of this form and meaning is not attested in Armenian as such, but only in Parthian and Middle Persian as *tygr* /tigr/ or /tiyr/. It is unclear whether this wrong attribution and faulty etymology says much about the relationship or perception of the two languages, particularly since similar mistakes do not recur.⁸⁵

The only other explicit mention that the Armenian language receives in Graeco-Roman literature is in the works of the 6th-century historian Procopius of Caesarea. In his *Bellum Vandalicum*, Procopius describes the attempted assassination of Gontharis, who had instigated a rebellion in the province Africa against the Byzantine emperor Justinian in 546 CE. In the passage in question, the Armenian Artasirēs (presumably orig. Arm. *Artašes*), a bodyguard (δορύφορος) of the Byzantine general Artabanēs (Arm. *Artawan*), is prevented from striking the rebel Gontharis by a colleague, Grēgorios, who speaks 'in the Armenian tongue.'⁸⁶ The purpose of speaking Armenian is evidently not to be understood by others present, who would have been conversant in Greek, the main language of communication in the Byzantine military. While this passage attests Armenian-Greek bilingualism in Armenian-born members of the Byzantine military, it postdates the period under question by c.50 years, and neither considers Armenian in its natural geographical context nor makes reference to the speakers' command of other languages, rendering it of little value for the present purpose.

The second reference to the Armenian language occurs in Procopius' *Bellum Gothicum*, in which the Armenian general Gilacius, having just been captured by the Goths, is said to 'not know how to speak either Greek or Latin or Gothic or any other language except Armenian alone.'⁸⁷ Like the previous passage, this mention is of limited value owing to the time in which it was written. It is noteworthy, however, that by the middle of the 6th century CE, such Armenians existed as could be of sufficient standing and social background to rise to the rank of general and still be monoglot;⁸⁸ at the same time, Armenian soldiers formed a significant part of the Roman and Byzantine military, their numbers being drawn from Armenia

⁸⁴ 'The *tigris* "tiger", which is like a striped lion and which until now it has not been possible to catch alive, is a word from the Armenian language; for there both an arrow and a very swift river are called *Tigris*' (trans. W. D. C. de Melo).

⁸⁵ For a discussion of this passage, cf. Traina (2017); de Melo (2019: 737–8).

⁸⁶ εἰπὼν ἐν τῇ Ἀρμενίων φωνῇ; Procopius, *Bellum Vandalicum* IV.xxviii.16.

⁸⁷ οὐτε ἐλληνίζειν ἠπίστατο οὐτε Λατίνην ἢ Γοτθικὴν ἢ ἄλλην τινα ἢ Ἀρμενίαν μόνην ἀφείβαι φωνῆν; Procopius, *Bellum Gothicum* VII.xxvi.25–7.

⁸⁸ This is only valid, of course, as long as Gilacius did not speak any other languages than those mentioned by Procopius, and was not elevated to generality from the ranks; unfortunately, nothing further is known of him.

Minor, which had frequently changed political allegiance until its final conversion into a Roman province under Diocletian in the early 4th century CE (cf. Garsoïan 1991: 175–7; Potter 2004: 292–3; Bowman 2005: 73, 83). While it may be unusual for Gilacius not to have any Greek given his station, the passage does not shed any further light on the question of Iranian–Armenian multilingualism.

3.3.1 Biblical texts

Explicit mention of Armenia in the Biblical tradition is made five times: 2 Kings 19:37 tells of the assassination of King Sennacherib by his two sons, who flee to the kingdom of Ararat, presumed to be Armenia; this passage is repeated in Isaiah 37:38. The same kingdom, Ararat, is mentioned also in Jeremiah 51:27 as one of the kingdoms in an alliance against Babylon. Mount Ararat is also mentioned in Tobit 1:24. Mention of the Armenian language is made only in Revelations 9:11, where the name of the angel Abaddon is rendered into Armenian as *korust* ‘destruction’.

The only direct mention of the Parthians occurs in Acts 2:9, where they are listed as one of the peoples represented during the descent of the Holy Spirit during Pentecost; thus, they too would have heard their language spoken. Tertullian, however, cites this verse of Acts differently:

In quem enim alium universae gentes crediderunt nisi in Christum qui iam venit? Cui etenim crediderunt gentes, *Parthi et Medi et Elamitae et qui habitant Mesopotamiam Armeniam Phrygiam Cappadociam*, [...].⁸⁹ (Tertullian, *Adversus Iudaeos* VII.4)

This different reading, substituting *Armeniam* for the received Greek reading Ἰουδαίαν is also adopted by Augustine of Hippo (cf. Bengel 1742); such a reading has not generally been accepted, however, and in either case is unlikely to provide any information not already known from other contemporary sources, e.g. Strabo.

3.4 Chinese sources

The Arsacid Parthian Empire (Han Chin. 安息 *Ānxī*)⁹⁰ was known to the Chinese Han dynasty through a number of expeditions and embassies in three distinct

⁸⁹ ‘In fact, in whom else have the clans of the world believed if not in the Christ who has come already? For in whom have the other clans (the Parthians, Medes, Elamites and those who inhabit Mesopotamia, Armenia, Cappadocia [...])’ (trans. G. D. Dunn).

⁹⁰ The form *Ānxī* has been explained as relating to either the Parthian capital city of Antiochia in Margiana (Gk. Ἀντιόχεια τῆς Μαργιανῆς; cf. Watson 1983: 541–2) or the founder of the ruling Arsacid dynasty, Arsaces I (Wang 2007: 90).

phases (126–91 BCE; 59 BCE–9 CE; and 73–7 CE; cf. [Posch 1998](#): 357). The importance of these documents for historiography must not be underestimated owing to their politically neutral, if limited, account of the Parthians; but little information pertinent to the present enquiry can be found therein.

One pertinent passage from the *Records of the Grand Historian* (Chin. 史記 *Shiji*), however, states the following:

From Da Yuan to the west until Anxi each state has a different language; and although that is the case, their customs are quite similar and their languages mutually intelligible. ([Posch 1998](#): 358)

Assuming that this observation is correct, it may be tentatively assumed that Middle Persian and Parthian, at least at the time in question, viz. the late 2nd century BCE, were mutually comprehensible. Similar observations have been made above, e.g. in the insults to King Aršak offered by the Persian stable-master (see [3.2.2.1](#)), and are implicitly corroborated, since both languages frequently co-occur and have influenced one another. Their close linguistic relationship lends further credence to this assumption (cf. e.g. [Skjærvø 2009a](#): 196; [Durkin-Meisterernst 2014](#): 1).

While there is some speculation concerning a possible reference to Armenia in Chinese sources,⁹¹ even if it were accepted, this evidence would have no bearing on the present question.

3.5 Summary

As has become evident, no contemporary literary and epigraphic evidence gives any direct indication as to the linguistic situation obtaining in the Armenian kingdom in and before the 5th century CE. Certain aspects of contact, however, can be gleaned indirectly from the historiographical texts; the story of the discourteous stable-master (see [3.2.2.1](#)), for instance, suggests that some individuals of rank clearly spoke an Iranian language, in the same way that the story of the priests imprisoned at the Sasanian court (see [3.2.2.1](#)) demonstrates that this is unlikely to have applied to society as a whole, thus answering in the negative one of the questions posed in [3.2.2](#): whether all Armenians were bilingual and spoke Parthian or Middle Persian.

Equally, the literary evidence does not allow for any clear pronouncement on the question of diglossia. Owing to the lack of contemporary Parthian documents, and the absence of code-switching or code-mixing in the Armenian evidence, there is no indication that either language was restricted or favoured in any particular

⁹¹ [Kauz and Liu \(2008\)](#) propose that the Chin. 阿蠻 *Āmàn*, a designation occurring in the *History of the Later Han* (Chin. 後漢書 *Hòu Hàn Shū*), which covers the period of c.25–220 CE, refers to Armenia.

context. Conversely, however, that does not mean that there was no diglossia; it is possible, if not demonstrable, that the ethnic Armenian members of the ruling classes, viz. the *naxarars* and their kin, would have spoken Armenian themselves and with their respective families, but would have preferred—or been made—to use Parthian as the main means of communication with the Arsacids. Such a situation, with diglossia but very restricted bilingualism, would not be uncommon in societies ruled by extraneous powers (Fishman 1971a: 544–6).

While the information about language use at the time in question is scant, the details of Armenian and Parthian societal cohesion is unequivocal. Both cultures interacted with one another for multiple centuries, including intermarriage and the exchange of young wards. The literature suggests that the Parthians were seen as the natural sovereigns of the Armenian kingdom. The complete absence of Parthian-language documents from this period suggests that the Arsacid Parthian ruling class had integrated linguistically, to one extent or another, with the Armenian people they ruled. The Christianization of both the region as a whole and the opposition to the Sasanians similarly suggest political and cultural unity.

The historical details presented in this chapter corroborate the linguistic data outlined in Chapter 2 and further present a sociohistorical setting in which more than just lexical borrowing is plausible. From a historical perspective, then, there is nothing to speak against the syntactic changes modelled on Parthian patterns proposed above. The following chapters (4–6) present the linguistic evidence for and previous approaches to these patterns.

4

Morphosyntactic alignment

Chapters 2 and 3 have shown clearly the specific expressions of language contact between Armenian and the West Middle Iranian languages, as regards both linguistics and sociocultural interactions. The present chapter, in turn, prepares the ground for a detailed discussion of the Armenian periphrastic perfect and the origin of its morphosyntactic alignment pattern, which are eventually shown to have been copied from a Parthian model.

To do so succinctly, the notion and different types of morphosyntactic alignment are briefly reviewed in general. This is followed by a discussion of the syntax of the Armenian periphrastic perfect, including a historical analysis of the participle on which the perfect is built and of previous attempts at explaining its unusual constituent marking. These discussions reveal that the passive–intransitive nature¹ of the participle is at odds with its transitive usage in the perfect, and that this usage cannot be explained as an Armenian-internal development.

4.1 Morphosyntactic alignment

In order to investigate any potential syntactical similarities in the way that West Middle Iranian and Classical Armenian construe their periphrastic past tenses, it is necessary to first enquire about the general nature of such constructions: their precise linguistic definition, the different types of constructions in existence, their diachronic developments where possible, and any correlations that might exist between different patterns and constructions. This falls under the general heading of morphosyntactic alignment, which is briefly discussed in the following section.

The definition of the term ‘morphosyntactic alignment’ adopted here is followed by a very brief outline of the most important types of alignment. Then, the typology of alignment is presented with a particular view to alignment splits, alignment change and its conditioning factors, and a brief excursus concerning the question of Proto-Indo-European alignment. Finally, observations made and questions raised during the previous discussions will be summarized and put into context.

¹ The morphology and diathesis of the participle are explained at length in [the Appendix](#).

4.1.1 Definition of morphosyntactic alignment

Morphosyntactic alignment as a concept refers to a small array of possible ways in which the core arguments of a proposition can be encoded by means of morphological or syntactic features (Bickel and Nichols 2008: 305). In the literature, these core arguments are standardly referred to as follows:²

- S (for subject) refers to the sole argument of an intransitive verb, e.g. *James bathes*, where *James* is S; in other terms, S is the sole participant in a one-participant event.
- A (for agent) refers to the argument of a transitive verb which controls the action associated with the verb, while
- O (for object, or elsewhere P for patient) refers to the other argument of a transitive verb, which undergoes the associated action, e.g. *Jane breaks the vase*, where *Jane* is A and *the vase* is O. Thus, in a prototypical two-participant event, A is the initiator, and O the endpoint (cf. Næss 2007: 27–30).

The references S, A, and O for the present purposes only refer to the syntactic function of the arguments they describe, and do not necessarily reflect semantic roles. Accordingly, an argument as delineated above may take on different roles as required by the individual verb while remaining in the same case; thus, while in NHG *Peter singt* and *Peter friert*, the S in both instances is represented by *Peter*, the first verb (*singt*) demands an agentive role, whereas the second verb (*frieren*) requires a patient role.³ While prototypical semantic roles are encoded within the verb in most languages, resulting in unambiguous assignment of syntactic roles, some languages encode semantics much more directly. Manipuri, a Tibeto-Burman language, for example, morphologically encodes control over the action with the same suffix irrespective of verbal valency (cf. Dixon 1994: 24); the marking of S and A is therefore not always predictable on syntactic grounds alone.

As the term ‘alignment’ suggests, the focus of interest lies with the different patterns in which these core arguments correspond either in form, viz. morphological marking, or position, viz. syntactic marking, or a combination of the above;⁴ the following examples demonstrate morphological and syntactic marking:

² A more fine-grained differentiation, which takes into account ditransitive (i.e. trivalent) verbs, is of course possible, as shown in Bickel and Nichols (2008) and Dowty (1991); for the present purpose, however, this system with three core arguments will suffice.

³ While necessary in order to avoid potential misunderstandings, this differentiation will be of very limited importance in this study.

⁴ Alignment patterns and their effects are not restricted to clause-level propositions, however. Some derivational or compositional processes, for example, are dependent on alignment patterns: English *bird-chirping* and *fox-hunting* are each nominal compounds consisting of a noun and a verb in the gerund; in the former compound, the noun takes on S function (*bird-chirping* ~ *a bird chirps*), whereas in the latter, the noun represents O (*fox-hunting* ~ *one hunts a fox* ≠ *a fox hunts*). In this respect, English aligns S and O where usually S and A are aligned (Comrie 1978: 337); see van de Velde (2014) for similar examples in Dutch.

- (4.1) (a) *James reads a book.*
 A V O
 ‘James reads a book.’ (English)
- (b) **A book reads James.*
 O V A
 (‘James reads a book.’)

- (4.2) (a) *Peter deckt den Tisch.*
 A_{NOM} V O_{ACC}
 ‘Peter sets the table.’ (German)
- (b) *Den Tisch deckt Peter.*
 O_{ACC} V A_{NOM}
 ‘Peter sets the table.’ (in context: ‘It is the table that Peter sets.’)

English, owing to its lack of nominal inflection, marks the syntactic value of core arguments through word order alone, as shown in example (4.1). German, on the other hand, by virtue of having overt (if not biunique) case-marking in the nominal system, can rely on morphological marking to convey the syntactic function of these arguments, and thus marks its A as nominative, and its O as accusative.⁵ The various alignment patterns are delineated in 4.1.2.

As will become more evident in what follows, morphosyntactic alignment is a complex set of features of a language, and as such neither immutable nor absolute: in a great number of languages, more than one alignment pattern can be found (Comrie 1978: 350), and as the history of the Indo-Aryan and Iranian languages in particular illustrates clearly, alignment patterns can change in a variety of directions and may well be in mid-change when observed (Drinka 1999: 480–1).

4.1.2 Types of morphosyntactic alignment

The patterns briefly discussed below are abstractions of the five combinatorially possible alignments of S, A, and O; the patterns are not all equally well represented in the world’s languages, and some are, for practical reasons that will become evident, less common than others. Further, as already mentioned, languages may share in more than one pattern, restricting each pattern to a particular domain; this is further discussed in 4.1.3.

4.1.2.1 Neutral alignment: S=A=O

In neutrally or directly aligned systems, S, A, and O are each equally morphosyntactically unmarked (Bickel and Nichols 2008: 316; Siewierska 2011: 340), so that no a priori distinction can be made between them. Languages with this patterning are rare; one exponent is Ju|’hoan, a variety of the !Kung language in Namibia.

⁵ Nonetheless, German does have a standardized word order (SVO), deviations from which in independent clauses are normally licensed only by particular pragmatic conditions.

Other languages, like English, Dutch, or French, where core arguments are not marked morphologically for their syntactic function, but where this function can normally be deduced on the basis of constituent order, do not belong in this group *sensu stricto*, since a difference between arguments can be made syntactically.

- (4.3) (a) *De hond bijt de vrouw.*
Le chien mord la femme.
 DET dog_A bites DET woman_O
 ‘The dog bites the woman.’ (Dutch, French)
- (b) *De vrouw bijt de hond.*
La femme mord le chien.
 DET woman_A bites DET dog_O
 ‘The woman bites the dog.’

In neutrally aligned languages, both versions of the above sentences should have the same reading in any one context, but this is not the case for Dutch or French.

At some stage in their development, many Middle Iranian languages, including Parthian and Middle Persian, also belonged to this type as far as large parts of their nominal system are concerned; see 4.3.2.1.⁶

4.1.2.2 Nominative–accusative alignment: S=A≠O

In languages with nominative–accusative alignment, S and A receive the same nominative marking—often remaining unmarked—while O is marked differently as accusative. Languages adhering to this alignment pattern include Latin, Classical Greek, and German; early stages of Parthian and Middle Persian are thus aligned in the synthetic tenses, as are English, French, and Dutch (morphosyntactically in their pronominal systems, by constituent order elsewhere).

- (4.4) *Τῇ ἐπαύριον βλέπει ὁ Ἰωάννης τὸν Ἰησοῦν*
altera die videt Iohannes Iesum
 the-other-day see.3SG.PRS John.NOM_A Jesus.ACC_O
ἐρχόμενον
venientem
 come.PRS.PTCP.ACC.SG
 ‘The next day John sees Jesus coming ...’ (John 1:29; Greek, Latin)
- (4.5) (a) *Hij aait de kat.*
 3SG.NOM_A pet.3SG.PRS DET cat_O
 ‘He pets the cat.’ (Dutch)
- (b) *De kat bijt hem.*
 DET cat_A bite.3SG.PRS 3SG.ACC_O
 ‘The cat bites him.’

⁶ A more specific statement is difficult, since different stages of the West Middle Iranian case system are attested; cf. Haig (2008: 95–101).

- (4.6) (a) *Il caresse le chat.*
 3SG.NOM_A pet.3SG.PRS DET cat_O
 ‘He pets the cat.’ (French)
- (b) *Le chat le mord.*
 DET cat_A 3SG.ACC_O bite.3SG.PRS
 ‘The cat bites him.’

Nominative–accusative alignment is the most common alignment pattern (Premper 2001: 486), and has been the subject of innumerable studies (cf. Song 2001 with bibliography); in view of its widespread occurrence in such a great variety of languages, and its familiarity to most readers, this pattern will not be discussed here in any greater detail. Notably, however, one of the questions that is of relevance for later discussion (see 4.4) concerns the correlation, if any, between alignment pattern and word order; the notion that such a relation might exist likely originates with Greenberg (1966: 95–6), whose *Universal 41* suggests that a language with a standard constituent order SOV or OSV almost always has a case system, and subsequently is unlikely to be aligned neutrally or double-obliquely.⁷ For a familiar instance of such a patterning, see (4.6) above, where the clause with nominal A and O follows SVO, while clauses with one or more pronominal constituent have a different constituent order, SOV, thus aligning with Greenberg’s prediction.

4.1.2.3 Ergative–absolute alignment: S=O≠A

Ergative–absolute alignment is the other main pattern of morphosyntactic configuration, with approximately a quarter of the world’s languages making use of some ergative features (Dixon 1994: 2). In this pattern, S and O receive identical absolute marking (often \emptyset), while A is marked as ergative. In a European context, Basque is frequently used as an example of ergative–absolute alignment; as mentioned above, West Middle Iranian patterns ergatively at least in the pronominal system in the periphrastic past, as do a number of modern Iranian languages such as Balochi (Korn 2009a) and Pashto (David 2012: 422ff.), languages of ancient Mesopotamia like Hurrian and Urartian (Wilhelm 2008a,b), and Australian languages, most famously Dyirbal (Dixon 2002: 523–4).

- (4.7) (a) *kud-u kazi pille-ne*
 fall-JUSS cup.ABS river-DIR
 ‘May the cup fall into the river.’ (Hurrian; Wegner 2007: 220)
- (b) *Kelia-š-nna-an paššith-iffu-š tive*
 Kelia-ERG-3SG.ABS-CON emissary-1SG.POSS-ERG word.ABS
andi kul-oš-a
 DEM.ABS say-PST-3SG
 ‘My emissary Kelia said this word.’ (Wegner 2007: 180)

⁷ The relevance of constituent order for alignment decisions will be further discussed, in connection with the analysis of the Armenian data below, in Chapter 5. For a view on the potential limits of this correlation, see Siewierska (1996).

- (4.8) (a) *ɲuma banaga-nʷu*
 father.ABS return-NFUT
 ‘Father returned.’ (Dyirbal)
- (b) *yabu ɲuma-ɲgu bura-n*
 mother.ABS father-ERG see-NFUT
 ‘Father saw mother.’

It is noteworthy that the case employed to denote ergative marking is not infrequently multifunctional, and may at times express functions other than the agent of a transitive verb; middle and modern Iranian languages frequently only discern two cases, direct and oblique, in which the oblique marks A in ergative environments, but O in accusative environments.⁸ In other languages such as Dyirbal, the Northeast Caucasian Avar and Lak, and the language isolate Burushaski, the morphological realization of the ergative case is shared by other, normally non-core argument functions, such as the instrumental, locative, or genitive (Dixon 1994: 57).

More rigorous differentiations between types of ergative languages are possible, for example along the lines of verb agreement and inter-clausal alignment. Late Hurrian and Dyirbal are both deep-ergative or syntactically ergative languages, in which the notion of *subject* is defined on a purely syntactical basis, so that two clauses with a co-referential element cannot combine by conjunction reduction if those co-referential NPs exhibit different case-marking and thus different syntactic roles. Accordingly, when deleting the second occurrence of *father* in conjunction reduction, the two sentences in (4.8) above cannot be combined to mean **Father returned and saw mother*, but only the following:⁹

- (4.9) *ɲuma banaga-nʷu Ø yabu-ɲgu bura-n*
 father.ABS_i return-NFUT Ø_i mother-ERG see-NFUT
 ‘Father returned and mother saw (him).’ (Dyirbal)

This pattern is exceedingly rare even among the languages with ergative alignment on a large scale.¹⁰ More commonly, languages with ergative alignment restrict this pattern to morphology, and are therefore called ‘morphologically ergative’ (or

⁸ It has been suggested (Bubenik 1989: 189–91) that in languages with e.g. tense-sensitive ergative split alignment (see 4.1.3.1), the terms ‘antiabsolutive’ and ‘superabsolutive’ are better suited to refer to the cases which mark (SA) in accusative environments, but (SO) in ergative environments, and O in accusative environments, but A in ergative environments, respectively; this is the case in many Middle Iranian languages. This terminology however, is not helpful, nor does it reflect a particular function of the system described. It seems more efficient and transparent to label these cases as suggested above, and differentiate according to environment.

⁹ The two clauses in question can, of course, be joined by means of an antipassive construction, in which the ergative A is demoted to an absolutive S under valency reduction of the verb, thus rendering the co-referential NPs in the same case and allowing for conjunction reduction; the O is deprived of its core argument status, and can optionally be rendered as an adjunct in an oblique case.

¹⁰ There are yet more indicators of syntactic ergativity (cf. Dixon 1994: 131ff.); since this phenomenon will play no further role in this study, it will not be discussed here any further.

‘subject-prominent ergative’) languages (e.g. Kurmanci, cf. [Matras 1992–3](#): 149). These latter languages, among whose number are the West Middle Iranian languages, Basque, and quite possibly early Hurrian, are therefore syntactically, viz. at clause level, no different from nominative–accusative languages. Their syntactic pivot, controlling Equi-NP deletion, conjunction reduction, and command of reflexives, is determined by a notion of subjecthood that is not coextensive with its morphological marking ([Anderson 1977](#): 321).¹¹

Next to morphological marking on NPs and their syntactic patterns, ergative alignment can further find expression in verbal agreement; all the logical options, i.e. agreement with A, O, or no constituent in a transitive clause, are in existence, at times within the same language. While in some languages (such as Parthian and Middle Persian) verbal agreement with O at times is the only indication of ergative alignment ([Noda 1983](#)), others like some Kurdish varieties show patterning with both S and O ([Pirejko 1979](#): 486–7); Talyši, on the other hand, shows an invariant verb form in agreement with no constituent whatsoever ([Payne 1979](#): 442).

(4.10) *cy=m'n dyd hy tw*
 COMP=1PL.ERG see.PST be.2SG.PRS 2SG.ABS
 ‘We saw you.’ (M_31_I V; Middle Persian)

(4.11) *dbžmьna äw köštьnä*
 enemy.ERG.PL 3SG.ABS kill.PST.3PL
 ‘The enemies have killed him.’ (Kurmanci;¹² [Pirejko 1979](#): 487)

(4.12) *av v'ind-am-e*
 3SG.ABS see.PST-1SG.OBL-3SG
 ‘I saw him.’ (Talyši; [Payne 1979](#): 442)

As is transparent from even this short introduction to ergative–absolutive alignment, the possible patterns and variations are considerable, particularly if the fact that some languages only exhibit ergative features in particular environments is taken into account; see [4.1.3](#)). As will become evident in further discussion, ergative–absolutive alignment, while perfectly valid and independent in and of itself, is often ousted in favour of nominative–accusative alignment, and in the history of numerous languages has been abandoned completely or relegated to a particular environment within that language. At times, the transition from one alignment pattern to another turns out to be the source of the occurrence of yet other patterns.

¹¹ The criteria that determine subjecthood and thus, by extension, the syntactic pivot of a language are useful, among other things, for determining whether a language does pattern ergatively or otherwise ([Cole et al. 1980](#)); see section [4.4](#).

¹² Orthographic conventions and transcription systems for the various Kurdish languages vary substantially; where quoted, the conventions of the source will be replicated.

4.1.2.4 Tripartite alignment: $S \neq A \neq O$

Tripartite alignment is often considered to be one of those transitional patterns in two senses: firstly, very few languages exhibit this particular form of alignment as their only pattern. Instead, it frequently occurs in such languages as share in both nominative–accusative and ergative–absolutive marking in an NP-split system; see 4.1.3.2, and cf. Næss (2007: 179).¹³

Secondly, in the historical, diachronic sense of ‘transitional’, it has been argued convincingly that tripartite alignment can be a stage in the development of ergative into accusative patterns (Skalmowski 1974; Payne 1980: 150). Yet, in a not negligible number of languages, this type of alignment is, at least synchronically, stable; such languages include Yazgulyami (Indo-Iranian, Pamir; cf. Payne 1980), some dialects of Pahari and Western Hindi (Indo-Aryan; Stroński 2010; also cf. Liljegren 2014: 150ff.), and, at least to some extent, Wanggumara, Waga-Waga, Yidin^y, and Dyirbal (Blake 1977: 11; Dixon 1979: 86–8).

The rarity of this alignment has been related to its uneconomic nature: S, A, and O are each marked differently, a differentiation deemed unnecessary for unambiguous comprehension (Dixon 1994: 40, 55, 70).

(4.13) (a) *áz=əm mət mad*
 1SG.ABS_S=be.1SG.PRS tired become.PST
 ‘I am tired.’ (Yazgulyami; Payne 1980: 175)

(b) *mon š-tu wint*
 1SG.OBL_A OBJ-2SG.OBL_O see.PST
 ‘I saw you.’

(4.14) (a) *ma ga-ē*
 1SG.NOM_S go-1SG.PST
 ‘I went.’ (Nepali)

(b) *mai-le Rām-lāi dekh-ē*
 1SG-ERG_A Ram-DAT_O see-1SG.PST
 ‘I saw Ram.’

While the differentiation of S, A, and O in Nepali is achieved exclusively by inflectional means, Yazgulyami cannot rely on case inflection alone,¹⁴ but further requires a functional prefix *š-* which marks O (Dixon 1994: 202); the latter behaviour is reminiscent of the situation in Classical Armenian, where a prefix *z=* is

¹³ More recently, it has been argued that instances of tripartite alignment can be explained without resorting to postulating three morphologically different core arguments; cf. Müller and Thomas (2017). For the present purpose, however, the arguments presented there have little impact.

¹⁴ Most Indo-Iranian languages have in the course of their history lost inflectional case distinction to a greater or lesser extent, often resulting in only binary distinction between direct and oblique case (Schmitt 1989: 98–9).

frequently employed to mark O.¹⁵ This pattern, as will be argued later, appears in Classical Armenian too, which in its periphrastic perfect does not adhere to nominative–accusative alignment, but instead shows tripartite patterns; this hypothesis will be expanded on further in 4.2.3, and will form the major focus of Chapter 5.

4.1.2.5 Double-oblique alignment: S≠A=O

The last combinatorily possible morphosyntactic alignment pattern is referred to as ‘double-oblique’, since it marks S differently from A and O, the latter two of which are marked alike. This pattern is inordinately rare (Comrie 1981: 176–7), no doubt due to the fact that it lets A and O coincide morphologically, although these are in principle the only syntactic core arguments that would require non-identical marking for the unambiguous interpretation of a sentence. Examples of such patterning do, however, occur both in Indo-Iranian languages (e.g. Rošani in the Pamir Mountains, cf. Payne 1979: 443; 1980: 155–6; Vafsi and the Muš dialect of Kurmanci, cf. Haig 2017: 478–9) and in Indo-Aryan (Dameli, a language of the Kunar group; Liljegren 2014: 149).¹⁶

- (4.15) (a) *mu tā wunt*
 1SG.OBL 2SG.OBL see.PST
 ‘I saw you.’ (Rošani; Payne 1979: 443)
- (b) *tā mu wunt*
 2SG.OBL 1SG.OBL see.PST
 ‘You saw me.’

In Rošani, the double-oblique system only applies in the past tense; further, word order indicates the role of the different arguments, so that the lack of distinct case morphology in A and O is mitigated to some extent.

4.1.2.6 Other alignment patterns

The present study is concerned mainly with three of the alignment types mentioned and briefly presented above: nominative–accusative, ergative–absolutive, and tripartite. For completeness’ sake, however, reference must be made here, in even greater brevity, to other types of alignment.

¹⁵ The Classical Armenian object-marker *z=* is, however, not obligatory; the question has been raised whether it may form part of a differential object-marking system within the language, only marking definite objects. For a discussion, see Scala (2011: 471–3); Minassian (1996: 217, 246).

¹⁶ The lack of distinctiveness in argument-marking and similarly the non-parsimonious differentiation of S and A are two of the reasons why such patterns are far less common than nominative–accusative or ergative–absolutive alignment (cf. Greenberg 1966). The fact that this pattern seems to be more widespread in Iranian and Indo-Aryan languages of northern Afghanistan, Pakistan, and India (in all of which it has retained some degree of stability) raises the question of the extent to which other constraints may interfere with supposed linguistic universals (cf. Haig 2008: 178, 195) and what other morphosyntactic patterns may play a role (e.g. differential object marking, cf. Haig 2017: 486–8).

As has been mentioned before, the consideration of only monotransitive statements exhibiting S, A, and O is reductionist; if ditransitive, i.e. trivalent, verbs (such as English *to give*) are taken into account, more complicated systems may arise, since another syntactic core argument is introduced. For a brief summary of alignment patterns including such verbs, cf. [Bickel and Nichols \(2008\)](#).

The last alignment pattern to be mentioned here exhibits split alignment of S with A or O, depending on the control or volition of S over the verbal action.¹⁷ This pattern has been variably named ‘active-stative’ (e.g. [Uhlenbeck 1901](#); [Klimov 1974](#)), split-intransitive ([van Valin 1987](#)), or split-S alignment ([Dixon 1994](#)),¹⁸ and is not uncommonly found in the native languages of the Americas and the Caucasus.

- (4.16) (a) *a-xá. a-gwerú aĩna.*
 1SG_A-go 1SG_A-bring them
 ‘I go. I am bringing them now.’ (Guarani; [Mithun 1991](#): 511)
- (b) *šé-rasĩ. še-reraha.*
 1SG_{patient}-be-sick 1SG_{patient}-carry-off.3SG.FUT
 ‘I am sick. It will carry me off.’
- (4.17) (a) *ʔi -kapa -ni*
 3SG.NFUT.A/S_A -see -3SG.NFUT.O/S_O
 ‘He sees him.’ (Baniwa; [Aikhenvald 1995](#): 165)
- (b) *ʔi -emhani*
 3SG.NFUT.A/S_A -walk
 ‘He walks.’
- (c) *hape -ka -ni*
 cold -DECL -3SG.NFUT.O/S_O
 ‘He/it is cold.’

4.1.3 Typology of alignment

The exposition of the various alignment patterns in existence has served to elucidate the difference between those patterns, and has already hinted at some of the issues to be considered further. The following select observations on the typology of alignment patterns focus on the ergative–absolute type, which has arisen in late Old Iranian or early Middle Iranian. These notes are meant to constitute a more theoretical foundation grounded in cross-linguistic data to supplement

¹⁷ Languages may vary considerably as to which feature controls the choice of alignment; this may in fact be determined on a lexical basis (cf. [van Valin 1990](#): 251–2).

¹⁸ [Dixon](#) further differentiates split-S and fluid-S alignment; in the former, the lexical semantics of each verb determines which alignment pattern is followed, while in the latter, the alignment decision is made by the speaker to denote the degree of control or volition exacted by the actant: non-volitional/controlled *I fell* vs volitional/controlled *I let myself fall* ([1994](#): 71).

the later consideration of Armenian and West Middle Iranian, both by highlighting common features and developments in languages that have once had, or are presently developing, ergative alignment, and by raising questions to which the data analysis in Chapter 5 will have to provide answers. A few such observations and questions have already been mentioned in passing, and are here taken up again.

Although ergative alignment is by no means uncommon in Iranian languages, none of them has developed an exclusively ergative case (Haig 2008: 13); instead, the oblique case is employed in this function, at times aided by verbal agreement with the direct-case O; this behaviour is widely attested and thus typologically unproblematic (cf. Dixon 1994: 57). Next to the Middle Iranian oblique/ergative case, which diachronically derives from the Old Iranian genitive-dative (Sims-Williams 1981: 169 n. 20; Korn 2009b: 161), Eskimo, the Northeast Caucasian language Lak, and Ladakhi (Tibeto-Burman) also show genitive-ergative polysemy. Other cases used to convey ergative syntactic relations include instrumental (Dyirbal, Avar, Modern Tibetan) and locative (Carribbean Kuikúro, a number of Australian languages). In turn, however, some languages have morphemes denoting ergative function exclusively (Basque, Yidin^y).¹⁹

Constituent order in some of the examples cited above has proven to be an effective way of differentiating between arguments which receive no further marking otherwise; similarly, some languages utilize prefixation for the marking of certain constituents. Constituent order therefore plays an important role in the organization and processing of language. The question arises whether there is an inherent connection between alignment pattern and constituent order, as suggested by Dixon (1994: 49–50), and indeed whether the occurrence of any particular order is a helpful tool in confirming a language's alignment.²⁰ For Classical Armenian, as the analysis in 5.3.4.2 shows, this is not the case.

A further worthwhile test relates to the control of canonical reflexives, which seems to be dependent on a semantic notion of subjecthood even in highly ergative languages, irrespective of their morphosyntactic marking (Dixon 1994: 138–9). This is only logical since by definition canonical reflexives indicate co-referentiality of A and O; while it is not a test that yields information concerning the alignment pattern a language follows, it does indicate which (kind

¹⁹ Given the polysemy of accusatives in nominative-accusative languages, where it can often denote concepts related to direction or time (Latin, Greek), and the fact that both nominative and absolutive cases are exclusively found to denote the syntactic S function, it seems plausible to assume that whichever case marks S in a given language will likely be restricted to that usage.

²⁰ Dixon argues that if S and A are aligned morphosyntactically, it is plausible to assume that within a sentence they should each take the same place; accordingly, accusative languages should show SV/AVO or VS/OVA, while ergative languages should pattern as SV/OVA or VS/AVO; verb-initial or verb-final languages are more problematic, since either constituent, viz. A or O, could be said to take the position of S. These observations are further limited to nominative-accusative and ergative-absolutive languages, since there are no attestations of tripartite languages which show the appropriate patterns.

of) constituent can function as subject and how it is marked, which in turn may be indicative of alignment patterns. For Armenian, Kölligan (2013: 76–7) provides proof that genitive agents can act as the pivot of reflexives and thus be considered subjects.

As has been alluded to in some of the examples given above, languages frequently adhere to more than one alignment pattern; the division between alignment patterns is not coincidental, but follows clear hierarchical tendencies. The following sections discuss the natures of such split alignment patterns, considering first those that are divided along a tense–aspect line, and then other hierarchical divisions. Section 4.1.3.3 discusses the genesis of such split patterns in more detail, since this question will have an impact on the expectations of the Armenian data presented below. Finally, the question of reconstructible alignment in (Pre-)Proto-Indo-European is addressed briefly.

4.1.3.1 Tense-sensitive alignment (TSA)

It is by no means unusual for a language to exhibit more than one alignment pattern; the factors which determine the choice of alignment for a particular environment, viz. its pivot, can be very variable (Dixon 1994: 24) and range from semantic pivots (volition, control, etc.; see fn. 18) to extralinguistic factors (animacy hierarchies, see 4.1.3.2), and include alignment split according to tense as well.

Such tense-sensitive alignment (TSA) splits are found in most Iranian and Indo-Aryan languages, Georgian, the Mayan language Chol, Polynesian languages, and languages of the Carib family in South America (Comrie 1978). The reason the split alignment patterns of these languages are arguably related lies in their aetiology: in all instances, ergative alignment in these languages arose from some sort of passive construction.²¹ While such a development is unsurprising in the Iranian languages, in which the passive–intransitive past participle of Old Persian pedigree is the starting point of ergative development in Middle Iranian (cf. 4.3.2),²² the development of TSA need not be restricted to such specific circumstances. The reinterpretation of passives as ergatives, and the concomitant restriction of the ergative to the perfective aspect, may arise owing to the inherent semantics of the passive, which focuses on the state of the referent denoted by the O argument

²¹ Historically, languages exhibiting ergative patterns were said to be ‘passive’ languages (Schuchardt 1896). While ergative and passive share in marking the patient as nominative/absolute, ergative patterns are by definition unmarked patterns, whereas passives are more marked (Comrie 1988: 19–20).

²² Most Iranian languages, past and present, in which ergative features are attested, exhibit TSA; some of them, however, such as the Awroman variety of Gorani and Talyši, have developed past tenses that construe along nominative–accusative lines. Haig (2008: 10) therefore emphasizes that ‘it is not past-time reference in itself which acts as the trigger for non-accusative alignments. It is ultimately a matter of the origins of particular verb forms, their links to the historical reflex of what was in fact once a participle.’

as a result of the verbal action (Dixon 1994: 190). As such, then, ‘passive constructions are semantically close to perfects in that they generally present a state resulting from a completed action’ (Anderson 1977: 336; also cf. Comrie 1976: 85–6; Hopper and Thompson 1980: 271), and may thus (but need not necessarily) result in split-ergative systems. As will be discussed in 4.3.1, other suggestions for the rise of split-ergative alignment in Indo-Iranian languages have been proposed.

The development of such a tense-sensitive split with a distribution of accusative and ergative patterns along the imperfective–perfective pivot seems unproblematic and is cogent with both the semantics of the diachronically underlying forms and cross-linguistic data. Yet the evaluation and classification of such systems can be complicated by certain factors. One such factor is constituted by the survival of the passive at the side of the thence-developed ergative construction in, for example, Middle Persian (Haig 2008: 117ff.), not helped by the poverty of the language’s morphology; the decision between passive and ergative is thus entirely context-dependent in that only the presence or absence of an oblique case argument can (but need not) render it ergative.²³

- (4.18) (a) *dyn* *’yg* *mn* *wcyd*
 religion REL 1SG.OBL choose.PTCP
 ‘The religion which I chose ...’ (M_5794_I; Middle Persian)
- (b) *prhyd* *wcydg-’n* *’wd* *nysšg-’n* *wcyd*
 much elect-PL and hearer-PL choose.PTCP
 ‘Many elects and hearers were chosen.’ (M_2_I; Middle Persian)

This double function can be observed even in modern Iranian languages, for example the Badīn variety of Kurdish, and further existed in Early New Persian (pre-1000 CE; cf. Heston 1976: 167). This goes to show that languages are rarely the neat, abstract systems they are construed to be, allowing for certain developments to remain unfinished and apparently incompatible constructions to exist alongside one another; further, this particular pattern provides important parallel evidence for the development of Classical Armenian syntax argued for in 4.2.1.

A second point of interest presents itself in the guise of verbal agreement features. Returning once more to the West Middle Iranian languages, the copula accompanying the historical participle in Middle Persian and Parthian is expected to agree with O in the past transitive as it would with S in the intransitive (Durkin-Meisterernst 2014: 393–5); at the same time, however, numerous examples illustrate that this must be a generalization. Textual evidence shows that next to O, instances of Ø-agreement and even agreement with A occur.

²³ Ambiguity may still arise in this case, as the oblique case can be used, with or without a preposition, to mark the recipient role as found in ditransitive verbs.

- (4.19) *xyndg bwd hym 'w=t'n dryst (q)yrđ*
 ill become.PTCP be.1SG.PRS and=2PL healthy do.PTCP
hym
 be.1SG.PRS
 'I was ill and you have cured me.' (Middle Persian, O-Agreement;
 MacKenzie 1979: 506)
- (4.20) *ME=m gndlp' BRA 'wct' Ø*
 and=1SG Gandarw PTC slay.PTCP Ø
 'And I slew Gandarw.' (Middle Persian, Ø-Agreement; Heston 1976: 177)
- (4.21) *LA ME L krt' HWEwm*
 NEG because 1SG.OBL do.PTCP be.1SG.PRS
 'No, because I did [it].' (Middle Persian, A-Agreement; Heston 1976: 178)

This variability in verb agreement persists in the Modern Iranian languages as well, as has been mentioned in 4.1.1 (also cf. [Pirejko 1979](#): 486–7). Iranian languages such as Talyši, and Indic languages like Hindi have even grammaticalized an invariant 3SG form of the copula in the transitive past ([Payne 1979](#): 442; [Pirejko 1966](#)).²⁴ The occurrence of such invariant copulas, or the lack of agreement overall, has been interpreted as one indicator of alignment change in progress, in this instance from ergative to accusative alignment ([Comrie 1978](#): 342).

Like the coexistence of ergative and passive in the periphrastic perfect, the variability of verbal agreement in West Middle Iranian is relevant in determining the origin of similar patterns in Classical Armenian.

4.1.3.2 Hierarchy-split alignment

Next to languages which develop tense-sensitive ergative alignment for the past tense, the reinterpretation of the passive as an ergative construction may result in a number of other splits along different lines ([Comrie 1978](#): 357), most notably according to NP type. The kinds of possible pivots are not restricted per se, but largely depend on the original function and usage of the passive in the language in question. English and German may illustrate one of the more typical distributions from which originate other hierarchical splits that tend to develop in such languages on the basis of passive usage.

- (4.22) (a) *James was hit by a car.*
 James be.3SG.PST hit.PTCP by DET car
 'James was hit by a car.' (English)
- (b) *?James was hit by Mary.*
 James be.3SG.PST hit.PTCP by Mary

²⁴ The situation in Hindi is very complex, and an invariant 3SG copula is only one of numerous possible agreement patterns.

- (4.23) (a) *Jakob wurde von einem Stein getroffen.*
 James become.3SG.PST by DET.DAT stone.DAT hit.PTCP
 ‘James was hit by a stone.’ (German)
- (b) *?Jakob wurde von Maria getroffen.*
 James become.3SG.PTCP by Maria.DAT hit.PTCP
 ‘James was hit by Mary.’

In both English and German, the passive sentences in which the agent in the prepositional phrase is not a person seem perfectly plausible and natural (4.22, 4.23); the opposite is true, however, for those involving agentive prepositional phrases containing persons. These are not distinctively ungrammatical, but are restricted to very specific circumstances and discourse situations. Even replacing personal names by NPs that could stand in for them (*James was hit by a man*; *Jakob wurde von einem Mann getroffen*) are unusual, if less so than personal names, and NPs of a different type, such as animals, are fully acceptable (*James was bitten by a boar*; *Jakob wurde von einem Eber gebissen*).

What is observable here is the tendency of agents in the passive to be non-human, and not infrequently inanimate; this tendency is borne out by cross-linguistic data (cf. Silverstein 1976). Indeed it is this very tendency to prefer passive agents that are, in feature analysis, [-human] and [-animate] which is reflected in many of those languages in which ergativity is controlled by an animacy-pivot, precisely since they derive from passives of a comparable nature (Estival and Myhill 1988: 458–9; Haig 2008: 51); a further feature that often plays a role in such determinations is [\pm person]. Based on cross-linguistic evidence, a relatively clear, universal hierarchy can be gleaned from the ways in which various languages split their alignment systems:

While it is true that the exact place along the sequence of noun phrase types generated by the feature hierarchy, at which any given language splits its accusative-agentive-ergative subsystems, is not fixed [...], the *form* of the split(s) is determined. The more highly marked noun phrases (in the sense of feature specification) will always show an accusative case-marking if less highly-marked ones do, as defined by one or more features jointly [...] (Silverstein 1976: 159)

and vice versa for ergative alignment. That is to say that, if nominative–accusative alignment is found in a language for NPs specified as [-person, +human, +animate], all forms higher on a hierarchy, viz. [+person] are extremely likely to show the same alignment; conversely, if a [-person, –human, +animate] NP is ergatively aligned, all those below will likely share in this pattern. Such hierarchy-split systems can become rather complicated and involve more than two alignment patterns, as the example of Warrgamay, a Pama-Nyungan language related to Dyirbal, demonstrates. There, accusative alignment is found for 1/2NON-SG pronouns,

tripartite alignment for 1/2SG and 3NON-SG pronouns, and ergative alignment for nouns, adjectives, and 3SG pronouns (Dixon 1981: 96–7).

Although hierarchy-split languages have little impact on this study, they do illustrate that alignment patterns follow a certain set of rules and directions, and rarely occur in isolation. The fact that there is a universal hierarchy underlying the stratification of such systems raises the question whether this is a reflection of diachronic developments, with all languages eventually striving for one alignment in particular, or whether diachronic patterns are in fact more diverse.

4.1.3.3 Change in alignment patterns

An early claim (Klimov 1973: 232ff.) suggested that there is a clear developmental hierarchy of alignment patterns: languages start out with active, i.e. semantically determined fluid-S alignment, whence they develop ergative, then accusative alignment; the latter is taken as the goal and end of syntactic developments in this matter. This suggestion has since been rejected (Dixon 1994: 185ff.): the theory is undermined by the fact that one of its prime arguments, the existence of fluid-S, or labile, verbs in ergative languages, was overturned by the evidence from many Australian ergative languages in which such verbs do not occur. Similarly, the development of the Iranian languages in particular shows that undulation between, and coexistence of, alignment patterns is well attested, since the Middle Iranian split-ergative alignment sprang from nominative–accusative aligned Old Persian, and eventually resulted in nominative–accusative aligned Modern Persian.²⁵ Nonetheless, a recent empirical study of neurophysiological processing suggests that languages tend to overall prefer, develop, and maintain case-marking systems in which base-form and agent-form are identical (Bickel et al. 2015).²⁶

The mere existence of split systems, as already suggested, is a clear indication of the reality of ‘partially implemented, gradual moves from one alignment to another, occurring in small increments’ (Drinka 1999: 480), and in a variety of directions. The processes underlying the changes from one system to another are not necessarily parallel or mirror images of each other; while ergative alignment may develop out of a passive, for example, and accusative alignment out of the antipassive, the factors determining such developments are quite different, largely owing to the different semantics of passive and antipassive (Dixon 1994: 193ff.).²⁷

²⁵ This is not meant to suggest that any of the languages named is direct ancestor to or descendant of the other, since phonological evidence alone would make such a claim difficult to maintain. Assuming a dialect continuum, however, allows for a generalization as suggested here.

²⁶ Among other things, Bickel et al. (2015: 18) conclude that languages generally avoid ergativity and are less likely to develop it, and if it is developed, are less likely to maintain than to lose it; one of the factors that contributes to the development of ergativity against this principle is language contact; see Chapter 7.

²⁷ The category ‘antipassive’ refers to single-argument predicates; as opposed to passives, in which the patient of the action is that single argument, antipassives only require an agent. A patient may optionally be added as an oblique case adjunct.

Similarly, as shown by the plethora of different developments within the Iranian language family alone, changes are not always predictable; certain morphological developments and syntactic environments are necessary and facilitate alignment change, but they are by no means sufficient to force a change. Whether (and in particular when) such changes are going to occur is not predictable with any certainty (Langacker 1977: 98).

It is, however, at least possible to determine under what circumstances languages are likely to change alignment patterns. While it cannot be excluded on principle that such motivations may arise from phonological changes alone,²⁸ most alignment changes are the result of ‘what might be regarded as the morphological equivalent of the lexicalization of opaque alternations in phonology’ (Anderson 1977: 325), whereby the morphological realization of a syntactic operation (e.g. passivization) is ascribed a new role owing to changes in that syntactic operation and the resulting obscure relation between the latter and its morphological form.

Recalling the morphophonological developments of Old to West Middle Iranian, for example, it is evident that the occurrence of word-final apocope resulted in the loss of most of the suffixal morphology in that language, essentially eradicating whole paradigmatic categories such as the original synthetic preterite. As in a phonological pull-chain shift, the open slot was filled by the periphrastic past tense, presumably used only in specific environments previously;²⁹ at this stage at the latest, the old passive construction must have been reanalysed as ergative.³⁰

Next to morphological changes, syntactic changes, too, can be the cause of alignment change. The analysis of ergative features in Central Kurdish varieties as proposed by Bynon (1980), for example, demonstrates how strict SOV word order (owing to restricted morphological differentiation mechanisms) and obligatory clitic subjects (which cannot occur sentence-initially) have led to topicalization of agent NPs in direct case, thus conforming to the word order ideal. While this is the status quo in Mukri, the Sulaymaniyah variety has progressed further and eliminated verbal agreement marking, so that it now construes as nominative–accusative on the basis of clitic agreement alone.

- (4.24) *estēre-k-ān=mān de-bižārt-in*
 star-DEF-PL_i=1PL IPFV-COUNT.PST-3PL_i
 ‘We were counting the stars.’ (Mukri; Haig 2017: 483)

²⁸ See Sapir (1926) and Anderson (1977) on the development of ergative alignment in Chinook, which comes close to such a case.

²⁹ Haig (2008: 85) sees the rise of the Old Persian periphrastic past as a result of the loss of synthetic past tenses; contrary to the lexically and environmentally restricted Old Persian evidence, however, he takes this construction to be ‘a viable alternative to the finite forms’ already in Old Persian.

³⁰ The evidence for this construction in Old Persian is problematic, as will be discussed in 4.3.1. This stage of late Old or early Middle Persian, in which the loss of word-final syllable occurred, must surely be taken as the *terminus post quem* for the development of the ergative proper.

- (4.25) (a) *šwāna-ka aspa-kān=i bīnī*
 shepherd-DEF horses-DEF.PL=3SG see.PST
 ‘The shepherd saw the horses.’ (Sulaymaniyah Kurdish; [Bynon 1980](#): 160)
- (b) *min pyāwa-ka=m kušt*
 1SG man-DEF=1SG kill.PST
 ‘I killed the man.’ (Sulaymaniyah Kurdish; [Bynon 1980](#): 156)

Changes in morphosyntactic alignment patterns are facilitated by such restrictions, be they syntactic or morphological, but the drive underlying linguistic change must be sought beyond the changes in any one language in particular. The ordering principle does indeed seem to be cross-system harmony ([Haig 2008](#): 193), i.e. the attempt at unifying complementary systems, such as ergative–absolutive and nominative–accusative alignment, in one pattern. The creation of simplicity, then, is the most basic motivation for alignment change; this certainly rings true for split-alignment systems, such as in some Kurdish varieties, where one subsystem is made to conform to the syntactic rules of other, more dominant systems ([Langacker 1977](#): 102ff.). It does not surprise that the direction of such changes is in favour of less marked, viz. simpler, more commonplace forms or structures.

With the motivations, manifestations, and directions of change broadly outlined, the question remains how the conceptual change underlying some transformations progresses: how does a subject arise from non-subjecthood? One indication of this mechanism is provided by the Sulaymaniyah examples above: an extraposed, grammatically unmarked NP has taken the normal subject position through topicalization, and over time has been reanalysed as (part of) the grammatical subject. The transfer of subject-properties to a non-subject, confirmable by means of e.g. Equi-NP deletion, begins with the syntax and only later (if at all) is reflected in the morphology of the new subject (cp. the Germanic dative experiencers, [Cole et al. 1980](#); [Haig 2008](#): 33). Morphological changes reflecting the new subject status need not affect the subject itself, but can materialize as, for example, lacking or changed verb agreement (cp. the Kurdish varieties cited above) or innovative object-marking of previously unmarked O; see [4.3.2.3](#), and [Estival and Myhill 1988](#): 463, 467).

Finally, it bears mentioning that in spite of the tendency of split-alignment languages to change, shift, or simplify their patterns over time, it need not always be in the direction of accusative alignment; especially those languages exhibiting syntactical or ‘deep’ ergativity are more likely to maintain their status quo, or expand the usage of the ergative ([Anderson 1977](#): 355).³¹

³¹ The development of syntactic ergativity, so [Anderson](#) argues, is indeed a result of alignment change; where other languages would have changed morphology to adopt an accusative pattern, languages like Dyrbal have altered their syntactic patterns.

Before summarizing the insights gained from the preceding sections and highlighting again the questions that need to be raised when analysing a language's alignment pattern, particularly in the case of Classical Armenian and West Middle Iranian, it seems appropriate to include a brief discussion of alignment in Proto-Indo-European, if only to elucidate whether any of the features found in its daughter languages might have been inherited.

4.1.3.4 Alignment in Proto-Indo-European

The following brief discussion is not meant to explain in great detail the different arguments in favour of or against particular proposals regarding alignment in Proto-Indo-European, nor about the philosophical nature of that language, but rather to demonstrate that whatever pattern is assumed to govern verbal case-assignment at this point in time, it bears no relevance to the present study or the development of ergative alignment in other Indo-European languages.

The first case in favour of reconstructing Proto-Indo-European as an ergative language was made by Uhlenbeck (1901), who sought to explain the fact that reconstruction necessitated the formal identity of nominative and accusative in inanimate nouns (= ABS), and the *-s marking of animate nominatives (= ERG). Later extensions of this theory have attempted to thus explain, among other things, the suppletive pattern of personal pronouns (cp. Lat. NOM *ego* 'I' vs ACC *me* 'me') and the existence of two sets of conjugations (thematic vs athematic *vel sim.*) in Sanskrit, Greek, Slavic, and Hittite (Vaillant 1936), as well as differences in diathesis (Kortlandt 1983b). In an apt summary of the debate, Bavant (2008: 438) reiterates that further indications of ergative alignment include the secondary application of the accusative (= ABS) marker *-m, and the later spread of the supposedly 'ergative' *-s to intransitive subjects.³²

An important indication that there is a divide between the alignment of at least animates and inanimates is found in Hittite, where neuter nouns can only function as A if suffixed with *-anza* and related forms, thus effectively rendering them animate (Laroche 1962). Given the status of Hittite as one of the earliest descendants of Proto-Indo-European, some scholars assume that it must reflect the pattern of its mother language more closely than later descendants;³³ recently it has been argued, however, that the animacy-split ergative alignment exhibited by Hittite is

³² For the original attempt at an explanation of the Proto-Indo-European ergative-to-accusative shift, see Pedersen (1907). A number of questions remain in this regard: how can a secondary rise of *-m or the spread of 'ergative' *-s marking to the intransitive be so readily asserted in a reconstructed language, most of whose daughter languages show little to no direct indication of ergative alignment? While theoretically not impossible, these points appear to be wholly unnecessary for the cogent reconstruction of Proto-Indo-European; see e.g. Kuryłowicz's change of heart regarding the nature of the *-s marker (1964: 208–11), which need not be an indicator of non-accusative alignment.

³³ Other arguments in favour of Proto-Indo-European ergative alignment draw on the greater restrictiveness in accusative case usage in Hittite as compared to e.g. Greek (Luraghi 1987). It is said to have taken on the function of the absolutive, marking S and O. With the S function being later taken

an internal development of an individuation marker, Hitt. *-ant*, into an ergative marker (Rumsey 1987a: 311; Goedegebuure 2012).

Doubts concerning the ergative analysis of Proto-Indo-European have been raised on a largely typological basis. As mentioned, 4.1.3.2, it is usual for the least prototypical agents (= prototypical patients), viz. those specified as [-animate], to take ergative case in languages with NP-split alignment patterns; that Proto-Indo-European may have been split in alignment is plausibly deducible from the different treatment of neuters. These neuters, however, are not morphologically differentiated along ergative lines, since ergative marking is *prima facie* applied to [+animate] actants. According to the analysis of (Rumsey 1987b: 34), a more cogent analysis of the neuter marking suggests that they adhered to a neutral pattern, where S=A=O (see 4.1.2.1; also cf. Villar 1983; 1984); furthermore, ergative marking would be expected to occur only at the lower end of the animacy hierarchy (Silverstein 1976), and not throughout it, as would be the case here. This neutral/accusative interpretation would allow for the remainder of the system to follow a nominative–accusative pattern, as attested in its daughter languages.

This line of argumentation does, however, presuppose an animacy-split proper, as opposed to a merely statistical preponderance for animate nouns to govern transitive verbs. In fact, it is entirely possible and plausible that the original ergative case should have furnished later nominative endings in those nouns or noun classes, in which it was used frequently (= animate), while not having this effect (or having it to a lesser extent) in less commonly ergative (= inanimate) nouns or noun classes.³⁴

Other data, specifically the question of the semantics of the middle voice and the perfect, have led to other suggestions, for example that Proto-Indo-European showed elements of fluid-S alignment (Drinka 1999); for reasons of limited relevance, this is not discussed here.

Given the intrinsic uncertainty of reconstructing syntactic patterns in languages whose morphological development is not fully secured, it seems as yet indeterminable precisely how Proto-Indo-European was aligned. While ergative alignment for Pre-Proto-Indo-European is a possible analysis, the data from its daughter languages can only give indirect evidence thereof.

For the purpose of this study, it is inconsequential precisely how (Pre-)Proto-Indo-European construed morphosyntactically, since tense-sensitive alignment as occurred in the Iranian languages, specifically in analytic past-tense forms, is not a recognizable feature of Proto-Indo-European. Even the case of this reconstructed language goes to show, however, that alignment shift is not uncommon.

up by the nominative, the accusative remained a strictly functional, i.e. syntactic, case in Hittite, as evidenced by a separate directive case, while in other Indo-European languages it took on other functions as well.

³⁴ For proper discussions and refutations of Rumsey (1987a,b), see Cuzzolin (1998); Nikolaev (2000).

4.1.4 Observations and questions

The above summary of alignment patterns, their typology, and the manners and directions in which they change has been brief and, to a large extent, focused on specific aspects that are of relevance to this study. Simplifications and reductive simplifications have been avoided where possible, but in some regards are unavoidable.

Even within this restrictive framework, however, it has become evident that the Iranian languages, which have been chosen as examples for self-evident reasons, are a veritable treasure trove as regards alignment change, since many patterns are represented in this family, including some typologically rather uncommon ones. This is particularly fortunate since the development of the Iranian language family is one of the better-documented cases of alignment change in existence.

A number of features, both general as well as those gleaned from Iranian in particular, have been given express attention in the above discussion since they are relevant for the analysis of the Armenian data below; the following are the most important:

- tripartite alignment, as occurs in the Pamir language Yazgulyami, is shown to be one of numerous ‘transitional’ alignment patterns which obtain during the process of alignment shift from ergative to accusative;³⁵
- rise of O-prefixation in split-ergative languages in the process of alignment change, partly resulting in tripartite alignment;
- loss of verbal agreement with O in ergative environments, change to S agreement, Ø agreement, or invariable, petrified forms;
- changes in constituent order resulting in, or reflecting, alignment change.

All of these changes occur in isolation as well as in combination with one another in a variety of languages, as discussed. It is of note, however, that all are found within the Iranian family and, in the case of some languages, combine three or more of the elements mentioned. Hence it may be reasoned that the morphosyntactic environment historically provided by Old and Middle Iranian is pluripotent, engendering a variety of changes to different degrees. At the same time, it ought to be kept in mind that the situation in Classical Armenian, as briefly outlined in Chapter 2, and discussed in greater detail immediately below, is not dissimilar, but does not profit from a comparable transmission history, and has as yet not been analysed more closely with reference to its alignment pattern. The next section seeks to remedy this.

³⁵ The term ‘transitional’ should be used with care; clearly this pattern is not transitional in the sense of temporary, but rather in the sense of one of the (potentially many) stages in a progressive, long-term change. While tripartite alignment is uncommon for reasons stated above, it is nonetheless synchronically stable.

4.2 Morphosyntactic alignment of the Classical Armenian periphrastic perfect

With the overview provided in section 4.1 in mind, the present section investigates the morphosyntactic alignment of the periphrastic perfect in Classical Armenian with a view to establishing whether there are any particular subtypes, conditioning factors, or environments that have led to its unusual construction.

First, the usage of said participle and the associated perfect tense are illustrated by means of examples drawn from classical texts. This is followed by a discussion of the various approaches which have been suggested as explanations of the transitive perfect, and a critical analysis of their merits and faults. The case is then made for considering the construction an instance of tripartite alignment, the result of alignment shift from an ergative pattern replicated from West Middle Iranian.

4.2.1 Alignment patterns in the periphrastic perfect

Classical Armenian shows nominative–accusative alignment in the vast majority of contexts; syntactic roles are marked on the NP by means of inflection, consisting largely of fusional suffixes and ablaut patterns. S and A are (un)marked as nominative, while O is reflected by accusative marking; in the nominal and pronominal paradigm, nominative and accusative are identical in the singular, but O is often marked further by the proclitic *z=* if it is definite (see fn. 15).

- (4.26) *ew yet aysorik elanēr na i*
 and after DEM.EMPH.GEN.SG go.3SG.PST 3SG.NOM (in)to
telis mehenac'n ...
 place.ACC.PL temple.GEN.PL
 ‘And after this he went to the sites of the temples ...’ (Ag. CXV.9)
- (4.27) *du es ayn, or kotorec'er*
 2SG.NOM be.2SG.PRS DEM.NOM.SG REL.NOM.SG destroy.3SG.AOR
z=Aris aysč'ap' ams ...
 OBJ=Aryan.ACC.PL so-many year.ACC.PL
 ‘It is you, who has destroyed the Aryans for so many years ...’ (P'B IV.54)
- (4.28) *ew ban=n im z=or lsēk'*
 and word.NOM.SG 1POSS.NOM.SG OBJ=REL.ACC.SG hear.2PL.PRS
oč' ē im, ayl hōrn or
 NEG be.3SG.PRS 1POSS.NOM.SG CONJ father.GEN.SG REL.NOM.SG
arak'ëac'=n z=is
 send.3SG.AOR=DET OBJ=1SG.ACC
 ‘And my word, which you hear, is not mine, but my father’s, who sent me.’ (John 14:24)

As the examples demonstrate, in both transitive and intransitive environments, the nominative marks S and A in present, past, aorist, as well as in the subjunctive mood of these tenses; the same is true for accusative O-marking. The periphrastic perfect, however, does not construe along the same lines. As discussed above, it is composed of the past participle and frequently a form of the copula; the latter is optional in non-biblical texts. In addition, the participle may be used in apposition as a *participium coniunctum*, as an attributive or predicative adjective, or as a converb.³⁶ The usage of the perfect can be roughly divided into four sections according to standard grammatical descriptions: (α) intransitive; (β) passive; (γ) transitive; and (δ) impersonal.³⁷ The last group, first mentioned by Vogt (1937) and proposed in more detail by Weitenberg (1986: 10–12), is attested only sporadically, and further investigation is necessary to establish whether postulating its existence is statistically justified, or if occurrences are rare outliers.

The historical provenance of the perfect construction is debated. A genitive agent, as occurs in types α^* and γ , is not otherwise attested in Armenian with any regularity, nor are there any direct parallels for the transitive construction of type γ in any of the other Indo-European languages.

The following collection provides an example each of a standard perfect with copula, a verbal use without copula, and, where necessary and available, an irregular pattern marked *; they will further illustrate the semantics of the perfect, which, as opposed to the punctual aorist, emphasizes the result of an action.

4.2.1.1 Type α : intransitive

Type α consists of intransitive perfects with a nominative subject, and construes personally, i.e. subject and copula (where present) agree in number and person.

- (4.29) *or ustek' ustek' ekeal haseal ēin i*
 REL.NOM.SG from-all-over come.PTCP arrive.PTCP be.3PL.PST in
t'ikuns
 aid.ACC.PL
 '... who had arrived from all over in aid ...' (Ag. I.8; copular)

- (4.30) *ard hraman haseal ar is omn*
 then order.NOM.SG arrive.PTCP to 1SG.ACC INDF.ACC.SG
Agat'angelos
 Agat'angelos
 'Then, as the order arrived for me, a certain Agat'angelos, ...' (Ag. foreword, 30; non-copular)

³⁶ The notion of converb is discussed in 5.3.3.

³⁷ Ditransitive verbs will be treated as transitive verbs and their recipient or similar argument disregarded.

Type α^* , on the other hand, exhibits genitive subjects; owing to the paucity of evidence, it has not yet been clearly determined whether these construe personally or impersonally, given that participles and adjectives preceding their head noun need not agree with them.

- (4.31) *yaynžam matuč'eal ašakertac'n nora, asen*
 at-that-time approach.PTCP disciple.GEN.PL 3SG.GEN say.3PL.PRS
c'=na
 IOBJ=3SG.ACC
 'At that time his disciples approached, and said to him ...' (Mt. 15:12)

4.2.1.2 Type β : passive

Type β consists of passives, both with an agent (*i* + ABL) and without. Other types of agents do not occur, but instruments may be found in the instrumental. The subject is in the nominative, and the copula (where present) agrees with the subject in number and person.

- (4.32) *erkir ew mardkan, or i nmanē*
 earth.NOM.SG and mankind.NOM.SG REL.NOM.SG by 3SG.ABL
en stelceal
 be.3PL.PRS create.PTCP
 '... earth and mankind, which were created by him.' (Ag. V.9; copular)
- (4.33) *ahawasik es kapeal hogwov ert'am*
 behold 1SG.NOM bind.PTCP spirit.INS.SG go.1SG.PRS
y=Erusalem
 into=Jerusalem
 'Behold, bound by the spirit I go into Jerusalem.' (Act. 20:22;
 non-copular)

4.2.1.3 Type γ : transitive

Type γ consists of transitive verbs, which as expected take an accusative object (often but not unfailingly marked with the DOM proclitic *z=*); the agent of these formations is in the genitive, and there is no agreement between agent or object and copula in number or person, since only the 3SG form \bar{e} , its imperfect $\bar{e}r$, or analogous forms of other copulative verbs are found.

- (4.34) *?oč' z=gir=n z=ayn ic'ē*
 NEG OBJ=writing.ACC.SG=DEF OBJ=DEM.ACC.SG be.3SG.SBJV
ant'erc'eal jer
 read.PTCP 2PL.GEN
 'Have you perhaps not read this writing?' (Mk. 12:10; copular)

- (4.35) *z=or* *areal* *t'agawori=n,* *z=amenesean*
 OBJ=REL.ACC.SG accept.PTCP king.GEN.SG=DET OBJ=all.ACC.PL
astuacakard *lcoyn* *hnazandec'uc'anēr*
 ordained-by-god yoke.DAT.SG subjugate.3SG.PST
 'The king, having accepted this, made them all subject to the yoke
 ordained by god.' (Ag. foreword, 35; non-copular)

In a limited number of instances, type γ^* continues the same construction but with nominative agents.³⁸

- (4.36) *nok'a* *areal* *tanein* *z=na*
 3PL.NOM seize.PTCP lead.3PL.PST OBJ=3SG.ACC
 'Having seized [him], they led him away.' (John 19:17)

4.2.1.4 Type δ : impersonal

As mentioned, it is as yet unclear whether the postulation of a type δ consisting of impersonal constructions is necessary, or whether they can fall under one of the above types. Like α^* and γ^* , this type is fairly rare.

- (4.37) *orum* *xawsec'cal* *z=Mariam*
 REL.DAT.SG promise.PTCP OBJ=Mary.ACC.SG
 '...to whom [one had] betrothed Mary.' (Mt. 1:16)

This type is called 'impersonal', since neither text nor context provide a plausible overt or covert agent while the logical object remains in the accusative or is marked with the DOM proclitic *z=*.

4.2.2 Previous explanations

In what follows, the main theories adduced to explain the transitive perfect will be presented critically, with a view to elucidating their individual explanatory strengths and weaknesses; some of them have been advanced and supported to one extent or another in the literature, others are mere hypotheticals that can be easily excluded. They consider the perfect, in order of treatment, (1) as a construction of *nomen actionis* and *genitivus auctoris*, (2) as a 'have'-perfect and *genitivus possessivus*, (3) the result of the prototypical agent function of the genitive, (4) as intrinsically linked to genitive usage with verbal adjectives in Tokharian, (5) as a language contact phenomenon derived from ergative Caucasian languages, (6) as

³⁸ It is, however, admittedly impossible to determine whether the nominative is governed by the matrix verb or the participle; see also 5.3.3.2.

the result of analogical shifts, (7) as a construction involving denominal adjectives and a verbal abstract, respectively, or (8) as a borrowing from Hurro-Urartian.

Section 4.2.2.9 summarizes the issues with the above theories, and proposes in turn that a different avenue, namely language contact with the West Middle Iranian languages, furnishes the best and most cogent explanation of the nature of the transitive perfect construction in Armenian.

4.2.2.1 *Nomen actionis* and *genitivus auctoris*

The original attempt at explaining the genitive in the perfect construction goes back to Meillet (1903); in a later edition of this work, he expands on his initial thoughts, suggesting that the syntagma be construed as a *genitivus auctoris* with a *nomen actionis*:

[L]’emploi au premier abord étrange, du genitive dans les tours [participiaux] provient sans doute de ce que les participes en *-eal* représentent d’anciens substantifs: *nora bereal ē* ‘il a porté’ a dû signifier originairement ‘il y a porter de lui’, c’est-à-dire que l’infinitif et le participe seraient des formations également nominales, mais de structure distincte.³⁹ (Meillet 1936: 128–9)

The issues with this explanation were pointed out first by Deeters, who underlines the difficulties in explaining the difference between the intransitively employed participle with a nominative and the transitive participle with a genitive agent:

Nicht erklärt wird durch diese Deutung die Tatsache, daß diese Wendung fast ausschließlich bei transitiver Geltung des Partizips vorkommt. Warum sagt man ‘Es gibt mein ihn-Tragen,’ aber nicht ‘Es gibt mein Kommen?’⁴⁰ (Deeters 1927: 80)

Benveniste (1952: 58) has further elaborated on Deeters’s objection and adds that Meillet’s analysis would require a different morphological history for the intransitive and transitive participle, respectively: ‘Il faudrait admettre que *-eal* est participle dans le parfait intransitif, mais nom d’action dans le parfait transitif et là seulement, sans qu’on discerne non plus de raison à cette répartition.’⁴¹

³⁹ ‘The usage of the genitive with participial phrases, while curious at first glance, without doubt derives from the fact that the *-eal* participles are old nominal forms: *nor a bereal ē* “he has carried” originally meant “there is [an act of] carrying by him”. That is to say the infinitive and participle would both be nominal formations, but with different structures.’

⁴⁰ ‘This interpretation does not explain the fact that this construction is almost exclusively found with transitive participles. Why can one say “There is my carrying-him” but not “There is my coming”?’

⁴¹ ‘One would have to admit that the *-eal* form is a participle in the intransitive perfect, but an action noun in the transitive perfect and only there, without being able to discern any reason of this dichotomy.’

4.2.2.2 ‘Have’-perfects and *genitivus possessivus*

The concept that the Armenian perfect, like that of Old Persian, should be construed as a ‘have’-perfect with its agent in the *genitivus possessivus* originates with [Benveniste \(1952\)](#) and finds acceptance even in more recent works ([Schmitt 2007](#): 152). Suggesting that the structures found in the so-called *taya manā krtam* construction⁴² (genitive-dative agent, nominative object) cannot be sensibly analysed as a synchronic passive, [Benveniste](#) proposes that

le sens du parfait perse [...] est possessif. Car de même que **manā puṣṣa astiy* “mihi filius est” équivaut à “habeo filium”, de même *manā krtam astiy* est à entendre “mihi factum est”, équivalent à “habeo factum.”⁴³ (1952: 56)

[Benveniste](#) goes on to argue in favour of applying the same model to the Armenian question, rejecting [Meillet’s](#) explanation. Pointing out the possessive function the Armenian genitive-dative fulfils,⁴⁴ [Benveniste](#) suggests that the Armenian perfect is, like the Old Persian, ‘une expression possessive bâtie en arménien même sur un modèle idiomatique pour rendre ce qui était apparemment le sens propre du parfait transitif’ (1952: 60).⁴⁵ The fact that Armenian, as opposed to Old Persian, takes an accusative object is explained as a cogent development of its transitive nature.

In a later paper, [Benveniste](#) rightly points out that the syntax of the perfect and that of the participle are related (1959: 58).⁴⁶ In addition, he underlines that the occurrence of the accusative object entails that the construction at work here must be active.⁴⁷ The occasional occurrence of genitive agents with intransitive verbs is explained here as ‘préférée parce qu’elle faisait mieux ressortir le rapport

⁴² This phrase, originally thought to be an unusual passive ([Geiger 1893](#): 1), has since been the subject of much debate: analysed by [Benveniste \(1952\)](#) as a possessive construction, other interpretations have suggested an ergative ([Haig 2008](#): 86–8; [Jügel 2015](#)) or benefactive ([Karimi 2012](#): 29, 37) interpretation. For a more detailed discussion, see section 4.3.1.

⁴³ ‘The [Old] Persian perfect has a possessive meaning, for **manā puṣṣa astiy* “mihi filius est” is equivalent to “habeo filium” in the same way that *manā krtam astiy* must be understood as “mihi factum est”, which is equivalent to “habeo factum.”

⁴⁴ Apart from pronominal paradigms, genitive and dative are morphologically indistinguishable in Armenian. It is, however, noteworthy that the perfect construction never construes with the pronominal dative, so the genitive is indeed the agent case. Pronominal datives can function as the agents of infinitives; this phenomenon is less well attested, however, and need not be related to participial usage (cf. [Mkrtč’yan 1967](#)).

⁴⁵ ‘a possessive expression in Armenian itself, built on an idiomatic model to express what was apparently the proper meaning of the Armenian transitive perfect.’

⁴⁶ He states, in fact: ‘ces deux problèmes n’èn font qu’un, qu’il s’agit ici et là de la même relation syntaxique’ (‘These two problems are, in fact, the same, since in both cases the same syntactic relation is expressed’). For a discussion of the accuracy of this statement, see Chapter 5.

⁴⁷ This, in turn, of course bears some relevance on the question, whether the perfect in Old Persian is active too. According to [Cardona \(1970: 10\)](#), it is more plausible to maintain that the Old Persian construction is a passive; cf. [Skjærvo \(1985\)](#) for a synchronic overview, and see section 4.3.1 for a more detailed discussion.

d'antériorité' (1959: 63);⁴⁸ this explanation, like other ad hoc explanations of individual passages, lacks any formal reasoning and cannot convince. In contrast, his judgement that the non-copular participle acts just like the perfect tense, stripped of its copula since the person is marked in the main verb, deserves some attention (1959: 65); this analysis aptly avoids the problem of having to explain how secondarily developed verbal rection is imposed on the primarily nominal participle.

Schmidt (1962: 231–2) accepts Benveniste's main points and concludes that, owing to its intransitive function, the fact that it can be used as a passive-intransitive participle (whence derives the transitive perfect), and that it further functions as an active transitive participle without copula, the Armenian *-eal* participle according to Benveniste must have been 'primär unempfindlich gegen eine Diathesenunterscheidung. Hierin stimmt sie mit anderen armenischen [...] Verbalnomina überein.'⁴⁹ He suggests that only this indifference to diathesis allows for the construction to have all its various functions, since it has 'seine Flexion zugunsten einer finiten Verbalauffassung (Objekt im Akkusativ) weitgehend aufgegeben.'⁵⁰

This argument is not cogent, however; the Armenian participle has not given up its flectional character and, when used attributively, can still be fully declined. While Schmidt himself adds that supposing an originally passive–intransitive participle is more sensible, he suggests that the transitive-active rection of the periphrastic perfect may be explained as follows: 'Der Anstoß für die aktive Umdeutung der primär passivischen Formation des periphrastischen Perfekts transitiver Verbalstämme wäre demnach durch das appositiv gebrauchte Partizip erfolgt' (1962: 233).⁵¹ This argument, based on Benveniste's observation that participle and perfect construe identically, seems circular: since it must be assumed that the active function of the participle can only plausibly be derived from its usage as part of the supposed 'have'-perfect, how can it have been used actively in apposition before, thus causing the active interpretation of the perfect (and so forth)?

Furthermore, the same objection may be applied to both Benveniste's and Schmidt's understanding of the situation: Benveniste mentions the 'statut double' of the participle, partaking both of verbal and nominal rection, viz. taking an accusative object while being governed by a possessive genitive. This pattern, while not unheard of in other languages,⁵² does not seem to have any close parallel in any

⁴⁸ 'preferred because it expressed better the anterior reference.'

⁴⁹ 'originally not sensitive to a differentiation of diathesis. Herein it agrees with other Armenian verbal nouns.'

⁵⁰ '[The participle has] largely given up its inflection in favour of an interpretation as a finite verb (object in the accusative).'

⁵¹ 'The trigger for the active reinterpretation of the primarily passive formation of the periphrastic perfect of transitive verbal stems would thus be the appositive use of the participle.'

⁵² Turkic languages frequently have an ill-defined boundary between nominal and verbal rection: TTurk. *Ayşe'nin bu oteli seçmesi bizim için iyi oldu*, 'Ayşe's choosing this hotel has been good for us';

other Indo-European language.⁵³ A further problem must be seen in Benveniste's assumption that the accusative object is simply a logical consequence of the 'transitive nature' of the construction; if indeed the perfect were based on the possessive construction, would the latter not be expected to show similar developments in the direction of an accusative? Such occurrences, however, are not attested.⁵⁴

4.2.2.3 Genitive as a prototypical agentive case

In view of the various approaches presented above, it is worth considering also the question of whether the genitive may have been a prototypically agentive case. Schmidt (1963: 3–4) points out that, although rare in the earliest attested Indo-European languages, the genitive seems to frequently take on an agentive role, even in languages such as Latvian, in which according to Endzelins (1923: §774) agentive passive constructions occur but are avoided in favour of active phrasings. Next to Latvian, Schmidt (1963: 8–9) mentions other Indo-European languages in which genitive agents are known to occur with verbal adjectives in *-to-, viz. Lithuanian, Old Persian, Vedic, or with participial formations in *-ues-/-us- or *-lo-, namely Tokharian and Armenian.⁵⁵ He rightly emphasizes that the genitive as agent with finite verbal forms must be secondary to its use with nominal, non-finite forms in Latvian, and thus by extension also in other languages (Schmidt 1963: 11).

This is further corroborated by Hettrich (1990: 94, 97), who points out that the genitive in agent function 'war ursprünglich auf die Verwendung neben passivischen Verbaladjektiven beschränkt',⁵⁶ as shown by its statistically more frequent occurrence with these in Vedic, Greek, and Old Persian; he furthermore points out that this function pertains to the basic genitival meaning of appurtenance, and does not represent a separate function of the case, but developed in agentive uses *einzelnsprachlich* in later forms of the respective languages. Whether the

here, *seçmesi* is a verbal noun with a direct object *bu oteli* and a genitive agent/possessor *Ayşe'nin*. The English translation reflects that the same is possible in this language, but this doesn't hold true for all other Germanic languages: NHG **Ayşes (das) Hotel Auswählen war gut für uns*.

⁵³ It is, of course, not impossible to arrive at such a pattern through successive stages of development; it is conceivable that the object should have been in the nominative initially, and then, after the periphrastic perfect had been analysed as 'une forme simple à l'égard de son objet' (Benveniste 1959: 60) ('a simple form with respect to its object'), analogical levelling with all other tenses should have occurred, resulting in the use of an accusative object. This development, however, does not provide any explanation for e.g. contaminations such as genitive agents with intransitive verbs, or the fact that the non-copular participle, too, follows the perfect-type case-assignment.

⁵⁴ A discussion of Sakhokija (1984; 1985) is not attempted here, since her possessive approach adds little new information and draws too heavily on (infelicitous) comparisons to Georgian; see also Schmalstieg (1988).

⁵⁵ While the connection may be historically relevant, Schmidt here fails to mention in any detail or account for the fact that in Armenian, the genitive cannot be synchronically analysed as a passive agent, since it takes an accusative object. The role of the passive agent is taken up by the prepositional periphrasis with *i* + ABL.

⁵⁶ 'was originally restricted to usage next to passive verbal adjectives.'

usage of genitives with verbal adjectives in Armenian, Tokharian, and Vedic are structurally comparable will be explored immediately below.

Further evidence against a prototypically agentive genitive is provided by [Jamison \(1979: 133–7\)](#), whose research suggests that ‘the gen. agent so often attributed to Vedic in the standard literature is marginal, even nonexistent, in early Vedic, except in certain semantic categories’ (1979: 137).⁵⁷ A similar verdict applies to the rare genitive agents found in Greek; the example of *διόδοτος* ‘Zeus-given’, which has been cited as a clear indication of an old genitive agent already by [Brugmann and Delbrück \(1897–1916: II.2.601\)](#) and [Schwyzer \(1946\)](#), and was compared with Ved. *patyúh kritá* ‘husband-bought’,⁵⁸ is rejected by [Jamison \(1979: 142\)](#), who points out that in its formation it is quasi-unique,⁵⁹ and that similar compounds with inflected forms as their *Vorderglied* occur in Homer, but exclusively with the dative, e.g. Gk. *ἀρηίφατος* ‘Ares-killed’, *αἰγίβοτος* ‘goat-grazed’. Whether the *Vorderglied* represents a genitive, or as per [Jamison’s](#) suggestion an old ablative, it is unlikely that it reflects an old state of the language.

A different approach relating directly to the function of the genitive is offered by [Trost \(1968: 104–5\)](#). He attempts to explain the agentive genitive on a purely semantic basis: he distinguishes *Subjektsperfekt*, which details a state of the subject and is most commonly intransitive, e.g. ‘to die’, ‘to be born’, and active, transitive verbs, which form *Objektsperfekt*, an action directed towards an object that cannot influence said action. The argument continues that the subject of the *Subjektsperfekt* is comparable in its affectedness to the object of the *Objektsperfekt*, but not to the subject of the latter. Trost asks:

Der gedanklichen Konzeption des Objektsperfekts ist es eigen, daß das Subjekt als Zustandsverursacher fungiert, weil es die den perfektischen Zustand auslösende Handlung beherrschte. Warum sollte nun dieser Wandel in der Rolle des Subjekts nicht auch grammatikalisch zum Ausdruck kommen?⁶⁰ ([Trost 1968: 105](#))

[Trost’s](#) semantic analysis, which appears to be closely aligned to the concept of ergativity, fails to acknowledge, however, that such a shift in role and/or emphasis is cogently expressed, both semantically and syntactically, by the passive; further, he pays no attention to the fact that similar patterns are lacking entirely in any other tense, even those which may themselves express states.

⁵⁷ The semantic groups mentioned include verbs of perception, consumption and distribution, and enjoyment, which also show variation in case assignment of their other core arguments.

⁵⁸ It ought to be noted, however, that philological doubts concerning this formation, occurring in Pindar and Aeschylus, were mentioned in [Rödiger \(1867: 320\)](#), stating that if the first part is to be considered a genitive, ‘so sieht man in der welt nicht ein, wie derselbe zur Bedeutung des compositum passen soll’.

⁵⁹ The only comparandum is Gk. *θεόδοτος*, which may be an analogical formation.

⁶⁰ ‘It is inherent to the mental concept of the *Objektsperfekt* that the subject acts as the causer of a state, because it is in charge of the action causing the perfective state. Why then should this change in the role of the subject not be expressed in grammatical terms, too?’

It appears unlikely, therefore, that the genitive should have a prototypically agentive role in Proto-Indo-European, from which its daughter languages might have inherited such a use; that such a role might have developed *einzelnsprachlich*, however, cannot be excluded.

4.2.2.4 Evidence from Tokharian and Vedic verbal adjectives

The occurrence of *-lo- verbal adjectives in Tokharian, the agent of which is expressed by means of a genitive, appears to provide the closest link to the Armenian situation. Tokharian A and B both have two distinct verbal adjectives based on the *-lo- suffix, rendered as TA *-l*, TB *-lle/-lye*.⁶¹ One is based on the present stem and expresses a deontic modality, the second is formed on the basis of the subjunctive stem and generally expresses a potential modality. Only the deontic form is of interest in the present context.

As the following examples show, the verbal adjective is primarily passive, and agrees with its patient, whereas the agent is found in the genitive (Thomas 1952: 19):⁶²

- (4.38) *śaul nemce tärkänälle kreñcepi*
 life.NOM.SG certainly give-up.VBADJ.NOM.SG good.GEN.SG
ste ś[au]m(o)nts[e]
 be.3SG.PRS man.GEN.SG
 ‘Certainly life must be given up by a good man.’ (MQR 35a6)

- (4.39) *penäs kraś mänt yal ñi*
 say.2PL.IMP good.VOC.PL how go.VBADJ.NOM.SG 1SG.GEN
 ‘Say, good ones, how shall I do [it]? (lit. ... how is it to be done by me?)’
 (No. 71a1)

At the same time, however, Thomas points out that on occasion, verbal adjectives with an instrumental agent can be found as well; such occurrences are attributed to influence from Sanskrit.

- (4.40) *yessāk yāṃṣälle*
 2PL.INS do.VBADJ.NOM.SG
 ‘You must be acting. (lit. There must be acting by you.)’ (Udānāl. 27b3)

⁶¹ As noted by Thomas (1977), the derivation of TB *-lle/-lye* is debated. Van Windekens (1976: 95) argues that these forms are likely the outcome of a palatalized protoform *-ljo-. A different suggestion by Couvreur (1947) proposes a secondary formation on the basis of the feminine singular form. Thomas calls for caution, however, since it is unlikely that functionally and formally closely related forms should have different origins. He proposes (1977: 258–9) that TB *-lle* be a ‘redoublement secondaire’ as postulated by Van Windekens (1976: 123–5), comparing the situation to privatives like TB *anākätte* ‘faultless, immaculate’, *ayāmätte* ‘not to be done’, where *-tte* < *-te < *-to-s. The TB *-lye* form, on the other hand, is analysed as an original oblique case, based on the evidence of other adjectives like TB *allek*, obl. *alyek* ‘other’, *emalle*, obl. *emalye* ‘hot’ (cf. also Thomas 1967). Winter (1992: 152) objects, arguing that both Tokharian A and B forms are derived from *-ljo-. Most recently, Fellner (2017: 157) suggested that the Tokharian gerundive is a ‘conflation of the neuter abstract/adjective *-lo- and animate *-lijo- since *-lo- n. and *-lijo- m. became equivalent in the pre-history of Tocharian.’

⁶² For bibliographical data on the quoted examples, see Thomas (1952).

Thomas further mentions that these verbal adjectives also occur with direct objects in the oblique case, as opposed to the predominant passive formation; he differentiates between an impersonal and a personal construction.

- (4.41) *kurkal tune viciträ pyāpyai*
kurkal.NOM.SG tuna.NOM.SG vicitra.NOM.SG flower.OBL.SG
maṇḍālne taṣale
 magic-circle.DIR place.VBADJ
 ‘*Kurkal, tuna* [and] *vicitra*-flower ought to be placed in the magic circle.’
 (Filliozat. Frgm. M 3a5)

- (4.42) *sessatatte rine meskeṣṣe[m] cāneṃ aiṣlyi*
Šeṣadatta.NOM.SG town.LOC joint.OBL coin.OBL.PL give.VBADJ
tākaṃ
 be.3SG.SBJV
 ‘In town, Šeṣadatta needs to hand over the money transfers related to the bands.’ (MQ 23.4)

In these constructions, an agent either remains unexpressed (impersonal), or is in agreement with the verbal adjective, thus essentially rendering it active. Concerning the historicity of both syntagmata, however, Thomas (1952: 23) speculates ‘ob nicht teilweise die sich ergebende Obl.-Konstruktion beim I. Vba. necess. auf bloße Unkorrektheit der Schreiber zurückzuführen ist,’⁶³ and wonders whether in other cases the scribe may not have simply misconstrued the sentence (1952: 25).

There are a number of important differences between the Tokharian and Armenian situation, however. A first misfit is represented by the largely passive nature of the verbal adjective, as demonstrated by the examples above, whereas the Armenian construction with a genitive agent is almost always active.⁶⁴

The verbal adjectives in Tokharian express deontic modality, which in itself is unproblematic. Yet, as Luraghi (1995: 262) summarizes, ‘[m]any Indo-European languages have dative agents with forms of the verb that express obligation’; a very helpful overview concerning the spread of this type of construction can be found in Hettrich (1990: 64–6), who demonstrates that in Hittite, Vedic, Avestan, Greek, Latin, Lithuanian, Slavic, Germanic, Tokharian, and Old Irish, deontic modal expressions ‘stimmen in ihrer Struktur überein: Ihr Prädikat besteht aus der Kopula (die fehlen kann) und einem participium necessitatis [...], ein Agens kann im Dativ hinzutreten.’⁶⁵ In fact, the genitive in Tokharian has through case syncretism adopted a number of the functions of the prototypical dative otherwise lost in

⁶³ ‘whether the resulting oblique construction with the first necessitative verbal adjective cannot be, at least in part, reduced to mere inaccuracies of the scribe.’

⁶⁴ The Armenian situation, as suggested by Stempel (1983: 87) (see 4.2.2.6), may be a secondary development, however.

⁶⁵ ‘[These deontic expressions] agree in their structure: their predicate consists of a copula (which may be omitted) and a necessitative participle [...], an agent may be added in the dative.’

Tokharian (Zimmer 1985: 568–9; Pinault 2008: 463; 2011: 383), e.g. the *dativus (in-)commodi*, so that the occurrence of the genitive with the *-lo- based verbal adjectives is of no immediate relevance for the question of the Armenian perfect.

4.2.2.5 Caucasian influence and ergativity

The possibility that the Armenian periphrastic perfect should be influenced by the neighbouring Kartvelian languages was first mentioned by Meillet (1899–1900: 385) who suggested that ‘cette construction inexplicable au point de vue indoeuropéen, rapelle au contraire le “character passif du transitif dans les langues du Caucacus”’;⁶⁶ reiterated also in a later work (Meillet 1936: 95).

This notion was rejected by Deeters (1927) on multiple grounds: on the one hand, he points out that ‘Konstruktionen, wo weder Agens noch Patiens im Nominativ stehen, sind hier [viz. in the Caucasian languages] ebensolche Ausnahmen wie im Indogermanischen’ (1927: 80).⁶⁷ Secondly, Deeters underlines that in Kartvelian languages, a morphological passive is well developed, so that its lack in Armenian and the presumed retention of a genitive agent cannot be historically grounded. Despite denying a Caucasian connection, Deeters, like Pedersen (1907: 151–3) and Brugmann and Delbrück (1897–1916: II.3.502), adopts Meillet’s interpretation of the participle as a *nomen agentis*, cautioning, however, that Meillet does not explain why this connection occurs mainly with transitive verbs, and that this would imply that the appositive or non-copular usage of the participle was secondary to its predicative use.

A different perspective is offered by Lohmann (1937), who insists that the construction in question must ‘irgendwie “kaukasischen” Sprachgeist reflectieren’ (1937: 51).⁶⁸ While admitting that the surface form of the respective constructions in Armenian and Kartvelian are not compatible, Lohmann suggests that the participle was originally a *nomen actionis*, thus *nora teseal ē zmard* ‘he has seen the man = there was his seeing the man’, the object of which action is set in the accusative. This accusative corresponds to the nominative of Kartvelian transitive perfect constructions—what in modern terminology would be referred to as an ergative construction. Lohmann thus relates the Armenian accusative and Kartvelian nominative on the basis of their object function in the perfective (1937: 53), not taking into account any other syntactic circumstances. He further equates the Armenian genitive agent with the Kartvelian dative-accusative, since a differentiation of dative and genitive in Armenian is morphologically expressed almost exclusively in the pronouns, and thus sees his theory of a Caucasian substrate confirmed. Solta, in turn, emphasizes that Armenian ‘bildet offenbar eine kaukasische

⁶⁶ ‘This construction, inexplicable from the Indo-European perspective, rather calls to mind the so-called passive character of the transitive in the languages of the Caucasus.’

⁶⁷ ‘Constructions in which neither agent nor patient are in the nominative, are as much an exception [in the Caucasian languages] as in Indo-European.’

⁶⁸ ‘must somehow reflect a Caucasian linguistic spirit.’

Konstruktion mit seinen Sprachmitteln nach'⁶⁹ (1963: 123) to justify the apparent incongruity.

Lohmann's approach cannot convince. For a Caucasian substrate in Armenian to have such a profound effect on the syntax of the verbal system, a number of other borrowings or calques would have to be in evidence (Thomason and Kaufman 1988: 60); compared to the influence of Iranian languages, however, the Caucasian substrate is negligible since it is almost nonexistent.⁷⁰ Even if a sufficiently strong substrate were supposed, Lohmann's equation is unbalanced. For it is readily noted that in the present, Kartvelian, like Armenian, possesses a nominative subject and a dative-accusative object; were the two perfective constructions related, one would assume that Armenian would have inverted the subject-object relationship in the same way that Kartvelian has, rather than choosing an evidently unrelated case (cp. Schmidt 1962: 227–8).

A similar comparison with the Kartvelian languages is advocated by Tumanyan (1974), who believes the Armenian perfect to be construed in ergative alignment (see also Anderson 1977: 330; Comrie 1981: 181); yet, like Lohmann before him, Tumanyan does not give any indication as to how this supposed Armeno-Kartvelian syntactic parallel might have arisen. This proposal is sensibly rejected by Schmidt, who points out that in Armenian, intransitive subject and transitive object do not align, as would be expected in an ergative construction (cf. Tumanyan 1974: 960). Schmidt also makes the observation that, were the Armenian construction interpreted from an ergative perspective,

[d]as armen. Syntagma—mit Ziel im Akk.—erklärt sich am besten als Transformationsergebnis einer zu Grunde liegenden Partizipialkonstruktion: *'von ihm (genitiv) ist die Arbeit verrichtet worden' [...] das altarmen. Perfekt stell[t] augenscheinlich [eine] hybride, im Übergang zu NK [nominative construction] begriffene, EK [ergative construction] dar.'⁷¹ (Schmidt 1980: 166)

He further points out that 'in dem armen. Beispiel *z-gorc gorceal ē nora* 'er hat die Arbeit verrichtet' ist vorhistorisch von der Konkordanz zwischen Verbum [...] und Ziel [...] auszugehen' (1972: 454).⁷² This transitional status allows

⁶⁹ '[Armenian] imitates a Caucasian construction with its own linguistic means.'

⁷⁰ As Djahukian (2003) points out, no systematic studies facilitating the detection of Kartvelian loans in Armenian or vice versa have been conducted yet; his findings, as well as those presented in Deeters (1927: 111–14) and Vogt (1938), suggest that the prehistoric contact between the two languages was insignificant at least for the development of morphology and syntax, as opposed to the influence from e.g. Greek or Middle Iranian. Vogt's findings concerning Georgian elements borrowed into Armenian are not numerous, and have been largely rejected by more recent scholars (cf. Gippert 2005b: 153–5).

⁷¹ 'the Armenian syntagm—with its goal in the accusative—is best explained as the result of a transformation of an original participial construction: *'by him (genitive) the work was done' [...] The Old Armenian perfect apparently represents a hybrid construction, transitioning from ergative-absolutive to nominative-accusative.'

⁷² 'In the Armenian example *z-gorc gorceal ē nora* 'He has done the work', a prehistoric agreement between verb and goal must be assumed.'

for, or explains, both the coexistence of a potentially ergative agent-marking genitive with an active-aligned accusative object and the general state of flux of the construction, as indicated by incursion of intransitive, viz. nominative, agents in perfect transitive constructions and vice versa (see 4.2.1; cf. Schmidt 1992: 299–300; Vogt 1937: 59). Schmidt (1972: 453; 1980: 165) also points out that de-ergativization processes in the transitive system were already ongoing in the ‘Südkaukasische Grundsprache’;⁷³ at the same time, Schmalstieg (1984: 141) presents evidence of the application of ergative marking in intransitive contexts in both Georgian and Lithuanian. Some Caucasian languages, in turn, have generalized ergative alignment: in Megrelian, the aorist construes in the ergative irrespective of (in)transitivity, while in Laz, the ergative is used only for transitive verbs, but in all tenses (cf. also Boeder 1979: 439–40; Kortlandt 1983b: 320).⁷⁴

Since in Armenian, we find sporadic signs of transitive-marked intransitives and intransitive-marked transitives in the perfect, as well as an active-marked object in a potentially ergative construction, this transitional approach is worth pursuing, and will be discussed in more detail in 4.2.3. Assuming Caucasian influence on the Armenian perfect construction is, however, neither necessary nor sensible.

4.2.2.6 Analogical shift

Stempel (1983: 69ff.) rejects all previous attempts at explaining transitive perfects. Meillet’s interpretation of the perfect as an original phrase consisting of *nomen actionis* and copula (*nora bereal ē* ~ ‘il y a porter de lui’), already called into question by Deeters (1927), raises the question why the same mode of expression is not also employed for intransitives. In addition to Benveniste’s criticism that this construction is not perfective but instead suggests a progressive or even futuric aspect, Stempel takes issue with the rection of the phrase, which is both verbal (accusative object) and nominal (genitive agent). Finally, commonly nominalized participles such as *mereal* ‘dead person’ and *arak’eal* ‘emissary, apostle’ are passive in meaning and do not reflect the verbal abstracts envisaged by Meillet.

Considering the approaches of Benveniste and Lohmann, Stempel argues that both explanations are unsatisfactory. In view of Benveniste (1952: 60), who compares the perfect phrase *nora gorceal ē* ‘he has done’ with *nora ē handerj* ‘he has a garment’, Stempel argues that the comparandum to *handerj*, the object possessed, ought to be, not the participle as above, but the object of the perfect, usually found in the accusative (1983: 73). Citing examples from Italian, where there is a congruence between the perfect participle and its object if the latter precedes,⁷⁵ he sees

⁷³ Similarly Schmidt (1982), where an undefined relationship with South Caucasian languages is still advocated, although its details and reality have not been elucidated in any way.

⁷⁴ Schmalstieg considers all IE languages to have been originally ergative. As regards the Armenian perfect, he argues in favour of an originally intransitive formation, later interpreted as a passive. Neither of these perspectives find sufficient corroborations in the data.

⁷⁵ Compare It. *ho visto la casa* ‘I have seen the house’ and *le case che ho viste* ‘the houses which I have seen’.

in the lack of congruence between the Armenian participle and its object a flaw in Benveniste's line of argument.

A second objection against a possessive interpretation may be raised on the basis of diathetical implications; as in the Romance languages, such an approach requires the participle to be inherently passive–intransitive, which it is (see the Appendix and 5.3.1; cf. Vogt 1937: 51, index locorum); yet, the Armenian participle is with active meaning even without the copula.

- (4.43) *ew tesimal z=žotovurds=n el i*
 and see.PTCP OBJ=crowd.ACC.PL=DET go.3AOR.SG into
leařn
 mountain.ACC.SG
 'He, having seen the crowd, went into the mountains.' (Mt. 5:1)

According to Stempel (1983: 74), a possessive interpretation would therefore necessitate a secondary origin of the non-copular usage of the participle, which he believes to be unlikely.

Lohmann's interpretation only receives very limited attention, and is dismissed mainly on the basis of a methodological issue. Explaining the Armenian construction as not reflecting the passive character of the transitive (1937: 51), he still suggests that the accusative is used in Armenian as a result of this characteristic.

Stempel himself offers an explanation of his own. In agreement with Benveniste and Schmidt, he presumes a prehistoric passive construction of the form **nora gorceal ē gorc*, where *gorc* is the clausal subject; this assumption, according to Stempel, aligns best with the passive–intransitive and adjectival nature of the *-eal* participle (1983: 83). At the same time, he attempts to find a solution that avoids the problematic possessive nature of Benveniste's proposal and further provides an Armenian-internal motivation for a transition from passive to active.

Based on his assumptions concerning the diathetic nature of the participle, he argues that the perfect was initially only able to form a passive, whereas other tenses offer a distinction between active and passive (1983: 84).⁷⁶ The genitive agent in this construction is inherited from the proto-language, and as such is found in similar formations in Tokharian, Lithuanian, and in remnants of Greek (but see 4.2.2.3).⁷⁷ With the integration of the passive perfect into the general tense

⁷⁶ This argument is problematic. Only aorist-based forms stringently differentiate active and passive, while in the present only the *e/i*-conjugation allows for such a distinction; no separate passive occurs in the imperfect. See the discussion in the Appendix.

⁷⁷ Cp. Schwyzer (1946). While this is the case for Tokharian (Thomas 1952: 19–20), there the genitive is applied in both transitives and intransitives. As mentioned by Hettrich (1990: 93, 95) and Mathiassen (1996: 143, 185–6), the genitive is an agent case for the passive in Lithuanian; both state, however, that passives are usually agentless, and this practice is avoided. The notion of a prototypical genitive agent has been discussed above; it is further worth taking into account that genitive agents in passive constructions are cross-linguistically rare and their usage normally correlated with a nominal (≠ adjectival) origin of the passive verbal morphology (Kazenin 2001: 904).

and aspect system, the genitive agent did not align with the regular passive marking by *i* + ABL, and therefore the latter syntagm was introduced, leading to the coexistence of **nora gorceal ē gorc* and *gorc gorceal ē i nmanē*, the latter being productive in attested Classical Armenian.

After the analogical creation of the new perfect passive, [Stempel](#) suggests further analogical processes in which the original **nora gorceal ē gorc*, whose function was now performed by the *i* + ABL formation, was reinterpreted as an active:

Aor.Act. *na gorceac (z=)gorc* : Aor.Pass. *gorc gorcečaw i nmanē* ::
 Perf.Act. **nora gorceal ē gorc* : Perf.Pass. *gorc ē gorceal i nmanē*.

Filling the perfect active slot, the participle itself had not yet adopted an active meaning; given the large-scale isomorphy between nominative and accusative,⁷⁸ it was first necessary to reinterpret the grammatical subject as the logical object of the transitive perfect clause. Any potential congruence in case- or number-marking was likely eliminated; adjectives preceding their head nouns are not usually marked accordingly in Armenian, and in analogy this pattern may have been adopted for postposed predicative adjectives ([Stempel 1983](#): 85). In a further analogical step, and owing to the reinterpretation of grammatical subject as logical object, the latter was marked by the nota accusativi *z=*, as is frequently the case in all other tenses.

This last step allowed for an active interpretation of the participle even in attributive contexts, which in turn required the maintenance of a morphologically marked difference between active and passive participle, thus passive *na teseal ē* vs active *nora teseal ē* ([1983](#): 86).⁷⁹

As has been discussed above already, [Stempel's](#) theory cannot stand, owing to the assumption of an inherited agentive genitive from the proto-language, and the extent to which analogical remodelling is required. The supposed reanalysis of the construction as active and the subsequent adoption of the accusative *z=* raises the question whether that genitive agent would not have been eliminated first as not conforming to agent-marking in Armenian.

4.2.2.7 Attributive adjectives

[Weitenberg \(1986\)](#) adds considerably to [Stempel's](#) categorization of perfective expressions: in addition to the intransitive, passive, and transitive, he notes occurrences of juxtapositions which show unusual syntax, e.g. intransitives with a genitive subject, and a whole new group of impersonal expressions such as *orum*

⁷⁸ For detailed discussion of this merger, see [Meillet \(1936: 56\)](#), [Godel \(1975: 99–102\)](#), [Kortlandt \(1985\)](#).

⁷⁹ [Stempel](#) pays no further attention to the differentiation between transitive and intransitive here; since Armenian does not commonly differentiate these two categories by morphological means, it is curious that the agent-marking in the perfect should show such a differentiation.

xawsec'eal z=Mariam (Mt. 1:16) 'to who one had betrothed Mary' (1986: 11–12); see example (4.37).

Stempel's explanation for developing a differentiation in subject-marking between intransitive and transitive so as to distinguish otherwise identical syntagmata is refuted by Weitenberg; since 'in practice an active predicate without an object [...] does not frequently occur' (1986: 12), the presence of such an object is sufficiently distinctive as a feature. In turn, he suggests that the actual differentiation context is that between impersonal and transitive forms.⁸⁰

Weitenberg further subdivides the group of transitives, stating that perfect tenses without an overt subject, and those with an overt subject in the nominative (as opposed to the genitive), occur in the earliest texts (1986: 14). The development of the former is incompatible with the occurrence of impersonal constructions of the perfect, since they have the same syntactic pattern. These two developments are a sign of the loss of the classical genitive subject in favour of alignment with the nominative–accusative system that generally occurs in Armenian, and the personalization of the copula as shown in the 8th century in Łewond (1986: 15).

Agreeing with Stempel concerning the originally adjectival status of the *-eal* participle and the primacy of the appositional, non-copular usage, Weitenberg goes on to question how the impersonal character of the construction should have arisen in view of potential early plurals of the type **eius sunt visi illi* (1986: 16).⁸¹ The concept of a link to the ergative in Georgian is refuted by Weitenberg (1986: 17) following Stempel. He cautions that a general rejection of ergative influence is not cogent; his own views, however, do not require such a connection.

Stempel's own view is rejected on the grounds that no explanation is provided as to why the active construction is impersonal in nature; Weitenberg (1986: 18), citing Meillet (1962), further doubts the parallel between active and passive upon which the analogical shift in Stempel's argument rests, since the Armenian passive is demonstrably more impersonal than canonically passive.⁸²

Weitenberg's own theory combines a number of previous attempts and suggests a different approach to the genitive agent problem. Assuming that the *-eal* participle was an original adjective, but indifferent to diathesis, he proposes that the starting point for the development of the construction lies in both transitive and

⁸⁰ It is unclear why such a differentiation should be of importance, since it does not occur in any other inflected paradigm in Armenian. Further, to repeat the point made by Weitenberg himself *mutatis mutandis*, is not the occurrence or non-occurrence of a subject distinctive enough to tell apart transitive and impersonal use?

⁸¹ Given that sentences of this type are attested already in Armenian texts, Weitenberg's objection seems unwarranted; the reinterpretation of the possessive construction with a participle in apposition to the possessed as a transitive in analogy to the present tense seems in itself more debatable.

⁸² This, however, does not preclude the possibility that Stempel's analysis may be right; even if Armenian passive forms are usually used without an indication of agent, the normal expression of such an agent would include an ablative phrase which may serve as the basis for Stempel's analogy.

intransitive verbs taking a genitive subject. The syntax of the perfect is explained as resulting from an original nominal sentence with the participle as a predicative adjective.

He rejects [Stempel](#)'s argument that nouns such as *meṛeal* 'dead man' and *arakeal* 'apostle' prove the originally passive diathesis of the participle since:

[the] participle of a transitive verb, if used without an argument (as is mostly the case with substantivation) could only mean 'having reached a state after external action' (passive: *arakeal*), or 'having reached a state by one's own action. ([Weitenberg 1986](#): 19)

A transitive meaning is triggered only by a further argument. He thus agrees with [Schmidt \(1962\)](#) in that the appositional usage of the transitive participle, e.g. *teseal z=ayr=n asē* 'having seen the man he said', is not secondary, but simply shows the diathetically indifferent character of the participle. Further proof is adduced by the occurrence of impersonal forms, as suggested by [Pedersen \(1907: 157–9\)](#): as in Slavonic, the participle is used as a 'subjektlose transitive "man"-form' in the neuter.

Weitenberg further suggests that, on the basis of the intransitive participles occasionally occurring with genitive rather than with nominative subjects in negative sentences, this type is likely to be original; the spread of the nominative in this environment was supposedly slower, since 'negative sentences with an intransitive participle were more resistant to innovation than positive ones' ([1986: 21](#)).⁸³

The impersonal construction therefore forms the basis of all other formations; a neuter participle is substantivized and in a non-copular sentence takes an adjectival predicate. If a noun is to be added, a derived adjective is formed, thus yielding e.g. PArm. **ekealom mardoskom*, lit. 'having-come (is) man-ly' ([1986: 21](#)). This assumption explains the ubiquitous 3SG copula, since the subject, the nominalized verb, is always singular; by extension, all other forms are explained, including the transitive type **tesealom mardom merom*, lit. 'having-seen the man (is) ours'. With the integration into the Armenian verbal system, the structure of this syntagm was reinterpreted: the subject was turned into a predicate, and the adjectival predicate became the subject. The derived adjectives in *-skom were reinterpreted as genitives owing to their phonological similarity with the latter. From the 5th century onwards, according to [Weitenberg](#), the genitive agent was slowly eliminated,

⁸³ The number of genitive subjects with intransitive participles quoted by [Weitenberg \(1986: 20\)](#) are only noteworthy in Eznik (cp. [Vogt 1937: 54](#)), in whose work the nominative occurs in a vast majority with all other intransitive participial clauses. This in itself is not a strong enough indication to presume an original usage of this sort, nor is the assertion that negative sentences are generally more archaic (cf. [Meillet 1977: 139](#)). Whether there is any correlation between alignment and negation will be discussed in 5.3.4.1.

initially retained only where necessary, e.g. in the transitives to set them apart from the impersonal construction.⁸⁴

The single most implausible aspect of Weitenberg's approach lies in his reliance on explaining the genitive as a denominal adjective formation, presumably even beyond the genitive plural (where this explanation is acceptable); not only does it seem unlikely that such a formation should be used not only for nouns proper but also for pronouns; it is a priori unlikely that a derivational process like the formation of a denominal adjective should form part not only in the syntax of a language, but indeed its inflection, especially if the outcome was synchronically as ill-fitting as the genitive agent.

Another impasse is presented by the rarity of the impersonal construction, making this approach an unlikely basis upon which to build a new, frequent construction such as the perfect.

4.2.2.8 Borrowing from Hurro-Urartian

Another group of languages with which proto-Armenian is likely to have been in contact is Hurro-Urartian. The two languages making up this family—Hurrian and Urartian—are attested in the second and first millennium BCE in Mesopotamia, with the Kingdom of Urartu (or Biainili) including the landmark lakes Van, Sevan, and Urmia, which would later also form part of the core territory of the Armenian kingdom.⁸⁵ Owing to the territorial overlap and the fact that the Kingdom of Urartu ceased to exist at about the time Armenia is first mentioned in Iranian sources, some historians suggest that there was a meaningful and historically important relationship between the Armenian and Urartian peoples: proto-Armenian speakers may have arrived in the Armenian Highlands in the mid to late second millennium BCE, were firmly established there as well as culturally and politically significant by the end of the 6th century BCE.⁸⁶

From a linguistic point of view, Hurrian and Urartian are an isolate family in the region, not unequivocally related to any of the other families like Semitic, Indo-European, or Kartvelian. Diakonov and Starostin (1986) propose that Hurro-Urartian is a subgroup of East Caucasian (or Nakh-Daghestanian), a language family spoken nowadays in the Northeast Caucasus and represented by languages like Avar, Nakh, Lak, and Tsez.⁸⁷ This theory has, however, not received

⁸⁴ This suggestion presumes a very late date for this syntagm; given the phonological developments required to facilitate a reinterpretation of the derived adjectives as genitives, and the presumed age of the participial formation, any such development should have happened long before the 5th century—a fact that Weitenberg acknowledges later.

⁸⁵ For a historical sketch of Urartu, see Kroll et al. (2012); for details on the Hurrians, see Wilhelm (1989) (by now somewhat dated).

⁸⁶ A short and reasoned summary of the question can be found in Russell (1997). There are more extreme accounts of the relationships between these two people, emphasizing the continuity of the Hurrian, Urartian, and then Armenian kingdoms; as these often abound in nationalistic fervour and lack scientific rigour and reasoning, they are not given any further space here.

⁸⁷ For an overview, see Schulze (2001).

any wider support, and numerous problems concerning linguistic aspects and the data in general have been raised.⁸⁸ While there are potential Hurro-Urartian loanwords in Armenian (Diakonov 1985; Greppin and Diakonoff 1991), they are very few in number and all stem from a limited semantic field, namely plant species endemic to the region and social or administrative terms, the most common being Arm. *xnjor* ‘apple’, cp. Hurr. *he-en-zu-ru* /henzūru/ or /hinzur(i)/, and Arm. *nuṛn* ‘pomegranate’, cp. Hurr. *nu-ra-an-ti* /nuranti/. In the opposite direction, there are limited indications that proto-Armenian may have left traces in Hurro-Urartian syntax: Yakubovich (2010) proposes that the Armenian prohibitive negation *mi* was borrowed into Urartian from Armenian L2 speakers of the language. A similar argument, concerning the import of the conjunction Hurr. *ewə*, cp. Arm. *ew* < PIE *h₁epi, was made by Diakonov (1992).

There is, however, no indication that the Hurro-Urartian linguistic influence on Armenian goes beyond the lexicon. Hurro-Urartian shows ergative–absolutive alignment throughout its verbal system, and marks alignment by means of suffixes which, together with other TAM and agreement markers, agglutinatively form the verb; there is a separate ergative case.⁸⁹ Example (4.44) shows a sentence with ergative agent-marking.

- (4.44) *D*Šiwini-ə *m*Minua-še *m*Išpuini-ḫi-ni-še *ini* *NA*⁴*puluse*
 PN-DAT PN-ERG PN-PATR-SUF-ERG DEM.ABS.SG stele.ABS.SG
kuy-u-ni
 erect-TR-3SG→3SG
 ‘For Šiwini [the sun god] Minua, son of Išpuini, erected this stele.’ (CTU 5–80, Salvini and Wegner 2014: 69)

While in contact with proto-Armenian, Hurro-Urartian can be excluded as a potential origin of non-nominative alignment in the Armenian perfect owing to the different morphosyntactic structure of its alignment-marking—agglutination with a dedicated ergative case, not limited to any one tense or aspect system, and incomparable in its phonological expression—and lack of evidence of other loans beyond a very limited section of the lexicon.

4.2.2.9 Summary

While in the search for an Indo-European prototype of the Armenian perfect construction a great variety of solutions have been proposed, the discussion has demonstrated that to a greater or lesser extent, each approach misses the mark by failing to explain either genitive agent, accusative object, or the mixture of expressions of agentivity in transitive and intransitive expressions. These attempts at reconstructing direct equivalents in other Indo-European languages, or indeed

⁸⁸ Cf. Smeets (1989), Nichols (2003: 208), Kallio and Koivulehto (2018: 2285–6).

⁸⁹ Cf. Wegner (2007), Salvini and Wegner (2014: 25–9, 61).

harking back to Proto-Indo-European itself, have fallen for what [Jamison \(1979: 129\)](#) has aptly termed ‘a “mirage” of comparative linguistics’; her arguments in favour of considering the development of agentive expressions ‘not [as] an archaism but a parallel and independent development in each language’ (1979: 133), supported by [Hettrich \(1990\)](#),⁹⁰ account for the great variety of different cases found in agent roles.

Despite occasional claims to the contrary as presented above, from a historical morphological point of view, the Armenian participle must be a verbal adjective, explicitly marked as passive–intransitive.⁹¹ As such, a development from attributive usage **nora gorceal ē gorc* ‘[this] is his done work’ to a predicative, viz. copular, interpretation ‘his work is done’ is plausible, as is the subsequent grammaticalization of such a syntagm as a periphrastic construction. As already mentioned in the critique of [Stempel’s](#) argument, however, any further analogical shifts, such as the reinterpretation of the above as active and the transposition of the semantic patient into the accusative, are synchronically unmotivated—at least language-internally—in that they complicate rather than simplify the agreement system.

The reason for the lack of success of previous explanatory models is to be sought to a large extent in their unsatisfactory analysis of the synchronic state of affairs, some examples of which have been provided in section 4.2.1. Grammatical descriptions thus far have relied largely (but not exclusively) on the New Testament translations and convenience samples of the original texts only; owing to the translated nature of these texts, however, this strategy cannot do justice to the Armenian data, and must be abandoned (cf. [Cowe 1994–5](#); [Lafontaine and Coulie 1983](#); [Meyer 2018](#)). A thorough analysis of the original text is therefore conducted in Chapter 5.

Before that, however, the synchronic pattern of the Armenian perfect will be discussed from a different perspective, namely that of morphosyntactic alignment, and then scrutinized as to its potential diachronic origins.

4.2.3 The periphrastic perfect: a tripartite analysis

It has been shown that in the non-perfect tenses, i.e. the present, imperfect, and aorist, Classical Armenian construes along nominative–accusative lines in the plural and in the pronominal system; S and A are (un)marked as nominative, O receives accusative marking, and frequently a proclitic *z=*. In the perfect, however, morphosyntactic alignment differs significantly. S is still marked as nominative

⁹⁰ Both [Jamison](#) and [Hettrich](#) do, however, point out the strong evidence suggesting the PIE instrumental as the predecessor of a number of later agent cases.

⁹¹ See [the Appendix](#) for a detailed reasoning.

(type α above), but is no longer coextensive with A, which receives genitive marking, while O continues to be marked accusative (type γ above), which is often only indicated by $z=$.

The pattern, therefore, corresponds most neatly to the tripartite alignment treated in section 4.1.2.4. Synchronically, Classical Armenian is therefore best described as a language with a tense-sensitive split between nominative–accusative non-perfect and tripartite perfect. This pattern is reminiscent of Yazgulyami, an Iranian language spoken in the Pamir Mountains, in which the very same pattern obtains *mutatis mutandis* (Payne 1980: 174). There, too, direct objects are marked with a proclitic (*-na*)-š/ž- on both sides of the alignment divide.⁹² O-marking of this type is, however, not restricted to languages with tripartite marking, as evidenced by other Iranian languages such as Rošani, Bartangi, Orošari, and Sarykoli (Payne 1980: 161–72), all of which have created an obligatory object-marking clitic cognate with MP \acute{c} / \acute{z} / *az*/ and Pth. \acute{c} / \acute{z} / *až*/ ‘from, on, out of, for’ (Durkin-Meisterernst 2004: 18–24).⁹³ It is equally noteworthy that across these languages, O-marking is most common in the case of definite NPs.

Based on this split-tripartite analysis for Classical Armenian, three questions remain:

- How can the existence of a passive be accounted for (type β above)?,
- How do types α^* and γ^* (intransitives with genitive subjects, and transitives with nominative subjects, respectively) arise?, and
- How did tripartite alignment arise in Classical Armenian?

The first question, as has been argued before, can be answered readily: the Armenian participle, on which the periphrastic perfect is based, was originally passive–intransitive and has thus retained its historic function throughout the historical development of Armenian; this retention is paralleled by West Middle Iranian. Accordingly, nominative marking for the one-place argument of the passive is both historically expected and syntactically plausible in a language in which all other one-place arguments occur in the nominative.

Given this original passive–intransitive meaning of the participle, and by extension the perfect, the active meaning must have arisen secondarily, within the history of Proto-Armenian, especially since no other Indo-European language of comparable age exhibits similar patterns.

⁹² As opposed to Classical Armenian, however, this O-marker is obligatory in Yazgulyami; its form depends on the nature of O (*na-* is optional for pronominal O).

⁹³ Many of the above languages, particularly Bartangi, show relics of double-oblique marking; the rise of the direct-object marking clitic in these languages is therefore directly related to the ousting of this pattern.

4.2.3.1 Hypothesized historical origins

As discussed in 4.1.2.4, tripartite alignment patterns commonly occur as more or less stable transitional stages in languages undergoing alignment change. While its directionality is not a priori determinable, in the case of Classical Armenian the outcome is unambiguous: nominative–accusative alignment is the dominant pattern in the non-perfect tenses, and by the advent of Middle Armenian is stable in the perfect as well. Comparative typological evidence, e.g. from the Pamir languages, further indicates that tripartite alignment is the result of alignment change from ergative–absolutive to nominative–accusative; since all the languages in question exhibit tense-sensitive splits, system harmonization may have played a significant role.

Under this analysis, therefore, Classical Armenian is very likely to have had ergative alignment in its periphrastic perfect at some stage in its prehistory, and then undergone de-ergativization under the pressure of the nominative–accusative pattern of the non-perfect tenses. This very process has occurred (and in some languages is still in progress) in the Pamir languages discussed by Payne (1980: 183), and is also reminiscent of the argument advanced by Schmidt (1972: 453; 1980: 165) for a Kartvelian origin of the Armenian periphrastic perfect. In Proto-Armenian, therefore, S would have been marked nominative and A genitive, as is the case in the earliest attested forms of the language; O, however, would have been marked as nominative, like S.⁹⁴ Aided by the formal identity of nominative and accusative in singular nominals, the reinterpretation of this nominative into an accusative is relatively unproblematic. In his discussion of alignment change in Iranian, Haig (2008: 194–5) suggests that identical marking of arguments across alignment-splits is a significant force in alignment-change processes. More generally, language change is said to be, at least in part, motivated by the creation of biunique form–meaning pairs, with each surface form representing one function and ideally vice versa (Langacker 1977: 110). The differentiating change from nominative O in the proto-Armenian ergative perfect to accusative O, thus yielding tripartite alignment, is therefore well paralleled and motivated.⁹⁵ Table 4.1 visualizes the distribution of argument-marking, showing vestiges of an old ergative–absolutive system in some surface forms.

The existence of misaligned occurrences (types α^* and γ^* above) can be explained similarly, namely as the result of incipient language change, either by complete de-ergativization of the perfect (γ^*) or spread of genitive marking from

⁹⁴ Instances of this marking pattern are in fact still discernible in those occurrences, where O is singular and not marked by the object-proclitic *z=*; cp. Arm. *ew gteal Yisusi eš mi* 'And Jesus found a donkey' (John 12:14), where *Yisusi* is A and marked genitive, while *eš* is O and unmarked, which could indicate nominative or accusative.

⁹⁵ The motivation for marking A genitive will be discussed in 4.3.3. Here, suffice it to say that it is cross-linguistically not uncommon for a case to fulfil more than one function, and indeed for the genitive to take on the function of the ergative (Dixon 1994: 57).

Table 4.1 Surface marking and alignment patterns in Classical Armenian

Domain	1/2SG/PL; 3PL; PRO.PL; N.PL	3SG _{+def} ; PRO.SG _{+def} ; N.SG _{+def}	3SG _{-def} ; PRO.SG _{-def} ; N.SG _{-def}
Marking	NOM ≠ ACC S ≠ A	NOM = ACC S ≠ A	NOM = ACC S = A
IPFV	S = NOM A = NOM O = ACC	S = NOM A = NOM O = Z+NOM(=ACC)	S = NOM A = NOM O = NOM(=ACC)
Alignment	NOM-ACC	NOM-ACC	DIR
PFV	S = NOM A = GEN O = ACC	S = NOM A = GEN O = Z+NOM(=ACC)	S = NOM A = GEN O = NOM(=ACC)
Alignment	TRI	TRI	ERG-ABS

A to S (α^*), thus creating a competing genitive–accusative (= stabilized tripartite) alignment system in the perfect.⁹⁶ An evaluation of the situation is only feasible on the basis of more data, and will have to rely on a discussion of individual occurrences (see 5.3.2.1).

The most important, and equally problematic question, however, remains how Proto-Armenian developed tense-sensitive alignment features in the perfect at all. Schmidt's suggestion of Kartvelian influence has been rejected on grounds of missing indications that any such influence existed on a meaningful level in the relevant time frame. As mentioned in Chapter 2, however, Parthian and Middle Persian are two languages which exhibit tense-sensitive alignment splits of a distinctly comparable nature (involving a historical participle and an optional copula), and which have been in extensive and well-documented contact with Armenian. What factors may have conditioned pattern replication, i.e. syntactical borrowings, of this kind, and what constraints, environments, and other parameters need to be accounted for, will be discussed in detail in Chapter 7. From cross-linguistic parallels it is clear, however, that the adoption of another language's alignment system is feasible; Balti, a Tibetan language spoken in Pakistan and India, is thought to have played a role in the establishment, maintenance, and/or spread of ergative alignment in the Indo-Aryan language Šinā (Anderson 1977: 344; Verbeke 2013: 257). The case is even more definite for Northeastern Neo-Aramaic, which developed ergative patterns as the result of contact with Central Kurdish varieties (see 7.3.3; cf. Khan 2007: 202–3).

Since language-internal motivations for the development of tripartite alignment in Classical Armenian have been excluded on the basis of the arguments laid out above, and given the incontrovertible facts that extensive language contact with

⁹⁶ This is not a unique trend of Classical Armenian; Wakhi, another Pamir language, also shows a spread of the oblique from A into S function (Payne 1979: 445; 1980: 180).

the West Middle Iranian languages has influenced the Armenian language at least at the lexical, morphological, and phraseological levels, the hypothesis that tripartite alignment in Armenian should have arisen from an original ergative pattern that Armenian adopted on the model of Parthian and Middle Persian cannot be dismissed a priori and deserves testing. Only a close study of the history and synchronic patterns of morphosyntactic alignment in these languages, as well as a detailed study of the Armenian data, will allow for a proper answer to this question.

The next section therefore endeavours to provide the former, i.e. insight into Old and Middle Iranian alignment, and a comparison with the basic concepts illustrated here.

4.3 Morphosyntactic alignment in Old and Middle Iranian

The oldest written witnesses of the Iranian languages which are of any use for the study of its grammar are the Old Persian cuneiform inscriptions going back to the end of the 6th century BCE. The evidence for the Avestan languages and West Middle Iranian predates the attestation of Classical Armenian by only two or three centuries;⁹⁷ the attestations of each language spans multiple centuries, and in part show considerable diachronic variation within the same language, to such an extent that [Skjærvø \(2009b: 44, 46\)](#) treats Old and Young Avestan as independent languages.

For the purpose of discussing alignment change, Old Persian, Parthian, and Middle Persian will be the main focus of the following section; the other Old Iranian languages either do not exhibit the features in question in a sufficiently systematic manner (Avestan) and will thus be consulted only for illustrative purposes, or are not attested to any degree that would allow speculations about their grammar (Median, Scythian). Within the Middle Iranian languages, only Parthian and Middle Persian are going to be relevant; while Armenian shows a very limited amount of East Iranian loanwords (see [2.3.4.1](#)), it is practically beyond doubt that these were mediated by Parthian ([Sundermann 1989b: 115](#)), and that Armenian and the East Middle Iranian languages were never in close enough contact to allow linguistic interference on a level beyond the lexicon.

This section will first discuss the Old Persian evidence, since alignment change is likely to have taken place there to some extent already; the basic data will be presented and different explanatory models contrasted. Next, the Parthian and Middle Persian evidence is going to be considered systematically; in this context,

⁹⁷ Old Avestan sources are likely to have been composed at the end of the second millennium BCE, but were transmitted orally until the Sasanian period ([Kellens 1998](#); [Skjærvø 1995](#)); the earliest written records of West Middle Iranian do, in fact, date to the 2nd and 1st century BCE, but are limited to inscriptions and coin legends, most of which either consist of personal names, or were composed exclusively in Aramaic heterograms ([Sundermann 1989b: 116](#); [1989a: 140](#)).

- (b) *vašnā Aurmazdāha ima xšačam*
 by-grace-of Auramazda.GEN.SG DEM.ACC.SG kingdom.ACC.SG
dārayāmiy
 hold.1SG.PRS
 ‘By the grace of Auramazda I have/rule this kingdom.’
 (DB I.26; Old Persian)

The verbal morphology of Avestan is similarly rich and well developed as that of, for instance, Vedic, while Old Persian has more limited morphological means; still, both languages maintain an imperfect and aorist tense, and show at least remnants of the perfect.¹⁰⁰ Beside the indicative, subjunctive and optative are well attested, as are a number of non-finite forms.

Next to these synthetic forms, however, Old Persian has developed an analytical construction consisting of the past participle in *-ta- and an optional form of the copula. It is unsurprising that this periphrastic construction is used in intransitive and passive contexts, given the historically passive–intransitive morphology of this formation. As with other verb forms, the intransitive construction as well as the passive govern S in the nominative.

- (4.48) *yaθā Arminam parārasa pasāva hamičiyā*
 CONJ Armenia.ACC.SG arrive.3SG.PST then enemy.NOM.PL
hagmatā paraitā
 assemble.PTCP.NOM.PL go-forth.PTCP.NOM.PL
 ‘When he arrived in Armenia, then the enemies assembled [and] went forth ...’ (DB II.32–3; Old Persian)
- (4.49) *yaθā Kabūjiya Bardiyam avāja kārahyā*
 CONJ Cambyses.NOM.SG Smerdis.ACC.SG slay.3SG.PST people.DAT.SG
naiy azdā abava taya Bardiya
 NEG known become.3SG.PST COMP Smerdis.NOM.SG
avajata
 slay.PTCP.NOM.SG
 ‘When Cambyses slew Smerdis, it did not become known to the people that Smerdis had been slain.’ (DB I.31–2; Old Persian)

The latter example in particular demonstrates clearly the expected transformational process of promotion of O in an active setting to S in a passive environment (*Bardiyam* > *Bardiya*). The Old Persian *-ta-* participle is therefore not only cognate with but also used like the Latin past participle. As in Latin, too, the optional agent in a passive environment is rendered by a prepositional phrase consisting of *hacā* and the ablative of the agent.

¹⁰⁰ The only attested perfect form in Old Persian is *caxriyā* (DB 1.50), an optative form of *kar- ‘to do, make’.

Next to the prepositional agent phrase, however, there is a further construction, the precise nature of which is contended; here, the agent is expressed by the genitive of full or enclitic pronouns.

- (4.50) *θātiy Dārayavauš xšāyaθiya ima taya*
 say.3SG.PRS Darius.NOM.SG king.NOM.SG DEM.NOM.SG REL.NOM.SG
manā kṛtam pasāva yaθā xšāyaθiya
 1SG.GEN do.PTCP.NOM.SG after CONJ king.NOM.SG
abavam
 become.1SG.PST
 ‘King Darius says: This is what I have done [= what was done by me] after I became king.’ (DB I.26–8; Old Persian)

- (4.51) *θātiy Xšayāršā xšāyaθiya vazṛka taya*
 say.3SG.PRS Xerxes.NOM.SG king.NOM.SG great.NOM.SG REL.NOM.SG
manā kṛtam idā utā taya=mai
 1SG.GEN do.PTCP.NOM.SG here and REL.NOM.SG=1SG.GEN
apataram kṛtam ava visam vašnā
 afar do.PTCP.NOM.SG DEM.ACC.SG all.ACC.SG by-grace-of
Auramazdāha akunavam
 Auramazda.GEN.SG do.1SG.PST
 ‘The Great King Xerxes says: What I have done here and what I have done afar, all that I have done by the grace of Auramazda.’ (XPb 21–7; Old Persian)

- (4.52) *avaišam avā naiy astiy kṛtam yaθā manā*
 DEM.GEN.PL as NEG be.3SG.PRS do.PTCP.NOM.SG as 1SG.GEN
 ... *hamahyāyā θarda kṛtam*
 one.GEN.SG year.GEN.SG do.PTCP.NOM.SG
 ‘They have not done as much as I ... have done in one year.’ (DB IV.51–2; Old Persian)

This construction is used only in one particular phrasing, as the above examples suggest: the genitive agent is only found in combination with the participle of *kar-* ‘to do, make’.¹⁰¹ The question arises, therefore, whether these two ways of agent-marking are in free variation, and the attestation is misleading in only showing examples of genitive agent plus *kṛtam*; whether there are any other underlying constraints governing the usage of these phrases; or whether the two are completely unrelated.

¹⁰¹ Benveniste (1952: 54) suggests that a further participle used in this construction may be found in DNb 53 (*xšnūtam*); this is a restored form, however, and thus cannot count as sufficient evidence.

4.3.1.1 Passive vs possessive analysis

Upon its discovery, the *manā kṛtam* construction was first interpreted as a passive (Geiger 1893: 1), whence derived similar, i.e. ergative, constructions in the modern Iranian languages. This perspective was challenged by Benveniste (1952), in whose view the genitive agent was in fact a possessor (see 4.2.2.2) since passive agents were denoted by *hacā* alone. As genitives otherwise express possessors in Old Persian, this must also be the nature of the *manā kṛtam* construction; his argument is further aided by the hybrid nominal-verbal, i.e. deverbative, nature of the *-ta- participle.

While this position was accepted by some (Debrunner 1954: 582; Henning 1958: 90; Allen 1964: 337), it did not remain unchallenged. Straightforward points of criticism levelled against Benveniste are his failure to consider the non-agential passives formed with the participle which are clearly verbal in nature and thus cannot have a possessor, and the fact that similarity with a possessive construction does not entail identity with the same (Skjærvø 1985: 217–18). Furthermore, passive constructions need not be restricted to a single expression of agency.¹⁰² Most simply, it is not clear how far the term ‘possessive’ is helpful in any sense, since the structure does not synchronically (nor, probably, diachronically) denote possession (Haig 2008: 29).

A different and more contentious point of criticism refers to at least two instances (DB V.15–16, DB V.31–2) in which the genitive occurs as the agent of a finite, non-participial passive (cf. Cardona 1970: 2):

- (4.53) *avaiy* *ūvijiyā* *arikā* *āhaⁿ*
 DEM.NOM.PL Elamite.NOM.PL faithless.NOM.PL be.3PL.PST
utā=šām *Auramazdā* *naiy* *ayadiya*
 and=3PL.GEN Auramazda NEG revere.3SG.PST.PASS
 ‘These Elamites were faithless and did not revere Auramazda.’
 (DB V.15–16; Old Persian)

It is conceivable that the use of the genitive could have spread from its participial context to the environment of finite verbs; such a conclusion may, however, be premature in view of the very limited number of examples and the size of the corpus as a whole, as well as the fact that it seems to occur in one set phrase pattern only.

Comparative evidence from the closely related Indo-Iranian languages is of little help in this regard: in Vedic, supposed genitive agents are outnumbered more than ten to one by instrumental agents, and Jamison notes that they are:

¹⁰² Ancient Greek has both dative agents as well as agential prepositional phrases with *ὑπό*; modern German can express agency in prepositional phrases with either *von* or *durch*. The choice of a particular phrasing depends on a variety of factors, e.g. animacy.

almost entirely confined to special syntactic or semantic situations. Real or apparent gen. agents occur 1) when the past participle has virtually become substantivised, 2) when the genitive is actually to be construed with the noun modified by the participle, 3) when the verb is of a special semantic type. (Jamison 1979: 133)

Genitive agents further seem to be a relatively late, mostly Middle Indic, phenomenon, and are thus unlikely to have been inherited from Proto-Indo-European.¹⁰³ The Avestan occurrences of this phenomenon are few, and either recent or patterned just as the Vedic examples.¹⁰⁴ Cardona's hypothesis therefore remains unconfirmable, albeit a likely candidate; if genitive agents in finite verb phrases did develop in Old Persian, this was an innovation, possibly paralleled by a similar but quite possibly unrelated development in Indo-Aryan.¹⁰⁵

It is beyond doubt that the *manā kṛtam* construction had its origin in a passive syntagma, as evidenced by the usage of the participle without an agent.¹⁰⁶ This is borne out by comparative data from Avestan, albeit with a greater variety of optional agentive complements (cf. Jügel 2010).¹⁰⁷

4.3.1.2 The external possessor analysis

A different model is advocated by Haig (2008). Along with Skjærvø (1985), he argues that the Old Persian perfect did not distinguish diatheses (but see n. 107), and that a purely possessive analysis of the construction is implausible. Delineating the requirements for an analysis of the construction as passive (single core

¹⁰³ Hettrich (1990: 94) disagrees with Jamison's semantic grouping, but concurs in the evaluation of these constructions as primarily nominal; the limited usage as an agent at least in finite verbs must therefore be secondary. Genitives with participles fall under the general category of 'Genitiv der Zugehörigkeit im weitesten Sinne' (Hettrich 1990: 96; cf. Schwyzler et al. 1934–71: 117ff.).

¹⁰⁴ The only example with a genitive agent and finite verb seems to be Young Avestan (Yt. 13.50; cf. Hettrich 1990: 92, 94 n. 100).

¹⁰⁵ A methodological problem with Cardona's approach lies in the fact that he argues from the occurrence of agent phrases alone; since such phrases are optional in passive constructions, they are neither necessary nor sufficient condition for the existence of a passive (Statha-Halikas 1979: 353–4).

¹⁰⁶ Synchronically, the question arises whether the term 'passive' is appropriate given that an active for this tense is not attested (Lazard 1984: 242); yet, since an active/passive distinction exists in present and imperfect, the distinction of voices was clearly a part of Old Persian grammar, and an interpretation of the past participle as passive unproblematic; a similar state obtains in Latin, where the periphrastic perfect has no analogously formed transitive counterpart. At the same time, evidence from the Elamite and Akkadian versions often accompanying Old Persian inscriptions translate the syntagma as unequivocally active (Skalmowski 1976).

¹⁰⁷ Jügel further argues that the Old Persian construction is in fact ergative, since A is marked differently from S, and O occurs in the nominative. Such a development from a passive is, of course, possible and attested in the Middle Iranian languages; given the restriction to one verbal environment (*kṛtam*), the existence of non-agentive passive constructions, and the occurrence of genitive agents with the imperfect, his analysis may be somewhat premature, however, at least for Old Persian; but cf. Jügel (2015: 441–60) in more detail. Similarly, his assumption that the passive participle is diathetically indifferent is problematic; cf. Bavant (2014: 340–1) on the passive–intransitive nature of the OP *-ta* participle. While it is likely true that ergative alignment frequently develops as the result of verbalizing deverbal forms (Estival and Myhill 1988: 441), this process of 'verbalization', i.e. the occurrence of a finite form of the copula with the participle, is attested only in a minority of cases.

argument is patient/theme; marked verb form; optional agent phrase with low-level integration into syntax; semantic markedness of construction), he underlines in particular the fact that genitive agents can occur in a cliticized form (see example 4.51); cliticization, according to Haig, otherwise occurs only with structural cases (accusative for the direct object, genitive/dative for the indirect object):

(4.54) *Auramazdā=maiy upastām abara*
 Auramazda=1SG.GEN aid.ACC.SG bear.3SG.PST
 ‘Auramazda bore me aid.’ (DB I.87–8; Old Persian)

(4.55) *pasāva=dim manā frābara*
 thereafter=3SG.ACC 1SG.GEN bestow.3SG.PST
 ‘Thereafter he bestowed it on me.’ (DB I.60–1; Old Persian)

Since the agent phrase underlies such a strict syntactic rule (Haig 2008: 45–9), it is likely to reflect a syntactic rather than a semantic case, and thus is not a prototypical passive agent phrase. A further anomaly is the fact that, unusually for passive agents, the agent phrase in Old Persian is very high on the animacy hierarchy, and usually the topic of the clause as well (Haig 2008: 51). Returning to ‘the spirit, if not the letter’ of Benveniste’s analysis, Haig (2008: 55) interprets the *manā kṛtam* construction as an ‘External Possessor Construction’ (EPC) involving a possessive modifier that does not form part of the possessed NP, but is syntactically independent from it; the semantic roles fulfilled by an EPC include, but are not limited to, the recipient, experiencer, addressee, benefactive, and other notions of indirect participation in an action (cf. Payne and Barshi 1999).¹⁰⁸ The main reasoning behind such an analysis is the explanation of the above cliticization rule, which applies to agents and other genitives as well, since for cliticization, they cannot be part of a noun phrase, but must be an independent phrase within the clause.

While Haig provides more details, parallels, and reasoning, this brief outline will suffice here, especially since it is enough to demonstrate some essential weaknesses in his argument. Firstly, the appellation of ‘structural case’ is questionable; while it is true that direct and indirect object can be expressed by clitics, this position is not limited to such syntactic roles. On the contrary, frequently notions of possession or benefaction, i.e. clearly semantic usages of the genitive and non-core arguments as well, are expressed in clitics:

(4.56) *Auramazdā=taiy jatā biyā*
 Auramazda.NOM.SG=2SG.GEN smiter.NOM.SG be.3SG.OPT
 ‘May Auramazda be a smiter for you’
 (DB IV.78–9; Old Persian, benefactive)

¹⁰⁸ Indirect participation is normally applied to instances like German *Er hat mir die Augen geöffnet*, lit. ‘He opened my eyes for me’, or *Mir fielen die Augen zu*, lit. ‘The eyes fell shut for me’, but to be understood as ‘He helped me to see/understand something clearly’ and ‘My eyes closed [without my volition]’, respectively. The dative *mir* is an indirect participant insofar as no action is required by it, but rather performed on or to the (dis)advantage of it.

- (4.57) *martiyā taya=šaiy fratamā*
 man.ACC.PL REL.NOM.PL=3SG.GEN foremost.NOM.PL
anušiyā āhata agarbāya
 follower.NOM.PL be.3PL.PST capture.3PL.PST
 ‘And the men, who were his foremost followers, they captured.’ (DB III.49; Old Persian, possessive)

These may well be deemed EPCs, and fit both Haig’s and Payne and Barshi’s definition of the term. This feature alone should, however, not suffice to disqualify the genitive agent from its potentially prototypical status. It is to be noted that in the above examples possessor and possessed appear in sequence in the clause; this is not always the case for genitive agents (see 4.51). Even distance from its head, however, need not mean that the possessive adjunct cannot be cliticized:

- (4.58) *avaθā=šam hamaranam kṛtam*
 CONJ=3PL.GEN battle.NOM.SG do.PTCP.NOM.SG
 ‘Then they joined battle.’ (DB III.47; Old Persian)

The question is, then, whether the assumption of an EPC is required to explain this phenomenon. Given the fact that the agent phrase in Old Persian seems to be maximally topical, it may be simpler to assume that such a constituent in a given clause may undergo topical fronting and then cliticization,¹⁰⁹ unless it is a newly introduced subject or the sole non-verbal constituent in its clause.

A further kink in the EPC argument consists of extending its domain to include not only indirect participants (e.g. German *Er öffnete mir den Mund*, ‘He opened my (lit. to me) mouth’) but also the agents of debitive constructions, such as the dative of Latin gerundives (Haig 2008: 70–3), and other direct agents; these structures, like their Vedic and Avestan counterparts and including the *manā kṛtam* construction, are semantically quite different from canonical EPC constructions, and thus do not make for valid *comparisons*.¹¹⁰

The assumption of an EPC does not, therefore, add any explicatory power to the ‘possessive’ analysis of the Old Persian genitive agent; the extent to which a synchronic analysis of this construction as ‘possessive’ in any respect is sensible remains doubtful, especially since genitive agents seem fully licensed as optional adjuncts to the verbal phrase.

¹⁰⁹ For a similar, if not identical topicalization of possessive adjuncts, consider the Lord’s Prayer: *For thine is the kingdom, and the power, and the glory*, where *thine* has been topicalized and fronted, or NHG *Meiner ist er nicht, der Esel*, ‘It isn’t mine, the donkey’. These examples are, of course, semantically or pragmatically marked rather than derived from a syntactic rule.

¹¹⁰ According to the criteria outlined by Haspelmath (1999), direct, mental affectedness is a key criterion for an external possessor; he further suggests that external possessors are not otherwise attested in non-European Indo-European languages.

4.3.1.3 Summary

The precise functional nature of the Old Persian *manā kṛtam* construction has little impact on its development in the Middle Iranian languages. Morphologically and based on comparative evidence from Avestan and Vedic, it is clear that the construction is passive at least in origin, whatever its precise synchronic interpretation;¹¹¹ this is a plausible starting point for the development of ergative alignment in later states of the language, and helped by the nonexistence of an active construction. Whether it should be counted as an ergative construction in Old Persian, as suggested by Jügel (2010; 2015) and Lazard (2008), is a matter of perspective; while formally it fulfils all prerequisites of ergative constructions (S=O≠A for short), the occurrence of more frequent straight passives based on the participle, the restricted occurrence of the agentive pattern with the genitive, and the (spurious) use of the genitive as a passive agent, even in passive clauses with a synthetic verb, need to be taken into account.

Further, as is clear from its usage, the *manā kṛtam* construction to some extent parallels an active clause, *ima tayā akunavam*. It has further been noted that the construction is used like a true perfect, setting ‘Grenzsignale für größere Sinnabschnitte’ (Widmer 2012: 129).

Given the limited attestation of this construction, and the resulting impossibility of determining its synchronic function and analysis any further, this summary suggested by Lazard seems most appropriate, except for its insistence on calling the agent ‘possessive’:

On a discuté la question de savoir si cette construction est possessive ou passive. Vaine querelle. C’est, en iranien, une périphrase fonctionnellement active, formée d’un participe passif et d’un complément possessif représentant l’agent. (Lazard 2005: 81)¹¹²

4.3.2 Alignment in West Middle Iranian

Irrespective of whether the Old Persian genitive agent represents a prototypical genitive agent or a possessive relationship of some sort with the participle, it is evident from the Middle Iranian material that an ergative construction developed

¹¹¹ While this is undeniable on the surface, Bavant (2014: 335, 348–9) points out that almost all objects of the *manā kṛtam* construction are neuter and would therefore not exhibit a separate accusative case; in a late inscription (A³Pa 22), the logical, feminine object occurs in the accusative (OP *ustašanām*) as part of this construction. Whether this is a feature of the late, possibly ungrammatical nature of the inscription, or an actual reflection of proper Old Persian grammar, cannot be determined securely.

¹¹² ‘The question whether this construction is possessive or passive has been discussed—what an unnecessary bother. In Iranian, it is a functionally active periphrasis, formed from a passive participle and a possessive complement which represents the agent.’

on the basis of the Old Persian *manā krtam* construction. Owing to the lack of evidence within Old Persian and early Middle Iranian, it remains impossible to determine how a minority construction such as this came to form the basis of the regular past tense in later languages; quite clear, on the other hand, is the influence that phonological change and the subsequent morphological deterioration of the language had on its grammar.

The most significant development in this regard is the word-final apocope, thought to be the result of a static stress on the penultimate syllable (1989a: 148 n. 76 with bibliography; Sundermann 1989b: 125); as in Armenian, where the same change applied (Kortlandt 1980: 103), this led to the obliteration of most grammatical distinctions marked by synthetic inflectional morphology and thus to the loss of many minimally distinct forms such as the imperfect.¹¹³ The resulting verbal system differentiates between two main tense stems, a synthetic present system forming indicative, subjunctive, optative, imperative, and, in very few forms, the imperfect; and a perfect system with analytical tenses built on the perfect participle and frequently a form of the copula.¹¹⁴ Haig (2008: 85) succinctly describes the rise of the periphrastic perfect as the main past tense in Middle Iranian as a ‘pull-chain development, with the initial catalyst coming from changes in the verb morphology’. The resulting construction is further impacted by significant changes in the (pro)nominal system described below, ameliorated somewhat by disambiguating prepositional argument-marking and finally alignment change, both of which develop gradually within the West Middle Iranian languages.

To demonstrate regular alignment in the West Middle Iranian languages and some of its issues, however, its working needs to be exemplified systematically. To avoid confusion, the following examples are restricted to the present-tense system; the periphrastic perfect and its ergative alignment are dealt with separately below.

(4.59) Intransitive

(a) *’wd ’w kw šw-yh*

and to where go-2SG.PRS

‘And whither are you going?’ (GW §12; Parthian)

¹¹³ An imperfect inherited from Old Persian is not found in Parthian at all; early inscriptional Middle Persian shows a handful of potential remnants of this category (Skjærvø 1992; 1997), but does not maintain it throughout time; since three of the five attested forms are written as heterograms, however, their interpretation as imperfects is not secured (Durkin-Meisterernst 2014: 245). Other secondary imperfects which developed within Middle Iranian are designated thus owing to their meaning, but do not otherwise have imperfective markers, viz. augment and varying stem (Durkin-Meisterernst 2014: 374–5).

¹¹⁴ Durkin-Meisterernst (2014: 246–7) further specifies that next to the copula, other auxiliary verbs such as WMIr. *bw-* /*baw-* ‘become’ and Pth. *št-* /*ēšt-*-, MP *’yst-* /*ēst-* ‘stand’ can combine with the participle to form pluperfects and, in the case of *bwd*, present passives. It is further of note that next to participial stems inherited from Old Iranian, which show a different, often ablauted stem, innovative participles based on the present stem are found in both Parthian and Middle Persian (Durkin-Meisterernst 2014: 258–9).

- (b) *c'wn r'z qrwg ky pd dysm'n 'yst-yd*
 like architect REL by building stand-3SG.PRS
 'Like an architect who stands by a building (= is currently building
 a structure) ...' (KPT 708–10; Middle Persian)

(4.60) Passive

- (a) *sdf-'n prmws-ynd ky wdyfs-ynd pd*
 creature-PL be-terrified-3PL REL deceive-3PL.PASS by
dyn-'n
 religion-PL
 'The creatures are terrified, who are deceived by religions.'
 (M77/R/4–5; Parthian)
- (b) *h'n rwšn ... p'c-yh-yd*
 DEM light purify-PASS-3SG
 'That light ... is purified.' (KPT 1520–22; Middle Persian)

(4.61) Transitive

- (a) *'w 'm'h hrw'yn bwxtqyft wynd-'m*
 and 1PL all salvation seek-1PL.SBJV
 'And we all shall seek salvation.' (BBB 302–3; Parthian)
- (b) *h'n w'xš gwp kw=t 'n ny*
 DEM ghost say.PTCP COMP=2SG.OBL 1SG.DIR NEG
pdyr-ym
 receive-1SG.PRS
 'That ghost said (that): I do not receive you.' (Šbrg 57–8; Middle
 Persian)

These examples briefly illustrate a number of things concerning Middle Iranian syntax: there is no reliable morphological case differentiation, resulting in the formal, morphological identity of S, A, and O in most cases (but see 4.3.2.1); in the present system, the morphological marking of the verb shows S or A agreement; direct objects can be expressed as pronominal enclitics.

The following section will lay out what morphological marking possibilities remain in the West Middle Iranian nominal system, and in which ways this restrictive repertoire was used while maintaining comprehensibility.

4.3.2.1 Decay of the West Middle Iranian nominal system

To a very limited degree, both Parthian and Middle Persian in their earliest attestations show remnants of a direct–oblique case system (Skjærvø 1983), in which the direct case marks the non-ergative subject, and the oblique case marks direct and indirect object, possessor, and functions as the prepositional case (Durkin-Meisterernst 2014: 273; Sundermann 1989b: 130).

- (4.62) *w ḡ 'by'dg'ryft d'r-yd pd w'wryft 'bdrynj-yd*
 and in memory hold-3SG.PRS on belief be-secure-3SG.PRS
'w dybhr nyr'm-yd 'wd dwšmn-yn 'stwb-yd
 and anger suppress-3SG.PRS and enemy-OBL±PL defeat-3SG.PRS
 'And if he keeps (this) in mind, he is firm in (his) belief and suppresses
 (his) anger and defeats (his) enemy(ies).' (LN §21; Parthian)

The above example shows a noun *dwšmn* /dušmen/ in its oblique form in *-yn* /-in/, which marks the plural as well. A consequent execution of the direct-oblique and the singular/plural distinction is found only in inscriptional Parthian and Middle Persian, and in the psalter fragments (Skjærvø 1983: 49, 176), and even there only in kinship terms, the personal pronouns of the first and second person in the singular; and in the plural for nouns, pronouns, and adjectives.¹¹⁵ In the later Manichaean texts, and thus in the main corpus of the two languages, the only reliable distinction exists in the first person singular of the pronoun, since even plural forms, in spite of their historical derivation, no longer mark the oblique;¹¹⁶ a genitive singular in *-y* /-ē/ < OIr. *-ahya is only attested indirectly in *puhrēpuhr* 'grandson, lit. son of the son' (Durkin-Meisterernst 2014: 199 n. 93), although an orthographic remnant may putatively be found in word-final, unetymological *-y*.¹¹⁷ A reconstruction of the marking system which accounts for these developments is presented in Table 4.2 (cf. Haig 2008: 100).¹¹⁸

It is therefore difficult to ascribe any of the alignment patterns discussed above to Parthian and Middle Persian as a whole, since (pro)nominal case-marking varied over time. For stage 3 of Table 4.2, it seems most sensible to speak of neutral alignment with no case-marking distinction for syntactic roles (except for

¹¹⁵ These differences are expressed either by the use of different heterograms (pronouns) or by the addition of phonetic complements to heterographically written forms (nouns). Skjærvø points out that there are few attestations of direct objects in these texts, and that both direct and oblique case are used at least once in each role; unhelpfully, within the nominal system, oblique singular and direct plural are identical with the exception of one kinship term for which three distinct forms are attested. The distinct forms for kinship terms further only apply to Middle Persian (also cf. Sims-Williams 1981; Sundermann 1989a). Cantera (2009) proposes that the solution of this unusual pattern lies in the different morphological development of isosyllabic and imparisyllabic stems: the former immediately develop a two-case (DIR vs OBL) system, while the latter preserve a separate genitive for a period of time.

¹¹⁶ The plural marker *-ān* is by far the most common, and derives from OIr. *-ānām; analogically developed forms in *-īn* and *-ūn* exist as well. As Durkin-Meisterernst (2014: 202) shows, comprehension is further complicated in that plural marking is not obligatory, so that *-ān* and its allomorphs may only occur in the oblique plural, while everything else is marked Ø.

¹¹⁷ Since it is not attested in that function anywhere, however, the productive existence of this morpheme must be placed into the time before the first attestation of the West Middle Iranian languages; see also Sundermann (1989b).

¹¹⁸ Other plural formations in *-yn* /-īn/ and *-wn* /-ūn/ exist, but form a minority pattern; they do not diverge in usage from *-n* /-ān/; cf. Durkin-Meisterernst (2014: 201).

Table 4.2 Reconstruction of WMIr. nominal endings

		SG	PL
Stage 1	DIR	∅	∅
	OBL	*-ē	-ān
Stage 2	DIR	∅	∅
	OBL	∅	-ān
Stage 3	DIR	∅	-ān
	OBL	∅	-ān

the first person singular pronoun). Greater confusion is only mitigated by relatively stringent SOV word order, and the licensing of clitics only in oblique-case functions.¹¹⁹ Further role specificity was at times also added by the application of prepositions for certain syntactic functions, as will be shown in section 4.3.2.3.

Before that, however, it is worth considering the time-frame in which the above changes must have occurred. The lack of evidence for a productive GEN.SG *-ē and the attestation of the direct/oblique distinction in inscriptional Parthian and Middle Persian (leading up to stage 2 in Table 4.2) sets the *terminus post quem* for further developments in the 4th century CE, if it is assumed that the psalter fragments are of approximately equal age; a younger estimation of the latter would expand this time-frame up to the 6th century. Both Skjærvø (1983: 177–9) and Durkin-Meisterernst (2014: 198) further agree in considering it possible that these archaic forms may have continued in local dialects of the respective languages.

4.3.2.2 The West Middle Iranian past tense

As has been mentioned before, the past tense of Parthian and Middle Persian construes along ergative lines; given the paucity of case-marking in these languages, this alignment finds expression largely in the following ways: different forms of the first person singular pronoun; usage of object clitics as ergative agents of a clause; person and number agreement of the copula with the direct object. The exception to the latter is the third person singular, in which the copula never occurs (Durkin-Meisterernst 2014: 374). Accordingly, it is at times difficult to determine which role a constituent will fulfil if neither verbal agreement nor pronominal clitics occur in the sentence; word order will give a clue, but meaning is still largely reliant on context.

¹¹⁹ This is true by and large; Durkin-Meisterernst (2014: 292–3) remarks that in later texts, enclitics do on rare occasions show up in non-ergative subject functions as well.

In the following are collected examples of the various past-tense constructions as in 4.2.1.

4.3.2.2.1 *Type α: intransitive*

- (4.63) 'wd 'z ḡd hym kw 'c bzkr
 and 1SG.DIR come.PTCP be.1SG.PRS CONJ from evil-doer
 bwj-'n
 rescue-1SG.SBJV
 'And I have come so that I may rescue (you) from the evil-doer.'
 (AR/VI/64a; Parthian)

- (4.64) 'z dwr gy'g 'md hym
 from distant place come.PTCP be.1SG.PRS
 'I have come from a distant place.' (M2/I/V/i/4–5; Middle Persian)

As both examples show, verbal agreement in the past intransitive is clearly with S; both languages are able to mark S in verbal agreement only, thus dropping the personal pronoun. Thus far, the pattern is exactly the same as in the present.

4.3.2.2.2 *Type β: passive*

- (4.65) 'wd pd tw bst dydym 'w hrwyn dwšmn-yn
 and by 2SG bind.PTCP diadem for all enemy-PL
 'And a diadem was bound by you for all enemies.' (AR/VI/56a; Parthian)

- (4.66) 'wd h'n rwsnyy 'wd xwšn 'yg yzd-'n 'y 'c nwx
 and DEM lightness and beauty EZ god-k REL in beginning
 pd 'z 'wd 'hrmyn 'wd dyw-'n 'wd pryg-'n
 by Greed and Ahremen and demon-PL and Parīg-PL
 zd bwd
 smite.PTCP become.PTCP
 'And the lightness and beauty of the Gods, which in the beginning was smitten by Greed and Ahremen and the demons and the Parīgs, [...]'
 (M7984/II/V/i/19–24; Middle Persian)

The examples illustrate the passive usage of the participle, here with agential phrases marked by *pd* /*pad*/. Durkin-Meisterernst (2014: 349) notes that in (4.66), the passive notion is provided not by the participle, which is supposedly neutral as to voice, but by the auxiliary *būd*. Such an interpretation is clearly not necessary in (4.65).¹²⁰ He notes elsewhere that accordingly, the ergative construction must not be taken as a version of the passive. Although the usage of the past participle is not restricted to forming the periphrastic perfect, and while it can function

¹²⁰ Other examples of the passive construction occurring without any copula are provided by Haig (2008: 118–19).

as an attributive adjective, this use is relatively uncommon and largely passive-intransitive (cf. [Durkin-Meisterernst 2014: 252](#); [Jügel 2015: 271–6](#) with examples); the claim concerning its neutrality is, accordingly, difficult to verify.¹²¹

4.3.2.2.3 Type γ : transitive

(4.67) *byc* 'w's *cy=m* *dvd* 'yy 'w=m *tw* *sxwn*
 CONJ now COMP=1SG see.PTCP be.2SG.PRS and=1SG 2SG speech
 'šnwd
 hear.PTCP
 'But now that I have seen you and heard your speech' (MKG 1398–1400;
 Parthian)

(4.68) *cy=m'n* *dvd* *hy* *tw* *xwd'y*
 CONJ=1PL see.PTCP be.2SG.PRS 2SG Lord
 'for we saw you, Lord.' (M31/I/V/18; Middle Persian)

As is evident from the examples, the auxiliary agrees in person and number with O, while A is expressed by the oblique case, here in the form of enclitics.¹²² That this type cannot be a passive synchronically has been demonstrated in detail by [Noda \(1983\)](#) on typological grounds; further differences consist in the valency (divalency of the ergative transitive vs monovalency of the passive), only optional omission of the copula in passives (whereas the ergative omits the 3SG consistently), and optional expression of agency in the passive. The second clause of (4.67) further demonstrates the lack of a copula in the 3SG.

It is worth noting that enclitics do not only fulfil the role of agent markers in the split-ergative past tense, but can also function as objects and, notably, as possessive markers ([Durkin-Meisterernst 2014: 292](#)). These two functions are illustrated briefly by (4.69, 4.70).

(4.69) 'w=š'n 'c 'z w: 'hrmyn *bwz-ym*
 and=3PL from PN and PN save-1PL
 'And we save them from Āz and from Ahremen.' (M49/II/R/10–11;
 Middle Persian)

(4.70) (gy)'n=wm *j'm* 'w *whyšt* 'nwšg
 soul=1SG lead.IMV to paradise immortal
 'Lead my soul to immortal Paradise!' (MMiii 887; Parthian)

¹²¹ If 'indifference' is understood as referring to the ability of the participle to act as an active or passive depending on the argument structure of the current sentence (A and O vs S only), the term 'conditioned' may be more appropriate. To qualify for true 'indifference', the participle would have to be documented in a *participium coniunctum* construction, showing both diatheses in different passages.

¹²² These examples have been chosen to demonstrate the most transparent form of this construction. The lack of enclitics, and thus the distinction between direct and oblique, yields less transparent and independently ambiguous sentences. Further, it needs to be kept in mind that at one stage of the West Middle Iranian languages, plural marking was facultative; verbal agreement in number need thus not always occur.

The possessive function of the enclitics will be of particular importance in the discussion of the origin of the Armenian genitive marking of agents.

4.3.2.2.4 Ergativity in West Middle Iranian

Coming back to the question of the diathetical orientation of the participle, it is beyond doubt that its Old Iranian and Proto-Indo-European origins are passive.¹²³ The notion that *-to- should have been diathetically indifferent, as alluded to by Durkin-Meisterernst (2014: 252), is to be rejected owing to paucity of evidence.¹²⁴ Synchronically, the periphrastic perfects of other languages may be adduced as comparison: the statements Fr. *il a composé une sonate*, NHG *er hat eine Sonate komponiert*, and NE *he has composed a sonata* are unambiguously active, while the participles *composé*, *komponiert*, and *composed* are unequivocally passive. Similarly, this passive notion can be expressed in periphrastic past tenses in those languages by means of a different auxiliary: Fr. *la sonate a été composée*, NHG *die Sonate ist komponiert worden*, and NE *the sonata has been composed*. There is hence no good reason to assume any diathetical ambiguity in the participle itself; but note that in sentences containing two core arguments, the periphrastic perfect, whose core is the participle, construes unlike a passive.

From type γ it is clear that in its past tense, Parthian and Middle Persian construe as ergative; alignment is therefore split and tense-sensitive. Owing to the development of the nominal system, proper ergative marking is only visible on the surface in the forms of the auxiliary (except for the third person singular), which agree with O, and in the usage of oblique case pronouns (1SG only) or oblique enclitics used as A. Word order may give further clues as to the syntactic role of each constituent.

These restrictions do apply to the attested corpus of the language; based on the reconstructions of and spurious evidence from earlier stages of Parthian and Middle Persian, however, it is possible that this alignment pattern was more clearly defined at a time when direct and oblique case were still overtly marked on nouns and pronouns. As suggested, disambiguation was provided, where needed, by prepositional argument-marking as detailed below. Finally, it must be borne in mind that the attested texts reflect a literary language; spoken West Middle Iranian may have differed in the explicitness of argument-marking.

4.3.2.3 Prepositional argument-marking

Prepositions play a significant role in syntactic argument-marking in both Parthian and Middle Persian. A variety of them are used to mark indirect and direct

¹²³ To be precise, passive-intransitive may be a more accurate term (see the Appendix), since the participles of motion verbs and other intransitives can form participles too.

¹²⁴ The occurrence of passive participles with active meanings in some of the Indo-European daughter languages is insufficient evidence for projecting such a state back to the proto-language. Lat. *pōtus* 'drunk; intoxicated' shows both voices, but the active voice may simply be a secondary, semantically motivated development; cp. Gk. *μεθύω* 'to be drunk', which is clearly active, in contrast.

object, especially when normal SOV constituent order is not followed (Durkin-Meisterernst 2014: 298), among which *'w /ō/* and *pd /pad/* are most important in Parthian for contributing to the disambiguation of syntactic roles.¹²⁵ While *'w /ō/* normally designates ‘das Ziel einer Bewegung bzw. Handlung[,] vor allem [...] mit Verben, die eine Bewegung oder eine Übermittlung bezeichnen’ (Durkin-Meisterernst 2014: 330),¹²⁶ *pd /pad/* denotes the circumstances of an action, its location, temporal frame, or means by which it was achieved; it can further mark the agent in the passive construction (compare type β above). In their usage, *'w /ō/* occurs in both Parthian and Middle Persian, whereas *pd /pad/* seems to be restricted to the latter; prepositional argument-marking in general seems to be more common in Middle Persian.

- (4.71) *'w hm 'w jyryft cy p fyštġ-’n wyfr’št*
 and also OBJ wisdom REL by apostle-PL announce.PTCP
bw-yd 'sxnd-ynd w: 'w 'rd'wyft
 become-3SG mock-3PL and OBJ community-of-righteous
škr-ynd
 persecute-3PL
 ‘And the wisdom, which is announced by the Apostles, they mock, and the community of the righteous they persecute.’
 (MKG 1682–6; Parthian)
- (4.72) *'wd dwdy mry 'wzyy hmwčġ 'w xwd'wn rwšn pywhyd*
 and again Mār Uzzī teacher OBJ lord light entreat.PTCP
 ‘And again the teacher Mār Uzzī entreated the Lord of Light ...’
 (MKG 2262–4; Middle Persian)
- (4.73) *'L 'lthšdl dyt' W pt=š ny'c-'n' bwt'*
 OBJ Ardaxšir see.PTCP and OBJ=3SG desirous become.PTCP
 ‘(She) saw Ardaxšir and desired him (lit. became desirous)’
 (KAP 3,2; Middle Persian)¹²⁷

In his discussion of the preposition *'w /ō/*, Durkin-Meisterernst (2014: 330–40) mentions that its occurrence seems to be dependent largely on word order, given that its usage in verse in general, and in postverbal position in particular, is more common; its usage is deemed non-obligatory as long as SOV constituent order is maintained. The notion that an object marked by *'w /ō/* ‘bestimmter ist als ein direktes Objekt ohne *ō*’ is rejected owing to lack of evidence (2014: 330).¹²⁸ Yet, the

¹²⁵ Brunner (1977: 147) further mentions MP *z /az/* as an occasional direct object marker; this function is not attested in Parthian.

¹²⁶ ‘the goal of a motion or action, especially [...] with verbs of motion or transmission.’

¹²⁷ ‘L is a heterographic writing of *'w /ō/*.

¹²⁸ ‘is more definite than a direct object without *ō*’; for more details on differential object-marking in Middle Persian, see Jügel (2019).

high incidence of *w/ō/* in Parthian, esp. within the past tense, has led Brunner to take it as an indication of the

effacing of the participle's passive character. The construction would then represent a preliminary step toward the reinterpretation of the past passive sentence [...] as transitive. (Brunner 1977: 137)

In the terms used here, this means that Parthian was transitioning from an ergative (first person singular pronoun, enclitics) or neutral (other pronouns and nouns) to a tripartite or accusative pattern.¹²⁹ By the time of early Classical Persian, such changes would certainly have been completed; the specific developments are difficult to determine, however, as a result of sparse relevant evidence in this regard from the later part of the Middle Iranian period.¹³⁰

4.3.2.4 Later developments within the history of West Middle Iranian

Although Parthian and Middle Persian were both tendentially quite conservative in orthography and grammar, innovations still transpired in the written texts as well. To what extent the time of attestation correlates with the original development of an innovated construction or similar is, unfortunately, impossible to determine for certain.

Since the ergative construction is restricted to the past transitive, and there to the indicative, it is not surprising that ‘geriet die Konstruktion unter Druck der aktivischen Konstruktion, und es treten entsprechende Ausgleicherscheinungen auf’ (Durkin-Meisterernst 2014: 397–8; cf. Brunner 1977: 221–2).¹³¹ The dating of this change is impossible on the basis of current material, but since these *Ausgleicherscheinungen*, i.e. de-ergativized constructions occur in some of the Turfan fragments, the 8th century CE may be assumed as a *terminus ante quem*.

The main change involves the agreement of the copula with A rather than O; since S, A, and O were already identical in surface form, this was a simple adaptation to the majority pattern.

- (4.74) *dy'n hbz' wrwc'n š'h w'xt kw 'ym kd'm*
 then Habazā Waručān-šāh say.PTCP COMP DEM what-kind
wy'w'r 'st 'wd w'xt-ynd kw
 speech be.3SG.PRS and say.PTCP=be.3PL.PRS COMP
 ‘Then said Habazā, the *Waručān-šāh*: ‘What kind of speech is this?’ And they said: ...’ (MKG 145; Parthian)

¹²⁹ The usage of these terms here is to be taken as an idealization: as has been remarked above, the usage of *w/ō/* was not compulsory. Further, different marking patterns are at play, since the first person singular pronouns has suppletive case forms, while all others are marked by the preposition alone.

¹³⁰ For a detailed consideration of adpositional object-marking in Middle Iranian, see Jügel (2015: 192–219).

¹³¹ ‘The construction was under pressure from the active constructions wherefore signs of compensation show up.’

- (4.75) *'wd yzd-'n pnd grypt hym*
 and god-PL path take.PTCP be.1SG.PRS
 'And I took the path of the Gods.' (M49/II/V/4; Middle Persian)¹³²

The Parthian example reads *wāxtēnd* for original *wāxt hēnd* and thus already shows the kind of univerbation typical of Classical Persian; the line must read 'and they said' (another interpretation is not permissible in this context), and thus shows agreement of auxiliary and A. Similarly, no plausible passive interpretation can be proposed for the Middle Persian example, since *pand* 'path' is not a semantically viable agent.¹³³ One change, which is unfortunately not exemplified by Brunner or Durkin-Meisterernst, is the occurrence of the 3SG copula in such de-ergativized forms, when its occurrence is not attested in the older texts under ergative agreement.

While Classical Persian has abandoned split-ergative agreement for an accusative pattern with direct object-marking in *ra*, other Iranian languages, which similarly developed ergative alignment either as a result of phonological and ensuing morphological changes or under the influence of surrounding varieties with this feature, dealt differently with this pattern (see 4.1). As the difference in the choice of preposition for direct object-marking illustrates, and as corroborated by other divergent developments, Classical Persian is not a direct successor of Middle Persian *sensu stricto*, inasmuch as Middle Persian is not a direct successor of Old Persian; this may in part be due to the tendency of West Middle Iranian texts to archaize, thus not reflecting current idiom and grammar as regards prepositional usage, and to the fact that instead of a single language it may be more sensible to speak of a dialect continuum, in view of the size of the Sasanian Empire and the diversity of Iranian languages spoken therein and thereabouts.

4.3.3 Comparison of West Middle Iranian and Classical Armenian alignment

Now that both the Armenian and Old and Middle Iranian data have been set out in their essence, it is possible to compare the alignment properties of both language groups effectively. The following features need to be taken into account: (1) tense-sensitivity; (2) case-marking; (3) prepositional object-marking; (4) occurrence of the copula; (5) occurrence of non-standard patterns; (6) chronological coincidence.

¹³² Sundermann (2001: 269–70) for linguistic reasons assumes this text to be older than other Turfan texts.

¹³³ But see the discussion in Durkin-Meisterernst (2014: 399).

- (1) It has been shown in both instances that non-accusative¹³⁴ alignment is tense-sensitive in that it only occurs in periphrastic tenses, specifically composed of the originally passive past participle and an optional form of the copula. Both languages further agree in maintaining a passive pattern next to the non-accusative one, which differs from the latter in either the absence of an agent or its marking by means of a preposition, and agreement of the copula with the grammatical subject.
- (2) The commonalities and differences in case-marking are less readily compared, since Armenian has maintained a fuller case system than Parthian and Middle Persian. It is of note, however, that neither Armenian nor West Middle Iranian distinguishes nominative/direct and accusative/oblique in the singular, but that they do so in the plural. Since Iranian marks O as direct in the past tense, accusative O-marking in Armenian must be an innovation, most likely on the basis of nominative–accusative identity in the singular. A more significant difference exists in the marking of A; Parthian and Middle Persian use the same oblique case, which only in plural nouns, in the 1SG pronoun, and in enclitics differs from the direct case, while Armenian exhibits genitive marking for the most part. This is best explained as relating to the other function of the West Middle Iranian oblique case, namely marking possession (see 4.3.2.2.3), which aligns with the function of the Armenian genitive. Additionally, genitives are commonly used as agent cases across languages (see 4.1.2.3).
- (3) A different situation obtains regarding direct-object marking, since both language groups can (but need not) mark the direct object by means of a preposition; this is valid not only in the periphrastic perfect but also in other tenses, and reflects the insufficiency of nominal morphology in unambiguously specifying syntactic roles.
- (4) The usage of the copula is without doubt the most divergent feature between the two language groups: while Parthian and Middle Persian show copula agreement with O except for the 3SG, where Ø agreement occurs, Armenian generally shows an invariant 3SG copula, or no finite verb at all. This latter fact unites the two languages again, however, in that the absence of the copula is effectively the norm.
- (5) In both language groups, there was some indication of non-standard patterns, where accusative constructions occurred in normally ergative environments, and (in Armenian only) vice versa. This suggests that both languages are, if perhaps at different stages, undergoing alignment change.

¹³⁴ This term is used here to refer to both the ergative/neutral alignment in West Middle Iranian and the tripartite alignment of Classical Armenian; it is not meant as a claim for a further pattern, but as an umbrella term to simplify discussion.

- (6) As concerns the time-frame in which these patterns were dominant, sources allow for the assertion that in the 5th century CE, during which Armenian was first attested in written form, all these patterns were in active use at least in written material, and that during the developments in early West Middle Iranian detailed above, the two languages would have been in close contact.

Armenian and West Middle Iranian therefore show non-trivial and non-random commonalities not paralleled in other Indo-European languages of the same or earlier periods, while diverging in some aspects. Keeping in mind their close geographical, sociohistorical, and linguistic relationship, as evidenced by Armenian lexicon, derivational morphology, phraseology, and literature, the question posed in section 4.2.3.1, namely whether the Armenian perfect might have an Iranian origin, does indeed bear closer investigation.

4.4 Hypotheses and questions

The groundwork for an investigation into potential syntactic interference in Armenian by the West Middle Iranian, and more specifically Parthian, ergative periphrastic perfect has been laid above. There are sufficient non-trivial commonalities to make a relationship between the unusual morphosyntactic alignments in both languages plausible. As has been suggested in 4.2.3.1, the Armenian alignment pattern is a consequence of previous ergative alignment modelled on West Middle Iranian patterns; later stages of the languages in question, i.e. Middle Armenian and Classical Persian (in lieu of a successor to Parthian), show a clear abandonment of ergative alignment in favour of accusative patterns, as already predicted by some non-standard occurrences of such patterns in the earlier languages.

It is evident that, if the Armenian pattern is of Iranian origin, it has developed along different lines from those of its model, and that only a non-initial stage of this development is attested. One of the tasks of this investigation must therefore be the reconstruction of this developmental path, and the explanation of the changes that Armenian must have undergone in order to arrive at the attested state; other modern Iranian languages show quite clearly that there is no single path away from ergativity, since even closely related and structurally similar languages have taken different routes (Haig 2008; Matras 1992–3; Payne 1979; 1980). The *prima facie* differences, i.e. the optional but invariant copula and the usage of the genitive for A in the transitive past, need to be the initial focus of this analysis. A corpus study of the earliest original Armenian texts will show whether there are any conditioning factors underlying the choice [±copula], [±object-marking] and the occurrence of the past participle in a *participium coniunctum*, or non-copular, construction, and whether the incidence of these features is constant or varies over time.

The following working hypotheses serve as a set of guides which the corpus study aims to prove or disprove:

- the Classical Armenian periphrastic perfect shows tripartite alignment as a result of pattern replication of a Parthian model, i.e. the ergative periphrastic perfect;
- the choice of the genitive as the case-marking A is motivated by functional similarities with the West Middle Iranian oblique case and the use of enclitic pronouns in marking possession;
- the development of the invariant copula is an Armenian innovation, and independent of the Parthian model;
- instances of atypical alignment are indications of continuing alignment shift within Armenian (ergative–absolute model > tripartite transition > nominative–accusative).

The linguistic analysis of the corpus therefore needs to consider the occurrence of the past participle both as part of the perfect construction and on its own, and make enquiries concerning the relative frequency of its occurrence with and without the copula, with and without an explicit agent, in *participium coniunctum* constructions, as well as the word order of its arguments, the occurrence of the direct-object marker, and its co-ordination with other non-periphrastic, nominative–accusative-aligned tenses. On the basis of this data, the state and development of the construction will become clearer and allow for an evaluation of its diachronic trajectory and historical origin by means of quantitative analysis. It further provides the first account of this pattern based entirely on non-translated, i.e. originally Armenian, texts, thus avoiding any potential translation effects that might have influenced previous studies based on the New Testament translation.

5

The syntax of the Armenian perfect

A corpus analysis

In order to test the hypotheses set out at the end of the previous chapter, it is necessary to study the Classical Armenian periphrastic perfect in some detail. This is best done by means of a quantitative and qualitative analysis of a corpus of pertinent Armenian texts.

As set out in section 4.4, if these hypotheses are correct, the data needs should reflect certain predicted characteristics and tendencies. Firstly, if the perfect construction is indeed due to Iranian influence and therefore is based on an ergative–absolutive alignment pattern, the tripartite alignment as attested in the earliest texts is likely the result of an adaptation of the ergative pattern to the otherwise nominative–accusative aligned verbal system of Armenian. It may be expected that such adaptation processes, leading to the eventual loss of tripartite alignment in the perfect, should be evident in Classical Armenian, specifically in non-standard subject- or agent-marking (genitive instead of nominative subject, nominative instead of genitive agent). If this trend is diachronically persistent, more variation in this regard may be expected from later texts.

Secondly, if the copula—at least in its invariable 3SG form in the transitive perfect—is an Armenian-internal development, rather than based on an Iranian model, its incidence may be expected to increase. As with case-marking, if the perfect is indeed in the process of de-ergativization, it may further show signs of agreement change or variation in that the copula may begin exhibiting agent- or object-agreement rather than \emptyset -agreement. Again, this kind of development would likely be more pronounced in later texts.

A third point concerns the use of the participle as an adjective. Since the participle is originally passive–intransitive in nature (see [the Appendix](#) for details), its adjectival uses should be restricted to passive–intransitive meaning too, at least in the earlier texts. If transitive uses occur, they would probably be analogically derived from the use of the participle in the perfect construction; under this analysis, they are likely to be late and minor occurrences.

Finally, the non-copular use of the perfect needs to be considered. If the copula is an Armenian-internal development, and the construction does indeed rely on an Iranian model, this non-copular use should be most frequent in the earlier texts, and should be able to appear on its own, as the sole verb of a main clause.

These expectations form the underlying framework for the enquiries to follow, and will determine the merit of the hypotheses previously set out.

Before going into data analysis, two sections discuss the selection, creation, and analysis criteria of the corpus. The section concerning the corpus itself will briefly describe the texts used for this study, their content, and relative chronology. It will further outline why certain texts have not been included in this analysis.

The following section describes the issues with current digital corpora of Classical Armenian texts, and how the corpus used here was compiled. It further outlines the categories according to which each occurrence was analysed, and discusses the principles to which this analysis has adhered.

Following on this, the data gleaned from the corpus study is discussed. After an outline of the adjectival use of the participle, the distribution and development of the periphrastic perfect is considered in some detail, followed by a shorter look at the category of converbs (or appositional participles). In each case, the data is considered from a qualitative point of view first, and common features and problems are outlined; this is followed by a quantitative analysis.

After a brief consideration of the role polarity and constituent order play in the perfect, an error analysis of the study is conducted prior to offering an evaluation of the hypotheses and a summary of other insights.

5.1 The corpus

The two main principles that underly the selection of the texts used for this corpus are homogeneity and contemporaneity. In order to avoid interference from different genres or the influence of other languages, only historiographical texts (in the broad sense) have been used; equally, only texts assumed to have been written in or just after the 5th century CE have been used in order to permit a detailed, relatively fine-grained study of the perfect and its nascent development into a nominative–accusative aligned tense. The latter is of particular interest since the outcome of this development, i.e. the loss of tripartite alignment by the 8th century, has already been established, but the process of its development is as yet unclear.

For these reasons, the following five texts were chosen for analysis:¹

- *The Epic Histories* (*Buzandaran Patmut'iwnek'*) attributed to P'awstos Buzand;
- *The Life of Maštoc'* (*Vark' Maštoc'i*) by Koriwn;
- *The History of Armenia* (*Patmut'iwñ Hayoc'*) attributed to Agat'angelos;
- *The History of Armenia* (*Patmut'iwñ Hayoc'*) by Łazar P'arpec'i;

¹ See 5.2.1 for details on how these texts were accessed; all texts have been compared with the most recent authoritative version as printed in the *Matenagirk' Hayoc'*.

- *Concerning Vardan and the Armenian War* (*Vasn Vardanay ew Hayoc' pater-azmi*) by Elišē.

As at least some of these titles suggest, all five works deal with the history of Armenia and some of its most prominent leaders or historical figures, such as St Grigor Lusaworič, who was instrumental in the Christianization of Armenia in the early 4th century (Agat'angelos); Mesrop Maštoc', the monk and scholar who invented the Armenian alphabet (Koriwn); and Vardan Mamikonean, who led the Armenian army in the battle of Avarayr in 451 CE and secured the position of Christianity in Armenia (Elišē).

Agat'angelos' *History of Armenia* details the developments in Armenia between the onset of the demise of Arsacid rule over Persia after 224 CE and the death of St Grigor Lusaworič in c.325 CE. For the better part, it is concerned with the life and deeds of St Grigor, most importantly his conversion to Christianity of King Trdat III, the Great (r. 287–c.330), and the rest of Armenia (cf. Thomson 2010).

The *Epic Histories* are an account of the later years of the Arsacid dynasty in Greater Armenia, covering the period between the reign of Xosrov III Kotak (r. 330–338/9 CE) and the partition of Armenia between the Byzantine and Sasanian empires (387 CE), and describes in some detail the precarious position of Armenia between these two great powers (cf. Garsoïan 1989).

Łazar's *History of Armenia* begins where the *Epic Histories* ended, with the division of Armenia in 387 CE, and ends after 484 CE with Vahan Mamikonean entering into negotiations with the Sasanian king Vałarš. The bulk of the history treats the 5th-century conflicts between Christian Armenians and Zoroastrian Sasanians, including the battle of Avarayr (cf. Thomson 1991). The latter battle and its circumstances and consequences are also narrated, in somewhat greater detail, by Elišē (cf. Thomson 1982).

Koriwn's *Life of Maštoc'* stands out among these texts to a certain extent owing to its subject, namely the life and works of Mesrop Maštoc' (c.362–440 CE; cf. Mahé 2005–7; Winkler 1994). The latter text is also the shortest of those considered, while the works of Łazar and P'awstos are the longest. Table 5.1 provides specific details concerning the approximate word count of each text.

Inevitably, this corpus is smaller than many modern language corpora. Although it is a synchronic full-text corpus, its genre-based, specialized nature

Table 5.1 Word count of the corpus text and number of occurrences of the participles therein

	Kor.	Ag.	P'B	ŁP'	Eł.	total
Words	6,349	31,746	62,673	61,655	40,817	203,240
Occurrence	358	1,106	1,747	2,713	1,074	6,998

(Kennedy 1998: 19–23) accounts for its size, which is also determined by the availability of texts from this period. Not all texts dating to the 5th century have been used, for reasons that are further explained in 5.1.2. While this limits the representativeness of this corpus for Classical Armenian according to the criteria laid out by e.g. Biber (1993), it must be kept in mind that Late Antique written accounts of any genre are unlikely to be very varied in terms of the addressee's or addresser's relation to specific social strata. As pointed out in section 2.1, any study of this time, linguistic and otherwise, is largely restricted to investigating the upper strata of society and the corresponding literary language.

5.1.1 Relative chronology of texts

As a result of the age and limited manuscript history of these works, as well as the potential of scribal interference and interpolations, it is impossible to arrive at a certain, absolute date for any of these texts.² Even establishing a relative chronology is not entirely straightforward.

Especially in the case of Łazar and Elišē, who cover similar time-spans and topics, the question of who influenced whom and who copied from whom is difficult to answer (Thomson 1982: 26–9; 1991: 5). Thomson, for reasons that are too complex to reiterate here and have little bearing on this study, is of the opinion that the work of Łazar ought to be attributed to the end of the 5th century, while Elišē's history may have been written in the early 6th century, but at any rate after that of Łazar.

Garsoĭan (1989: 10–11) discusses the date of the *Epic Histories*, which the narrator claims are eyewitness accounts of 4th-century history. Given a number of confusions and inaccuracies, as well as quotations from later texts like Koriwn and prominent foreshadowing of later historical events such as the battle of Avarayr in 451 CE, Garsoĭan suggests a date in the 470s CE for this text.

Text-internal evidence suggests that the date of composition of Koriwn's *Life of Maštoc'* must have been before the battle, but necessarily postdates the death of its central character, Mesrop Maštoc'. Winkler (1994: 21) suggests a period of time between 442/3 and 449 CE.

Finally, Thomson (2010: 87–108) considers in great detail the potential date of the *History* attributed to Agat'angelos. In brief, it appears that the work makes use of material not known prior to the composition of Koriwn's biography of Maštoc'.

² Limitations of space entail that what follows is not a discussion of the issue of dating and chronology, but instead a statement of the *communis opinio*; for discussions and bibliographical material, cf. the referenced works.

and in turn was itself known to Łazar and P'awstos; this puts it right in the middle of the century, likely in the 460s CE.³

While these dates are vague, they provide a probable internal chronology which, in what follows, is used for the identification of linguistic trends in the corpus. For the present purpose, therefore, the following chronological order is assumed (textual abbreviations in brackets):

- (Kor.) Koriwn: 440s
- (Ag.) Agat'angelos: 460s
- (P'B) P'awstos Buzand: 470s
- (ŁP') Łazar P'arpec'i: late 5th century
- (Eł.) Elišē: later 5th/early 6th century

Based on the expectations set out above, Koriwn should accordingly exhibit the most conservative patterns, while more variation or innovation may be seen in Elišē.⁴

5.1.2 Exclusions

A small number of texts have been excluded from this corpus. The reasons for this exclusion are twofold: one set is of texts that are likely to be too heavily influenced by another language, viz. Greek; other texts pertain to a different genre and may, for this reason, exhibit different linguistic properties.

The most notable exclusions are the New Testament translation and Eznik Kolbac'i's *Against the Sects*.⁵ The former has been excluded primarily because it is a translated text, and owing to translation effects may not correctly reflect the state of the Armenian language at the time in question.⁶ This point has been made repeatedly by e.g. Lafontaine and Coulie (1983); Cowe (1994–5); and Meyer (2018; 2023). Eznik, one of the translators of the New Testament, in his writing on occasion also exhibits signs of interference from Greek; the exclusion of his philosophical and theological tractate, however, is owed mainly to its genre, which does not fit with the other texts of the corpus, and which, without other contemporaneous comparanda of the same genre, may have skewed data analysis.

³ Thomson (2010: 8–24) also gives a clear indication of the complicated history of the various recensions of the work attributed to Agat'angelos. The date suggested here is the latest permissible for the version as compiled in modern editions.

⁴ In-text references to the texts follow the divisions given in the *Matenagirk' Hayoc'*.

⁵ These two texts were among those considered by Vogt (1937). Based on the *index locorum* and numbers cited, however, Vogt cannot have considered each text in full. The current study will remedy this, and avoid a skewing of the data by not mixing translated and original texts. For a study of the perfect in Eznik, see Lyonnet (1933), Ouzounian (2003).

⁶ For a refutation of the alleged translated nature of the *Epic Histories*, see Garsoïan (1989: 6–8).

For these same reasons, all texts pertaining or ascribed to the so-called Hellenising School (*Yunaban dproc'*) have been excluded.⁷

Another text that has been ascribed to the 5th century is the *History of Armenia* by Movsēs Xorenac'i. As has been argued by Thomson (1978: 1–61, esp. 58–9), however, textual evidence in the form of quotations taken from texts posterior to the claimed date of composition points towards a later time of composition, probably the 8th century; see also section 5.6.

5.2 Methodology

There are already a number of fully or partially parsed corpora of Armenian available online. The largest is the *Eastern Armenian National Corpus (EANC)* with c.110 million words; since it covers only text from the mid-19th century onwards, however, it is of no use for this study.

A number of texts (Kor., Ag., EK) further exist in parsed form as part of the *Thesaurus Indogermanischer Text- und Sprachmaterialien (TITUS)*; similarly, the commercial *Leiden Armenian Lexical Textbase (LALT)* has a number of parsed works (Kor., Ag., El.). No available repository, however, has a version of either LP' or P'B.⁸

Unfortunately, the online interfaces of these repositories do not allow for easy corpus-based queries based on grammatical form or function, nor indeed for the export of data for use in other applications; since both corpora are based on now depreciated data structures and front-ends, an exclusively online use was ruled out. This highlights a distinct need for innovation in the study of Classical Armenian and its linguistic structures. A digital corpus of Classical Armenian texts, beginning with the New Testament translations and the works used here, morphologically and lexically parsed and tagged for syntactic structures, would be a tool that would put Armenian on par with other classical languages such Latin and Greek.⁹

5.2.1 Data retrieval

The lack of a readily usable source of linguistic data led to a different approach being taken. Digitized plain-text versions of Kor., Ag., P'B, LP', and El. based on reliable print editions are available from the *Digital Library of Armenian Literature*

⁷ For an overview, see Muradyan (2012).

⁸ The text of Kor. is further available in a parsed and tagged format from the *Pragmatic Resources in Old Indo-European Languages (PROIEL)* project.

⁹ An XML-based data structure like that of the dependency treebanks of the PROIEL project, which already includes the text of Kor., would make for a good starting point in such an endeavour; see Eckhoff et al. (2018).

(DIGILIB). These texts have been retrieved, ‘cleaned’ (stripped of undesirable characters and annotations), and mined for occurrences of the *-eal* participle by means of a set of scripts written in Python.¹⁰ Two types of false positive had to be excluded manually: the infinitive of the verb *keam, keal* ‘to live’ (*passim*), and two place names (*Arpāneal* and *Grēal*, both in Eł. p. 69). Overall, this yielded 6,998 occurrences.

5.2.2 Data categorization and principles of analysis

Each occurrence was analysed according to the following categories (possible values noted in brackets):

- use (adjective; main verb; converb;¹¹ adverb¹²);
- valency (intransitive; transitive);¹³
- voice (active, passive, impersonal);¹⁴
- subject/agent case (nominative; genitive; Ø);
- explicit object (yes; no);
- copula present (yes; no);
- copula agreement (subject; agent; object; Ø-agreement);
- form of copula (be.PRS; be.PST; be.PRS.SBJV; become.PRS; become.PST; become.AOR.SBJV);
- constituent order (V; SV; VS; AV; VA; OV; VO; AVO; AOV; VAO; VOA; OVA; OAV)
- polarity (positive; negative).

Some further notes are in order to explain these categories further. In the case of adjectival use, only two other categories (valency, voice) were considered. In general, the term ‘adjective’ has been used conservatively here, and strictly refers to either nominalized, attributive, or clearly predicatively used participles after verbs like *erewim* ‘to appear’, *gtanim* ‘to appear; lit. to be found’. In attributive use, participles most frequently refer to oblique-case NPs, or are used as epithets, e.g. *urac’eal* ‘having apostasized; apostate’ as the epithet of Vasak Siwnec’i. Other indications that a participle was used adjectivally or nominally are coordination with other

¹⁰ An annotated version of these scripts can be found in Meyer (2017: 347–52).

¹¹ For a definition, see 5.3.3.1.

¹² The category ‘adverb’ has been used exclusively for Arm. *darjeal* ‘again; lit. having turned’; this participial form has grammaticalized as an adverb, and in many but not all instances is used thus rather than as a participle proper; it will not be further discussed here.

¹³ As suggested by the discussion in 4.1.1, ditransitive verbs have not been categorized separately, but rather as transitive verbs; their third participant has been ignored.

¹⁴ Since Armenian makes no formal morphological or syntactic distinction between the middle voice and the passive, no such differentiation has been attempted here.

adjectives or nouns and the use of the determiners =s, =d, and =n, e.g. *arakealn* ‘the apostle; lit. sent’. Further examples are provided in 5.3.1.

In contrast, participles have been categorized as main verbs if they are accompanied by a copula, are coordinated with other main verbs by means of conjunctions, or are the only verb in a clause.

The category ‘converb’ comprises all other instances of participles, referred to historically as appositional or *participium coniunctum*. They are adjuncts to the main verb, and can (but need not) share its subject, agent, and/or object; in most instances they express actions prior to or contemporaneous with that of the main verb, which are however less important than the main-verb action. They differ from the adjectival use of the participle in not describing an NP, but instead the main verb more closely. The converbial use of the participle is discussed in detail in 5.3.3.

In the ‘voice’ category, the value ‘passive’ has been used only when a context demanded a passive reading. In the case of *zarhurem* ‘to frighten’, for instance, the common participle *zarhureal* has mostly been interpreted as intransitive active (‘having been in a state of fright’) rather than intransitive passive (‘having been frightened’) unless there was a clear indication of external agency or causation.¹⁵

Only overt subjects and objects, i.e. those occurring within the same clause as the participle in question, have been counted as such and registered accordingly as part of the constituent order.¹⁶

As regards the copula, the following verbs have been counted as copular: *em* ‘to be’, *linim* ‘to become’, and *elanim* ‘to become’.¹⁷

5.3 Data analysis

After this outline of the structure of the corpus and the principles of analysis, the following section will present the outcomes of the corpus study. Each discussion will begin with a few standard examples of the feature or category in focus, and will present a statistical analysis, potential diachronic trends where appropriate, and a discussion of potential problems.

The analysis commences with participles categorized as adjectival, and will then move on to those used as main verbs in the periphrastic perfect, and those used as converbs. Finally, observations are made concerning constituent order and polarity.

¹⁵ External agents are normally expressed by *i* + ABL, or with pure INS.

¹⁶ As will become apparent in the discussion of converbs, it is at times difficult to establish whether a subject or agent more closely belongs to the converbial participle or the main verb.

¹⁷ Although the verb *kam* ‘to remain’ also occasionally occurs with participles, it has not been counted as a copula owing to its relative rarity, and since participles occurring with *kam* can be counted as converbs; see 5.3.3. The same goes for *unim* ‘to have’, which occasionally occurs together with the participle (Kocharov 2016).

5.3.1 Adjectival and nominal participles

In its most basic form, the participle is used as an adjective, either as an attribute to an NP, used predicatively with certain verbs like *erewim*, *gtanim* ‘to appear’, or in a nominalized form. Since the participle is, historically speaking, a passive–intransitive formation, its adjectival forms should reflect this heritage in being largely passive–intransitive as well.

Examples (5.1, 5.2) are instances of participles being used attributively.

- (5.1) *ard dimeac’ gal surb=n Grigorios zi*
 PTC rush.3SG.AOR go.INF holy=DET PN COMP
k’andesc’ē ew z=ayn ews zi takawin isk
 destroy.3SG.AOR.SBJV also OBJ=DEM further COMP more PTC
tgēt mardik xar’nakut’ean zohēin y=ays
 ignorant mankind confusion.GEN.SG sacrifice.3pl.pst to=DEM
bagins mnač’eals
 altar.ACC.PL remain.PTCP.ACC.PL
 ‘Then St Grigor set out so that he might destroy this one, too, since ignorant men to/of chaos (?) still sacrificed at these remaining altars.’ (Ag. CXIV.3)

- (5.2) *sałmosk’ ēin noc’a mrmnjunk’ ergoc’*
 psalm.NOM.PL be.3PL.PST 3PL.GEN whisper.NOM.PL song.GEN.PL
ew ant’erc’uack’ surb groc’ katareal
 and lesson.NOM.PL holy scripture.GEN.PL complete.PTCP
uraxut’iwnk’
 happiness.NOM.PL
 ‘Their whispers of songs were psalms, and the lessons in holy scripture their supreme happiness.’ (Eł. VII.22)

In (5.1), the active intransitive participle *mnač’eals* must refer to *bagins*, both being in the accusative, and thus can only be an adjective. Similarly, (5.2) shows the passive–intransitive participle *katareal* in the nominative describing *uraxut’iwnk’*; here, the attributive participle is part of a predicative NP.¹⁸ As these and the following examples show, adjectival participles, attributive and otherwise, can occur together with NPs in all cases.¹⁹

¹⁸ Note, however, that a converbial interpretation is only excluded by context. In principle, there is little that would speak against a reading ‘their happiness, once it was achieved, was lessons in holy scripture’. This example highlights that data analysis can be difficult and, at times, subjective, since it is context-dependent.

¹⁹ It must be kept in mind that adjectives preceding their NP are not commonly inflected even if the NP is.

As already mentioned, participles also occur in predicative position. Examples (5.3, 5.4) illustrate this use after the verbs *t'uim* 'to seem' and *erewim* 'to appear'.

- (5.3) *ayl t'ē hnar ēr jez ayžm gitel*
 but if possible be.3SG.PST 2PL.DAT now know.INF
margarēut'eamb t'ē orpēs vasn patgami=d
 prophecy.INS.SG COMP how because-of message.GEN.SG=DET
aydorik [...] t'uik' mez angitk' ew
 DEM.GEN.SG seem.2PL.PRS 1PL.DAT ignorant.NOM.PL and
korusealk'
 ruin.PTCP.NON.PL
 'But if it were possible for you to know by foresight how ignorant and
 lost/ruinous you seem to us because of that message.' (ŁP' LV.21)

- (5.4) ... *čaragayt'ic' imanali aregakan, or y=amenayn žam ew*
 ray.GEN.PL spiritual sun.GEN.SG rel in=all time and
y=amenayn awr ger i veroy cageal erewi
 in=all day very in above shine.PTCP appear.3SG.PRS
ameneč'un
 all.DAT.PL
 '... of the rays of the spiritual sun, which every hour and every day
 appears shining more [brilliantly] above [us] all.' (Eł. V.89)

In (5.3), *korusealk'* refers to an unexpressed 2PL which is only patent in *t'uik'*; the adjectival reading of this participle is further corroborated by the coordinated adjective *angitk'*. The interpretation of the participle's voice is not entirely clear here, since both a passive reading 'lost' and an active intransitive reading 'ruinous, doing an act of destruction' seem plausible; for evaluation purposes, an active intransitive reading has been preferred. This illustrates some of the interpretive challenges of data analysis.

Example (5.4), in turn, clearly shows an active intransitive participle *cageal*, here dependent on *erewi* with the relative pronoun as its subject. In this case, again, a converbial reading is not impossible, but seems contraindicated by context, as 'which having shone appears' or 'which shines and appears' seem less plausible interpretations.

The final category of adjectivally used participles are those in nominal use. Like their attributive and predicative counterparts, they too appear as either intransitive active or intransitive passive, as (5.5) and (5.6) demonstrate.

- (5.5) *areal aynuhetew eranelwoy=n z=hawatač'eals*
 take.CVB thereafter blessed.GEN.SG=DET OBJ=believe.PTCP.ACC.PL
iwr
 3POSS
 'Thereafter, the Blessed took his believers ...' (Kor. V.1)

- (5.6) *ew c'uc'anim anzgam orpēs ew surb arak'ēal=n*
 and seem.1SG.PRS unfeeling like also holy send.NOM.SG=DET
Astucoy Pawlos
 God.GEN.SG PN.NOM.SG
 'And I may seem unfeeling like the holy apostle Paul' (ŁP' XVI.13)
- (5.7) *ert'ayk' y=inēn anicealk' i hur=n*
 go.2PL.IMV from=1SG.ABL curse.PTCP.NOM.PL into fire.ACC.SG=DET
yawitenic'
 eternity.GEN.PL
 'Go forth from me, accursed ones, into the fire of eternity ...'
 (ŁP' XXXII.13)

In (5.5), the intransitive active participle *hawatac'ēals*, best rendered as 'believers (lit. who believe, do an act of believing)', occurs in the accusative. While adjectives are often nominalized by means of enclitic determiners, the latter only occur with definite NPs, and thus this participle does not receive such marking. Here, the absence of other NPs which the participle could refer to, and the fact that it has been marked as accusative plural, sufficiently indicate its nominalized status.

Both *hawatac'ēal* and the participle used in (5.6), passive–intransitive *arakeal* 'apostle (lit. sent)', are used so frequently as nouns that they have probably been lexicalized as such; the Modern Eastern Armenian nominal cognates *arakyal* and *hawatac'yal* corroborate this. Owing to their formation, they have nonetheless been counted as participles in the corpus.

Finally, (5.7) illustrates the use of nominalized participles in appellations. In this instance, *anicealk'* 'cursed', although part of an address, appears as nominative, since Armenian lacks a vocative. Once more, a converbial reading ('Having been cursed, leave ...' or 'Be cursed and leave ...') is possible but not plausible in context, since the act of cursing is not recent and thus unlikely to cohere with the main verb.

The occurrences of adjectivally used participles are summarized in Table 5.2. As shown, the adjectival use makes up for, on average, c.15.18 per cent of all participles with only minor variation between the texts.²⁰ Passive–intransitive participles are more common in all texts but Eł., but it is unclear whether this predominance, or its lack in Eł., are of any significance or simply results of authorial style or content.

It must be noted, however, that Eł. also stands out in its usage of transitive active participles, which do not occur elsewhere. Example (5.8) presents one of those instances.

²⁰ At a standard deviation of $s=2.88$, all values fall within 1.2s.

Table 5.2 Distribution of voice and valency in adjectival participles

	Kor.	Ag.	P'B	ŁP'	El.
ITR.ACT	12	53	113	118	96
ITR.PASS	32	134	188	202	89
TR.ACT	0	0	0	0	4
Total	44	188	301	320	189
% of all PTCPS	12.3	17.0	17.2	11.8	17.6

- (5.8) *zi ork' kalc'in sirov*
 COMP REL.NOM.PL accept.3PL.AOR.SBJV love.INS.SG
erewesc'in katareal z=hraman=n ark'uni
 appear.3PL.AOR.SBJV fulfil.PTCP OBJ=command.ACC.SG=DET royal
 '... so that those who accept it may seem to have fulfilled the royal
 commands willingly' (El. III.75)

In this instance, *katareal* is clearly used predicatively after *erewesc'in*, and is the only verb which can govern the object *z=hraman ark'uni*. If participles in transitive use are part of Armenian syntax, they are very clearly a nascent category, as the small number of occurrences suggests. As a result, however, it is impossible to determine whether they have developed in analogy to the transitive use of the participle as part of the perfect or as a converb, or whether they have arisen differently.²¹ In either case, their rarity and late occurrence confirms the picture presented above.

Based on the data presented here, it appears that one of the expectations voiced above stands corroborated. The use of the participle in its original, adjectival form is restricted to intransitive active and passive forms, as the historical morphology of the participle predicted. The few instances of adjectivally used transitive participles are late, secondary innovations as indicated by their occurrence only in El., the latest of the five corpus texts.

In turn, this distribution also suggests that the active use of the participle in the periphrastic perfect must have developed secondarily, since explanations can no longer reasonably rely on originally diathetically indifferent participles.

5.3.2 Participles in the 'true' periphrastic perfect

According to traditional grammars like [Jensen \(1959\)](#), and as outlined above, the periphrastic perfect, of which the participle is an integral part, construes as

²¹ [Thomson \(1982: 27\)](#) notes the 'the influence from translations of the "Hellenizing" period' on *Elišē*. Both (5.8) and the other three examples are reminiscent of Greek uses of the participle; whether there is any relationship between the two cannot be determined, however.

follows: in intransitive (active and passive) verbs, a nominative subject and copula in subject agreement; in transitive active verbs, a genitive agent and a copula in \emptyset agreement in the 3SG. These standard alignments were referred to as types α (ITR.ACT), β (ITR.PASS), and γ (TR.ACT) in section 4.2.1.

Equally, it has been noted that variations on these patterns exist, specifically with unexpected cases for the subject (GEN) or the agent (NOM), and that copula agreement shows similar variation, with unexpected agent agreement in transitive verbs and \emptyset agreement in intransitive verbs.

If the hypotheses set out at the end of Chapter 4 are correct, the state of the periphrastic perfect in Classical Armenian as attested at the beginning of the 5th century CE was already one of transition, between the ergative–absolutive model of West Middle Iranian and the nominative–accusative alignment found from the 8th century onwards. Accordingly, it might be expected that the type of variation just noted should already exist in the chronologically earlier texts, but that the incidence of those variants more closely aligned with the known outcome of alignment change (NOM agents and subject/agent agreement) should increase over time.

These patterns constitute the ‘true’ periphrastic perfect, used as (one of) the main verbs in a sentence, which will be considered in this section; the converbial use of the participle is discussed separately in 5.3.3. In what follows, the statistical distribution of these features will be presented, illustrated by pertinent examples. The discussion begins with subject- and agent-marking, and then moves on to the use of the copula and its agreement. Two further issues, the potential influence of polarity suspected by Vogt (1937) and the question of constituent order, will be discussed more briefly in the final part of this section.

5.3.2.1 Subject- and agent-marking

The following examples, taken from the corpus, illustrate once more the gamut of constellations in which the perfect occurs. This section focuses on subject- and agent-marking.

5.3.2.1.1 Standard patterns

Active intransitive verbs (type α), as outlined above, standardly exhibit nominative subjects and copulas in subject agreement; thus examples (5.9, 5.10):

- (5.9) *ew orpēs etun zroyc’ ork’ and nma*
 and as give.3PL.AOR news REL.NOM.PL with 3SG.DAT
ekeal ēin
 come.PTCP be.3PL.PST
 ‘And as those, who came with him, reported ...’ (P’B IV.5.73)

- (5.10) *ayl duk' or ayžm y=erec'unc' ašxarhac'*
 but 2PL.NOM REL.NOM now from=three.ABL country.ABL.PL
ekeal=d ēk' tanuteark' ew sepuhk'
 come.PTCP=DET be.2PL.PRS magnate.NOM.PL noble.NOM.PL
 'But you magnates and nobles, who have now come from three countries,
 ...' (ŁP' XXVII.15)

In both instances, the subject (represented by relative pronouns) is in the nominative, and the copula agrees with the subject.²²

A similar situation obtains for passive perfects (type β), which also expect nominative subjects and copulas in subject agreement, as shown in examples (5.11, 5.12):

- (5.11) *himunk' nora edeal en i veray hastatun*
 foundation.NOM.PL 3SG.GEN put.PTCP be.3PL.PRS on-top solid
vimi
 stone.GEN.SG
 'Its foundations were put on solid rock.' (Eł. II.264)

- (5.12) *du or i mankut'enē y=aydm*
 2SG.NOM REL.NOM.SG from childhood.ABL.SG in=DEM.LOC.SG
awrēns sneal ēir
 religion.LOC.PL rear.PTCP be.2SG.PST
 'You, who were brought up from childhood in this religion, ...' (Eł. III.71)

In these instances, too, the agreement pattern is obvious: *himunk'* is NOM.PL, and thus taken up by the 3PL copula *en*. The case for (5.12) is no different.

In contrast to these two intransitive patterns, the transitive perfect requires a genitive agent, and shows Ø agreement of the copula, which occurs in an invariable 3SG form (type γ). This constellation is presented in (5.13, 5.14).

- (5.13) *ew gitem t'ē lueal ē z=xorhurds*
 and know.1SG.PRS COMP hear.PTCP be.3SG.PRS OBJ=plan.ACC.PL
mer Parskac' kapen z=na ew
 1PL.POSS Persian.GEN.PL bind.3PL.PRS OBJ=3SG.ACC and
vštac'učānen
 torment.3PL.PRS
 'I know that [if] the Persian have heard our plans, they [will] imprison
 him and torment [him].' (ŁP' LXVI.16)

²² Concerning the lacking number agreement of pivot and REL in (5.10), see Minassian (1989).

- (5.14) *bayc' t'agawor=n Pap i č'k'mels*
 but king.NOM.SG=DET PN into innocence.ACC.PL
linelov č'=lueloyn arnēr ibrew t'ē iwṛ
 become.INF.INS NEG=hear.INF.GEN take.3SG.PST as if 3SG.POSS
č'=ic'ē gorceal z=ayn
 NEG=be.3SG.PRS.SBJV do.PTCP OBJ=DEM.ACC.SG
 'But King Pap, [as though] being innocent, pretended not to have heard,
 as though he had not done this deed.' (P'B V.24.25)

Both examples contain pronominal agents, *mer* in (5.13) and *iwṛ* in (5.14). The former functions both as the genitive of the 2SG personal pronoun and as its possessive adjective, while the latter is restricted to use as the possessive adjective referring to the subject of the clause.²³

Furthermore, (5.13) demonstrates well that Classical Armenian does not require explicit subjects even if the morphological expression in one clause does not meet the requirements of the next. Since *kapen* and *vaštac'uc'anen* are present forms, a nominative agent would be required; yet the agent of the second clause is not explicit, and assumes that of the previous clause irrespective of its case-marking.²⁴

As the statistical analysis in 5.3.2.1.4 will make plain, these three patterns account for the overwhelming majority of all perfects.

5.3.2.1.2 Non-standard patterns

Each of the standard patterns discussed above shows some variation in subject- or agent-marking, specifically by adopting the marking pattern of the other category.

In (5.15), therefore, the intransitive verb *hasanem* 'to arrive' shows a genitive agent, specifically the genitive of the 1PL, *mer* (type α^*).

- (5.15) *mer aydpēs hasael ē veray bnu'tean dora*
 1PL.GEN thus arrive.PTCP 3SG.PRS ON nature.GEN.SG 3SG.GEN
 'And thus we learned about his nature (lit. we arrive on ...)' (Ef. VIII.302)

Although the English translation suggests a transitive understanding of this sentence, it must be kept in mind that the Armenian does not allow for such an interpretation in any way.

The standard argument-marking pattern of the passive shows variation, too, but only in one instance in P'B (5.16), where it occurs with a genitive subject.

²³ The fact that *iwṛ* can function as agent is likely a result of analogy with the genitive personal pronouns, which double as possessive adjectives.

²⁴ This equally suggests that, as was to be expected, Classical Armenian is not one of the languages discussed briefly in 4.1.2.3 which are syntactically ergative.

- (5.16) *omanc' cneal, ew oč' snuč'cal, i čap'*
 INDE.GEN.PL give-birth.PTCP and NEG rear.PTCP in manhood
hasuceal, ew anargeal t'snamanōk'
 cause-to-arrive.PTCP and dishonour.PTCP insult.INS.PL
 'Some are born but were not nurtured, reached maturity, and were
 dishonoured by insults.' (P'B IV.5.32)

Since this particular constellation occurs only once, it is difficult to determine whether it is *echtsprachlich*, or a scribal mistake. For statistical purposes, it can be ignored as a hapax.

The third non-standard pattern is that of transitive perfects with nominative agents (type γ^*), here represented by (5.17):

- (5.17) *ew andēn valvalaki dahičk'=n hraman*
 and then suddenly executioner.NOM.PL=DET command
areal y=eric' naxararac'=n srov
 receive.PTCP from=three.ABL noble.ABL.PL=DET sword.INS.SG
hatanel z=paranoc' eranelwoy=n
 cut-off.INF OBJ=neck.ACC.SG blessed.GEN.SG=DET
 'And then, the executioners immediately received a command from the
 three nobles to cut off the head of the Blessed.' (Eł. VII.232)

As is evident, the transitive verb *ařnum* 'to take, receive' here construes with a nominative agent in the perfect; as so often, a form of the copula is absent (on which, see 5.3.2.1.4). The object, *hraman* 'command', is not marked here, but neither context nor grammar allows for a different reading of this sentence.

The final non-standard pattern is the impersonal construction (type δ) as discussed by Weitenberg (1986). Here, an accusative object occurs accompanied by a participle and a copula in the 3SG, but without an agent in a core case, either explicit or inferable from context. Examples (5.18, 5.19) illustrate this pattern.

- (5.18) *vasn čaragorcac' isk ēr šineal z=ayn*
 for evil-doer.GEN.PL PTC be.3SG.PST build.PTCP OBJ=DEM.ACC.SG
teli ew i spanumn mahapartac'=n
 place and for execution condemned-to-death.GEN.PL=DET
amenayn Hayoc'
 all Armenia.GEN.PL
 'They built this place for evil-doers, and for the execution of those
 condemned to death in all Armenia.' (Ag. XI.14)

- (5.19) *ew duk' awadik kamik' [...] meržel z=bnak*
 and 2PL.NOM then want.2PL.PRS [...] forsake.INF OBJ=natural
tears=n z=ors tueal ē jez
 lord.ACC.PL=DET OBJ=REL.ACC.PL give.PTCP be.3SG.PRS 2PL.DAT

y=Astucoy

by=God.ABL.SG

‘And you wish to [...] forsake your natural lords, who were given to you by God’ (P’B IV.51.11)

Example (5.18) shows the pattern most clearly: no agent is apparent in the sentence itself, nor can one be gleaned from context. At the same time, the object marker *z=* indicated that this is not a standard passive construction, in which a straight forward nominative would be expected.

The situation is somewhat more complicated in (5.19), since here an explicit agent with *i + ABL* does occur in *y=Astucoy*; at the same time, the constituent affected by the verbal action is marked as accusative, ruling out a straightforward passive reading.²⁵

Impersonal constructions are not particularly common (see 5.3.2.1.4). Rather than assuming their historical primacy, as did Weitenberg (1986), their relative rarity and closeness to the passive construction would suggest a secondary development, possibly in analogy with the accusative object/affectee of the transitive active construction. It cannot be excluded, however, that they simply reflect an extension of impersonal expressions in other tenses, where a verb in 3PL but without explicit subject can express impersonal statements (Jensen 1959: §359aa); if based on the transitive active perfect, a 3PL would not standardly find any morphological expression, since the copula shows \emptyset agreement.

These non-standard patterns do not constitute a large part of the attested ‘true’ perfects, but are not statistically negligible, as will be discussed after a few more remarks on noteworthy behaviour of the perfect.

5.3.2.1.3 Other patterns of note

Certain features of Classical Armenian syntax have an impact on the analysis of corpus data, such as the fact that Armenian is a pro-drop language and does not require overt subjects in every clause if they are inferable from context. The same is true for the objects of transitive verbs, which need not be explicit. Furthermore, verbs can govern otherwise unmarked sentential objects, in the form either of infinitives or of subordinate clauses. Some examples of this kind of behaviour will be given and explained briefly.

Example (5.20) shows an instance of a perfect occurring without an explicit subject or agent; as in many other languages, this is very frequent in Armenian, too.

²⁵ In a number of instances, *z=* before relative clauses need not indicate the case of the relative pronoun itself, but can mark the clause as referring to the object of the main clause. Since REL is inflected as ACC.PL in (5.19), however, this cannot apply here.

- (5.20) *ew žotoveal z=amenayn iwroy išxanut'ean=n*
 and gather.PTCP OBJ=all 3POSS.GEN.SG kingdom.GEN.SG=DET
k'alak'ac' z=amenayn ort'odok's z=episkoposs
 city.GEN.PL OBJ=all orthodox OBJ=bishop.ACC.PL
z=eric'uns z=sarkawaguns or
 OBJ=presbyter.ACC.PL deacon.ACC.PL REL
 'And [the king] gathered all the orthodox bishops, presbyters, and
 deacons from all the cities under his dominion, who ...' (P'B IV.5.79)

Here, the determination that the king is the agent can only be made from context, while the object is overt; even if a copula had been employed, it would not have provided any further information owing to its lack of agreement.

Similarly, in some instances there is no overt object with transitive verbs, as in (5.21).

- (5.21) *ew sparapet=n Hayoc' tēr=n*
 and *sparapet.NOM.SG=DET Armenian.GEN.PL lord.NOM.SG=DET*
Mamikonēic' eraneli=n Vardan areal and iwr i
 PN.GEN.PL blessed=DET PN.NOM.SG take.PTCP with 3POSS from
tanuterac'=n Hayoc' ork'
 magnate.ABL.PL=DET Armenian.GEN.PL REL.NOM.PL
 'And the *sparapet* of the Armenians, the lord of the Mamikoneans, the
 blessed Vardan took with him [those] from among the magnates of the
 Armenians, who ...' (ŁP' XXXIV.1)

Here, the object is implicit in the free relative clause introduced by *ork'*, which owing to a lack of case-matching requirements can take on this function although it is in the nominative and part of the relative clause (Meyer 2018). On occasion, objects are also omitted after long passages of direct speech when the next paragraph begins with formulae like, e.g. *nora lueal (ē)* 'He heard [this]', which directly refers to the speech made.

Finally, objects can take the form of e.g. clauses introduced by *(e)t'ē* or *zi*, as illustrated by (5.22).

- (5.22) *ew lueal ews ē im t'ē i*
 and hear.PTCP further be.3SG.PRS 1SG.GEN COMP to
Parsiks xōsi
 Persian.ACC.PL say.3SG
 'And I have also heard that he is talking to the Persians.' (P'B V.4.20)

In this instance, the clause beginning with *t'ē* constitutes the object of *lueal ē*. As the genitive agent *im* suggests, this verb must be counted as transitive.

The purpose of this section was to briefly illustrate that the corpus analysis must account for patterns such as those listed above as well, resulting in a number of

verbs without explicit subject, agents, or objects. For the purpose of this study, verbs without explicit object have been counted as transitive if context could supply one, but where listed as not having an object; the same applies to transitive verbs with sentential objects.²⁶

As will become evident in the next section, a lack of explicit subject or agent is very common in Classical Armenian.

5.3.2.1.4 Statistical evaluation

With the patterns presented above in mind, the question of their distribution remains to be discussed. The numerical data concerning the marking of subject and agents is laid out in Table 5.3.

Four main observations can be made on the basis of this data. The first observation, as already mentioned, is that the standard, expected patterns are more frequent than their non-standard equivalents by a large margin. On average, non-standard patterns only account for 9.2 per cent (GEN subject in ITR.ACT verbs) and 7.7 per cent (NOM agents in TR.ACT verbs), respectively.²⁷ This suggests that it is

Table 5.3 Distribution of S- and A-marking in perfect-tense main verbs

	SAO	Kor.	Ag.	P'B	LP'	Et.	
ITR.ACT	S=NOM		7	78	203	104	122
	S=GEN		5	11	19	17	13
	S=Ø	(58.6%)	17	(41.2%) 63	(31.5%) 102	(32.4%) 58	(34.0%) 70
	total		29	153	324	179	206
ITR.PASS	S=NOM		6	58	58	47	40
	S=GEN		0	0	4	0	0
	S=Ø	(57.1%)	8	(34.1%) 31	(35.7%) 35	(42.7%) 35	(33.3%) 20
	total		14	91	98	82	60
TR.ACT	A=NOM		2	4	21	19	13
	A=GEN		15	34	65	138	69
	A=Ø	(57.5%)	23	(67.8%) 80	(44.2%) 69	(38.4%) 98	(42.3%) 60
	total		40	118	156	255	142
IMPRS	total		2	11	18	7	4
Grand total			85	373	596	523	412
% of all PTCPS			23.7	33.7	34.1	19.3	38.4

²⁶ In a few cases, otherwise transitive verbs like *asem* 'to say something' were deemed to be used intransitively, i.e. 'to speak', where no explicit object could be found and no implicit object inferred.

²⁷ There are two outliers in this regard: Kor. for the GEN subjects (17.2%, *s*=4.7) and P'B for the NOM agents (13.5%, *s*=3.9), the values for both of which fall just within 2s.

indeed permissible to speak of a standard pattern, and that these patterns must have been already relatively well established in Classical Armenian.

In this connection, it must be noted that the non-standard patterns show a particular diachronic trend, as visualized in Figure 5.1. The trends shown suggest a diachronic decline of GEN subject-marking in intransitive active verbs, but a rise in NOM agent-marking in transitive active verbs.²⁸ This trend conforms neatly to the expectation voiced above concerning the process of de-ergativization of the Classical Armenian periphrastic perfect in favour of nominative–accusative alignment. While the slope of the graph suggesting a rise of NOM agents is small, it must be kept in mind that language change frequently takes the shape of an S-curve, the beginning of which this trend might represent.

A third observation is the incidence of periphrastic perfects without overt subjects or agents, which in all texts and groups account for more than a third and up to two thirds of perfect forms.²⁹ These numbers may be the result of conservative data analysis principles, by which a subject governing multiple coordinated verbs was only counted once, i.e. together with the verb in whose clause it appears. While this practice may have increased the number of subjectless or agentless perfects and thus skewed that particular statistic, counting subjects or agents separately for

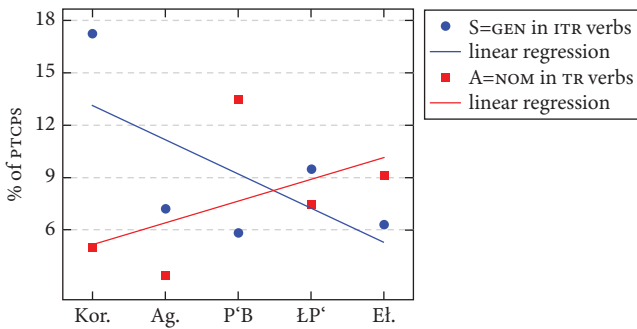


Figure 5.1 Incidence and trend of non-standard argument-marking in the perfect

²⁸ The graphs in Figure 5.1 are based on the simple linear regression of the percentage of non-standard patterns among the ‘true’ periphrastic perfects. Although commonly used to determine diachronic trends in linguistics, this method can only be used as a basic guide for a number of reasons: there are too few distinct data points; the algorithm assumes a linear development, which is not typically the case in language change; the graphs are based on the assumption of an approximately equal chronological distance between the texts surveyed, which may not reflect reality. Accordingly, the r^2 values for both regressions, which measure the goodness of fit between trend and data, are in both cases well below 0.5. Despite these limitations, linear regression offers an approximation of the actual trend.

²⁹ This is not to say that zero subjects are in any way unusual or that the Armenian data are outliers; much higher rates occur in other languages. Cf. Haig and Schnell (2016); Haig et al. (2021).

each coordinated verb would have had an influence on the statistics concerning the case-marking of subject and agents. As example (5.13) above illustrates, Classical Armenian verbs in coordination can delete subject or agents by conjunction reduction even if they are not in the appropriate case, but solely based on their grammatical function. To avoid skews in statistics on argument-marking, counting subject or agents multiple times was avoided.

Finally, it will be noted that the use of the participle in the ‘true’ periphrastic perfect, where it constitutes the main verb or one of a series of main verbs and can be accompanied by the copula, makes up for only between 19 and 38 per cent of all uses of the perfect. As will be discussed in 5.3.3, most instances of the perfect fall into the category of converbial forms, which has implications for the history of the periphrastic perfect.

5.3.2.2 Copula use and agreement

Just like the variation in argument-marking, the periphrastic perfect also shows variation in the use and agreement of the copula. They are outlined in what follows in the same way as in the previous section, beginning with the standard patterns (subject agreement in intransitive verbs; \emptyset agreement, and an invariable 3SG copula in transitive verbs), then moving on to non-standard patterns, and ending with a discussion of the statistical distribution of these patterns.

5.3.2.2.1 Standard patterns

The standard agreement pattern could already be observed in the examples provided in 5.3.2.1.1; a few more examples are cited below for convenience’s sake.

In (5.23, 5.24), the forms of the copula agree with their respective subjects in the nominative; (5.23) illustrates this for intransitive active verbs, (5.24) for passive-intransitive verbs.

- (5.23) *ew ibrew žolovealk’ ēin i miahamur hasarak*
 and when gather.PTCP.NOM.PL be.3PL.PST in collectively public
miaban amenayn episkoposk’ i jernadrel z=surbn
 unanimous all bishop.NOM.PL to ordain.INF OBJ=holy
Barseł
 PN
 ‘And when the bishops had all gathered together to ordain St Barseł ...’
 (P’B IV.9.3)

- (5.24) *i xorhurd koč’ēr z=paštawneays*
 to council.ACC.SG call.3SG.PST OBJ=minister.ACC.PL
jaxakołman=n, ork’ kapeal ēin i
 left-side.GEN.SG=DET REL.NOM.PL bind.PTCP be.3PL.PST in

krapaštut'ean=n anlučaneli hanguc'iwk'
 idolatry.LOC.SG=DET indissoluble bond.INS.PL
 'He called to council his sinister ministers, who were bound to idolatry
 by indissoluble bonds, ...' (Eł. I.13)

In transitive verbs, however, the copula is mainly found in the 3SG, as in (5.25):

(5.25) *i vkayanoc'i and y=aynmik z=or*
 in martyr-shrine.LOC.SG there in=DEM.LOC.SG OBJ=REL.ACC.SG
ēr šineal srboyn Epiřanu
 be.3sg.pst build.ptcp holy.GEN.SG PN.GEN.SG
 '... in that shrine for the martyrs, which St Epiphanius had built.'
 (P'B V.28.6)

While the 3SG copula in (5.25) might at first glance look like an instance of agent agreement, examples (5.13, 5.22) demonstrate that this is not the case on the basis of agents in the 1/2SG/PL.

As is shown in the statistical evaluation in 5.3.2.2.3, standard patterns make up for the vast majority of those perfect-tense verbs which are accompanied by a copula.

5.3.2.2.2 Non-standard patterns

Next to these standard patterns exist those which show the opposite kind of copula agreement expected, i.e. an invariable 3SG with intransitive verbs irrespective of subject number or person, and a copula in agent agreement in transitive verbs; the passive does not show any kind of variation.

Examples (5.26, 5.27) are instances of the former, intransitive verbs with invariable 3SG copulas.

(5.26) *im Astucov keč'eal ē jerm*
 1SG.GEN God.INS.SG live.PTCP be.3SG.PRS warm
k'ristonēut'eamb
 Christianity.INS.SG
 'I have lived in the sight of God in fervent Christian faith.' (P'B V.44.17)

(5.27) *ew et'ē č'=ēr mer ačapareal ew i p'axust*
 and if NEG=be.3SG.PST 1PL.GEN hasten.PTCP and in flight
darjeal
 turn.PTCP
 'And if we had not made haste and turned to flight, ...' (Eł. III.68)

In these two instances, the copula is invariably in the 3SG, even though the subjects of *keam* 'to live' and *ačaparem* 'to make haste' are in the 1SG and 1PL, respectively. Although there are few instances of this pattern, it is noteworthy that they all show

not only the invariable 3SG copula, but also genitive-marking of the subject.³⁰ This suggests, in turn, that while genitives can clearly fulfil agent or subject function, they cannot license verbal agreement; if this is the case, non-standard agreement patterns in transitive verbs might be expected to exhibit nominative agents only.

For the most part, this expectation is fulfilled. Although again not frequently, the non-standard agreement pattern in transitive verbs mainly shows non-overt or nominative agents with agreeing copulas, as illustrated by (5.28, 5.29).

(5.28) *y=or* *jgeal* *ēin* *z=na*
 into=REL.ACC.SG throw.PTCP be.3PL.PST OBJ=3SG.ACC
 ‘... into which they threw him.’ (P’B IV.3.33)

(5.29) *minč’ duk’* *z=jer* *anjins=d* *angiwts*
 then 2PL.NOM OBJ=2PL.GEN self.ACC.PL unfindable.ACC.PL
arareal *ēik’* *i* *korstean=n*
 make.PTCP be.2PL.PST in perdition.LOC.SG=DET
 ‘And then you made yourselves irrecoverable in this perdition.’
 (P’B III.14.32)

In (5.28), there is no explicit agent agreeing with *ēin*, but context provides enough evidence to assume a 3PL. In contrast, the agent in (5.29) is overt, and *duk’* is in the nominative and agrees with the 2PL copula.

There is, however, one exception, where an overt genitive agent occurs with a copula in agent agreement, as (5.30) illustrates.

(5.30) *z=or* *jer* *i* *vat tohmē* *ew*
 OBJ=REL.ACC.SG 2PL.GEN from bad family.ABL.SG and
y=anpitan *i* *mardkanē* *ašxarhi=s*
 from=despicable from mankind.ABL.SG country.GEN.SG=DET
Hayoc’ *išxan* *kargeal* *ēk’*
 Armenian.GEN.PL ruler arrange.PTCP be.2PL.PRS
 ‘[the man] whom you have made ruler of Armenia, from a bad family and despicable people, ...’ (ŁP’ LXXV.17)

Here, the copula *ēk’* agrees with the agent *jer*, even though the latter is in the genitive. Barring this exception, however, it does indeed seem to be the case that agent–verb agreement is restricted to instances where the agent is either not overt or expressed in the nominative. This explains the occurrence of the invariable 3SG copula in standard transitive perfects: since agent agreement is predicated on the nominative case, and no such nominative is available, the copula defaults to

³⁰ For the purpose of this study, in instances like *dora y=ant’iw čakat mteal ēr* ‘He has entered countless battles’ (P’B V.36.3), where the subject is in the 3SG, the copula has been counted conservatively as being in subject agreement.

Table 5.4 Distribution of copula agreement in perfect-tense main verbs

	Agreement	Kor.	Ag.	P'B	ŁP ^c	Eł.
ITR.ACT	S	3	87	239	120	165
	invariable 3SG	0	1	2	2	5
	total	3	88	241	122	170
ITR.PASS	S	4	65	81	54	50
TR.ACT	A	0	5	5	13	4
	invariable 3SG	1	29	83	124	92
	total	1	34	88	137	96
IMPRS	invariable 3SG	2	7	16	4	4
Total (verbs with copula)		10	194	426	317	320
% of ITR.ACT verbs with copula		8.8	57.5	74.4	68.2	82.5
% of TR.ACT verbs with copula		2.1	28.9	56.4	53.7	67.6
% of all main verbs		11.8	52.0	71.5	60.6	77.7

the 3SG. To what extent this explanation harmonizes with other observations is discussed in 5.3.2.3.

5.3.2.2.3 Statistical evaluation

Now that these patterns have been presented, a statistical evaluation is in order. Table 5.4 presents the numerical data.

Apart from the qualitative observations made above, the quantitative data brings to light two further noteworthy facts.

Firstly, the incidence of non-standard patterns is very limited, and accounts for only a small percentage of the occurrences of the copula in any particular category. Furthermore, there is no clearly discernible trend that indicates the rise or fall in incidence of these patterns.³¹ While variation in subject- and agent-marking exists, the texts of this period do not foreshadow the later rise of agent agreement.

The second observation is that the use of the copula in periphrastic perfects in general, and in transitive verbs in particular, shows a significant increase over the course of the 5th century, from being a minority pattern in Kor. to more than two thirds of all occurrences in Eł. Figure 5.2 visualizes this trend.

³¹ It is unclear whether the absence of these non-standard patterns in Kor. is due to the fact that it is the earliest text, or to the relative shortness of the text.

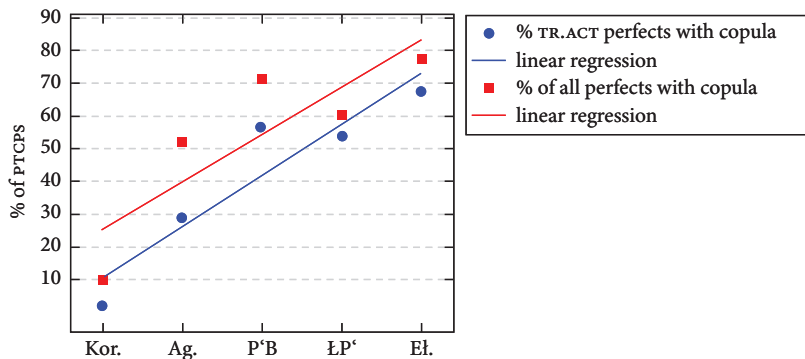


Figure 5.2 Incidence and trend of the copula in the perfect

This trend suggests that the use of the copula in the perfect in general, but certainly in the transitive perfect, was still a developing pattern at the beginning of the 5th century, but one which gained momentum quite rapidly. Equally, it indicates that the use of the invariable 3SG copula in transitive perfects is not particularly old.

These findings align well with the hypothesis, set out in section 4.4, that the development of the 3SG copula is an independent Armenian phenomenon and unrelated to the suggested West Middle Iranian model. Given that the earlier texts still exhibit a majority of perfects used without a copula, as would be the case most frequently in the West Middle Iranian languages,³² the data presented above lends further credence to this hypothesis.³³

5.3.2.3 Summary

It is evident from the examples cited that, with the exception of non-standard minority patterns, the Armenian periphrastic perfect as used in 5th-century historiography exhibits tripartite alignment, with nominative subjects, genitive agents, and accusative objects. In intransitive verbs, copula agreement occurs with the subject; for transitive verbs, an invariable 3SG copula is used.

In the earliest texts, the copula is not used frequently in the perfect, but gains traction very quickly and by the end of the century occurs in most perfects.

Non-standard argument-marking patterns, whereby transitive agents are marked nominative and intransitive subjects genitive, occur in a small number of

³² It must be kept in mind that copula agreement in the Parthian and Middle Persian transitive past is based on the logical object, which in narrative or historical texts is most commonly a third-person entity; see 4.3.2.2.3.

³³ No cases of copula agreement with the object have been observed. This does not speak against an Iranian origin of the Armenian perfect, however, since Armenian seems to be conservative when it comes to verbal agreement, which can only be licensed by a nominative, as suggested in 5.3.2.2.2.

cases. There is a clear diachronic trend showing an increase in nominative agents and a decrease in genitive subjects. Non-standard copula agreement occurs too, but shows no comparable trend.

Based on the data presented thus far, a number of conclusions can be drawn.

The increasing incidence of nominative agents in transitive perfects corroborates the suggestion that, already in the 5th century, the Armenian periphrastic perfect is undergoing an alignment shift; this change in argument-marking is indicative of the switch from tripartite to nominative–accusative alignment, as documented by the 8th century. As suggested in Chapter 4, this is part of a larger process which originally involved the development of tripartite alignment on the basis of the West Middle Iranian ergative–absolutive model.

Similarly, the rise in use of the copula over the course of the 5th century, especially in the transitive perfect, suggests that it is an Armenian-internal development. The fact that a 3SG copula does not occur in the Parthian or Middle Persian past, where a sole participle is used in such cases, corresponds well to the state of affairs documented in the earliest texts. The development of a 3SG copula to mark the transitive is likely the result of two concomitant facts: the use of copulas in the intransitive perfect, and the impossibility of verbal agreement with non-nominative case constituents.

The data and statistics do not provide answers, or hints, concerning all questions in this matter. It is unclear whether the use of the copula in intransitive perfects is also a late, secondary development based on Iranian influence, or whether it is an original Armenian syntagma; the data from Kor. and Ag. in this regard points to a late development, however.

Given the above, it is now possible to outline the potential development of the Armenian periphrastic perfect, first suggested in 4.2.3.1 in more detailed terms. Prior to the attestation of Armenian, the ergative construction of the Parthian past tense, based on otherwise adjectival participles, was copied into Armenian. The pattern was adapted to take an accusative object, probably as a result of the formal identity of NOM.SG and ACC.SG in the nominal paradigm; the choice of the genitive as marker of the agent is based on functional parallels between the Armenian genitive and the Parthian oblique case and enclitic pronouns, which mark possession. The pattern was borrowed without the copula, since with third person objects no copula occurs in Parthian; the development of the invariable 3SG copula is a process taking place just after the beginning of Armenian literary attestation.

5.3.3 Converbial participles

The use category into which, on average, more than half of all participles in this corpus fall is that of the converb, or participle in apposition, or *participium*

coniunctum. These participles never have a copula, but occur in the same clause as other main verbs, often but not always share a subject, agent, or object with them, and usually relate to a backgrounded action prior to or concomitant with that of the main verb.

After a brief definition of the term ‘converb’ and a justification of its use, this section looks at the use of these converbial participles, how they differ from those classed as ‘true’ perfects above, and what problems arise in their analysis. The section ends with a statistical analysis of the converbial participle.

5.3.3.1 Converbs

The term ‘converb’ refers to a ‘nonfinite verb form whose main function is to mark adverbial subordination’ (Haspelmath 1995: 3), whereby converbs differ from participles, which are not adverbial but adnominal modifiers. While the Armenian participle can be used as an adnominal modifier, the examples provided below illustrate that it also occurs as a non-coordinated adverbial form.

According to Haspelmath, converbs can but need not share their subject with the main verb of the sentence, and if they have a different subject, the latter may be expressed in a different case from that of canonical subjects. The use of the converb in Armenian falls into the category of free-subject converbs (cf. Nedjalkov 1995), meaning that both subject-sharing and explicit subjects differing from that of the main verb are permissible.

To give but one example, in the following Lithuanian sentence the subject of the converb *tekant* ‘rising’ is in the dative, as opposed to the normally expected nominative.

- (5.31) *Saul-ei tek-ant, pasiek-ė-m kryžkel-e*
 sun-DAT rise-CVB reach-PST-1PL crossroads-ACC
 ‘When the sun rose (lit. the sun rising), we reached the crossroads.’
 (Lithuanian; Haspelmath 1995: 2)

Nedjalkov (1995) and König (1995) both suggest a distinction of converbs according to semantic criteria, namely whether they are specialized, carrying only particular meaning; contextual, being able to express a variety of meanings according to context; or narrative, expressing a coordinative connection. The use of the English *-ing*, for instance, suggests itself as a contextual converb, since sentences like ‘Walking down the street, John had a toothache’ are ambiguous as to whether the toothache was caused by, contemporaneous with, or in spite of the act of walking down the street. As the translations from Armenian throughout this chapter suggest, a contextual reading is also the most likely choice for Armenian, since the converb can express temporal, causal, concessive, and other relations.

Finally, [Haspelmath \(1995: 43\)](#) notes that converbs often form part of periphrastic constructions, especially resultative ones.³⁴

While there are other, both broader and more specific definitions of converbs in the literature, this basic introduction to the category suffices for the present purpose, as it is intended, not to advance a typological claim concerning the nature of converbs or the *-eal* participle, but largely in order to distinguish in name the structurally different uses of the participle: the adnominal, i.e. adjectival one; its function as part of the perfect construction and thus as a main verb; and as a converb, i.e. an adverbial modifier.

5.3.3.2 Uses of and difficulties with converbial participles

In general, the same argument-marking patterns as illustrated above for the main verbs apply to converbs as well; that includes the frequent absence of an overt subject or agent.

Converbs most frequently occur in close combination with a main verb, irrespective of the latter's tense. In (5.32), the main verb *asēr* and the two converbial participles *hawaneal* and *barbareal* share a subject *na*.

- (5.32) *isk na hawaneal vaṽaṽaki barbareal asēr*
 PTC 3SG.NOM believe.CVB suddenly speak.CVB say.3SG.PST
 'And being convinced, he suddenly spoke and said ...' (Ag. CXI.10)

It is not uncommon for these sequences of converbs to be longer, as illustrated by (5.33), where three converbs (*arareal*, *handerjeal*, *kazmeal*) precede the main verb.

- (5.33) *ew amenayn əst asac'əloy patuirani=n*
 and all according-to say.PTCP.GEN.SG command.GEN.SG=DET
arareal handerjeal kazmeal patrastec'in
 make.CVB prepare.CVB decorate.CVB prepare.3PL.AOR
 'And they made, prepared, decorated, and arranged everything according to the command given.' (Ag. CIV.2)

Both these examples also illustrate why an adjectival, predicative interpretation of these converbial participles is inappropriate. For one, they do not exclusively occur with copular verbs, and rather than describing the subject or agent, more closely describe the main verbal action or its prerequisite background. In (5.32), the subject is not described as a 'speaker', for instance, but the action of *asēr* is further described as requiring the subject to be convinced and to speak. Instead of converbs, these participles could accordingly be called adverbial; this is further supported by the fact that they frequently share not only the subject, but also the object of the main verb, as in (5.33).

³⁴ On a resultative interpretation of the Armenian periphrastic perfect, see [Ouzounian \(2001–2\)](#); [Seměnova \(2016\)](#).

A particular kind of complication arises in this very context, through subject- or agent-sharing. Where a converb and a main verb share a subject or agent, which of the two determines which case the subject or agent should take? As examples (5.34, 5.35) illustrate, there does not appear to be an established rule.

- (5.34) *bazum mardik haneal z=jukn*
 many mankind.NOM.SG pull-out.CVB OBJ=fish.ACC.SG
ōgtēin i nmanē
 profit.3PL.PST from 3SG.ABL
 ‘Many men, having caught the fish, profited from it.’ (P’B V.27.7)

- (5.35) *uleworac’=n tueal patasxani asac’in*
 traveller.GEN.PL=DET give.CVB anser.ACC.SG say.3PL.AOR
 ‘The travellers gave an answer and said: ...’ (P’B V.43.14)

In both cases, the converbs are transitive. In (5.34), the nominative could be licensed by the main verb, but represents a non-standard pattern for the converb; the converse is true for (5.35), where the genitive agent is appropriate for the converb, but not the main verb. Since in both cases the agent is first in the sentence, followed by the verb and object, there are no environmental factors, such as proximity to the converb or main verb, that influence the choice of agent case.

This is not intrinsically problematic, since Armenian does not have problems sharing subjects between verbs, even if they require different overt marking; see 5.3.2.1.4. It does, however, present a problem for statistical analysis. On what basis ought the subject or agent be counted, if both main verb and converb could account for its case? Proximity to the verb does not play a role, as the two examples above suggest.

Another example will further illustrate this problem.

- (5.36) *bazum caṛayk’ z=iwreanc’ teranc’*
 many servant.NOM.PL OBJ=3POSS.GEN.PL lord.GEN.PL
z=ganjs əmbr̄neal p̄axuc’ealk’ andr ankanēin
 OBJ=treasure.ACC.PL seize.CVB flee.CVB.PL there fall.3PL.PST
 ‘Many servants seized their lords’ treasures, and upon fleeing arrived there.’ (P’B IV.12.14)

In (5.36), the same problem arises; the agent is in the nominative, *caṛayk’*, and could be licensed by either the main verb *ankanēin* or indeed the second converb, *paxucealk’*. For *əmbr̄neal*, however, it is an instance of non-standard marking.

The result of subject- and agent-sharing is that in the statistical account of the corpus, converbial participles may show non-standard patterns more frequently than their main-verb counterparts owing to subject or agent licensing based on the main verb; at the same time, it is not appropriate not to account for these

shared subjects, since they clearly can also be licensed by the converbs themselves, as examples like (5.35) suggest.

Furthermore, converbs on occasion also exhibit their own subject or agents, which are distinct from those of the main verbs. They can be implicit (5.37) or explicit (5.38).

- (5.37) *ew eʔeal yandiman tʔagawori=n teteʔkanayr*
 and become.CVB opposite king.GEN.SG=DET inform.3SG.PST.PASS
i nmanē tʔagawor=n Peroz
 by 3SG.ABL king.NOM.SG=DET PN.NOM.SG
 ‘And when [he] entered the presence of the king, the king was informed by him.’ (ŁP^c LXV.12)
- (5.38) *ew ankeal zawraworkʔ=n i sur tʔsnameacʔ=n*
 and fall.CVB soldier.NOM.PL=DET into sword enemy.GEN.PL=DET
meʔaw kʔaʔ=n Mamikonean Vasak
 die.3SG.AOR valiant=DET PN PN
 ‘And as the soldiers engaged the enemies in battle (lit. fell on the swords of the enemies), the valiant Vasak Mamikonean died.’ (ŁP^c LXIX.20)

Both instances show that these converbs can have subjects and agents of their own. They still differ, however, from the ‘true’ perfects in not being coordinated or subordinated to the main verb of the sentence, and qualify the circumstances of the action of the main verb more closely. The existence of this type of converb further requires that argument-marking be accounted for in this category.

5.3.3.3 Statistical evaluation

Despite these caveats, the distribution and overall trends relating to the occurrence of explicit subjects and agents, and their morphological marking in converbial participles, are comparable to those of the ‘true’ perfect discussed above. Table 5.5 presents the pertinent data.

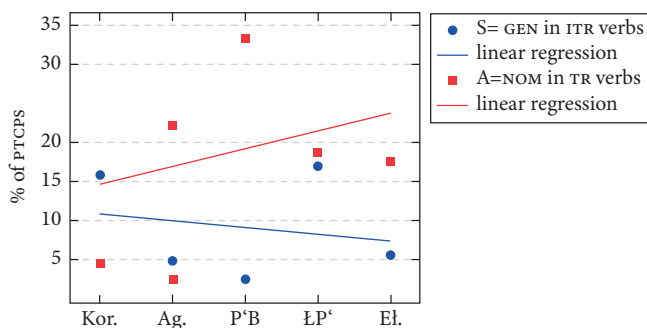
The data show that like the ‘true’ perfect, a large percentage of converbs do not have an overt subject or agent. At between 40 and 68 per cent, converbs account for a considerable portion of all participles, and similarly exhibit standard and non-standard alignment, although not in the same proportions as the ‘true’ perfect. As argued above, however, this may not necessarily be a reflection of grammatical change, but could be the result of subject-sharing.

Nonetheless, the trends borne out by the data are the same as those of the perfect: genitive subjects are declining in use over time, while nominative agents are on the rise. As above, this is visualized as a linear regression in Figure 5.3.³⁵

³⁵ It is worth noting, however, that at least in the case of the nominative agents, the standard deviation in that particular dataset is more than double that of the corresponding set in the perfects, suggesting that the data of the converbs in this regard may be less reliable, or that authors differ more strongly in their use.

Table 5.5 Distribution of S- and A-marking in converbs

	SAO	Kor.	Ag.	P'B	ŁP'	El.	
ITR.ACT	S=NOM		10	123	245	334	108
	S=GEN		11	12	10	126	11
	S=∅	49 (70.0%)	121 (47.3%)	169 (39.9%)	286 (38.3%)	87 (42.2%)	
	total		70	256	424	746	206
ITR.PASS	S=NOM		7	21	50	123	33
	S=GEN		0	0	0	14	1
	S=∅	13 (65.0%)	16 (43.2%)	16 (24.2%)	47 (25.6%)	24 (41.4%)	
	total		20	37	66	184	58
TR.ACT	A=NOM		5	51	111	169	29
	A=GEN		39	28	30	375	17
	A=∅	69 (61.1%)	152 (65.8%)	192 (57.7%)	362 (40.0%)	120 (72.3%)	
	total		113	231	333	906	166
IMPRS	total		0	2	3	5	1
Grand total			203	526	826	1841	431
% of all PTCPS			56.7	47.6	47.3	67.9	40.1

**Figure 5.3** Incidence and trend of non-standard argument-marking in converbs

Broadly speaking, the converb data supports the conclusions drawn in 5.3.2.1.4: the rise of nominative agents in transitive converbs supports the notion of an alignment change in progress.

5.3.3.4 Summary

The data relating to converbs adds to the general picture already gleaned, and supports the conclusions drawn thus far. The dominant use of the participle as a converb, however, still needs to be accounted for. It seems self-evident that

participles should be used as adjectives, and that this is one of their primary uses, while their development in periphrastic verbal forms is secondary.

Given that in their adjectival function, participles are for the most part restricted to intransitive use in active and passive, their transitive active use must be a secondary development. As is discussed on a more theoretical level in section 7.1.2.4, the most cogent explanation of this pattern is the following. Both Parthian and Armenian use their participles as adjectives; on the basis of this coincidence, Armenian imitates the verbal use of the participle in the Parthian past tense; the use of the copula is not copied, both on account of its lower frequency (it does not occur with third-person objects, which are common) and because of the unusual agreement pattern itself. This, in turn, is the basis of both the converb and the periphrastic perfect; based on its distribution, the latter is likely the younger form. It is however unclear, and probably indeterminable, how precisely the converbial use arose.³⁶

5.3.4 Other considerations

In the previous sections, the participle was discussed with reference to the three use categories which arise—adjective, periphrastic perfect, and converb—and the correlation of valency, argument-marking, and copula agreement. In what follows, two further potential correlations will be discussed with reference to the use of the periphrastic perfect:³⁷ polarity and constituent order.

5.3.4.1 Polarity

In his discussion of the participle and its morphosyntactic alignment, Vogt observes: ‘Pour le participle prédicatif, nous avons pu observer le rôle joué par la négation, qui entraîne le génitif du sujet même d’un participe intransitif. [...] cette tendance du génitif à dominer dans une phrase négative paraît très nette’ (1937: 60).

From this, the question arises whether there is indeed a correlation between polarity and argument-marking. Givón (1979: 121–30) suggests that frequently, if not in all cases, negative expressions are syntactically more conservative than their positive counterparts, since intrinsically they rely on positive expressions to change first.

³⁶ Haspelmath (1995: 17–20) suggests that predicative participles are often the historical origin of converbs; given the passive–intransitive nature of the participle, however, Iranian influence must have played a role in this development, and the periphrastic perfect could have arisen from the participle’s converbial use.

³⁷ This discussion will be confined to the periphrastic perfect, i.e. the use of the participle as a main verb, owing to the issues in accounting for subject and agent sharing in converbs laid out in 5.3.3.

Table 5.6 Distribution of argument-marking and polarity in perfect-tense main verbs

		Kor.	Ag.	P'B	LP'	El.
ITR.ACT	NOM +	8	75	197	99	121
	NOM –	0	3	6	5	1
	GEN +	7	9	19	15	11
	GEN –	0	2	0	2	2
	S=∅	16	50	92	58	71
	Total +	34	148	314	170	200
	Total –	0	5	10	9	6
TR.ACT	NOM +	1	4	21	19	13
	NOM –	1	0	0	0	0
	GEN +	17	32	61	126	62
	GEN –	0	2	4	12	7
	A=∅	26	61	66	98	60
	Total +	46	111	148	236	133
	Total –	1	7	8	19	9

Accordingly, in the case of the periphrastic perfect, it might be expected that the older, more frequent patterns (NOM subjects, GEN agents) should be more common than their non-standard counterparts in negative sentences. This does not fully align with the sentiment of *Vogt*, but is more self-consistent.³⁸

Table 5.6 summarizes the occurrences of different types of argument-marking correlated to author and polarity.

As is evident from the data, negative expressions in perfects with overt subjects and agent are not frequent. Equally, it emerges that negative expressions do occur more frequently in the standard patterns, i.e. with NOM subjects and GEN agents; yet, since these patterns are on the whole more common than their non-standard counterparts, this is not indicative of a causal relationship between argument-marking and polarity.

Owing to low and zero values, tests of the statistical significance of this distribution are unlikely to be reliable, but suggest that there is little indication of a statistically significant difference between negatives with GEN or NOM subjects or agents.³⁹

³⁸ *Vogt* (1937) observes this, but does not provide any reason why the negative should be more inclined towards the genitive.

³⁹ Pearson's χ^2 -test requires a greater sample size, but Fisher's Exact Test is an option (*Stefanowitsch and Gries 2003*). Based on a null hypothesis that there is a significant difference in the use of NOM and GEN agents in negated perfects, the following p-values arise: for intransitive verbs p=0.205, for transitive verbs p=0.038. The latter value is below the significance threshold of p=0.05, and could corroborate the null hypothesis. Given the low incidence of non-standard patterns, and the zero values in this category, however, it is not clear that this test is reliable in this matter.

On this basis, it seems safe to assume that polarity and the choice of case in argument-marking are not immediately correlated.⁴⁰

5.3.4.2 Constituent order

A very brief discussion of constituent order in the perfect is worthwhile for one particular reason: if Armenian did copy the Parthian ergative construction, it may have had an impact on constituent order. In some nominative–accusative languages, which mark S and A identically, S and A usually occupy the same place in the standard sentence, e.g. SV, AVO; by contrast, in certain ergative–absolutive languages, which mark S and O identically, it is S and O which share the same space, thus e.g. SV, but OVA.⁴¹

Accordingly, the constituent order of the Armenian perfect, without having copied the word order of the West Middle Iranian languages, could show a tendency to give S and O the same spot in a sentence. A comparison of the respective word order in perfect and non-perfect tenses would be ideal, but is beyond the scope of this study. Nonetheless, even considering the constituent order patterns present in the perfect alone provides some insight.

Table 5.7 presents the distribution of various constituent order constellations in the perfect tense across the corpus. The position of V is here determined by the participle, not the copula; the table only takes into account the ‘true’ periphrastic perfect for the reasons laid out in 5.3.3: the constituent order in converbs could show interference from other verbs with which it shares a subject or agent.

As the data presented suggests, however, there is no unequivocal indication that S and O are aligned in any particular form in the periphrastic perfect. The data for V, OV, and VO order attest to the fact that Armenian is a pro-drop language and does not require explicit subjects or agents. Overall, SV order for the intransitive verbs and OV(A) for the transitive verbs seem to be most common, which might speak in favour of the ergative hypothesis; at the same time, however, it must be observed that AVO and AOV patterns are also similarly well represented, as is VO.

Overall, based on the data given here, Armenian constituent order appears to be rather free, and is likely to be used for stylistic effect as much as for pragmatic purposes.⁴² While the dominant order patterns align S and O, other patterns are only minimally less frequent. Without considering constituent order in other tenses, no

⁴⁰ A similar distribution has been drawn up for the potential correlation between copula agreement and polarity. Since non-standard copula agreement did not show any particular trend in general, and since the p-values given by Fisher’s Exact Test in this case are far above the significance threshold, there is no indication of a correlation between these features either, and thus no need to produce the table or any further discussion here.

⁴¹ This is a simplification, of course. As discussed in 4.1.3, the situation would be quite different for languages with split alignment systems. Haig (1998) further illustrates that, at least for Iranian languages, this generalization does not hold true.

⁴² Since the distribution of the respective constituent order types is relatively stable diachronically, with only minor fluctuations between authors, no attempt has been made to determine potential trends, or enquire as to the significance of a particular distribution.

Table 5.7 Distribution of constituent order types in perfect-tense main verbs

Constituent order	Kor.	Ag.	P'B	LP'	Eł.	total
V	30	107	139	114	94	484
SV	22	110	213	104	147	596
VS	2	36	76	65	29	208
AV	2	2	0	14	6	24
VA	0	0	4	11	12	27
OV	17	53	52	45	41	208
VO	11	27	30	38	20	126
AVO	3	13	21	22	16	75
AOV	6	9	15	22	16	68
OVA	4	3	29	36	15	87
OAV	1	2	9	24	8	44
VAO	2	7	5	16	7	37
VOA	1	4	3	12	1	21

further speculation is sensible. For the moment, then, the question whether the ergative pre-history of the periphrastic perfect finds expression in the constituent order of the perfect must be left open, but based on these data would have to be answered in the negative.

5.3.4.3 Summary

Neither the enquiry into a potential relation between polarity and argument-marking nor the distribution of constituent order patterns in the perfect have yielded any insights that could shed more light on the history or development of the periphrastic perfect.

Before proceeding to the conclusions, it is necessary to consider all that may have been overlooked in the above analysis, and what other errors might have occurred which could have influenced the data.

5.4 Caveats

For the sake of clarity, it is worth discussing briefly the categories of errors that might have influenced both the data and their analysis presented above.

The most basic is human error in analysing and processing the data in the first place, e.g. accidentally omitting to put in certain values in a spreadsheet, or putting in the wrong value. It is hoped that this kind of error has been largely avoided

through careful checking of the data, and as part of the quantitative data analysis, during which value omissions have been corrected.⁴³

A different kind of human error lies with the scribes on whose copies modern editions are based: scribal errors and emendations may have skewed (parts of) the texts used for this corpus in favour of more current constructions.

Other kinds of potential errors are largely based on omission from consideration. No particular studies of authorial style have been conducted, nor have different kinds of speech acts been taken into account.⁴⁴ The semantics of the perfect and its potential syntactic implications have not been given any consideration either.⁴⁵

The use of different kinds of copula, and different tenses, has not been taken into account, as it is likely to be connected more closely to the semantics of the perfect than to its syntax.⁴⁶

Finally, no systematic attempt has been made to account for the variation in argument-marking or copula agreement in terms of individual verbs or semantic classes of verbs.

Any of these errors or omissions could have an unknown impact on the patterns discussed; for the most part, it was deemed unlikely that this should be the case, e.g. in the case of semantics. Since this corpus study was undertaken with a view to testing the plausibility of an Iranian origin of the perfect construction, and to determine whether its diachronic trends within the 5th century corroborated the supposed de-ergativization process, the considerations mentioned above were not central to the question.

5.5 Summary

The analysis of a corpus comprising five Armenian historiographical texts from the 5th century CE as to their use of the periphrastic perfect, which has been reported

⁴³ Where a value had been omitted, certain sum-functions would show missing values, which were then found and corrected.

⁴⁴ It is conceivable that speeches as reported in P'B, LP, and El. in particular may have sought to emulate a different kind of style, esp. for Iranian speakers. If writers of 5th-century Armenian were aware of the Iranian origin of the Armenian perfect, this might have influenced their use of this pattern. At the same time, it must be noted that little in the data speaks in favour of this, since Kor. and Ag., which do not heavily feature Iranian actants, do not show developments or distributions that are wildly dissimilar from those in the other texts.

⁴⁵ Both Ouzounian (2001–2) and Semënova (2016) discuss the semantics of the perfect and come to the conclusion that one of the primary meanings is a resultative one; also cf. Minassian (1975–6: 68); Kölligan (2020: 357–73).

⁴⁶ It may be of note that Armenian shows a similar set of copular verbs to those used in West Middle Iranian. Next to *em* 'to be', *linim* 'to become' and *elanim* 'id.' are used; although not counted as a copula for statistical purposes (see fn. 17 above), *kam* 'to remain' could be interpreted as a copula, too. These find exact equivalents in Pth. *'h /ah-/* 'to be', *bw-/ /baw-/* 'to become', and *'št /iš-/* 'to stand, remain' (cf. Durkin-Meisterernst 2002; Durkin-Meisterernst 2004: 384; Jügel 2015: 123–59). Whether this is the result of borrowing or just a typologically common pattern cannot be determined clearly.

on in this chapter, has helped to lend further credence to the hypotheses made at the end of Chapter 4, and thus to the overall notion that the construction of the Armenian periphrastic perfect with a genitive agent and invariable 3SG copula is the result of Iranian influence, specifically the modelling of the Armenian perfect on the Parthian past tense.

The analysis of the adjectival use of the participle shows clearly that, barring a few examples found in Eł., both attributive and predicative uses of the participle are restricted to the passive and active intransitive; this corroborates a number of analyses of the historical morphology of the perfect as laid out in detail in [the Appendix](#).

Similarly, the discussion of the variation in subject- and agent-marking discussed in 4.2.1 has been expanded by means of statistics. As the data shows, the non-standard patterns (NOM agents and GEN subjects) are clearly minority patterns, and a sign of an alignment shift in progress. This is further confirmed by the diachronic trends suggested by the data, which show an increase in NOM agents and a decrease in GEN subjects; such a development might be expected of a language, or subsystem of a language, in the process of changing to nominative–accusative alignment.

The analysis of copula agreement patterns equally shows that non-standard patterns (Ø agreement in intransitive verbs, agent agreement in transitive verbs) are in the minority; here, however, no diachronic trend can be identified. Nonetheless, it emerges that the use of the copula in the periphrastic perfect shows a diachronic upward trend, from occurring in fewer than 10 per cent of the ‘true’ perfects in Kor., to more than 75 per cent in Eł. As suggested at the end of Chapter 4, this is a sign that the use of the copula in the perfect, specifically the invariable 3SG, is an Armenian-internal development; in view of the lack of agreement between copula and genitive subject in intransitive non-standard patterns, it is surmised that the choice of the 3SG as the copula indicates that verb agreement can only be licensed by nominative-case subjects and agents.

The category of converbs, or appositive participles, or *participia coniuncta*, equally corroborates the trends already discussed as part of the perfect. Owing to the nature of the converb, however, specifically its frequent subject-sharing with other verbs, the quantitative data gleaned from this statistically largest group of participles is only of limited use. The high frequency of converbs, together with the rise of the copula during the 5th century, suggest that this was the original locus of borrowing of the alignment pattern from the Parthian past tense, and that the ‘true’ perfect developed on this basis.

In two further brief reviews of the potential correlations between polarity and agent- or subject-marking, and the potential implications of constituent order for morphosyntactic alignment, no statistically significant observations could be made. While it was noted that the most common constituent orders (SV and OVA)

did reflect an order typical of ergative alignment, other orders were also similarly frequent and not indicative of such an alignment.

The quantitative and qualitative analysis of the corpus data therefore clearly supports the central hypotheses made above, and thus the development of the periphrastic perfect in Armenian on the basis of a Parthian model. The following chapter goes on to show that such syntactic borrowing processes can be observed in other Armenian patterns as well.

5.6 Excursus: the question of Movṣēs Xorenac'ī

Before moving on, a brief excursus is in order. As noted in 5.1.2, one prominent autochthonous historiographical text sometimes attributed to the 5th century has been excluded from the corpus, Movṣēs Xorenac'ī's *Patmut'iwn Hayoc'* (*History of the Armenians*). The reason for this exclusion lies in the disputed date of its composition: while a 5th-century date is traditional and that suggested by the author himself, Thomson convincingly argues in favour of a later, 8th-century date, stating in particular:

Moses is not a disinterested antiquarian. He puts his erudition to a definite purpose—boosting the reputation of the Bagratuni family. Although he pretends to be writing dispassionately, carefully sifting his sources and scrutinizing them for historical accuracy, in fact Moses is an audacious, and mendacious, faker. He does not merely suppress the unflattering evidence and emphasize the flattering. He willfully distorts his sources and invents episodes [...] Undoubtedly Moses has preserved many reminiscences of historical truth, But his attitude to his sources and his methods of historical writing are such that his uncorroborated word can never be fully trusted. (Thomson 1978: 58)⁴⁷

These misgivings warrant an initial exclusion from the corpus study, but equally challenge the data of the latter, since two opposed expectations arise: if the text dates to the 5th century, its language in general and its use of the perfect in particular should be roughly in keeping with that of the contemporary corpus texts; if, on the other hand, it postdates these texts, and in view of the later development of morphosyntactic alignment, the latter would be expected to manifest in Movṣēs' writing.

After providing a brief summary of Thomson's specific claims against Movṣēs, his *History of the Armenians* will be spot-checked according to the same categories as the main corpus and the results compared. While an analysis of a single

⁴⁷ It ought to be noted that, in the second edition of his book on Xorenac'ī, Thomson has tempered his language somewhat.

linguistic feature cannot be the key to deciding whether this is an earlier or later text, it nevertheless provides useful information in favour of one or the other point of view, thus corroborating the applied value of such detailed linguistic studies for related disciplines.

5.6.1 Background to the controversy

Movsēs' *History* delineates the genesis and development of the Armenian people from the beginning of time, i.e. starting with Adam, until the supposed time of writing. It covers, in more or less detail, all periods of Armenian history until the second war of independence under the leadership of Sahak Bagratuni and later Vahan Mamkikonean in the late 5th century. Next to its historiographical detail, the *History* is commonly cited as an important source of pre-Christian poetry, particularly the *Song of Vahagn* (MX I.31), a source of potential Hurro-Urartian connections, and a source of contemporary details on Armenia's relationship with its neighbours.⁴⁸

The claim of a 5th-century date is made in the introduction to book I, in which Movsēs reacts directly to a supposed demand by Sahak Bagratuni (*d.* 482) to write a history of the Armenian people (MX I.1.2–7): 'From Movsēs Xorenac'i to Sahak Bagratuni, greetings at the beginning of this work concerning our people. [...] So having received your request with pleasure, I shall labour to bring it to completion in order to leave this as an immortal memorial to you and your descendants to come.'⁴⁹ The dispute of this early date does not originate with Thomson,⁵⁰ nor is he alone in supporting a later date: a number of other scholars, notably Garsoïan (2003–4) and Mahé (1992), support and supplement his arguments. Equally, however, opposing voices like Nersessian (1979), Muşelyan (1990), and Topchyan (2006) uphold the earlier date.

Apart from an overarching but underlying bias in favour of the Bagratids and against the Mamikoneans, Thomson makes a number of specific points suggesting a late date, the key concepts of which can be summarized in the following three points:

1. Use of Greek sources: Thomson (1978: 20–39) argues that Movsēs could not have made use of Greek sources like the *Alexander Romance*, the writings of Josephus, Philo of Alexandria, or Eusebius of Caesaraea in the original

⁴⁸ Cf. Traina (1996; 2007); Zimansky (2001).

⁴⁹ *Movsēs Xorenac'i yalags meroyis i skzban yaysm banic's Sahakay Bagratunwoy xndal. [...] Yalags oroy heštabar ənkaleal zk'o xndird, ašxatasirec'ayc' acel i katarum, yanmah yišatak t'olul zays k'ez ew or zkni k'o galoc' en azgk'.*

⁵⁰ For a summary of the debate preceding Thomson, see Toumanoff (1961); for the earliest exposition of the question, see von Gutschmied (1876).

Greek, but relied on their Armenian translations which postdate his own supposed life (also see [Mahé and Mahé 1993](#)).

2. Use of Armenian sources: certain parallels with the history attributed to Agat'angelos suggest that Movsēs was familiar with redactions of these works that postdate him ([Thomson 1978](#): 41–5); in other instances, [Thomson](#) argues that Movsēs references the history of Łazar P'arpec'Ī and the *Ašxarhac'oyc'*, a geographical treatise now attributed to Anania Širakac'Ī (*fl.* 7th century), both composed later.
3. Anachronisms: Movsēs makes occasional reference to political or geographical equivalences that had not been established in his time, e.g. the existence of four Armenias which, as provinces of the Byzantine Empire, were not established until 536, or an Iranian advance into Bithynia, which was reached only in a war dating to the early 7th century ([Thomson 1978](#): 58–9).

[Thomson's](#) critics refute his arguments, suggesting that his criticism of Movsēs' opaque use of sources and lack of attributions is anachronistic, and pointing out that, if it had been written in the 8th century, more references to or foreshadowing of historical events of interest at that point in time would be expected. In particular, in his review of [Thomson, Nersessian \(1979: 479–80\)](#) asks:

how does one explain then Moses's complete preoccupation with the events preceding A.D. 440 and his silence regarding the events leading up the Arab incursions [? ...] The ecclesiastical interests do not point to the eighth century. There is no echo of the Chalcedonian controversy which engaged the Armenians from 451 to 641.

All of the counterarguments against an 8th-century date only hold, however, if the suggestion that Movsēs engages in purposeful literary and historiographical deception is rejected from the outset. Since [Thomson](#) makes substantive points, this seems unwise, and leaves the question unanswered for the moment, at least from the historiographical perspective.

5.6.2 Spot-check

In view of this dating conundrum, the question whether Movsēs' use of the periphrastic perfect can shed any light on his period of activity is therefore worth asking. There are three broad outcomes of such a query:

- Clear confirmation of a 5th-century date: Movsēs' use of the perfect is consistent with that of the corpus (largely tripartite; some instances of NOM agents, fewer of GEN subjects; invariable copula shows Ø-agreement);

- Clear confirmation of an 8th-century date: Movsēs' use of the perfect is entirely inconsistent with that of the corpus (largely NOM-ACC alignment; copula shows S/A-agreement);
- Inconclusive: Movsēs' use of the perfect does not align perfectly with that of the corpus, but does not show complete transition to NOM-ACC alignment either.

Since the previous discussion has shown that not all categories of enquiry led to useful results, the comparison of Movsēs to the 5th-century corpus will be restricted to expressions of agents in the perfect proper, the use of the copula, and the use of the participle as an adjective. A few final remarks concerning Movsēs' language serve to contextualize the data.

Table 5.8 details the distribution of subject and agent expressions in Movsēs alongside the average across the 5th-century corpus for comparison.⁵¹

Three numbers stand out in this comparison. In intransitive verbs, the nominative has evidently remained the standard marker of the subject, with only a single

Table 5.8 Distribution of S- and A-marking in perfect-tense main verbs in MX

INTR.ACT	SAO	5th-century corpus	MX
	S=nom	51.0%	73.7% (28)
	S=gen	9.2%	2.6% (1)
	S=∅	39.5%	23.7% (9)
	total		38
INTR.PASS	S=nom	58.0%	64.7% (11)
	S=gen	0.8%	0
	S=∅	40.6%	35.3% (6)
	total		17
TR.ACT	A=nom	7.7%	21.4% (3)
	A=gen	42.1%	21.4% (3)
	A=∅	50.0%	57.1% (8)
	total		14
IMPRS	total		3
Grand total			72
% of all PTCPS		29.8	16.5

⁵¹ The data is based on a convenience corpus, consisting of MX I.1–32.

case of genitive marking found in Movsēs. In transitive verbs, by contrast, there appears to be an equilibrium of both types of agent-marking, showing both genitive and nominative agents. This suggests that the tripartite alignment pattern is less securely established than it was in the 5th century and that, therefore, a later date is plausible. At the same time, the numbers on which these percentages rely are very small, and limit the probative value of these figures.

Equally interesting is the overall percentage of participles used in the perfect construction, which is far lower in Movsēs than the 5th-century average, lying even below the range of single values in the corpus (19.3–38.4%).

By contrast, the occurrence of the copula in the perfect is far lower in Movsēs (28 instances, 38.9 per cent) than the 5th-century average (43.9 per cent, range 11.8–77.7); this would suggest a very early text. There are also no instances of A-agreement of the copula as occasionally seen in the 5th-century corpus. Both of these observations speak against a later date and suggest that the alignment pattern in Movsēs is as conservative as that of the earlier corpus texts.

There are, however, two further indications speaking against an early date. One of them is Movsēs’ use of participles as the main verb in reported speech. Example (5.39) illustrates this usage.

- (5.39) *ew andēr sa gtak hroy ew kam Promet’ēos*
 CONJ why 3SG.NOM inventor fire.GEN.SG CONJ or PN
golac’ēal ar’i y=astuacoc’=n z=hur ... oč’
 steal.PTCP from from=god.GEN.PL=DET OBJ=fire NEG
berē asel karg bani=s
 bear.3SG.PRS say.INF order story.GEN.SG=DET
 ‘And why Prometheus [is called] the inventor of fire or the thief of fire
 (lit. stealing/having stolen the fire) from the gods ... the remit of this
 story does not permit to say.’ (MX I.7.4)

Here, the participle *golac’ēal* clearly governs *z=hur* as suggested by the object-marker, but must also be taken as parallel to the noun *gtak* ‘inventor’, which suggests a reading as a nominalized adjective. Alternatively, the participle can be analysed as a perfect without copula (‘Why he [is called] the inventor of fire or [why] Prometheus stole the fire ...’).

At this point, it is unclear whether this is a development internal to Armenian or due to external influence. The occurrence of certain other syntagmata which are clearly influenced by Greek suggests, however, that his use of the participle may also be the result of such influence. Passage (5.40) illustrates clearly the use of the participle as a main verb in indirect speech; this construction is common in Greek, but only extremely rare elsewhere in Armenian (Ouzounian 1992: 77–80; 1996–7: 9–16).

- (5.40) *bayc' asem z=Kronos=d anun ew z=Bēl Nerbovt'*
 but say.1SG.PRS OBJ=KRONOS=DET name and OBJ=Bēl Nimrod
leal
 be.PF.PTCP
 'But I say that the one called Kronos and Bēl is Nimrod.' (MX I.7.2)

In this example, the subject of the reported statement has been rendered as an accusative (as marked by the *nota accusativi*), while the participle *leal* 'be' fulfils the role of the main verb.⁵²

A further, unrelated use of a genitive absolute construction (*aysoc'ik' ... kargeloc'*), which otherwise occurs only in Greek itself and later hellenizing translations into Armenian of Greek texts, adds to the suspicion that Movsēs' Armenian must have undergone more significant Greek influence than the rest of the 5th-century corpus.⁵³

- (5.41) *ew aysoc'ik' aypēs kargeloc' ...*
 and DEM.GEN.PL thus arrange.PF.PTCP.GEN.PL ...
sksayc'
 begin.1SG.AOR.MP.SBJV
 'And with these things being arranged thus ... I will begin ...' (MX I.19.5)

These inconsistencies between Movsēs' *History* and the 5th-century corpus and in the text internally, when compared to other individual texts, allow two conclusions: either he was an extreme outlier among the 5th-century texts, at least linguistically speaking; or he does not belong to this time period.

5.6.3 Summary

This little excursus has illustrated the analytical potential of the periphrastic perfect to diagnose a text's adherence to a set of rules and tendencies established on the basis of a corpus. While the evidence does not show beyond reasonable doubt that Movsēs Xorenac'i was an author postdating the 5th century, there are sufficient discrepancies between his usage and that of established 5th-century authors to add substance to Thomson's historiographical arguments. In particular, his use of Greek structures favours a later date.

Since Movsēs was clearly aware of the work of his predecessors, it cannot be excluded that he actively sought to imitate their style, for example, avoiding copulas

⁵² For more on the question of reported speech and the influence of contact languages, see 6.3.

⁵³ Cf. Muradyan (2012: 161–4).

as in Koriwn, but did so imperfectly; if his style is due to conscious imitation, Thomson's evaluation of Movsēs seems even more appropriate. A more in-depth study of Movsēs' *History* is required to further corroborate the impressions provided above.

6

Other cases of Iranian–Armenian pattern replication

Chapters 4 and 5 have made the linguistic case for the replication of the Classical Armenian periphrastic perfect on the model of the West Middle Iranian, and specifically Parthian, past tense, which is historically derived from a similar periphrastic construction.

To further corroborate the case of Parthian influence on Armenian syntax, and to illustrate in more detail the difficulty in this branch of language contact research, this chapter is going to discuss three further instances of potential pattern replication: the first such pattern is that of Armenian nominal relative clauses, which have been compared to the Iranian *ezāfe* construction already by Meillet (1899–1900); secondly, there is the functional distribution of Arm. *ink'n* ‘self’ as intensifier, resumptive pronoun, and switch-function marker which may be derived from West Middle Iranian; finally, there is the usage of Arm. *(e)t'ē* ‘that’ as, inter alia, both complementizer and quotative marker, introducing direct and indirect speech, including before *wh*-question words, which has Iranian parallels.

Owing to the nature of these patterns, their analysis will proceed in less depth than in the case of the previous pattern; rather than offering a quantitative study, the discussion will be qualitative only and based on illustrative examples, but will provide as much detail as necessary to reflect the pattern replicated and potential issues in assigning the syntagmata in question an Iranian origin.

6.1 *Ezāfe*

While scholarship has provided insights into numerous morphological and even phraseological borrowings from Iranian into Armenian (see Chapter 2), no such findings relating to Armenian syntax have been made bar one: Armenian nominal relative clauses, in which a relative pronoun links a determinand (or antecedent) with a determinans describing it further. This pattern finds a plausible model in the West Middle Iranian *ezāfe* construction, which operates along the same lines.

Yet, opinions are divided as to whether nominal relative clauses in Armenian really constitute an instance of pattern replication, or whether this syntagma is inherited from Proto-Indo-European, or developed independently. It is therefore

worth revisiting this question briefly, to outline both the Armenian and the Iranian constructions, as well as parallel ones in other Indo-European languages, in order to determine whether replication or inheritance explain the Armenian pattern better.

After revisiting the basic structure of standard Armenian relative clauses, this section discusses the potential *ezāfe* function of the relative pronoun. This is followed by a review of West Middle Iranian relative clauses and their usage of *ezāfe*. Finally, Indo-European parallels are outlined.

6.1.1 Standard Armenian relative clauses

A standard Armenian relative clause consists of an antecedent (or pivot), a form of the relative pronoun Arm. *or*, and the clause further describing the antecedent; the relative pronoun is usually found in the case syntactically required by its function in the relative clause.¹ Since Armenian has lost morphological gender differentiation, relative pronouns agree with their antecedents only in number.²

A typical relative clause might thus look like the examples below; in (6.1), the relative pronoun occurs in the dative as part of the naming construction, while in (6.2), the nominative pronoun functions as subject of its clause.

- (6.1) *z=ays greac' ew ec'oyc'*
 OBJ=DEM.ACC.SG write.3SG.AOR and show.3SG.AOR
marzpani=n, orum anun ēr Sebuxt.
 marzpan.DAT.SG=DET REL.DAT.SG name.NOM.SG be.3SG.PST PN
 'This he wrote and showed to the *marzpan*, whose name was Sebuxt.' (El. III.177)

- (6.2) *ew z=ays amenayn lueal sop'ēstēs=n,*
 and OBJ=DEM.ACC.SG all hear.PTCP sophist.NOM.SG=DET
or ēr vkayanoc'i=n, ...
 REL.NOM.SG be.3SG.PST chapel.LOC.SG=DET
 'And when the sophist heard all this, who was in the chapel, ...' (P'B IV.10)

Next to individual antecedents, relative clauses can also refer to the action of an entire clause or phrase; this is expressed most commonly in the collocation Arm. *vasn oroy*, as illustrated in (6.3).

¹ For instances of relative attraction in Armenian, see Meyer (2018).

² The exception to this rule is the usage of Arm. *or*, the NOM./ACC.SG, for both singular and plural; Minassian (1989) links this to scribal errors.

- (6.3) ... *i mēñj patuhasik' ew y=astuacoc' Vasn*
 by 1PL.ABL punish.2PL.PASS and by=god.ABL.PL because
oroy ew z=awrēns mer z=stoyg ew
 REL.GEN.SG also OBJ=religion.ACC.PL 1PL.POSS OBJ=true and
z=ardar greč'ak' ew tuak' berel ar jez.
 OBJ=just write.1PL.AOR and give.1PL.AOR carry.INF to 2PL.ACC
 '... you will be punished by us and by the gods. Because of this (lit. of
 which) we wrote down our infallible and just religion and had it brought
 (lit. gave [it] to bring) to you.' (ŁP' XXII.3–4)

In (6.3), the relative pronoun is governed by *vasn* and is thus in the genitive; it anaphorically refers to the entirety of the previous clause. In similar fashion, the relative pronoun is often employed at the beginning of sentences to refer to a constituent in the previous sentence.³

Inevitably, there is more to say about Armenian relative clauses, but for the present purpose this brief recapitulation will suffice.⁴

6.1.2 Armenian *ezāfe*?

Next to the standard relative clauses outlined above, there are those in which no verb occurs and which have thus been termed nominal. In the literature, they are often treated together with other nominal clauses (e.g. predicative).

Example (6.4) contains two instances of nominal relative clauses: one with a dative and one with a nominative relative pronoun.

- (6.4) *zi t'erevs ordi mi linic'i nma,*
 for perhaps son.NOM.SG one become.3SG.PRS.SBJV 3DAT.SG
orum anun Ormzd, or z=erkins
 REL.DAT.SG name.NOM.SG PN REL.NOM.SG OBJ=heaven.ACC.PL
ew z=amenayn or i nosa arnic'ē
 and OBJ=all REL.NOM.SG in 3LOC.PL make.3SG.PRS.SBJV
 'For perhaps he will have a son, whose name [is] Ormzd, who will make
 the heavens and everything and everything that [is] in them.' (EK II.1.2)

The difference between the two instances, however, lies in the fact that the phrase *z=amenayn or i nosa* would be equally grammatical without the relative pronoun, which is not the case for *ordi ... orum anun Ormzd*. The first instance, then is a

³ Cp. the notion of a connecting relative in e.g., Latin (Menge 2009: §590).

⁴ For more detailed treatises, see Jensen (1959: 86–7, 198–9); Hewitt (1978); Vaux (1994–5: 17–28); de Lamberterie (1997); Meyer (2018).

nominal relative clause proper, while the second may be a kind of *ezāfe*⁵—if such a difference is to be made at all.

In some instances, it is evident that the occurrence of such apparent *ezāfe* constructions is due to Greek influence, specifically the rendition of articular phrases as in (6.5):

- (6.5) *Shogi* *mardoyn* *or* *i nma*
 spirit.NOM.SG man.GEN.SG REL.NOM.SG in 3SG.LOC
 τὸ πνεῦμα τοῦ ἀνθρώπου τὸ ἐν αὐτῷ
 ‘the spirit of the man which [is] in him’ (1 Kor. 2:11)

Contrary to the speculation of [Ajello \(1997: 252\)](#), it is not evident from this example that this rendition is due to Iranian influence rather than a translation effect owed to the Greek original; the rendition of the Greek definite article, for which there is no isofunctional parallel in Armenian (for which cf. [Ajello 1973: 151–7](#)), as an Armenian relative pronoun need not be inspired by Iranian syntax or phraseology. The potential of this kind of interference is one of the best reasons to avoid using the biblical corpus as the basis for linguistic studies.⁶

In cases where there is no Greek model, however, no such influence can be expected. [Meillet](#) is the first to propose an Iranian origin of this syntagma (1899–1900: 379 n. 1; 1906–08: 21), but also the first to reject it, since

[l]’examen des exemples écarte absolument l’hypothèse d’une influence iranienne [...] Le plus souvent, la phrase relative sans verb «être» est très courte; elle se compose du relatif et d’un mot précédé de préposition ou du génitif de l’anaphorique, mais non pas d’un adjectif ou d’un génitif quelconque. ([Meillet 1910–11: 345](#))

[Meillet](#) does not address the reason for his rejection explicitly, but only refers to parallels in Latin, which in themselves are doubtful.⁷

While the construction is indeed apparently most common with prepositional phrases, there are a number of occurrences with other kinds of phrases following the relative pronoun.

⁵ The *ezāfe* construction (from Arab. *idāfat* ‘addition; connection’) for the present purpose refers to a syntagma common to many West Iranian languages (e.g. Farsi, Kurmanci), whose purpose is to further determine a (set of) NP(s). Accordingly, on the surface it consists of an NP (determinand), an enclitic particle (connector), and further XPs (determinans), most commonly another NP or adjectival or prepositional phrase; which phrases are licensed to occur within the *ezāfe* construction varies by language. For more details, see [Haig \(2011\)](#).

⁶ For this argument and similar translations effects in the realm of relative clauses, see [Cowe \(1994–5\)](#); [Lafontaine and Coulie \(1983\)](#); [Meyer \(2018\)](#).

⁷ [Meillet \(1910–11: 345\)](#) cites [Marouzeau \(1911: 155–6, 180–1\)](#) on Terence and Plautus. The relevance of this evidence is questionable, since both of these authors wrote in verse and commonly use colloquial language which may not always reflect inherited structures; furthermore, the cases of nominal relative clauses in Latin cited therein bear little resemblance to those of Armenian.

- (6.6) *anun Astuacoy or tearn=n*
 name.NOM.SG God.GEN.SG REL.NOM.SG lord.GEN.SG=DET
araracoc'
 creature.GEN.PL
 'the name of God which [is that of] the lord of creation' (EK IV.1.21)
- (6.7) *oč' z=iwr inč' k'ajut'awn sut hramayec'*
 NEG OBJ=3POSS INDF bravery.ACC.SG falsely command.3SG.AOR
mez vipasanel ... ayl irk' or
 1PL.DAT relate.INF but thing.NOM.PL REL.NOM.SG
eal=k' *vasn yelanakac' yelap'ox žamanakac'*
 happen.PTCP=PL because nature.GEN.PL variable time.GEN.PL
 'He did not command us to write in any way falsely about his own bravery
 [...] but rather about things that happened owing to the nature of
 changeable times ...' (Ag. foreword, 31)

Connecting two nominal phrases in the same case, (6.6) is a clear counterexample to the restrictions suggested by Meillet.⁸ Interpreting the structure of (6.7) is more difficult, as it depends on the analysis of *eal=k'*. As argued in Chapter 5, participles even without forms of the copula can function like finite verbs and constitute the main predicate of the clause; equally, however, it has been shown that in most instances where the participle receives a number agreement marker, it is used nominally or adjectivally. Assuming the latter is the best analysis here, this would be another example speaking against Meillet's restrictions.

The question remains, for the moment, whether Meillet's rejection is justified, or whether his earlier stance is more plausible; more recent scholarship (Jensen 1959: 160; Benveniste 1964: 35; Ajello 1997: 252) assumes that the construction may have been modelled on Iranian, but that it is impossible to prove this beyond reasonable doubt. The evidence from West Middle Iranian will shed more light on this situation.

6.1.3 West Middle Iranian *ezāfe*

Both Parthian and Middle Persian employ relative clauses widely, both in their original, relative function, as well as in various other functions when combined with particles (Durkin-Meisterernst 2014: 430–31). Like Armenian, neither of the Iranian languages distinguishes grammatical gender; the relative pronouns do, however, have a tendency to differentiate between animate (WMIr. *ky* /*kē*/) and inanimate (WMIr. *cy* /*čē*/). The *ezāfe*-function is fulfilled by *cy* /*čē*/ in Parthian, and by a separate particle 'y /*ī*/ in Middle Persian. Apart from 'y /*ī*/, these particles also operate as interrogatives.

⁸ It remains open and indeterminable, however, whether this is a remnant of Greek style or diction in the writings of Eznik, who was one of the translators of the Bible.

Example (6.8) is a typical relative clause, in which a noun *rwšn* /rōšn/ is relativized with the relative pronoun *ky* /kē/; the relative clause contains a finite verb form *'myxsyd* /āmixsēd/.

- (6.8) *byc hw z'wr rwšn ky 'd t'r 'w'gwn*
 but DEM strength light REL with darkness so
'myxsyd kw
 mix.3SG.PRS.PASS COMP
 'But the strength of the light, with which darkness is so mixed that ...'
 (M2/II/R/i/16–18; Parthian)

In essence, Parthian relative clauses are therefore very similar to Armenian ones, with the exception that West Middle Iranian relativizers are not as morphologically explicit, i.e. marked for at least case and number, as their Armenian counterparts.

Next to relative clauses with finite verbs, there are also those which only have a participle. In (6.9) and (6.10), the relative clauses only contain participles (*HYTYt* /āwāst/, an Aramaic heterogram, and *qyrd* /kird/). This, of course, is the expected expression of the West Middle Iranian past when the form of the copula would otherwise be the 3SG.PRS (see Chapter 4), but this is arguably not the case for (6.9), where context suggests a first-person agent.

- (6.9) *W {mrtwhmk} MH MN prwmyn hštr MN 'nyr'n pty*
 and mankind REL from Roman land from Anaryān by
'w'r HYTYt
 abduction(?) take.PTCP
 'And the people, which [we] have taken from Roman lands, from
 Anaryān, by abduction ...' (ŠKZ pa 15–16; Parthian)
- (6.10) *kw 'dg hym (kw) 'y(m) 'pdn wyg(')n'n [ky]*
 and able be.1SG.PRS COMP DEM temple destroy.1SG.SBJV REL
(pd) ds(t) qyr(d)
 by hand build.PTCP
 'I am able to destroy this temple, which [was] built by hand.'
 (MKG 1180–94; Parthian)

Furthermore, Parthian too includes relative clauses containing only a prepositional phrase like (6.11).

- (6.11) *wd ('hyn)jyd (')w br'dr-'n ky pd jfr'(n)*
 and draw.3SG OBJ brother-PL REL in abyss
 'And he draws [up] the brothers, who [are] in the abyss.'
 (GW §34; Parthian)

Durkin-Meisterernst classes the instances cited thus far as nominal relative clauses and sets them apart from the *ezāfe* construction *sensu stricto*, which are said to express possessive or explicative relationships mainly between nouns and other

nouns or adjectives (2014: 266–8; also cf. Boyce 1964), as opposed to participial phrases.

(6.12) *m'd cy dyw-'n*
 mother EZ demon-PL
 'mother of demons' (KPT 1194–96; Parthian)

(6.13) *twhm MH LN*
 family EZ 1PL.POSS
 'our family' (NPi pa §65; Parthian)

(6.14) *pd šng 'wd srwd cy (š)'dyft*
 with harp and song EZ friendship
 'with the harp and song of friendship' (M5569/R/10–11; Parthian)

Such possessive relationships are not unknown in Armenian—see (6.4) above—but have to be expressed with a declined relative pronoun. Similarly, as has been argued above, whether Armenian can be said to have *ezāfe*-like constructions with adjectives as the determinans depends on the interpretation of the Armenian participle.

There are, therefore, clear parallels between the Parthian and Armenian usage of relative pronoun in nominal relative clauses and in an *ezāfe*-like constructions—if that differentiation is indeed necessary; Parthian exhibits a use pattern that could have served as the model for the Armenian use of the pronoun in this way. Equally, however, it is plausible that both languages could have developed these constructions independently.

It must further be noted that according to Durkin-Meisterernst (2014: 265), the *ezāfe* construction in Parthian is less common, and that the language prefers to express the determinand–determinans relationship without a linking particle, thus e.g. *'h'r jm'n /āhār žamān* / 'dinner time' (MKG 1932) rather than *†jm'n cy 'h'r /žamān čē āhār* /.

It remains to be seen, then, whether comparative evidence from other Indo-European languages can provide any more insight into the matter.

6.1.4 Replication or inheritance?

A number of the older Indo-European languages can be seen to make use of nominal relative clauses in a way comparable to that of West Middle Iranian and Classical Armenian; the pattern is not restricted to any one branch of the Indo-European daughter languages.⁹ The question remains, however, whether the examples that follow are indeed instances of nominal relative clauses, or 'simply' of copula ellipsis.

⁹ For a more detailed general discussion of nominal or verbless relative clauses in Indo-European languages, see Probert (2015: 407–14).

Already in Hittite, examples of nominal relative clauses can be found, as (6.15) illustrates; for more examples and discussion, see Benveniste (1958: 49–50).

- (6.15) *kuit handan apāt išša*
 REL.NOM/ACC.SG.N just RES.NOM/ACC.N do.2SG.IMP
 ‘Do that which [is] just!’ (Hittite)

Vedic similarly exhibits such nominal relative clauses (6.16); as in Hittite, the determinans is most frequently an adjective or noun.

- (6.16) *vísve marúto yē sahāsaḥ*
 all.NOM.PL.M Marut.NOM.PL REL.NOM.PL.M powerful.NOM.PL.M
 ‘all the Maruts [storm-gods] who [are] powerful’ (RV 7.34,24; Vedic)

The Old Iranian languages also show a similar pattern; the crucial difference, however, is that Hittite and Vedic use the relative pronoun in nominal relative clauses in the nominative only as per its function as subject of the relative clause, whereas in Avestan and Old Persian there are examples of relative pronouns in such clauses in both nominative (6.17–6.19) and other cases (6.20–6.22) without any evident conditioning environment.

- (6.17) *mat vā padāiš yā frasrūtā*
 1SG.ABL 2PL.ACC footstep.INS.PL REL.NOM.PL famous.NOM.PL
īžaiiā pairijasāi
 Iža.GEN.SG walk-around.1SG.PRS
 ‘with the footsteps, which [are] famous [as those] of Iža, I shall walk around you’ (Y. 50.8; Old Avestan)

- (6.18) *miθrəm ... yō nōiṭ kahmāi*
 Mithra.ACC.SG REL.NOM.SG NEG INDEF.DAT.SG
aiβi.draoxδō
 deceive.VBADJ.NOM.SG
 ‘Mithra ..., who [is] not to be deceived by anyone’
 (Yt. 10.17; Young Avestan)

- (6.19) *adam Bardiya amiy haya Kūrauš*
 1SG.NOM Smerdis be.1SG.PRS REL.NOM.SG Cyrus.GEN.SG
puça Kabūjīyahyā brātā
 son.NOM.SG Cambyses.GEN.SG brother.NOM.SG
 ‘I am Smerdis, who [is] the son of Cyrus, the brother of Cambyses’
 (DB I.39; Old Persian)

- (6.20) *tāiš šīiaoθanāiš yāiš vahištāiš*
 DEM.INS.PL deed.INS.PL REL.INS.PL best.INS.PL
 ‘with the best (of) deeds’ (Y. 35.4; Old Avestan)

- (6.21) *miθrəm yim vouru.gaoiiaotīm*
 Mithra.ACC.SG REL.ACC.SG wide-pastured.ACC.SG
 ‘Mithra with wide pastures’ (Yt. 10.1; Young Avestan)
- (6.22) *adam ... avam Gaumātam tayam*
 1SG.NOM DEM.ACC.SG Gaumata.ACC.SG REL.ACC.SG
magum avājanam
 magus.ACC.SG slay.1SG.PST
 ‘I ... slew that Gaumata, the magus.’ (DB I.56–7; Old Persian)

It is worth noting that the occurrence of ‘case attraction’, i.e. the coincidence in case of syntactic pivot and relativizer, does not occur in other, i.e. verbal, relative clauses in Avestan or Old Persian.¹⁰ Furthermore, Young Avestan and Old Persian show instances of nominal relative clauses linked with a generalized relative particle Av. *yaṭ*, OP *taya* (both REL.NOM/ACC.SG.N), which also functions as the complementizer (see Lühr 2008: 153 for the relationship between these two forms). A construction of this kind is likely to be the origin of the *ezāfe* in later Iranian.

- (6.23) *puθrəm yaṭ pouruśaspae*
 son.ACC.SG COMP Pouruśaspa.GEN.SG
 ‘the son of Pouruśaspa’ (Yt. 5.18; Young Avestan)
- (6.24) *ustacanām taya aθagainām*
 staircase.ACC.SG COMP of-stone.ACC.SG
 ‘(this) stone staircase’ (A²Sc; Old Persian)

Note that in (6.23), the innovative form with complementizer *yaṭ* encroaches on the older, ‘attracting’ construction.¹¹

Greek attestations of verbless relative clauses are limited to early forms of the language (Probert 2015: 413). Here, too, the determinans may be a noun (6.25) or an adjective (6.26); other types of phrase also occur, but are rarer.

- (6.25) ἦ μάλα δὴ c’ ἐφόβησε Κρόνου
 truly PTC PTC 2SG.ACC put-to-flight.3SG.AOR Kronos.GEN.SG
 πάϊς, ὅς τοι ἀκοίτης
 son.NOM.SG REL.NOM.SG 2SG.DAT companion.NOM.SG
 ‘Truly, the son of Kronos, who [is] your companion, has put you to flight.’ (Homer, *Iliad* XV.91; Greek)

¹⁰ The gamut of nominal relative clauses in Avestan and Old Persian is, however, greater than exemplified here; for more detail, see Skjærvo (2009b: 155–60) and Seiler (1960: 134–70). For a more recent explanation of the construction in Old Persian, which suggests that it arose through contact with Elamite, see Yakubovich (2020).

¹¹ See e.g. (6.21) for Avestan and (6.24) for Old Persian, where the relativizer agrees in number, gender, and case with its pivot rather than assuming the function of subject in a verbless relative clause.

- (6.26) *νηυὶ μὲν ἐν μέσσηιν ἀμύνειν εἰς*
 ship.DAT.PL PTC in middle.DAT.PL ward-off.PRS.INF be.3PL.PRS
καὶ ἄλλοι Ἰάαντες τε δύο Τεῦκρός θ',
 also other.NOM.PL Ajax.NOM.PL and two Teucer.NOM.SG and
ὁ ἀριστος Ἀχαιῶν ἢ τοξοσύνη,
 REL.NOM.SG best.NOM.SG Achaean.GEN.PL archery.DAT.SG
ἀγαθὸς δὲ καὶ ἐν σταδίῃ ὑμνῆ
 good.NOM.SG PTC and in upright.DAT.SG combat.DAT.SG
 ‘Among the ships, in the middle there are furthermore others to ward
 [them] off: the two Ajaxes and also Teucer, who [is] the best of the
 Achaeans at archery, and also good in hand-to-hand combat.’
 (Homer, *Iliad* XIII.312–14; Greek)

Latin, too, provides some indication that it inherited nominal relative clauses; but, these are restricted to very few examples from Old Latin.¹²

- (6.27) *hi quos Augurum Libri*
 DEM.NOM.PL.M REL.ACC.PL.M augur.GEN.PL.M book.NOM.PL.M
scriptos habent sic «divi
 write.PRF.PTCP.ACC.PL.M have.3PL.PRS so divine.NOM.PL.M
qui potes» pro illo quod
 REL.NOM.PL.M capable.NOM.PL.M for DEM.ABL.SG.N REL.ACC.SG.N
Samothracas θεοὶ δυνατοί
 Samothracian.NOM.PL.M god.NOM.PL.M capable.NOM.PL.M
 ‘These [are the gods] whom the *Books of the Augurs* mention in writing
 as “potent deities”, for what the Samothracians call “powerful gods”’
 (Varro, *de lingua latina* V.58; Latin)¹³
- (6.28) *salvete, Athenae, qui*
 be-well.2PL.PRS.IMP, Athens.VOC.PL.F, REL.NOM.PL.M
nutrices Graeciae
 nurse.NOM.PL.F Greece.GEN.SG.F
 ‘Greetings, Athens, [who is the] nourisher of Greece’
 (Plautus, *Stichus* 649; Latin)

The evidence provided by these early Indo-European languages suggests that nominal relative clauses, no matter whether introduced by a reflex of *ye/o- or *k^wi/o-, may have been inherited from the ancestor language. Their nature has led some

¹² The relevant use of the relative pronoun does not occur in all manuscripts and may be a later interpolation, however. Benveniste (1958: 51) also gives an example from Festus, *de verborum significatione*; in context, however, an interrogative reading of *qui* seems more appropriate here than a relative one.

¹³ de Melo (2019: 286, 696) questions whether the relative pronoun here is original.

scholars, chief among them [Benveniste \(1958\)](#), to argue that nominal relative clauses indicate the original nature of the later relative pronoun, namely: a definite determiner.

This proposed origin is contradicted, however, by the lack of agreement between relative pronoun and pivot in some examples: (6.17) expects instrumental; (6.18) might expect accusative (which would also require the verbal adjective to agree); examples where such agreements do take place are later, independent developments.¹⁴

Keeping in mind that nominal sentences in Indo-European languages occur not infrequently in general (cf. [Ajello 1973](#)), and given the fact that prototypical nominal relative clauses in Indo-European daughter languages show no appreciable difference from their verbal counterparts, it may be most uncomplicated to assume that nominal relative clauses simply lack an overt verb ‘to be’.

Whatever their specific development, it is evident that nominal relative clauses or *ezāfe*-style constructions are not Iranian idiosyncrasies, but a shared feature of a number of Indo-European languages. In some languages (Avestan, Old Persian, West Middle Iranian), this type of relative clause developed into a separate syntagma; in others (Greek, Latin), it fell out of use.

6.1.5 Synthesis

It remains unclear, then, whether the nominal relative clauses of Classical Armenian are simply an inheritance from Indo-European times, found in a number of other languages, or whether they are a borrowing from West Middle Iranian.

The evidence for and against either case is weak. If Armenian participles are counted as adjectives—as they should be in at least some instances—Armenian nominal relative clauses do not differ significantly from their cousins in other Indo-European languages. At the same time, it must be noted that in both Parthian and Middle Persian, the use of the *ezāfe* construction is not (yet) obligatory at the time of contact, although each language has a specific preference.¹⁵ As before, the lack of Armenian linguistic data from a pre-contact period makes any assertions in this matter impossible.

A speculative, compromising analysis might suggest that Armenian did indeed inherit nominal relative clauses, which as in Greek and Latin were falling out of use; yet contact with West Middle Iranian, where a new related syntagma had formed independently, provided the necessary input to prevent the complete

¹⁴ On this, see [Kurzová \(1981: 38\)](#); [Lehmann \(1984: 5\)](#); [Haider and Zwanziger \(1984\)](#).

¹⁵ Equally, it cannot be determined whether the texts transmitted in the West Middle Iranian languages fully reflect the spoken vernacular Armenian speakers would have been in contact with.

disappearance of such clauses. At present, however, data remains insufficient to provide any indisputable answer to this question.

6.2 Intensifier, anaphora, and reflexive

The second pattern to be considered in this chapter revolves around expressions of intensification, anaphora, and reflexivity.¹⁶ First, it is shown, that an Indo-Iranian innovation of a periphrastic noun phrase as the expression of the canonical reflexive relationship (instead of an inherited Proto-Indo-European pronoun in *sue- alone) has been calqued in Armenian with similar material, most likely on the basis of its Parthian manifestation. Secondly, this section illustrates that the functional distribution of Arm. *ink'n* ‘-self’ may have replicated that of the West Middle Iranian adverb-turned-pronoun WMIr. *xwd/wxd* ‘-self’ derived from PIE *sue-.

The Iranian data will be considered first;¹⁷ etymologies of the relevant expressions will be discussed or suggested, and similarities with older Indo-Iranian languages discussed. This is followed by a description and analysis of the functional distribution of the pronouns MP *xwd* /*xwad*/, Pth. *wxd* /*wxad*/. In similar fashion, the Armenian data will be approached.

6.2.1 West Middle Iranian: *xwd/wxd*

According to the discussion in Brunner (1977: 78–80), the Middle Persian and Parthian ‘emphatic pronouns’, *xwd* /*xwad*/ and *wxd* /*wxad*/, serve three main functions: emphasis, i.e. reinforcement of the subject of the clause; adverbial affirmation of the whole clause; and possessive marking (in Middle Persian only). Whilst his examples neatly correspond to the perspective argued for, Brunner’s explanations do not paint the whole picture, are descriptively wanting, and do not touch on the question of how this particular distribution arose. Durkin-Meisterernst (2014: 363–5), too, does not afford the pronouns more attention or expand on their functional distribution.

A good starting point for the latter, it would seem, is to attempt an etymological derivation of the two pronouns in order to gain an insight into the possible development of these pronouns and their functions.

¹⁶ This section is a revised and condensed discussion of the material presented in Meyer (2013).

¹⁷ Durkin-Meisterernst (2004) provides an exhaustive list of occurrences for the relevant lemmata in Manichaean texts. This section is based on the forms listed there, excluding some not accessible or available at the time of writing (fragments from the Museum für Indische Kunst, Hutter’s *Manis kosmogonische Šaburagan Texte*, and unpublished manuscripts).

6.2.1.1 Etymology

Both MP *xwd* /*xwad*/ and Pth. *wxd* /*wxad*/ regularly derive from a IIr. form **h₂uatah*.¹⁸ The Proto-Indo-European precursor to this form in all likelihood features an initial **s₂u-* cluster, cf. Ved. *sva-*, Gk. *ἑ-* ‘self, own’. The suffix IIr. **-ta_h* < PIE **-tas* indicates an old ablatival formation on a pronominal basis. Whilst no corresponding form of this particular word is attested in Old Persian,¹⁹ other parallel forms such as YAv. *xvatō*, Ved. *svatas* suggest that the proto-form was likely petrified and has retained an adverbial character, close in meaning to ‘by itself’ or ‘on one’s own’ as evidenced by Young Avestan (6.29) and Sanskrit (6.30).

- (6.29) ... *mā* [...] *aēša* *yā* *kaine* [...]
 NEG DEM.NOM.SG.F REL.NOM.SG.F maiden.NOM.FG.F
xvatō *garəβəm* *raēšaiiāt*
 by-herself fetus.ACC.SG.M damage.3SG.PRS.OPT.ACT
 ‘... let the girl not damage the fruit of her womb by herself’
 (Vidēvdāt 15.11)

- (6.30) *agnyādheye* *yad* *bhavati* *yac*
 fire-placing.LOC.SG.N REL.NOM.SG.N become.3SG.PRS REL.NOM.SG.N
ca some *sute* *dvija*
 and Soma.LOC.SG.M press.PTCP.LOC.SG.N twice-born.VOC.SG.M
yac *cetarair* *mahāyajñair*
 REL.NOM.SG.N and=other.INS.PL.M great-worship.INS.PL.M
veda *tad* *bhagavān* *svataḥ*
 know.3SG.PERF.ACT DEM.ACC.SG.N noble-man.NOM.SG.M by-himself
 ‘That, which by placing the fire on the sacrificial fire-place and by pressed-out Soma the Brāhman becomes, and which others know through great acts of worship, the fortunate man is by himself’
 (Mahābhārata 12.260.37)

In both examples, sense suggests that YAv. *xvatō* and Ved. *svatas* are used adverbially, modifying the action, rather than adnominally; this, as will become evident below, is decidedly not the position *xwd/wxd* take in West Middle Iranian.

¹⁸ The initial metathesis illustrated by the Parthian form is not restricted to this paradigm, but is a regular correspondence mechanism between Middle Persian and Parthian; as a comparandum may be adduced Pth. *wxrd* ‘eaten’ and MP *xwrd* ‘id.’ (see Chapter 1 above). The phoneme represented by <*xw*>/<*wx*> is likely to be a voiceless rounded velar fricative, but no further information can be gleaned from the data to suggest whether Middle Persian and Parthian realizations would have differed.

¹⁹ IE **s₂u-* developed into OP *^huva-*, which seems to occur only in compounded nouns, e.g. *uvaipašiya-* ‘belonging to the self’ (e.g. DNb 15); cp. Av. *x^haēpaiθya* ‘own’.

6.2.1.2 Brief excursus: expressions of reflexivity

Before going into detail about *xwd/wxd*, one other expression making use of derivatives of PIE *s_ǵe- in Indo-Iranian should be considered, especially as the pronouns are synchronically not used as canonical reflexives; this concept is expressed periphrastically in West Middle Iranian.

The Indo-Iranian languages appear to share an innovative expression of reflexivity by periphrasis. Where a host of other Indo-European languages use cognates of the enclitic *s_ǵe- (cf. Lat. *se*, Gk. ἑ-(*αὐτόν*), OHG *sih*, ON *sik*) to express the direct object co-referent with the subject of the clause, Indo-Iranian has introduced noun phrases which employ a possessive adjective derived from this root together with a noun meaning ‘body’ or ‘soul’.

Two examples of this structure, YAv. *huua- tanu-* (6.31) and Ved. (*sva-*) *tanú-* (6.32), will suffice to illustrate this point.

- (6.31) *paoirīm upa mayəm hakəraṭ āpō āaṭ*
 first.ACC.SG.M at hole.ACC.SG.M once water.ACC.PL.F then
huuqəm tanūm pairi-yaoždaiṣīta.
 own.ACC.SG.F body.ACC.SG.F cleanse.3SG.PRS.OPT.MID
 ‘At the first hole he shall purify himself once with water.’ (Vidēvdāt 9.31)

- (6.32) ... *utá sváyā tanvā sám vade*
 and own.INS.SG.F body.INS.SG.F together talk.1SG.PRS.MID
 ‘... and I talk with myself’ (RV 7.86.2)

This innovation is retained and expanded in West Middle Iranian, where variations on the noun exist; judging from the extant material, the most common expression is *xwys̄ gryw* /*xwēš grīw*/, lit. ‘own soul’, or better ‘oneself’, e.g. in (6.33).

- (6.33) *’w=š’n xwd ’z xwys̄ gryw ’ndr ’myxt*
 and=3PL_i ANA greed 3POSS_i soul in mix.*pst*_i
 ‘And they [the plants] then mixed in themselves him [the Third Messenger] and Greed.’ (MMi. B I Ri (6); Middle Persian)

A similar collocation, *xwys̄ tn* /*xwēš tan*/, lit. ‘own body’, is employed in this meaning, as indicated by (6.34); this, however, appears to be a less frequently used expression.

- (6.34) *’yg ’wymyzdgt’c’ wd ’zdygr yzd ’y myhr yzd ’wd*
 then Call and Answer Lord REL Mihr Lord and
srygrqyrb ’y ’whrmzdyby m’d ’br xwys̄ tn
 woman REL First Man mother to/upon 3POSS body
 ‘Then Call and Lord Answer, who is Lord Mihr, and a woman, the mother of the First Man, to/upon himself/themselves ...’
 (MMi., 178 (y, 7, 2, M_7984, II, Rii, 10))

By the time of Classical Persian, the reflex of *xwd* /*xwad*/, CPers. *x^wad*, has incorporated the functions of the reflexive pronoun (cf. Windfuhr 1979: 73–4).

6.2.1.3 Intensifier

Based on its etymology, the oldest and most probably original function of the pronouns seems to be the intensification of an explicit, direct-case noun phrase, usually the grammatical subject of the clause in question. Sentences (6.35, 6.36) exemplify this pattern.

(6.35) ʿ *ym(y)n hrwyn tw wzrgy(s)tr [ʾwd] rwšnystr ʾyy*
 from 3DEM.SG all.PL 2SG greatest and brightest be.2SG.PRS
cy pd [r]ʾš(t)[y](f)t tw wxd bwt ʾyy
 because in truth you INT Buddha be.2SG.PRS
 ‘Of all these you are the greatest and brightest, for in truth you yourself are Buddha.’ (MKG 56; Parthian)

(6.36) ʾw=š *yγšwʾ wʾ(x)t kw nxw(š)[t] tw wxd wʾxt*
 and=3SG Jesus speak.PST COMP first 2SG INT speak.PST
kw ʾz hym ...
 COMP 1SG.DIR be.1SG.PRS
 ‘And Jesus said to him: “You yourself said that I am ...”’
 (MKG 1193; Parthian)

In both examples, the intensifier immediately follows the clause subject and is itself followed by the verb; position alone, therefore, cannot predict whether the marker ought to be taken as part of the subject or the predicate. Sense, however, requires that both instances of *wxd* /*wxad*/ be interpreted adnominally, since context allows for emphasis of the subject, but not of the verb itself.

The usage of the intensifier does not differ in Middle Persian, and obeys the same basic rules, as (6.37) illustrates.

(6.37) *ky xwyš gryw byrwn dyd ʾndrwn ny dyd hʾn*
 REL own soul outwardly see.PST inwardly NEG see.PST 3SG
xwd qmb bwyd ʾny=c ks qmb
 INT lesser become.3SG.PRS other=EMPH INDF lesser
kwnd
 make.3SG.PRS
 ‘He, who himself saw but from the outside, and did not see the inside, he becomes little and makes others little.’ (BBB 549; Middle Persian)

The degree of intensification can be increased by repetition; it is common for the two instances of the intensifier to be separated by a phrase or clause, as in (6.38), where *xwd ... xwd* are interrupted by a relative clause co-referent with the pronoun; note that the intensifier may be found on either side of its noun phrase.

- (6.38) 'wd xwd 'wys'(n) 'rd'w-'n ky=š 'c byrwn 'wd
 and INT DEM.PL righteous-PL REL=3SG from outwardly and
 'c 'br p(yr)['mwn 'y]st'nd 'wyn x(w)[d] 'br
 from above around stand.3PL.PRS DEM.PL INT over
 h'n 'dwr wzrg 'wd 'br wysp cy=š 'ndr p'dyxš'y
 DEM.SG fire great and over all REL=3SG in rulership
 bw'nd [']yb
 become.3PL.PRS fire
 'And those Righteous themselves that will stand around it, outside and
 above, they shall have power over that Great Fire, and over everything
 in it.' (Kaw F 62; Middle Persian)

While the *xwd/wxd* also occur as anaphors proper (see section 6.2.1.5), the usage in (6.38) is clearly still intensifying, since both occurrences have a demonstrative pronoun next to them.

Given the etymology of the intensifier and its original adverbial function, the change in its function is most probably due to reanalysis as an adnominal; instead of emphasizing or focusing the verb, it intensifies the direct-case nominal or pronominal subject in its vicinity. In this function, it is difficult to determine whether *xwd/wxd* are pronominal adjectives or just function words; their other function may provide more information in this regard.

6.2.1.4 Anaphor and switch-function marking

Most commonly, the pronoun is employed in relative clauses in what *prima facie* appears to be an explicative function. This function is likely to be related to the original intensifier function, in that it can be interpreted as intensification of the relative pronoun; this kind of usage has parallels in other Indo-European languages.²⁰ The pattern is common to both Middle Persian and Parthian, as examples (6.39, 6.40) illustrate.

- (6.39) 'wd jnyd ('w h)[w] d'lwg mrnyh cy wxd
 and fell.3SG.PRS OBJ DEM.SG tree_i deadly_i REL INT/ANA_i
 's(t) [xyn
 be.3SG.PRS hatred
 'And he fells the Tree of Death, which itself is hatred.' (LN 27; Parthian)

²⁰ Cp. e.g. Lat. *Insanit hic quidem, qui ipse male dicit sibi*. 'This fellow is mad, who on his own accord maligns himself.' (Plautus, *Menaechmi* 309); both *ipse* and *sibi* are co-referent with the matrix subject, but *ipse* is neither semantically nor syntactically necessary, and serves intensifying or explicative purposes only.

- (6.40) 'st](w)ynd [b](x)šyhy(d) 'y xwd (h)ynd hpt'n
 material_i split.3SG.PRS.PASS REL INT/ANA_i be.3PL.PRS seven
drwxš-'n
 demoness-PL
 '... the material ("das Stoffliche") is split, which itself consists of seven
 demonesses.' (KPT 364; Middle Persian)

Both examples pose the question whether the sense of these statements would change if the pronoun were to be omitted. (6.39) suggests that this may indeed be the case; if construed without *wxd* /*wxad*/, the relative clause need no longer refer to *d'lwg*, but may take as its antecedent the whole previous clause, thus creating ambiguity.²¹ Example (6.40) does not allow for such an interpretation, largely owing to the lack of context; other examples from the corpus, however, seem to show a similar pattern.²²

In relative clauses, *xwd/wxd* therefore seem to function as anaphoric markers when preceded by a relative pronoun, unambiguously co-referencing a matrix clause constituent within the relative clause. Example (6.39) and most other instances in which the pronoun is used in this fashion further seem to suggest that *xwd/wxd* indicates a switch in syntactic function: in most instances, this means that a matrix-level object will in the relative clause take subject function. As (6.40) indicates, however, this is not a hard-and-fast-rule, but rather a tendency.²³ The development of optional switch-function marking may be the result of the morphological poverty of the West Middle Iranian case system, which does not allow for marking co-reference in any other way.²⁴

This disambiguating usage of the pronoun, including its possible switch-function marking, is not restricted to relative clauses, but is used in other subordinate clauses too.

- (6.41) 'w=š tgnbnd ds(t) bwrđ 'w=š hw w'drwng
 and=3SG quickly hand bring.PST and=3SG DEM.SG ?melissa
nx'f''d 'wt šwd 'w=š prw'n s'h hndym'n kyr[d]
 ?distill.PST and go.PST and=3SG before king_i before make.PST

²¹ This ambiguity is due to the lack of agreement-marking in the relative pronoun, and may be represented as follows: 'And he fells the [Tree of Death]_i which_i is hatred' vs '[And he fells the Tree of Death]_i which_i is hatred.'

²² Cp. BBB 186ff. (MP): 'pryd 'wd 'stwwd hyb byh yyšw' ... 'yg xwd mđ zyywng' ... 'Blessed and praised be Jesus ... who/which himself/itself is the life-giving mother ...'; a similar syntactic ambiguity may be observed upon excision of *xwd* /*wxad*/, although context favours the reading co-referencing the relative clause with Jesus.

²³ Switch-function marking can be compared to, and to a certain extent is analogous to, switch-reference marking; both phenomena are cross-linguistically not uncommon, but rarely found in Indo-European languages; for a definition and overview, cf. Foley and van Valin (1984: 354–60); Comrie (1989: 41–2).

²⁴ Old Iranian languages like Old Persian and Avestan, on the other hand, do mark gender, case and number on relative pronouns, and therefore have no particular need for separate co-reference marking.

kd wxd 'd ws-'n 'z'd-'(n) ['](wt wzrg)-'n bzm
 when ANA_i with many-PL noble-PL and great-PL banquet
s'y'd
 lie.PST

'And she quickly carried it away (*dst bwrđ*), and she distilled the melissa, and went and put it before the king when he was banqueting with many noble and rich men.' (MKG 715; Parthian)

In this instance, the pronoun occurs in a temporal clause, but operates essentially along the same lines as stated above, i.e. co-referencing the object in the matrix clause and the subject in the subordinate clause. It stands to reason that an omission of the pronoun here would have entailed that the matrix clause subject is also taken as the subordinate clause subject, which context would not allow.

In Middle Persian, too, *xwd /xwad/* can function as a switch-function marker.

(6.42) *sdyg kw 'wys'n gy'n-'n pyšyng-'n 'yg pd xwys' dyn*
 thirdly COMP DEM.PL soul-PL ancient-PL REL in 3POSS religion
qyrdg'n ny hnzft 'w dyn 'yg mn 'ynd
 deed NEG finish.PST to religion EZ 1POSS come.3PL.PRS
'y=s'n xwd dr 'y 'wzynyšn bwyd
 REL=3PL ANA gate EZ redeeming become.3SG.PRS
 'Thirdly, that those ancient souls, which in their own religion did not complete good deeds, come to my religion, which in turn becomes the gate of salvation to them.' (MMii T II D 126 IV (9); Middle Persian)

The genesis of the pronoun's tendency to mark a switch in syntactic function between matrix and subordinate clause is most probably conditioned by the pragmatic need to disambiguate the subject identity in subordinate clauses and the pronoun's original function as a subject intensifier.²⁵

Furthermore, there is a third function. The usage of *wxd /wxad/* in (6.43) does not adhere to either of the patterns described thus far; here, there is no noun or pronoun immediately preceding or following the pronoun, disqualifying an intensifier interpretation, nor is the pronoun found in a subordinate clause.

²⁵ In terms of historical developments, the switch-function usage may originally have been restricted to relative pronouns, which are close in meaning and function to actual noun phrases and which *xwd/wxd* would have modified as an intensifier; subsequently, *xwd/wxd* were reanalysed as (switch-function marking) anaphoric pronouns, grammaticalized as such, and thus extended their domain to all subordinate clauses. This successive extension of meaning and function through reanalysis and analogy is in keeping with expectations of grammaticalization processes (see Hopper and Traugott 2003: 101–6).

- (6.43) *'b'w mrd 'yw wzrg '(c) 'bršhr d'ry'w n'm prw'nhw*
 then man_i one great from Abaršahr Dāryāw name before
hw gd wxd 'd'n dw (b)r'dr-'n ...
 DEM.SG go.PST INT_i with two brother-PL
 'Then a noble man from Abaršahr by the name of Dāryāw went before
 him, (that is) he with his two brothers ...' (MKG 670; Parthian)

In this instance, *wxd* /*wxad*/ functions as a general anaphoric pronoun, possibly used for stylistic rather than syntactic purposes; the passage quoted is followed by a lacuna, making it difficult to judge whether an anaphor was necessary here. This pattern, as described in what follows, is very common.

6.2.1.5 Anaphor and subject resumption

Next to its anaphoric, disambiguating function in subordinate clauses, the pronoun also occurs in an anaphoric or resumptive function in main clauses. As in their use in subordinate clauses, *xwd/wxd* do not need a noun phrase, and function as independent pronouns; in their use in matrix clauses, however, the original referent is the matrix clause subject. The pronouns are a sign of subject re-uptake, often but not exclusively after a change in subject or another 'interruption' of the main clause.

At its most basic, in a main clause *xwd/wxd* restate the subject after a conjunction with no intervening change in subject; given the pro-drop nature of West Middle Iranian, this may be done for stylistic reason, e.g. for contrast as in (6.44, 6.45).

- (6.44) *byd m'nh'g ('hy)nd 'w 'skynd ky ('w 'n)y kyc r'h*
 then like be.3SG.PRS to lame REL to other INDF road
nm'yd 'w nydf'ryd 'wd wxd nšst
 show.3SG.PRS and hasten.3SG.PRS and ANA set.PTCP
št(y)d ...
 stand.3SG.PRS
 'And they are comparable to the lame, who shows the way to another
 man and urges him to hurry, but himself remains seated ...'
 (GW 79; Parthian)
- (6.45) *pš kdy=š 'ndr bnd 'n'by'd bndynd ... u wxd*
 after when=3SG in prison forgotten bind.3PL.PRS and ANA
ž 'br pdyxš'hynd ...
 from above rule.3PL.PRS
 'And after they bound him in a prison of oblivion ... and themselves took
 charge from above ...' (MMiii T II D 79, 79; Parthian)

Example (6.46), on the other hand, illustrates that the pronoun also had a resumptive function, referencing the last-but-one subject, or at any rate the last contextually sensible one.²⁶

- (6.46) 'w_t p_t r'h kw šwyd tgnbnd 'w dšt 'yw wzrg
 and on path when go.3SG.PRS quickly to steppe_i one great
 w wy'b'n y'dyndyh 'w_t 'škyft grm 'hyn(dy)h 'w_t
 and desolate reach.3SG.OPT_j and very hot be.3SG.OPT_j and
 wxd wgd wšynd 'w_t tšynd 'hyndyh
 ANA_j be-malnourished.PST_j hungry and thirsty be.3SG.OPT_j
 'And on the path, as he walks, he quickly reaches a great and desolate
 steppe. And it was very hot, and he was starving, hungry and thirsty.'
 (MKG 797; Parthian)

The change of subject, as it occurs in the clause 'w_t 'škyft grm 'hyn(dy)h /ud iškēft garm ahēndēh/, is not indicated syntactically; on the contrary, it is prima facie not implausible to assume that *grm* /garm/ should refer to the same noun phrase as do *wšynd* /wišāyēnd/, etc. Two arguments, however, speak in favour of construing the clause with a different, null subject: first, the lexicon would suggest that in West Middle Iranian, *grm* ought to refer to an inanimate object rather than an animate one, at any rate in the meaning 'hot, warm', and must thus apply to *dšt* /dašt/ rather than any other constituent;²⁷ secondly, the position of *wxd* /wxad/ in the second clause as well as the repetition of the predicate 'hyndyh suggest that two different subjects occur within the sentence.

Where in (6.46) the change of subject can only be inferred from context, (6.47) exhibits subject re-uptake after a syntactically overt change of subject.

- (6.47) h'n gnwm 'bwsyd 'wd 'w xwyš qndwg
 DEM.SG wheat_i collect.3SG.PRS_j and to 3POSS_j jug
 bryd ky 'c=yš 'wzyd 'wd xwdyc 'w
 bring.3SG.PRS_j rel from=3SG_i come-out.PST and ANA-EMPH_j to
 h'n xwybš m'nd šwyd ky 'c=yš 'md
 DEM.SG 3POSS_j house go.3SG.PRS_j REL from=3SG_j come.PST
 'He collected that wheat and brought it to his storage jar from which it
 had come. And he went back to his house, from which he had come.'
 (KPT 2066; Middle Persian)

²⁶ Co-reference may be determined by the minimal distance principle (see Huang 2000: 43), as long as co-reference occurs within the same sentence. Accordingly, in this context the controllee (resumptive pronoun) would be co-indexed with its closest subject on the same clausal level.

²⁷ Cp. e.g. Gk. θερμός, a cognate of *grm*: when referring to inanimates, its meaning ranges from 'warm' via 'hot' to 'feverish'; when metaphorically applied to animates, however, it means 'rash, hot-headed'.

The clause introduced by *ky 'cy* /kē az/ refers back to *qndwg* /kandüg/, and as its subject takes =š, referring to *h'n gnwm* /hān gannum/. This change of subject may have been carried over to the next sentence, since West Middle Iranian is pro-drop; thus, to unambiguously refer back to the subject of the previous matrix clause, *xwdyc* /xwadiz/ is employed as a resumptive pronoun.

Further, (6.47) shows that where no referential ambiguity between matrix and subordinate clause exists, no switch-function marking takes place; instead, change of subject to the 'original' subject is effected by means of anaphora.

6.2.1.6 Summary

In summary, *xwd* /xwad/ and *wxd* /wxad/ can be categorized as follows:

- (a) Intensifier, providing emphasis to subject;
- (b) Anaphor (or switch-function marker) in subordinate clauses, mainly referencing the matrix clause object;
- (c) Anaphor (or resumptive pronoun) in matrix clauses, mainly used for stylistic purposes and to signal subject re-uptake after introduction of new subject.

This functional distribution is a West Middle Iranian development, springing in all likelihood from the original intensifying function: an intensifying adverb was re-analyzed as an adnominal, and in relative clauses grammaticalized as an anaphoric pronoun. The development of the matrix clause anaphor function may be related to this development, or may have arisen independently, for instance as extension of an intensifier with an ellipsed or null subject. Either way, it is evident that the etymological connection to the reflexive is not entirely lost, since the pronoun only occurs in subject function, albeit often referencing an object when used in relative clauses.²⁸

6.2.2 Classical Armenian: *ink'n*

With this threefold functional distribution in mind, the parallel use pattern of Armenian *ink'n* can now be considered. How far can any potential parallels be said to be based on the Iranian model rather than having arisen independently? And to what extent does the fact that Armenian has a richer (pro)nominal morphology play a role in the development and analysis of anaphoric pronouns?

Jensen (1959: 78) has very little to say about the precise usage of the pronoun *ink'n*, noting that it serves as one of several reflexive pronouns and may be employed for all three persons, usually accompanied by the personal pronoun in the case of the first and second person. In contradistinction to the West Middle Iranian

²⁸ The situation in Classical Persian, however, is different; as noted above, the purview of the pronoun has further increased, as it can intensify NPs in all grammatical functions and further serves as a canonical reflexive pronoun.

pronouns, *ink'n* is fully declinable and in fact seems to occur most frequently in prepositional phrases, and thus in non-nominative cases. As will become evident from what follows, however, in a number of respects *ink'n* exhibits a functional distribution so close to that of its Iranian counterparts that coincidence or independent development in both families seem less likely.

6.2.2.1 Etymology

The lack of phonemic correspondence between *wxd* /*wxad*/ and *ink'n* precludes lexical or phonetic borrowing; potential parallels must therefore be explained differently. In terms of the etymology of *ink'n*, no fully satisfying analysis has been suggested yet. [Martirosyan \(2010: 303\)](#) derives the *-k'*- of *ink'n* from the same root **sue-*, and further links it with the possessive reflexive *iwr*. An analysis as **ensuom*, i.e. the accusative singular of the reflexive pronoun prefixed by a preposition 'in', may be one plausible reconstruction; the cluster **-su-* regularly develops into Arm. *-k'*-, cf. e.g. **suesor-* 'sister', Skt. *svásar-* 'id.', Arm. *k'oyr*, and **suop-no-*, Skt. *svápna-*, Arm. *k'un*. Final syllables, on the other hand, are regularly lost or undergo vowel syncope, which may explain the reduction **-suom* > PArm. **-k'om* > PArm. **-k'm* > Arm. *-k'n*.²⁹ In terms of meaning, the hypothetical 'in itself' compares quite well to IIr. 'by itself', which suggests that the original functions of both petrified expressions may have been similar; *ink'n*, too, may originally have been an adverb.

6.2.2.2 Another brief excursus: expressions of reflexivity

The fact that Indo-Iranian employed an innovative set of periphrastic reflexive constructions, consisting of a cognate of PIE **sue-* and a noun meaning 'body' or 'soul', was established in [6.2.1.2](#).

As it turns out, Armenian can also employ a periphrastic construction to express canonical reflexivity, consisting of the noun *anjn* 'person, soul, self' and a possessive pronominal adjective, e.g. *im* 'my', *k'o* 'thy', *iwr* 'his/her/its'. The latter, particularly, is of interest, as Arm. *iwr* could be derived from **seue/o-ro-* ([Martirosyan 2010: 303](#)).

- (6.48) *yet aysorik darjeal yaytneac' z=anjn iwr*
 after DEM.GEN.SG again reveal.3SG.AOR OBJ=SOUL.ACC.SG 3POSS
Yisus ašakertac'=n iwroc' ar
 Jesus.NOM.SG disciple.DAT.PL=DET 3POSS.GEN.PL at
covezerb=n Tibereay
 sea-shore.INS.SG=DET Tiberias.GEN.SG
 'Thereafter Jesus revealed himself again to his disciples, at the shore of
 Lake Tiberias.' (Jn. 21:1)

²⁹ This is a regular sound change; see also **dek'n* > Arm. *tasn*.

- (6.49) *Yisus K'ristos, or i k'ēn=d*
 Jesus.NOM.SG Christ.NOM.SG REL by 2SG.ABL.SG=DET
arāk'ec'aw ar mez ... ew nkareac' ew
 send.3SG.AOR.PASS to 1PL.ACC and depict.3SG.AOR and
tpaworeac' z=anjn iwr i stelcowac'
 imprint.3SG.AOR OBJ=soul.ACC.SG 3POSS in creature.ACC.PL
je'rac' iwroc'
 hand.GEN.PL 3POSS.GEN.PL
 'Jesus Christ, who was sent by you to us, ... and who depicted and
 imprinted himself on the creatures of his own hands ...' (Ag. VII.44)

While the periphrasis works along very similar lines to those commonly used in Young Avestan and Vedic, Arm. *anjn* is not cognate with YAv. *tanu-*, Ved. *tanú-* or *ātmán-*, but rather belongs with Oic. *angi*, 'smell, scent', Dan. *ange* 'steam', probably from *h₂enh₁- 'to breathe' (cf. Martirosyan 2010: 94).

Examples (6.48, 6.49) show a striking similarity between Indo-Iranian and Armenian expressions, which suggest that the Armenian expression may well be a direct calque from West Middle Iranian.³⁰ Can the same be shown to obtain in relation to the usage of *ink'n*?

6.2.2.3 Intensifier

As in Middle Persian and Parthian, Arm. *ink'n* can be used as an adnominal intensifier.

- (6.50) *ew ink'n Davit' hogwov=n srbov asē.*
 and INT PN.NOM spirit.INS.SG=DET holy.INS.SG say.3SG.PRS
asac' tēr c'=tēr im, ...
 say.3SG.AOR Lord.NOM.SG IOBJ=Lord.ACC.SG IPOSS.ACC.SG
 'And David himself said by the Holy Spirit: the Lord said to my lord, ...'
 (Mk. 12:36)
- (6.51) *kam orpes z=noyn ink'n ašxarhi hoviw*
 or how OBJ=same.ACC.SG INT land.GEN.SG shepherd.ACC.SG
ka'uc'eal, vayelēin i norun
 appoint.PTCP.NOM enjoy.3PL.PST in same.GEN.SG
vardapetut'ean=n
 teaching.LOC.SG=DET
 'Or how they appointed the very same man as shepherd of the land, and
 enjoyed his teaching.' (Ag. foreword, 37)

³⁰ A similar collocation of a word referring to 'body', 'person', or the like is also found in a number of Semitic languages (see Lipiński 1997: 311). Given the early attestation of this structure in the Indo-Iranian languages, however, this vector seems more likely, especially since the Semitic version uses a possessive enclitic rather than a pronominal adjective like Arm. *iwr*, which may have been rendered as an Armenian enclitic determiner (=s, =d, or =n) instead.

Since the pronoun is fully declinable in Classical Armenian, however, it is not restricted to subjects, as was the case for West Middle Iranian, but can occur with other nominal constituents; as noted above, CPers. *x^wad* underwent a similar development.

6.2.2.4 Anaphor and subject resumption

Ink'n further occurs in the same function as a main clause anaphor as MP *xwd* /*xwad*/, Pth. *wxd* /*wxad*/, and can be used both resumptively and as a straight-forward anaphor. In this function, *ink'n* is restricted to subject function. In (6.52) there is a clear break in subject continuity, whilst in (6.53), the subject is maintained; here, *ink'n* is likely used for stylistic reasons.

- (6.52) *ew ibrew emut i nawn, gnac'in zkni*
 and when enter.3SG.AOR in ship.ACC.SG go.3PL.AOR after
nora ašakert-k'=n. ew aha šaržumn
 DEM.GEN.SG disciple-PL=DET and behold earthquake.NOM.SG
mec etew i covu=n ... ew ink'n
 big.NOM.SG become.3SG.AOR in sea.LOC.SG=DET and ANA
nnjēr
 sleep.3SG.PST
 'And when he embarked upon the ship, his disciples followed him. And behold, there was a great earthquake in the sea And he was asleep.'
 (Mt. 8:24)

- (6.53) *ew lueal z=ays aṛn mioy*
 and hear.PTCP OBJ=DEM.ACC.SG man.GEN.SG one.GEN.SG
vačarakani ... or ew z=lezu
 merchant.GEN.SG REL.NOM.SG also OBJ=language.ACC.SG
hayerēn xawsic' k'aj' tekekabar gitēr. ew
 Armenian speech.GEN.PL very well know.3SG.PST and
ēr ink'n ayr mi i mankut'enē
 be.3SG.PST ANA man.NOM.SG one.NOM.SG from childhood.ABL.SG
iwrēm ke'ēal aṛak'ini varuk'
 REFL.POSS.ABL.SG live.PTCP virtuous life.INS.PL
 'A certain merchant heard this ... who knew the Armenian language very well. And he was a man who, from his youth, had lived a virtuous life.'
 (ŁP' LIV.2)

6.2.2.5 Anaphor and switch-function

In Armenian too, the pronoun can be used as a switch-function marker like its Iranian counterpart; this function is uncommon in other Indo-European languages.³¹

³¹ Such marking is more common in Native American languages such as Capanahua, which have similar systems linking the subject of the dependent clause with the object of the matrix clause (Huang

Owing to less ambiguous agreement-marking in Armenian, however, switch-function marking is comparatively less common and clearly optional, but still evident in (6.54, 6.55).

- (6.54) *ew areal paštōnēic'=n ekelec'woy banakin*
 and receive.PTCP priest.GEN.PL=DET church.GEN.SG camp.GEN.SG
z=marmin, gnac'eal-k' i gawar=n Tarōnay,
 OBJ=body.ACC.SG go.PTCP-PL to district.ACC.SG=DET Tarōn.GEN.SG
taran i y=agarak=n meci
 lead.3PL.AOR to to=village.ACC.SG=DET great.GEN.SG
margarēanoc'in Yovhannu, ur ēr ink'n i
 place-of-martyrdom.GEN.SG PN.GEN.SG, rel be.3SG.PST ANA in
kendanut'ean=n iwrum yaraġagoyñ bnakeal
 life.LOC.SG REFL.POSS.LOC.SG formerly live.PTCP
 'The ministers of the camp took his body and went to the district of
 Tarōn, to the place of the great martyrdom of John, where he himself
 had formerly lived.' (P'B III.16)

In (6.54), *ink'n* references the subject of a previous clause (P'arēn, here indirectly mentioned as *z=marmin*); the 3SG verb also indicates that a change of subject must have taken place.

- (6.55) *es gitem zi i hrapoyrs*
 1SG.NOM know.1SG.PRS COMP in attraction.ACC.PL
arñ=d aydorik eleal ēk' duk'
 man.GEN.SG=DET_i DEM.GEN.SG_i come.PTCP be.2PL.PRS 2PL.NOM
k'anzi ink'n axtac'eal ē marmnov
 because ANA_i be-sick.PTCP be.3SG.PRS body.INS.SG
 'I know that you have been seduced (lit. come in the spell) of this man,
 [but] because he is sick of body ...' (Eł. VII.237)

Example (6.55) states the case more clearly. Here, the genitive adjunct *arñ=d aydorik* of the matrix clause is referenced by means of the switch-function marker in a subsequent subordinate clause, where it takes on subject function.

- (6.56) *tesanes zi ... čšmarit ordi=n Astucoy oč'*
 see.2SG.PRS COMP true son.NOM.SG=DET_i God.GEN.SG_j NEG
garši tal z=iwr žaranguťiwn
 detest.3SG.PRS give.INF OBJ=3SG.POSS inheritance.ACC.SG
iwroc' sireleac'=n carayic'=n. or
 3SG.POSS.DAT beloved.DAT.PL=DET servant.DAT.PL=DET REL.NOM.SG

2000: 280, 287–8); in such languages, however, this function is fulfilled by independent morphemes which have no other functions.

ink'n bnut'eamb ordi ē, anveher
 ANA_{i/j}? nature.INS.SG son.NOM.SG be.3SG.PRS boldly
matuc'anē
 bring.3SG.PRS

'Do you see that ... the true Son of God does not disdain to give his inheritance to his own beloved servants? [He], who is by nature Son, boldly brings ...' (Ag. XV.6)

The interpretation of (6.56) is somewhat more difficult in that *ink'n* could here refer to the subject of the previous clause, *ordi=n*, in which case it would likely be either an intensifier or a regular anaphor; or it could refer to the subject's adjunct *Astucoy*. The question thus is: who is 'by nature son', the son of God, or God? This is not the place to enter a theological argument; the predominance of the collocation *or ink'n* with an intensifying reading suggests, however, that the former reading may be a more likely interpretation here.

6.2.2.6 Differences between Armenian and West Middle Iranian

Owing to the fact that Armenian has a richer pronominal morphology than either of the West Middle Iranian languages, it is not surprising that in addition to subject function, *ink'n* also readily appears in the oblique cases.

(6.57) *ew koč'ec'eal ar ink'n z=erkotasanesin*
 and call.PTCP to REFL.ACC.SG OBJ=twelve.ACC.PL
ašakerts=n iwrr
 disciple.ACC.PL=DET 3POSS
 'And he called to himself his twelve disciples ...' (Mt. 10:1)

(6.58) ... *ur ew ink'ean iwrov anjamb=n isk*
 where also REFL.GEN.SG 3POSS.INS.SG soul.INS.SG=DET INT
ōrinak c'uc'anēr
 example show.3SG.PST
 '... , where by himself he indeed made an example of himself.'
 (Ag. CXXI.7)

In these examples, oblique case forms of *ink'n* clearly operate as canonical reflexives, referring back to the subject of the sentence. It stands to reason that this function arose independently from Iranian, where the structural pendants to *ink'n* do not exhibit this function. Given the reflexive-linked etymology of the pronoun, it is not implausible that this function should have been one of the original ones.

6.2.2.7 Summary

The functional distribution of Arm. *ink'n* can be summarized as follows:

- (a) Intensifier, providing emphasis to NPs of all cases;

- (b) Anaphor (or resumptive pronoun) in matrix clauses, behaving like its Iranian counterpart, but occurring in all cases;
- (c) Anaphor (or switch-function marker) in subordinate clauses, occurring less commonly in Armenian owing to morphological differences;
- (d) Canonical reflexive, which developed without the influence of Iranian.

The pronoun *ink'n* shows a similar functional distribution to that of WMIr. *xwd/wxd*, but owing to morphological differences between the two languages there are differences in usage and other, independent developments as well.

6.2.3 Synthesis

Based on the etymologies suggested, it stands to reason that both languages have developed their respective pronouns independently, and that originally, they may have served as adverbs, later reanalysed as adnominal intensifiers. If any pattern replication has taken place, this is a likely locus for pivot-matching.

Equally, in both languages, these intensifiers have taken on anaphoric functions, broadly speaking, but in this function can only serve as subjects.³² It is difficult to determine whether this functional extension occurred independently in both languages, or whether Iranian has influenced Armenian.

It is the admittedly rare occurrence of switch-function marking that may tip the scale in favour of pattern replication, since it is unlikely to have arisen in Armenian on its own owing to its more explicit morphology, and does not otherwise occur in older Indo-European languages. Equally, since both *ink'n* and *xwd/wxd* otherwise only refer to subjects, but as switch-function markers both refer to non-subjects, this seems beyond coincidental.

As in the case of nominal relative clauses, it is impossible to determine with any degree of certainty what, if any, role language contact in general, and pattern replication in particular, has played in the development of these functionally similar pronouns without a clear idea of diachronic development. Although the present case is not strong enough to ascribe this similarity to influence from Iranian, it is at least plausible that *xwd/wxd* should have played a catalytic role in the development of Armenian *ink'n*.

6.3 Quotative and complementizer

The final pattern under consideration here involves the usage of Arm. *(e)t'ē* as complementizer, quotative, and indirect speech and question marker (next to a

³² For a parallel in English *self*, see Eckardt (2011: 399) with references. Similarly, Latin *ipse* underwent a similar development in Late Latin and the early Romance languages, for which see Ledgeway (2011: 722) with references.

number of other functions). As will be discussed below, the use of a complementizer to introduce indirect statements or questions is not unusual per se; its use as a quotative for direct statements and questions, however, is less common in Indo-European languages, particularly in the case of *wh*-questions.

This usage of Arm. $(e)t\bar{e}$ does, however, have a parallel in West Middle Iranian *kw* /*kū*/, which also functions as complementizer, quotative, and indirect speech and question-marker next to other functions.

This section first outlines the etymology of $(e)t\bar{e}$ and then goes on to discuss its various uses in Classical Armenian. Thereafter, the same will be done for *kw* /*kū*/. The final section discusses parallels and differences from other Indo-European languages, and reasons for assuming that the functional distribution of Arm. $(e)t\bar{e}$ may be due to pattern replication from West Middle Iranian.

6.3.1 Armenian $(e)t\bar{e}$

6.3.1.1 Etymology

According to Meillet (1896: 154 n. 1) and Jensen (1931: 28–9), Arm. $(e)t\bar{e}$ is best derived from an Indo-European demonstrative stem **te-/to-*, cp. Ved. *tád*, Av. *taṭ*, Gk. τό, Goth. *þata*, etc. The origin of the initial *e-* is unclear. Jensen speculates it may relate to interrogative **k^wi-* and compares OCS *kъ-to*, *čъ-to*; an alternative, and preferable, reading is to assume an emphatic or deictic particle *e*—compare Gk. κείνός vs ἐκεῖνός, Ru. *mom* vs *эмо*. Ačařean and Nersisyan (1971–1979: II.7) implicitly suggest that the initial (*e-*) derives from relative **ye-/yo-* by suggesting as cognates Skt. *yathā*, Av. *yaθa*, *yēiḍi*, and OP *yadiy*; Martirosyan (2010) does not discuss $(e)t\bar{e}$.³³

In terms of its original meaning, this etymology and the usage of $(e)t\bar{e}$ suggest something like ‘so, thus’, which aligns well with cognate function words in other Indo-European languages, e.g. Lith. *tè* ‘there, thus’, OSax. *the* ‘that’.

In what follows, no further reference will be made to the difference in use between $t\bar{e}$ and $et\bar{e}$, since it has no bearing on the question discussed in this section.

6.3.1.2 $(e)t\bar{e}$ marks direct speech, questions

One of the primary functions of $(e)t\bar{e}$ in Classical Armenian is the introduction of statements and questions, both direct and indirect, after verbs of saying and

³³ An additional question is which of the two forms is original and which secondarily created. The long form $et\bar{e}$ decreases in currency over the course of Middle Armenian and is lost entirely in Modern Armenian varieties, suggesting that it may be the original form. It is equally possible to assume, however, that both forms are original, since both are used almost exclusively in some syntactic contexts; for more on this, see Jensen (1931).

thinking (*verba dicendi et sentiendi*). In the first, quotative use, pronominal reference and verbal agreement retain the same values as in the original statement.³⁴ As will be discussed in 6.3.1.3, it is not always possible to differentiate direct and indirect questions and statements, especially in such cases where neither pronoun nor verbal agreement would have to change.

Direct statements and exclamations are introduced by a form of e.g. *asem* ‘to say’; the quotative immediately precedes the quoted speech. Thus (6.59–6.61):

- (6.59) *isk nok'a asēin t'ē cano mez*
 PTC 3PL.NOM say.3PL.PST QUOT make-know.2SG.AOR.IMP 1PL.ACC
ew hastatea z=mits mer
 and confirm.2SG.AOR.IMP OBJ=mind.ACC.PL 1PL.POSS
 ‘Then they said: Inform us and confirm our minds ...’ (Ag. XXII.3)
- (6.60) *aस्पēs yišec'ek' ew i mti*
 thus remember.2PL.AOR.IMP and in mind.LOC.SG
kalaruk' z=ban=n tearn
 keep.2PL.AOR.IMP OBJ=word.ACC.SG=DET Lord.GEN.SG
z=or asac' t'ē xndrec'ek'
 OBJ=REL.ACC.SG say.3SG.AOR QUOT seek.2PL.AOR.IMP
z=ark'ayut'iwn Astucoy ew z=ardarut'iwn nora,
 OBJ=kingdom.ACC.SG God.GEN.SG and OBJ=justice.ACC.SG 3SG.GEN
ew ayn amenayn tac'i
 and DEM all bring.3SG.SBJV
 ‘And so remember and keep in mind the word of the Lord, which he said: Seek the kingdom of God and his justice, and he will give [you] everything’ (P'B IV.6)
- (6.61) *ar hasarak atean=n z=bołok' barjeal alatakein*
 jointly court=DET OBJ=appeal.ACC.SG raise.CVB shout.3PL.PST
et'ē Nersēs lic'i mer hoviw
 QUOT PN become.3SG.AOR.SBJV 1PL.POSS shepherd
 ‘Jointly the [members of] court raised an appeal and shouted: Nerses shall be our shepherd.’ (P'B IV.3)

While examples (6.59, 6.60) contain imperative forms and are thus to be classed as commands, (6.61) is, or can be interpreted as, a plain statement. This kind of quotative marking has parallels in other Indo-European languages (e.g. Greek, Sanskrit, Old Persian), for which see 6.3.3.

³⁴ That is to say, given a question like ‘Why aren’t you washing my car?’, a quotative rendition of this question would maintain both the verb form ‘aren’t’ and the pronominal referents ‘you’ and ‘my’; in colloquial Modern English, this might be expressed as ‘He was like “Why aren’t you washing my car?”’; whereas standard Modern English might express the same question as ‘He_i asked why he_j was not washing his_i car’. For a brief overview of quotative structures in English and other languages, see Buchstaller and van Alphen (2012).

Next to direct statements, *(e)t'ē* can also introduce direct questions, including *wh*-questions; thus examples (6.62–6.64):

- (6.62) *ew ayr=n or y=arajnum=n kardac'*
 and man=DET REL in=beginning.LOC.SG=DET call.3SG.AOR
z=anun im ew c'uc'anēr inj asē
 OBJ=name.ACC.SG 1SG.POSS and show.3SG.PST 1SG.DAT say.3SG.PRS
c'=is t'ē ayr du zi? kas
 IOBJ=1SG.ACC QUOT man 2SG.NOM why stand.2SG.PRS
zarmac'ēal ew oč' i mit arnus
 be-amazed.PTCP and NEG into mind take.2SG.PRS
z=mecamecs Astucoy
 OBJ=great.ACC.PL God.GEN.SG
 'And the man who at the beginning had called my name and showed me
 [this] said to me: You, man, why do you stand [around] in amazement
 and do not reflect on the great [deeds/creations] of God?'
 (Ag. CII.29)

- (6.63) *ew ert'eweks areal and xoran=n asē c'=na*
 and go-to-and-fro.CVB in tent=DET say.3SG.PRS IOBJ=3SG.ACC
yoržam i parsik i holoy=n i veray čemein
 when in Persian in soil.LOC.SG=DET atop walk.3PL.PST
t'ē andēr? eler im t'snami, Aršak ark'ay
 QUOT why become.2SG.AOR 1SG.POSS enemy, PN king
Hayoc'
 Armenian.GEN.PL
 'And as they were toing and froing in the tent, he said to him as they
 were walking on top of Persian soil: Why did you become my enemy,
 King Aršak of the Armenians?' (P'B IV.54)

- (6.64) *z=or tareal Vehdenšaphoy ew ork' and*
 OBJ=REL.ACC.SG lead.PTCP PN.GEN.SG and REL.NOM.PL with
nmay=n ein ew harc'ēal t'ē duk' y=o?
 3SG.DAT=DET be.3PL.PST and ask.PTCP QUOT 2PL.NOM to=what
kazmik'
 plan.2PL.PRS
 'These [people] Vehdenšaphuh and [those] who were with him drew out
 and asked: Where are you planning [to go]?' (ŁP' LIII.12)

Once more, *(e)t'ē* immediately precedes the question itself, although the *wh*-marker need not be at the beginning of the sentence, as in (6.62, 6.64), where appellations precede the question word.

Next to direct statements introduced by *(e)t'ē*, there are instances of direct statements and questions, though less numerous, in which no function word links introductory and quoted speech; these occur throughout the corpus of surveyed texts, as well as in the New Testament translation.

- (6.65) *ew asē c'is nayeac' du i ver ew*
 and say.3SG.PRS IOBJ=1SG.ACC look.2SG.AOR.IMP 2SG up and
tes z=sk'anč'elis z=or c'uc'anem
 see.2SG.AOR.IMP OBJ=miracle.ACC.PL OBJ=REL.ACC show.1SG.PRS
k'ez
 2SG.DAT
 'And he says to me: Look up and behold the miracles which I [will] show to you.' (Ag. CII.7)

- (6.66) *isk na oč' arnoyr y=anjn z=noč'a*
 PTC 3SG.NOM NEG take.3SG.PST into=soul.ACC.SG OBJ=3PL.GEN
inč' ar nosa matuč'eal asē oč'? vał isk
 INDF to 3PL.ACC approach.CVB say.3SG.PRS NEG before PTC
asac'i et'ē
 say.1SG.AOR COMP
 'But he did not take anything of theirs [which they had] brought to them, saying: Did I not tell you earlier that ...' (Ag. CIV.9)

6.3.1.3 *(e)t'ē* marks indirect speech, questions

In contrast to direct statements, commands, and questions, the phrasing of indirect statements, commands, and questions changes in that references to the first and second person should be turned into different kinds of demonstrative pronouns, which in turn is reflected in third-person verbal morphology. It is difficult to determine, however, whether a statement is direct or indirect in those cases where no reference to non-third-person entities is made.

Examples (6.67, 6.68), for instance, may be indirect or direct statements, since no reference to non-third-person entities is made; this is reflected in the two possible translations in (6.67).

- (6.67) *isk na hawaneal valvalaki barbareal asēr*
 PTC 3SG.NOM agree.CVB immediately exclaim.CVB say.3SG.PST
t'ē kamk' Astucoy kataresc'in
 QUOT wish.NOM.PL God.GEN.SG fulfil.3PL.AOR.SBJV
 'And he, as he was convinced, immediately shouted: The will of God will be fulfilled' / '... shouted that the will of God would be fulfilled'
 (Ag. CXI.10)

- (6.68) *ew edeal skizbn t'argmaneloy z=girs*
 and give.PTCP beginning translate.INF.GEN.SG OBJ=book.ACC.PL
nax y=A'arakac'=n Solovmoni, or i
 first from=proverb.ABL.PL PN.GEN.SG REL.NOM.SG in
skizban=n isk canawt's imastu'tean=n
 beginning.LOC.SG PTC acquainted.ACC.PL wisdom.GEN.SG=DET
ancayec'u'canē linel aselov et'ē čanačel
 recommend.3SG.PRS become.INF say.INF.LOC.SG QUOT know.INF
z=imastu'tiwn ew z=xrat, imanal
 OBJ=wisdom.ACC.SG and OBJ=counsel.ACC.SG understand.INF
z=bans hančaroy
 OBJ=word.ACC.PL reflection.GEN.SG
 'And so they began translating the books of the *Proverbs* of Solomon,
 which from the beginning recommends getting acquainted with
 wisdom, saying: To know wisdom and counsel, to understand the words
 of reflection' (Kor. VIII.7)

Example (6.68) does not lend itself to different kinds of translations, direct and indirect, since what is reported is but a sentence fragment.

In (6.69), by contrast, such a differentiation is possible, both in the indirect statement and in the indirect question contained therein.

- (6.69) *ew noc'a harc'eal et'ē oyr? ē*
 and 3PL.GEN ask.CVB QUOT who.GEN.SG be.3SG.PRS
bazmut'iwn ays, luan i mardkanē t'ē
 troops.NOM.SG DEM hear.3PL.AOR from people.ABL.SG QUOT
Siwneac' tearn=n ē
 Siwnik'.GEN.PL lord.GEN.SG=DET be.3SG.PRS
 'And when they asked: Whose are these troops? they heard from the
 people: They are [the troops] of the lord of the Siwnik' / '... asked whose
 these troops were, they heard that they were the troops ...' (ĽP' XLII.14)

Further instances of indirect questions can be found in abundance in all texts of the corpus.

- (6.70) *isk t'erevs asic'es du t'ē ur?*
 PTC perhaps say.2SG.PRS.SBJV 2SG.NOM QUOT where
pahē z=erkiwtacs iw'r
 guard.3SG.PRS OBJ=worshipper.ACC.PL REFL.POSS
 'Perhaps you will say: Where does he guard his worshippers?' / '... ask
 where he guards ...' (Ag. XXI.9)

- (6.71) *y=ors harc'anēr Meružan=n ew asēr et'ē*
 into=REL.ACC.PL ask.3SG.PST PN=DET and say.3SG.PST QUOT
čanaparhs i Bagrawand ənd or? ert'ay
 way.ACC.PL to Bagrawand with who go.3SG.PRS
 'Of them Meružan asked and said: With whom does he travel on the way
 to Bagrawand?' / '... asked with whom he travelled...' (P'B V.43)

Just as in the case of direct statements, their indirect counterparts, too, do on occasion occur without an introductory function word; thus (6.72):

- (6.72) *ew yaytneal ar Grigor hreštak teař=n asē*
 and appear.CVB to PN angel.NOM.SG Lord.GEN.SG say.3SG.PRS
hačec'aw tēr z=bnakel srboc'=d
 be-contented.3SG.AOR Lord.NOM.SG OBJ=dwell.INF holy.GEN.PL=DET
Astucoy i tetwoj=d
 God.GEN.SG in place.LOC.SG=DET
 'And as an angel of the Lord appeared to Grigor, it said: The Lord is
 contented that the Saints of God should dwell in this place.' (Ag. CXIV.7)

The same is, however, not the case for indirect questions, of which no instance without (*e*)*t'ē* could be found, raising the question whether the differentiation between indirect and direct speech in Armenian is necessary.³⁵

6.3.1.4 (*e*)*t'ē* as complementizer and in other functions

Jensen (1931) gives a full account of the various functions fulfilled by (*e*)*t'ē*; some of the most common are briefly illustrated here.

One of the most common functions of (*e*)*t'ē*, next to its quotative use, is that of the complementizer, which precedes sentential objects,³⁶ as (6.73) illustrates.

- (6.73) *k'anzi gitemk' t'ē na ē čšmarit Astuac*
 because know.1PL.PRS COMP 3SG.NOM be.3SG.PRS true God
 'Because we know that he is the true God.' (Ag. XXII.23)

A similarly common function of (*e*)*t'ē* is the introduction of conditional clauses, where it marks the beginning of the protasis. In (6.74), (*e*)*t'ē* is used in a mixed-tense counterfactual conditional.

³⁵ Ouzounian (1992) treats reported speech in Classical Armenian in great detail, and arrives at the conclusion that '[I]e discours direct est par excellence le mode de reproduction d'un discours dans la langue classique' (1992: 93). Indirect speech proper is expressed in a variety of fashions, e.g. without a complementizer in an infinitive construction: *asēr c'patgamaworsn Parsic' ar valiwn ainel noc'a patasx-ani* ('He said to the Persian messengers [that he would] respond to them the next day', LP' LXXXIX.3; see Ouzounian 1992: 72); or with *zi* (cf. Ouzounian 1992: 82–93). This latter kind of reported speech, however, does not appear to be used to report actual utterances, but rather to relay commands like 'tell them that...' or other purposive expressions. Furthermore, Modern Eastern Armenian retains the use of *t'ē* as a marker of direct speech, whereas *or* is more commonly used to introduce indirect speech without any further connotations; see Giorgi and Haroutyunian (2019: 285–8).

³⁶ The coincidence of reported speech marker and complementizer is not uncommon; cp. e.g. NHG *dass*, NE *that*, Gk. *ōti*.

- (6.74) *zi t'ē mardoy p'rkeal ēr z=jez i*
 for if man.GEN.SG save.PTCP be.3SG.PST OBJ=2ACC.PL from
carayut'enē [...] i mec barkut'iwn brdēik'
 servitude.ABL.SG into great anger.ACC.SG provoke.2PL.PST
z=arajin tēr=n jer
 OBJ=first master.ACC.SG=DET 2GEN.PL
 'For if a man had saved you from servitude [...] you would provoke your
 first master to great anger.' (Eł. III.22)

In addition, (e)t'ē can further introduce unfulfillable wishes and counterfactual comparisons; an instance of the former is shown in (6.75):

- (6.75) *miayn t'ē i tēru'tean=n ew oč' i p'axstean*
 only COMP in reign.LOC.SG=DET and NEG in flight.LOG.SG
ēr vaxčaneal
 be.3SG.PST die.PTCP
 'If only he had died in his reign and not on the run!' (MX II.13.8)

Next to its functions as quotative marker, complementizer, and conditional, Jensen (1931) suggests that (e)t'ē can introduce purpose clauses, causal clauses, and more rarely concessive clauses. A search for such uses in a representative sample of the corpus of original texts, however, reveals that only the causal use (6.76) is (infrequently) attested therein; the other uses do not occur in these texts, and must therefore be restricted to the Bible translation. Whether they are, in fact, reflections of Greek syntax in Armenian cannot be addressed here.

- (6.76) *ew barexawsel=n nora vasn srboc' ew*
 and intercede.INF=DET 3SG.GEN because saint.GEN.PL and
barexawsel=n Hogwoy=n Srboy ar' i
 intercede.INF=DET spirit.GEN.SG=DET holy.GEN.SG for
vardapeteloy mez zi and mimeanc' [barexaws
 teach.INF.GEN.SG 1PL.ACC so-that with RECIP.LOC.PL intercessor
ic'emk', ew oč' et'ē ar' barjragown ok'
 be.1PL.PRS.SBJV and NEG because for higher INDF
Miaci=n kam Hogwoy=n Srboy]
 only-begotten.GEN.SG=DET or spirit.GEN.SG=DET holy.GEN.SG
barexawsel=n giteli ē
 intercede.INF=DET evident be.3SG.PRS
 'It is evident that he [Jesus] interceded for the saints and for the Holy
 Spirit in order to teach us that we should be intercessors for one
 another, and not because the Only-Begotten or the Holy Spirit
 interceded for some higher power.' (Kor. XXIII.18)

6.3.2 West Middle Iranian *kw* /*kū*/

In and of themselves, the use patterns of Arm. *(e)t'ē* do not deviate greatly from those of similar particles in other Indo-European languages. It is primarily the occurrence of direct questions with both a *wh*-question word and quotative marker that are less typical.

In view of the general influence of West Middle Iranian on Classical Armenian, and given the other potential syntactic parallels shown already, it is worth investigating whether this pattern, too, might find a plausible parallel in Parthian and/or Middle Persian.

As above, after a very brief etymological note, the uses of the West Middle Iranian marker *kw* /*kū*/ will be illustrated briefly.

6.3.2.1 Etymology

Based on its usage and phonology, it is clear beyond doubt that WMIr. *kw* /*kū*/ derives from an interrogative stem **k^wi-*/*k^wo-*; the basic meaning ‘where?’, attested also in Gatha Avestan,³⁷ may suggest an original locative case, but word-final apocope in the development of West Middle Iranian has obscured its morphological origin and does not allow a closer determination.

6.3.2.2 *kw* /*kū*/ marks direct speech, questions

As in Armenian, direct speech is introduced by the quotative marker, upon which follows immediately the quoted sentence. No changes in pronouns or verbal agreement occur. As (6.78) shows further, direct questions are also signalled by the quotative marker before the *wh*-question word, here ‘*kw* /*až kū* / ‘whence?’ (6.78) and *cy wsn'd /čē wasnād* / ‘why?’ (6.79).

(6.77) (*'w=š w*)(*cyd kw 'fr*)[*yd*] *bw'h*
and=3SG.OBL say.3SG.PRS QUOT bless.PTCP be.2SG.SBJV
‘And he says to him: Blessed be you!’ (M8286/I/V/7–14; Parthian)

(6.78) [*pd w*]*zrg (š)dyft 'w mn w'xt kw ' kw*
with great joy to 1SG.OBL say.PTCP QUOT from where
'(*yy*) *tw mn bg 'wd 'njoyw*
be.2SG.PRS 2SG 1SG.POSS god and saviour
‘With great joy she said to me: From where are you, my Lord and Saviour?’ (MKG 126–8; Parthian)

³⁷ E.g. in ... *kū ašauuā ahurō yā* ... ‘... where the righteous Lord, who ...’ (Y. 53.9). Based on attestation, Avestan prefers the complex form Av. *kūθrā* to signify ‘where’ (Bartholomae 1904: 473–4).

- (6.79) *ws(n)'d b't zr'd kw cy wsn'd drwšt ny*
 because PN be-angry.PTCP QUOT what because well NEG
bwšt
 become.PTCP
 'Because of Bat he was/became angry [saying]: Why (lit. because of
 what) has he not become well?' (MKG 1210–11)

A noteworthy difference consists in the placement of object clitics, which attach to the quotative marker. Accordingly, it is not always possible to reconstruct the original sentence in its original structure with complete certainty (Durkin-Meisterernst 2014: 404). This is exemplified in (6.80), which also shows that Parthian and Middle Persian operate along the same lines in this regard.

- (6.80) *h'n w'xš gwpt kw=t 'n ny pdyrym*
 DEM spirit say.PTCP QUOT=2SG 1SG.DIR NEG accept.1SG.PRS
 'That spirit said: I will not accept you.' (MM2 M2/I/R/ii/26–7; Middle Persian)

A further similarity in speech-marking—or rather lack thereof—between Armenian and West Middle Iranian consists in the fact that direct statements and questions can equally be found unmarked by quotatives, as (6.81, 6.82) show.

- (6.81) *w'xt cy? bwrzy(s)tr. 'rd'w w'xt mn 'sp[y]r*
 say.PTCP what higher just say.PTCP 1SG.POSS sphere
 'He [Mani] said: What [is even] higher? The just [man] said: My sphere.'
 (MKG 42–3; Parthian)
- (6.82) *'w mn gwpt (c)[y r'](y) ny šwd hy '(w*
 to 1SG.OBL say.PTCP what for NEG go.PTCP be.2SG.PRS to
x)[wyš] šhr. mn gwpt 'c dwr gy'g 'md
 REFL.POSS land 1SG.OBL say.PTCP from far place come.PTCP
hym dyn r'y
 be.1SG.PRS religion for
 'He said to me: Why did you not go to your own land? I said: I came
 from a far-off land for religion's sake.' (MMii M2/I/V/i/1–6)

Thus far, then, the suspected parallels between West Middle Iranian and Armenian hold.

6.3.2.3 *kw* /*kū*/ marks indirect speech, questions

None of the current grammars concerned with West Middle Iranian make reference to indirect speech or questions; it would seem that in both languages, reported speech is only expressed directly. Accordingly, no comparison with Classical Armenian can be attempted.

This raises two questions: first, whether the category of indirect statements and questions in Armenian is indeed real or just based on the absence of pronominal references; and secondly, whether indirect speech is indeed nonexistent or simply unattested in West Middle Iranian.

The latter question cannot be answered for the simple reason that no data is available. The former, on the other hand, has no clear answer, since no examples of unambiguously indirect questions are forthcoming in the corpus; they could equally well be rendered as direct statements. The New Testament data cited by Jensen (1931: 32) provides little evidence to the contrary, and owing to its nature as a translated text is not a valid comparandum.

Accordingly, there is nothing in principle that speaks against treating expressions of direct and indirect statements—should the latter exist—in Classical Armenian as one grammatical category, and comparing them to direct statements in Middle Iranian.

6.3.2.4 *kw* /*kū*/ as complementizer and in other functions

Durkin-Meisterernst (2014: 403–9) states that *kw* /*kū*/, next to its quotative function, also serves as complementizer (6.83) and causal conjunction (6.84).³⁸

(6.83) *'wd kd twr'n š'h dyd kw qyrbkr 'br 'x'st*
and when Tūrān king see.PTCP COMP benefactor up rise.PTCP
'And when the king of Tūrān saw that the benefactor had risen, ...'
(M8286/I/R/1–3; Parthian)

(6.84) *'w=š'n ny hw ws(n)'d pdwh'd kw, 'g=yš'n n[y]*
and=3PL NEG DEM because pray.PTCP because if=3PL NEG
pdwh'd 'hyndyḥ 'b'w=š'n 'whrmyz(d) [b]g ny hwfry'd'd
pray.PTCP be.3SG.OPT then=3PL PN NEG help.PTCP
('h)ndy byc=yš'n frh' hw pdwhn
be.3SG.OPT but=3PL because DEM prayer
'And they did not pray on this account because, if they had not prayed,
Ohrmezd-Bad would not have helped them; but their prayer was for this
...'
(MMiii M2/II/R/ii/10–16; Parthian)

There is, accordingly, a reasonable amount of functional symmetry between Arm. (*e*)*t'ē* and WMIr. *kw* /*kū*/ in that both serve as quotatives, complementizers, and

³⁸ Both Arm. (*e*)*t'ē* and WMIr. *kw* /*kū*/ can also introduce clarificatory clauses, comparable to NE 'namely', NHG 'nämlich'. Cp. e.g. Arm. *hamarec'an z=zōr=n elbōr=n t'ē xalalut'iw'n ē ek=n nora* 'They thought that his brother's army was coming in peace (lit. They counted on [his] brother's army, namely its arrival was peace)' (P'B IV.18) and Pth. *kaḏ hirzēnd mardomag, kū-m nē nē wināsēnd, bašn=um bawēd zargōn yaḏ ō rōž yāwēd* 'If people let [me = date palm], that is do not harm me, my tip will be green until the last day' (DA 24–5). This usage is, in all likelihood, an extension of the complementizer function.

causal conjunctions; the Armenian form is further used to introduce conditional statements, while the West Middle Iranian form can introduce local interrogative and relative clauses.

6.3.3 Synthesis

Given these functional parallels between Classical Armenian and West Middle Iranian, the question arises whether this use pattern was inherited from Indo-European, developed independently in both languages, or is the result of language contact.

If this pattern were inherited from Indo-European, some of the older daughter languages ought to show similar distributions. Upon further reflection, however, it becomes evident that parallels are relatively limited.

Hittite does not provide any such parallels, as it uses an enclitic particle Hitt. =*wa(r)*= as a quotative (Fortson 1998). Tokharian does not use any overt form of subordination to indicate direct speech (Adams 2015: 37).

Greek *ὅτι* may introduce direct and indirect statements (6.85, 6.86), function as complementizer (6.87), and even as a causal conjunction (6.88), but is not used to introduce direct or indirect questions.³⁹ It must further be noted that marking (and using) direct speech as shown in (6.85) is the exception rather than the rule.

- (6.85) *οἱ δὲ εἶπον ὅτι ἱκανοὶ ἐσμεν*
 DET.NOM.PL.M PTC say.3PL.AOR QUOT ready.NOM.PL.M be.1PL.PRS
 ‘But they say: We are ready.’ (Xenophon, *Anabasis* V.4,10)
- (6.86) *ἔλεγεν ὅτι ἔτοιμος εἶη ἡγεῖσθαι αὐτοῖς*
 say.3SG.PST QUOT ready.NOM.SG.M be.3SG.PRS.OPT lead.PRS.INF.MID
 3PL.DAT
 ‘He said that he was ready to be their leader’
 (Xenophon, *Anabasis* VII.1,33)
- (6.87) *οἶδ’ ὅτι οὐδ’ ἂν τοῦτό μοι ἐμέμφου*
 know.1SG.PRS COMP NEG PTC DEM.ACC.SG.N 1SG.DAT
 blame.2SG.PST.MID
 ‘I know that you would not blame me even for this’
 (Xenophon, *Oeconomicus* II.15)

³⁹ For these uses and concerning direct and indirect speech in Greek in general, see Smyth (1984: §§2240, 2590a, 2597–2634).

- (6.88) *Λακεδαιμόνιοι* *διὰ* *τοῦτο* *πολεμήσειαν*
 PN.NOM.PL.M because DEM.ACC.SG.N wage-war.3PL.AOR.OPT
αὐτοῖς ὅτι οὐκ ἐθελήσαιεν μετ' Ἀγεσιλάου
 3PL.DAT because NEG wish.3PL.AOR.OPT with PN.GEN.SG.M
ἐλθεῖν ἐπ' αὐτόν
 march.AOR.INF.ACT against 3SG.ACC.M
 '[He said that] the Spartans had made war against them [Thebans]
 because they did not want to march against him [King of Persia] with
 Agesilaos.' (Xenophon, *Hellenica* VII.1,34)

The older Indo-Iranian languages come closer to the functional distribution shown in West Middle Iranian and Classical Armenian. The particle Ved. *íti*, found mainly in Vedic prose, can mark both direct statements and questions, but differs from (e)*t'ē* and *kw* /*kū*/ in the following quotations.

- (6.89) *brahmajāyē* *ḡám* *íti* *céd* *ávocan*
 brahmin-wife.NOM.SG.F DEM.NOM.SG.F QUOT if say.3PL.AOR
 'If they have said: This is a Brahman's wife' (RV 10.109,3)
- (6.90) *tám* *devá* *abruvan* *vrátya* *kīṃ* *nú*
 3SG.ACC.M god.NOM.PL.M say.3PL.PST PN.VOC.SG why now
tiṣṭhasí *'ti*
 stand.2SG.PRS QUOT
 'The gods said to him: Vrātya, why do you now stand?' (AV 3.1)

An indirect construction exists, but according to Speijer (1886: §491) construes with the accusative and participle; the particle *íti* is, however, also used to fulfil other functions, including that of complementizer (see Speijer 1886: 493 with examples). Equally, however, it is noted, that marking of direct speech is not always necessary.

Avestan similarly does not require marking of direct or indirect speech, but has a (rarely used) particle *u'itī* that may be employed to signify quoted speech, as in (6.91); note, however, that the quotative marker does not immediately precede the statement in question.

- (6.91) *yaiiā* *spaniiā* *u'tī* *mrauuat*
 REL.GEN.DU.M life-giving.NOM.SG.M QUOT say.3SG.PRS.SUBJ
yām *angrām* *nōit* *nā* *manā* ...
 REL.ACC.SG.M evil.ACC.SG.M NEG 1SG.GEN thought.NOM.PL.N
noit *uruuqnō* *hacintē*
 NEG soul.NOM.PL.M go.3PL.PRS
 '... of which two the life-giving [one] thus will say to [him] whom [one
 knows as] the Evil [one]: neither our thoughts ... nor souls go together'
 (Y. 45.2)

Av. *u'tī* is, however, not used as the complementizer, or indeed to introduce indirect questions. The Avestan complementizer is *yaθā*, *yezī*, or *yaṭ/hiiat*, the former two of which can also introduce indirect polar questions; indirect *wh*-questions are signalled by the relevant form of the relative pronoun in *ya*- (Reichelt 1909: §§754–789). Next to their complementizer functions, these conjunctions (esp. *yaṭ/hiiat*) can also be used to introduce causal and explanatory clauses.

- (6.92) *aiiā* *nōiṭ* *arəš* *vīšiiātā*
 DEM.GEN.DU.M NEG properly decide.3PL.AOR.INJ.MID
daēuuāčīnā *hiiat* *iš* *ā.dəbaomā* ...
 Daēva.NOM.PL.M because 3PL.ACC infatuation.NOM.SG.N
upā.jasaṭ
 overcome.3SG.PRS.INJ
 ‘Between these two [spirits] even the Daēvas did not [manage to] decide properly, because infatuation overcame them.’ (Y. 30.6)

In Old Persian, the cognate conjunction OP *yaθā* is used as a causal conjunction (6.93); Kent (1953: 204 s.v. *yaθā*) further suggests it was used as a complementizer in DB IV.44, but this passage is more plausibly translated as causal, too. Direct speech, however, either remains unmarked (6.94) or is marked with different deictic particles, e.g. *avaθā* (6.95).

- (6.93) *avahya=rādiy* *Auramazdā* *upastām* *abara* ... *yaθā*
 for-this-reason PN.NOM.SG help.ACC.SG bring.3SG.PST because
naiy *arika* *āham*
 NEG evil.NOM.SG be.1SG.PST
 ‘For this reason Ahura Mazda helped me, because I was not evil.’
 (DB IV.62–3)

- (6.94) *θātiy* *Dārayavauš* *xšāyaθiya* *manā* *pitā*
 say.3SG.PRS PN.NOM.SG king 1SG.GEN father.NOM.SG
Vištāspa
 PN.NOM.SG
 ‘King Darius says: My father was Hystaspes’ (DB I.3–4)

- (6.95) *hauv* *kārahyā* *avaθā* *adurujiya* *adam*
 DEM.NOM.SG people.GEN.SG thus lie.3SG.PST 1SG.NOM
Bardiya *amiy*
 PN.NOM.SG be.1SG.PRS
 ‘This man deceived the people thus: I am Smerdis’ (DB I.38–9)

Another conjunction, OP *taya* (cp. Av. *hiiat* / *yaṭ*), however, can introduce indirect speech and also operates as complementizer (6.96, 6.97); Kent (1953: 187 s.v. ²*taya*) adds that *taya* may also be a causal conjunction. Kent’s reading of (6.96) suggests that it here introduces indirect speech; based on the introductory phrase *azdā*

abava, however, a complementizer reading seems more likely, especially since this need not be seen as an actual utterance. Similarly, in (6.97), the occurrence of *mām* before *taya* and the fact that the clause it introduces is effectively the object of *xšnāsātiy* favours a complementizer reading over Kent's quotative; the 1SG verb does, however, complicate the matter, leading Schmitt (1995: 243) to agree with Kent (1953: §302e) that it might be an 'indirectly quoted statement', or simply an explicatory clause.

(6.96) *yaθā Kabūjiya Bardiyam avāja kārahyā naiy*
 when PN.NOM.SG PN.ACC.SG slay.3SG.PST people.GEN.SG NEG
azdā abava taya Bardiya avajata
 known become.3SG.PST COMP PN.NOM.SG slay.PTCP.PASS.NOM.SG.M
 'When Cambyses killed Smerdis, it did not become known to the people
 that Smerdis had been slain.' (DB I.31–2)

(6.97) *avahyarādiy kāram avājanīyā mātya=mām*
 for-this-reason people.ACC.SG slay.3SG.PST.OPT lest=1SG.ACC
xšnāsātiy taya adam naiy Bardiya amiy
 know.3SG.PRS.SBJV COMP 1SG.NOM NEG PN.NOM.SG be.1SG.PRS
 'For this reason he used to slay the people lest they know me, that I am
 not Smerdis.' (DB I.51–3)

A different example suggests, however, that OP *taya* may in fact also introduce indirect speech, specifically *wh*-questions, where an interrogative pronoun follows on the quotative marker.⁴⁰

(6.98) *yadipatīy maniyāhaiy taya ciyakaram āha*
 if think.2SG.PRS.SBJV.MID QUOT how-many be.3SG.PST
avā dahyāva tayā Dārayavauš
 DEM.NOM.PL.F country.NOM.PL.F REL.ACC.PL.F PN.NOM.SG
xšāyaθiya adāraya
 king.NOM.SG.M hold.3SG.PST
 'If now you should think how many are the countries, which King
 Darius holds ...' (DNa 38–41)

In view of the illustrative data presented above, it is unlikely that a pattern of Indo-European age was the foundation of the functional distribution emerging in West Middle Iranian and Classical Armenian.

Of the old and early-attested daughter languages, Hittite and Tokharian do not provide any comparable information. Early Latin does not indicate that *quod*,

⁴⁰ Note, however, that the other instances of *man-* 'think' do not show a complementizer/quotative (Schmitt 1995: 244).

which would among other things later furnish the complementizers of Romance languages, was used in this function until after the turn of the millennia.

Greek does use the conjunction *ὅτι* to introduce direct and indirect statements (favouring the latter), as complementizer, and also to introduce causal clauses; reported direct and indirect questions, however, are not introduced by this conjunction.

Sanskrit *iti* may be used to introduce direct statements and questions, including *wh*-questions, and as a complementizer; indirect statements are expressed differently, however.

Avestan and Old Persian have a number of conjunctions to introduce complementizer clauses and direct or indirect speech; of these, OP *taya* seems to best match the functional distribution described for West Middle Iranian and Classical Armenian in being able to function as quotative marker and complementizer, including before *wh*-questions.

The developments in these languages, therefore, do not allow for a reconstruction of such a functional distribution in Indo-European: the function words differ too widely in their etymology, position, and usage. Within Indo-Iranian, where these particles are used in a comparable fashion, the etymological match between these particles is imperfect, but may suggest a nascent pattern; the size of the Old Persian corpus in particular, however, makes it difficult to determine how widespread this functional distribution was.

Since it is therefore unlikely that the use pattern of Arm. $(e)t\bar{e}$ is based on an inherited Indo-European prototype, two options remain: either the pattern developed independently, or it was replicated from West Middle Iranian.

Typologically, quotatives based on roots with deictic function are not uncommon, as is the case for verbs signalling comparison (Buchstaller and van Alphen 2012: XIV, XVIII); this would include Sanskrit *iti* and probably Arm. $(e)t\bar{e}$.⁴¹ It is therefore not to be excluded that this pattern may have developed on its own, and that the co-occurrence of reported-speech marking and *wh*-question words is owed not to language contact but to the fact that Armenian does, in fact, only report direct speech and questions, so that this is the standard and logical way to phrase reported questions.

Equally, however, the fact that these two languages, one of which has influenced the other significantly as illustrated in Chapters 2 and 5, have both developed this functional distribution could allow for pattern replication. The locus of the pivot, i.e. the function which both WMIr. *kw* /*kū*/ and Arm. $(e)t\bar{e}$ shared initially, is made difficult by the exclusively post-Iranian attestation of Armenian.

Since WMIr. *kw* /*kū*/ derives from PIE *k^wi-/k^wo-* and can be used as interrogative and relative ‘where(?)’ (as also attested in Avestan), one plausible starting point

⁴¹ WMIr. *kw* /*kū*/, however, does not neatly fit into any of the categories from which quotatives usually develop.

may be the grammaticalization of this adverb as a causal conjunction—assuming both are etymologically related and not just homophones. This would make for a relatively weak pivot, however, since the use of *(e)t'ē* in Armenian as a causal conjunction is very limited.

A more likely alternative is the complementizer function, which is common in both languages and aligns more clearly with the probable original meaning of *(e)t'ē* ‘so, thus’; the grammaticalization path of WMIr. *kw* /*kū*/ from ‘where?’ to ‘that’ is less clear.

It may be speculated, then, that next to their non-shared functions as conditional complementizer (Armenian) and interrogative and relative adverb (West Middle Iranian), the two conjunctions overlapped in their use as complementizers, and possibly as markers of direct or indirect discourse. This parallel may have led to a functional extension of Arm. *(e)t'ē* to also introduce reported direct *wh*-questions as well as causal clauses in the same way that WMIr. *kw* /*kū*/ does.

6.4 Conclusions

In this chapter, the use and syntax of three Armenian function words or constructions has been discussed with a view to their potential Iranian origins: the use of the Armenian relative pronoun *or* as an NP-linker comparable to the Iranian *ezāfe*-construction; the intensifying, subject-resuming, and switch-function use of Arm. *ink'n* and possible parallels in MP *xwd* /*xwad*/, Pth. *wxd* /*wxad*/; and finally the use of the complementizer and quotative *(e)t'ē* with reported *wh*-questions in Armenian as compared to similar uses of WMIr. *kw* /*kū*/.

In all cases, it has proved difficult to make any certain determinations owing to the nature of the Armenian data, specifically the lack of attestations prior to Iranian influence, and the ensuing impossibility of analysing syntactic developments in ‘pure’ Armenian.

In the matter of the *ezāfe*-construction, the evidence is not clear enough to favour or disfavour an explanation based on language contact; the fact that nominal relative clauses do occur in other Indo-European languages points in the direction of direct inheritance, however. At the same time, since in at least some languages such clauses were falling out of use, it is possible that the use pattern of the Iranian *ezāfe*-construction may have helped to preserve inherited nominal relative clauses in Armenian.

The case of the use pattern of Arm. *ink'n* is similar: an independent development of at least the intensifier and subject-resumption function in Armenian is entirely cogent; it is the parallel in switch-function marking, less common but still attested in Armenian, that suggests that WMIr. *xwd*/*wxd* may have influenced the Armenian pattern, whether directly in the form of pattern replication or as a catalyst or stabilizer for an internal development.

Finally, the use of Arm. *(e)t'ē* as complementizer, as causal conjunction, and as a marker for reported speech and questions, including *wh*-questions, may be due either to independent internal developments or to contact with Iranian. If Armenian is thought to report speech as direct speech or questions exclusively, the co-occurrence of quotative and *wh*-question words can be explained without reference to West Middle Iranian, and the functional parallels are explained as typologically conditioned. It is remarkable, however, that two languages in close vicinity with etymologically quite different complementizers/quotatives and rather different literary traditions should have developed this kind of functional distribution independently from one another. This topic may benefit from a more detailed, corpus-based study to determine how wide spread each of the use patterns presented above is.

Beyond the specific cases themselves, this chapter shows in no uncertain terms why research into syntactic borrowings from Iranian into Armenian in particular, and in other corpus languages in general, has not been at the forefront of research thus far: it is often simply impossible to determine if a particular syntactic pattern is the result of an independent development or language contact if no data prior to contact between the two languages in question is available. Furthermore, next to requiring an understanding of the potential contact languages in question, it is necessary to take into consideration comparable data from related languages and general diachronic trends to ensure that a pattern is not simply a common typological development, which complicates the process.

It is unclear whether a more thorough, corpus-based investigation into the three patterns discussed above would yield clearer results. At the very least, however, it has been shown that in many instances, there is potential for a language contact-based explanation to Armenian syntactic patterns that warrants investigation, if only to be dismissed.

Parthian–Armenian language contact and its historical context

Chapters 5 and 6 have further corroborated the hypotheses suggested at the end of Chapter 4, namely that Armenian has undergone significant influence from the neighbouring Iranian languages not only as far as its lexicon and derivational morphology are concerned, but also with respect to its syntax.

The distribution and usage of the Armenian past participle in *-eal* has confirmed its originally passive–intransitive nature, as well as the decline of the tripartite alignment pattern of the periphrastic perfect in favour of nominative–accusative alignment as found in all other tenses of the language. All this, it has been suggested, is the result of influence from Parthian, on the basis of whose past tense the Armenian perfect was modelled.

At the same time it has been shown that a number of smaller syntactic patterns have in all likelihood been influenced by or created on the basis of similar West Middle Iranian models, specifically the *ezāfe*-like use of nominal relative clauses in Armenian, the use of Arm. *ink'n* as a subject resumption and switch-reference marker, and the quotative use of Arm. *(e)t'ē*.

All of these linguistic effects of the contact between Parthian and Armenian are supported by the historical evidence, which does not include much direct evidence of the language practices of the time, but provides clear-cut indirect evidence for an extensive and intensive contact situation conducive to the kind of wide-ranging contact phenomena discussed above.

With these patterns and their Iranian origin in mind, the following three questions arise:

1. How does the contact situation between Armenian and Parthian compare to typical scenarios discussed in the literature on language contact?
2. Based on the data discussed above, can a more fine-grained analysis of the Parthian–Armenian contact situation be provided?
3. Is this contact situation an outlier or does it have parallels elsewhere?

In order to provide answers to these questions, this chapter first discusses language contact in general, and reviews a number of aspects of and perspectives on contact, with a particular focus on pattern replication. The Parthian–Armenian situation is

discussed with reference to parallel and contrasting instances of language contact, and it is suggested that it comprised multiple sociohistorically conditioned phases in which different contact processes occurred. Specifically, it is argued that after a phase of potentially unilateral bilingualism on the part of upper-class Armenians, the fall of the Parthian Empire in 224 CE, the Christianization of Armenia at the beginning of the 4th century, frequent hostilities and wars with the Sasanian Empire, and the establishment of a hereditary dynasty of Parthian rulers over Armenia have resulted in a bilingual ruling class of Parthian origin, which in time has come to self-identify as Armenian. This hypothesis is built on the established and new linguistic data and sociohistorically details discussed in previous chapters, and on comparable instances of language contact presented below.

The second part of this chapter draws together the findings from Chapters 5 and 6, the extralinguistic sources presented in Chapter 3 above, and after presenting a small number of parallel contact situations to underpin the plausibility of the hypothesis advanced here, proposes a tentative chronological outline and explanation of the development of Iranian–Armenian language contact, its various linguistic manifestations, and links to sociopolitical events in the history of the peoples concerned.

7.1 Language contact and language change

‘Language contact’¹ is broadly used as a term covering the conditions—linguistic and otherwise—processes, and results of the interaction between two or more languages or lects (Harris and Campbell 1995: 32–3; Lass 1997: 184–5; Myers-Scotton 2002: 1); consequently, as is readily imaginable, there is a host of subfields, different contexts, perspectives, and frameworks that pertain to this field, including questions regarding bi- and multilingualism, code-switching (in the broadest sense),² di- or polyglossia, borrowing, language shift, and convergence feature most prominently and are of greatest relevance here. These aspects are, of course, not independent of one another, and causal relations can but need not exist between any or all of them, although not in all combinations and directions.³

¹ For a brief historical survey, see Clyne (2004).

² Depending on context and scholar, code-switching may refer either generally to the usage of items and patterns from multiple languages or of lects in a single speech act (cf. Gumperz 1982: 59), or specifically to such usage intersententially; the occurrence of items from multiple languages intrasententially is then occasionally referred to as ‘code-mixing’ (Muysken 2000: 1). For the present purpose, no such distinction is necessary, and the term ‘code-switching’ is used in its widest sense.

³ This is to say that, for instance, bilingualism may be the cause of code-switching in conversation, but the inverse is not true. Further, while diglossia may be the result of societal bilingualism, this need not be the case: diglossia can exist without bilingualism, and bilingualism without diglossia (Fishman 1967). Some common examples include the situation in Tsarist Russia, where a certain amount of French–Russian diglossia existed among the upper classes without full societal bilingualism (see Dmitrieva and Argent 2015; Rjéoutski and Somov 2015 for details), while the situation in Wales or

Owing to the linguistic material discussed here, as well as its historical and documentary context, the focus of the discussion lies on different kinds of contact scenario, their definitions, contexts, and outcomes. The Parthian–Armenian situation is analysed with reference to the theories and comparanda outlined in each section, and an attempt is made at explaining its position within the wider context of contact linguistics. It is argued that, owing in part to the kind of data available and its date, the Parthian–Armenian situation resists a single categorization; instead, it is likely that there were at least two phases of Parthian–Armenian contact, in which different contact mechanisms came into play, resulting in the form of the Armenian language as preserved in the texts analysed in Chapter 5.

7.1.1 Theoretical considerations in language contact studies

This section begins with a very brief review of the relevance of language contact studies for historical linguistics, and then proceeds to consider general prerequisites (Section 7.1.1.2), results, and constraints on linguistic change induced by language contact (Section 7.1.1.3). Section 7.1.2 discusses a pertinent selection of specific language contact scenarios in more detail and with reference to the Armenian material, in order to situate it within the bigger scheme. Section 7.1.3 considers motives for and constraints on contact-induced change, with a view to explaining the occurrence of pattern replication phenomena. Finally, Section 7.1.4 explores the question of primacy in contact, specifically whether sociohistorical or linguistic factors more closely determine what kind of language contact phenomena occur, and to what extent.

7.1.1.1 Relevance of language contact for historical linguistics

Historically, consideration of non-current stages of language, particularly since the Neogrammarians, has focused on elaborating on and enquiring into the genetic relationships between that stage and its successors or predecessors, and on defining regular mechanisms by which change took place, frequently explicitly excluding contact-induced interference (Poplack and Levey 2010: 392; Romaine 1988: 349).⁴ While the main analytical tools used to accomplish such an analysis—the Comparative Method and Internal Reconstruction—can often account for the vast majority of changes between any well-attested stages of a language, provided sufficient data is available and taken into consideration, not all change is based on genetic relations. Similarly, changes that are difficult and

the Republic of Ireland may be classed, at least for some individuals, as bilingualism without diglossia, since both English and Welsh/Gaelic may be (and are) used in a variety of communicative situations (see e.g. Murchú 1988).

⁴ Müller (1871–2: 86), for example, suggests that there is no such thing as a mixed language, effectively denying any potential external influence beyond loanwords.

inconvenient to explain in genetic terms—for instance, the development of the Armenian periphrastic perfect—may find more ready explanations in non-genetic, and specifically contact-induced, change.

In view of this tendency, Thomason cautions against ignoring the possibility of external influence:

Traditional historical methodology in linguistics is so heavily biased in favor of internal causation that the absence of proof of [contact-induced] interference might be thought to be sufficient evidence for internal causation. (Thomason 1980: 362)

Equally, the opposite approach, i.e. assuming language contact to be the cause of all change, is inappropriate. The middle way is the best approach: language contact ought to be considered as one potential origin of change, particularly when a genetic explanation produces overly complicated or unlikely results, and when it is less likely that this change should have arisen outside a contact situation (cf. Thomason 2008: 47; 2001: 62–3).

Another dimension of relevance lies in the fact that multilingualism was and is a far more widespread phenomenon than perceived in the Western, especially anglophone world. As Kühl and Braunmüller (2014: 16) point out, both historically and at present, multilingualism and with it language contact are the norm rather than the exception. This emerges not only in multilingual inscriptions such as that on the rock cliff at Behistun or on the Ka'ba-ye Zardošt (see Section 3.1.2), but equally from Latin calques based on Greek,⁵ graecizing letters from Roman Egypt,⁶ medieval macaronic sermons switching between Latin, English, and French (see 7.3.1, and Schendl 2013), or bilingual newspapers such as the Armenian–Turkish weekly *Agos*.

Consequently, language contact must not be ruled out, and in fact has to be more actively considered as a potential source of change, particularly in languages or linguistic areas where other results of contact, e.g. loanwords, have been recognized as forming a non-negligible part of the lexicon, as is clearly the case for Classical Armenian.⁷

The question then arises of the prerequisites and conditions that must obtain in order to make change by contact a plausible explanation.

⁵ Adams (2003: 420–1, 459) points out, however, that these were largely learned formations and related to technical vocabulary (e.g. Lat. *qualitas* 'quality; type' < Gk. ποιότης 'id.'). Quintilian refers to them as *figurae*, stylistic devices, in his *Institutio Oratoria* (cf. Mayer 1999).

⁶ Cf. Adams (1977: 86) for the letters of Claudius Terentianus.

⁷ Wiemer and Wälchli (2012: 9–14) point out that there are different perspectives from which language contact may be investigated, i.e. reconstruction, result, and process. The present study is mainly conducted from a reconstructive perspective in the sense that it compares and contrasts genealogical with contact explanations of Armenian grammatical structures; at the same time, there are processual elements in it, since it seeks to explain the likely paths of grammaticalization involved in the structural borrowings concerned.

7.1.1.2 Prerequisites for language contact and contact-induced change

One of the earlier summaries of what is required for features of one language to influence those of another is given by Winter:

We thus have to recognize at least the extralinguistic conditions of collocality, contemporaneity, existence of channels of communication, and presence of social stimuli as necessary presuppositions for linguistic transfer to materialize. (Winter 1973: 139)

To rephrase this, two languages can only influence one another if they are spoken in the same area, at the same time, if speakers of both languages communicate with one another, and if one or the other group has something to gain from speaking their non-native tongue; this social stimulus might be a material advantage in the form of business relations, or relate to the ‘prestige’ associated with a language. In the case of Classical Armenian and Parthian, these conditions clearly obtain: both languages were collocal, contemporaneous at least for the period considered here, and had clear channels of communication at the very least at the upper levels of society.⁸

The other question, that of social stimuli or prestige,⁹ seems relatively straightforward: Armenian nobles (*naxarars*) wished to be on good terms with the ruling Arsacids, thus adopting vast amounts of Parthian vocabulary. The issue is more complicated, however, where structural loans are concerned, as the discussion in 7.1.2.2 explains.

With respect to the latter, Thomason (2008: 49) provides a useful catalogue of prerequisites for structural loans: her first criterion consists of establishing that structural interference of this kind is not isolated in the language, i.e. that multiple systems are affected. For Armenian, this was established in Section 2.4

⁸ The extent of the survival of Parthian in the western part of the Iranian world is somewhat unclear: judging by the extant manuscripts, it was used as a liturgical language of Manichaeism up until the 10th century in the east, albeit already in a non-standard form, probably due to a lack of native speakers (Durkin-Meisterernst 2014: 10); epigraphic evidence, however, ends with the inscription of Narseh at Paikuli (Sundermann 1989b: 116–17; Durkin-Meisterernst 2014: 5–6). While it cannot be determined with any degree of certainty, there is at least the possibility that Parthian in the West slowly died out beginning with the fall of the Parthian Empire; see Meyer (2022b).

⁹ The notion of ‘prestige’, which may variably be correlated to political, economic, cultural, and many other factors, is somewhat fuzzy. While the prestige of a language frequently coincides with the numerical dominance of its speakers in a region, this need not be the case; Matras (2009: 46), for instance, cites colonialization and other instances of foreign rule as cases in which the prestigious, dominant language is that of a numerical minority. Precisely what constitutes ‘prestige’ is therefore context-dependent. Winter (1973: 139) cites the contrast between the ‘enrichment’ of the numerous languages spoken in the former Soviet Union with Russian lexicon and constructions on the one hand (see e.g. Dum-Tragut 2009: 651; Cowe 1992: 335 on Modern Armenian), and the influence of Greek on Latin on the other (Adams 2003); in the former, political influence was probably the main prestige factor, while the latter is more likely to relate to cultural values. In either case, a language can be considered ‘prestigious’ if some kind of benefit—social, material, linguistic—can be derived from speaking or imitating it; owing to the nature of the notion and the numerous unquantifiable vectors that form part of it, however, no more concrete definition can be readily provided.

for derivational morphology, in Chapters 4 and 5 for the perfect system, and in Chapter 6 for the intensifier, quotative, and the *ezāfe*-construction. Secondly, a source language needs to be clearly identifiable—Parthian in this case, and without doubt—and thirdly, shared features identified. The fourth criterion is the proof that the supposedly shared features did not already exist in the affected language prior to contact;¹⁰ for the perfect, this is demonstrably the case (see the Appendix for details). Finally and conversely, it must be shown that the structures in question were present in the source language prior to contact; see Section 4.3.2.¹¹

As stated by Thomason and Kaufman (1988), the transfer of structural, particularly syntactical structures is only likely in contact situations in which speakers of the interacting languages are in very close and long-term contact. Nadkarni (1975: 681), and following him many others such as Heine and Kuteva (2005: 13, 239, 267 n. 11), suggest that ‘intensive and extensive bilingualism with a certain time-depth’ is necessary for structural changes to occur, where ‘intensive’ relates to the fact that the model language is used for a wide range of purposes, whereas ‘extensive’ suggests that the entire speech community or significant subsets thereof are bilingual.¹²

Historical data does not allow for clear judgements on the question of the extent of bilingualism in Armenian society on the whole, but as suggested in 3.2.2, extralinguistic data together with the number and kind of loanwords, calques, and derivational morphology taken from Middle Iranian, makes this a likely scenario at least for the ruling classes. The same data speaks in favour of intense contact.¹³

¹⁰ Where earlier stages of the language are unavailable, as in the case of Armenian, comparison with other related languages must show that the feature cannot be reconstructed for the parent language, and that it is unlikely to have been an independent innovation. For Armenian, this has been shown in Section 4.2.2.

¹¹ Pat-El (2013: 316) further proposes that there are two characteristics that allow for the determination of the source of contact-induced language change, where this is unclear. On the example of Aramaic and Hebrew, she argues that the existence of intermediate stages of language change, and synchronic consistency of the feature across categories, are typical of source languages. In the case of Armenian, of course, the source language is never in question. Given the unavailability of data for Armenian prior to contact, and the relative remoteness between Old Persian and Parthian, neither shows clear intermediate stages prior to contact; as argued in 5.3.2, however, Armenian shows clear and increasing signs of incipient de-ergativization, as do the West Middle Iranian languages, and these languages thus share certain developments in similar directions post-contact. Some remnants of the earliest stage of contact-induced change in Armenian may be seen in the occurrence of ergative-like patterns in the periphrastic perfect; see 4.2.3.1.

¹² These conditions need only obtain in situations in which changes are introduced from L2 into L1 directly; the scenario favoured below, 7.2.1, suggests a somewhat different progression, with the initial locus of interference in Parthian-dominant bilinguals, for whom the influence would be L1 > L2.

¹³ Dealing with language contact in historical contexts brings with it distinct problems. These relate particularly to the (non)existence of data of a pre-contact stage of the language, and the clear identification and classification of speakers as regards their socio linguistic characteristics, particularly social class and level of multilingualism (Poplack and Levey 2010: 396–7, 401). Given the type of extant evidence from Armenian, the only data available is the literary language associated with the upper levels of society, which need not reflect the variety spoken at the time. Yet, while restricted, the data is not mixed, and so can at least provide a clear perspective on the language commonly used for literary purposes. It is unfortunate but inevitable that, at least when it comes to social breadth and historical depth of data,

Based on these criteria, and in view of the detailed data analysis undertaken in Chapter 5, the Parthian–Armenian contact situation fulfils all the criteria listed above. While the linguistic and sociohistorical data available for both Armenian and the West Middle Iranian languages may not be ideal compared to that used in studies on modern languages, they are still more than sufficient to paint a clear picture of background, circumstances, and motivations of pattern replication, as will be suggested in what follows below.

7.1.1.3 Issues and limitations of language contact studies

The most elementary epistemic issue is the process of contact itself. As [Kühl and Braunmüller \(2014: 15\)](#) point out, the speaker is the true locus of contact, i.e. it is not languages that are in contact, but their speakers (also cf. [Thomason and Kaufman 1988: 4](#)); the phenomenon as such cannot be observed directly in corpus languages, and even in modern languages it is difficult to consciously observe contact itself rather than its results; consequently, all conclusions drawn are by nature inferential (see [Thomason 1997: 181](#); [Haugen 1958: 771](#)). To no small extent, this is not only due to the data available in corpus languages, but also based on the fact that change, especially when contact-induced, is in most instances multicausal, and requires consideration of not only linguistic, but also social, geographical, and personal factors, as well as a weighing of numerous pressures and interactions, e.g. received standard vs local vernacular, or typological fit vs frequency ([Kühl and Braunmüller 2014: 16](#); [Milroy and Milroy 1997: 75](#); also see Figure 7.3).

In turn, this means that no single factor—linguistic or otherwise—is a sufficient indicator of the kind of contact-induced change that may or may not arise in any particular contact situation. There is currently no agreement, either, whether one of these factors has primacy over the others, but two clear camps have emerged: one suggests that it is largely social factors that determine language contact phenomena (see e.g. [Heine and Kuteva 2005](#); [Thomason 2003](#); [2008](#); [Thomason and Kaufman 1988](#); [Winford 2003](#)), while the other gives precedence to linguistic considerations (e.g. [Haugen 1950](#); [Lass 1997](#); [Myers-Scotton 2002](#); [Silva-Corvalán 2008](#); [Wilkins 1996](#)).¹⁴ The present study suggests that [Thomason's](#) approach—giving primacy to social factors, without ignoring the linguistic evidence—is overall preferable.¹⁵

corpus languages frequently cannot live up to the modern methodological standards propounded by [Poplack and Levey](#) and others.

¹⁴ The latter camp in particular attempts to systematize possible and likely outcomes of language contact, usually in the form of a 'borrowing hierarchy' or the like. As shown by, among others, [Curnow \(2001\)](#) and [Thomason \(2008\)](#), however, these hierarchies do not hold up to scrutiny, in that numerous exceptions to each alleged constraint can be found.

¹⁵ [Heine and Kuteva \(2008: 77\)](#) argue convincingly that even social factors are far from sufficient in determining what type of change might happen or have happened, since languages in contact may serve as model and replica language for one another at the same time; for an example, see [Aikhenvald \(2002\)](#) on the reciprocal influence of Portuguese and the North Arawak language Tariana.

7.1.2 Types and outcomes of language contact

A fine-grained systematization of all possible outcomes and scenarios of language contact is, as mentioned above, impracticable owing to the number of interacting and interdependent factors. There are, however, more general categories of contact-induced change, the most relevant of which are worth differentiating briefly. They include, in the commonly used terminology of [Thomason and Kaufman \(1988\)](#): language maintenance, which is largely signalled by lexical loans and need not involve multilingualism; and language shift, in which a group of speakers adopts a different language, in many cases leading to interference in phonology and syntax of the target language.¹⁶ Next to these terms and scenarios, it is worth keeping in mind the non-coterminous processes referred to by [van Coetsem \(1988\)](#) and [Winford \(2005\)](#) as borrowing (transfer with target-language agentivity) and imposition (transfer with model-language agentivity).

It must be borne in mind, however, that none of these scenarios or processes are mutually exclusive, and that contact between languages can be reciprocal.¹⁷ In what follows, only the first two of these three categories are addressed in detail; their setups are compared to the situation obtaining in Classical Armenian. The aim is to illustrate that, although Parthian–Armenian contact may be explained as a case of language maintenance or borrowing, another explanation fits the data better.

7.1.2.1 Language maintenance or borrowing

The most elementary form of contact, referred to as either language maintenance, borrowing ([Thomason and Kaufman 1988](#)), transfer ([van Coetsem 1988](#)), or matter replication ([Matras 2009](#)), usually involves native speakers of language A, the target language (TL), incorporating non-basic lexical items from language B, the model language (ML), into their vocabulary (also cf. also [Thomason 2003](#): 691–3). This type of transference is closely tied to the concept of code-switching, particularly as regards the usage of non-basic lexicon; like code-switching, therefore, borrowing does not require speakers of language A to be perfect bilingual speakers of language B, although a certain amount of (at least passive) familiarity is necessary (cf. [Myers-Scotton 2002](#): 25). In these instances, the TL is also often less prestigious, socially or otherwise, or spoken by a minority community.¹⁸

¹⁶ A third category, mixed languages, in which elements of two languages fuse, creating a new language that is not genetically related to either of its ‘parents’ in its entirety ([Meakins 2013](#)), exists but is of no particular relevance in the present context.

¹⁷ That is to say that the terms ‘model language’ and ‘replica language’ used here are relative, and that each language can but need not occupy both roles with regard to the other ([Heine and Kuteva 2005](#): 4); see also [Thomason and Kaufman \(1988](#): 15–16, 136–7) for examples from Indic–Dravidian and Šinā–Burushaski contact.

¹⁸ The reasons behind borrowing vary according to situation: filling a ‘gap’ in the lexicon of the TL, or bringing with them a certain amount of ‘prestige’. The former often involves ‘cultural loans’ that relate

There can be no doubt that Classical Armenian underwent a phase of borrowing from Parthian that follows these parameters. The evidence presented in 2.3.2.3 clearly identifies non-basic lexical items that relate to administrative offices (e.g. *salar* ‘general-in-chief’), concepts (e.g. *p’ark’* ‘divine glory’),¹⁹ and other things not previously found in Classical Armenian, thus filling a gap. Other items, however, do not fit into this category (e.g. terms like *bžišk* ‘doctor, physician’, a concept which must have existed before), and instead are likely to have been adopted for reasons of ‘prestige’. Equally, however, numerous Parthian loans in Classical Armenian are part of the basic lexicon as well (e.g. colour terms, numerals, prepositions, verbs like *hramayem* ‘to order, command’; nouns such as *dašt* ‘field’). Together with derivational morphology and nominal composition, this degree of influence is probably a result of what Thomason and Kaufman (1988: 50, 83–95) refer to as ‘moderate/heavy borrowing’, presupposing particularly long and close periods of interaction between speakers of the two languages. Whether such words were actively adopted by the Armenians (‘transfer’, in van Coetsem’s terms) or introduced by the Parthians (‘imposition’) is unclear.

In these moderate/heavy borrowing situations, other linguistic features are not infrequently borrowed as well; these include phonological, morphological, and syntactic structures.²⁰ The Iranian influence on Armenian has evidently extended so far, as calques, nominal compounds, the periphrastic perfect, etc. show; even on the phonological level, contact-induced innovations have arisen (see 2.3.2.1). Given that Armenians, though numerically dominant, were the ruled, lower-ranked party in the relationship with the Arsacid Parthians, and taking into account the characteristics of borrowing given here, together with the Armenian language data presented above, the contact situation in Armenia in and before the 5th century CE could therefore be described as one of moderate to heavy borrowing from Parthian by the Armenians over whom the former ruled.

At least one reason, however, to enquire beyond the framework of borrowing in a language maintenance context is given very succinctly by Thomason:

Target language speakers [...] are likely to be borrowing words from an indigenous language even while that language’s speakers are shifting to the target

to things, activities, or concepts not native to the borrowing language’s society but found in the culture associated with the other language; concepts are most succinctly expressed by the replica language term (Matras 2009: 149; compare e.g. technological vocabulary often borrowed from English, as in *internet* and *e-mail* in French, German, Dutch, etc). Another motivation for loans is the prestige associated with the model language and its culture; this term is relative and need not relate to high culture or political dominance (see Matras 2009: 150 on covert-prestige Romani borrowings in English like *chav* and *pal*). Such loan words often have TL counterparts, and the difference in use relates to the circumstances of and participants in the speech act.

¹⁹ For a closer definition and discussion of the term Arm. *p’ark’*, compare Av. *x’arənah*, Pth. *frh*, MP *prh* /farrah/, see Zakarian (2021: 181–5).

²⁰ As reported in Comrie (1981: 167, 171, 179) Ossetic (Iranian family), for instance, has replicated from Caucasian languages like Georgian not only a great number of lexical items, but also agglutinative morphology, a more detailed case system, and a series of phonemic glottalized stops.

language and incorporating some of their own native features into their version of the target language. (Thomason 1980: 364)²¹

As a result, the following section must explore the explanatory power of a language shift scenario for the present context to ensure that borrowing by itself does not provide a better analysis of the Parthian–Armenian data.

7.1.2.2 Language shift

Where in a language maintenance situation, the TL borrowed mainly lexical material from another language, in which TL speakers did not need to be proficient, the situation in language shift is the converse. Here, speakers who are by definition not fluent in the TL introduce features into it, first and foremost phonology and syntax ('imposition' in the terms of van Coetsem 1988). As Thomason (2003: 692) suggests, this process often (but not necessarily) is tied to language-learning; depending on the circumstances, shifting speakers may (but need not) learn the TL imperfectly,²² failing to learn certain TL features, e.g. because they have no parallel in their L1, and/or they may carry over features of their L1 into the TL.²³ In such cases, a version of the TL spoken only by the shifting group may develop (TL₂), which includes such non-TL features, and differs from that of the native speakers' usage (TL₁). Given the right sociolinguistic circumstances, TL₂, a so-called 'inter-language',²⁴ may survive as a community language, e.g. when sufficiently isolated from TL₁ speakers, or if linguistic norms are permissive. In certain circumstances, some features of the shifters' TL₂ may even be adopted by the whole speech community, creating an integrated variety TL₃. This is likely to occur when L1 speakers possess 'prestige' of one sort or another. Figure 7.1 visualizes this process.

This is only one of many scenarios in which structural interference may occur; Heine and Kuteva point out that neither imperfect learning nor indeed shift are prerequisites for interference without much lexical borrowing, since

grammatical replication tends to involve [...] a process where speakers combine a number of different variables [...] to create novel forms of expressing grammatical

²¹ Although Thomason speaks of the 'indigenous language' as shifting, this does not of course restrict the co-occurrence of maintenance and shift in this scenario; which language is dominant depends on the individual social, political, economic, etc. context, as suggested above.

²² The kind of 'mistake' that is likely to find its way into the TL owing to language shift is, therefore, the kind that language-learners are wont to make; in this respect, Haugen (1954: 380) is right in stating that 'the study of bilingualism is essentially the study of the consequences of second-language learning'.

²³ It is of note that Thomason has revised her perspective on the likelihood of shift-induced change, which in Thomason and Kaufman (1988: 51) is still deemed rarer and more common when simplification changes occur in the TL. In part, this change of heart is owed to the increase in data available for analysis; other considerations that may have altered her perspective include the consideration of 'markedness' as a factor, which has since been shown to be a poor predictor of structural interference (cf. Haspelmath 2006; Meyer 2019; Thomason 2008).

²⁴ See Myers-Scotton (2002: 188) with discussion and bibliography.

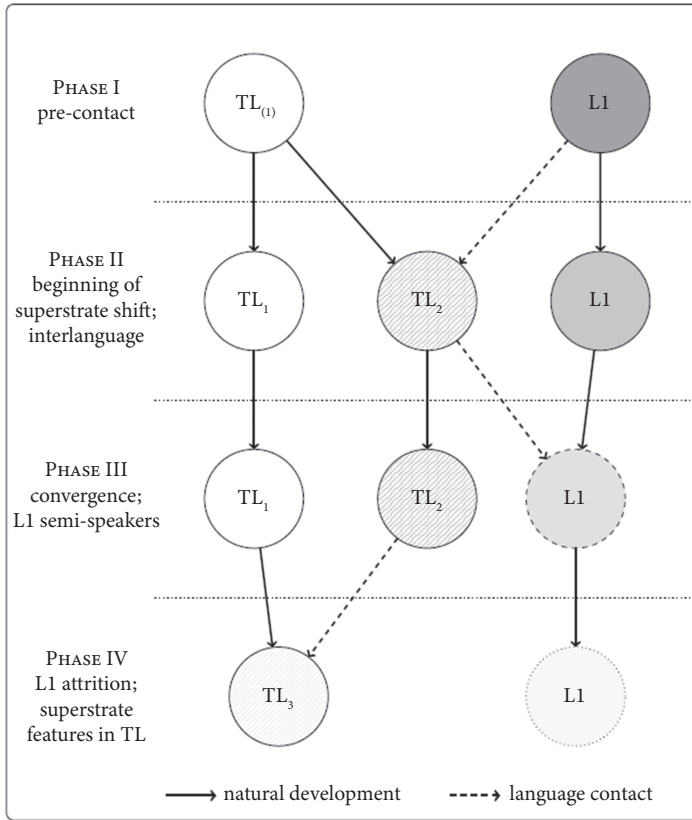


Figure 7.1 Simplified superstrate language shift schema

Language shift, here of a superstrate, occurs in distinct phases. Phase I represents the languages in their unaltered, pre-contact state. In phase II, L1-speakers learn the TL, and through imperfect learning and/or pattern replication create an interlanguage TL₂; their L1 remains constant. Phase III sees the rise of importance of TL₂ for L1-speakers, and not all speakers acquire L1 fully or without interference; L1 converges towards TL₂. In phase IV, finally, TL₁ and TL₂ merge into TL₃ as former L1-speakers integrate fully into the TL society; L1 may live on as a heritage language, or disappear entirely.

meanings in the replica language. Accordingly, we are dealing—at least to some extent—with a creative process. (Heine and Kuteva 2008: 77; 2005: 37)²⁵

²⁵ Some scholars still maintain, however, that structural features are not transferred in contact situations; Silva-Corvalán (2008: 221) suggests that, while externally caused change does occur, ‘every change allowed appears to be constrained by the structure of the affected language’. It is unclear, however, how this suggestion can hold up in view of the adoption of e.g. agglutinative morphology and differential object-marking from Turkish in Asia Minor Greek (Dawkins 1916; Thomason and Kaufman 1988: 219–20; Janse 2004; Janse 2009a;b; Karatsareas 2011; 2016), or ergative alignment in Northeastern Neo-Aramaic on the model of local Sorani dialects (cf. Khan 2004; 2007; Meyer 2019). For other sceptical views, see also Sankoff (2013: 509); King (2000); Prince (1988). That being said, language-internal factors do, of course, play a role in the borrowing process and can promote it (as e.g. argued for Asia Minor Greek by Karatsareas 2016).

A similar thought is expressed in [Thomason \(2007\)](#), namely that contact-based language change, i.e. the adoption of non-TL features into the TL, can be deliberate; potential motivations for the replication of grammatical structures, both social and linguistic, are discussed in [7.1.3](#).

Particularly in corpus languages which also show heavy lexical borrowing, it is impossible to account for the path of origin of grammatical patterns that are likely to have arisen through contact, at least on the basis of linguistic data alone ([Thomason 2003: 693](#)). The grammatical patterns could have found their way into the TL either through borrowing by native TL speakers; through non-native speakers shifting into TL, accompanied by structures from their L1; through a mixture of the two; or in a number of different other ways. The potential scenarios cannot be differentiated neatly by the involvement of bilingualism either, since borrowing frequently but not necessarily involves bilingual speech communities without a clear dominant language, whereas structural interference without lexical borrowing, e.g. in a shift situation, usually involves L2 acquisition, resulting in bilingualism, but can arise in other ways as well.²⁶ Furthermore, if, in a shift scenario, the shifting speakers are numerically in the minority but sociopolitically dominant (as in post-Conquest Britain—a so-called ‘superstrate shift’), heavy lexical borrowing in the TL may accompany phonological and syntactic loans ([Thomason 2008: 48](#); [Thomason and Kaufman 1988: 306–9](#); also see [7.2.1, 7.3.1](#)).

7.1.2.3 Mechanisms of structural interference

Before proceeding to the specificities of the Armenian situation, it is worth having a closer look at the mechanism by which structural interference occurs in bilingual speakers, and subsequently in contact situations, in order to be able to judge whether the changes suggested for the Armenian periphrastic perfect fit this model.

The borrowing of syntactical structures, in particular by pattern replication, from one language to another, when occurring in bilingual speakers of those languages, is a language-processing mechanism which involves ‘identifying a structure that plays a pivotal role in the model construction, and matching it with a structure in the replica language, to which a similar, pivotal role is assigned in a new, replica construction’ ([Matras and Sakel 2007: 830](#)). This process, called ‘pivot-matching’, results in a replica construction that on the whole respects the structural constraints of the replica language and does not usually involve matter replication, i.e. borrowing, as well ([Matras 2009: 26–7](#)).²⁷

²⁶ [Thomason \(1997: 199\)](#) makes the case that where a shifting group imperfectly learns the TL, resulting in a modified TL₂ variety, TL₁ may adopt features of shifters’ language based on passive familiarity alone. In that sense, TL₁ speakers are not bilingual in TL₂, and actually borrow the patterns in question.

²⁷ [Matras and Sakel \(2007: 832\)](#) suggest that the reason for the occurrence of pivot-matching and pattern replication lies in the ‘syncretisation, in the two languages, of the mental procedures that map

Pivot-matching, and thus pattern replication, is driven by a number of forces, especially formal linguistic, psychological, and social. For the development of the replica pattern, however, the most important factor is that of polysemy or poly-functionality copying, which may be defined as ‘the potential of a structure in the replica language to cover the (lexical or grammatical) semantics represented by the model’ (Matras and Sakel 2007: 852; see also Heine and Kuteva 2005: 100; Heine 2012). Here, the bilingual speaker identifies a structure in the TL that shares some semantic or functional features of the model construction in the source language, and extends its usage to match one or more source-language features.²⁸ This extension frequently brings with it an increase in frequency of usage of the TL construction chosen as the basis of the replica for the source-language model, and an extension of the contexts in which said TL pattern is used.²⁹

A succinct way of representing this mechanism more generally is the following three-step scheme (with R being the replica or target language, and M the model language; see also Heine and Kuteva 2003: 533):

- (1) speakers of R recognize in M a grammatical category Mx which does not exist in R, and a related category My, which has a parallel Ry;
- (2) R speakers draw on universal grammaticalization strategies to develop Ry into Rx;
- (3) A variation of Ry is grammaticalized as Rx.

A number of aspects of this process are worth commenting on.

First of all, although steps (1) and (2) may suggest that this mechanism is employed to fill a gap in the replica language system, this decidedly need not be the case (*pace* Winter 1973: 138), as numerous examples show the creation of redundant use patterns and categories.³⁰ Given that the first occurrence of such replicated patterns is commonly found in bilingual code-switching or interference, the creation of redundant patterns is really an attempt at economizing linguistic processes (see 7.1.3).

abstract operations’; that is to say, the bilingual speaker has extended the use of a syntactic pattern belonging to the model language, and now uses it in the replica language as well, thereby relaxing to some extent the degree to which their two linguistic repertoires are separated. See also Figure 7.2.

²⁸ ‘Structure’ can include morphemes as well as syntactic relations; for the former; see Heine and Kuteva (2003: 544–5); Haig (2001: 214–16); for the latter, see e.g. Elšik and Matras (2006: 84).

²⁹ Examples of this type of development include the extension of the Basque comitative case to cover both comitative and instrumental functions on the basis of a Gascon model (Haase 1992: 67; Ross 2007: 124–5); the use of reduplication of verb, noun, or adjective for numerous purposes in Singlish (Singapore English) based on such usage in locally significant varieties of Chinese and Malay (Ansaldò 2010: 510–12); and the creation of a new grammatical category (a periphrastic *going to* future) in American Yiddish on the basis of the English model (Rayfield 1970: 69; Romaine 2010: 331) This type import is often referred to as a ‘minor use pattern’ (Heine and Kuteva 2005: 45) or ‘latent construction’ (Koptjevskaya-Tamm and Wälchli 2001: 626) turning into a major use pattern.

³⁰ An example of the creation of such a redundant pattern is the rise of a ‘come’-passive in Maltese on the basis of Italian, although the language has other passive constructions (Drewes 1994: 95–6; Heine and Kuteva 2008: 69–70).

Secondly, steps (2) and (3) are separated by a rather large gap; the first two steps in the process occur in the individual speaker, and account for the first inception of new grammatical structures, whether contact-induced or otherwise. The final step, however, requires the adoption of such a novel use pattern or category by a speech community. This final step is, accordingly, not only the result of linguistic processes, but also reliant on social and environmental factors in the speech community.

Finally, despite pivot-matching and polysemy copying, the outcome of the above process need not yield a pattern Rx that is isomorphic with Mx, i.e. there is no principled necessity for a one-to-one correspondence between the morphemes of the equivalent lexemes; rather, as [Matras \(2009: 247\)](#) puts it, ‘each [expression] is created within the rules of its own self-contained system, but they share a general design.’³¹

7.1.2.4 Pattern replication in Armenian

In applying these criteria to the periphrastic perfect in Classical Armenian, it emerges without particular complication that the pattern replication mechanism outlined above is apt to describe the likely provenance of the construction. [Figure 7.2](#) provides a diagrammatic representation.

The model, as described in [Section 4.3.3](#), is evidently the participle-based past tense of the West Middle Iranian languages, which is Mx. Owing to the occurrence of the participle in the Iranian tense, which can be used as a passive–intransitive adjective (My; cf. [Durkin-Meisterernst 2014: 252](#); [Jügel 2015: 271–6](#) with examples), it is readily pivot-matched to the Armenian participle in *-eal* (Ry), which can be used in like fashion.³² With the pivot matched, the Parthian–Armenian bilingual is able to copy other patterns associated with the Parthian model (Mx) into Armenian, thus creating a finite perfect in that language (Rx). The latter pattern was eventually grammaticalized.³³

³¹ See also [Heine and Kuteva \(2003: 538\)](#); [Matras \(2010: 73–4\)](#). The latter gives as an example the rise of complementation in Macedonian Turkish, which unlike standard Turkish does not use an infinitive before a modal verb, but a subjunctive; as opposed to the pure Macedonian model, however, Macedonian Turkish has no overt complementizer, and thus the patterns are not isomorphic.

³² [Durkin-Meisterernst](#) notes, however, that the participle may also be considered indifferent to diathesis (see [Brunner 1977: 137](#)). [Jügel](#) expresses a similar view, and views Old and Middle Iranian *-to- participles as resultative in relation to the object, where present. Since the present study makes no claims regarding the specific semantics of the Armenian or Middle Iranian perfect, the encompassing, descriptive term ‘passive–intransitive’ is preferred and sufficient.

³³ The inverse has occurred in contact between Pipil (Uto-Aztecan family) and Spanish, during which the Pipil past participle, which previously was only used as part of a finite verbal phrase, acquired a new use pattern as an adjective on the model of the Spanish past participle ([Heine and Kuteva 2005: 54](#); [Campbell 1985; 1987](#)).

Overall, the process of pattern replication is comparable to that of loan shift or semantic extensions on the lexical level, where target language lexis acquires new meanings on the basis of parallels in the model language; such extensions include, for instance, NHG *realisieren* ‘to make real, to create’ being extended to also mean ‘to be aware, to notice’ on the basis of NE *realize*, or NE *star* ‘celestial

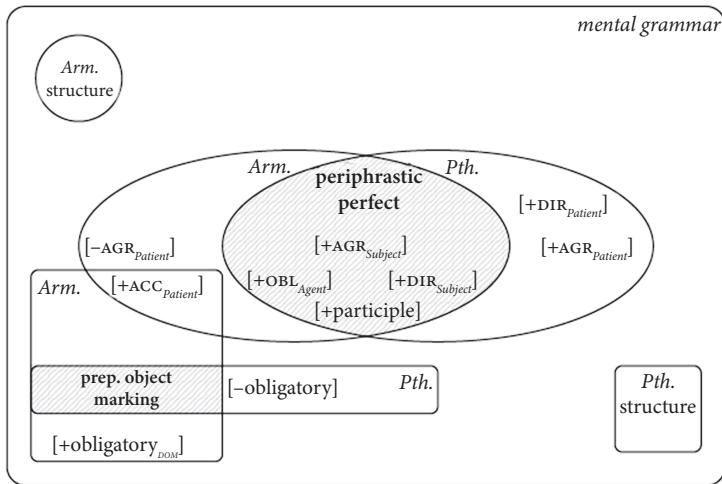


Figure 7.2 Pivot-matching in Armenian and Parthian

In the mental grammar of an Armenian–Parthian bilingual, pivot-matching may be represented by means of Venn diagrams. In Parthian, there are two syntagmata involving the participle: the past tense with the features [+participle, +DIR_{Subject}, +AGR_{Subject}, +OBL_{Agent}, etc.], and the usage of the passive–intransitive participle as an adjective. Since the latter pattern also exists in Armenian, the former is replicated into Armenian under adoption of some but not all features. Other structures, such as prepositional object-marking, interact with the replication process.

The same model can be applied to explain the choice of the genitive as the case of the agent; here, polysemy-copying is likely to rely on its function as possessive marker, in nominal phrases, enclitics, and in the West Middle Iranian ‘have’-construction (see 4.3.2.2.3, and cf. Durkin-Meisterernst 2014: 266–71; 370–71). Since oblique-marked forms are, however, rare and also fulfil a number of syntactic roles in West Middle Iranian, additional explanations of the choice of the genitive must be taken into account as well. It is in all likelihood also structurally motivated, since large-scale isomorphism in the Armenian oblique cases results in the undifferentiability of genitive, dative, and often ablative and their associated functions (e.g. appurtenance, recipient, origin-marking). Only the pronominal system (all personal pronouns; the singular of demonstratives, etc.) exhibits different forms. Therefore, the choice of the genitive is motivated not only by functional equivalence with its Iranian model, but by unambiguous and economic coding of grammatical functions as well (Meyer 2022b: 292–3). Furthermore, the Armenian genitive is the only case other than the locative without a structural function in the sentence, as it does not denote the direct or indirect object, passive agent, or instrument; it may therefore have been the default choice.

body; famous person, celebrity’ spreading its second meaning to references to celestial bodies in other languages, e.g. Heb. *kokhāv*, Russ. *звезда*, Finn. *tähti* (see also Bynon 1977: 237–9).

Whether the *nota accusativi* *z=* was equally modelled on the usage of *'w /ō/* in Parthian cannot be determined with any degree of certainty;³⁴ in view of the occurrence of non-marked objects in the Armenian periphrastic perfect, which most closely reflects the construction at the earliest stages of Middle Iranian, it would appear unlikely that *z=* and *'w /ō/* should be linked intrinsically.³⁵ Further indicators in favour of a separate Armenian development are the lack of other semantic parallels between *z=* and *'w /ō/*, and a clear functional difference, i.e. the use of *z=* to express definiteness.

The difference in the usage of the copula equally does not pose a problem for pattern replication. It needs to be remembered that in Parthian the copula only occurs in non-3SG forms, and that in Armenian overall, occurrences of the periphrastic perfect without the copula are more common (see 5.3.2.2.3, 5.3.3.3). Since 3SG objects, for which the copula is not used, are likely to be most common in both texts and speech, the pattern was in all likelihood replicated without copula in the first place. Such a development, as was explained above, is in keeping with other languages that have undergone an alignment change away from the ergative construction (see Section 4.2.3), and reflects the lack of an isomorphism constraint and the tendency for complex patterns to be replicated with differences or 'errors' (Matras 2009: 243; see also 7.1.2.2).

The statistics provided in Chapter 5 also indicate clearly that the periphrastic perfect constitutes a fully realized category in Classical Armenian, in that it is one of the main narrative tenses employed in literature and in its finite and converbal usage accounts for the majority of occurrences, as opposed to the inherited participial form. In contrast, the nascent usage of *-eal* participles as adjectives with an active meaning, which have arisen in analogy to the quasi-active form of the transitive perfect, is comparatively low, as predictable on the basis of its originally passive–intransitive nature.

The replication processes for Arm. *ink'n*, *(e)tē*, and the *ezāfe*-construction would have proceeded along similar lines. In the case of *ink'n*, however, it is difficult to know on which function of the West Middle Iranian model the Armenian was formed, since pre-contact data is unavailable. For reasons of frequency and etymology, however, it is most likely that the intensifier function was native to Armenian, as discussed in 6.2.3.

7.1.3 Intrinsic motivation of contact-induced change

The Armenian data leaves no doubt that Armenian has been in contact with Iranian languages for a considerable period. With the theoretical background

³⁴ The optional usage of Pth. *'w /ō/* in direct-object marking is discussed in 4.3.2.3.

³⁵ See Durkin-Meisterernst (2014: 332–3); Jügel (2015: 330–42). It ought to be noted again that the marking of the direct object in this fashion is not obligatory in Parthian.

concerning the mechanisms underlying the process of borrowing and interference having been discussed above, there remains one key question: why? What purpose or benefit motivates the adoption of syntactic patterns and other non-native linguistic features into a language?

As regards pattern replication, the main motivating factor is found in language-processing itself.³⁶ For a bilingual speaker, applying the same structures to both languages in their repertoire requires less cognitive processing than having to go through the necessary stage of assuring that the current language in use and the pattern in question are indeed co-indexed (Kühl and Braunmüller 2014: 19; Myers-Scotton 2002: 190–91; Matras and Sakel 2007: 832). The lessening of the psycholinguistic burden on the speaker further allows them to ‘exploit [...] the full potential of [their] linguistic repertoire’ (Matras 2009: 5), so that pattern replication can be motivated by ‘a reduction in the tension surrounding certain language processing tasks’ (Matras 2007: 69). A strong but well-supported phrasing of this motivation can be found in Myers-Scotton:

structural pressure[s] within the system of language in general [tend] toward a single unified source of abstract lexical structure. [...] nature abhors the structural variation that bilingual speech introduces [...] The push is toward a unified source of the abstract grammatical frame (Myers-Scotton 2002: 297)

which need not derive from one language alone. While this drive may manifest in adult speakers, e.g. through regular code-switching and eventual grammaticalization, pattern replication is most common, creative, and thus productive in (pre-)adolescents (Ross 2013: 26–7), who in acquiring the speech habits of their parents may (begin to) grammaticalize their idiosyncrasies, but equally creatively use patterns from both languages in the other language.³⁷

Figure 7.2 (see Höder 2014: 45–6) shows the mental grammar of a hypothetical speaker of Classical Armenian and Parthian with reference to the periphrastic perfect. There is a clear set of items co-indexed solely with one of the two languages, while the formation of the perfect is unindexed, and thus applicable to both languages. Other structures, such as object-marking, do not have a clear index; this is to indicate that similar structures exist in both languages, but that the available data do not allow any judgement concerning their potential influence on one another.

³⁶ In fact, Pienemann et al. (2005: 147) suggest that empirical evidence points towards processability as one of the key constraining factors on L2 transfer, which can override typological distance; cf. Meyer (2019).

³⁷ A child during language acquisition learns to differentiate appropriate contexts for language use and will, all being equal, use the form co-indexed with the context. Where this is unavailable, unknown, or less readily retrieved than an isofunctional or synonymous form, the bilingual child may use a form counterindicated by context, thus filling the gap or easing the mental processing load (Matras 2009: 65; Müller 1998). This is a natural and sensible strategy, particularly in view of the fact that the child speaker has no abstract notion of a language’s grammar, and may not yet have acquired an index for the pattern or item in question.

The choice of the Parthian structure as the model, as opposed to using, for example, the Armenian aorist, is likely rooted in a number of factors. One is the existence of a matching pivot (the participle) in Armenian; another is the dominance of Parthian as the L1 of first-generation bilingual speakers, and the bilingual but possibly linguistically biased upbringing of children in later generations.³⁸

Cognitive processing efficiency can, however, only be one motivating factor, which in turn is constrained by the need for communicative clarity. For although pattern replication, synchronically in code-switching or through L2-acquisition mistakes, may lead to more efficient language-processing, it need not result in more efficient communication, especially when the addressee is unfamiliar with the model pattern.

Another important factor therefore is constituted by the prestige of a particular language, and whether learning or acquiring this language is seen as politically, socially, economically, etc. advantageous enough (Myers-Scotton 2002: 34). In view of the fact that structural interference of the kind that occurred in Classical Armenian is frequently associated with sociopolitically motivated language shift (cf. Myers-Scotton 2002: 22), and given that, locally, Parthian is likely to have been a minority language, even if that of a politically dominant speech community, the Armenian language must have had a very particular appeal.

7.1.4 A social-primacy approach to language contact

The reason to assume that social (and with it political) considerations are key in explaining and, to a very limited extent, predicting language contact phenomena lies in synchronic observations, e.g. of code-switching and diglossia. The retention and usage of local dialects, for instance, has been linked to the notion of *Ortsloyalität* (roughly *sense of place*); small, close-knit communities are, among themselves, more likely to make use of their local dialect rather than the standard language, not because of communicative necessity but rather as a means of identification with their community (Mattheier 1985; Tældeman 2010). Such a dialect can be said to have covert prestige, in that it does not associate the speaker with an economically, politically, or otherwise powerful speech community, but rather with a small, select group that wish to set themselves apart for a variety of reasons.

The use of one language over another in a specific context is therefore often a distinct choice and can be 'bound up with the identity which a person is seeking to

³⁸ Matras (2009: 23, 61) points out that 'dominance' is not an absolute term, but varies according to speaker, environment, and time. A more general dominance of one language in a bilingual society can, of course, arise through institutional backing or social norms (2009: 45). In individual speakers, the development of a dominant language depends on multiple factors; depending on circumstances, however, shifting speakers' descendants not infrequently develop a more positive attitude (and thus dominance) towards the public, majority language as opposed to the heritage language spoken at home (see Bolonyai 2009: 258 with references).

project on a particular occasion’ (Adams and Swain 2002: 2);³⁹ accordingly, language choice can vary with time, social context, and addressee, and with it varies the degree of impact that one language has on the other in a bilingual speaker and speech community.⁴⁰

This often conscious and deliberate use of different languages by bilingual speakers on a synchronic level also has an influence on the diachrony of the languages involved, especially as language shift enters the picture. Since prestige, particularly in the guise of economic and political power, is desirable, ‘it is necessary to display appropriate linguistic and cultural knowledge [of the prestigious language] in order to gain access to the game’ (Heller 1995: 160). In shift situations, where the first generation may be expected to acquire the language in post-adolescence, and therefore potentially imperfectly, the potential influence of the shifting speakers’ L1 on the newly acquired L2 may be twofold: synchronically, it may, through pattern replication and similar mechanisms, leave structural traces in the TL by creating TL₂,⁴¹ which diachronically remain in TL₂ through the process of language acquisition of the second generation. TL₂ brings with it a new identity associated with that language.⁴² If the standard TL₍₁₎ is sufficiently accepting of the shifting speakers and is not too highly regulated, adoption of the shifting speakers’ variety of TL by native speakers is a possibility (see Figure 7.1).

While the filling of gaps and economies in cognitive processing are the underlying, more or less unconscious factors that motivate the usage of non-native patterns, they are unlikely to have any impact on language use unless the social factors in the bilingual speech community in question are conducive. If a language is highly regulated, or foreign-seeming material and patterns are disfavoured owing to social or political pressures, contact-induced change originating in bilinguals will be either entirely lacking, or restricted to a small, particular speech

³⁹ ‘Occasion’ here refers both to what Fishman calls domains (work, family, friends, etc.), and individual communicative situations. In largely multilingual societies, such as in Belgium or Switzerland, different languages may be required or appropriate for different domains; but a particular situation might warrant an exception to those rules, e.g. discussing local sports news with work colleagues and thus code-switching or code-mixing with the language or variety that is normally associated with that subject, rather than speaking the language they would use for communicating at work.

⁴⁰ See e.g. the different communicative habits of Russian–Hebrew bilinguals in modern Israel, which Gasser (2015) describes as differing according to identity and language attitude of each speaker generation.

⁴¹ For issues of imperfect language learning in adults in this context, see Ross (2013).

⁴² The idea that language and identity are closely interconnected is not new (see e.g. Fishman 1971b: 566–8; Myers-Scotton 2002: 262). It is notable, however, that the creation of mixed languages, as mentioned already, is often associated with the adoption or creation of a new identity (Thomason 2003: 707; 2007: 50), and can in certain circumstances adopt an iconic status or be associated with a particular ideology as well. Specifically the concept of *iconization*, i.e. the association of ‘linguistic features that index social groups or activities [... as] iconic representations of them’ (Irvine and Gal 2000: 37) is relevant in the present context, as the Arsacids may have ‘iconized’ Armenian as a language without ties to the rival Sasanian Empire (as opposed to their native Parthian), and (at least some) Armenians in turn may have adopted the Parthian shifting speakers’ version of Armenian as that of the prestigious ruling class; for a further discussion, see Chapter 3 and 7.2.1.

community. Conversely, where one language enjoys particular prestige,⁴³ and bilingualism is widespread, economizing, gap-filling, and other contact-related replication processes may be actively encouraged.⁴⁴

Consequently, the right sociopolitical situation must be considered the primary constraint and equally motivator for the propagation of contact-induced change, particularly in diachrony. If synchronically code-switching, code-mixing, and pattern replication are permissible in a speech community, then—and only then—can grammaticalization processes begin; these are accompanied by formal linguistic considerations such as typological distance and pattern frequency, and in diachrony determine the grammaticalization path (or lack thereof) of a replicated pattern.

For a pattern to be replicated, grammaticalized, and retained over time, then, the sociopolitical situation must be such as to allow for it in principle; the replicated pattern must fulfil a purpose (economy of expression; filling a perceived gap; or another communicative purpose), fit within the grammatical system of the replica language, and be used sufficiently frequently to spread across the speech community (cf. Meyer 2019). In other words, the grammaticalization and retention of contact-induced change is dependent on three factors: a continuously favourable sociopolitical situation in the bilingual speech community; a good typological fit of the model pattern in the replica language; and the frequency of replica pattern use. These factors are independent, but all interact with the grammaticalization and retention process, as Figure 7.3 illustrates.

In summary, Thomason's assertion that 'the social relations between the two speech communities, not the structures of their languages, determine the direction and even the extent of interference' (Thomason 2008: 53; see also Myers-Scotton 2002: 193; Poplack 1997: 285) is valid, but must be amended insofar as structures can determine what is or is not to be replicated. At the same time, her warning concerning the limitations of social factors as necessary but not sufficient conditions for structural interference must be borne in mind, together with the caveat that 'whether [interference] occurs or not depends on cultural factors that are likely to remain permanently beyond our predictive grasp' (Thomason 2007: 58; see also Heine and Kuteva 2008: 77).

⁴³ As pointed out already, prestige or dominance can but need not be associated with an elite status or the size of a speaker community (Matras 2009: 46, 220); as illustrated by the concept of *Ortsloyalität* mentioned above, and the case of Angloromani, small, covertly prestigious groups can be equally influential; the same is true for secret languages or jargons as have historically developed among certain layers of society in Germany under the cover term *Rotwelsch* (cf. e.g. Efung 2005). Conversely, a large but politically subordinate speech community can become dominant under the right sociopolitical circumstances, e.g. in the case of Middle English in post-Conquest Britain in spite of the Norman French ruling class (see 7.3.1).

⁴⁴ These are, of course, extreme situations, and a number of scenarios lie in the middle.

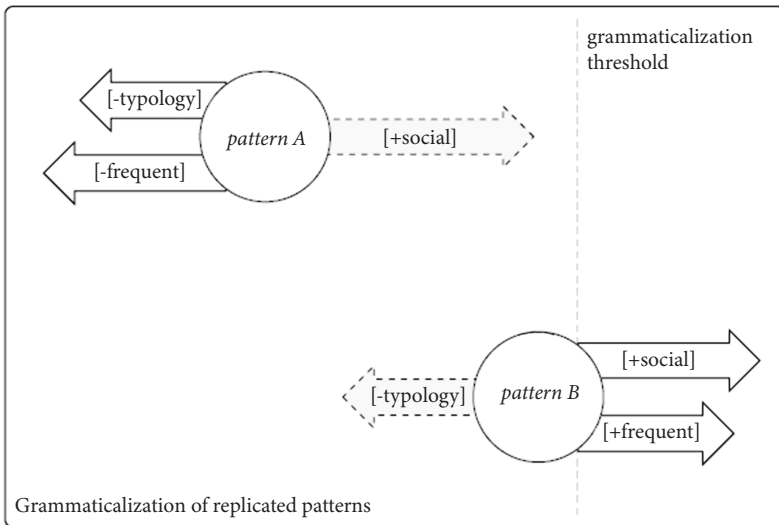


Figure 7.3 Contact-induced grammaticalization

Once a pattern is replicated through code-mixing or switching, it enters the grammaticalization process. Success or failure of grammaticalization of a replicated pattern depend on a number of independent factors, including: typological fit of replicated pattern with replica language; usage frequency of the pattern; and sociohistorical circumstances. Only if one or more of these vectorial factors is sufficiently strong does grammaticalization take place.

Coming back to the situation in historical Armenia, the data presented in Chapter 5 clearly indicates that the periphrastic perfect as a pattern was in use frequently enough in Classical Armenian,⁴⁵ and was the only past-tense formation in the West Middle Iranian languages. Frequency, therefore, is likely to have favoured the grammaticalization of the replicated patterns as suggested above. Likewise, pivot-matching was sufficiently successful, and the typological mismatch regarding the grammatical marking of constituents small enough not to impede grammaticalization in the first place.⁴⁶

⁴⁵ This frequency relates, of course, only to written text, and no estimations can be made whether it would have occurred at a similar rate in spoken discourse. If modern languages which have both synthetic and analytical past tenses are an indicator, however, it is likely that the periphrastic form would have been frequent then, too, with the potential of ousting synthetic forms; cf. the tendency for *Präteritumsschwund* in European languages (Abraham 1999; Drinka 2004).

⁴⁶ The mismatch between constituent-marking in the perfect as opposed to the rest of the verbal system would, however, still have constituted a counterforce to grammaticalization. It was not strong enough to prevent it, owing to frequency and sociohistorical circumstances, but is likely to have played a significant role in the alignment change of the originally ergative construction, first into a tripartite and finally into a nominative–accusative pattern.

7.1.5 Summary

This section has shown in some detail the practical and theoretical considerations that underlie language contact studies, and has attempted to relate them to the situation of Classical Armenian and Parthian.

It has been suggested that owing to the lack of a satisfactory explanation of all the grammatical features of the periphrastic perfect based on Armenian-internal changes and developments alone, a language-contact approach is sensible (cf. [Poplack and Levey 2010](#)). Although the Armenian data does not offer any synchronic signs of code-switching or code-mixing, the amount of lexical, phonological, and derivational morphological loans from Parthian and Middle Parthian leave no doubt that language contact over an extended period of time and with some intensity must have taken place. This is corroborated, of course, also by the pre-[Hübschmann](#) perception of Classical Armenian as an Iranian language.

It has been emphasized that there are a set of different scenarios that might explain the precise situation that led to the pattern replication of the periphrastic perfect described here: language maintenance in [Thomason and Kaufman](#)'s terms, suggesting that bilingual Armenians adopted the Parthian model on their own accord; language shift, i.e. the decision of native Parthian speakers to acquire Armenian for communicative purposes, and the subsequent imperfect learning of Armenian syntax, resulting in the 'sneaking in' of the perfect construction; or grammaticalization of code-switching habits of proficient bilingual speakers.

The possible scenarios raise the question of the motivation of and constraints on contact-induced change. It has been argued above that, a priori, there are no intrinsic linguistic constraints on contact-induced change at a synchronic level, i.e. code-switching and the like, and that typological factors only come into play at the grammaticalization level, where they interact with (and thus can be overruled by) other factors, especially frequency and sociohistorical context.

With the theoretical background provided here and its application to the Armenian situation in mind, the next section proposes in some detail a historical delineation of the contact dynamics between Parthians and Armenians in and before the 5th century.

7.2 A new perspective on Arsacid Parthian and Armenian

While no contemporary literary and epigraphic evidence gives any direct indication as to the linguistic situation obtaining in the Armenian kingdom in and before the 5th century CE, certain aspects of contact, however, can be gleaned indirectly from the historiographical texts. The story of the discourteous stablemaster (see [3.2.2.1](#)), for instance, suggests that some individuals of rank clearly spoke an Iranian language, in the same way that the story of the priests imprisoned

at the Sasanian court demonstrates that this is unlikely to have applied to society as a whole, thus answering in the negative one of the questions posed in Section 3.2.2 namely whether all Armenians were bilingual and spoke Parthian or Middle Persian.

Equally, the literary evidence does not allow any clear pronouncement on the question of diglossia. Owing to the lack of contemporary Parthian documents, and the absence of code-switching or code-mixing in the Armenian evidence, there is no indication that either language was restricted or favoured in any particular context. That does not mean, however, that there was no diglossia; it is possible, if not demonstrable, that the ethnic Armenian members of the ruling classes, i.e. the *naxarars* and their kin, would have spoken Armenian themselves and with their respective families, but would have preferred—or been made—to use Parthian as the main means of communication with the Arsacids. Such a situation, with diglossia but very restricted bilingualism, would not be uncommon in societies ruled by extraneous powers (Fishman 1971a: 544–16). It will be suggested, however, that diglossia is unlikely to be necessary to explain the Armenian situation.

Instead, numerous factors in the shared history of Arsacid Parthians and Armenians suggest that a language-shift scenario is more likely, in which the numerically smaller group of Parthian-speaking nobility and their entourage in Armenia shifted to speaking Armenian after the fall of the Parthian Empire. The benefits of such an approach, as opposed to assuming a case of language maintenance, are discussed. With this in mind, and taking into account the lexical material presented in Chapter 2 and the findings of Chapters 4–6, a polyphasic model of Armenian interactions with the Iranian languages in general, and Parthian, in particular, is then proposed. To corroborate the plausibility of the proposed superstrate shift and of the type of syntactic changes effected by the pattern replication of the Parthian past tense in Armenian, three comparanda are adduced: the case of Norman French superstrate shift in post-Conquest Britain; and two instances of pattern replication with an Iranian model-language leading to partial alignment changes in the affected contact language.

7.2.1 An Arsacid superstrate shift

As set out in 7.1.2, syntactic change of the kind observed here can, in theory, arise both in a contact situation qualified as language maintenance, in which lexical borrowing is the most typical manifestation, and in a language-shift scenario, where a group of non-TL speakers acquires TL in addition to their native tongue, often accompanied by phonological and syntactic features of the shifting speakers' L1 into the TL. The latter analysis, it will be argued, is more suitable to explain the case of Classical Armenian for both linguistic and sociohistorical reasons.

On the linguistic level, both maintenance and shift are in principle possible, since sufficient time and intensity of contact allow for lexical, phonological, and syntactic loans into the TL in both cases. In fact, [Thomason and Kaufman \(1988: 122–3\)](#) warn that in shift situations where the shifting group constitutes only a very small number of people, the likelihood of adopting their learners' errors into the TL are very low. Is it then more reasonable to assume pattern replication etc. under maintenance, without shift?

For a number of reasons, the answer must be no. The prime linguistic factor that suggests language shift is the kind of syntactic material replicated, namely what [Thomason and Kaufman](#) refer to as 'marked' features, or what might more generally be called an element that does not fit the TL's typology, in the Armenian case specifically the originally ergative alignment of the periphrastic perfect. As suggested in [7.1.2.2](#), the replication of patterns in most instances involves bilingual speakers extending the use of a non-TL construction to the TL by pivot-matching; this may, but need not, involve imperfect knowledge of the TL. Following the two options offered by [Thomason and Kaufman \(1988: 51–2\)](#), the rise of the periphrastic perfect must either be attributed to Parthian native speakers employing a native construction in their L2, Armenian, no matter whether by choice or mistake; or understood as involving a group of balanced Armenian-Parthian bilinguals who imported the pattern in the same way.

What makes the second scenario less likely is the level of bilingualism required; to replicate such a pattern from Parthian, either the individual would have to have equal proficiency in both languages involved, probably the result of fairly balanced bilingual upbringing, or Parthian would have to be their dominant language, with the acquisition of Armenian commencing later than that of Parthian—that is exactly the setting of the shift scenario. Given that linguistic innovations of this kind are more likely to arise and settle in (pre-)adolescence (see [7.1.3](#)), a language maintenance situation would accordingly require a not inconsiderable group of Armenian youths being brought up to speak both languages equally well, and to carry sufficient prestige for their version of the TL to be adopted.

In this case, however, the expectation might be that such replicated patterns would remain spontaneous cases of code-switching, in which a child engages prior to the full indexing of the construction and relevant language in their mental grammar (cf. [Matras 2009](#)).⁴⁷ Taking into account contact with non-bilingual speakers, and their probable standardizing influence, it appears less likely that complex replicated patterns should have stabilized in and spread from such speakers. Another factor to take into account is the likely number and social standing of such

⁴⁷ As [Meisel \(2011\)](#) notes, transmission failure, i.e. the imperfect L1 acquisition of children, is rarely the cause of considerable language change. Conversely, weaker L2 bilinguals—whether owing to imperfect acquisition or to attrition—are more likely to apply L1 patterns in L2, as the over-usage of overt subjects in less proficient Spanish heritage speakers shows ([Montrul 2004; 2008: 184](#)).

speakers; while intermarriage did exist, as described above, it is doubtful that it would have produced balanced bilinguals.⁴⁸

Next to this primarily linguistic observation, the main arguments in favour of a shift of Parthian speakers to Armenian stem from the sociohistorical context suggested above. Here, the three main conditioning factors are the establishment of a hereditary Arsacid dynasty, Christianization, and enmity with the Sasanians.

Iranian–Armenian contact had been established for centuries before the Arsacid rulership of Armenia became truly hereditary, i.e. was passed on from father to son or closest living relative; this tradition only commenced with Xosrov I (r. 198–217 CE), who had inherited the throne from his father, Valarš II, and passed it on to his son Trdat II. The establishment of a hereditary dynasty, together with the existence of other Armenian noble families of Parthian origin, and the fall of the Parthian Empire in 224 CE gave rise to the creation of a new centre of life, activity, and identity for the Arsacid rulers of Armenia.⁴⁹

Notably, the use of Parthian as an inscriptional language subsided with the end of the 3rd century,⁵⁰ and on the political level, too, it is evident that it lost its importance soon after the establishment of the Sasanian dynasty.

The fall from power of the Arsacids outside of Armenia and the subsequent establishment of a permanent domain in Armenia resulted in the tightening of ties with the Armenian *naxarars*, exemplified both in intermarriage and the *dayeak* system (see 3.2.2.2), but most importantly in the conversion to Christianity of the entire ruling class.⁵¹ Marriage and exchange of wards were, as noted, clearly intended to cement political ties between the noble families, but equally provided ample opportunity for linguistic exchange. Christianization, on the other hand, not only bound ethnic Armenians and Parthians more closely together, but also created a significant difference between the Arsacids and their Parthian cousins in the Sasanian Empire and elsewhere.

As detailed above, the political and religious ties between Arsacids, Armenians, and the Roman Empire resulted in frequent and often long-lasting hostilities between Armenians and Sasanians. Taken together, these factors present a clear motivation for the Arsacid Parthians and other families of like origin in Armenia to

⁴⁸ Grosjean (1989; 1998) points out that the number of truly balanced bilinguals is very small. Typically, one or other of the two languages is stronger, and he suggests that function and knowledge of either language differs on an individual basis; see also Montrul (2008: 18).

⁴⁹ As noted, the Parthians did not entirely lose their political influence in the Sasanian Empire, but Armenia was and remained a different polity, with close ties to the Graeco-Roman world.

⁵⁰ As Durkin-Meisterernst (2014: 3) points out, dating the ‘death’ of Parthian as an active language is difficult. Christensen (1930: 4–5) and Ghilain (1939: 28) suggest a *terminus post quem* of the end of the 4th century, whereas Henning (1947: 49) and Sundermann (1986: 279–280) suggest the 6th century CE; Durkin-Meisterernst opts for the 7th century as the date of last native production. Parthian clearly survived for at least this long as the liturgical language of Manichaeism in the East, as the Turfan documents attest, and may have continued to be spoken locally in the Parthian heartland and to some extent along the Silk Road.

⁵¹ Notable relapses like that of King Pap may be discounted, as they had little overall effect.

create, or rather adopt, a new, Armenian identity. The lack of significant epigraphic evidence, the well-established strong influence of Parthian on the Armenian language, and the sociopolitical situation described all suggest that this new identity was tied to the Armenian language, and in the long run disfavoured Parthian.

Such superstrate shifts are rare, since it is more common for the politically and socially weaker stratum of a society to adopt the language of the more powerful one, regardless of their numerical proportions.⁵² Nonetheless, such changes are attested, e.g. in post-Conquest Britain (see 7.3.1) when Norman speakers shifted to Middle English owing to the fall of the Angevin Empire, or in the case of Cushitic-speakers shifting to Ethiopic Semitic (Leslau 1945: 79–81). Next to the phonological and syntactic interference typical of such shifts, they can bring with them significant amounts of loan words (Thomason and Kaufman 1988: 68–9, 116), which is uncommon for substrate shifts. Given the political and social situation delineated in this chapter, it stands to reason that in the case of Parthian–Armenian contact, too, such a shift has taken place.

At the same time, owing to the lack of linguistic and literary evidence predating the 5th century CE, it remains impossible to determine with any degree of certainty when or how such a shift set in. In view of the momentous changes in Parthian–Armenian–Sasanian relations that stretch throughout the 3rd century CE, however, this period appears to be the most plausible *terminus a quo* for the onset of a shift from Parthian to Armenian. Lexical borrowings, especially regarding mainly non-basic loans typical also of language maintenance situations, may very well have occurred earlier, whereas basic vocabulary and loans in the closed classes could first have made their way into Armenian in the shifting period.

Like the timing of this shift, it is difficult to determine the process by which it came about. For the reasons given in Section 7.1.2.2, it is inevitable that more than one generation of speakers was involved, that those speakers were, at least to begin with, unbalanced bilinguals with Parthian as a dominant language, and that their integration into and status among the Armenian speaking community warranted assigning their idiolect (TL₂) sufficient prestige for adoption as the general language of court. A possible scenario reflects that summarized in Figure 7.1: generation 1 of Parthian speakers, who have to one degree or another acquired Armenian with some, but not perfect, proficiency, ‘decide’ that Armenian will be the main mode of communication henceforth.⁵³ Their offspring, generation 2, are initially brought up with Parthian as their heritage language, and come into contact with Armenian either in the context of residing with their *dayeak*, acquiring the Parthian–Armenian idiolect of their parents, or both; in either case, the onset

⁵² This need not necessarily mean language shift, of course, but may result in bilingual diglossia, e.g. where covert prestige and *Ortsloyalität* lead to the retention of local variations or languages in smaller speech communities; see 7.1.4.

⁵³ This ‘decision’ may even have arisen out of necessity, since it is unclear whether all *naxarars* would have spoken Parthian.

of bilingualism is likely to be no earlier than in late childhood or early adolescence, leaving Parthian in the position of dominant language in the formative years.

Generation 2, or a subsequent generation, in their lifetime would have shifted to Armenian entirely, speaking either the idiolect of generation 1, or their own Parthian-influenced version of Armenian. Owing to their sociopolitical position, their usage—including code-switching into Parthian in Armenian conversation, and the use of Parthian patterns such as the periphrastic perfect—is in time adopted by native Armenian-speakers of the ruling classes as well, and crystallizes as the Classical Armenian used in 5th-century literature. The shift sequence accordingly is $L1 \rightarrow L2 = TL$ with the subsequent creation of idiolectal, Parthian-influenced TL_2 and, in time, a convergence (through borrowing and further shift) of native Armenian TL_1 and Parthian-influenced TL_2 into Classical Armenian as TL_3 .

The crystallization of Classical Armenian as a result of a Parthian shift in itself requires a borrowing process on the side of native Armenian-speakers (Thomason 2003: 692), a process aided by at least some bilingualism among ruling-class Armenian families.⁵⁴ The picture painted here is inevitably a hypothetical and simplified abstraction; the process was likely more complex. Nevertheless, it represents the most coherent explanation in view of the fact that borrowing alone is unlikely to have led to the replication of such patterns as have been adopted, and is less well suited to explain the intrusion of Parthian basic lexical entries into Armenian.⁵⁵

In summary, the situation that presents itself as the best explanation of the lexical, phonological, morphological, and syntactic influence of Parthian on Classical Armenian is a shift of Parthian speakers to Armenian from, at the latest, the end of the 3rd century CE, accompanied by unbalanced bilingualism on both sides. This shift was the result of a number of sociohistorical factors, which have been acknowledged to be the primary motivators of contact-induced language change: the establishment of a hereditary dynasty of Arsacid Parthian rulers over Armenia under Xosrov I, the fall of the Parthian Empire and relegation of the Iranian Arsacids to second rank, the Christianization of Armenia, which included the Arsacid ruling class, and the subsequent political and religious rift

⁵⁴ It is well worth remembering that another instance of language shift is likely to have happened in the history of Parthian: with the invasion of the Parnians into Parthia after its secession from the Seleucid Empire in 247 BCE, the East Iranian invaders established a new dynasty in c.238 BCE under Arsaces I (hence Arsacid). The (not directly attested) Parnian language, however, only left traces in Armenian loan words, and was probably given up in favour of Parthian (Curtis and Stewart 2007; Lecoq 1986).

⁵⁵ Widespread and fairly balanced bilingualism among the ruling class remains another, albeit remote, possibility. Contact situations of this kind are prone to spontaneous pattern replication, and in fact to convergence in the narrower sense, namely the formation of a strongly mixed language. Problematically, however, there is no definitive extralinguistic evidence suggesting that all, or at least most, members of the ruling class were balanced bilinguals. As pointed out numerous times, some bilingualism on both sides must have existed, but need not have spread to the majority of speakers. Further, if both languages had spread so widely, at least some remnants of Parthian evidence on Armenian territory might be expected, however fragmentary; as discussed, this is not the case.

between Armenian Arsacids and Sasanian Iran, all of which resulted in frequent and long-lasting altercations between the two. Together with the marginalization of the Parthian language in the Sasanian Empire by the end of the 3rd century, the Parthian-speaking Arsacid ruling class, numerically in the minority, in time adopted Armenian as its main language of communication and as its new identity.

7.2.2 Advantages and disadvantages of a language-shift approach

Summarizing the data collected and suggestions made in the previous sections and chapters, the following aspects of Parthian–Armenian language contact support the language shift scenario just proposed:

1. The sheer number and spread of Iranian, and specifically Parthian, lexical items, as well as derivative morphology, in the Armenian lexicon.
2. The depth of lexical intrusion, i.e. the existence of Parthian lexical material in closed classes such as prepositions and numerals.
3. The occurrence of syntactic patterns in Armenian which are likely to have their origin in, or to have been influenced significantly by, Parthian models.
4. The sparsity of documentary evidence of the Parthian language in Greater Armenia, and the lack of multilingual documents, as well as the disappearance of Parthian from the region after the fall of the Parthian Empire.
5. The social dynamics and numerical relationship between the Parthian ruling class and Armenian nobility and the general populace.
6. The existence of at least two strata of Parthian loans, the latter of which may have been borrowed only after the beginning of the Parthian shift.

Neither of these aspects is sufficient to prove the occurrence of language shift. Taken together, however, and viewed in the sociohistorical frame of reference presented in Chapter 3, these factors speak in favour of a shift interpretation. This will become more evident in the ensuing comparison with the situation in post-Conquest Britain.

The only two disadvantages that this model presents are methodological. Owing to the relative paucity of data concerning the use of language(s) in the region and time in question, or indeed historical accounts detailing the process suggested, the idea that language shift occurred is neither verifiable nor falsifiable, barring the appearance of new documentary evidence. Secondly, it might be noted that a shift approach does not follow the principle of Occam's Razor in suggesting a sequence and coherence of historical events and linguistic processes that could be coincidental.

The first objection is irrefutable, but unfortunately inherent in linguistic and cultural research into languages and cultures of the distant past. The main rebuttal

to the second objection lies in the terms in which it is formulated: the historical events and linguistic processes described in the foregoing sections and chapters simply do not appear to be coincidental, and if viewed together suggest that the simple picture of Parthian–Armenian contact painted before is insufficient.

7.2.3 A polyphasic model of Iranian–Armenian contact

What follows is meant to paint a new picture of Iranian–Armenian language contact across time, taking into account the new findings presented and advocated above.

The first phase comprises all the developments that Armenian underwent after its separation from the other Indo-European languages, particularly Greek, but prior to the first influence from Iranian. No absolute dating of this pure Proto-Armenian phase is possible owing to the lack of data; logically, however, it cannot have ended before the first contact with the Old Iranian languages, i.e. the conquest of Armenia under Darius I at the end of the 6th century BCE. In terms of chronology of sound change, this phase cannot have ended before the rise of secondary⁵⁶ prothetic vowels (stage 14 by the reckoning of Kortlandt 1980: 103),⁵⁷ which the oldest layer of Iranian loan words exhibit.⁵⁸

Contact with Old Iranian yielded only a very limited amount of lexical borrowings, however, which occurred sporadically and possibly at different stages in the phonological development of Proto-Armenian. Commencing with this contact phase of Proto-Armenian, Iranian influence waxed and waned over the centuries, but never completely subsided. In all likelihood, there were two distinct stages in this phase: the first involved contact with speakers of Old Iranian, the second contact with speakers of Parthian. The transition between these stages is likely to

⁵⁶ The term ‘secondary’ here refers to prothetic vowels that did not arise from laryngeals e.g. Arm. *anun* ‘name’, cp. Gk. *ὄνομα*, Lat. *nōmen*, or Arm. *erek* ‘evening’, cp. Gk. *ἔρεβος* ‘darkness’, Skt. *rājas* ‘id.’, ON *røkkr* ‘twilight’. Secondary prothetic vowels occur before word-initial consonant clusters and *r-*, e.g. in Arm. *erek* ‘three’, cp. Gk. *τρεῖς*, Lat. *trēs*, or Arm. *elbayr* ‘brother’, cp. Gk. *φράτηρ*, Lat. *frāter*.

⁵⁷ Kortlandt’s account of the relative chronology of Armenian sound changes is here used as one potential sequence without further discussion; its use is only meant to illustrate time-scales and issues of contact times.

⁵⁸ Kortlandt clearly indicates that certain Iranian words have undergone Armenian-internal sound changes (his stage 21); he neglects to mention certain other phonological changes exhibited by Iranian loans, however, which indicate that contact may have begun earlier than suggested. It cannot be excluded, for instance, that contact with Iranian had begun somewhat before this stage, since loans like Arm. *partēz* ‘paradise’ must have occurred after the development of PArm. *p* > Arm. *p’* / *h* / *∅* (Kortlandt’s stage 10), but before PArm. **-d-* > Arm. *-t-*; similarly, the older stratum of Parthian loan words, which preserve Armenian-internal ablaut in tonic *oy*, pretonic *u*, etc., must have occurred before these diphthongs would have yielded just *u* (Kortlandt’s stage 13b). It is further of note that both Armenian and the West Middle Iranian languages underwent a stage of word-final apocope, which may or may not be coincidental.

have been gradual.⁵⁹ The rise of the Artaxiad dynasty in 189 BCE is not unlikely to have brought with it a potential for further linguistic influence from outside. Consequently, the end of this first contact phase of Proto-Armenian can only be a *terminus post quem non*, coinciding with the establishment of Arsacid rule over Armenia in 62 CE.

It is during this Arsacid phase of Proto-Armenian that the vast majority of lexical, morphological, and syntactic loans occurred. As suggested above, the fall of the Parthian Arsacid Empire, together with the establishment of a hereditary dynasty in Armenia and their subsequent Christianization splits this phase in two; more intense borrowing, specifically of core vocabulary and derivational morphology, but also pattern replication must have taken place in the second half of this period, once the Armenian Arsacids had been politically separated from the Sasanians.⁶⁰ If suggestions made in this chapter are correct, then the Parthian influence on Armenian must have ended at some point between the establishment of the hereditary dynasty under Xosrov I and the definite end of the Arsacid period in 428 CE, when Armenia was established as a Sasanian *marz*. By this time at the latest, the Arsacid ruling class would have been speaking Armenian, while Parthian remained only as a heritage language. After this period the influence of Middle Persian began.

Since all these changes, developments, and indeed shifts in dominant languages occurred during a long period of time in which Armenian was not written and thus left no trace, and owing to the distinct lack of interest in the linguistic practices of the region in all foreign sources and most native sources, much if not most of the periodization, and indeed of the judgements concerning contact-related developments, must remain hypothetical. Nevertheless, in view of all the material presented here—linguistic, historical, and otherwise—the developments postulated above give the most plausible explanation to date of a number of issues in Armenian and Iranian linguistics: the lack of Parthian documents from Armenia; the intrusion of Parthian lexical matter into the Armenian core lexicon; and the development and variability of the periphrastic perfect and certain other patterns in Classical Armenian on the model of Parthian.

⁵⁹ The fact that late Old Persian inscriptions show deviations from ‘standard’ Old Persian syntax and morphology hints at the fact that it was no longer spoken as such by the 4th century BCE (cf. Schmitt 1999: 59–118; Skjærvø 1999: 158–61), but was replaced by one of the Middle Iranian languages.

⁶⁰ It is tempting to suggest that the stratification of Parthian loan words postulated in 2.3.2.2 should coincide with the split of the Arsacid period into two parts. Since the loss of productivity of Armenian-internal ablaut cannot be dated even relatively, there seem to be no formal restrictions preventing such a hypothesis. Equally, however, it is difficult to find any arguments that speak distinctly in its favour other than the coincidence of closer social and political relations with an increase in new loanwords. Supposing that Parthian influence began already with the Artaxiads, an earlier division is just as likely, but similarly unprovable.

7.3 Comparanda

7.3.1 Case I: French and English in post-Conquest Britain

As has been pointed out before, language shift commonly occurs in the direction of less dominant to more dominant language.⁶¹ There can be little doubt that in terms of political and cultural strengths, the Arsacid Parthians are to be seen as the dominant influence on Armenian.

The persistence of a local, politically and socially less prestigious language in contact with a non-indigenous, more prestigious language, and the subsequent insignificance or disappearance of the latter, is less common than its substrate shift counterparts.⁶² The phenomenon is so rare, indeed, that the one example that is cited over and over in the literature is the slow shift of Norman French speakers to Middle English in the aftermath of the Norman Conquest of Britain in 1066 CE (Thomason 2010: 36; Thomason and Kaufman 1988: 265–9; Myers-Scotton 2002: 31, 211).

The case of the ‘defeat’ of Norman French by Middle English has, in the past, also attracted the attention of scholars dealing with Classical Armenian, who have drawn comparisons between the two situations. Schmitt, for instance, in dealing with the onomastics of Arsacid Parthian, writes:

Die Forschung hat immer wieder den übermächtigen Einfluß alles Französischen nach der Eroberung Englands durch die Normannen als Analogie namhaft gemacht, und nicht nur deshalb, weil die Wortschätze des Englischen und Armenischen einen vergleichbar hohen Anteil von Fremdelementen aufweisen.⁶³ (Schmitt 1998: 175)

Mancini goes a step further and suggests:

ciò significa che il contesto storico dei contatti fra mondo armeno e mondo iranico non può limitarsi a un raffronto superficiale con quanto avvenuto nell’Inghilterra medioevale. E’ del tutto evidente, infatti, analizzando la natura dei

⁶¹ ‘Dominance’ here may refer to any number of factors, e.g. population size, overt or covert prestige, economic, political, cultural, or other; cf. Matras (2009: 23, 61), and see 7.1.2.1.

⁶² The terminology of sub-, super-, and adstratum is, however, problematic insofar as it requires a fairly rigid definition of dominance, in one form or another. This, as shown above, is unlikely to reflect reality in all instances. Similarly, language contact is rarely entirely unidirectional, with both languages adopting features or material of the other to some extent (Thomason and Kaufman 1988: 115–19).

⁶³ ‘Over and over again, research has adduced the analogy of the overpowering influence of all things French after the conquest of England by the Normans, not only because the lexica of English and Armenian contain a comparably high number of foreign elements’; see also Schmitt (1983: 74); Belardi (2003a: 98).

dati linguistici, che il processo storico di conservazione dell' armeno si accompagnò con un bilinguismo esteso e duraturo, quindi con un contatto interetnico molto più massiccio di quanto si sia abituati a pensare.⁶⁴ (Mancini 2008: 18–19)

While Schmitt suggests that the situations are directly comparable, since in both instances the socially more prestigious languages (French, Parthian) were actively imitated by the speakers of the less elevated tongues (English, Armenian), Mancini contrasts the two cases, since the Armenian situation was less superficial. The question arises, then, which of these two interpretations is more accurate.

A direct comparison between the British and Armenian situations is difficult owing to a number of factors: first, there is a considerable difference in the time-scale of contact. Armenian, by the end of the Arsacid dynasty in 428 CE, had been under direct Arsacid rule for about four centuries, and is likely to have had long-lasting contact with Parthian and other Iranian speakers for centuries before. Contact between the Norman French invaders and English-speakers properly commenced only after the conquest in 1066 CE, with the first loanwords appearing in about 1250;⁶⁵ by the end of the 14th century, new loans from French ceased to be added, and most Normans still in residence were either fully bilingual or English monolingual (Thomason and Kaufman 1988: 269). This leaves Armenian with at least four centuries of contact with Parthian, as opposed to only about two centuries in the Anglo-Norman case.

A second difference lies in the type of documents available from both contact situations. As has been shown in some detail above, the literary evidence for contact in Armenian is, on an extralinguistic level, restricted to indirect indications. For Norman French and English, however, documents exist which exhibit code-switching and code-mixing, as well as evidence speaking to the attrition of French spoken in Britain (Legge 1980; Schendl 2000; 2013; Steiner 2010).⁶⁶ Furthermore, both languages are attested prior to contact, in the form of Old English and Old French, making it possible to determine with greater accuracy what is a likely 'natural' development, and which changes were introduced by contact.

That being said, there is of course considerable influence of (Norman) French on (Middle) English in the lexicon, particularly in specific semantic fields such

⁶⁴ 'this means that the historical context of the contacts between the Armenian and Iranian worlds cannot be limited to a superficial comparison with what happened in medieval England. In fact, analysing the nature of linguistic data, it is quite clear that the historical process of preserving Armenian was accompanied by extended and long-lasting bilingualism, and thus with much more significant inter-ethnic contact than we are used to thinking.'

⁶⁵ This delay in the appearance of loanwords is probably due to social impermeability. While sources suggest that the level of French spoken in Britain decayed steadily between the Conquest and the loss of Normandy in 1204, it was only at that time that some members of the French aristocracy settled in Britain permanently. Contact proper was therefore probably established only then, with political marriages and increased commerce resulting in borrowings (Berndt 1965; Crespo 2000).

⁶⁶ Giraldus Cambrensis describes the French spoken in Britain in the late 12th and early 13th century as 'rudis Anglorum Gallicus et feculentus' (Short 1980: 468; see also Lefevre 1973).

as cuisine, art, law, and literature. In a large number of cases, however, French loanwords co-exist with English (near) synonyms, allowing for fine distinctions (e.g. between *sheep* as an animal vs *mutton* as a foodstuff). To a much lesser degree, there has similarly been some influence on English (non-core) syntax from French, e.g. as regards the usage of prepositions (Hornero Corisco 1997; Iglesias-Rábade 2000), periphrastic comparatives with *more* (González-Díaz 2008), and the position of adjectives (Fischer 2006; Trips 2014).⁶⁷

Similarities continue on the sociopolitical level as well. French was spoken by the ruling classes (aristocracy, higher clergy, some lower clergy, and urban magnates), but never became widely spoken. The invasion force of William I in 1066 is likely to have been relatively small (5,000–7,000 men), and the number of French settlers of any rank is likely never to have exceeded 10 per cent of the entire populace, with the lowest estimates suggesting figures closer to 1 per cent (Berndt 1965: 147). While no estimates concerning the number of Parthian or Armenian speakers can be made for the period under consideration here, it remains most likely that the Parthian ruling class was numerically very small.

Perhaps more important, however, is the similarity of political situations subsequent to the loss of Normandy in 1204 as a result of the war with the French under Philip II. With the loss of the last continental domains, the French language lost its importance in Britain; the French aristocracy, who previously had divided their time between their holdings in Britain and France, gave up one or the other, resulting in at least some of them becoming full-time British residents. With the split from the mainland, and the establishment of a permanent group of (formerly) francophone residents, came the self-identification of those residents with their new home and its English language, which by that time had attained an iconic status for the Anglo-Normans (cf. Irvine and Gal 2000), or, as Thomason and Kaufman (1988: 268) put it: ‘Those nobles retaining fiefs in England came to identify themselves as English by nationality, whatever their language might have been’ (see also Baugh and Cable 2002: 108–9, 121–2).

This setting is closely reminiscent of the one obtaining in Armenia: a political (and in Armenia also religious) rift together with a minority ruling class speaking a formerly prestigious language that is slowly depreciating leads to the acquisition of the indigenous majority language in (at least initially) a bilingual setting. Chronologically, bilingualism is likely to have developed slowly; the Norman settlers would have been French-dominant bilinguals to begin with, but in time and under the historical circumstances described, would have shifted to English. As with Armenian, this shift progressed slowly, and involved shifting attitudes towards the local majority language, which improved with each successive generation (cf. Bolonyai 2009: 258). Bilingualism and progressive shifting towards English are

⁶⁷ For a summary, see Filppula (2010).

also likely to have contributed to the decay of ‘Anglo-Norman’ as compared to continental French.

Coming back to the question of whether Schmitt’s or Mancini’s evaluation of the Armenian situation is more appropriate, it emerges that Schmitt is, of course, correct in emphasizing the vast amount of lexical borrowings in both contact situations; Baugh and Cable (2002: 161) jocularly suggest that, as regards the English lexicon, ‘English retains a controlling interest, but French, as a large minority stockholder, supplements and rounds out the major organization in almost every department.’ Notably, however, the French elements in English are, for the most part, restricted to specific semantic fields as mentioned above, and have not percolated as strongly into the basic vocabulary and closed classes as is the case in Classical Armenian. Both languages show an influx of derivational morphology which arose from contact,⁶⁸ as well as the replicated pattern of core syntax discussed in detail above. In emphasizing the greater intensity and duration of contact, and the importance of bilingualism, Mancini therefore seems to be closer to the truth. In any case, the influence of Norman French on Middle English makes for a good *comparandum* to the Armenian case, and corroborates the plausibility of the shift scenario suggested above.

7.3.2 Case II: Old Aramaic and Old Persian

To underline that the proposed origin of the split-alignment system of Classical Armenian is not unique in resulting from contact with another language with such a split-alignment system, two close parallels are presented in what follows: first the case of the Old Aramaic *q̄tyl l=* construction, which has been linked to Old Persian *taya mana k̄rtam*; secondly, the past tense of varieties of Northeastern Neo-Aramaic, which exhibits split alignment owing to contact with neighbouring varieties of Kurdish. Both cases illustrate that pattern replication resulting in alignment split is attested, specifically in the context of contact with Iranian, even beyond the single example of Armenian.

As the lingua franca of the Achaemenid Empire, Old Aramaic was in prolonged contact with Old Persian. It served as a means of communication between the various parts of the Empire, each with their own dominant language. The contact between the two languages is reflected not only in translations of Old Persian material, such as the Behistun inscription, into Old Aramaic, but also in numerous

⁶⁸ As discussed in greater detail in Chapter 2, Armenian has borrowed both affixes as well as certain *Kompositionsglieder* from Iranian, e.g. the adjectival suffix *-akan*, the negative prefix *dž-/t’š-*, or the *Hinterglied -kert*, referring to a built or created place or entity. In the case of English, suffixes of French origin like *-age*, *-ity*, *-ment* abound.

lexical borrowings from Old Persian into Old Aramaic;⁶⁹ a few morphosyntactic calques are equally attested.⁷⁰

One such influence of Old Persian on Old Aramaic concerns an addition to the verbal system whose origin is thought to be the Old Persian *taya manā kṛtam* construction (see 4.3.1). Example (7.1) reiterates this pattern, discussed in more detail above:

- (7.1) *ima* *taya* *manā* *kṛtam* *pasāva*
 DEM.NOM.SG.N REL.NOM.SG.N 1SG.GEN DO.PTCP.NOM.SG.N after
yaṯā *xšāyaṯiya* *abavam*
 when king.NOM.SG.M become.1SG.PST
 ‘These [are the things] which I did (lit. done of me) after I became king.’
 (DB I.27–8)

As noted, the participle occurs together with an agent in the genitive case and patient in the neuter nominative/accusative in all instances of this construction, while a finite form of the copula does not frequently accompany the construction. This Old Persian construction is of interest for two reasons: first, a genitive agent is not widely attested in Old Persian in either active or passive construction, finite or non-finite;⁷¹ second, the construction is attested only with the verb °kar- ‘to do, make’, which raises questions concerning its status in Old Persian.

Despite the attention paid to the *taya manā kṛtam* construction in linguistic papers, the pattern is synchronically rather limited in scope. Limited to °kar- in the Old Persian inscriptions, it must have gained greater currency by Middle Iranian times, since its successor became the standard past tense of the Western Middle Iranian languages (Jügel 2015: 450–2). According to Ciancaglini (2008: 32) and Pennacchietti (1988: 104), the Old Aramaic *qṭyl l=* construction, which consists of a passive participle and a prepositional phrase (*l=* and enclitic pronoun), is based on this Old Persian model.⁷² The preposition *l=* ‘to, belonging to’ is used otherwise mainly to indicate the indirect object, but not the passive agent, for which the preposition *min* ‘from; by’ is employed instead. In Old Aramaic, the construction

⁶⁹ These consist of specialized terms such as OA *ḥšḏrpn* ‘satrap’ < OIr. *xšθrapāna- or OA *ptyprs* ‘retribution’ < OP *patifrāsa-, but also include lexical items referring to less abstract, more quotidian objects, e.g. OA *prds* ‘garden’ < OP *paridaiza-* (cp. Engl. *paradise*) or OA *nbršt* ‘lamp’ < OP *nibrāšti-.

⁷⁰ To name but two examples: connectives like OA *ḥr* ‘afterwards’, based on OP *pasāva* ‘id.’, but also more complex structures like the replication of OP *haya/taya*-phrases—an early form of the *ezāfe*-construction found also in Avestan and numerous later Iranian languages—which express a genitive/possessive relationship between NPs, in the form of OA *zy* instead of a construct chain typical of Semitic languages (cf. Whitehead 1978: 128–35).

⁷¹ While the genitive is not a prototypical agentive case (see 4.2.2.3; Hettrich 1990: 94, 97; Jamison 1979: 133–7), similar constructions exist in Avestan and Sanskrit (cf. Cardona 1970).

⁷² Ciancaglini (2008: 34) explains that the *qṭyl l=* construction only occurs in East Aramaic, the variety in contact with Old Persian: the first attested instance of this construction occurs in the writing of a Persian satrap, Aršāma; the Aramaic translation of the Old Persian Behistun inscription does not use this construction to render the Old Persian model construction, which suggests that its introduction must be dated later and that it did not yet exist in Aramaic.

serves as a resultative perfect, and like its Old Persian counterpart is restricted to certain verbs initially.⁷³ Example (7.2) presents a minimal example, and the first attestation of the construction.

- (7.2) *w-k'n tnh kn šmy' l=y*
 and-now here thus hear.PTCP to=1SG
 'And now, thus have I heard here, [that] ...' (TAD A6.10; Driver 7; Pell. Aram. I)

This pattern contrasts with the standard expression of subject (and object) in Old Aramaic, where neither bears explicit morphological markings; word order and verbal morphology indicate syntactic roles, as demonstrated by (7.3), where word order (SVO) and semantics alone indicate the syntactic roles of the constituents.⁷⁴

- (7.3) *ʾr]thy yd' ʿm- znh*
 PN know.3SG.M command-EMPH this
 'Arḥaya knows this command' (TAD A6.10; Driver 7; Pell. Aram. I)

The same construction also persists in some of its daughter languages, including Syriac, Mandaic, and Talmudic Aramaic,⁷⁵ as in (7.4, 7.5):

- (7.4) *qrēn l=āk ktābā*
 read.PTCP to=2SG book.PL
 'Have you read the books?' (Spic. 13,8)

- (7.5) *mhallak l=i*
 stand.PTCP to=1SG
 'I have stood.' (Spic. 43,7)

The *qṭyl l=* construction deviates from its Old Persian model in being used for more than one verb, and intransitive verbs to boot; it also exhibits differences from the Middle Iranian successor construction. The occurrence of explicit object-marking of what should be the grammatical subject constitutes a further step away from that model, as illustrated in (7.6).

- (7.6) *kaḏ ʾasīr l=eh l=sāṭānā b-šēšaltā*
 CONJ bind.PTCP to=3SG.M to=Satan with-chain.PL
 'for he had bound Satan with chains' (am 3, 595, 13)

⁷³ Only verbs of perception are found in the Old Aramaic construction.

⁷⁴ The standard word order of the earliest form of Old Aramaic was VSO, as in other Old Semitic languages; SOV order is not uncommon in Imperial Aramaic owing to influence from Iranian languages, but is eventually ousted by the shift to SVO; see Kaufman (1997: 127). What is unusual in this construction is therefore not primarily the word order, but the additional marking of S/A with the proclitic *l=*.

⁷⁵ According to (Kutscher 1969: 140), the construction was still fairly uncommon in the Pešittā; yet it came to be used for verbs other than those of perception, and included transitive and intransitive verbs; cf. Nöldeke (1904: §279).

Accordingly, the historical sequence of events may have run as follows: the Old Persian construction is replicated in Old Aramaic, whereby the genitive pronoun is rendered as a prepositional phrase owing to a lack of case-marking in the recipient language. Originally restricted to verbs of perception, its input widens to encompass other types of verb, including intransitive ones; by the time of Syriac, the prepositional agent marker has been reanalysed as a subject, and previous grammatical subjects of the passive–intransitive participle may receive overt object-marking.

This construction was never adopted as a standard expression, and remained marginal in Old Aramaic or Syriac (Ciancaglini 2008: 36); over the course of time, the replicated pattern was reanalysed as an active construction, fitting into the syntax of Syriac as shown in (7.6). Lack of frequency, the loss of prestige of Old Persian after the fall of the Achaemenid Empire, and system pressure from the other tenses resulted in reanalysis of the pattern.

This case of pattern replication on the basis of an Iranian construction resulted in the (admittedly marginal) grammaticalization and subsequent adaptation of syntagma whose morphosyntactic alignment did not correspond to that of the replica language and which, owing to system pressure, was reanalysed to better fit the alignment of the other tenses.

7.3.3 Case III: NENA and Kurdish

Another pertinent parallel for this kind of pattern replication can be found in the various modern dialects of Northeastern Neo-Aramaic (NENA), resulting from their contact with the local varieties of Kurdish, a group of languages belonging once more to the Iranian family. These speech communities maintained centuries-long cultural and commercial ties and, as a consequence, share a number of linguistic structures (cf. Noorlander 2014: 203).

The results of this contact differ in each variety, but may include a considerable number of loans and calques in all linguistic domains.⁷⁶ The construction of the simple past (perfective) in the Judaeo-Aramaic dialect of Sulaymaniyah in Iraqi Kurdistan is of most interest in the context of changes in morphosyntactic alignment.⁷⁷

Sulaymaniyah Kurdish has a tense-sensitive split-ergative inflection pattern, wherein tenses based on the past stem exhibit ergative–absolutive marking, while

⁷⁶ Cf. Khan (2004; 2007) for e.g. phonological changes (e.g. NENA postvocalic [i], [d̪] > [l] in *bela* < *beta, cp. OA *byt* /bayit/ ‘house’ or *’ile* < *’ide, cp. OA *yd* /yad/ ‘hand’; see also Mutzafi 2004: 36–8) and loss of grammatical categories (e.g. loss of gender in the pronouns).

⁷⁷ The vast majority of the Muslim population of Sulaymaniyah speak a variety of Central Kurdish (Sorani); the neighbouring Jewish community used this variety to communicate with their neighbours until their emigration to Israel in the early 1950s (cf. Khan 2007: 198).

Table 7.1 Alignment pattern of Sulaymaniyah Kurdish

	Present		Past	
ITR	a-mir-ī PRS-die-2SG 'You are dying.'	a-mir-in PRS-die-2PL	mird-ī die.PST-2SG 'You died.'	mird-in die.PST-2PL
TR	a-t-kuž-ē PRS-2SG.OBL _O -kill-3SG _A 'He is killing you.'	a-tān-kuž-ē PRS-2PL.OBL _O -kill-3SG _A	kušt-Ø-it kill.PST-3SG _O -2SG.OBL _A 'You killed him.'	kušt-Ø-tān kill.PST-3SG _O -2PL.OBL _A

Table 7.2 Alignment pattern of Sulaymaniyah Judaeo-Aramaic

	Present		Past	
ITR	a-mir-ī die.PRS-2SG 'You are dying.'	a-mir-in die.PRS-2PL	mird-ī die.PST-2SG 'You died.'	mird-in die.PST-2PL
TR	qāṭil-Ø-lox kill.PRS-3SG.M _A -2SG.OBL _O 'He is killing you.'	qāṭil-Ø-laxun kill.PRS-3SG.M _A -2PL.OBL _O	qṭil-Ø-lox kill.PST-3SG.M _O -2SG.OBL _A 'You killed him.'	qṭil-Ø-laxun kill.PST-3SG.M _O -2PL.OBL _A

all other tenses follow a nominative–accusative pattern (cf. Khan 2004: 10–11). This is similar to the patterns found in Middle Persian and Parthian illustrated in 4.3.2. Thus, intransitive verbs behave in like fashion in the present and simple past, but transitive verbs diverge significantly, as Table 7.1 illustrates.⁷⁸

In the present and past intransitive, a suffix is added to the verb, agreeing with the subject. For the transitive verb, an agent clitic is added to the verb in the present; an object clitic precedes the verb. In the transitive past, however, this object clitic fills the agent position, following the verb; an agent clitic (Ø for 3SG) may further be added. Evidently, then, it is the form (or case) of the clitic that suggests ergative–absolutive alignment, rather than its position, which may vary. This pattern is reflected in NENA, as shown in Table 7.2 and examples (7.7, 7.8).⁷⁹

- (7.7) *baxt-āke* *barux-āwal-i* *garš-ā-lu*
 woman-DEF friend-PL-1SG.POSS pull.PRS-3SG.F.DIR_A-3PL.OBL_O
 'The woman pulls my friends.'

⁷⁸ This a simplification: in the past transitive, the agent-marker attaches to the first word within VP; further clitics, e.g. marking the object, may occur and subsequently attach to the verb; cf. Haig (2008: 288–96).

⁷⁹ See Doron and Khan (2012: 227–8).

- (7.8) *baxt-äke barux-äwal-i gərš-í-la*
 woman-DEF friend-PL-1SG.POSS pull.PST-3PL.DIR_O-3SG.F.OBL_A
 ‘The woman pulled my friends.’

This pattern mirrors the Kurdish model, and is not dissimilar to the one found in Old Aramaic and Syriac mentioned in 7.3.2; the (marginal) pre-existence of the classical pattern may have been a contributing factor in the replication of the present pattern into NENA.

The Sulaymaniyah NENA pattern is not an exact copy of the Kurdish model, but shows the same formal symmetry of present object and past agent taking the same clitic form. While clitics in the Kurdish dialects may appear separated from the verb, their position is fixed in NENA, but their grammatical function as agreement-markers is tense dependent.

The NENA verbal system exhibits a morphosyntactic alignment split between the simple past tense and the present-tense system, whereby the order and meaning of the associated affix systems no longer correspond to one another. This split-ergative alignment pattern results at least in part from contact with Sulaymaniyah Kurdish, and goes beyond the changes described for Syriac and Old Aramaic.

The construction has been stable in NENA owing to its frequency in speech and prolonged contact with the Kurdish varieties. Yet, as in many split-ergative languages, system pressure from the present tense has resulted in the creation of compromise constructions such as (7.9):

- (7.9) *qtil-le ’illox*
 kill.PST-3SG.M.OBL_A 2SG.OBL_O
 ‘He killed you.’ (Khan 2004: 12)

Here, both agent and object are represented by oblique case forms, with the object no longer attached to the verb as a clitic, reminiscent of the outcome of the *qtil l-* construction in Syriac. Instead, a prepositional phrase with an enclitic pronoun is used, particularly in 1SG and 2SG objects. The expected form, with the object of the past transitive verb suffixed to the verb in direct case, preceding the oblique-case agent-marker, is given in (7.10):

- (7.10) *qtil-a-le*
 kill.PST-3SG.F.DIR_O-3SG.M.OBL_A
 ‘He killed her.’

The argument order in (7.10) has, therefore, been adapted to that of the present-tense system, with agent-marker followed by object-marker, albeit with morphological forms diverging from the present.

The format shown here, as regards sequence of constituents, is an accommodation of the past-tense system in favour of the more widely used present-tense order.

The replicated split-ergative system is being eroded by system pressure to conform to the predominant nominative–accusative pattern found in other tenses. Similar changes are, of course, also found in languages whose split-ergative pattern does not derive from language contact, as well as in other varieties of NENA.⁸⁰

This case serves as another clear parallel of a language in contact with an Iranian variety changing its morphosyntactic alignment on the basis of the Iranian model. The developments observed in the case of NENA go beyond the marginal changes observed in Old Aramaic above, and provide a plausible parallel to the wide-ranging changes observed in Classical Armenian.

7.4 Summary

In reviewing the pertinent theoretical literature on language contact, applying it to the situation of Classical Armenian, and adducing a number of parallel cases, this chapter has demonstrated that the contact between Parthian and Armenian and its linguistic results are not unusual, albeit complex.

The Armenian and Parthian ruling classes were, to some extent, sufficiently bilingual to allow pattern replication to occur, by which means the structures discussed in Chapters 4–6 were copied from Parthian and adapted to the needs of Armenian. This occurred in the latter phase of contact, when a hereditary Parthian dynasty had been installed in Armenia and its members began to identify with the Armenian people, shifting to Armenian as their main means of communication. The extensive borrowing from Parthian discussed in Chapter 2 began in the first phase of contact, predating the superstrate shift.

This kind of shift, while less common than substrate shifts, finds a good parallel in post-Conquest Britain, where Norman French fell out of use as the Norman ruling class began to identify with and marry the local British populace. Other parallels have been presented to illustrate that the type of contact-induced alignment change proposed as the core of this study is not unprecedented, either. Like Armenian, Old Aramaic and Neo-Aramaic were in extensive contact with different varieties of Iranian languages and have, as a result, partly changed the morphosyntactic alignment pattern in (one of) their past tense(s). In all three cases, over the course of time, this contact-induced change has been ousted in favour of harmonization with the non-past tenses, which use a different alignment pattern.

⁸⁰ In the Judaeo-Aramaic of Sanandaj and Urmia, for instance, ergative marking in the simple past has spread to intransitive verbs, now applying to unergative verbs in the former and to all intransitives in the latter. This type of development is not paralleled in any of the closely related Kurdish varieties (Khan 2008: 21). Barotto (2014: 93) concludes that, in one form or another, all NENA dialects are in the process of restructuring the alignment of the perfective past to fit the nominative–accusative pattern of the imperative system. Varieties of Kurdish are equally affected by this trend, e.g. Kurmanci (Dorleijn 1996).

Taken together with the detailed data analyses and the refutation of previous explanations provided above, these comparanda underline that a contact approach best explains the genesis, development, and eventual demise of the Armenian perfect, while equally providing a cogent explanation of other syntactic parallels between Armenian and Parthian.

Conclusions

Over the course of this study, a host of data from Armenian, Iranian, and other languages has been presented or adduced to support a number of arguments. Next to linguistic information, details from the historiographical literature have been included, as well as more theoretical considerations from language contact studies. To tie up all of these different strands and in order to present as holistic a picture as possible, the following summary gives a chronological account of the linguistic and extralinguistic interactions between Iranian and Armenian speakers between the 6th century BC and the 6th century CE.

As one of the regions mentioned in the royal Achaemenid inscriptions, Armenian- and Iranian-speakers must have been in contact since that time at least, i.e. the end of the 6th century BC. A few lexical borrowings from Old Iranian attest to this relationship, but the small number and the type of terms borrowed suggest that this relationship was a very loose one, where only culturally novel items would be taken over. If Iranian–Armenian bilingualism existed at this period, it was severely limited and restricted to a small set of speakers, either at the courts and/or in the mercantile professions.

Little evidence of any kind of (linguistic) relationship is forthcoming for a few centuries, except the assertion by Strabo in his *Geographica* (XI.14.5) that during the rule of Artaxias and Zariadres in the early 2nd century BCE the same language was spoken across the Armenian Highlands and the surrounding areas. Since both rulers mentioned are of Iranian descent, however, and given that Strabo does not explicitly mention the language by name, it is unclear whether Armenian or an Iranian variety is meant. At the same time, this text underlines the intertwined fates of the Iranians and Armenians from an early period onwards.

As far as historical data can reveal, the intense phase of language contact between the Armenians and the Parthians in particular must have begun with the coming to power of the Arsacids, i.e. with the coronation of Trdat I in 66 CE. No concrete linguistic or autochthonous extralinguistic data is available from that period, but the observation of the linguistic data as presented in the earliest Armenian sources allows a certain amount of well-founded speculation. Morphophonological variation in terms borrowed from Parthian into Armenian, in particular as regards stem ablaut, indicates that there were two phases of borrowing: an earlier one in which this ablaut still happened (type: *dēm̄kʷ*, GEN *dīmacʷ*); and a later type, where it no longer did (type: *den*, GEN *deni*). While these and related criteria are not sufficient to allow for a stratification of the whole borrowed lexicon, at least

two candidates could indicate the break between two phases of speaker interactions and thus of bilingualism: the fall of the Arsacid Parthian Empire in 224 CE and the establishment of a hereditary Arsacid dynasty in Armenia later in the same century.

Given that what is known about Parthian–Armenian interactions on the socio-cultural and political level mainly relies upon sources dating to the 5th century CE, little can be known for certain of the first of these two phases. In the second phase, however, starting at some point in the 3rd century CE, the literature clearly indicates a great deal of common ground between the speaker communities: inter-marriage, the exchange of young wards as part of an established tutelage system, the conversion to Christianity of Parthians and Armenians alike, and a common enemy in the Sasanian neighbours. It is in this period of Arsacid dynastic rule that Parthian–Armenian bilingualism in the upper echelons of the society is most likely to have developed if it did not exist before.

While the Armenian literary tradition therefore most likely arose in such a bilingual setting, contemporary and local Parthian sources are conspicuously absent, and had been since at least the end of the 3rd century CE. In the Sasanian Empire, where Parthian had previously been, and still was, used to some extent, this is explained by the dominance of Middle Persian. In Armenia, by contrast, it was the Parthians who were the sociopolitically (but not numerically) dominant speaker community. This discrepancy between lack of attestation and attested status is best explained by a superstrate shift: the Parthian ruling class had, over the centuries, come to identify with its Armenian subjects for the reasons mentioned above and in doing so adopted the Armenian language as their main means of communication, too. It is unclear whether Parthian continued to be spoken as a home or heritage language, but the fact that some of the traces Parthian has left in Armenian were maintained for such a long time speaks in favour of this notion.

The result of this superstrate shift, which finds clear parallels in the interactions between Norman French and Middle English speakers between the Norman Conquest in 1066 CE and the late 14th century, was not only the apparent disappearance of Parthian from the region, however. The variety of Armenian spoken by the Parthian ruling class, who had commissioned or to whom were dedicated most of the early pieces of Armenian literature, became the prestige variety which was used in that literature. This variety was, however, not only lexically but also syntactically influenced by the Parthians' other language. What is found in these earliest texts is a version of Armenian imbued with Parthian constructions, 'imported' over generations by means of imperfect learning and bilingual child language acquisition—a Parthian–Armenian interlanguage effectively. These bilingual speakers, realizing that certain elements (e.g., participles) occurred in both languages and had similar uses, extended the use patterns of these elements from one language to the other. These copied constructions, if they were adopted

in the grammar of the other language, were adapted to harmonize with the rest of the affected system over the course of time.

The most flagrant case of this type of pattern replication is the Armenian periphrastic perfect, which construes with tripartite morphosyntactic alignment, whereas the non-perfective tenses follow nominative–accusative alignment. The pivot around which the construction was replicated is the *-eal* participle, which finds a parallel in the West Middle Iranian past participle, both of which are passive–intransitive outside their respective periphrastic constructions. The use pattern of the Iranian participle was then copied onto the Armenian one. To begin with, the resulting construction followed the same ergative–absolutive pattern as its Iranian counterpart, and in those paradigms, where nominative and accusative in Armenian are formally identical, this surface identity continues. In time, however, the formerly nominative object in the perfect was replaced by an accusative object, likely under pressure from the rest of the verbal system. The agent of the perfect, however, continued to be marked by the genitive, a deviation from the Iranian pattern. The choice of the genitive finds parallels in other languages which have, for one reason or another, adopted ergative–absolutive alignment, but equally may relate to the Iranian oblique case and enclitics, which are used to mark agents in the past tense as well as possession, one of the main functions of the Armenian genitive.

Both the Parthian and the Armenian constructions make use of copulative verbs, too, but use them in different ways. In Parthian, the copula agrees with the subject or object and does not occur in the 3SG; in Armenian, by contrast, the copula is often absent, and when present agrees with the subject or presents \emptyset -agreement in a fossilized 3SG form. The data shows that the Armenian use of the copula is a language-internal innovation and independent of its Iranian counterpart, having arisen and been made quasi-obligatory over the course of the 5th century. The choice of the 3SG form is an indication of a newly created (in this case copied) construction, in which the language's need for a finite verb form is at odds with the licensing restrictions, which do not allow for agreement between the verb and a genitive constituent. The choice of the 3SG is thus a default form, attested in other languages where similar developments have taken place.

This tense-sensitive split-alignment pattern was not diachronically stable in either West Middle Iranian or Armenian. The data show a clear trend towards nominative–accusative agreement already in the early 5th-century texts, underlining the fact that the replicated Iranian structure was continuously adapted to fit the needs of the Armenian language. In borrowing such intricate structures and changing morphosyntactic alignment, Armenian is not an outlier. Parallels from Old Aramaic and Northeastern Neo-Aramaic show that similar changes have taken place, to one extent or another, in other languages in contact with Iranian varieties. Equally, the perfect construction is not the only instance of Iranian–Armenian pattern replication. The cases of nominal relative clauses modelled on the West

Middle Iranian *ezāfe*-construction, the intensifier *ink'n* and its functional distribution based on Middle Persian *xwd*, Parthian *wxd*, and the complementizer *(e)tē* used as a quotative like its Iranian model *kw* all demonstrate that Iranian influence was pervasive.

With these latter constructions, however, it is difficult to determine to what extent this Iranian influence was instrumental in the creation of the patterns described, or whether it only aided developments that were already taking place language-internally; for the nominal relative clauses in particular, this is a difficult question. More generally, it must be noted once more that little of what has been summarized above, by the nature of the evidence on which it rests, is beyond doubt. The fact that most of the developments described in this study took place prior to the literary attestation of Classical Armenian is a clear indication of this fact. Equally, certain questions have not found a clear answer. What is the role of the converbial use of the participle in the development of the perfect, and how did it arise? Does the usage of different copulas in the Armenian perfect reflect a similar distribution in Parthian, or is this just coincidence? Was the oblique case still morphologically realized in Parthian by the beginning of the 5th century CE, or is the use of the Armenian genitive solely reliant on the parallel use of enclitics in Parthian to mark possession and to function as the agent of transitive verbs in the past? Could a more fine-grained analysis of the corpus data yield further information? How do the trends discussed in Chapter 5 pan out in the 6th and 7th centuries? As the brief discussion of Movsēs Xorenac'i has illustrated, the dangers of literary language lie in the potential for imitation and the ensuing unreliability of the data.

Despite these inevitable shortcomings and open questions, the conclusions arrived at address the two main concerns of this study: they provide an account of the pre-literary and early development of the Classical Armenian perfect construction that is more cogent than the other explanations offered over the course of the last century. In contradistinction to these prior approaches, a contact-based explanation can and does account for all the variations that occur, and is backed by statistical evidence to corroborate the major trends and developments argued for. Similarly, a clearer and evidence-based picture of the contact dynamics between the Parthians and Armenians has been painted, making use of linguistic and extralinguistic information alike.

Nevertheless, it is important to emphasize that the argument presented in this study, even with all the caveats and uncertainties already mentioned, need not necessarily be taken in its strongest form, i.e. insisting on multilingualism, pattern replication, and a superstrate shift as the only reasons for the development of the Armenian perfect or indeed any other syntactic structure discussed here. Internal developments have, without doubt, played a role in all the changes involved; and while it is impossible to gauge what role they played, their potential contribution must not be forgotten. Equally, of course, it is possible that other, even simpler,

and indeed better explanations for the changes discussed here may be suggested in the future. For the time being, however, an Iranian origin of—or, less strongly put, a significant Iranian influence on the Armenian periphrastic perfect and some other patterns—would appear to be the neatest solution.

This study has striven to further the understanding of the linguistic history of Armenian, and its contact with West Middle Iranian in particular, as well as the understanding of language contact and language change in general. It has also highlighted fields in the linguistic study of Classical Armenian which require further attention: the enquiry into further possible cases of pattern replication, or other instances of syntactic borrowing, from Iranian into Armenian; and the need for a consistent, freely accessible, and modern parsed digital corpus of Classical Armenian to facilitate corpus-based research and the appropriate use of quantitative data and methods in historical linguistics. Although it is difficult to spot potential patterns which may be the result of language contact, future research of this kind will benefit not only the understanding of the history and linguistic behaviour of Classical Armenian, but also the typology of language contact in general.

APPENDIX

Historical morphology of the Armenian *-eal* participle

This appendix serves to outline in detail the historical morphology of the Armenian past participle in *-eal*, the main ‘ingredient’ of the periphrastic perfect. It corroborates what must be archaic and what innovative in the perfect construction (see also 4.2.2).

This discussion of the complex history of the Armenian *-eal* participle along with other verbal categories associated with its formation, the present and the aorist, is intended as a summary and cannot be exhaustive, but condenses the material to give an essential overview.¹

The morphological complexities of the participle are largely related to two questions. What is its relationship to the present and aorist stems? And what is the origin of the *-ea*-cluster? From a syntactic point, the most important question regards the valency of the participle: is it historically monovalent (passive–intransitive) or divalent (transitive)?

With these questions in mind, the section first organizes the synchronic verbal system into groups according to the relationship between aorist and participle stems. There follows an outline of the debate concerning the provenance of the Armenian weak aorist marker *-cʿ*- and a proposal for a relative chronology of its diffusion according to the groups established above. Moving on to the formation of the past participle, it is argued that aorist and participle formation are in fact originally unrelated, and that the occurrence of the *-eal* form with both apparent present and aorist stems is the result of analogical levelling across different classes of verbs. Finally, a different historical morphology, one not linked to the aorist formation, is tentatively advanced to better fit the developments and correlations outlined above.

Synchronic verbal groups

Armenian distinguishes the following categories in the morphology of its finite verb: person (1, 2, 3); number (singular, plural); tense (present, past or imperfect, aorist, perfect, and pluperfect); voice (active, medio-passive); and mood (indicative, subjunctive, imperative). The perfect and pluperfect are analytical tenses, formed with a participle in *-eal*. A voice distinction does not occur on a morphological level in all tenses or verb classes. All tenses form an indicative, but there is no imperfect or pluperfect subjunctive, and imperatives do not occur outside the present and aorist.

For the formation of the participle, the aorist is of paramount interest. Synchronically, the Armenian aorist is formed on the basis of the aorist stem of a verb and differentiates

¹ For an even more succinct version, see Meyer (2014); for a more detailed version, see Meyer (2017: ch. 2).

two voices, active and medio-passive. The verb *sirem* ‘to love’ may serve as a model: as a verb of the *-e-* conjugation, it can form a present medio-passive with the thematic vowel *-i-*, thus *sirim* ‘to be loved’; it forms a regular aorist active *sirec’i* ‘I loved’, and an aorist medio-passive *sirec’ay* ‘I was loved.’² Of the five conjugational classes, differentiated according to their theme vowel as *-e-*, *-i-*, *-a-*, *-u-*, and *-o-* conjugations, a voice distinction in the present is only morphologically expressed in the first two, *-e-* and *-i-*. For the most part, the *-e-* conjugation furnishes transitive active verbs, which have a corresponding intransitive, medio-passive form in the *-i-* conjugation, thus *sirem* ‘to love’, but *sirim* ‘to be loved’.

On the synchronic level, a general distinction can be made between two large classes of aorist formations. First, so-called strong or root aorists, which occur with a wide set of present formations, and which in the aorist show either the bare verbal root or a synchronically non-transparent variation on it; for example (1SG.PRS—1SG.AOR, 3SG.AOR): *berem* ‘to carry’—*beri*, *eber*; *tesanem* ‘to see’—*tes*, *etes*; *nstim* ‘to sit’—*nstay*, *nstaw*; *ankanim* ‘to fall’—*ankay*, *ankaw*.³

Secondly, weak aorists in *-c’-*; for instance: *asem* ‘to say’—*asac’i*, *asac’*; *gorcem* ‘to work’—*gorcec’i*, *gorceac’*; *nmanim* ‘to resemble’—*nmanec’ay*, *nmanec’aw*; *gnam* ‘to go’—*gnac’i*, *gnac’*.

There is no immediately transparent correspondence scheme between present and aorist formation in all cases. Schmitt (2007: 146–7) lists no fewer than 17 correspondence groups, while Kortlandt (1996: 35–9) finds 26 different groups. This diversity serves to illustrate the historical and formational complexity of the verbal system, which is made even more difficult when taking into account the participle. The latter is frequently said to be formed on the basis of the aorist stem (Meillet 1936: 116; Jensen 1959: 105–6; Godel 1975: 129), but shows completely different subgroupings from those of present and aorist mentioned above.

In the root aorists, the participle is formed on the basis of the verbal root as expected, thus: *berem* – *beri* – *bereal*; *tesanem* – *tes* – *teseal*; *nstim* – *nstay* – *nsteal*; *ankanim* – *ankay* – *ankeal*.

The situation is somewhat different, however, in the case of the *-c’-* aorists. Some classes form their participle based on the aorist stem, others on the verbal root. The latter are marked in bold: *asem* – *asac’i* – *asac’eal*; *gorcem* – *gorcec’i* – ***gorceal***; *nmanim* – *nmanec’ay* – ***nmaneal***; *gnam* – *gnac’i* – *gnac’eal*.

With these patterns in mind, the following division of the formations of aorist and participle can be arrived at:

- A synchronic root aorists and root participles;
- B *-c’-* aorists and root participles;
- C *-c’-* aorists and participles based on the *-c’-* stem.

These groups do not include all verbs, excluding those, for example, which form suppletive aorists or are not attested in that tense, as well as a small number of others. This grouping raises the question whether any morphological or semantic commonalities between the verb classes pertaining to each group, respectively, can be found, and whether

² As in other Indo-European languages, however, not all verbs can form both voices. Intransitive verbs such as *meřanim* ‘to die’ usually only form one aorist, here *meřay*, while certain transitive verbs, e.g. *ćanaćem* ‘to recognize’, do not differentiate voice in the aorist, thus *caneay*.

³ These verbs represent an exemplary subset of different verbal groups, as suggested by Schmitt (2007: 146–7). Differentiating features have been set in bold.

such commonalities allow any insight into the reason why the groups show different developments of aorist and participle formation.

The following summaries of each group aim to illustrate that there are indeed such formational tendencies which determine the appurtenance of verbs to their respective group, and that to some extent, morphological formation and semantics are correlated.⁴

Group A: root aorists with root participles

Both Arm. *berem, beri* ‘to bear’ < *b^her-e/o- and *acem, aci* ‘to lead’ < *h₂aĝ-e/o-⁵ are classified as thematic present stems with an e-grade root (Meillet 1936: 105; Klingenschmitt 1982: 273-4). It seems likely that their respective aorist forms relate to earlier imperfects, as evidenced by Skt. *ābharat*, Gk. *ἔφερε* < *e-b^her-e-t, Arm. *eber*, and Skt. *ājat*, Gk. *ἤγε*, Arm. *ac*.⁶

The verbs in *-(a)nem* can be retraced to *-n-infix presents.⁷ Arm. *tesanem, tesi* ‘to see’, cp. Skt. *°dṛś-*, 1SG.AOR *adarśam*,⁸ Gk. *δέρομαι*, AOR.PTCP *δρακεῖς*,⁹ all of which are derived from the root *derġ-, paints a similar picture: while the nasal present is not inherited, the root aorist formation originates within PIE.¹⁰

Verbs ending in *-(a)nam*, e.g. *bar̄nam, barjay* ‘to pick up, lift, carry’, can partly be grouped into A as well; here, primary and secondary, i.e. denominative, formations can be separated along both semantic and morphological lines. The primary formations are discussed here, while their secondary counterparts fall into group C below (Group C: *-c’- aorists with -c’- stem participles*).

As primary *-(a)nam* verbs may be counted *dar̄nam, darjay* ‘to turn (around)’ < *d^hreġ^h-, cp. Gk. *τρέχω*, Alb. *dreth*, AOR *dródha*, and *bar̄nam, barji* ‘to pick up, lift, raise’

⁴ The Armenian present tense formation and verbal etymologies are beyond the scope of this book and are not discussed in any detail below; only a small selection of verbs is presented for each group to make the argument less theoretical.

⁵ This verb has also been derived from *h₂eĝe/o- (Clackson 2004–5: 155); in either case, the expected *h*- reflex of the laryngeal is lost.

⁶ Klingenschmitt (1982: 128) argues that the usage of an old imperfect as the aorist was caused by the lack of an aorist of Indo-European age for those verbs, attested in the occurrence of suppletive or innovative forms in Greek, and complete lack thereof in Indo-Iranian; the imperfect of Classical Armenian is an innovation.

⁷ Klingenschmitt (1982: 159) suggests that they were secondarily thematized by analogy with the 3PL *-ent(i). The formation thus lost its infix character and turned into a suffix; at the same time, a differentiation of primary and secondary formations is necessary (1982: 159, 177). The largely innovative nature of this subgroup is demonstrated by e.g. Arm. *lk’anem, lk’i* ‘to leave, abandon’, Skt. *riṇákti*, Lat. *linquo* ‘to remain’, Lith. (dial.) *liñka* ‘id.’, all of which < *leġk^w-, showing *-n-infix presents. Given the aorist formation in other languages, e.g. Skt. *áricat*, Gk. *ἔλιπον*, it seems plausible to assume that the Armenian aorist, too, is a built directly on the root.

⁸ *°dṛś-* also forms thematic and sigmatic aorists, but is more likely to have an original root aorist (Hoffmann 1960).

⁹ While *δέρομαι* forms a regular thematic aorist, the aorist participle *δρακεῖς, δρακεντ-*, attested in Pindar, speaks in favour of an original root aorist, which was later remodelled; cf. Forssman (1964); Beekes (2010: 317–18).

¹⁰ While some verbs secondarily form their present on the basis of an aorist stem, it is unclear whether (but not unlikely that) this is the case here, too, since the etymology of *tesanem* is debated; on this question, see Klingenschmitt (1982: 228); Martirosyan (2010: 741); Winter (1966: 205). Other verbs falling in this category, e.g. *anicanem, anēc* ‘to curse’, are discussed below (‘Continuation of PIE *s-aorist’).

< *b^herǵ^h-,¹¹ cp. Hitt. *pár-ak-ta-ru* ‘let him rise’, TA/B *pärk-* ‘rise (the sun)’, and some other verbs (cf. Klingenschmitt 1982: 107–18); these verbs are similar to another type in group **A**, verbs in *-anem/-anim*, with the exception that the present verbs were not thematized.

Verbs like Arm. *t’olum*, *t’oli* ‘to let, allow’ are similarly derived from **-n*-infix presents which were replaced by suffixal **-neŷ/-nu-* stems,¹² cp. Lat. *tollere* ‘to take up, take away’, OIr. *tlena* ‘to steal’, TB *tallaṃ* < PT **tálnā-*, all of which < **tl-n(e)-h₂-* (see Rix and Kümmel 2001: 622). The precise stem formation process is unclear, however.¹³

As a final subgroup in **A**, verbs like *arnum*, *ari* ‘to take, receive’, Gk. ἄρῆναι ‘to obtain, win’, Av. *arənauu-* ‘to procure, grant’, all derive from the root **h₂r-neŷ/-nu-*, thus reflecting a root originally using a **-neŷ/-nu-* suffix, as opposed to those which acquired the suffix secondarily.

Group **A** accordingly largely consists of thematic verbs and those with a nasal infix of diverse origin; the majority of verbs show ‘simple’ semantics, i.e. their suffixes are only of morphological, not semantic relevance (no factitives, causatives, etc.), and are not denominative; this latter point proves to be a contrastive feature with regard to groups **B** and, in part, **C**.

This group is characterized by the continuation of old imperfect and aorist formations as their synchronic aorist stem, which often serves as the basis of their present stem, too. They probably constitute the chronologically earliest or most conservative layer of the verbal system. This assessment is supported by the fact that most verbs in this group have a clear Proto-Indo-European pedigree, since loanwords are a priori less likely to continue old, unproductive formations.¹⁴

Group B: *-c’* aorists with root participles

The group of verbs in *-em/-im* with an aorist in *-ec’i* continues original denominative stems or roots, to which the present suffix **-eje/o-* > Arm. *-e-* is added (Klingenschmitt 1982: 139–40).

¹¹ The Armenian forms are most probably based on the aorist stems, Ø-grade **d^hǝǵ^h-* and **b^hǝǵ^h-*, which explains the vocalism (cf. Klingenschmitt 1982: 109). The difference in consonantism between present and aorist is *lautgesetzlich*, since **-rj-n-* results in Arm. *-rñ-*; cf. Schmitt (2007: 45–6), and, on the phonologically similar Arm. *taramim* ‘to whither’, cp. Skt. *tṛṣyati* < **tṛs-*, Beekes *apud Kortlandt* (2003: 196).

¹² This is phonologically regular, since **l* > Arm. *l* before consonant (except **y*), cp. Arm. *eln* ‘deer cow’, Gk. ἔνελος (with metathesis), OCS *jelenъ*, all from < **h₁el-(h₁)en-*.

¹³ Klingenschmitt (1982: 243–4) suggests a number of possibilities: either a derivation from the o-grade perfect stem, a denominative formation on the substantive *t’oyl* ‘permission’, or a direct formation from the Ø-grade stem **tl-nu-* with analogical introduction of *-o-* on the basis of the plural (in which case an e-grade suffix might be expected in the singular).

¹⁴ As indicated in the discussions of groups **B** and **C** below, most loanwords from Iranian or other language families are modelled on these more innovative morphological paradigms. A parallel pattern may be sought in English: verbal stems adopted from the Romance languages, e.g. NE *innovate*, *stabilize*, *diverge*, all form their past tense in *-(e)d*, as opposed to older, ablauting formations such as *sing*, *drive*, *catch*. There are a small handful of exceptions to this rule (Meyer 2017: 50), but they do not detract from the overall evaluation given above.

Besides straightforwardly Indo-European roots such as Arm. *gorcem* ‘to work’, cp. Gk. ἔργον, Myc. *wo-ze*, Av. *varaz-*, PRS *vəraziia-* < * $\text{u}e\text{r}g\text{-}$, in Armenian derived from the nominal o-grade * $\text{u}o\text{r}g\text{-}$, and potentially *lmem* ‘to press, knead’, cp. OCS *lomiti* ‘to break’, this group also includes denominative formations on the basis of Iranian terms adopted into Armenian, e.g. *bžškem* ‘to heal’, cp. Arm. *bžišk* ‘physician, doctor’, Pth. *bzyšk* /*bizešk*/, Skt. *bhišaj*; Arm. *nšanakem* ‘to signify, make clear’, cp. Arm. *nšanak*, *nšan* ‘sign’, Pth. *nyš(‘)n* /*nišān*/; and Arm. *nmanim* ‘to be like, resemble’, cp. Arm. *nman* ‘like’,¹⁵ Pth. *m’n-* /*mān-* ‘to resemble’, MP *m’nīg* /*mānāg*/ ‘like’.¹⁶ In addition to denominative formations and the class of inherited *-je/o- formations, verbs borrowed as such from West Middle Iranian have been integrated into this group as well, thus Arm. *aržem* ‘to be worth’, Av. *araja-*, Pth. *’rj’n* /*aržān*/; *hramayem* ‘to order’, WMIR. *frm’y-* /*framāy-*/ (Durkin-Meisterernst 2004: 156); *awhrnem* ‘to bless’, WMIR. *’fryn-* /*āfrīn-*/ (Durkin-Meisterernst 2004: 26–8).

While attributing most **B** verbs to denominative derivational mechanisms, Klingenschmitt also suggests that some may be thematic in nature. In the case of Arm. *erewim* ‘to appear, seem’, cp. Gk. *πρέπω* ‘to excel, draw attention to oneself’, for instance, a derivation from **prep-* is traditional (1982: 143–4).¹⁷

Other verbs clearly belong in this group, but present with a less clear etymology and thus formational history; so for example Arm. *sxalem/-im* ‘to err, stumble’,¹⁸ and Arm. *malem* ‘to grind, mill’,¹⁹ In other instances, it is plain that the present is formed with a *-je/o- suffix, whether it be primary or denominative; as verbs of this type may be counted *cicalim*

¹⁵ The Armenian presumably goes back to an unattested Iranian form with a prefixed *ni-* as occurs frequently in Indo-Iranian languages; see further Pth. *nydrynj* /*niḍrenj*/ ‘to oppress, subdue’ and YAv. *θrayta* ‘compressed’ < **trenk*^(w)- (cp. Cheung 2007: 395–6).

¹⁶ The occurrence of Iranian loanwords in this group suggests that the denominative formation in *-em* was still productive *nachursprachlich*. While West Middle Iranian, specifically Parthian, loans undergo a small set of Armenian-internal sound changes (see Chapter 2 above), they are unlikely to have entered Armenian before the onset of their intensive contact with Parthian in the 1st century CE. To a more limited extent, Syriac loans show the same derivation; cp. Arm. *kározem* ‘to preach, announce’, and Arm. *károz* ‘preacher, herald’, Syr. *krwza* /*kārōzā*/.

¹⁷ As has been noted, however, both the Greek and the Armenian forms can also derive from **k^wrep-*, cp. Skt. *’kīp-* ‘beauty’, Lat. *corpus* ‘body’ (Schindler 1972; Clackson 1994: 165–6; Olsen 1999: 516–17), in which case a denominative formation of Arm. *erewim* < **k^wrep-je/o-* is not implausible, esp. in view of related nominal forms such as Arm. *eresk* ‘face’ < **k^wrep-sa-h₂* (Olsen 1999: 64).

¹⁸ Klingenschmitt derives this verb from **sk^wh₂al-e/o-*, cp. Gk. *σφάλω* ‘to make fall, trip’ (1982: 144); this is, however, phonologically problematic (Martirosyan 2010: 517), suggesting that this may be a loan word of as yet unclear origin. Given the existence of *sxal* ‘error, mistake’, a denominative origin is probable.

¹⁹ A derivation from **melh₁-* is indisputable, but the precise formation is debated; Klingenschmitt suggests a thematic present on the basis of a Ø-grade root **m₁h₂-e/o-* next to OUmbr. *kumaltu*, *kumultu*, Cymr. *malu* (1982: 145). This, however, stands in contrast to a distinctly athematic formation in Lat. *molō* ‘id.’ (de Vaan 2008: 386–7), and the related denominative formation Lat. *immolāre* ‘offer, sacrifice, immolate’ from *mola* ‘millstone’ < **molh₂-h₂*. Since a laryngeal in the sequence *-VRH- is presumed to disappear (for which evidence is scant; cf. Beekes *apud Kortlandt* 2003: 189) and assuming that **-o-* > Arm. *-a-* in an open syllable on occasion, if the loss of *-H- preceded this change, a denominal formation of *malem* on the basis of PArm. **mol-* is not impossible; a reduplicated form, Arm. *mamul* ‘press’, is attested (Ag. VIII.19), but no original simplex is extant. A different but possibly preferable derivation sees *malem* as a secondarily thematized form based on an old ablauting athematic formation; this would also explain the productive *-c¹* aorist, which is likely secondary, too.

‘to laugh’,²⁰ *diem* ‘to suck (milk from the breast),’²¹ *ačem* ‘to grow, increase,’²² *mrmnjem* ‘to murmur, mumble.’²³

Given that a large number of the roots upon which group **B** verbs are based have been borrowed from e.g. West Middle Iranian languages and Syriac, the formations in this group must be younger than those in **A**. This is evidenced further by the usage of aorist markers that have arisen only in Proto-Armenian; at the same time, it must be noted that the participles of these verbs, as described above (‘Synchronic verbal groups’), do not contain the innovative aorist marker Arm. -c^ʿ, and are instead based on the historical present stem, which synchronically must have been perceived as the root.

Group C: -c^ʿ- aorists with -c^ʿ- stem participles

The verbs belonging to group **C** are in many respects the most diverse in their formation. While they share the general aorist formans -c^ʿ- and a participial formation based on this stem, -c^ʿeal, their present and aorist stems are evidently of heterogeneous origins.

The smallest subgroup within group **C** is constituted by the four verbs *asem* ‘to say’,²⁴ *gitem* ‘to know’,²⁵ *karem* ‘to be able, have the power’, and *mart'em* ‘to be able, possible, have the power’, all of which construe an aorist in -ac^ʿ- and a participle in -ac^ʿeal.²⁶

²⁰ While it is plausible that this word should continue a reduplicated formation *ǵel-ǵlh2-je/o- as suggested by Klingenschmitt (1982: 147), comparable in formation to Gk. δαιδάλλω ‘to work cunningly, embellish’, Martirosyan (2010: 340–41, 766–7) points out that reduplications of the pattern Ci-Ce/aR- are most common in nouns, cp. Arm. *šišal* ‘demon’, wherefore *cicalim* may well be a denominative formation.

²¹ Cf. Klingenschmitt (1982: 148); Jahukyan (1987: 119); Godel (1975: 88–9); Martirosyan (2010: 239).

²² For the etymology of this root, cf. Martirosyan (2010: 43) with references.

²³ Cf. Klingenschmitt (1982: 154–5); verbs derived from onomatopoeic expressions appear to often be built on *-je/o- stems, cp. also e.g. Gk. μορμύρω (Godel 1975: 81). The associated noun *mrmunj* ‘mutter, maundering, lamentation’ is likely to be secondary.

²⁴ This verb is based on an old perfect stem, cp. Gk. ἦ, Lat. *aiō*, assuming Arm. *ase* < *h₁e-h₁eǵ-t and analogical generalization of the resulting -s- < *-ǵ-t-; for discussion and bibliography, see Martirosyan (2010: 118), Klingenschmitt (1982: 137–8).

²⁵ This verb is undeniably related to Gk. οἶδα, Ved. *véda*, Goth. *wait*, all of which < *uoid-h₂e, a perfect formation. Klingenschmitt suggests that the formation of a thematic present is based on the 3SG form *uoid-e to which the thematic 3SG.PRS marker *-ti is added, yielding *uoid-e-ti as the basis of an analogical restructuring of the verb (1982: 135).

²⁶ *karem* and *mart'em* are etymologically unclear; cf. Gauthiot (1914: 160; 1930: 83). Klingenschmitt (1982: 138–9) compares Sogd. *k’ōy*, *k’ōw* ‘very’ and Av. *kāθa* ‘affection’, which may change the meaning of the Sogdian words to ‘lovingly, with pleasure’. In both instances, the semantics remain tenuous; a potential relation to WMIr. *kr-* /*kar-* ‘to do, work’ seems less problematic, if still not semantically unobjectionable; cp. Ačařean and Nersisyan (1971–1979: 542–3); Durkin-Meisterernst (2004: 207–8). Since *karem* is likely to be a denominative on Arm. *kar* ‘strength, ability’, an Indo-European derivation from *ǵ^wrH-i-, cp. Cymr. *bryw* ‘strong’, OIr. *brig* ‘strength, fortitude’ is not implausible; but cf. de Lamberterie (1982) for a derivation from an old perfect of this root. *mart'em* may similarly be a denominative on Arm. *mart* ‘possibility, possible’; Klingenschmitt (1982: 139) stipulates that *mag^h-tro-, Germ. *may-, Slav. *mogo- ‘to be able’, is the only plausible Indo-European connection.

The second subgroup of *-am* verbs contains Arm. *bam* ‘to say’ (defective),²⁷ *keam* ‘to live’,²⁸ *tam* ‘to give’,²⁹ *gam* ‘to come’,³⁰ and *kam* ‘to remain, stay’. Within Armenian, all five verbs form athematic root presents. This small group of athematic presents only partly fits into group C, since *tam* has retained an old aorist formation and *gam* uses similar, but suppletive formations, so that both should belong in group A. *keam* and *kam*, on the other hand, have adopted younger *-c-* aorists. Due to the small number of these verbs, however, and the general heterogeneity of group C, these few outliers do not undermine the makeup of the group.

A further group of *-am* verbs consists of denominatives of the type **-ah₂-je/o-* built mainly on o-stem nouns and adjectives, endowed with the meaning ‘to have, do, deal with, be like X’; while it is phonologically unclear whether **-ah₂-je/o-* > PArm. **-ǎje/o-* > Arm. *-a-* is plausible owing to a lack of comparable data, this seems the most economical assumption (Klingenschmitt 1982: 89–91).³¹ Among this group may be counted verbs such as *yusam* ‘to hope’ (< *yoyš* ‘hope’), *olbam* ‘to lament’ (< *olb* ‘lament’), *p’ut’am* ‘to hasten’ (< *p’oyt* ‘haste’), and *šnam* ‘to commit adultery’ (< *šun* ‘dog; adulterer’).³²

²⁷ *bam* ‘to say’ functions only as a conjunction after *asem* ‘to say’, and may be related to **b^hah₂-*, Gk. φημί, Lat. *fātur*; an aorist is not attested (Klingenschmitt 1982: 84).

²⁸ This verb is thought to reflect **g^weih₃-*, cp. Gk. βέομαι ‘I shall live’, Skt. *jīvati*, forming an athematic present (Klingenschmitt 1982: 84–5; Martirosyan 2010: 256–7); for an alternative view, cf. Barton (1990–1: 45 n. 58).

²⁹ Like *kam*, Arm. *tam* stands in contrast to cognates in other Indo-European languages which show reduplicated present roots, cp. Gk. δίδωμι, Ved. *dādāti* < **d^é-deh₃-*. Klingenschmitt (1982: 85) assumes that ‘in diesen Fällen eine Umbildung der reduplizierten Stämme durch Weglassung der Reduplikationssilbe stattgefunden hat’. *tam* forms an athematic root aorist *et* like *ekn*. Bonfante (1942) observes that the 3SG.AOR of both *dnem* ‘to put’ and *tam* ‘to give’ corresponds to the respective forms in Vedic (Arm. *ed*, *et* and Ved. *ádhat*, *ádāt*). The 1SG.AOR forms *edi* and *etu*, however, cannot be cognate with Ved. *ádham* and *ádām* owing to Proto-Armenian word-final apocope. Bonfante, and with him later on Kortlandt (1987), therefore assumes that, like Slavonic, Armenian has continued in these forms a sigmatic aorist **dh^{esom}*, **d^{osom}* as evidenced by e.g. Slav. *děchū*, *dachū*; also cf. Barton (1973–4).

³⁰ The case of *gam*, AOR *eki* ‘to come’ is complex. Both Martirosyan and Klingenschmitt agree that the aorist form is a regular athematic root aorist on the basis of **g^wem-*, Skt. *gam-*, 1SG.AOR *ágamam*, Gk. βάλω, Lat. *veniō*, at least for the 3SG: *ekn* < **h₁é-g^wem-t* (Klingenschmitt 1982: 279; Martirosyan 2010: 249). Complications arise in the determination of the present. Klingenschmitt (1982: 86) rejects Meillet’s derivation from **ueh₂-(d^h)-mi* (1936: 134; cf. Martirosyan 2010: 196) on semantic grounds; his suggestion that Arm. *gam* be related to Gk. κίχάω ‘to reach, arrive, meet’ < **g^heh₁-* is rightly rejected by Martirosyan, since Skt. *já-hāti* ‘to leave, abandon’ and Av. *za-zā-mi* point to a root with a palatal velar. The aorist Arm. *eki* has a related present in Arm. *kam* ‘to stand, remain’, which in turn forms a weak aorist *kač’i*.

³¹ Klingenschmitt also raises the question whether this type may have been merged or contaminated with a similar suffix **-ah₂-* as occurring in e.g. Lat. *novāre* < **neuh₂-*; there is no semantic evidence that a factitive meaning is contained within the verbs in question (this function is taken up by a younger formation, Arm. *-anam*), nor any way of phonologically determining its validity, and thus it remains insubstantial.

³² Klingenschmitt points out that many verbs of this type are etymologically problematic: *ert’am* ‘to go, leave’ may serve as a case in point. Forming a suppletive indicative aorist *čogay* (all other moods are built upon the stem *ert’-*), the verb shows a participle *ert’eal*. Historically linked to Gk. ἐρχομαι, Ved. *rcchāti* (Meillet 1898: 276; 1935: 249; Rix 1970: 98), all deriving from **h₁r-ske/o-*, this etymology leaves open the question of the *-am* type conjugation; the most plausible explanation is that of Martirosyan, who proposes that *ert’am* is a denominative verb from Arm. *ert’* ‘journey, going’, deriving from **h₁r-sk-ti-* > PArm. **er-c’-t’i* > Arm. *ert’*, aligning this verb with most others of its class (2010: 263).

Another subgroup is constituted by verbs in *-(a)nam*, which are continuations of original Indo-European nasal-infix presents (Klingenschmitt 1982: 106). This type is diachronically differentiable in primary and secondary, i.e. denominative stems; the former have been treated above (Group A: root aorists). Klingenschmitt counts amongst the above-mentioned primary formations also factitives in *-anam* which morphologically belong in group C; these, however, align synchronically with the denominatives in forming aorists and participles in *-c^t*, thus *stanam*, AOR *stačay* ‘to purchase, receive’, cp. Lat. *dēstināre* ‘to make fast, decree’ (also a factitive), both < *steh₂-, and *banam*, AOR *bac’i* ‘to open’, cp. Gk. φάίνω ‘to bring to light, cause to appear’, both < *b^heh₂-.³³ The largest number of *-anam* verbs, however, consists of secondary formations, mainly fientive or stative denominative verbs (Klingenschmitt 1982: 119).³⁴ While the vast majority of these verbs derive from Indo-European roots, Iranian and Syriac loanwords, e.g. *thanam* ‘to be(come) a child’ < Syr. *thly* /talyā/ ‘boy’, or *hiwandanam* ‘to be(come) ill’ < Pth. *hēwand ‘ill’, cp. MP *hy(w)ndkyh* /hēwandakēh/ ‘illness’ (Salemann 1908: 92–3; Olsen 1999: 303 n. 229; Yakubovich 2009: 270) occur as well. Other semantic types exist, but are both severely limited in number and most likely very late developments (Klingenschmitt 1982: 122–3). In all secondary cases, it is likely that the formation relies on a nasal suffix added to ‘urindogermanische mittels eines Suffixes *-h₂- von thematischen Adjektivstämmen abgeleitete faktitive Denominativa’, i.e. the type *neue-h₂- < *neuo- ‘new’ (Klingenschmitt 1982: 124).

The final subgroup in C consists of verbs in *-num*. This category is mainly represented in group A with verbs such as Arm. *arnum* ‘to receive’, cp. Gk. ἀρνύμαι, forming synchronic root aorists and participles. A few verbs, however, fall into group C; those which have a more or less securely determinable etymology seem to show not a primary *-neu-/nu- suffix but rather one used in a secondary function, e.g. Arm. *zgenum*, AOR *zgečay* ‘to put on sth.’, cp. Gk. ἔννυμι (act.) ‘to dress someone; (mid.) to get dressed’ < *ues-nu- (prefixed in Armenian with *zu-), according to Klingenschmitt (1982: 248) reflects a ‘Faktivbildung zu der einen medial flektierten rhizotonen athematischen Präsensstamm bildenden Wurzel *ues-’ and is an innovation in both Greek and Armenian.³⁵

Group C is clearly very diverse as far as the morphological formation of its constituent verbs is concerned, but coheres in that most if not all formations are of a semantically secondary, derived nature, consisting largely of denominatives, factitives, and fientives built on both Indo-European and borrowed Iranian or Syriac roots. Moreover, those few verbs whose historical morphology patterns with types grouped within C but which show closer

³³ Klingenschmitt (1982: 112–13) proposes original nasal infix presents in both cases, although in most other instances in which, from an Indo-European perspective, such present stems would be expected, they have been replaced by *einzel sprachlich* developed nasal-suffix presents (1982: 109, 159–61; see also Schmitt 2007: 135). Given their aorist formation, and their clearly derivative semantics, it is doubtful whether the designation primary is appropriate.

³⁴ Some of them have, however, turned into transitive verbs, e.g. *bokanam* ‘to take off (shoes); lit. to be(come) barefoot’ < *bok* ‘barefoot’, *golanam* ‘to steal; lit. to be(come) a thief’ < *gol* ‘thief’.

³⁵ A similar innovation as compared to Indo-European cognates may be present in *lnum*, AOR *lc’i* ‘to fill’; while Gk. πίπτω and Ved. 3SG.IMP *āpiprāta* suggest a reduplicated present, Vedic and Old Avestan also show reflexes with nasal infix presents, e.g. Ved. *pṛnāti*, OAv. 2SG.IMV *pərənā*. Neither Klingenschmitt (1982: 253–5) nor Martirosyan (2010: 309–10) take a clear position on the formation of the Armenian reflex; owing to its semantics, a factitive formation does not seem too far-fetched. Olsen (1999: 805) sees in this formation a late remodelling of a PArm. *lnam; this, however, seems unlikely in view of its aorist formation.

affinity to groups **A** or **B** have been shown to deviate from the main type in some meaningful way; in most cases, however, it remains unclear whether these deviations are archaic or innovative.

Summary of verbal groups

The overlap between groups **A**, **B**, and **C** is relatively small and largely restricted to verbs in *-num* and *-anam*; occasional examples of atypical behaviour can be linked either to secondary formations or frequency effects.

Group **A** consists largely of originally thematic verbs and primary nasal-suffix presents; group **B** is restricted almost exclusively to denominative formations with a mixed Indo-European and contact language heritage. Group **C** contains Indo-European perfects, athematic, denominative, factitive, and other secondary formations, which are likely to have arisen in their current form later in the development of Proto-Armenian than those in at least group **A**.

All this suggests a correlation between present, aorist, and participle formation on the one hand and verbal class as well as relative chronology on the other hand; the specific nature of this correlation is explored in what follows.

To understand the various aorist formations, and in order to determine the specific and relevant chronological order of the groups mentioned, different approaches to the formation of the aorist in general, but most specifically that of the *-c'*-aorist, must be reviewed and compared briefly. It is only on this basis that further comments concerning the underlying reasons for the grouping suggested above and its relevance to the formation of the participle can be made.

Aorist formation

In view of the grouping proposed above (*'Synchronic verbal groups'*), the question arises whether the innovative *-c'*-aorist may have originated within one of the above-established groups or subgroups, and what precisely its likely Indo-European ancestry is.

For this purpose, this section reviews the different views on this subject, weighing the various arguments and proposing which origin seems most likely given the evidence from phonological change, word and stem formation, and cognates in other IE languages. Approaches that consider a sigmatic aorist the origin of Armenian *-c'* is discussed first, together with an outline of the problems that go along with this hypothesis. Thereafter, the more widely accepted assumption that the Armenian weak aorist marker derives from an old imperfect formation in **-sġ-* is presented along with some parallels in other Indo-European languages. Finally, the implications of accepting one or the other theory presented with regard to the formation of the past participle are discussed.

Continuation of PIE **s*-aorist

A number of proposals link the Armenian weak aorist in *-c'* with the Indo-European sigmatic aorist. Klingenschmitt (1982) advocates an extended sigmatic aorist as the basis of the Armenian *-c'*, calling into doubt both the possibility that Armenian could have used

the PIE preterite as a continuation of the aorist and that **-sk̑-* should yield *-c̑-* in Armenian. He suggests that *-c̑-* derives from **-ss-* by dissimilation of the first dental spirant into a dental stop (cp. Ved. AOR *avātsam* ‘to dwell’ < **a-uās-sam*) and subsequent phonemization (1982: 287).³⁶ Solta (1984: 73–4) calls this suggestion an ‘unglückliche Idee’, and rightly rejects for not having Indo-European backing and for contravening Armenian sound laws.³⁷

A different approach suggests that the aorist in *-c̑-* arose on the basis of sigmatic aorists in dental-final stems, which were then used as an analogical model. Already Solta remarks that a small set of words with dental-final seem to show a sigmatic aorist from which is then built the present stem, e.g. *anicanem*, 1SG.AOR *anici*, 3SG.AOR *anēc* ‘to curse’ < **h₃nejd-s-* (cp. Gk. ὀνειδος ‘reproach, rebuke’)³⁸ In these verbs, Arm. *-c-* reflects a development from **-ds-*.³⁹ Solta lists other instances in which original sigmatic aorists have survived and served as the basis for present-stem formation, yielding the same phonological form as taken by the weak aorist, e.g. Arm. *lućanem*, cp. Skt. AOR *arociṣṭa*, showing a combination of palatal and **-s-* (1984: 425).

Pisani extends the argument by suggesting that **-s-* furnishes the weak aorist marker *-c̑-*, too.⁴⁰ Kortlandt makes the argument more explicit: the weak aorist in *-c̑-* in general derives from sigmatic aorists as a result of analogy with dental- or laryngeal-final verbs (1995: 15).⁴¹ Specifically, he suggests that *-c̑-* is the expected result of **-Ts-* and **-Ķs-*, whereas **-Hs-* yields *-ac̑-*.⁴² In addition, Kortlandt (1996) argues that next to a group of verbs that form thematic or root aorists, e.g. *mtanem* ‘to enter’ < **mud-*, AOR *mti*, *emut*, there is also a large group of sigmatic aorists, e.g. *mucanem* ‘to introduce’ < **meuds-*, whose present stem is in fact secondarily built on the aorist (1996: 42). This line of reasoning suggests, then, that at the time that **-s-* was lost in Proto-Armenian, the various previously formed combinations of dental or palatal stop and **-s-* had all phonemically coalesced to PArm. **-c̑-*, thus providing the new aorist marker for Armenian.⁴³ Consequently, the root-final consonants were analogically restored in those verbs where other outcomes are phonologically predicted, e.g. *mucanem*, *emuc* with *-c-* < **-ds-*.

This explanation is, on the whole, untenable for two reasons: the expected outcome of most **Ts* and **Ķs* clusters is Arm. *-c-*, not *-c̑-*. Furthermore, this proposal fails to explain how or why this aorist formation, based only on a small minority of verbs, should have

³⁶ Klingenschmitt does not clarify whether the first **-s-* is aoristic or belongs to the stem, thus requiring analogical mechanisms for spreading throughout the paradigm.

³⁷ Compare e.g. **h₂es-si* > Arm. *es* ‘thou art’, not **ec̑*; see further Kortlandt (1995).

³⁸ Other verbs include *xacanem*, 1SG.AOR *xaci*, 3SG.AOR *exac* ‘to bite, chew’ < PArm. **xad-s-* (possibly cp. Skt. *khādati* ‘to chew’); and *hecanim*, 1SG.AOR *hecay* ‘to mount, ride’ < **sed-s-* (Gk. ἕζομαι ‘to seat oneself, sit’).

³⁹ Solta (1984: 423); also cf. Bugge (1893: 47).

⁴⁰ He makes the same phonological connection for the GEN.PL marker *-c̑-*, reconstructing the ending on the basis of the pronominal **-sōm*; cp. the analogically created **-sōm* genitives in Latin and Greek, e.g. *amicārum* ‘of female friends’ (cf. Ernout 1953: 22, 32; Palmer 1954: 242). Here *-c̑-* is supposedly the result of **-s-* combining with preceding consonants, specifically **-t-* and the palatal series under word-final apocope. This approach is problematic at least insofar as the GEN.PL marker is not preceded by consonants of this series in all lemmata. This derivation therefore relies on an analogical spread from a probably quite small number of nouns.

⁴² Middle aorists in *-eay* (which do not show this marker) accordingly derive from thematic aorists in **-ēs-* (cf. Godel 1975: 121). The expectation that all **-Ts-* clusters should yield *-c̑-* is contrary to what Kortlandt has suggested before (1987), and raises the question whence derive the forms mentioned there. Similarly, the provenance of the Arm. *-ea-* vocalism is left unexplained.

⁴³ Kortlandt (1996: 43) concedes that this change is contrary to sound laws, but morphologically sensible and thus an acceptable exception.

spread analogically through large parts of the verbal system. The approach is additionally undermined by the fact that in verbs such as *anicanem*, the aorist is synchronically strong, and does not show the same phonological outcome as do the weak *-c'* aorists. That being said, it is entirely plausible that sigmatic aorists have been retained in Armenian for a small set of verbs, e.g. those with final dental. Solta's observation that all these verbs form a secondary present may in turn entail that synchronically, these aorists were considered akin to root aorists (cf. group **A** above).

Numerous attempts at connecting the Indo-European sigmatic aorist with the Armenian *-c'* aorist-marker have been made, but it seems unlikely that any of these suggestions can cogently account for both the phonological form of the marker and its spread.

The suggestions put forward by Klingenschmitt (1982) and Kortlandt (1996) clearly and openly violate established and, as far as the data permits, well-evidenced sound laws.

An earlier approach by Kortlandt (1995) relies too heavily on analogy, since the number of verbs which form the basis of this supposed analogical change is rather small, and they are unlikely to have been frequent enough to effect such change.

While the explanations advanced to explain the etymology of *anicanem*, *hecanem*, *xacanem*, etc. are cogent with the data from Indo-European sister languages and the Indo-European sigmatic aorist therefore has reflexes in Armenian, it cannot account for the most prevalent aorist formans *-c'*, which cannot be plausibly derived by regular sound change or analogy.

Continuation of PIE *sġ-imperfect

A number of different attempts at explaining the Armenian weak aorist as a reflex of an Indo-European formans *-sġe/o-*, which in other languages is found as a frequentative or imperfect marker, have been made.⁴⁴ All of these explanations, in one way or another, relate to Meillet (1903: 85–6), where it is suggested that the weak aorist marker *-c'* is cognate with an imperfect-marker employed in Greek; the *-ea-* vocalism of the 3SG.AOR is there described as being of unknown or obscure origin.

Mariès' explanation became the *communis opinio* for a long time (cf. Solta 1963: 122 n. 8). He expands on Meillet (1903) in attempting to find an explanation for this *-ea-* vocalism of the aorist. In his view, the derivation of Arm. *-c'* from **-sġe/o-* is undeniable, while a connection between the Arm. *-a-* in *-eac'* and **-ā-*,⁴⁵ occurring also in Lat. *erās* 'thou wert', *fēcerās* 'thou hadst done' and Lith. *būvo* 'he has been' (o < *ā) is 'plus que vraisemblable' (1930: 168).

Mariès notes that an **-ā-* formans is found in two different functions in Armenian, once in the formation of the present and once in the aorist stem. In the present, the formantia **-ā-je/o-* and **-ā-ne/o-* are found in regular thematic and denominative verbs such as *orcām* 'to vomit', *yusām* 'to hope', and *loganam* 'to wash oneself', *tkaranam* 'to become weak'. These

⁴⁴ For the outcomes of **-sġe/o-* in Greek, see Zerdin (1999).

⁴⁵ No attempt will be made at identifying or clarifying the original function of this formans, as this would go beyond the remit and purpose of this chapter.

verbs continue this *-ā- in the aorist, thus *orcac'i*, *yusac'i*, and *logac'ay*, *tkarac'ay*.⁴⁶ This Arm. -a-, accordingly, is not part of the aorist formation, but of the verbal stem.

In other verbs with weak aorists, *-ā- forms part of the aorist formation in the sequence -ea-, which *Mariès* derives from *-is-, an aorist marker attested in e.g. Skt. *ābhāriṣam* 'I carried' and Lat. *ēg-is-tis* 'you drove'. The formation of Arm. *gorceac'* 'he worked' from **uorǵ-* thus involves a sequence *-is-ā-ske/o-.⁴⁷ Both *-ā- and *-ske/o- are, however, usually found in past-tense formations, as indicated above, and further evidenced by Homeric imperfects/injunctives such as Hom. *φάσκων* 'I said', *φύγεσκων* 'I fled'. The sequence of formantia envisaged, i.e. *-is-ā-ske/o-, therefore seems rather improbable, since aorist and present/imperfect markers would seem incompatible; similarly, the markers *-ā- and *-ske/o- are not expected in company (cf. *Karstien* 1956: 223). Furthermore, it is unclear why there is a marker *-is- as the aorist marker in the absence of either a complementary *-s- formans in the same type of formation or plausible phonotactic reasons.

A different approach is presented by *Karstien*, who suggests that there may be a closer relation between the Armenian aorist formation and that of the Slavonic imperfect, advocating a relationship between Slav. -aše-/acho- and Arm. -ac'e-, i.e. the aorist of some group C verbs such as *mnam*, AOR *mnač'i* 'to remain'.⁴⁸ The suggestion that non-aoristic past-tense formations may have been reinterpreted as an aorist is unproblematic in view of forms such as *eber* 'he carried' and *eharc'* 'he asked', both of which reflect original Indo-European imperfects, cp. Ved. *ābhārat* and *apṛcchat*.⁴⁹

To explain all weak aorist formations, *Karstien* distinguishes three types of -c'- aorists: type *gitac' ~ gitem* 'to know', where -ac'- is added directly to the verbal root;⁵⁰ type *gorceac' ~ gorcem* 'to work', where a formans -e- appears between verbal root and tense marker; and type *mnač' ~ mnam* 'to remain', *yusac'aw ~ yusanam* 'to hope', consisting of denominative verbs whose present stem ends in -a-, thus showing only a -c'- aorist.

Karstien does not discuss the first type in great detail, only mentioning *gitac'* as a secondary formation on the basis of an old perfect comparable to that of Goth. *wissa*, OHG *wissa*, *wista*, since *gitem* derives from **uoid-*, cp. Gk. *οἶδα*.

The -e- interfix of the second type is identified as continuing either the Indo-European causative-iterative marker *-éje- or the denominative suffix *-jé- added to the thematic vowel, the outcomes of which are indistinguishable in Armenian; cp. Gk. *φορέω*, *φιλέω*, *φοβέω*, Ved. *patáyati*, *svāpáyati*, *amitráyati* (1956: 222). This analysis squares well with the observation that -eac'- aorists are most commonly found in denominative and other secondarily formed verbs.

The second element of the formation corresponds to the marker already envisaged by *Mariès* and *Meillet*, i.e. *-ske-; owing to the various functions of this suffix in Armenian,

⁴⁶ Note the difference in treatment of the suffixes: *-ā- is preserved in the aorist formation, while the present stem formantia -je/o- and -ne/o- are dismissed; this suggests that for all purposes, the synchronic verbal roots must include the *-ā- marker.

⁴⁷ For *-is-a- > *-ia- > Arm. -ea-, cp. *tehi*, INS.SG *teleaw* 'place' < *-iaw < *-jab^hi.

⁴⁸ He draws on the already-mentioned insight that the *-ā- element as a past marker is not uncommon in a number of IE languages, citing e.g. Lat. *erat* 'he was', *cūrābat* 'he took care' and Lith. *kovójo* 'to struggle, fight', *turėjo* 'to have'; this suggests that this morph may be the past formans, while Slav. *-che-/cho- and related elements can only be allotted 'eine begleitende Rolle als modifizierendes Element' (1956: 221).

⁴⁹ Furthermore, Armenian verbs with -ac'e- aorists most frequently are secondary, e.g. denominative formations, which in other languages often have no original aorist but only an imperfective past or a suppletive aorist form (cf. *Klingenschmitt* 1982: 128).

⁵⁰ There are only four of these verbs, *gitem* 'to know', *asem* 'to say', *karem* 'to be able', *mart'em* 'id.'; see page 265.

Karstien rules out the possibility that it could bear any specific function such as past tense,⁵¹ suggesting that this function is taken up by *-ā-.⁵²

Godel generally agrees with Karstien, and in view of the various aorist formations concludes:

il faut donc qu'à l'époque où on a passé du système indo-européen au système arménien, l'opposition d'aspect qui distinguait l'imparfait de l'aoriste et déterminait les fonctions de ces deux 'temps' se soit effacée, et que seul soit demeuré pertinent le trait qui leur était commun: la valeur passé. (Godel 1965: 34)

Godel (1969) does, however, raise doubts concerning the primacy of the *-ea*-cluster.⁵³

He suggests that, analogously to the declension of the participle (NOM.SG *-eal*, GEN.SG *-el-oy*), the *e*-monophthong may be primary (1969: 256).⁵⁴ The relationship between *-eac'* aorists and their present stems would be parallel to the one suggested for *-ac'* aorists: the *-sĕ- formans is added to the present stem directly, and *-ec' turns into *-eac'* under word-final stress.⁵⁵ It cannot be determined whether this would have happened on the basis of Indo-European type formations in e.g. *-āĭe- and *-eĭe- still, or whether these had already been simplified to PArm. *-a- and *-e-, respectively. Further, Godel's pattern is not applicable across all verbal classes forming weak aorists, since e.g. *asem* 'to say', AOR *asac'i* does not follow suit.

A final proposal goes back to Clackson (1994: 75), who also advocates a derivation of the aorist from an Indo-European imperfect in *-ǎ-sĕ- based on the present stem. He suggests that the marker spread from the verbal groups in *-num*, *-am*, and *-anam* (1994: 82), and explains the forms in *-eac'* as a combination with the thematic vowel, thus *-e-ǎ-sĕ-.

⁵¹ While in Slavonic the *-sĕ- marker was restricted to the past, in Armenian it is employed both as a present-tense marker, e.g. in *harc'anem* 'to ask' < *prĕ-sĕ/o-, a causative formans (verbs in *-uc'anem*, cf. Solta 1963: 118), as well as in aorists, e.g. *elic'* < *e-plē-sĕ-t, and subjunctives. On this basis, Karstien (1956: 227) concludes: 'Angesichts dieser Vielfalt des Vorkommens kann von einer bestimmten Funktion des arm. -çe- [-c'e-] keine Rede sein, indem es sich sowohl in temporaler als auch in modaler Hinsicht als indifferent erweist.' Accordingly, *-sĕ- cannot have been the imperfect marker in either Slavonic or Armenian.

⁵² This does stand in contrast to, and potential contradiction of, the Greek evidence, where Homeric imperfects show that the *-sĕ- suffix can function as a past-tense marker; this, of course, need not have been the case in Slavonic or Armenian.

⁵³ In a small set of verbs, the hypothesis that *-ā- is the actual tense marker in *-c'* aorists is not borne out. Aorists such as *lc'i* ~ *lnum* 'to fill', *xc'i* ~ *xnum* 'to stop', *ankek'i*, *ankēc'* ~ *ankenum* 'to throw' are problematic owing to the lack of *a*-vocalism; an appeal to analogy is unlikely to be fruitful since e.g. *lc'i* < *(e-)plē-sĕ- is likely an old, root-based formation; the most straightforward explanation, as offered already by Meillet (1936: 115), suggests that these verbs were vowel-final and thus added *-sĕ- immediately to the root. The other verbs whose etymology is clear suggest that in addition to the clusters *-ac'* < *-ā-sĕ- and *-eac'* < *(e)ĭe-ā-sĕ-, a formation in *-e(ĭe)-sĕ- must be assumed (Godel 1965: 37).

⁵⁴ This is doubtful, since the main form of the participle is its nominative, and all other forms are subsidiary. The same could be said about the aorist itself, but there, analogies with other persons in the paradigm seem more likely.

⁵⁵ Godel (1975: 128) considers the avoidance of forms terminating in tonic *-e(-)* as a potential motivation, citing as a related example a form of the AOR.IMV *grea* for *gre ~ *grem* 'to write'. The imperative, however, can hardly be used as an analogical model. Further, Godel does not take into account that other aorist forms, e.g. *egit*, *eber*, *eker*, which show similarly labile vowels in tonic position, do not strengthen and diphthongize (see already Hübschmann 1895: 411; see also Clackson 1994: 81–2). Klingenschmitt (1982: 136) further counters Godel's suggestion, citing *ankēc'* < PArm. *and-kēc^he(t^h) which was not analogically transformed to *-ea-* (1982: 136).

Summary and implications

Phonologically, the derivation of the weak aorist marker Arm. *-c'* from **-sk-* is unproblematic and finds good evidence in other well-attested formations such as *harc'anem* 'to ask, request', cp. Ved. *prchá-*, Lat. *poscō*, all < **pṛk̑-ske/o-*. Given the evidence from the denominative verbs and the occurrence of other imperfect formations reanalysed as aorists, it is only sensible to assume that, as suggested by Godel (1965: 34), Klingenschmitt (1982: 128), and others, a functional shift in tense formation must have taken place.

As far as the vocalism is concerned, a sufficient explanation must account for: the occurrence of *-c'* right after the verbal root (type *lnum*, *lc'i*); verbs presenting with an *-ac'* aorist (type *mnam*, *mnac'*); and verbs exhibiting *-eac'* aorists (type *gorcem*, *gorceac'*).

While tempting, Godel's view that the *-eac'* vocalism is secondary is untenable in view of e.g. Hübschmann's and Clackson's arguments. The latter's approach, based on the work of Karstien, seems the most logical: the *-c'* marker originates with group C verbs, consisting largely of denominatives or verbs with otherwise secondary present formations and meanings, which in most other languages, too, would not have had aorists of Indo-European age.⁵⁶ The origin of forms like *lc'i* ~ *lnum* 'to fill' < **pleh₁-sk-*, cp. Gk. *πίμπλημι*, Lat. *plēo*, where the **-ā-* does not occur, are difficult to explain; it seems unlikely that they should be analogical formations. Forms in *-eac'*, on the other hand, are likely the result of group C type *-ac'* aorists spreading to thematic formations in group B.

This explanation has certain implications for the formation of the participle, most approaches to which link the formation, and thus the vocalism, of the aorist in *-eac'* and the *-eal* participle, suggesting that they are based on the same stem. In view of the likely development of the aorist, however, this seems improbable: first, a significant number of primary verbs, group A, form aorists that bear no relation to the *-c'* marker and stem; secondly, all participles encountered exhibit an *-ea-* vocalism, while aorists show differentiated vowel patterns (∅, *-a-*, *-ea-*). Were the two forms related, it might be expected that they should have developed together.⁵⁷ These issues are discussed in what follows.

Participle formation

Taking into account the insights gained concerning the formation of the aorist and the structure of the Armenian verbal system, this section is going to tie in an explanation of the formation of the *-eal* participle that can conform to all synchronic necessities and is semantically as well as diachronically sensible.

After a very brief synchronic recapitulation of the participle formation, the discussion moves on to explore whether it is more plausible to link the Armenian past participle to Indo-European *nomina agentis*, or whether it is better described as a reflex of a verbal adjective of Indo-European age.

After a summary of the issues thrown up by previous explanations, a new solution to the question of the *-ea-* vocalism in the participle and its relationship to the previously discussed aorist formation is presented.

⁵⁶ Cf. Schmitt (2007).

⁵⁷ The situation in Greek may be adduced in contrast; here, synchronically strong and weak aorists, e.g. *λαμβάνω*, *ἔλαβον* 'to take' and *παιδεύω*, *ἐπαίδευσα* 'to educate', form related participles *λαβόμενος* and *παιδευσάμενος* without one tense formation encroaching on the ground of the other.

Synchronic overview

From a purely synchronic perspective, the formation of the participle is, like that of the aorist, dependent on the conjugational class of the verb in question, and thus on its present stem.

As has been suggested above ('Synchronic verbal groups'), three classes can be distinguished:⁵⁸

- A** synchronic root aorists and root participles (*berem, beri, bereal* 'to carry');
- B** -c'- aorists and root participles (*gorcem, gorcec'i, gorceal* 'to work');
- C** -c'- aorists and participles based on the -c'- stem (*ateam, atec'i, atec'eal* 'to hate').

Descriptions in grammars usually state that the participle is built on the basis of the aorist stem, with the exception of certain verbs (groups **B**), where the participle formation is based on the present stem (Jensen 1959: 105–6). While the differences in aorist formation have their origin in the difference in verbal semantics and are correlated to present-tense formations, as suggested above, the fact that the formation of aorist and participle are, in their respective stems, not coextensive, resulting in the mixed group **B**, is puzzling both synchronically and diachronically.

As explained in what follows, there are two types of proposed derivation of the *-eal* participle: one suggesting an original Indo-European nominal stem, the other proposing derivation from a verbal adjective.⁵⁹

Continuation of PIE nominal

Meillet recognizes a formation in PIE *-lo- in the *-eal* participle,⁶⁰ corresponding to that of its Slavonic counterpart; he cites the parallel example OCS *nes-lŭ jesmŭ* 'I have carried', notes its assumed original meaning as 'I am a carrier', and proposes a similar original meaning for Armenian (see 4.2.2.1).

While Meillet (1936: 116) states simply that the *-lo- formans attaches to the Arm. *-ea-* stem, Mariès (1930) more explicitly links its formation to that of the aorist forms: in the example *gorceal*, he suggests that *-eal* derives from a formation *-is-ā-lo-, where the *-skē/o- suffix found in the aorist has been replaced by *-lo-; the formation must be an innovation since it is not based on the verbal root, as found in Slavonic (*nes-lŭ* 'carried' < *nek-), but rather on the aorist stem.⁶¹ In his view, then, the *-lo- form is, in fact, a deverbal *nomen agentis* (1930: 170).⁶²

⁵⁸ Clearly derivative formations like intransitive aorists with a participle based on the causative (*kornc'im, koreay, koruseal* 'to perish') are not included in this grouping.

⁵⁹ A supposed nostratic connection with Georgian *l*-formations as proposed by Jahukyan (1979: 87) was discussed and rejected by Stempel (1983: 40), and will not be given any further attention here.

⁶⁰ The Armenian infinitive continues this formans, too; cf. Meyer (2017: 72–3 fn. 143).

⁶¹ Mariès does not actually provide a definition of 'aorist stem', at least not in an Armenian context; given his analysis, this might have proved problematic owing to the differences in treatment of verbal suffixes as described above ('Summary and implications').

⁶² On the basis of this formation, Mariès suggests that *-ā- in this formation designates not the past tense, but a state, specifically 'la mise en un état d'action ou de passion', so that the Armenian aorist is intrinsically not a past tense. Similarly, the participle is not specified as to tense, but rather aspect, and describes 'un changement in instanti de process aboutissant' (1930: 172).

Regarding the chronology of aorist formations, *Mariès* advocates that verbs in *-em*, AOR *-ec'i* with participles formed on the verbal root (group **B** above) formed this participle first.⁶³ This assumption is largely based on their close morphology in AOR **-is-ā-ske/o-*, PTCP **-is-ā-lo-*.

Deeters (1927) rejects *Mariès*'s and *Meillet*'s suggestions that the participle is a nominal form on logical grounds (see 4.2.2.1), and voices serious doubts that the **-lo-* suffix can attach to an aoristic stem—defended by *Mariès* (1930: 170) as a result of 'l'extrémisme arménien'—since the evidence from all the other languages with **-lo-* suffixes points to its attaching to the root or present stem.

The most recent advocate of a nominal formation is *Klingenschmitt*, according to whom the *-eal* participle is, in its formation, a relict from a period in which the participle was built by suffixation of *-l* < **-lo* to the 'Basisstamm (allgemeinen Verbalstamm)' (1982: 55) (presumably the verbal root)⁶⁴ whereas all forms based on the *-c'* aorist stem are secondary. Remnants of such formations are present in participles that are mainly used as adjectives, e.g. *arbeal* 'intoxicated', *merjeal* 'close', relating to the verbs *arbenam*, *arbec'ay* 'to get intoxicated' and *merjenam*, *merjec'ay* 'to approach'.

Concerning the rise of participial formations based on the aorist stem, e.g. *arnem*, AOR *arari*, PTCP *arareal* 'to do, make' and *gnam*, AOR *gnac'i*, PTCP *gnac'eal*, *Klingenschmitt* (1982: 56) suggests that they are due to the phonological likeness (and thus conceptual conflation) of thematic verbs in *-em* and denominative verbs in *-em*, e.g. *berem* and *gorcem*; while both verb classes build the participle on the verbal root, verbs like *berem* also have root aorists. Owing to the perceived past reference of the participle, and the perception that they were formed on the aorist stem (*berem*, AOR *beri*, PTCP *beréal*), this mechanism was analogically extended to all other verbs.

Continuation of PIE verbal adjective

A different perspective is offered by *Solta*, who suggests that '[d]ie einfachen l-Bildungen haben den Charakter von Partizipien oder Adjektiven, nicht so sehr von Nomina agentis' (1963: 109; see *Meillet* 1932). His claim that the other Indo-European languages apart from Slavonic only show adjectival outcomes of this formation, e.g. Lat. *crudelis* 'cruel', Gk. *σίηλος* 'silent', Got. *sakuls* 'quarrelsome', OE *slápol* 'somnolent' (1963: 109 n.4) is somewhat reductive in view of Gk. *τρίβολος* 'caltrop', Lat. *figulus* 'potter', which point towards nominal formations.⁶⁵

⁶³ There are later, secondary *-ec'eal* participles based on verbs in *-em*, AOR *-ec'i* (group **B**). It is suggested that they were formed once the repetition of **-is-ā-* was no longer perceived (1930: 173). With *Aytənean and Arsēn* (1885: 71), *Mariès* assumes a voice differentiation, whereby, forms passive in meaning are more likely to show an *-ec'eal* participle; exceptions, however, are not rare, and *Vogt* (1937: 6) notes that no difference in semantics or voice is apparent; also cf. *Abrahamyan* (1953: 170ff.). Without any further explanation, the *-ec'eal* form is then re-analysed as derived from the aorist medio-passive imperative, thus e.g. *sirem* 'to love', AOR *sirec'i*, AOR.IMV.ACT *sirea*, AOR.IMV.MED *sireac'*, whence **sireac'-eal* > *sirec'eal* (attested post-classically). *Sahverdyan* (1988) suggests that most *-eal* participles are derived from forms in *-ec'eal* by haplogy; this explanation, however, cannot convince, owing to the evidently secondary, late nature of such participles in derived *-em* verbs.

⁶⁴ *Klingenschmitt* does not discuss the *-ea-* vocalism with respect to the participle separately, but assumes it is the same vocalism as for the aorist.

⁶⁵ In a similar vein, *Godel* draws comparisons to **-lo-* adjectives in other Indo-European languages, such as Gk. *δειλός* 'cowardly', Lat. *pendulus* 'hanging', as well as to the verbal adjectives of Tokharian and the past participle active of Old Church Slavonic, as used in e.g. the perfect *bilū jesmī*

Stempel, in turn, focuses on the parallels and differences between the Armenian participle and the Slavonic past participle active in *-l̥*, cautioning that, although both forms are a productive part of the verbal system, distinct differences between the formations exist: the Slavonic participle is usually root-based and active in meaning, aligning it with Germanic and Latin *nomina agentis* (1983: 44), while the Armenian form is historically passive–intransitive. Although Tokharian verbal adjectives are also passive in the main, and are built on the present (and subjunctive) stem, **Stempel** emphasizes that owing to the relatively late attestation of Slavonic, Tokharian, and Armenian, no certain conclusions may be drawn concerning the value of verbal **-lo-* formations in Proto-Indo-European, since all developments could have been *einzelsprachlich* or at least *nachursprachlich*.

Within Armenian, the **-lo-* formans seems to have taken over from the **-to-* participle, which for phonological reasons was unstable in Armenian and is only attested in a small number of words (**Stempel** 1983: 48).⁶⁶

Regarding the specific formation of the participle in *-eal*, **Stempel** agrees with **Schmitt** (2007) that the vocalism *-ea-* in aorist and participial forms is identical (1983: 62), and like Schmitt explains the *-c'* formans as a primary imperfective **-sk-*, later generalized as **-ā-sk-* on the basis of *a*-stems, whence *-ac'*, and applied to *e*-stems, yielding the formans *-eac'*; for him, the *-ea-* of the participle is an analogical formation.⁶⁷

His argument that the **-lo-* participle is likely to have taken over from the phonologically infelicitous **-to-* formans, continued only in a few lexical items such as *mard* ‘man’ < **mṛ-to-* and *li* ‘full’ < **pleh₁-to-*, is based on the assumption that the *-eal-* form is inherently passive–intransitive; he adds: ‘[e]ine altertümliche Diathesenindifferenz ist für eine so junge Sprache wie das Armenische nicht zu erwarten’ (1983: 67).⁶⁸ The usage of the participle as part of a perfect active must, accordingly, be secondary.

A new approach to the *-ea-* vocalism in the participle

Two explanatory trends can therefore be extrapolated: the participle is either directly related to the *-c'* aorist of group B and C (denominatives assumed not to have had aorists of

‘I have struck’. He provides only a vague sketch of an explanation for the *-ea-* vocalism, which cannot convince (1975: 129).

⁶⁶ **Stempel** argues that much speaks in favour of **-lo-* as a passive verbal adjective having taken over this function: Arm. *joyl* ‘molten, poured, massive’ < **ǵ^he/ou-lo-* suggests an old, athematic formation which attests to such a function separately from the verbal paradigm. As opposed to the *nomina agentis* of similar formation in other Indo-European languages, the Armenian formation must have been an adjective *ab initio*, since the adjectival use of both *joyl* and the *-eal* participle would otherwise have required further derivation with an adjectival formans (1983: 47). **Weitenberg** (1986) objects that there are a number of nominal **-lo-* formations in Armenian (*tesil* ‘vision’, *argel* ‘obstacle’, *ka’il* ‘drop’, *erkiwl* ‘fear’) and other Indo-European languages (OIr. *ól, oul* ‘drinking’, Ru. *pojlo* ‘drink’), which could but need not have arisen through secondary nominalization.

⁶⁷ **Stempel** derives both *-el* infinitive and *-eal* participle from a PArm. **-lo-* verbal adjective, suggesting a proportional analogy of the type *gorcec’i* : *gorceac’* :: *gorcelóy* : **gorcél* > *gorceál*, by which the *-eal* participle has expanded the *-e-* of the infinitive under word-final stress. Thus, infinitive and participle are supposedly separated along aspectual and temporal lines (1983: 67). This explanation does leave open a number of questions regarding the formation of other types of infinitives (in *-al*, *-ul*, and *-ol*) and their analogical relationship to their respective aorist forms.

⁶⁸ It is doubtful whether this is necessarily true, since **Stempel** (1983) seems to conflate late attestation with late development.

Indo-European age), based on a suffixal pattern **-e₂-ǎ-lo-*,⁶⁹ and has thence been analogically spread to class A and the remaining members of C (Mariès 1930 and followers), or it is the result of a differentiation between infinitive and participle, in which the *-ea-* vocalism is the analogical product of its corresponding form in the aorist (Stempel 1983).

In view of the likely development of the aorist suggested above, however, and various criticisms expressed concerning Stempel's ideas (cf. de Lamberter 1985; Weitenberg 1986), neither explanation seems entirely satisfactory.

A first issue lies with tense-marking: Jasanoff (1983: 71, 76) notes that the occurrence of **-ǎ-* < **-eh₂-* past tenses is likely to be restricted to languages in which presents of the type Ved. *tudāti* 'to beat', i.e. thematic verbs with Ø-grade root and accented thematic vowel, occur in significant number; the marker itself occurs with Ø-grade roots. These prerequisites are not met in Armenian, since *tudāti*-type verbs are not well attested. Were **-ǎ-* the past-tense marker in Armenian, the attachment of a second **-skē-* past-tense marker would seem superfluous; a secondary, analogical attachment of this suffix to **-ǎ-* or an *-ea-* past-tense suffix of a different origin is implausible also, since both historically and synchronically the marker of the aorist is *-c'* < **-sk'*, and no remnant of a simple **-ǎ-* past tense remains, while forms such as *inum*, *lc'i* are evidence in favour of **-skē-* as the primary past-tense marker.

Secondly, it ought to be noted that in the two other languages in which the **-lo-* suffix occurs as a productive part of the verbal system, it attaches to the present stem (Slavonic; Lunt 2001: 109)⁷⁰ or to the present/subjunctive stem (Tokharian; Thomas 1952: 11; Malzahn 2010: 49).⁷¹ If a secondary, analogical formation à la Stempel is excluded, as argued above, the Armenian formation would be atypical.

Thirdly, occasional occurrences of adjectives in *-eal* which bear no direct resemblance to verbal forms or whose base verb is not attested, suggest that the formation historically proposed is unlikely; amongst these may be counted *alceal* 'salted' < *alt* 'salt', *barjreal* 'elevated' < *barjr* 'height' (see Greppin 1974: 205). It remains unclear, however, whether these formations are independent and indicate a nominal-adjectival formation, or whether they relate to unattested or obsolete verbal forms.

Accordingly, a different morphological analysis is called for. Given the morphophonological restrictions, the possibilities are severely limited. A promising solution is related to the formation of Armenian *i*-stem verbs, which are largely passive-intransitive. Meillet (1936: 107–8) and with him Godel (1975: 120) relate these verbs to a non-thematic variant **-i-* of

⁶⁹ The length of the **-ǎ-* depends entirely on whether it is assumed that the marker relates to other Indo-European preterites, or is the result of an analogical process.

⁷⁰ Trost (1968: 88–90), however, points out that the *l*-participle is formed in a variety of ways, e.g. from the synchronic aorist stem in OCS *dalъ* 'having given' < *da-*, as compared to the present *dadętъ* 'they will give' < *dad-*, or from the general verbal stem in OCS *vъpalъ* 'having fallen' < **vъpad-lo*, PRS *vъpasti*, AOR *vъpade*, etc. Still, it emerges that none of the possible formations are based on secondary, non-inherited stems.

⁷¹ The exact etymology of TA *-l*, TB *-lle* is debated; Thomas (1952; 1977) argues for an origin in **-lo-* and secondary differentiation within Tokharian, while Van Windekens (1976), Hackstein (2003), and Malzahn (2010) assume that the underlying form is **-ljo-*.

the $*\text{-}\ddot{\text{e}}/\text{o-}$ suffix accountable for the *ya*-passives in the Indo-Iranian languages;⁷² the non-thematic variant occurs also in Balto-Slavic, e.g. Lith. *sėdi* ‘he is seated’, *tūri* ‘he has’, OCS *sěditŭ* ‘he is seated’, *bŭditŭ* ‘he is awake’.⁷³

On this basis, an analogous thematic variant of this suffix, specifically $*\text{-}\ddot{\text{i}}\text{e}/\text{o-}$ may have furnished the *-ea-* vocalism of the participle.⁷⁴

Phonological parallels for the necessary developments can be found partly in *-ea*-stem nouns of the type *tari* ‘year’, INS.SG *tareaw*, in which original $*\text{-}\ddot{\text{i}}$ is lowered to *-e-* (Olsen 1999: 113–4), and other paradigmatic alternations like *jiwn* ‘snow’, GEN.SG *jean* (1999: 135; also cp. Martirosyan 2010: 434–15) or *-ut’iwn*, *-ut’ean* (Olsen 1999: 550–1).

Parallels for a development $*\text{-e}/\text{o-} >$ Arm. *-a-* can be found in *tasn* ‘ten’ < $*\text{d}\acute{\text{e}}\text{k}\acute{\text{m}}$ - and *vat’sun* ‘sixty’ < $*\text{s}\acute{\text{u}}\text{e}\text{k}\text{s}$ - (cf. Arm. *vec* ‘six’).⁷⁵ An alternative explanation would be a dissimilatory change, since a PArm. $*\text{-e-e-}$ would have contracted and thus fallen together with the stem of thematic and some denominative verbs. In the case of an o-grade, a rendition as *-a-* in open syllable is far more common, as delineated by Meillet (1894: 153–5).⁷⁶ Examples of such a development are Arm. *aliki* ‘waves, white hair’ < $*\text{p}\acute{\text{o}}\text{l}\ddot{\text{i}}\text{o-}$, cp. Gk. *πολιός*, and *asr* ‘wool, fleece’ < $*\text{p}\acute{\text{o}}\text{k}\text{u-}/\text{*p}\acute{\text{e}}\text{k}\text{u-}$ cp. Gk. *πόκος*, Skt. *pásu* < $*\text{p}\acute{\text{e}}\text{k}\text{u-}$.⁷⁷

With the proposed phonological development, i.e. $*\text{-}\ddot{\text{i}}\text{e}/\text{o-} >$ PArm. $*\text{-}\ddot{\text{i}}\text{e}/\text{o-}$ (regular loss of intervocalic $*\text{-}\ddot{\text{i}}$) > Arm. *-ea-*, the original development of the participial form would have occurred in the verbs of group **A** or **B**, which form the participle on the verbal root; in group **A** this often coincides with the aorist stem, but not so in group **B**. Whether it is possible that the participle formation in *-eal*, which—possibly secondarily—replaced the phonologically unstable $*\text{-to-}$ participle, should originate in this group **B**, is unclear. An origin in group **A** would surely have resulted in an analogical formation on the basis of the aorist, as happened in group **C**.

This morphological derivation has the additional advantage of further corroborating the assumption of Stempel (1983) and others, who judge the *-eal* participle to be historically passive–intransitive, confirmed by the quantitative observations of Vogt (1937: 51, index

⁷² This is not to suggest that $*\text{-}\ddot{\text{e}}/\text{o-}$ necessarily carries a passive–intransitive meaning in Indo-European already. García Trabazo (2011), for instance, suggests that the Indo-Iranian *ya*-passives are developed within that branch. It is clear, however, that the $*\text{-}\ddot{\text{e}}/\text{o-}$ suffix marks intransitivity in Sanskrit class IV verbs (Kulikov 2012: 761); a passive development on this basis is, if not predestined, then at least plausible.

⁷³ Meillet remarks, however, that in some Armenian verbs, such as *nstim* ‘to sit’, the *i*-vocalism should rather be derived from $*\text{-}\ddot{\text{e}}$ - or $*\text{-}\ddot{\text{e}}\ddot{\text{i}}\text{e-}$; cf. Klingenschmitt (1982: 129–31) for a different view.

⁷⁴ Since there are no indications that SIEVERS’ LAW applied in Armenian, it can only be presumed that form $*\text{-}\ddot{\text{i}}\text{e}/\text{o-}$ was chosen either as a generalization, or in order to avoid homophony with $*\text{-}\ddot{\text{e}} >$ Arm. *-e-*; alternatively, albeit less likely, the suffix could be a secondary thematization of the non-thematic $*\text{-}\ddot{\text{i}}$ -, yielding $*\text{-}\ddot{\text{i}}\text{e}/\text{o-}$.

⁷⁵ Bonfante (2002) further cites Arm. *cahr* ‘laughter’, cp. Gk. *γῆλωσ* < $*\text{g}\acute{\text{e}}\text{l}\text{h}_2$ -, with $*\text{-e-} >$ $*\text{-o-}$ possibly under the influence of the *-u*-stem (cf. Clackson 1994: 126–32; de Lamberterie 1978: 271). For a different, critical perspective, see Belardi (2003b), who does not, however, discuss all possible cases of $*\text{-e-} >$ Arm. *-a-*.

⁷⁶ Kortlandt’s restriction of $*\text{-o-} >$ *-a-* to environments in which the following syllable does not contain another *-o-* (1983a: 10) is remedied by the apparently late application of this sound change, after apocope of the final syllable.

⁷⁷ For a thorough treatment of the question of whether Arm. *-a-* can derive from $*\text{-o-}$, see Morani (1994), who suggests that it is indeed possible (if somewhat unstable) in pretonic position.

locorum) and 5.3.1. It is the diathetic alignment of the newly formed participle, too, which allows it to take the place of the ousted **-to-* participle, which in itself is not tense-marked. Judging by the other nominal **-lo-* formations mentioned above, assuming an analogical replacement of a **-lo-* adjective for a **-to-* adjective seems plausible also on aspectual grounds, since e.g. *tesil* 'sight' implies a resultative that agrees, at least to some extent, with the past tense function the participle fulfils synchronically.

The syntactic implications of assuming a passive–intransitive origin of the participle are considerable: its active usage with a genitive agent, which requires a diathetically indifferent participle to work, must then be explained as a secondary development in Armenian.

Conclusion

The Armenian aorist has multiple formational origins, continuing amongst others both sigmatic and root aorists of Indo-European heritage; in addition, and more importantly, a former imperfect formation in **-sĕ-* has been reanalysed as a novel aorist, initially perhaps to furnish denominative verbs which had no inherited aorist form.

This new formation spread throughout the paradigms; yet, while one group of verbs (**C**) built their past participle on this new aorist stem, as do verbs with an inherited root aorist, another group (**B**) took a different route and used the verbal root as the basis of participle formation.

As has been suggested above, the use of synchronic systematization along formational and semantic patterns can bring to light issues in diachronic derivational morphology. Group **B**, on the basis of which the aorist is likely to have been innovated, together with group **A** thematic verbs is the point of origin for the past participle. This participle is an original verbal adjective in **-lo-*, marked as passive–intransitive by the preceding **-iĕ/o-* suggested here; given the frequent identity of aorist and present stems in group **A**, a reanalysis as a past participle and subsequent alignment with the aorist stem took place, furnishing by analogy the participles of group **C**, most members of which are secondary, derived verbs. The existence of late forms like *sirec'eal* confirms this trend.

Independently of the specific derivation of the participle proposed here, the majority of attested forms, participial and otherwise, in Armenian and other Indo-European languages point to a passive–intransitive usage and origin, which is further confirmed by the adjectival use of the participle discussed in 5.3.1.

As Chapter 4 has shown, this passive–intransitive analysis of the Armenian past participle necessitates that any active, transitive usage thereof, as is so common in the periphrastic perfect, must have developed secondarily.

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