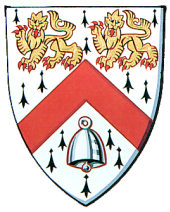
UNIVERSITY OF CAMBRIDGE

A STUDY OF CAPPADOCIAN GREEK NOMINAL MORPHOLOGY FROM A DIACHRONIC AND DIALECTOLOGICAL PERSPECTIVE

Petros Karatsareas
Wolfson College



This dissertation is submitted for the degree of
Doctor of Philosophy

Cambridge
September 2011

Declaration

This dissertation is my own work and includes nothing which is the outcome of work done in collaboration except where specifically indicated in the text and the acknowledgements.

This dissertation does not exceed 80,000 words, including footnotes and references, but excluding bibliography.

Cambridge, 5 September 2011

Petros Karatsareas

Abstract

In this dissertation, I investigate a number of interrelated developments affecting the morphosyntax of nouns in Cappadocian Greek. I specifically focus on the development of differential object marking, the loss of grammatical gender distinctions, and the neuterisation of noun inflection. My aim is to provide a diachronic account of the innovations that Cappadocian has undergone in the three domains mentioned above. All the innovations examined in this study have the effect of rendering the morphology and syntax of nouns in Cappadocian more like that of neuters. On account of the historical and sociolinguistic circumstances in which Cappadocian developed as well as of the superficial similarity of their outcomes to equivalent structures in Turkish, previous research has overwhelmingly treated the Cappadocian developments as instances of contact-induced change that resulted from the influence of Turkish. In this study, I examine the Cappadocian innovations from a language-internal point of view and in comparison with parallel developments attested in the other Modern Greek dialects of Asia Minor, namely Pontic, Rumeic, Pharasiot and Silliot. My comparative analysis of a wide range of dialect-internal, cross-dialectal and cross-linguistic typological evidence shows that language contact with Turkish can be identified as the main cause of change only in the case of differential object marking. On the other hand, with respect to the origins of the most pervasive innovations in gender and noun inflection, I argue that they go back to the common linguistic ancestor of the modern Asia Minor Greek dialects and do not owe their development to language contact with Turkish. I show in detail that the superficial similarity of these latter innovations' outcomes to their Turkish equivalents in each case represents the final stage in a long series of typologically plausible, language-internal developments whose early manifestations predate the intensification of Cappadocian–Turkish linguistic and cultural exchange. These findings show that diachronic change in Cappadocian is best understood when examined within a larger Asia Minor Greek context. On the whole, they make a significant contribution to our knowledge of the history of Cappadocian and the Asia Minor Greek dialects as well as to Modern Greek dialectology more generally, and open a fresh round of discussion on the origin and development of other innovations attested in these dialects that are considered by historical linguists and Modern Greek dialectologists to be untypically Greek or contact-induced or both.

Acknowledgements

First and foremost, I would like to gratefully acknowledge the financial support of the Greek State Scholarships Foundation (Ίδρυμα Κρατικών Υποτροφιών), the Alexander S. Onassis Public Benefit Foundation (Κοινωφελές Ίδρυμα Αλέξανδρος Σ. Ωνάσης) and the George and Marie Vergottis Fund of the Cambridge European Trust, which generously funded my doctoral studies. I also wish to express my appreciation to the Department of Linguistics and to Wolfson College for providing me with additional funding to attend various conferences both in the United Kingdom and abroad.

My work has benefited greatly from the insightful and constructive comments of my supervisor, Bert Vaux, whom I would like to thank for all his help and guidance during the past four years. Many thanks go to James Clackson, my PhD advisor (or is it adviser?), and to David Willis for the valuable feedback they gave me at my yearly assessment interviews; also, to Christoforos Charalampakis, my IKY supervisor, for his contribution. I would like to extend my gratitude to Ioanna Sitaridou, who, apart from co-supervising my MPhil, was the one to light the spark of my interest in Cappadocian Greek.

I am particularly indebted to Christina Basea-Bezantakou, the Director of the Research Centre for Modern Greek Dialects — I.L.N.E. (Κέντρο Ερεύνης των Νεοελληνικών Διαλέκτων και Ιδιωμάτων — Ι.Λ.Ν.Ε.) of the Academy of Athens, for granting me access to the Centre's Manuscript Archive from which I collected rare material on the Cappadocian varieties and to the researchers of the Centre, especially Stamatis Beis, Georgia Katsouda, Magdalini Konstantinidou and Maria Vrachionidou for the constructive discussions we had while I collected material from the Archive; also, to the library staff of the Centre for Asia Minor Studies (Κέντρο Μικρασιατικών Σπουδών) at Athens for helping me get hold of a considerable number of publications on Cappadocian and the other Asia Minor Greek dialects that were hard to find in the United Kingdom.

I am grateful to all the people with whom I have exchanged ideas regarding my work and theirs that helped me advance and broaden my understanding of the issues I dealt with in my research. Special thanks go to the investigators and researchers of the Grammar of Medieval Greek Research Project at Cambridge, especially to Io Manolessou and Notis Toufexis; to the audiences of the various conferences at which I presented papers while my research was still in progress, especially to Giannoula Giannoulopoulou, Nikolaos Pantelidis and Eleni Valma at the 4th International Conference of Modern Greek Dialects and Linguistic Theory at Chios; to Inés Fernández-Ordóñez, Brian Joseph and Peter Trudgill at the XIXth International Conference on Historical Linguistics at Nijmegen; to Peter Mackridge at the Greek in Pontus: Romeyka in Contemporary Trebizond Workshop at Cambridge; to Andrew Garrett at the Language, Text and History: Linguistics and Philology in the 21st Century Symposium of the Philological Society at Cambridge; to the four (!) anonymous reviewers of the paper I published in the Transactions of the Philological Society (you—and I now—know who you are!); and to Thanasis Giannaris. I would also

like to thank Elżbieta Adamczyk, Stergios Chatzikyriakidis, Vicky Chondrogianni, Inés Fernández-Ordóñez, Francesco Gardani, Cristina Guardiano, Chryso Hadjidemetriou, Mark Janse, Konstantinos Kakarikos, Magdalini Konstantinidou, Adam Ledgeway, Martin Maiden, Aggeliki Malikouti-Drachman, Io Manolessou, Dimitra Melissaropoulou, Ioanna Sitaridou, Vassilios Spyropoulos, Evangelia Thomadaki, Notis Toufexis and Hugh Everard Wilkinson for trusting me with copies of their published and/or unpublished work. I thank Makis Theofilopoulos of the Greek newspaper TA NEA for sending me an electronic version of a published map of the Cappadocian villages. I also thank Chris Geissler for translating Hans Dernschwam's text (§2.2) and Illan Gonen for typing the Perso-Arabic text in §2.3 for me.

Spyros Armosti, Mina Daniel and Aaron Ralby deserve special mention for proofreading parts of my dissertation. This task fell largely on Aaron, who proofread almost the whole of it. Spyros proofread the list of symbols and the reference list whereas Mina proofread Chapter 6. I owe the excellent design of Maps 2.1, 2.2 and 2.3 as well as that of Figures 2.2 and 2.3 to Emmanouil Magkaris. I hereby thank all four of them for their invaluable help that came when I needed it the most. Of course, all errors remain my own.

On a personal level, I was fortunate to have the support and encouragement of very dear friends. My gratitude goes to Spyros Armosti, Eftychia Eftychiou, Evgenia Mesaritou, Karolina Moutsopoulou and Efstathia Pitsa, who have been constantly by my side since my early days in Cambridge; also, to my fellow 'nesters' Thomas Godard, Claudia 'Mom' Peverini-Benson, Thomas Rainsford, Erica Ross, Anna Tristram, Liv Walsh and Claire White—all of us were on the same boat under the adverse (weather) conditions of the Graduate Centre on the far off third floor of the MML Faculty. I am also ever so grateful to Emmanouil Magkaris for making possible my escapes from the bubble that is Cambridge out to the real world, and to my old friends from Greece, who made sure I felt as if I had never left home every time I went back.

Τέλος, θα ήθελα να εκφράσω την ευγνωμοσύνη μου στην οικογένειά μου και ιδιαίτερα στους γονείς μου, Βασίλειο και Έλλη Καρατσαρέα, για την ανιδιοτελή αγάπη που μου προσφέρουν απλόχερα από τότε που θυμάμαι τον εαυτό μου και για την αμέριστη συμπαράσταση και κάθε είδους υποστήριξη που δείχνουν έμπρακτα σε κάθε βήμα της ζωής μου. Μαμά και μπαμπά, nagyon hálás vagyok mindenért.

Table of Contents

List of Tables

List of Figures

List of Maps

List of Textual Abbreviations

Three corpora of Cappadocian texts were compiled for the purposes of this study: the Dawkins corpus, the KMS (Kentro Mikrasiatikon Spoudon) corpus, and the ILNE (Istoriko Lexiko tis Neas Ellinikis) corpus. The texts comprising each corpus and their abbreviations are shown below:

A. Dawkins corpus

1. *Dawkins* — Dawkins, Richard M. (1916). *Modern Greek in Asia Minor: a Study of the Dialects of Sílli, Cappadocia and Phárasa with Grammar, Texts, Translations and Glossary*. Cambridge: Cambridge University Press, 304-464.

B. KMS corpus

1. KMS/C — Costakis, Athanasios P. (1964). *Le parler grec d'Anakou*. Athens: Centre for Asia Minor Studies, 80-85.

2. KMS/K — Kesisoglou, Ioannis I. (1951). *Τὸ γλωσσικὸ ἰδίωμα τοῦ Οὐλαγὰτς (Le dialecte d'Oulagatch)*. Athens: Institut Français d'Athènes, 136-161.

3. KMS/M&K — Mavrochalyvidis, Georgios & Ioannis I. Kesisoglou (1960). *Τὸ γλωσσικὸ ἰδίωμα τῆς Ἀξοῦ (Le dialecte d'Axos)*. Athens: Institut Français d'Athènes, 186-221.

4. KMS/P — Phosteris, Dimitrios (1952). Τὸ Ἀραβάνιον. *Mikrasiatika Chronika* 5, 161-177.

5. KMS/P&K — Phosteris, Dimitrios & Ioannis I. Kesisoglou (1960). *Λεξιλόγιο τοῦ Ἀραβανὶ (Vocabulaire d'Aravani)*. Athens: Institut Français d'Athènes, 98-127.

C. ILNE corpus

1. ILNE/755 — Costakis, Athanasios P. (1959). *Γλωσσικὸν ὑλικὸν ἐκ κατοίκων τοῦ χωρίου Μισθὶ Καππαδοκίας ἐγκατεστημένων νῦν εἰς Ἁγιονέρι Ἀξιουπόλεως Μακεδονίας*. Unpublished manuscript № 755. Manuscript archive of the Research Centre for the Study of Modern Greek Dialects and Idioms — Historical Dictionary of Modern Greek. Academy of Athens, Athens, Greece, 46-61, 64, 82, 88-90, 94, 146, 154, 176, 196, 198-200.

2. ILNE/811 Tsitsopoulos, Eleftherios (1962). *Συλλογὴ γλωσσικοῦ καὶ λαογραφικοῦ ὑλικοῦ ἐκ τοῦ χωρίου Φλογητὰ Χαλκιδικῆς (προσφύγων τοῦ ὁμωνύμου χωρίου Καππαδοκίας)*. Unpublished manuscript № 811. Manuscript archive of the Research Centre for the Study of Modern Greek Dialects and Idioms — Historical Dictionary of Modern Greek. Academy of Athens, Athens, Greece, 18-24, 26, 31-36, 38-40, 44, 48-82, 84-93, 95-99, 101, 103-106.

3. ILNE/812 Costakis, Athanasios P. (1962). *Γλωσσικὸν ὑλικὸν ἀπὸ τὰ Φλογητὰ Χαλκιδικῆς (προσφυγικὸν χωρίον)*. Unpublished manuscript № 812. Manuscript archive of the Research Centre for the Study of Modern Greek Dialects and Idioms — Historical Dictionary of Modern Greek. Academy of Athens, Athens, Greece, 1-11, 12-19, 21, 23, 28, 29-30, 83-102, 112-141, 149-157, 159-160, 164-166, 172-174, 176-187, 192-203, 216-238, 272, 274, 276-280, 284-285, 289.

List of Linguistic Abbreviations

The following abbreviations are used in the main text, the footnotes as well as in the glosses of the linguistic examples:

3	third person
ABL	ablative case
ACC	accusative case
C	common gender
CL	noun class
DAT	dative case
DIM	diminutive
DEF	definite
F	feminine gender
GEN	genitive case
INDEF	indefinite
LOC	locative case
M	masculine gender
N	neuter gender
NOM	nominative case
OBJ	object marker
PL	plural number
POSS	possessive
PREP	preposition
SG	singular number

List of Symbols

The following symbols are used in the linguistic examples to represent sounds that are not found in Standard Modern Greek:

Symbol	IPA Symbol	Description	Example
ä	[æ]	near-open front unrounded vowel	Pontic *λäκά* 'stain'
b	[b]	voiced bilabial plosive, used for the non-prenasalised pronunciation of *μπ* word-medially	Cappadocian *μπαbά* 'father'
d	[d]	voiced alveolar plosive, used for the non-prenasalised pronunciation of *ντ* word-medially	Cappadocian *ντώdεκα* 'twelve'
ə	[ɯ]	close back unrounded vowel	Cappadocian *αλτάν* 'gold piece'
ï	[i]	used to represent an [i] sound that does not undergo synizesis	Pharasiot *γïάδι* 'cow'
g	[g]	voiced velar plosive, used for the non-prenasalised pronunciation of *γκ* word-medially	Cappadocian *μεριgό* 'a day's wage'
ẑ	[ʒ]	voiced palatoalveolar fricative	Cappadocian *ẑυμάρ* 'dough'
ḱ	[k^h]	aspirated voiceless velar plosive	Cappadocian *ḱουντώ* 'push'
x̂	[kʃ]	combination of the unaspirated voiceless velar plosive [k] with the voiceless postalveolar fricative [ʃ]	Silliot *x̂υπνώ* 'to wake up'
ö	[œ]	open-mid front rounded vowel	Silliot *öμπρί* 'life'
ṕ	[p^h]	aspirated voiceless bilabial plosive	Cappadocian *ṕαγύ* 'thick'
q*	[q]	voiceless uvular plosive	Cappadocian *qαφά*

			‘head’
ὁ, ς	[ʃ]	voiceless postalveolar fricative	Pontic *ὁέρ(ιν)*** ‘hand’
ŧ	[tʰ]	aspirated voiceless alveolar plosive	Cappadocian *ŧις* ‘who’
τὁ, τς	[ʧ]	voiceless postalveolar affricate	Rumeic *κουρίτὁα* ‘girls’
τζ̂	[ʤ]	voiced postalveolar affricate	Pharasiot *τζ̂είνο* ‘that (pronoun)’
ϋ	[y]	close front rounded vowel	Cappadocian *σϋχτώ* ‘to press’
ψ̂	[pʃ]	combination of the unaspirated voiceless bilabial plosive with the voiceless postalveolar fricative [ʃ]	Pontic *ψ̂η* ‘soul’
ᵒᵘ	[w]	voiced labiovelar approximant	Pharasiot γ*ᵒᵘώσσα* ‘tongue’

* Dawkins uses this symbol to represent the “Turkish *q* (*qaf*, ق)”, which, according to him, “keeps its Turkish sound, a hard back *k*” (1916: 86), that is, a voiceless uvular plosive [q] in (a) his Greek transliteration of words of Turkish origin such as *qαφά* ‘head’ (< Turkish *kafa*) and *πατιὁαχλάq* ‘kingdom’ (< Turkish *padişahlık*), and (b) his rendering of the initial sound of words such as *qάλα* ‘milk’, *qάμος* ‘wedding’ and *qουργούρ* ‘throat’ from Malakopí, Phloïtá and Sílata Cappadocian respectively that appears in the place of original, inherited [ɣ] (cf. *γάλα*, *γάμος* and *γουργούρ* in other Cappadocian varieties). Recently, however, Janse has expressed the view that what Dawkins transliterates as *q* in words such as *πατιὁαχλάq* and *qάλα* did not in reality differ from the voiceless velar plosive [k]. Therefore the two words should be written as *πατιὁαχλάκ* and *κάλα* respectively (personal communication). Nevertheless, as the issue remains open to debate and due to the lack of conclusive evidence in favour of the one or the other position, I will use *q* in my examples coming from the Dawkins corpus with the aim to remain faithful to the original documentation of this phonological problem.

** Brackets indicate sounds that are subject to dialectal variation or sounds that do not occur synchronically in the data due to historical phonological developments.

1

Introduction

This dissertation is a study of a number of interrelated developments that diachronically affected the morphosyntax of nouns in Cappadocian Greek (henceforth Cappadocian), a Modern Greek (henceforth MGr) dialect that was originally spoken by the Greek Orthodox communities of Cappadocia, in south-eastern Asia Minor, until 1923 when Greece and Turkey exchanged populations in accordance with the Treaty of Lausanne. I focus on the development of differential object marking (henceforth DOM); the loss of grammatical gender (henceforth gender) distinctions and agreement; and the neuterisation of noun inflection. The aim is to provide a diachronic account of the innovations that Cappadocian has undergone in these three domains.

DOM is the phenomenon wherein the head nouns of noun phrases (henceforth NPs) found in typically accusative-marked syntactic contexts, such as the direct object position, are marked with a morphological accusative case only if the NPs in question are definite; the head nouns of indefinite NPs are marked with a morphological nominative. Consider, for example, *σταυρό* 'cross.ACC' in the definite direct object NP in (1a) as opposed to *σταυρός* 'cross.NOM' in the indefinite direct object NP in (1b). The overwhelming majority of the other MGr dialects, with the exception

of Pharasiot, do not make such a distinction. In Standard Modern Greek (henceforth SMGr), for instance, the head nouns of all NPs in accusative contexts are uniformly marked by a morphological accusative, irrespective of definiteness. Compare, in this connection, the Cappadocian examples in (1) with their SMGr equivalents in (1′).

(1) Phloïtá Cappadocian (*ILNE/812*, 52, 87)

a. *βουτούν το σταυρό σα νερά*
they.dip the cross.ACC in.the waters
'they dip the cross in the water'

b. *φκιάνουν στη γη σταυρός*
they.make in.the ground cross.NOM
'they form a cross on the ground'

(1′) SMGr

a. *βουτούν το σταυρό στα νερά*
they.dip the cross.ACC in.the waters
'they dip the cross in the water'

b. *φτιάχνουν στη γη σταυρό*
they.make in.the ground cross.ACC
'they form a cross on the ground'

The loss of gender distinctions becomes manifest in the formal invariability of elements that cooccur with nouns whose cognates in other MGr dialects differ in terms of gender. All agreement targets in Cappadocian appear in what is from a historical point of view their neuter form, regardless of the semantic and morphological properties of the nouns that control them. In (2a), the definite article *το*, the object clitic pronoun *το* and the passive participle *qαπαδιμένο* 'closed' bear neuter morphology in spite of modifying and/or referring to *θύρα* 'door', which is known to have been historically feminine in gender. Similarly, in (2b), the indefinite article *ένα* and the adjective *καλό* 'good' are morphologically neuter even though they modify *χεκίμης* 'doctor', which inflects in the same way as masculine nouns in other

MGr varieties. Compare the formal invariability of the various agreeing elements in (2) with the variability of their SMGr cognates in (2′).

(2) Cappadocian[1]

a. *το θύρα ηύραν το qαπαδιμένο*
the.N door.F they.found it shut.N
'they found the door shut' (Sílata, *Dawkins*, 444)

b. *περνάν ένα καλό χεκίμης*
he.passes.by a.N good.N doctor.M
'a good doctor is passing by' (Axó, *KMS/M&K*, 196)

(2′) SMGr

a. *την πόρτα τη βρήκαν κλειστή*
the.F door.F her they.found shut.F
'they found the door shut'

b. *περνάει ένας καλός γιατρός*
he.passes.by a.M good.M doctor.M
'a good doctor is passing by'

The term "neuterisation of noun inflection" refers to the use of the endings *-ιού* and *-ια*, which are characteristic of *ι*-neuter nouns such as *σπίτι* 'house' and *παιδί* 'child', to form the genitive singular/plural and the nominative/accusative plural of nouns that do not synchronically or historically belong to the *ι*-neuter inflectional class. There are two morphological processes of this kind, which differ with respect to the unit to which *-ιού* and *-ια* attach in realising the said case/number combinations:

[1] In (2) as well as in all subsequent Cappadocian examples in this dissertation, agreement controllers and targets (nouns; articles, adjectives, participles, pronouns, numerals) are glossed as masculine, feminine or neuter strictly for illustrative and historical reasons. In nouns, the gender glossed refers to the original gender value of each noun, that is, the one it had before gender distinctions were lost. Glossing is based on the gender of cognate nouns in other MGr dialects. In the case of nouns that lack cognates, inflection provides the evidence for glossing. Agreeing elements are glossed on the basis of their morphology.

(a) neuter heteroclisis; and (b) 'agglutinative'[2] inflection. In neuter heteroclisis, the two endings attach to noun stems as in (3a), in which the heteroclitic form *πιῶτικιού* 'shepherd.SG.GEN' consists of the stem *πιῶτικ-* of the *ος*-masculine noun *πιῶτικός* and the *ι*-neuter genitive singular/plural ending *-ιού*. In 'agglutinative' inflection, the *ι*-neuter endings attach to what appear to be nominative singular forms of nouns. For example, the 'agglutinative' form *καλόγεροσια* 'monk.PL.ACC' in (3b) is structured into a unit *καλογεροσ-* that is formally identical with the nominative singular form of the noun *καλόγερος* and the *ι*-neuter nominative/accusative plural ending *-ια*. The corresponding inflected forms of the two nouns in SMGr are shown in (3′). Note that *πιῶτικός* is not found in SMGr; the genitive singular form in (3a′) is the one the noun would have if it were found in the standard variety. In the standard language, *καλόγερος* belongs to the *ος*-masculine inflectional class.

(3) Cappadocian

a. *εγιώ κείται 'να πιῶτικιού ναίκα*
here there.lies a shepherd.SG.GEN wife
'the wife of a shepherd lives here' (Axó, *KMS/M&K*, 214)

b. *ασά καλόγεροσια πήρε το μετόχι-τνε*
from.the monk.PL.ACC he.took the dependency-their
'he took the dependency from the monks' (Phloïtá, *ILNE/811*, 98)

(3′) SMGr

a. *εδώ είναι η γυναίκα ενός πιστικού*
here there.is the wife a shepherd.SG.GEN
'the wife of a shepherd lives here'

[2] I enclose the term in single quotation marks to indicate my disagreement with the view that inflected forms such as *καλόγεροσια* in (3b) are agglutinative, that is, as consisting of a free base *καλόγερος* and an inflectional ending *-ια* that solely expresses number in a one-to-one relation between form and function. However, since the term is used widely in previous analyses of the phenomenon in the literature, I will use it for ease of reference.

b. *από τους καλόγερους πήρε το μετόχι τους*
from the monk.PL.ACC he.took the dependency their
'he took the dependency from the monks'

All the innovations illustrated above have the effect of rendering the morphology and syntax of nouns in Cappadocian more like that of neuters. This is most obvious in the loss of gender distinctions, as a result of which all nouns in the dialect behave as neuters for the purposes of agreement. In the domain of inflectional morphology, following the development of neuter heteroclisis and 'agglutinative' inflection, nouns belonging to all inflectional classes form parts, or even the whole, of their inflectional paradigms on the model of *ι*-neuters. Lastly, by making obligatory the use of a morphological nominative in accusative contexts, DOM introduced a novel instance for the prototypically neuter syncretism of the two core cases—nominative and accusative—in masculine nouns, which previously were not formally identical.

From an explanatory point of view, these innovations have been overwhelmingly treated in previous research as instances of contact-induced change, resulting from the influence of Turkish (see, among others, Thomason & Kaufman 1988: 215-222; Winford 2005: 402-409). The only exception to this generalisation is neuter heteroclisis, which has otherwise gone largely unnoticed in the literature. There are two main reasons for the focus on language contact: one involving the historical and sociolinguistic circumstances in which Cappadocian developed in time, and one based on the superficial similarity of outcomes of the Cappadocian innovations to their Turkish equivalents.

As regards the former, the early invasions of the Seljuq Turks in parts of Cappadocia in the 11th century CE, the subsequent political separation of the Cappadocian speaker communities from the Byzantine Empire in the west, and the consecutive dehellenisation and turkicisation of much of Asia Minor resulted in Cappadocian developing for many centuries in relative isolation from other Greek-speaking communities, on the one hand, and in intense and long-standing contact with Turkish, on the other. These circumstances had a direct impact on the dialect, which preserves numerous grammatical features characteristic of earlier stages in the history of Greek but also presents a considerable number of structural innovations

that distinguish it from other varieties of MGr. In many of these Cappadocian innovations, the linguistic effects of language contact with Turkish are indeed evident. In other, less clear cases, however, it appears that language contact has been evoked as an explanation by previous scholars based on what Poplack and Levey identify as "the widespread but unfounded assumption that linguistic differences occurring in bilingual contexts are necessarily (...) contact-induced" (2009: 397-398).

It is true that the outcomes of several Cappadocian innovations, including the developments in the morphosyntax of Cappadocian nouns exemplified in (1)-(3) above, are reminiscent of Turkish grammatical structures. Turkish has a DOM pattern that is highly similar to the Cappadocian one, the only difference being that in Turkish it is specific rather than definite NPs whose head nouns are marked by the accusative case. Turkish, like Cappadocian, lacks gender distinctions, while the inflected forms of nouns are built by attaching the various inflectional endings to a unit that is always formally identical with the nominative singular in a fashion similar to the formation of Phloïtá Cappadocian *καλόγεροσια* in (3b). In the literature (see references above), these correspondences between the relevant Cappadocian and Turkish structural features have been used as evidence to establish language contact with the latter as the single cause for the developments in the former without, however, accounting for the actual linguistic mechanisms and processes that resulted in these changes. On the contrary, the Cappadocian innovations are generally portrayed in a way that gives the impression that they occurred rapidly and abruptly, without undergoing intermediate stages of development. On the whole, previous accounts fail to demonstrate satisfactorily that the innovations examined here are indeed the product of language contact and not of language-internal processes.

In this study, I aspire to overcome these methodological and analytical shortcomings by placing particular emphasis on the geographical context of Cappadocian and on its genealogical relationships with the other MGr dialects that were spoken in Asia Minor, namely Pontic, Rumeic, Pharasiot and Silliot. In spite of the differences between them that justify their being considered separate linguistic entities, all the Asia Minor Greek (henceforth AMGr) dialects share a significant number of innovative characteristics that render them distinctively different from other, more mainstream MGr dialects. More importantly, these characteristics constitute evidence that the various different dialects are related by descent from a

common ancestor, a dialectal form of Greek that was spoken in inner Asia Minor in all likelihood during medieval times. Based on this dialectological background and in light of the fact that developments parallel to the ones Cappadocian has undergone in terms of DOM, gender and inflection are attested in all the other dialects of the AMGr group, I set a methodological framework that offers an alternative to contact-oriented approaches and calls for a revision of accepted views on the language-internal and -external dynamics that shaped Cappadocian into its modern form.

My dialectological approach benefits from the diversity found among the AMGr dialects, some of which are more conservative while others more innovative with respect to the innovations examined here. This is a major methodological advantage in that the various dialects essentially illustrate distinct developmental stages in the course of the various changes, which assists in the reconstruction of their origins and the trajectories that they followed over time. Along these lines, my comparative analysis of a wealth of dialectal data from all the AMGr dialects as well as from a number of Northern Greek dialects shows that language contact with Turkish can be identified as the main cause of change in Cappadocian only in the case of DOM. On the other hand, with respect to the origins of the more pervasive innovations in gender and noun inflection, I argue that they go back to the common linguistic precursor of the modern AMGr dialects and did not result from language contact with Turkish. I show in detail that the superficial similarity of these latter innovations' outcomes to Turkish grammatical structures represents in each case the final stage in a long series of typologically plausible, language-internal developments whose early manifestations predate the intensification of Cappadocian-Turkish linguistic exchange.

Regarding gender, I argue that its loss in Cappadocian is a second level development that followed and built upon an earlier AMGr innovation, that of semantic agreement whereby inanimate masculine and feminine nouns triggered agreement in the neuter gender on targets controlled by them. Evidence from Medieval Pontic as well as the occurrence of reflexes of semantic agreement in all core AMGr dialects suggests that the earlier manifestations of its development must go back to the common ancestor of the modern dialects, that is, at a time before language contact with Turkish. In that light, I analyse the generalisation of neuter agreement in Cappadocian as the result of the progressive extension of semantic

agreement in the neuter with respect to agreement targets, domains and, crucially, with respect to semantic noun types that trigger it. This process was driven by the strong correlation between gender and inflection that holds in all dialects and varieties of MGr.

As for the developments in noun inflection, I make the case that neuter heteroclisis emerged at a time before the genetic split of the AMGr and NGr dialect groups based on its attestation in all the dialects of the AMGr group and in the NGr dialects of Lésbos and Kydoníes, and Sámos. Neuter heteroclisis is therefore a very early innovation that I postulate came about in order to overcome uncertainty as to stress placement in the genitive singular and plural of paroxytone *ος*-masculine and *ο*-neuter nouns, and in the genitive plural of parisyllabic *α*-feminine nouns. From that locus, it was extended as a repair strategy to other noun types that presented different structural difficulties in their paradigms. As a consequence, large numbers of nouns in the AMGr dialects became morphologically associated with the neuter gender and, in particular, the *ι*-neuter inflectional class. Neuter heteroclisis also strengthened the grammatical correlation between the inanimate semantic type, neuter gender, and the *ι*-neuter class, thus forming conditions that favoured the development of 'agglutinative' inflection in Cappadocian.

Unlike the dominant view, which treats 'agglutinative' inflection as having been modelled on the Turkish inflectional system, I account for it in strictly language-internal terms. I show that noun paradigms which have been analysed as agglutinative by previous researchers are not actually agglutinative when examined in the context of the system defining properties of noun inflection in Cappadocian. From a synchronic point of view, I consider nouns thought to have 'agglutinative' paradigms to belong to the *ι*-neuter inflectional class. From a diachronic point of view, I take this to evidence a historical shift of non-*ι*-neuter nouns to the *ι*-neuter inflectional class that was initially triggered in order to repair prototypicality deviations within the masculine and feminine inflectional classes by assigning inanimate nouns to a semantically appropriate class. Owing to these shifts, the *ι*-neuter class gained significantly in productivity, which gradually allowed for the generalisation of the shifts to nouns of other semantic types (animal, human).

The dissertation is structured as follows: in Chapter 2, I present the social, cultural and linguistic history of Cappadocian and its speakers and describe in detail

the dialectological framework within which I examine the developments in the morphosyntax of Cappadocian nouns. I look at the development of DOM in Chapter 3 and deal with the loss of gender distinctions in Chapter 4. In Chapter 5, I consider the developments in noun inflection and conclude the dissertation in Chapter 6.

2

The Modern Greek dialect of Cappadocia

2.0 Introduction

In Chapter 1, I briefly underlined the importance I attach to the relations between Cappadocian and the other MGr dialects of Asia Minor for the study of the developments in the morphosyntax of Cappadocian nouns. This chapter presents the social, cultural and linguistic history of the Cappadocian dialect and its speakers with the aim of advancing our understanding of its dialectological background of Cappadocian—which remains under-investigated—and overcoming the weaknesses of previous research that has focused largely on the effects of language contact with Turkish in order to explain the neuterising innovations in Cappadocian nominal morphology. The historical and linguistic investigation in this chapter contributes to the aims of the dissertation in two major ways. First, the systematic grammatical similarities shared by the modern AMGr dialects suggest a common linguistic ancestor to which many distinctive Cappadocian innovations trace their origin. Second, the divergent evolutionary paths that the various AMGr dialects followed can shed light on the developmental stages that certain of these innovations went through en route to their present synchronic form in Cappadocian. Based on this language-internal approach, I make the more general case that the triggers, origins and subsequent

development of diachronic change in Cappadocian are best understood within a larger AMGr dialectological context.

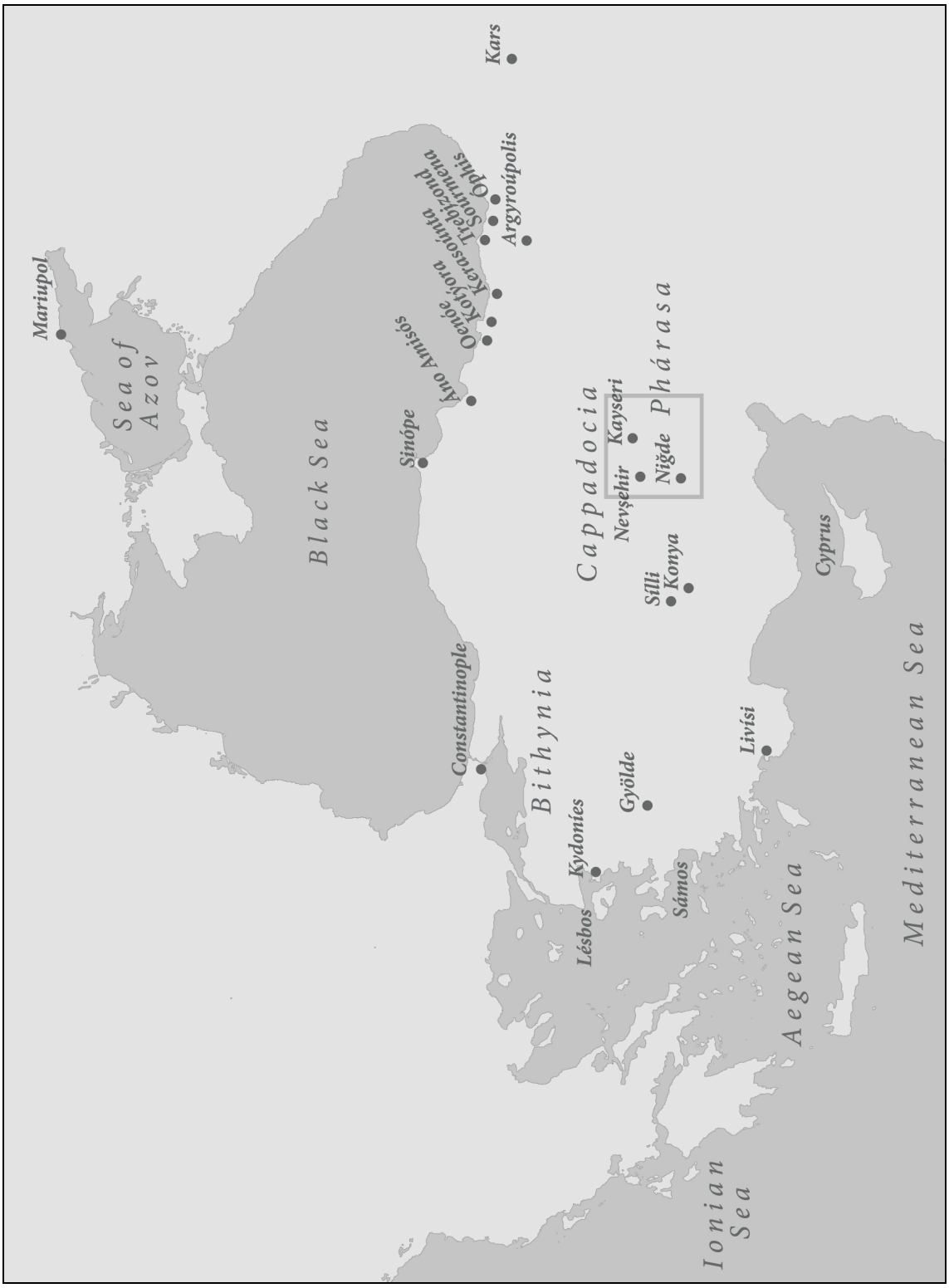
The chapter is structured as follows: after a brief outline of the geography of Cappadocian in §2.1, I present the social and cultural history of the Cappadocian-speaking communities in §2.2. In §2.3, I review the available sources of material on Cappadocian. §2.4 discusses the effects of the Cappadocian speakers' history on their language and critiques the analytical emphasis that previous research has placed on the effects of Turkish influence. In §2.5, I elaborate on the dialectological background of Cappadocian by examining shared innovations and convergent developments in the AMGr dialects; based on these considerations, I then present the basic principles of the methodological approach that I followed in this study. §2.6 concludes this chapter.

2.1 The language

Cappadocian Greek is a MGr dialect cluster comprised of a number of closely related subdialects or varieties that were originally spoken by Greek Orthodox communities indigenous to the Cappadocian plateau of south-eastern Asia Minor (today's Turkey). At the beginning of the 20th century, the use of the dialect had been geographically reduced to twenty villages located in the rural areas between the Ottoman cities of Nevşehir (Greek *Νεάπολη*), Kayseri (Greek *Καισάρεια*) and Niğde (Greek *Νίγδη*) that were either entirely or partially inhabited by Cappadocian-speaking communities: Delmesó, Ferték, Araván, Ghúrzono, Ulaghátsh, Semenderé, Mistí, Díla, Tsharaklý, Jeklék, Axó, Trokhó, Malakopí, Phloïtá, Sílata, Anakú, Sinasós, Zaléla, Potámia, and Arabisón (Dawkins 1910: 115-117, 1916:10).[3] The exact location of the Cappadocian-speaking area as defined by these villages and their relative positions are shown in Maps 2.1 and 2.2 below.

[3] In early works written by Greek authors, some of the Cappadocian villages are referred to by names that differ slightly from the ones given by Dawkins (1910, 1916). These are either the original Greek names of the villages or hellenised renderings of the names recorded by Dawkins. For example, Rizos (1856: 98, 105) uses the name *Τελμισσός* to refer to Dawkins's Delmesó, whereas Karolidis (1874: 96) replaces the *t* of the consonant cluster in the name of Mistí for a more Greek *θ* (*Μισθί*). In this study, I use the names of the Cappadocian-speaking villages as they were transliterated and used by Dawkins.

Map 2.1. *The major Greek-speaking communities of Asia Minor at the beginning of the 20th century.*



Map 2.2. *The Cappadocian-speaking villages at the beginning of the 20th century (based on Dawkins 1916).*

Recently refining a classificatory scheme proposed by Dawkins (1916: 209), Janse (2008a: 191) groups the varieties of the Cappadocian villages on geographical terms as shown below. The variety of Delmesó, which he includes in the Northeastern group despite of its being geographically located in the southwest of the Cappadocian-speaking area next to Ferték, Araván and Ghúrzono, is the only exception to Janse's grouping.

(a) Northern Cappadocian varieties:
    i. Northeastern varieties: Delmesó, Sinasós, Potámia
    ii. Northwestern varieties: Sílata, Anakú, Phloïtá, Malakopí
(b) Central Cappadocian varieties: Axó, Mistí
(c) Southern Cappadocian varieties:
    i. Southwestern varieties: Ferték, Araván, Ghúrzono
    ii. Southeastern varieties: Ulaghátsh, Semenderé

Alektoridis was the first to use the term Cappadocian to describe the MGr varieties of these villages ("*ἡ κατὰ τὴν Καππαδοκίαν ἐν γένει λαλουμένη ἑλληνική*"; 1833: 486). His use of the term appears to be more geographical than linguistic since it encompasses the dialects of the towns of Phárasa and Sílli which, as we will see later on, are related to those of the twenty Cappadocian villages but do not belong to Cappadocian proper from a genetic point of view. In any case, what should be borne in mind is that Cappadocian is a learnèd designation that speakers of Cappadocian did not use to refer to their language. Instead, they employed glossonyms derived from their respective villages of origin. For example, the variety of Axó was called *αξενιώτικα* (Mavrochalyvidis & Kesisoglou 1960: xiii) whereas that of Mistí is still called *μιῶώτκα* by its speakers (Janse 2007: 73). As all other Greek-speaking people, Cappadocian speakers, by virtue of their religious affiliation, belonged during Ottoman times to the *millet-i Rûm*, the confessional community headed by the Greek Orthodox Patriarch of Constantinople. Therefore they also referred to themselves as Romans, as evidenced by the following description of the population of Araván by one of its inhabitants at the beginning of the 20th century:

> *Σὸ Ἀραβανὶ Τοῦρκοι δέν 'δαι· οὔλλα Ρωμηοί νδαι.*
>
> 'At Aravan there are no Turks, all are *Romaioi*.' (Dawkins 1910: 284-284; translation and emphasis of the original)

The population of the Cappadocian-speaking area including Phárasa and Sílli amounted to 37,650 inhabitants, according to an estimate of Papadopoulos (1998 [1919]: 109), based on Dawkins (1916). Of these, 17,500 were speakers of Cappadocian (Janse 2007: 70); the rest spoke Turkish.

2.2 The social, cultural and linguistic history of the Cappadocian speakers

The Cappadocian-speaking communities trace their origin to the Byzantine, Greek-speaking people that populated Asia Minor prior to the first Turkish invasions of the early 11th century (Vryonis 1971: 448-452). Until that time, Cappadocia was the southeasternmost confine of that part of the Byzantine Empire in which Greek was

predominantly spoken by the overwhelming majority of the population, following a long process of linguistic and cultural hellenisation that was only completed around the 4th to 6th centuries CE (Anastasiadis 1975: 153; Karolidis 1885: 7; Vryonis 1971: 42-55). However, owing to its location at the frontier between Byzantium and Arab lands such as Syria and Mesopotamia, Cappadocia was found as early as the mid 7th century in the heart of the confrontation between the Byzantine Empire and Islam. The Arab raids that penetrated deep into the Empire disrupted Byzantine cultural and linguistic continuity in Cappadocia and led to cultural, social, political, and linguistic contact between the Greek-speaking Christian population of Asia Minor and non-Greek-speaking Muslim invaders (Kaegi 2008; Treadgold 2002: 129-131).

In the centuries that followed, the effects of the early disruption that was caused by the Arab invasions became progressively more pronounced, chiefly as a result of events of decisive importance involving another Muslim ethnic group: the Seljuq Turks. By the mid 11th century the Seljuq Turks had become a serious threat to the Byzantine Empire. Under Alp Arslan, the Seljuqs descended from the Caucasus, taking advantage of the Empire's unpreparedness to withstand attacks at its northeastern border. By 1070/1071, they had made their way inland as far as Chonai in western Asia Minor, having first reached important southeastern territories and cities, including Cappadocia and Cilicia, and Caesarea and Ikonion (Turkish Konya). The mounting warfare between Byzantines and Seljuqs reached its peak with the historic battle of Manzikert in 1071, which saw the crushing defeat of the Byzantine army by the Seljuq troops. In the aftermath of the battle, the Byzantine Empire lost control of Asia Minor forever. What had been the heart of the Empire until then now passed to the Seljuqs and other Turkic tribes, and its greater part was incorporated into the political entities that they founded, particularly the Great Seljuq Empire and its continuation, the Seljuq Sultanate of Rûm. The only exceptions were the Empire of Trebizond at the southeastern coast of the Black Sea, which remained Greek, and the Armenian Kingdom of Cilicia at the northwest of the Gulf of Alexandretta (Korobeinikov 2008; Magdalino 2002: 184-189).

The Seljuq conquest had far-reaching consequences for the cultural and linguistic history of the Greek population, a proportion of which fled the Turkish invasion by seeking refuge in the mountainous areas and fortified towns of Asia Minor and even in the Aegean islands off its western coast (Vryonis 1971: 169-184).

Separated from the Orthodox Christian, Greek-speaking contingent of the west, the Greeks who remained in their Asia Minor homeland after 1071 entered a four century long period marked by a gradual religious and linguistic transformation, which, presumably through a considerable amount of ethnic mixing, ultimately led to their islamisation and concomitant turkicisation. Owing to the vastness of the area and other geographic and demographic factors, though, this process of cultural change did not proceed uniformly throughout Asia Minor. Augustinos (1991: 15) notes that the Greek people of more densely populated western and northeastern coastal areas, such as Pontus, continued the popular traditions of Byzantine civilisation longer. The Pontic Empire of Trebizond, the last standing Greek political entity in Asia Minor, was overthrown by the Ottoman Turks only in 1461, after they had established their sovereignty over the totality of the peninsula as successors of the Seljuqs and other Turkish beys. Cultural change in these areas was not as dramatic and thorough as in the more sparsely populated interior of Asia Minor that crucially included Cappadocia, where islamisation and turkicisation advanced at a much faster rate (Tsalikoglous 1970). In a famous memorandum dated 30 July 1437, we read that even the clergy in *Turcia*, that is, inner Asia Minor, had by that time shifted to speaking Turkish:

> *Notandum est, quod in multis partibus Turcie reperiuntur clerici, episcopi et arciepiscopi, qui portant vestimenta infidelium et locuntur linguam ipsorum et nihil aliud sciunt in greco proferre nisi missam cantare et evangelium et epistolas. Alias autem orationes dicunt in lingua Turcorum.*
>
> 'It must be noted that in many parts of Turkey, there are found clergymen, bishops and archbishops who are dressed in the garments of infidels and speak their language and are not able to carry out anything else in Greek other than sing the Mass and the Gospel and the Epistles. All other speech they do in the language of the Turks.' (Anonymous 1910: 366; my translation).

The same situation is reported in a more geographically precise testimony written by Hans Dernschwam, a German traveller who spent two years in Constantinople between 1553 and 1555. According to Dernschwam, migrants coming at the time from *Caramania*, a land including parts of Cappadocia and Cilicia, spoke Turkish but were of the Greek Orthodox faith and held Mass in Greek, which to them was incomprehensible:

> *Nicht weit von abstander burg,* (...) *wont ein cristen volkh, nent man Caramanos, aus dem landt Caramania, an Persia gelegen, seind cristen, haben den krichischen glauben. Vnd ire mes haltten, sy auff krichisch vnd vorstehen doch nicht krichisch. Ir sprach ist turkisch. Nit weiss ich, ab sy anfenglich turkische sprach gehapt haben.*
>
> 'Not far from the castle, (...) there lives a Christian people, whom one calls the *Caramanos*. They come from the country of *Caramania*, which borders on Persia. They are Christian and profess the Greek faith. They hold their mass in Greek, but they do not understand Greek. Their language is Turkish. I do not know whether Turkish was their original language.' (Babinger 1923: 52; translation by Chris Geissler)

In a remarkable display of persistence in the face of sweeping cultural assimilation, a number of Orthodox, Greek-speaking communities in northeastern and central Asia Minor were able to survive as such through the range of social and political changes that drove the lengthy transition from the Byzantine Empire to the Seljuq Sultanate, and from that to the Ottoman Empire. In some cases, this survival can be attributed to physical seclusion, due to which certain Greek communities had always existed semi-independently from decision-making centres in the west and relied more heavily on their own political and cultural resources even during Byzantine times. Such is the case of Pontus, in which Greek Orthodoxy and the Greek language, or, to be more precise, the Pontic dialect of the Greek language persisted even after 1923. In smaller Greek communities, the preservation of traditional religion and language was facilitated by their geographic location mainly in rural areas where Turkish settlements occurred at a later time and in fewer numbers than in other regions. This is the case of the Cappadocian-speaking villages (Augustinos 1915: 17; Vryonis 1971: 451-452). Despite the different reasons for their survival, all of these communities represent what Vryonis (1971: 444-497) has termed the Byzantine residue in Turkish Anatolia, which "developed local cultures derived from the particular physical and social environment that distinguished them from Greeks in other territories" (Augustinos 1992: 5).

At the beginning of the 20th century, Greek-speaking communities were found in the locations listed below (see Map 2.1); their members are thought to have descended from the indigenous Greek population that predated the Seljuq invasions, as opposed to later settlements of populations from Greek-speaking areas outside of Asia Minor (Dawkins 1916: 5, 1940: 23-24; Papadopoulos 1998 [1919]):

(a) Pontus;
(b) the area between Pontus and Cappadocia;
(c) Cappadocia;
(d) Phárasa;
(e) Sílli;
(f) Livísi;
(g) Bithynia; and,
(h) Gyölde.

To these we should add Mariupol on the coast of the Sea of Azov, where Rumeic, a dialect closely related to that of Pontus, is still spoken by the Greek community of the city that traces its origin to Pontic settlers from Crimea (Pappou-Zhouravliova 1995; Symeonidis & Tompaidis 1999). The examination of these locations in Map 2.1 shows them to be separated by vast geographical distances, and in many instances by largely impermeable physical boundaries. In light of this, it becomes obvious that these Greek-speaking pockets represent only a small fraction of the historical Greek population of the area that survived the Turkish invasions. It therefore stands to reason to assume that—at least in the first centuries after the invasions—Greek in Asia Minor must have continued to be spoken much more widely than what the map allows us to gather. However, it should be noted that, despite the geophysical difficulties and the relatively early (near) completion of the linguistic turkicisation of Asia Minor, the communities found in the locations listed above did not remain totally isolated from each other from a linguistic point of view, as movements of mostly male populations were very common within the Ottoman territory from the 15th century onwards, bringing together speakers from the various Greek enclaves. A well-known example in that connection is the emigration from Cappadocia that became particularly intense during the 18th and 19th centuries. During that time, the capital, Constantinople, the Pontus, Smyrna and the western coast of Asia Minor but also some cities in its centre such as Adana (Greek *Άδανα*), Konya (Greek *Ικόνιο*), Mersin (Greek *Μερσίνη*) and Ankara (Greek *Άγκυρα*) received large numbers of migrants who left their homes due to the scarce agricultural production and the lack of safe conditions in the countryside (Dawkins 1916: 14, 23; Karachristos 2003a, b, c, d; Phosteris 1952: 142-144).

As would be expected, the preservation of the inherited language in the Greek communities of Asia Minor was not always favoured by historical circumstances, and in certain locations the use of Greek was seriously threatened by its sociolinguistic position and other factors external to its native environment. As a result of the early Seljuq invasions and of the later establishment of the Ottoman Empire, AMGr speakers spent most of their history in societies in which the language of the dominant political authorities was Turkish. As such, Turkish was spoken by the overwhelming majority of the population in all aspects of life: political, economic, social, and cultural. Greek, the language, which had dominated in the area until the 11th century, thus became one of many languages that were sociolinguistically dominated by the Turkish of the Seljuqs and the Ottomans. This situation gave rise to a considerable amount of Greek-Turkish bilingualism, which came to define the speaker communities of the Greek-speaking enclaves of Asia Minor almost without exception (Vryonis 1971: 457-459).

By the end of the 19th century, in some communities the use of Turkish alongside Greek had been so pervasive as to oust the use of the latter altogether. This has been recorded for the Cappadocian villages of Andavál and Límna, where Greek had by then become extinct (Archelaos 1899: 126; Dawkins 1916: 11; Karolidis 1885: 37). In other Cappadocian villages the shift from Greek to Turkish appears to have been well on its way to completion, as well. According to Krinopoulos (1889: 14), Turkish was the language predominantly spoken in Ferték, where the use of Greek was at the time limited to old women, an account later confirmed by Dawkins (1916: 14). In Ulaghátsh, Dawkins "even heard women talking Turkish to their children, a sure sign of the approaching extinction of the Greek dialect" (1916: 18); he reports the same for Semenderé. These extreme cases notwithstanding, there is no safe indication that bilingualism posed a very serious threat to the continuous use of Greek by its speakers in the majority of Asia Minor enclaves, at least at that time. Until 1923, the language was spoken without any apparent signs of being in danger of extinction in the large communities of Pontus, where a number of Pontic Greek varieties are still in use by Muslim communities (Bortone 2009; Sitaridou 2010), and in Phárasa, in Sílli, and even in some of the smaller Cappadocian villages. Dawkins writes with respect to the future of the Cappadocian variety of Axó: "there being no Turks and the population large and not given to going abroad, the dialect is in no danger of

disappearance either by giving way to Turkish or by being purified by the influence of common Greek" (1916: 22).

As pointed out in Dawkins's quotation, apart from Greek-Turkish bilingualism, "common Greek" was the other important factor that exerted a major influence on the preservation or loss of indigenous Greek in the Asia Minor communities. Common Greek here most probably refers to a linguistic version of MGr based on *Δημοτική*, the vernacular form of the language naturally acquired and spoken in Greece and the other contiguous Greek-speaking areas of the west, containing a good deal of grammatical and lexical archaisms characteristic of *Καθαρεύουσα*, the purifying form of Greek that was employed solely for educational, literary and official purposes (Mackridge 2009: 81). Common Greek reached the Asia Minor enclaves more intensely after the establishment of the first Greek state and the contemporaneous rediscovery of the Cappadocian Greek-speaking communities in the fourth decade of the 19th century (Balta & Anagnostakis 1994; Sapkidi 2002a, b) at which time Greek schools were founded in many Cappadocian villages (for Sinasós, see Archelaos 1899: 22; Eleftheriadis 1879: 29; for Sílata, see Farasopoulos 1895: 43). It is unclear whether Greek in these schools was taught in the form of *Καθαρεύουσα* or in the common Greek described above. Whichever the case, due to centuries of linguistic separation, both forms were incomprehensible to the Greeks of Asia Minor (Janse 2002: 360), despite the continuous presence in their communities of *Καθαρεύουσα* in which the liturgical texts of the Orthodox Church were written. The invasion of such foreign forms of Greek into the life of Asia Minor communities—encouraged by Greek nationalism stemming from the newly founded kingdom—had, in certain cases, the same effects as extensive Greek-Turkish bilingualism, ousting the use of Asia Minor Greek in favour of common Greek. Dawkins reports for Sinasós that "at present the old dialect largely gives way to the common Greek (...) Its schools and its flourishing condition have now at all events set it firmly on the path of the modern Greek *κοινή*, and it is, as the inhabitants boast, an Hellenic oasis, where even some Moslems know Greek" (1916: 27-28).

The continuous use of Greek in Asia Minor was brought to an abrupt end as a consequence of the defeat of the Greek army in the Greco-Turkish War (1920-1922), the *Μικρασιατική Καταστροφή* as it came to be known (Jensen 1979). In accordance with the *Convention Concerning the Exchange of Greek and Turkish Populations* that was signed

by the governments of Greece and Turkey at Lausanne, Switzerland on the 30th of January 1923 shortly after the end of the war,

> As from the 1st May, 1923, there shall take place a compulsory exchange of Turkish nationals of the Greek Orthodox religion established in Turkish territory, and of Greek nationals of the Moslem religion established in Greek territory.
>
> These persons shall not return to live in Turkey or Greece respectively without the authorisation of the Turkish Government or of the Greek Government respectively. (Article 1)

The Greek speakers of Asia Minor were thus uprooted from their eastern homelands and forced to relocate mainly in the recently acquired northern parts of Greece as refugees. There, they either inhabited existing towns and villages or founded new ones often named after their places of origin in Asia Minor (Kitromilides & Mourelos 1980-1982). Unlike refugees from more densely populated enclaves such as Pontus, Cappadocian refugees did not manage to establish large, homogeneous communities within Greece. Due to their small number and the lack of an organised displacement plan, the inhabitants of the various Cappadocian villages were scattered around the country. For example, refugees from Mistí moved to villages and towns in western and eastern Macedonia (Aghionéri and Xirochóri Kilkís, Kavála), Thrace (Alexandroúpoli, Xánthi), Thessaly (Mándra Laríssis), and Epirus (Kónitsa).[5]

In the context of this new geographical and social setting, Cappadocian Greeks experience new cultural and linguistic assimilation pressures, this time exerted by SMGr and the various MGr dialects native to the refugees' new homes. Combined with the native prejudice against the language of the refugees (Bortone 2009: 67-68; Clogg 1992: 101), linguistic assimilation within Greece was thought to have been completed by the end of the 20th century at which time Cappadocian was considered extinct (Kontossopoulos 1981: 7; Sasse 1992: 66). This assertion was based on the assumption that the dialect was only spoken natively by refugees of an older age who had acquired it while still in Asia Minor and that the natural language transmission process was interrupted after the population exchange. The descendants of refugees were therefore considered to have knowledge only of SMGr and/or MGr

[5] Source: http://kappadokes.gr/english/history/history2/history2_en.htm (Accessed on 19 January 2011).

dialects indigenous to Greece. It was not until 2005 that Mark Janse and Dimitris Papazachariou drew international attention to the fact that *Μιῶτκα*, the Cappadocian variety of Mistí, is still spoken in Greece in a number of dialect pockets mainly in rural areas of the north, with speakers also found isolated in cities elsewhere in the country. Today, what appears to be the last surviving Cappadocian variety is used not only by elderly people who came to Greece in 1923 at a very young age, but also by second and third generation refugees of middle age who acquired it as native or semi-native speakers from their parents and grandparents. Unfortunately, *Μιῶτκα* is now seriously facing the prospect of extinction (Janse 2007: 71-74, 2008a: 125-129, 2009: 38-39).

2.3 The linguistic record

The old diglossic tradition prohibiting the use in writing of any form of Greek other than the high, elevated code that was superposed upon the spoken form of the language during Byzantine times (Horrocks 2010: 213-214; Toufexis 2008), combined with the cultural and literary standstill to which the Greek territories occupied by the Seljuq and Ottoman Turks were brought after the turn of the second millennium (Horrocks 2010: 406) entailed that there is an almost complete dearth of dialectal texts or any other material known to be written in any of the different AMGr dialects in the period before the 19th century (see also Horrocks 2010: 281). The enumerable cases in which dialectal features can be identified with a relative degree of certainty in Greek texts dated earlier than that time involve mainly lexical items. More rarely, they show morphological or syntactic constructions geographically confined to the area, but do not allow for the further specification of a particular AMGr dialect. The attested dialectal features constitute innovations characteristic of all the modern AMGr dialects and sometimes even of dialects outside of Asia Minor.

The nature of the few available texts in which AMGr dialectal features are found varies greatly depending on their region of origin, each text presenting different philological difficulties. Dialectal features in sources originating in Pontus have to be sought in long texts that are otherwise written in the high Greek code of Byzantine times for official or semi-official purposes, such as the *Vazelon Acts* of the homonymous monastery, which were written over a period spanning the years 1245-1702 (Ouspensky & Bénéchevitch 1927), or the *Trebizond Almanac* of 1336 (Lamprou

1916). In these texts, the occurrence of dialectal features is attributed to slips and errors by the authors or copyists (Lampsides 1952; Vayacacos 1964). The frequent use in the *Vazelon Acts* of the accusative for indirect objects in examples such as *ἔδωκά τον καὶ ἐγὼ τὸ χωράφιον τοῦ ἀλωνίου* 'I gave him the field by the threshing floor' (Act 45, lines 3-4, 1260-1270; Ouspensky & Bénéchevitch 1927: 23) is particularly notable in that connection. As will be shown below, this feature appears in all of the modern AMGr dialects and probably originated in Constantinople, where it emerged as early as the 5th-6th century (Manolessou & Beis 2006: 221).

Texts from areas closer to Cappadocia present difficulties of a different nature as they are written in the Perso-Arabic script. This obscures their use of vernacular forms of Greek, which could, in principle, be considered an advantage compared to the use of the high code in the Pontus texts. Due to the lack of vowel pointing, the use of the Perso-Arabic script makes reading the Greek texts extremely difficult, allowing for various Greek transliterations, and therefore different readings as well. There are two such sources: the Greek verses in the poetry of Jalāl al-Dīn Muḥammad Rūmī and his son Baha al-Dīn Muḥammad-i Walad that were written in the area of Ikonion in the 13th century (Burguière & Mantran 1952; Dedes 1993; Mertzios 1958; Meyer 1895; Theodoridis 2004); and the Greek words listed in the Rasûlid Hexaglot, a multilingual glossary compiled by the Rasûlid ruler of Yemen, al-Malik al-Afḍal Ḍirgām ad-Dīn al-'Abbās, at the end of the 14th century (Golden 1985 [1987]; Halasi-Kun *et al.* 2000). Like that of the Pontus texts, the Greek language of these two sources is characterised by dialectal innovations that are found widely in Asia Minor and are not restricted to any particular modern dialect. For example, the use of the accusative instead of the genitive for indirect objects that I noted for the *Vazelon Acts* also occurs in one of Rūmī's poems: *πέ με τί ἔπαθες, πέ με τί ἔχασες* 'tell me what you lost' (پیمی تِی پَاثِیس پیمی تِی خاسِس; ff273v, manuscript № 67, Museum of Konya; Dedes 1993: 21). As for the Greek words in the Hexaglot, a handful of them appear to have undergone phonological, morphological and semantic changes that are again attested in more than one AMGr dialect. For example, the Ancient Greek *χειμὼν* 'winter' is attested in the Hexaglot as *χειμός* (ییموس; f. 4vB26, 192B26; Halasi-Kun *et al.* 2000: 136), having shifted from the ancient third to the second declension. This shift is also found in modern Pontic and Cappadocian, where the noun is recorded as *ôειμός* and *χειμός*, respectively. The distinctively Pontic

and Pharasiot adjectival formation *οκνᾰ́ρης/οκνιέρ* ‘lazy’ is attested in the Hexaglot as *ὀκνιάρης* ‘stupid, lazy’ (اوكنياريس; f. 4RA21, 191A21; Halasi-Kun *et al.* 2000: 118), illustrating a stage prior to the monophthongisation of unstressed /ia/ diphthongs to [æ] and [ɛ] that followed in the history of the two dialects. Overall, it seems that the dialectal features in these sources point towards an early dialectal separation of the whole of Asia Minor, but do not show any evidence of intradialectal differentiations, at least at the early time of the available texts.

It is not until the rediscovery of the Greek-speaking “living monuments” of Cappadocia in the 19th century and the publication in 1833 of Alektoridis’s glossary of the Cappadocian variety of Ferték (*“Λεξιλόγιον τοῦ ἐν Φερτακαίνοις τῆς Καππαδοκίας γλωσσικοῦ ἰδιώματος”*) that sources begin to appear more regularly containing linguistic material that can be uncontestedly identified as Cappadocian. This material is found in the form of sometimes very short grammatical outlines included as part of either historical and ethnographic works on Cappadocia and the Cappadocian villages (Archelaos 1899: 148-155; Krinopoulos 1889: 33-40), or glossaries of specific Cappadocian varieties (Anonymous 1914: 45-46; Alektoridis 1833: 487-491; Archelaos 1899: 216-281; Karolidis 1885: 109-129; Vasileiadis 1896). Following a practice common in the description of non-standard varieties of MGr, both the authors of the grammatical outlines and the compilers of the glossaries do not treat Cappadocian as a linguistic system in its own right, but instead as a set of deviations from SMGr and the more mainstream MGr dialects spoken in mainland Greece and the other contiguous Greek-speaking areas of the west. What is found in these sources are those grammatical—almost exclusively phonological and morphological—features and lexical items for which Cappadocian shows stark differences with respect to SMGr. These are generally presented in pre-theoretical terms and, in most cases, with very little detail. Alektoridis, for instance, describes the nominal inflection of Ferték Cappadocian in the following three sentences:

> *Ἡ ὀνομαστικὴ τῶν δευτεροκλίτων ἀποβάλλει ὡς ἐπὶ τὸ πλεῖστον τὸ τελικὸν ς οἷον* καλὸ ἄνθρωπο, σερνικὸ κτλ. *Ἡ γενικὴ σχηματίζεται προστιθεμένης, ἀδιακρίτως γενῶν, τῆς καταλήξεως ͜ιοῦ ἢ ἀμέσως εἰς τὴν ὀνομαστικὴν* (θεγὸ, ναῖκα γεν. θεγο͜ιοῦ, γεν. ναῖκα-ιοῦ) *ἢ εἰς τὴν ῥίζαν* (ἄνθρωπο, γεν. ἀνθρωπ-͜ιοῦ)· *ἡ αὐτὴ κατάληξις προστίθεται καὶ πρὸς σχηματισμὸν τῆς γενικῆς πληθυντικῆς. Ἡ δοτικὴ σχηματίζεται διὰ τῆς προθέσεως* ’σο, *ἥτις κατ’ ἐμὲ εἶνε σύνθετος ἐκ τὴς προθέσεως* εἰς *καὶ τοῦ*

> *ἄρθρου = εἰς το, 'σο ναῖκα τῇ γυναικί, 'σο θύρα = τῇ θύρᾳ, κατὰ τὴν καθωμιλημένην, εἰς τὴν θύραν.*
>
> 'The nominative of second declension nouns generally drops the final ς as in *καλὸ ἄνθρωπο*, *σερνικὸ* etc. The genitive is formed by adding the ending *ͅοῦ*, irrespective of gender, either directly to the nominative (*θεγὸ*, *ναῖκα* gen. *θεγοͅοῦ,* gen. *ναῖκα-ιοῦ*) or to the stem (*ἄνθρωπο*, γεν. *ἀνθρωπ-ͅοῦ*); the same ending is added to form the genitive plural, as well. The dative is formed by the preposition *'σο*, which, according to me, is composed of the preposition *εἰς* and the article = *εἰς το*, *'σο ναῖκα* to the woman*, 'σο θύρα* = to the door' (1833: 487; my translation)

As a result, very little of the linguistic material in these sources can be used for linguistic analysis in a constructive way, most of it being suitable for indicative purposes only.

Folk songs recorded around the end of the 19th century in the Cappadocian villages (Archelaos 1899: 155-171; Gourgoutis 1893 [1922]; Pachtikos 1905: 3-43) are another source of linguistic material that could, in principle, represent spoken Cappadocian of the time. However, the language of these songs is highly problematic in that it shows no evidence of several significant grammatical developments that, as we will see below, define not only Cappadocian but AMGr as a whole. The folk songs instead appear to illustrate an older stage in the history of AMGr, one prior to the introduction of its characteristic innovations; the language also happens to be suspiciously reminiscent of Dawkins's "common Greek" of the time. For example, in his grammatical outline of the Cappadocian variety of Sinasós, Archelaos (1899: 150) notes the use of the neuter form of adjectives when they modify inanimate masculine or feminine nouns, a semantic agreement pattern that is, however, not observed in the folk songs he provides later in his work. For example, the adjectives and the adjectival participle in *ὁ κόσμος οὖλος* 'the.M whole.M world.M', *αὐλαῖς μαρμαρωμέναις* (*sic*) 'marbled.F yards.F' and *χρυσῆ λαμπάδα* 'golden.F candle.F' (1899: 158, 160) appear in their masculine and feminine forms, thus agreeing with the nouns they modify in gender, as in common Greek. Such contemporary anachronisms cannot but be attributed to the influence of common Greek, noted by Dawkins as one of the factors that threatened Cappadocian; and that is only if one decides not to question the credibility of the folk song editions by addressing issues of editorial intervention. Alternatively, it could well be the case that the Cappadocian folk songs survived in an

earlier linguistic form due to their traditional nature. Factors such as meter and verbal formula might have helped preserve original characteristics in their transmission, including their language. In any case, the language of these sources cannot be considered to represent the spoken Greek of Cappadocia at the time.

The first significant, comprehensive and reliable source of data on Cappadocian is, without doubt, Dawkins's study entitled *Modern Greek in Asia Minor: A Study of the Dialects of Sílli, Cappadocia and Phárasa with Grammar, Texts, Translations and Glossary* published in 1916 (for reviews see McKenzie 1916; Psaltes 1918; Taylor 1918). In this celebrated work (Mackridge 1990), a short version of which appeared in the form of a journal article (Dawkins 1910), Dawkins reports the results of fieldwork he conducted in Sílli, the Cappadocian villages and Phárasa in the summers of 1909, 1910 and 1911, shortly before the Greek-speaking communities of these enclaves were uprooted from Asia Minor. Drawing on a wealth of primary linguistic material collected from his field trips, Dawkins produced a detailed grammatical description of the phonology and morphology of the Greek dialects of the area examined within their historical, cultural and sociolinguistic context, which he presents thoroughly in the study's introduction. The grammatical description is further supported by a range of materials, some of which may well be thought to surpass the grammatical exposition in importance. The most remarkable contribution is the transcription of a large corpus of spoken Silliot, Cappadocian and Pharasiot that occupies more than half of the study's length, supplemented by a glossary compiling the recorded lexical stock. Comprising folk tales narrated by local Greek speakers—whose demographic details and linguistic background are duly reported—the corpus captures the spoken language of Sílli, Cappadocia and Phárasa at the very last stages of its continuous use by its speaker communities in their native environments. The historical significance of the corpus therefore cannot be underrated. In that light and taken as a whole, Dawkins's collection of data, his grammatical description, the texts and glossary, and the account of the relevant historical and sociolinguistic background, compose what still remains the richest and most complete documentation of the MGr dialects of the inner Asia Minor enclaves to date.

The dramatic events of the Greco-Turkish War, the resulting population exchange and the relocation of the Greek-speaking communities in Greece called a halt to the documentation and description of Cappadocian and the other AMGr

dialects. Nearly three decades after the exchange, at which time the resettlement of Asia Minor refugees had for the most part been completed, researchers from the Centre for Asia Minor Studies and the then Historical Dictionary of Modern Greek of the Academy of Athens finally resumed fieldwork in the refugee reception areas with the aim of collecting ethnographic and linguistic material from the refugees. The documentation of the AMGr dialects in their new geographical setting led to the publication of a number of monographs and journal articles focusing on the dialects of specific refugee communities based on their region of origin in Asia Minor (Andriotis 1948 for Pharasiot; Andriotis 1960 for Livisiot; Costakis 1964 for Anakú Cappadocian; Costakis 1968 for Silliot; Kesisoglou 1951 for Ulaghátsh Cappadocian; Mavrochalyvidis & Kesisoglou 1960 for Axó Cappadocian; Phosteris 1952, Phosteris & Kesisoglou 1960 for Araván Cappadocian). Written by trained linguists in collaboration with native speakers of the AMGr dialects, the monographs of linguistic documentation follow the model of Dawkins (1916). They contain grammatical descriptions predominantly of the phonology and morphology of the dialects under investigation, in many parts in considerable detail, and also deal preliminarily with their syntax, a clear advantage over the total lack of syntactic analysis in Dawkins. The grammatical descriptions are supported by corpora of texts, which are rather small but include such kinds of folk texts as proverbs and sayings. Glossaries are also included, overall forming a set of fairly accurate and reliable sources of linguistic data on Cappadocian and the other AMGr dialects.

Not all of the material collected by this latter set researchers in Greece went to press. A great deal of primary linguistic data remains unpublished in the archives of the Centre for Asia Minor Studies and of the Research Centre for the Study of Modern Greek Dialects and Idioms (Historical Dictionary of Modern Greek) of the Academy of Athens. The Manuscript Archive of the latter institution has in its possession five particular manuscripts containing abundant linguistic material collected in the 1960s by Costakis and Tsitsopoulos from refugees coming from the villages of Mistí and Phloïtá (manuscripts № 755 (1959), 811 (1962), 812 (1962), 826 (1963), and 827 (1967)). These could be used to produce a monograph on their Cappadocian varieties on the model of the published works mentioned above. Yet, even if such monographs were ever produced, it will still be a misfortune that the varieties of only a small portion of the original AMGr communities will have been

documented and described in more than one source at more than one points in time; the language of such Cappadocian villages as Delmesó, Potámia, Malakopí, Ferték, and Ghúrzono will remain known only through Dawkins (1916).

2.4 The effects of early linguistic separation and intense language contact on Cappadocian

The social and cultural consequences of the military and political events that shaped the history of the Greek Orthodox communities of Cappadocia from the 11th century onwards had a direct impact on the Cappadocian dialect. Greek in Cappadocia developed in isolation from that of the contiguous Greek-speaking areas of the west, on the one hand, and in the context of intense language contact with the Turkish of the Seljuq and Ottoman conquerors, on the other, for a significant amount of time. The effects of both these conditions are vividly illustrated in the grammar of the modern dialect.

Owing to the early separation of the Cappadocian communities from the western Greek-speaking contingent, Cappadocian presents numerous grammatical features characteristic of earlier stages in the history of Greek, particularly the Early Medieval and the Late Medieval periods (500-1100 CE and 1100-1500 CE, respectively, according to Holton & Manolessou 2010: 541). Some of these features represent early developmental stages in the course of long-term grammatical changes that Greek is known to have undergone during medieval times and which in most MGr dialects were succeeded by later stages of development. Others have to do with the absence in Cappadocian of grammatical innovations that most MGr dialects underwent after the Early and Late Medieval periods. Based on the evidence of these archaic features, the Greek speakers of Cappadocia can be considered to have belonged until the Late Medieval period at the latest to the same contiguous Greek-speaking community as that to which the speakers of all the MGr dialects trace their origin. The most important archaisms found in Cappadocian that support this conclusion are listed in Table 2.1 (see also, Anastasiadis 1995; Horrocks 2010: 399-400; Papadopoulos 1998 [1919]: 91-95).

Table 2.1. *The major Cappadocian archaisms.*

(a) Sporadic retention of the pronunciation of ancient *η* [ε:] as [ε], and not as [i], mainly in unstressed syllables (Dawkins 1916: 67):

είχαμ πεγάδια εκεί 'we had wells there' (Anakú, *KMS/C*, 82; cf. SMGr *πηγάδια*)
ένα ψελό αράπης 'a tall black person' (Araván, *KMS/P&K*, 104; cf. SMGr *ψηλός*).

(b) Use of various forms of possessive pronouns for the first and second person originating in the ancient possessive pronouns *ἐμός-ἐμή-ἐμόν/ἡμέτερος-ἡμετέρα-ἡμέτερον* and *σός-σή-σόν/ὑμέτερος-ὑμετέρα-ὑμέτερον*, and not in *ἰδικός-ἰδική-ἰδικόν* (Dawkins 1916: 120-124):

το μο το σπιτ 'my house' (Phloïtá, *ILNE/812*, 123 ; cf. SMGr *το δικό μου το σπίτι*)
στ' εμέτ τα μέρες 'in our days' (Phloïtá, *ILNE/811*, 88; cf. SMGr *στις δικές μας τις μέρες*).

(c) Use of *να* to mark a present as future, an expression of futurity that fell out of use in the Late Medieval period in favour of constructions that later gave rise to MGr *θα* (Horrocks 2010: 301; Markopoulos 2009: 223):

«Τι να το ποίκεις;» Κι εκείνο είπεν, «Να μετρήσω λίρες» '"What will you do with it?" And she said, "I will measure gold pieces"' (Potámia, *Dawkins*, 454; cf. SMGr *Τι θα το κάνεις; Θα μετρήσω λίρες.*)
να κατεβείς σο κάτω σον κόσμο 'you will go down into the underworld' (Sílata, *Dawkins*, 450; cf. SMGr *θα κατεβείς στον κάτω κόσμο*).

(d) Retention of ancient *κ*-less stems in the formation of the aorist passive (Dawkins 1916: 144-146):

ογώ φοβήθα 'I was scared' (Mistí, *ILNE/755*, 88; cf. SMGr *φοβήθηκα*)
ηνέβη σο ντώμα 'she went up on the roof' (Ghúrzono, *Dawkins*, 346; cf. SMGr *ανέβηκε*).

(e) Retention of the ancient *ν*-less endings *-ούμαι/-ούται/-ούνται* in the formation of the present passive of verbs in *-ώνω* originating in ancient contracted verbs in *-όω* (Dawkins 1916: 141):

στεφανούται το 'he marries her' (Axó, *KMS/M&K*, 214; cf. SMGr *στεφανώνεται*)
σηκούνται πάλε 'they get up again' (Phloïtá, *ILNE/811*, 31; cf. SMGr *σηκώνονται*).

(f) Absence of periphrastic constructions formed with the auxiliary *έχω* and the aorist infinitive for the expression of the pluperfect and perfect tenses that developed near the end of the Late Medieval period (Aerts 1965; Holton & Manolessou 2010: 551-553; Horrocks 2010: 300-301; Moser 1988).

(g) Distribution of enclisis and proclisis with respect to object clitic pronouns that is reminiscent of that found in the Late Medieval period: pronouns in principle follow the verb but precede it if the verb is immediately preceded by modal and negative markers, complementisers, *wh*-expressions or fronted adverbials (Condoravdi & Kiparsky 2001, 2004; Janse 1993, 1994, 1997, 1998a, b, 2006; Mackridge 2000; Pappas 2004):

ντεν μπορ να το πῶαζ̂ (...) *πῶαν το* 'he cannot catch her (...) he catches her' (Axó, *KMS/M&K*, 210; cf. SMGr *δεν μπορεί να την πιάσει* (...) *την πιάνει*)
έκριψες ψωμί, ντώκα σι· έκριψες λερό (...) *ντέ σι ντώκα* 'you asked for bread, I gave you bread; you asked for water, I did not give you water' (Mistí, *ILNE/755*, 52; cf. SMGr *σου έδωσα* (...) *δε σου έδωσα*).

(h) Retention of the relative use of the definite article that was fully integrated into the grammatical system of Late Medieval Greek around the 12th century, and the absence of the indeclinable relativiser *(ό)που* and of the relative pronouns *ο οποίος/η οποία/το οποίο*, whose use was generalised much later than that time (Horrocks 2010: 293-295; Manolessou 2003; Nicholas 1998):

ομπρό ντα παίνον ντα κανείσια 'the people who go ahead', lit. 'ahead that they go the people' (Ulaghátsh, Kesisoglou 1951: 51; cf. SMGr *οι άνθρωποι οι οποίοι/που πηγαίνουν μπροστά*)

τα φορώνεις τα φορτσές 'the clothes which you wear', lit. 'that you wear the clothes' (Axó, Mavrochalyvidis & Kesisoglou 1960: 90; cf. SMGr *τα ρούχα τα οποία/που φοράς*).

Besides the survival of grammatical and lexical archaisms, the long linguistic isolation of the Cappadocian speaker communities provided the necessary conditions for the development of a significant number of structural innovations that distinguish Cappadocian from the other MGr dialects. Such defining innovations are found in all components of Cappadocian grammar, from phonology and morphology to syntax. It is in many of these innovations that the linguistic effects of language contact with Turkish, whose influence kept growing in the centuries that followed the Seljuq and Ottoman conquests of Asia Minor, become particularly evident. As a direct result of extensive Greek-Turkish bilingualism and the consequent linguistic interference from the latter to the former, there can be found in Cappadocian a number of grammatical features whose occurrence can be incontrovertibly attributed to the replication of Turkish linguistic matter and, in some cases, of grammatical patterns as well (in the sense of Matras 2009; Matras & Sakel 2007; Sakel 2007). The most distinctive features of this kind are shown in Table 2.2. In cases such as (a)-(e) in the table, Cappadocian has incorporated identifiable Turkish sounds and sound shapes of words and morphs alongside their grammatical meaning and function. In cases such as (f) and (g), it has replicated the organisation, distribution and mapping of grammatical and semantic meaning of Turkish grammatical patterns using available Greek linguistic material, that is, without borrowing the actual forms used in Turkish.

Table 2.2. *Distinctive contact-induced grammatical features in Cappadocian.*

(a) Introduction into the Cappadocian phonemic inventory of Turkish phonemes such as /œ/, /y/, /ɯ/, /ɣ/, /q/, which are found mainly in the great masses of Turkish loanwords that were borrowed into Cappadocian (Janse 2009: 39, 49):

και το κιölῦ λάλσε ντο ορτό-τ 'and the villager spoke the truth' (Ulaghátsh, *KMS/K*, 160; cf. Tr. *köylü*);
τôəγəρντά παιγιού ντο μάνα 'he calls the boy's mother' (Ferték, *Dawkins*, 328; cf. Tr. *çağırmak*).

(b) Extension of the Turkish aspirated stops [p^h], [t^h], [k^h] from loanwords to words belonging to the inherited Greek lexical stock (Janse 2009: 40):

κι άλλο p̔αγύ 'thicker' (Axó, *KMS/M&K*, 190; cf. SMGr *παχύ*)
t̔ίνος κεφάλ να κάτ̂ς 'on whose head it will sit' (Axó, *KMS/M&K*, 218; cf. SMGr *τίνος*)
ας το k̔ουντήσουμ μακριά 'let us push it away' (Axó, *KMS/M&K*, 212).

(c) Use of the interrogative particle *μι* (< Tr. *mI*) to mark yes/no and alternative questions:

Σανό-ναι μι ιτό ντο χερίφος; 'Is this man crazy?' (Ulaghátsh, *KMS/K*, 156)
Πεθερά-ς λιαρό-ναι μι πέθανεν μι; 'Is your mother-in-law alive or is she dead?' (Phloïtá, *ILNE/811*, 26).

(d) Use of the complementiser *κι*, borrowed from Turkish *ki* (itself a Persian loan), to introduce direct speech:

ετό είπεν κι, «Θεός να με δώκεν ένα κορίτ̂ς...» 'he said, "If God had given me a girl"' (Sílata, *Dawkins*, 440)
ντα φôέα-τ έπαν κι, «Βαβά,...» 'his children said, "Father, ..."' (Ulaghátsh, *Dawkins*, 346).

(e) Use of the particle *εν* (< Tr. *en*) to form the superlative (Dawkins 1916: 117):

εν το μικρό-τ το παιί 'his youngest child' (Ulaghátsh, *Dawkins*, 370; cf. Tr. *en küçük oğlu*; SMGr *το μικρότερό του παιδί*)
αν το μικρό το κορίτς̑ 'the youngest girl' (Axó, *Dawkins*, 394).

(f) Formation of the comparative on the model of Turkish, using the adjective in the positive degree preceded by a prepositional phrase formed with *ας* or *από* 'from', whose prototypical meaning matches that of the Turkish ablative (*-DAn*) case (Dawkins 1916: 116):

ενα παλάτ δέκα φορές ας μαυτού-τ μέγα 'a palace ten times bigger than his', lit. 'from his big' (Phloïtá, *ILNE/811*, 62; cf. Tr. *kendisinden büyük* 'lit. from his big'; SMGr *μεγαλύτερο από το δικό του*)
απ' εμάς το μικρό το κορίτς̑ 'the girl who is younger than us', lit. 'from us the young girl' (Delmesó, *Dawkins*, 316; cf. Tr. *bizden küçük kız*; SMGr *το μικρότερό μας κορίτσι*)

(g) Formation of the pluperfect on the model of (one of the ways to form) the Turkish pluperfect, whereby the third singular form of the past copula is invariably attached to the finite forms of the aorist that inflect for person (Dawkins 1916: 147; Janse 2009: 43; Lewis 2000: 129-130; Winford 2005: 405-406):

πάγωσαν ήτονε 'they had frozen', lit. 'they froze it was' (Sílata, *Dawkins*, 446; cf. Tr. *buz kesildilerdi* 'they had frozen' < *buz kesildiler* 'they froze' + *idi* 'it was')
τράνσε ήτον 'he had seen', lit. 'he saw it was' (Ulaghátsh, *Dawkins*, 372; cf. Tr. *gördüydü* 'he had seen' < *gördü* 'he saw' + *idi* 'it was').

In other cases, language contact appears to have resulted in the loss of inherited Greek distinctions that are not found in Turkish, such as that between the interdental fricatives /θ/ and /ð/, which in some Cappadocian varieties are replaced by the corresponding dental stops /t/ and /d/. For example, in Ulaghátsh

Cappadocian: *έδεσε ντο άλοχο-τ* 'she tied her horse', *ντο τύρα ομπρό* 'in front of the door' (*KMS/K*, 140; cf. SMGr *έδεσε*, *θύρα*).

Perhaps the most characteristic grammatical innovations that define Cappadocian as a distinct linguistic entity among the MGr dialects, including those of Asia Minor to which it is a close cognate, are the result of the developments in the morphosyntax of nouns that were introduced in Chapter 1 as the object of this study: namely, the loss of gender distinctions, the emergence of 'agglutinative' patterns in noun inflection, and the development of DOM. The loss of gender could be seen as comparable to the loss of interdental fricatives, whereby a grammatical distinction is lost under the influence of Turkish, which lacks noun classification distinctions altogether. 'Agglutinative' inflectional patterns and DOM, on the other hand, could be thought to have developed through the replication of Turkish grammatical patterns in a way similar to the development of (f) and (g) above; Cappadocian appears to have reorganised and adapted its inherited grammatical resources and rules in a way such that they become more similar or even identical to corresponding structures in Turkish. As already outlined in Chapter 1, however, language contact can satisfactorily account only for the development of DOM. On the other hand, I will argue extensively in Chapters 4 and 5 that the loss of gender distinctions and the innovations in noun inflection should be treated as language-internal developments whose incipient manifestations predate the intensification of Cappadocian-Turkish cultural and linguistic contact. These developments are language-internal despite the typological similarity of their outcomes to Turkish structural features from a synchronic point of view.

Finally, there are certain cases in which language contact with Turkish appears to have favoured grammatical and structural variants that are generally marginal or marked in MGr and which, in Cappadocian, have become the unmarked, default options by virtue of their correspondence to Turkish grammatical and structural patterns. The shift from head-initial to head-final constituent order in adnominal genitives and relative clauses is a relevant example. In Cappadocian, genitives and relative clauses precede their nominal heads (Dawkins 1916: 200-202; Janse 1999; 1998; 2002: 364-370; 2003): *χωριού ντα σκυλιά* 'the village's dogs' (Mistí, *ILNE/755*, 58), *Αγιά Μάκρινας το παναγύρ* 'Saint Makrina's feast' (Phloïtá, *ILNE/811*, 66) (for examples of relative clauses, see the list of Cappadocian archaisms above). In MGr,

adnominal genitives and relative clauses typically follow their heads. The head-final order is a marked alternative, reserved mainly for focus constructions (Manolessou 2000: 122). In Turkish, by contrast, head-final constructions are the only grammatical option; genitives and relative clauses always precede their nominal heads. It therefore appears that the prenominal genitives and relative clauses already available in Cappadocian lost their marked status and became default options due to the influence of Turkish. The effect of this influence is best illustrated in the case of multiple genitives, which in Cappadocian are consistently prenominal, giving rise to constructions that are not allowed in MGr. For example, the structure corresponding interlinearly to Axó Cappadocian *τ βαῶιλιού τ νυφς τα φορτσές* 'the king's bride's clothes' (*KMS/M&K*, 192) is grammatical in Turkish (*padişahın gelininin elbiseleri* 'king.GEN bride.3SG.GEN clothes.3SG) but ungrammatical in MGr (**του βασιλιά της νύφης οι φορεσιές*).

Commenting on the interlinear correspondence between Cappadocian and Turkish with respect to constituent order in head-final constructions as well as in a good deal of idiomatic expressions and light verb formations that were calqued in Cappadocian on the model of Turkish, Dawkins phrased the famous statement that in Cappadocian "the Turkish has replaced the Greek spirit; the body has remained Greek, but the soul has become Turkish" (1916: 198). This view was echoed much later by Kontossopoulos, who, in an equally expressive way, wrote: "*ὅποιος ἀκούει* (...) *τὴν καππαδοκικὴ διάλεκτο, δὲν ξέρει ἂν ἔχει νὰ κάνη μὲ τούρκικα σὲ ἑλληνικὸ στόμα ἢ μὲ ἑλληνικὰ σὲ στόμα τούρκικο*" 'whoever hears the Cappadocian dialect does not know whether s/he is dealing with Turkish in a Greek mouth or with Greek in a Turkish mouth' (1981: 7). Owing to its vividness, Dawkins's proclamation became so oft-cited a quotation that the primacy of Turkish influence it conveys with reference to head-final structures and idiomatic expressions has become *quasi* programmatic for modern linguistic research dealing with any aspect of the Greek of Cappadocia. Language contact is viewed as the principal, and often the only, cause of all grammatical developments in Cappadocian, which are usually treated as typical instances of contact-induced language change in historical linguistics and language contact literature.

Thomason and Kaufman's discussion of Silliot, Cappadocian and Pharasiot (1988: 215-222; see also Thomason 2001: 63-64, 66-67) is the best-known example in

this connection. Thomason and Kaufman make such a strong case for language contact in the three AMGr dialects as to claim that, while most of them "clearly retain enough inherited Greek material to count as Greek dialects in the full genetic sense, a few dialects may be close to or even over the border of nongenetic development" (1988: 93-94). Drawing on Dawkins (1916), they enumerate a variety of lexical and grammatical innovations found in the three dialects, including those that I presented above, whose development, they argue, must be attributed to borrowing, the incorporation of Turkish grammatical features into the Greek grammatical system on behalf of Greek bilingual speakers. Using these features as criteria, Thomason and Kaufman classify Silliot, Cappadocian and Pharasiot as "an excellent example of heavy borrowing – category 5" (1988: 215), which, on their borrowing scale, is the result of very strong cultural pressure and involves the incorporation of major structural features that cause significant typological disruption (1988: 74-76; see also Thomason 2001: 70-71).

Revisiting roughly the same set of Cappadocian innovations listed by Thomason and Kaufman, Winford (2005: 402-409; see also 2003: 83-84) recently reaffirmed the claim that they "testify to a strong and pervasive influence by Turkish on Greek" (2005: 407). He takes issue, however, with Thomason and Kaufman's assertion that the agents of these changes were monolingual or more proficient in the latter. Within the theoretical framework developed by Van Coetsem for the study of contact-induced language change (1988, 2000), Winford considers some "deep and pervasive changes" (2005: 408) to be symptomatic of imposition, the process whereby linguistic material is transferred into the grammatical system of the recipient language, in our case Cappadocian, by speakers who are linguistically dominant in the source language, in our case Turkish. Based on such developments as the emergence of 'agglutinative' patterns in noun inflection or of head-final constituent orders, Winford postulates a reversal in the linguistic dominance relations between Cappadocian and Turkish, whereby some Cappadocian speakers who were dominant in Greek during the first centuries of language contact with Turkish later lost competence in Greek due to growing bilingualism and became more proficient in Turkish. Therefore, according to Winford, the deepest and most pervasive changes observed in Cappadocian were brought about by speakers who were less proficient in Greek.

Both Thomason and Kaufman's and Winford's accounts of the changes that Cappadocian has evidently undergone suffer from many of the methodological and analytical shortcomings recently pointed out by King (2000: 46-48, 2005: 234-236) and Poplack and Levey (2009) regarding research on contact-induced language change. Their major shortcoming is that they fail to demonstrate satisfactorily that the most defining Cappadocian innovations are indeed the product of language contact and not of language-internal motivations. The principal reason for this shortfall lies in what Poplack and Levey identify as "the widespread but unfounded assumption that linguistic differences occurring in bilingual contexts are necessarily (...) contact-induced" (2009: 397-398). Adopting an ahistorical approach, Thomason and Kaufman and Winford subject the set of innovative grammatical features in Cappadocian to typological comparisons with corresponding structures in Turkish and SMGr on a strictly synchronic level. These scholars bring forth superficial structural similarity and, in many cases, interlinear morphemic correspondence between Cappadocian and Turkish structural features as evidence to establish language contact with the latter as the single cause for developments in the former. "Deep and pervasive" changes such as the loss of gender distinctions in Cappadocian are presented in a way that creates the impression they occurred rapidly and abruptly, without undergoing intermediate stages of development. What is more, neither analysis accounts for the actual linguistic mechanisms and processes that resulted in such changes (for a similar point, see Heine & Kuteva 2005: 8), nor do they make any attempt to define the earlier linguistic form of Greek against which the changes in Cappadocian are shown to have been induced by language contact after systematic diachronic examination. SMGr, the contemporary standard variety of MGr, instead serves as the point of reference on account of yet another unfounded assumption that SMGr is the most relevant and appropriate MGr variety that can form the basis of comparison in assessing the impact of Turkish on Cappadocian grammar.

This strong analytical emphasis on the effects of language contact is clearly the result of the fragmentary reading and interpretation of Dawkins's study and his discussion of the various innovative grammatical features found in the three AMGr dialects he investigated (1916: 192-214). This becomes clear especially in the light of a list Dawkins compiles in which he records a number of Cappadocian developments "which *may* be put down to Turkish influence" (1916: 203; emphasis added) and which

coincide with the ones reviewed by Thomason and Kaufman and Winford in their respective analyses. In addition to this list, Dawkins later categorises in his discussion the varieties of the Cappadocian villages according to the degree of Turkish influence in each of them, which surely contributed to much of later research's emphasis on language contact to explain changes in the dialect.

In Dawkins's classificatory scheme, Turkish influence is measured using the following criteria, drawn from the aforementioned list of Cappadocian developments: (a) the preservation or loss of the Greek interdental fricatives and their replacement by dental stops; (b) the preservation or loss of traces of the Greek gender system; (c) the absence or presence of 'agglutinative' patterns in noun inflection; and (d) the degree of use of Turkish constituent orderings and idiomatic calques (1916: 208-211). On the basis of these features, the Cappadocian varieties are classified into five groups (I-V) that can be thought of as forming the continuum graphically illustrated in Figure 2.1. At the left end of the continuum are varieties considered less influenced by Turkish, such as Delmesó or Potámia Cappadocian. At its right end are those varieties "where the Turkish element is at its strongest" (Dawkins 1916: 209), namely, Ulaghátsh and Semenderé Cappadocian. Note that this classification corresponds to the geographically defined grouping recently refined by Janse (2008: 191) who drew on Dawkins's early observation that the groups below correspond to the geographical locations of the Cappadocian villages.

Figure 2.1. *Dawkins's classification of the Cappadocian varieties based on the extent of Turkish influence (1916: 209).*

Dawkins's list of Turkisms and his use of them in grouping the Cappadocian varieties indicate beyond doubt that he, too, attributed the development of several Cappadocian innovations to the influence of Turkish. For example, he writes with respect to the loss of the interdental fricatives /θ/ and /ð/ and their replacement by /t/ and /d/: "The general explanation of these phenomena is that the people, from constantly talking Turkish, found a difficulty in pronouncing these non-Turkish sounds, and these substitutions are the results of their efforts" (1916: 79). Modern linguistic research on Cappadocian draws heavily on this and other accounts by Dawkins along these lines.

What has largely escaped the attention of historical linguists and scholars working on language contact is a proposal of a different nature, first put forth by Dawkins with reference to the loss of gender distinctions in Cappadocian (1916: 116). Dawkins correctly identifies that this Cappadocian innovation is related to developments affecting gender agreement in Pontic, in which the distinction between animate and inanimate nouns determines the selection of gender in the forms of agreeing nominals such as adjectives and pronouns (see Chapter 4 for details). In light of this relation, he introduces the idea of a link that connects many defining Cappadocian innovations with similar developments occurring in the other AMGr dialects, most notably Pontic and Pharasiot, and which may explain the synchronic occurrence of many of the Cappadocian peculiarities (see also Dawkins 1937: 30). Dawkins goes on to support this idea further by listing the grammatical features found in all Cappadocian varieties that justify their treatment as forming a single dialect (Dawkins 1916: 212-213). He clarifies that these features, "which mark the Greek substratum of the Cappadocian" (1916: 212) and which cannot be attributed to the influence of Turkish, are also found in both Pontic and Pharasiot. Among them is found the morphosyntactic expression of the animacy-based distinction mentioned above, but also the extension of the endings of the *ι*-neuters to nouns belonging to the masculine and feminine inflectional classes. As I will show in Chapter 5, both are related to the emergence of the 'agglutinative' inflectional patterns in Cappadocian nouns. Dawkins thus unwittingly provides the crucial suggestion (without elaborating on the specifics) that such "deep and pervasive" Cappadocian changes as the loss of gender or 'agglutinative' inflection might actually owe their development to the inherited Greek substratum of the dialect. They may therefore be best understood in

the dialectological context of the various AMGr dialects as having been internally motivated, rather than as the exclusive outcome of language contact with Turkish when examined in isolation. This would then lead to the unsurprising conclusion that the early linguistic separation of the Greek communities of Asia Minor from the Greek contingent of the west created the conditions necessary not only for language-external—that is, contact-induced—but also for language-internal developments, a possibility that remains unexamined (cf. Poplack and Levey's quote of criticism above) and for which I aim to provide corroborating evidence in the remainder of this chapter.

2.5 Cappadocian in the dialectological context of Asia Minor

2.5.1 The common linguistic ancestor of the modern Asia Minor Greek dialects

From a genetic point of view, Cappadocian along with Pontic, Rumeic, and Pharasiot is found at the core of the AMGr dialect group, which also encompasses Silliot as a more peripheral member (Andriotis 1995: 100-107; Arapopoulou 2001: 175; Drettas 1999: 15; Horrocks 2010: 398-404; Kontossopoulos 1981; Triantaphyllides 2002 [1938]: 273-295). The group is identified primarily on the basis of a set of pervasive linguistic innovations that are shared by all of the above dialects, with the exception of some that are not attested in Silliot, but also of most of the grammatical archaisms that were pointed out in §2.4 with reference to Cappadocian. These indicate the early linguistic separation of the AMGr speaker communities from the Greek-speaking contingent of the west following the Seljuq invasions of the 11th century. More importantly, they collectively distinguish the AMGr dialects from other MGr dialects and dialect groups, including those that were spoken in the western coastal areas of Asia Minor, such as the dialect of Kydoníes and Moschonísia or that of Livísi, but which do not show evidence of the characteristic innovations found, for example, in Cappadocian or Pontic. A distinction should therefore be drawn between those dialects that are classified as AMGr in the genetic sense and those that are so called solely in the geographic sense of the term. This study is concerned only with the former group of dialects.

The most important shared innovations that distinguish the AMGr group from the rest of the MGr dialects are given in Table 2.3.

Table 2.3. *The shared innovations of the AMGr dialects.*

(a) Deletion of the high vowels /i, u/ and raising of the mid vowels /ɛ, o/ to /i, u/ in unstressed post-tonic syllables found mainly, but not exclusively, at the end of the word (Andriotis 1948: 22-24; Costakis 1968: 30-31, 33-34, Dawkins 1916: 42, 62-64, 149-151; Oeconomides 1958: 56-64; Papadopoulos 1955: 17-19; Symeonidis & Tompaidis 1999: 21-24):

σο σπιτ 'to the house' (Sílata Cappadocian, *Dawkins*, 444; cf. SMGr *σπίτι*)
νά του βγάλου 'I will fetch it out' (Mistí Cappadocian, *Dawkins*, 386; cf. SMGr *να το βγάλω*)
κανείς κι ξερ 'nobody knows' (Stavrín Pontic, Lianidis 2007 [1962]: 330; cf. SMGr *ξέρει*)
του κουρίτς ραφτ 'the girl is sewing' (Rumeic, Pappou-Zhouravliova 1995: 255; cf. SMGr *το κορίτσι ράβει*)
πού πάτσες; 'where have you been walking?' (Pharasiot, Dawkins 1916: 486; cf. SMGr *πάτησες*)
τούτους άρτουπους 'this man' (Silliot, Dawkins 1916: 292; cf. SMGr *τούτος, άνθρωπος*).

(b) Development of the postalveolar fricatives /ʃ, ʒ/ and palato-alveolar affricates /ʧ, ʤ/ before the front vowels /i, ɛ/ and the glide /j/ as a result of the palatalisation of inherited velar consonants /k, g, x/ (Andriotis 1948: 27-28; Costakis 1968: 49; Dawkins 1916: 45, 70, 154; Oeconomides 1958: 90-97; Papadopoulos 1955: 27-28; Symeonidis & Tompaidis 1995: 30-32):

τρία Τούρτσ(οι) 'three Turks' (Mistí Cappadocian, *ILNE/755*, 48; cf. SMGr *Τούρκοι*)
είσε τρία παιδία 'he had three children' (Áno Amisós Pontic, Lianidis 2007 [1962]: 24; cf. SMGr *είχε*)

τα κουρίτσα-μ ‘my girls’ (Rumeic, Pappou-Zhouravliova 1995: 254; cf. SMGr *κορίτσια*)
τζείνο ο φουκαράς ‘that poor man’ (Pharasiot, Dawkins 1916: 492; cf. SMGr *εκείνος*)
του χειμό έρχιτι ‘winter comes’ (Silliot, Costakis 1968: 118; cf. SMGr *χειμώνας*, *έρχεται*).

(c) Simplification of the /st/ cluster to /s/ in amalgams consisting of the prepositions *σε* ‘in’ and *ας* ‘from,’ and the various forms of the definite article (Andriotis 1948: 32; Dawkins 1916: 83; Symeonidis & Tompaidis 1995: 35);

παίνισκα σο σχόλειο. Τον ξέβα άσο σχόλειο ‘I went to school. When I finished school’ (Phloïtá Cappadocian, *ILNE/811*, 18; cf. SMGr *στο σχολείο*, *απ’ το σχολείο*)
ση στράταν ‘on the way’ (Kotýora Pontic, Lianidis 2007 [1962]: 196; cf. SMGr *στη στράτα*)
σου όρους ‘to the mountain’ (Rumeic, Pappou-Zhouravliova 1995: 254; cf. SMGr *στο όρος*)
σο τσοβάνου το τσαδίρι ‘to the shepherd’s tent’ (Pharasiot, Dawkins 1916: 494; cf. SMGr *στου τσοπάνου*).

(d) Extension of the genitive singular and plural, and nominative/accusative plural endings of the *ι*-neuter nouns to masculine, feminine and other neuter nouns (neuter heteroclisis; see Chapter 5 for details):

κλεφτσιού το κεφάλ ‘the thief’s head’ (Ghúrzono Cappadocian, *Dawkins*, 344; cf. SMGr *κλέφτη*)
σα οτάδια ‘in the rooms’ (Phloïtá Cappadocian, *ILNE/811*, 70; cf. SMGr *οντάδες*)
καιρός του θερισματίου ‘reaping season’ (Áno Amisós Pontic, Lianidis 2007 [1962]: 34; cf. SMGr *θερίσματος*)
προβατί’(ου) κρεγιάτα ‘sheep meat’ (Rumeic, Symeonidis & Tompaidis 1999: 138; cf. SMGr *προβάτου*)
τα παράδε (< παράδια) του ‘his money’ (Pharasiot, Dawkins 1916: 520; cf. SMGr *παράδες*)

παπαριώ ρούχα ‘priests’ robes’ (Silliot, Costakis 1968: 60; cf. SMGr *παπάδων*).

(e) Use of the suffix *–ισκ–* and various related reflexes to form the imperfect active (Andriotis 1948: 43-44; Costakis 1968: 81-82; Dawkins 1916: 53-56, 132-135, 180-183; Oeconomides 1958: 280-282; Symeonidis & Tompaidis 1999: 72):

δε σκουληκιάισκαν ‘they would not get eaten by worms’ (Anakú Cappadocian, *KMS/C*, 82; cf. SMGr *σκουλήκιαζαν*)
ψήνισκε ‘she used to cook’ (Ghúrzono Cappadocian, *Dawkins*, 340; cf. SMGr *έψηνε*)
εζήνισκανε σάντιλα εθέλεινανε ‘they lived like they wanted to’ (Oenóe Pontic, Lianidis 2007 [1962]: 214; cf. SMGr *ζούσαν*)
πααίνκε σο σκόλειο ‘he used to go to school’ (Pharasiot, Dawkins 1916: 506; cf. SMGr *πήγαινε*)
κασινόντζισκαι χωρίς ζουλειά ‘they would sit around without working’ (Silliot, Dawkins 1916: 286; cf. SMGr *κάθονταν*).

(f) Null realisation of the nominative singular and plural forms of the masculine and feminine definite article (Costakis 1968: 54-55; Dawkins 1916: 46-47, 87-89; Oeconomides 1958: 154-156; Papadopoulos 1955: 157-158; Symeonidis & Tompaidis 1999: 44-45, 80-81):

Χεός ΰξεν τα και ναίκα πόμνε σο φαχ ‘God heard them and the woman became pregnant’ (Araván Cappadocia, *KMS/P&K*, 98; cf. SMGr *ο Θεός*, *η γυναίκα*)
ντ’ ευτάει αδελφή-μ ‘how is my sister?’ (Áno Amisós Pontic, Lianidis 2007 [1962]: 410; cf. SMGr *η αδελφή μου*)
Ρουμαίγοι ξέρουν τα όλα πα ‘those Greeks, they know it all’ (Rumeic, Symeonidis & Tompaidis 1999: 44; cf. SMGr *οι Ρωμιοί*)
κόρες πααίνουσι ‘the girls go’ (Silliot, Costakis 1968: 128; cf. SMGr *οι κόρες*).

(g) Development of obligatory definiteness spreading, that is, the appearance of the definite article before both the head noun and any preceding adjectival modifiers in definite noun phrases (Kesisoglou 1951: 29; Papadopoulos 1955: 157; Tompaidis 1980: 234-235, 1996: 106-107):

στ' αναμμένον το φούρνο μέσα 'in the lit oven' (Axó Cappadocian, *KMS/M&K*, 206)
η τρανέσσα η νύφε 'the oldest daughter-in-law' (Stavrín Pontic, Lianidis 2007 [1962]: 332)
τα βαρέα τα χρόνια 'the difficult years' (Rumeic, Symeonidis & Tompaidis 1999: 82)
το μέγον τ' ο υγιός 'his oldest son' (Pharasiot, Dawkins 1916: 488).

(h) Replacement of the lost dative case by the accusative for the morphological expression of indirect objects (Andriotis 1948: 50; Costakis 1968: 104; Papadopoulos 1955: 159-160; Pappou-Zhuravliova 1995: 211-212):

το ôκυλί είπεν την γκάτα 'the dog said to the cat' (Potámia Cappadocian, *Dawkins*, 464; cf. SMGr *της γάτας*)
δώκεν το δυο γρούδα 'he gave him two piastres' (Phloïtá Cappadocian, *ILNE/811*, 56; cf. SMGr *του έδωσε*)
είπεν την πεθεράν-ατς, «ποίσον με το δαβρίν» 'she said to her mother-in-law, "prepare the rod for me"' (Kerasoúnta Pontic, Lianidis 2007 [1962]: 138; cf. SMGr *της πεθεράς της*, *φτιάξε μου*)
τος λέει την 'he says to her' (Rumeic, Pappou-Zhuravliova 1995: 254; cf. SMGr *της λέει*)
να με δως α μαχσούμι 'for him to give me a baby' (Pharasiot, Dawkins 1916: 488; cf. SMGr *να μου δώσει*)
λαλεί τôη εναίκα του 'he says to his wife' (Silliot, Costakis 1968: 120; cf. SMGr *της γυναίκας του*).

(i) Extended use of neuter forms in gender agreement targets (articles, adjectives, participles, pronouns, numerals) controlled by masculine and feminine nouns (see Chapter 4 for details):

σ' ένα ορφανό νεκκληῶά 'in a deserted church' (Phloïtá Cappadocian, *ILNE/812*, 114; cf. SMGr *σε μια ορφανή εκκλησία*)
ούλλα νουμάτε φοβήραν 'all the men were scared' (Araván Cappadocian, *KMS/P&K*, 82; cf. SMGr *όλοι οι νομάτες*)
καν τρία λίρας 'around three liras' (Ófis Pontic, Lianidis 2007 [1962]: 238; cf. SMGr *τρεις λίρες*)
ρουμαίικου γλώσσα 'Greek language' (Rumeic, Symeonidis & Tompaidis 1999: 82; cf. SMGr *ρωμαίικη γλώσσα*)
ατζ̂είνο ο φοβᾶς 'that coward' (Pharasiot, Dawkins 1916: 550-551; cf. SMGr *εκείνος ο φοβητσιάρης*).

(j) Use of the proximal and distal locative adverbs as proximal and distal demonstrative pronouns respectively (Costakis 1968: 74; Dawkins 1916: 51, 126, 175):

εκεί τζ̂αδόσες παλ το είδαν 'those witches saw him again' (Delmesó Cappadocian, *Dawkins*, 322; cf. SMGr *εκεί* 'there')
έβγκη ατζ̂εί σο πίδι 'he climbed up that pear tree' (Pharasiot, Dawkins 1916: 175)
ρω τα τέκνα 'these children' (Silliot, Dawkins 1916: 51; cf. SMGr *εδώ* 'here').

This set of innovations is considered to be so unique within the realm of MGr dialectology that the AMGr dialects are, as a rule, not included in the traditional classification of the MGr dialects into Northern (henceforth NGr) and Southern (henceforth SGr) (Anastasiadis 1976: 5; Triantaphyllides 2002 [1938]: 276; Trudgill 2003: 50). AMGr presents features that are characteristically associated with both the NGr and the SGr group. For example, the deletion of high vowels and the related raising of mid vowels in (a) above, and the use of the accusative to express the indirect object in (h) are characteristic of NGr. On the other hand, the development of

postalveolar fricatives and palato-alveolar affricates in (b) is typically found in dialects belonging to the SGr group, such as Cypriot or Cretan Greek (Newton 1972: 13-18; Trudgill 2003: 53-57). The occurrence of such geographically disparate features in AMGr suggests that the AMGr speakers were linguistically separated from the rest of the Greek-speaking contingent at a time prior to the geographic consolidation of grammatical variation with respect to features that later formed isoglosses for the classification of the MGr dialects into NGr and SGr. It appears that AMGr did not participate fully in the dialect formation processes that resulted in the major MGr dialect divisions, which, according to Horrocks (2010: 382; see also Holton & Manolessou 2010), had already been set in motion by the middle of the Late Medieval period. The history of the Greek-speaking communities of Asia Minor supports this hypothesis. The AMGr dialects can therefore be considered to have followed common evolutionary paths to those MGr dialects that developed in the contiguous Greek-speaking areas of the west and are typically grouped into NGr and SGr only until the Late Medieval period. On account of the subsequent long history of linguistic separation, the latter two MGr dialect groups, including the standard variety of the language that developed out of them, cannot be used as the basis for comparison in investigating diachronic developments in AMGr.

On the contrary, what forms the most appropriate point of reference in historical investigations of the AMGr dialects is the picture of linguistic unity that emerges from the innovative grammatical characteristics that they have in common. These show that before they started differentiating from one another Cappadocian, Pontic, Pharasiot and Silliot formed a single dialectal variety that must have been spoken in an area of inner Asia Minor minimally defined by the modern AMGr speaking enclaves, as shown in Map 2.3.

Map 2.3. *The AMGr-speaking area during medieval times (approximation).*

It is in this historical variety that the innovations in Table 2.3 above are thought to have first become manifest. This hypothesis was brought forward by Dawkins, who treated the systematic similarities between the modern AMGr dialects as evidence for the existence of a medieval AMGr Koiné whose idiosyncratic development possibly preceded and was certainly facilitated by the Seljuq invasions of the 11th century (1916: 205, 213, 1940: 6, 14; see also Browning 1983: 130; Horrocks 2010: 382; Triantaphyllides 2002 [1938]: 277). In that connection, some scholars have gone as far as to claim that at least some of the distinctive developments of AMGr originate in the regional form of Koiné Greek that was spoken in Asia Minor and adjacent islands such as Cyprus during Hellenistic and Roman times (Thumb 1914: 199; Kapsomenos 2003 [1985]: 63; see also Drettas 1997: 15; Thumb 1901, 1906). However, *pace* Horrocks (2010: 113-114), there appears to be little relation between the grammatical innovations shared by the modern dialects and the region-specific characteristics of the Hellenistic Koiné of Asia Minor recorded by Brixhe (1987) and Bubenik (1989: 237-252). In that light, and taking into consideration the relation between the AMGr dialects and the other MGr dialects, I would follow Dawkins in placing the formation of the common ancestor of the modern AMGr dialects after the beginning of the Early Medieval period (500-1100) and before the end of the Late Medieval period (1100-1500) in the history of Greek.

To return to the methodological and analytical shortcomings that King (2000, 2005), and Poplack and Levey (2009) have pointed out with respect to the study of

contact-induced language change, it becomes clear that questions regarding the causes and triggers—either language-internal or -external—as well as the subsequent development of diachronic innovations in the AMGr dialects cannot be adequately addressed without taking into account the grammatical characteristics of their linguistic precursor: the medieval AMGr Koiné. Unfortunately, as we saw in §2.3, there is an almost complete dearth of written evidence on AMGr in the period before the 19th century which makes it difficult to carry out a systematic comparison between early, intermediate and most recent stages of development in order to identify what has changed over time and what the linguistic processes and mechanisms of change were in cases where change has indeed occurred. Fortunately, however, the lack of historical records that would grant direct access to the medieval AMGr Koiné is counterbalanced by the diversity found among the modern AMGr dialects themselves, some of which are more conservative while others more innovative with respect to a significant number of developments, including two of the three Cappadocian innovations that constitute the object of this study. This situation provides a methodological advantage in that the various dialects often illustrate different developmental stages of the change in question, which assists us in reconstructing the trajectories that they followed over time. In the discussion below, I show how such a reconstruction can be implemented based on the differentiation of the medieval AMGr Koiné into the distinct modern AMGr dialects.

2.5.2 The dialectal differentiation of Asia Minor Greek

Dialectal differentiation within the AMGr dialect group is generally taken to be the indirect result of the advancement of linguistic turkicisation in Asia Minor that was particularly intensified after the foundation of the Ottoman Empire in the 15th century (Dawkins 1931: 398-399). With the gradual establishment of Turkish as the dominant language in the largest part of Asia Minor and the linguistic and cultural assimilation of the majority of the indigenous peoples to the Ottoman Turkish population, the Greek communities of Pontus and Cappadocia, including those in the areas of Phárasa and Sílli, came to be separated from one another by vast numbers of predominantly Turkish speakers. The speaker communities in the resulting Greek-speaking pockets then started developing in relative isolation from one another and under sociolinguistic circumstances that differed in each case, mainly with respect to the

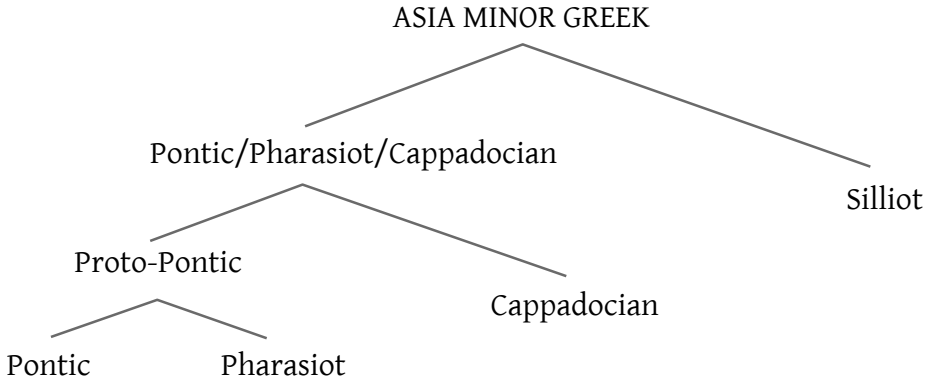
linguistic and cultural dominance relations between the Greek and Turkish communities. Recall in that connection from §2.2 that the Greek speakers of Pontus were much more numerous and their communities more closely-knit than those of the Cappadocian villages, Phárasa or Sílli. These conditions naturally favoured dialect divergence and, ultimately, the development of different versions of AMGr in the various culturally resistant enclaves, a fraction of which is represented by the Greek-speaking communities recorded by Dawkins at the beginning of the 20th century.

The divergent evolutionary paths that AMGr followed after the fragmentation of the Greek population of Asia Minor are vividly illustrated by the rich diversity found on all levels of linguistic analysis among the modern AMGr dialects, each of which is characterised by unique grammatical innovations that are not encountered in any other of the related dialects. For example, the emergence of a voiced labiovelar approximant [w] as an allophone of /l/ in clusters formed by a velar consonant plus /l/, as in γ^{ου}*ώσσα* 'tongue' (cf. Cappadocian *γλώσσα*) or χ^{ου}*ωρός* 'green, fresh' (cf. Pontic *χλωρός*) (Andriotis 1948: 30; Dawkins 1916: 158), is a truly Pharasiot innovation. Equally exclusive are the combination of extended imparisyllabic stems with endings of the *ος*-masculine inflectional class for the formation of the plural of all masculine nouns in Silliot, as in *άρτουπουροι* 'man.PL.NOM/ACC' (< *ανθρωπούδοι*; cf. Pharasiot *αθρώποι*) or *κλέφτῶηροι* 'thief.PL.NOM/ACC' (< *κλέφτηδοι*; cf. Pontic *κλέφτ'(οι)*) (Costakis 1968: 60; Dawkins 1916: 47); the development of a complex system of locative adverbs and particles for the expression of spatial deixis in Pontic (Drettas 1997: 449-508; Oeconomides 1958: 353- 354; Papadopoulos 1955: 98-114); and the development of the novel accusative plural ending *-ιούς* in masculine nouns in Cappadocian, as in *δασκαλιούς* 'teacher.PL.ACC' (cf. Pontic *δασκάλ(οι)*) or *κλεφτιούς* 'thief.PL.ACC' (cf. Pharasiot *κλέφτοι*) (Dawkins 1916: 95, 113).

At an intermediate level between the shared innovations of the AMGr dialects that testify to their common origin in a historical AMGr Koiné and the unique structural features of each one of them that justify their treatment as separate linguistic entities on synchronic terms, there are more restrictedly attested developments which allow for the classification of the modern dialects into smaller genealogical groups. The classification that has gained currency in the literature was first proposed by Dawkins, according to whom the AMGr dialect group has a core branch which "may be divided into Cappadocian on the one hand and on the other

the dialects of Pontos and Phárasa", with Silliot occupying a more peripheral position (Dawkins 1916: 206, 1937: 16-17; see also Anastasiadis 1975: 177, 1976: 16, 1995: 111-119; Andriotis 1948: 10; Triantaphyllides 2002 [1938]: 277). This grouping, which assumes a longer period of common historical development for Pontic and Pharasiot, is illustrated in Figure 2.2, based on Janse (2008a: 191).

Figure 2.2. *The accepted genealogical classification of the AMGr dialects.*



Upon closer examination of this classification, however, Dawkins's grouping shows problematic relations between the core dialects: Cappadocian, Pontic and Pharasiot. They are not defined on the basis of shared innovations but of shared retentions, which are not strong indicators of close linguistic relatedness (Campbell & Poser 2008). In particular, most of the "striking resemblances" (Dawkins 1916: 206) between Pontic and Pharasiot, which for Dawkins and others justify their forming a separate subgroup to the exclusion of Cappadocian, have to do with the absence of developments that the other AMGr dialects are known to have undergone and with the preservation of features tracing their origin to earlier stages in the history of Greek. Consider, for example, the absence of synizesis in Pontic and Pharasiot, whereby unstressed /i/ turned into a glide /j/ before a stressed vowel as in *χωρίο* 'village' or *πουλία* 'birds', as opposed to Cappadocian *χωρ*/j/*ό*, *που*/lj/*ά* (Andriotis 1948: 16-17; Dawkins 1916: 152-153; Papadopoulos 1955: 11). Consider alternatively the expression of negation by means of reflexes of the ancient negative particle *οὐκὶ* (mainly *κ́ι* in Pontic, *τζ̂ο* in Pharasiot) instead of the more recent *δεν* that is predominantly found in Cappadocian (Andriotis 1948: 47; Drettas 1997: 281-283; Papadopoulos 1958: 121). The only shared innovation of the two dialects that can be uncontestedly treated as such is the monophthongisation of unstressed /ia/

diphthongs to front unrounded vowels (/æ/ in Pontic, /ɛ/ in Pharasiot), for example *σπίτ̈α* 'houses' and *Χριστενός* 'Christian' as opposed to Cappadocian *σπίτια*, *Χριστιανός* (Andriotis 1948: 17-18; Dawkins 1916: 152-153; Papadopoulos 1955: 11).

Contrary to the above, and in light of evidence from the development of gender agreement and noun inflection in AMGr on which I elaborate in Chapters 4 and 5, I argue that Cappadocian and Pontic are genetically much closer than Dawkins's original classification assumes. Their relatedness is supported by a number of distinctive morphosyntactic innovations that both dialects have undergone to the exclusion of Pharasiot, which I consider as cognate to Pontic as it is to Cappadocian. The most notable shared developments of the Pontic and Cappadocian are given below.

(a) Use of syncretic nominative/accusative forms that are morphologically identical to the original accusative in the plural of all inanimate masculine nouns and the parallel extension of the neuter form of the definite article to agree with them (see Chapter 4 for details):

τα ντοίχ(ου)ς έχνε αυτιά 'even walls have ears' (Axó Cappadocian, *KMS/M&K*, 178; cf. Pharasiot *οι τιέχοι* 'the wall.PL.NOM', *τις τιέχοι* 'the wall.PL.ACC; SMGr *τοίχους* 'wall.PL.ACC')
εδέβαν χρόν̈α και καιρούς 'years and years passed' (Chaldía Pontic, Papadopoulos 1928: 196; cf. Pharasiot *οι τôαιροί* 'the time.PL.NOM', *τις τôαιροί* 'the time.PL.ACC'; SMGr *καιρούς* 'time.PL.ACC').

(b) Extension of the genitive singular ending of *ι*-neuter nouns to nouns belonging to all the masculine and other neuter inflectional classes (neuter heteroclisis; see Chapter 5 for details):

δεσποτιού το στράτα 'the bishop's way' (Phloïtá Cappadocian, *ILNE/812*, 174; cf. Pharasiot *δεσπότη*)
οδαδιού σο γιϋκλΰκ 'in the room's cupboard' (Sílata Cappadocian, *Dawkins*, 446; cf. Pharasiot *οδά*)

τ' αφεντίου του λόγος 'his master's word' (Áno Amisós Pontic, Lianidis 2007 [1962]: 26; cf. Pharasiot *αφέντη*)
σου παχτôαδίου το σπίτι 'in the garden house' (Oenóe Pontic, Lianidis 2007 [1962]: 214; cf. Pharasiot *μπαχτôά*).

On the other hand, there are few innovations that are shared by Cappadocian and Pharasiot to the exclusion of Pontic. As will be argued in detail in Chapters 3 and 5, however, these do not suggest a closer genetic relatedness between the two in the same way that (a) and (b) above do for Cappadocian and Pontic. Instead, they should be viewed as cases of areal diffusion and dialect convergence, in the senses of Hinskens *et al.* (2005) and Heine and Kuteva (2005: 177-178). It is therefore argued that Cappadocian and Pharasiot underwent the same developments by virtue of their being spoken in the same linguistic and geographical micro-area. Two innovations of this kind are given below:

(a) Development of DOM, whereby the heads of noun phrases found in typically accusative-marked environments, such as the direct object position, are marked with a morphological accusative only if the noun phrases in question are definite; the heads of indefinite noun phrases are marked with a morphological nominative (see Chapter 3 for details):

ετό το άθρωπο μη το λαλείτε 'do not talk to this man' (Phloïtá Cappadocian, *ILNE/811*, 58)
γιολλάτσαν ένα άθρωπος να το τôιγιρτής 'they sent out a man to call him' (Phloïtá Cappadocian, *ILNE/811*, 54)
είδε ο βασιλός αν ύπνος 'the king saw a dream' (Pharasiot, Dawkins 1916: 542)
του είδε ο βασιλός τον ύπνο 'the dream that the king saw' (Pharasiot, Dawkins 1916: 542).

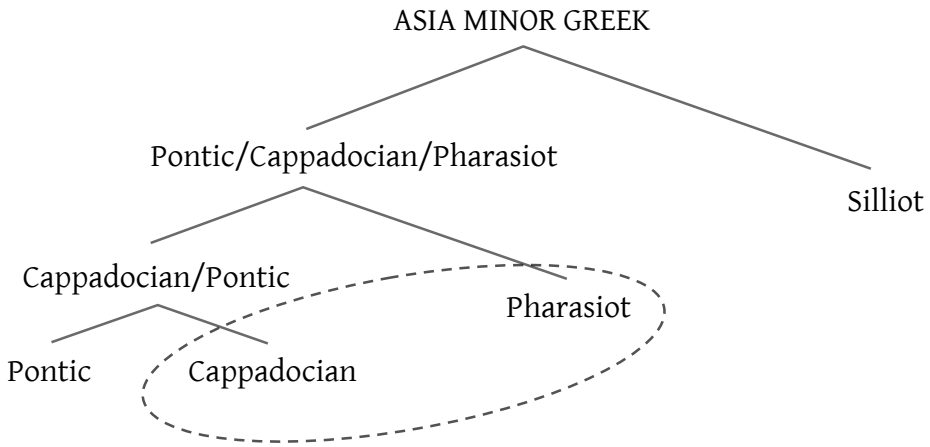
(b) Use of the nominative/accusative plural ending *-ια* of *ι*-neuter nouns to form the plural of imparisyllabic masculine nouns denoting inanimate and non-human animate entities (see Chapter 5 for details):

να ϱαζαντίς παράδια 'that he earns money' (Potámia Cappadocian, *Dawkins*, 456; cf. Pontic *παράδας*)

α σε δώσομε τα παράδε (< *παράδια*) *του* 'we will give you its money's worth' (Pharasiot, Dawkins 1916: 520).

On the basis of the above features, I propose that the accepted genealogical classification of the AMGr dialects shown in Figure 2.2 above be revised so that it represents the longer period of common development between Cappadocian and Pontic, their historical distance from Pharasiot, and the effects of areal convergence between Cappadocian and Pharasiot. My revised version of the genealogical classification that takes these factors into account is illustrated in Figure 2.3 below. Cappadocian and Pontic form a subgroup within the core branch of the tree diagram on the left, to the exclusion of Pharasiot, while Cappadocian and Pharasiot are encircled by a punctuated line in the centre. Silliot is still found at the periphery of the dialect group.

Figure 2.3. *The revised genealogical classification of the AMGr dialects.*



At this point, it should be made clear that the inclusion of Cappadocian and Pontic into one subgroup should not be interpreted as implying too high a degree of similarity between the two dialects. Despite being the two closest cognates within the AMGr dialect group, Cappadocian and Pontic remain considerably different and show evidence of separate development in many crucial aspects of their grammatical structure. The patterns of object clitic pronoun placement provide one such example. In Cappadocian, clitic pronouns follow the verb unless it is immediately preceded by

modal and negative markers, complementisers, *wh*-expressions or fronted adverbials. This distribution pattern of enclisis and proclisis, which is essentially that of the Late Medieval period, is also found in Pharasiot with the single exception of the negative marker *τζ͡ο* after which clitic pronouns follow the verb:

> *δώκεν το τρία αλτάνια* 'he gave him three gold pieces' (Phloïtá Cappadocian, *Dawkins*, 432)
> *γιατ με δώκεν ένα αλτάν;* 'why did she give me a gold piece?' (Phloïtá Cappadocian, *Dawkins*, 432)
> *ετά τα παράδια απού ντα qαζάνσες;* 'where did you earn this money from?' (Phloïtá Cappadocian, *Dawkins*, 416)
> *μέ τ' ανοίζ͡εις το σαντάχ* 'do not open the chest' (Axó Cappadocian, *Dawkins*, 392)

> *δώτζ͡εν ντα τρία ΐλε λίρες ο βασιλός* 'the king gave him three thousand pounds' (Pharasiot, Dawkins 1916: 492)
> *να σε δώσω ΐλε λίρες* 'I will give you a thousand pounds' (Pharasiot, Dawkins 1916: 492)
> *ο υγιός σου πού τα ηύρε;* 'where did your son find them?' (Pharasiot, Dawkins 1916: 494)
> *κανείνα μη ντα λες* 'do not tell anyone' (Pharasiot, Dawkins 1916: 478)
> *τζ͡ο πουάγω τα* 'I do not sell them' (Pharasiot, Dawkins 1916: 492).

Pontic differs greatly from both Cappadocian and Pharasiot with respect to clitic placement. In Pontic, object clitic pronouns always follow the verb, even in the presence of elements that in the other two dialects trigger preverbal placement of the clitic:

> *έρθα να αραεύω σε* 'I came to look for you' (Santá Pontic, Lianidis 2007 [1962]: 294)
> *πού θα ευρήκ ατά* 'where shall I find them?' (Chaldía Pontic, Drettas 1997: 540)
> *εσύ μη φορτούς ατά* 'you should not carry them' (Kerasoúnta Pontic, Lianidis 2007 [1962]: 142).

Apart from defining an isogloss distinguishing Cappadocian and Pharasiot on the one hand from Pontic on the other, this difference shows how the various AMGr dialects can be more conservative or innovative with respect to certain diachronic developments. In this case, the former two dialects preserve the proclisis *versus* enclisis pattern of Late Medieval Greek while Pontic has resolved the conflict by generalising enclitic placement across the board (see Chatzikyriakidis 2010 for details).

This type of dialectal divergence has great historical and methodological value. It may compensate for the lack of documentation of previous stages in the history of AMGr in cases of diachronic change in which the different AMGr dialects are found to represent chronologically distinct developmental stages as in the case of clitic placement that we saw above. In such cases, the synchronic stages in which the various dialects are found can be used to reconstruct the trajectories, pathways and, ultimately, origins of change. In the words of Dawkins,

> the modern dialects may be used to supplement our knowledge of the history of the language, for which direct written sources are for the most part entirely absent. The key we see is this, that the rate of development of certain phenomena has been very different in different dialects, and so by comparing one dialect with another, we may establish the actual history of the development of many phenomena of the modern language. (1940: 12)

In the remainder of this section, I show how such a methodological approach proves to be particularly helpful in accounting for the neuterising changes in Cappadocian nominal morphology that constitute the object of this study.

2.5.3 Investigating diachronic change in Cappadocian from a dialectological perspective: a methodological case-in-point

With King (2000, 2005) and Poplack and Levey (2009), I place particular emphasis (a) on the point of reference compared with which the Cappadocian innovations in noun morphosyntax can be shown to be internally- or externally-induced, and (b) on the linguistic processes and mechanisms that brought about language change in each case. I use the systematic grammatical correspondences of the AMGr dialects to

address the former issue while I rely on their dialectal differentiation to address the latter one.

The basic principle of my dialectological framework is that, if we are in a position to identify innovative phenomena similar to or reminiscent of the Cappadocian ones in other AMGr dialects, we have to account for the possibility that they constitute related developments whose incipient manifestations go back to the dialectal characteristics of the medieval AMGr Koiné. Where such connections can be established, we further need to see whether the different dialects are found in different stages with respect to the innovations in question. If that is the case, we can then compare these synchronic states in order to reconstruct the trajectories, triggers and origins of diachronic change in Cappadocian. Unlike previous accounts, which overwhelmingly treat the Cappadocian developments as outcomes of language contact with Turkish, such an approach addresses more readily the likelihood that at least some Cappadocian innovations may actually be attributed to language-internal reasons. Language contact is, however, not *a priori* dismissed as a contributing factor that may have favoured or accelerated specific developments in the process of change. Rather, in my approach, I revisit the influence of Turkish and reassess its role by looking at whether language contact is relevant to the origins of change and whether it is responsible for triggering the incipient manifestation of innovation in Cappadocian and the other AMGr dialects.

Accounting for the null realisation of the definite article in Cappadocian forms a good example of how this methodology can be implemented in investigating the neuterising developments in nominal morphology. In Cappadocian, the definite article is realised as null in the nominative singular and plural when immediately preceding nouns that belong to formerly masculine or feminine inflectional classes (recall, in that connection, that gender distinctions have been lost in Cappadocian). In the remaining case/number combinations, as well as before nouns belonging to formerly neuter inflectional classes, the article is always overtly realised (Costakis 1964: 32; Dawkins 1916: 87-89; Mavrochalyvidis & Kesisoglou 1960: 29-32). Consider the following examples from Phloïtá Cappadocian:

(1) Phloïtá Cappadocian (*ILNE/811*, 22, 31)

a. *τον* *τελειώ͡ς* *Ø* *λουτουργιά,* *Ø* *παπάς* *φερίσκει*
when it.is.over mass.F.NOM priest.M.NOM he.brings

το *νυφ* *σο* *γαμπρό* *κοντά*
the.ACC bride.F.ACC to.the.ACC groom.M.ACC close
'when the mass is over, the priest brings the bride to the groom's side'

b. *το* *θέρος* *σο* *χωριό* *μας* *κολά*
the.N.NOM summer.N.NOM in.the.N.ACC village.N.ACC our it.lasts

ένα *μήνα* *και* *περσό*
one month and more
'summer in our village lasts more than one month'

Scholars attribute the Cappadocian phenomenon exemplified in (1) to the influence of Turkish, which lacks a definite article (Anagnostopoulos 1922: 246; Dawkins 1916: 87; Thomason & Kaufman 1988: 222; Winford 2005: 406). However, such a contact-oriented explanation fails to account for the distribution of null realisation in terms of case/number and inflectional class membership. Language contact cannot explain why the article is overtly realised in case/number combinations other than the nominative singular and nominative plural, as in the accusative singular *το νυφ* and *σο γαμπρό* in (1a), and also before neuter nouns as in *το θέρος* in (1b). If Turkish had indeed provided the model for the development of null realisation, we would expect the article to be realised as null across the board. In other words, there should not be an article-like determiner expressing definiteness in Cappadocian at all.

In contrast, the null realisation of the definite article in Cappadocian becomes meaningful when examined in the AMGr dialectological context. Looking at the morphological expression of definiteness in the other AMGr dialects, we find that the null realisation of the definite article is also attested in Pontic and Silliot. Crucially, the phenomenon has different distributional properties in each dialect, which sheds light on its origins and development. In most Pontic varieties, the definite article is realised as null in the nominative singular and plural before masculine and feminine nouns that begin with a vowel. In the remaining case/number combinations as well as before masculine and feminine nouns beginning

with a consonant, and before neuter nouns, the definite article is always overtly realised (Henrich 1999: 661-667; Koutita-Kaimaki 1977/1978: 264-266; Oeconomides 1958: 154-156; Papadopoulos 1933: 17-20, 1955: 10; Tompaidis 1980: 225-227). This is shown in (2).

(2) Argyroúpolis Pontic (Valavanis 1937: 84, 85)

a. *και Ø υναίκα εποίκεν άμον ντο είπεν*
and woman.F.NOM she.did like what he.said

Ø άντρας-ατς
husband.M.NOM-her

'and the woman did what her husband told her'

b. *ύστερα ο γέρον εγροίξεν α*
later the.M.NOM old.man.M.NOM he.heard it
'then the old man heard it'

c. *τερεί σο κελάρ το κιφάλ*
she.looks in.the.N.ACC cellar.N.ACC the.N.NOM head.N.NOM

κι η καρδία κ' είν
and the.F.NOM heart.F.NOM not they.are
'she looks in the cellar and the head and the heart are not there'

The evidence of Pontic varieties such as that of Argyroúpolis shows that the forms of the definite article that are affected by null realisation are those consisting of a single vowel (masculine nominative singular *ο*, femine nominative singular *η*, masculine/feminine nominative plural *οι*), and that these are realised as null precisely before another vowel. Compare in this connection the noun phrases *άντρας-ατς* and *υναίκα* in (2a) with *ο γέρον* and *η καρδία* in (2b) and (2c) respectively. Forms of the article beginning with a *τ-* plus a consonant such as the remaining masculine and feminine forms and all the neuter forms are not affected. On the basis of this observation, Papadopoulos (1955: 10) identified hiatus avoidance as the motivation underlying the null realisation of the definite article in Pontic (see also Koutita/Kaimaki 1977/1978: 264). As for the origins of the phenomenon, Oeconomides

(1958: 155) hypothesises that it must first have become manifest with masculine and feminine nouns beginning with a phonetic [o] and/or [i] respectively, in front of which the homophonous definite article forms *ο*, *η*, *οι* were dropped due to their similarity with the word-initial vowels in examples such as (3).

(3) Pontic (Drettas 1997: 112)

Ø	*οκνέας*	*επήεν*	*σ'(ο)*	*ορμάν*	*και*	*τ'(ο)*	*ορμάν*	*εφορτώθεν*
	lazy.M.NOM	he.went	to.the	forest	and	the	forest	he.took.on

'the lazy one went to the forest and took the forest to his shoulders'

From these contexts, null realisation was extended in most Pontic varieties to all masculine and feminine nouns beginning with a vowel to avoid hiatus. Now, in the varieties of Áno Amisós and Sinópe, the phenomenon generalised even further to encompass all masculine and feminine nouns irrespective of the quality of their initial segment, as shown in the following example which is reminiscent of the Cappadocian example in (1a) above.

(4) Áno Amisós Pontic (Valavanis 1928: 188)

ασά	*έξι*	*μήνες*	*υστερία*	*έρκουντάνε*	Ø	*πάππος*
from.the	six	months	later	they.came		grandfather.M.NOM

του	*και*	Ø	*ναίκα*	*του*
his	and		wife.F.NOM	his

'six months later his grandfather and his wife came'

In accounting for this generalisation, Papadopoulos (1955: 157) resorts to the influence of article-less Turkish (see also Papadopoulos 1933: 18-19; Koutita-Kaimaki 1977/1978: 264; Tompaidis 1980: 226). Language contact, however, once again fails to explain the distribution of the null *versus* overt realisation of the definite article, which, as in Cappadocian, is null only in the nominative singular and plural of masculine and feminine nouns, while it is always overtly realised everywhere else (Henrich 1999: 664). In that connection, Oeconomides (1958: 155-156) considers the generalisation of null realisation to all masculine and feminine nouns in Áno Amisós and Sinópe Pontic to be an analogical extension of the phonologically-conditioned

distribution of Pontic varieties such as that of Argyroúpolis, illustrated in (2), while he takes Turkish influence to have played only a secondary role in this development.

The distribution of null *versus* overt realisation of the definite article in Silliot represents the most advanced attested stage of this innovation. In Silliot, the definite article is realised as null in the nominative singular and plural even before neuter nouns except when prenominally modified, in which case the form *τ* is found. In all other case/number combinations across the three genders, the article is always overtly realised (Costakis 1968: 54-55; Dawkins 1916: 46-47).

(5) Silliot

a. *Ø παιρί μεγάλουσι κι υστέρ Ø μάνα*
child.N.NOM it.grew.up and later mother.F.NOM

του λαγεί του
its she.says it
'the child grew up and then its mother said to it' (Andriotis 1968: 120)

b. *γω ένα πατιδαχιού τ παιρί ήτα*
I a king's the.N.NOM child.N.NOM I.was
'I was the son of a king' (Dawkins 1916: 290)

In light of the above, it becomes clear that the null realisation of the definite article is not a phenomenon isolated to Cappadocian. Rather, its occurrence in the dialect is but one of the many reflexes of an innovative development attested widely in the AMGr dialects. That these reflexes are found in such distinct dialects as Cappadocian, Pontic and Silliot shows that the origins of null realisation go back to a time before these dialects were linguistically separated from one another; that is, at a time when they still constituted a single linguistic entity. In addition, the genetic distance between Cappadocian, Pontic and Silliot (Figure 2.1), suggests that the incipient manifestations of the phenomenon must be dated quite early in the history of AMGr.

On the other hand, the differences in the distribution and extent of application of null realisation in the various AMGr dialects allow for the reconstruction of both its origins and its subsequent developments. Its phonological

origins in homophonous vowel sequences and hiatus avoidance can be reconstructed on the basis of the evidence of Pontic varieties such as that of Argyroúpolis, exemplified in (2), in which null realisation has the most limited, phonologically-conditioned distribution. Its subsequent developmental stages can be sought in Pontic varieties of the Áno Amisós and Sinópe type as well as in Cappadocian, which evidence a reanalysis from the original phonological to a morphological condition. Finally, the most advanced stages of the innovation are found in Silliot, which shows the generalised extension of the Cappadocian morphological condition. The full trajectory of this innovation is summarised in Table 2.4.

Table 2.4. *The diachronic development of the null realisation of the definite article in AMGr.*

Stage I	All definite article forms are overtly realised.
Change 1	Definite article forms consisting of a single vowel that are homophonous with the initial vowels of nouns are dropped due to phonetic similarity.
Stage II	Phonological conditioning: the nominative singular and plural forms of the masculine and feminine definite article are realised as null before nouns beginning with [o] and/or [i]. Before all other nouns and in all other case/number combinations, the definite article is always overtly realised. *ϴ οκνέας επήεν σ' ορμάν και τ' ορμάν εφορτώθεν* (Pontic)
Change 2	The phonological condition is extended to all vowels in order to avoid hiatus.
Stage III	Phonological conditioning: the nominative singular and plural forms of the masculine and feminine definite article are realised as null before nouns beginning with a vowel. Before all other nouns and in all other case/number combinations, the definite article is always overtly realised.

	και ɦ υναίκα εποίκεν άμον ντο είπεν ɵ άντρας-ατς	(Argyroúpolis Pontic)
Change 3	The phonological condition is reanalysed as a morphological, gender-based condition.	
Stage IV	Morphological conditioning: the non-neuter (masculine and feminine) nominative singular and plural forms of the definite article are realised as null. In all other case/number combinations, the definite article is always overtly realised, as are all neuter forms of the definite article.	
	τον τελειώς Ø λουτουργιά, Ø παπάς φερίσκει το νυφ	(Cappadocian; Áno Amisós and Sinópe Pontic)
Change 4	The morphological condition is extended to all genders and is reanalysed as a case-based condition.	
Stage V	Morphological conditioning: the definite article is realised as null in the nominative. In all other case/number combinations, it is always overtly realised.	
	Ø παιρί μεγάλουσι	(Silliot)

In conclusion, the null realisation of the definite article in Cappadocian is better understood when examined in the dialectological context of AMGr. By adopting such an approach, we can account more satisfactorily for the origins and subsequent development of the phenomenon, which evidently has connections with similar phenomena in the other AMGr dialects. This approach also helps reassess the role Turkish is presumed to have played in this development. In view of the evidence presented above, language contact does not appear to have been a factor relevant to the early manifestations of the null realisation of the definite article in AMGr, as illustrated by the attested Stage II varieties in the table above. Of course, Turkish influence might have facilitated the transition from one developmental stage to the

other, especially in the most advanced stages IV and V. However, as follows from the analysis, it is highly unlikely to have triggered the incipient manifestation of innovation.

2.6 Conclusion

In this chapter, I have shown that the social and cultural setting in which Cappadocian was spoken for the most part of its history, as defined by its early linguistic separation from the Greek-speaking contingent of the west and the intense language contact with Turkish, played a key role in the preservation of several archaic features and in the development of a significant number of innovations. In many of these innovations, the influence of Turkish is particularly evident. This has led much of modern research to consider all the innovations found in Cappadocian to have been induced by language contact. I argued that this approach poses analytical and methodological problems and also ignores the early proposal by Dawkins regarding a link between Cappadocian and the other AMGr dialects that could provide an alternative, language-internal explanation for many innovative developments, even for some of those considered to be so pervasive as to be attributed solely to the effects of crosslinguistic influence. In exploring this proposal further and on the basis of a number of systematic similarities shared by the modern AMGr dialects, I elaborated on the idea that they all trace their origin to a common ancestor hypothesised to be a form of Greek that was spoken contiguously in Asia Minor approximately until the medieval period and which was characterised by a number of distinctive dialectal features that differentiated it from other forms of Greek spoken elsewhere at the time. It is to this common linguistic precursor that the modern AMGr dialects owe their systematic grammatical and structural similarities. Against this picture of linguistic unity, I further discussed the extent of dialectal differentiation among the modern AMGr dialects that came about as the various Greek-speaking communities of Asia Minor were isolated from one another. I showed that each AMGr dialect has undergone an adequate number of idiosyncratic developments to be treated as a linguistic system in its own right and illustrated how the different AMGr dialects can be more conservative or innovative with respect to change, some of them representing earlier, and others later developmental stages in the course of specific cases of diachronic innovation. I specifically used the null expression of the definite

article in Cappadocian as a methodological case-in-point to demonstrate how this dialectal diversity can be used for the study of diachronic change in the dialect more generally in an approach that aspires to overcome the weaknesses of previous, contact-oriented approaches. With these considerations in mind, I now turn to the examination of the developments in Cappadocian nominal morphology, starting with DOM.

3

The development of differential object marking

3.0 Introduction

In Cappadocian, the head nouns of NPs found in typically accusative-marked syntactic contexts are marked as such by means of a morphological accusative case only if the NPs in question are definite; the head nouns of indefinite NPs are marked with a morphological nominative. In this chapter, I look at the development of this DOM pattern on account of two facts: first, Cappadocian and Pharasiot are the only two MGr dialects to have undergone such an innovation; second, the Cappadocian and Pharasiot DOM pattern is reminiscent of that of Turkish with the difference that, in Turkish, accusative marking is found on the head nouns of NPs that take a specific, not a definite, reading. Based on this resemblance, it has been argued in previous research that the development of DOM in Cappadocian is contact-induced and was brought about by the influence of Turkish. The aim here is to explore the hypotheses that have been formulated regarding the synchronic status of Cappadocian DOM as well as its historical emergence by analysing relevant Cappadocian and Pharasiot data in line with recent advances in the typological study of this widespread phenomenon. My synchronic analysis addresses the issue of the referential property that determines DOM in Cappadocian and Pharasiot, following the recent proposal by Spyropoulos and Tiliopoulou (2006) that DOM in the two dialects is based on

specificity and not definiteness, as Dawkins (1916) and Janse (2004) have claimed. The analysis shows Cappadocian and Pharasiot DOM to be determined by definiteness. It also reveals that its formal implementation by means of morphological marking is improbable from a typological point of view. Drawing on this finding and on the distant genetic relation between the two AMGr dialects, I exclude in my diachronic analysis the possibility that DOM is a language-internal innovation shared by Cappadocian and Pharasiot by descent. Rather, I view it as a case of areal convergence and I therefore side with previous research in supporting the idea that it developed as a result of language contact with Turkish. I further identify pattern replication as the mechanism that Cappadocian-Turkish and Pharasiot-Turkish bilinguals employed in introducing DOM in their respective AMGr grammatical systems.

This chapter is structured as follows: in §3.1, I present the theoretical-typological framework for the study of DOM. This section also illustrates the contrasting object marking systems of differential Turkish and non-differential MGr. In §3.2, I provide the data on DOM in Cappadocian and Pharasiot. The synchronic and diachronic analyses of DOM in the two AMGr dialects are found in §3.3, whereas §3.4 discusses the implications of its development in Cappadocian. §3.5 summarises the main findings of the chapter.

3.1 (Non-)differential object marking in Turkish and Modern Greek

3.1.1 The typology of differential object marking

3.1.1.1 Determining differential object marking: animacy and definiteness

The term DOM, coined by Bossong (1985), refers to the widespread phenomenon whereby only a subset of the direct objects in a language is overtly marked as such while the remaining direct objects bear no overt marking of their syntactic function. Whether a given direct object will be overtly marked or not is defined on the basis of referential—that is, semantic or pragmatic—properties of the referent of the NP occupying the object position (Aissen 2003; Bossong 1991, 1998; Comrie 1989: 124-137; Croft 2003: 166-175; Klein & de Swart 2011; Lyons 1999: 199-207; Malchukov 2008; Moravcsik 1978: 272-281; de Swart 2007). For example, in Russian, masculine singular

nouns in object NPs are overtly marked with the genitive/accusative case only if they are animate (1a); inanimate nouns appear in a form identical to that of the nominative, which is unmarked for case (1b) (Comrie 1978). In Hebrew, only definite object NPs are overtly marked with the prepositional object marker *et* (2a); indefinite object NPs do not bear any overt marking (2b) (Danon 2001; Givón 1978: 305-306). In Spanish, object NPs are overtly marked with the preposition *a* only if they take a specific reading and their referents are human (3a); if their referents are non-human or if they have a non-specific reading, they bear no overt marking of their syntactic function (3b) (von Heusinger 2008: 6).

(1) Russian (adapted from Comrie 1989: 132)

a. *Yuri videl mal'čik-a / begemot-a* (cf. NOM.SG *mal'čik*, *begemot*)
Yuri saw boy-ACC hippopotamus-ACC
'Yuri saw the boy/the hippopotamus'

b. *Yuri videl dub-Ø / stol-Ø* (cf. NOM.SG *dub*, *stol*)
Yuri saw oak-Ø table-Ø
'Yuri saw the oak/the table'

(2) Hebrew (Glinert 1989: 12)

a. *tavi li et ha-dag / et David*
bring me OBJ the-fish OBJ David
'bring me the fish/David'

b. *tavi li Ø dag*
bring me fish
'bring me (some) fish'

(3) Spanish (Comrie 1989: 134)

a. *el director busca al empleado / a un empleado*
the director is.looking.for PREP.the clerk PREP a clerk
'the director is looking for the clerk/a certain clerk'

b. *el* *director* *busca* *Ø* *un* *empleado* / *Ø* *el* *carro*
the director is.looking.for a clerk the car
'the director is looking for a clerk/the car'

Bossong (1998) identifies animacy and definiteness as the two referential properties that determine DOM phenomena crosslinguistically. In some languages, such as Russian and Hebrew, DOM is one-dimensional and determined only by one referential property, either animacy or definiteness. In languages such as Spanish, on the other hand, DOM is two-dimensional and determined by both animacy and definiteness (Aissen 2003).

Animacy is perceived as an ontological category that concerns the semantic distinctions between animate and inanimate entities and between human and non-human entities. Referents of NPs are intrinsically classified as animate or inanimate and/or human or non-human on the basis of whether they are alive and human (or human-like). The classification takes into consideration *inter alia* the extent to which referents participate in the life cycle, their ability to move and procreate, their ability to act as agents of a verbal action, and their degree of individuation (Comrie 1989: 185-200; Dahl 2000, 2008; Dahl & Fraurud 1996; Guardiano 2010; see Folli & Harley 2008 for a proposal that teleological capability is a more appropriate alternative to the notion of animacy).

Definiteness is assumed by Lyons (1999: 274-281) to be a grammatical category expressing the discourse pragmatic notions of identifiability and inclusiveness. Prototypical referents of definite NPs are thought to be unambiguously identified by both speaker and hearer who are familiar with them owing to general background knowledge they both have or to the previous introduction of the referents in the discourse. For example, both speaker and hearer must know *David* for the imperative sentence in (2a) to be felicitous. In the case of definite plural and mass NPs, definiteness involves inclusiveness in that reference is made to the totality of the objects or mass denoted by the head nouns in each case. *ha-dag* in (2a) refers to the whole fish and not just some part of it. Conversely, referents of indefinite NPs are taken to be identifiable by the speaker but unidentifiable by the hearer because they have not been previously established in the discourse. Indefinite NPs generally imply

non-inclusiveness and non-uniqueness (Lyons 1999: 1-15; see also Chesterman 1991; Hawkins 1978; Löbner 1985).

Related to the category of definiteness is specificity, another discourse pragmatic notion that refers to whether the referents of NPs are identifiable by the speaker only or are not identifiable by either the speaker or the hearer. Specificity is therefore generally assumed to be a referential property relevant to indefinite NPs on the assumption that the referents of definite NPs are always identifiable by both conversation participants. Indefinite NPs are considered specific if they refer to particular entities that are known and identifiable by the speaker but not by the hearer. They are used to introduce a new item in the discourse. For instance, in the Spanish example in (3a) above, a particular clerk is referred to by *un empleado* and is known by the speaker of the utterance but not by its hearer. Non-specific indefinite NPs, on the other hand, do not refer to particular entities, but rather to an arbitrary member of the class described by the NP. The referents of non-specific indefinite NPs are therefore not known to either the speaker or the hearer. In that sense, *un empleado* in (3b) does not refer to a particular clerk but to anyone who fulfils the description and qualifications of an *empleado* in Spanish (Givón 1978; Lyons 1999: 165-178; see Enç 1991 and Farkas 1995 for more semantically oriented approaches).

Approaching definiteness and specificity from the point of view of discourse representation theory, von Heusinger (2002, 2003) refutes the assumptions that define the relation between the two as they have been illustrated so far. He argues that the referents of definite NPs are not necessarily always identifiable by both speaker and hearer. Instead, they are always anaphorically linked to items already introduced in the discourse. Along similar lines, he argues that the referents of indefinite NPs may in certain cases be identifiable by both speaker and hearer. They cannot be linked to previously established discourse referents, however. Von Heusinger takes definiteness and specificity to be distinct, and therefore does not consider specificity to be a subcategorisation solely of indefinite NPs as speaker identifiable but not as hearer identifiable. In his analysis, (in)definiteness encodes the discourse pragmatic status of NPs, whereas (non-)specificity is a referential property of NPs that is independent of definiteness. In von Heusinger's words, "a specific noun phrase indicates that the associated discourse item is referentially anchored to another discourse item" (2002: 253). In this analysis, the NPs in the Spanish example (3a)

trigger overt object marking either because their referents are anaphorically linked to an item already introduced in the discourse—as in the case of the definite *al empleado*—or because they are referentially anchored to another discourse item, as in the case of *a un empleado*. That other item can be the speaker of the utterance, the subject of the sentence or some other NP found in the discourse.

3.1.1.2 The motivation underlying differential object marking

Bossong (1991) originally identified the need for the two arguments in transitive constructions, subject and object, to be formally distinguishable as the principal motivation underlying DOM systems crosslinguistically (also Moravcsik 1978: 273; see Comrie 1978: 35-36 for the same view with reference to DOM in Russian and the other Slavonic languages). In that connection, de Swart (2006), and de Hoop and Lamers (2006) independently formulate principles and constraints ensuring the distinctness of subject and object in transitive relations. From this point of view, DOM is considered to be employed in order to avoid ambiguity regarding which NP(s) corresponds to which argument. DOM can be used to avoid this ambiguity especially in transitive constructions in which the referents of both arguments can fulfil the roles of subject and object equally well by virtue of their semantics. For example, in the Russian example in (1a), no marking on *Yuri* and overt marking on *mal'čika* and *begemota* allow for no ambiguity as to who saw whom in each case. The semantic interpretation of the sentence in (1b), on the other hand, leaves only one possibility for the correspondence between NPs and arguments; there therefore need not be any overt marking on either *dub* or *stol*.

However, as Aissen (2003: 437), and Melis and Flores (2009: 277) point out, overt object marking is found in many cases of transitive constructions in which its absence would not cause any ambiguity as to which NP(s) corresponds to which argument. This is the case in the Hebrew example in (2a), in which subject and object would remain distinguishable even in the absence of *et* due to the semantic interpretation of the sentence. In view of similar observations, Bossong (1998) developed the proposal that overt marking in differential languages is found on object NPs whose referents have subject-like semantic and/or pragmatic properties that distinguish them as potential subjects (or, agents). Overt marking therefore signals that, despite these subject-like properties, an NP that would be most likely found in

the subject position is, on the contrary, found in the object position in a transitive construction. In contrast, NPs whose referents constitute prototypical objects are left unmarked.

In accounting for the referential properties of prototypical subjects and objects, Bossong (1998: 202-204) uses the scalar dimensions of inherence and reference. These are more widely known as the Animacy Hierarchy and the Definiteness Hierarchy, respectively. The Animacy Hierarchy ranks the referents of NPs based on their meaning in terms of the basic animacy-based distinctions, animate *versus* inanimate and human *versus* non-human. The most popular version of the Animacy Hierarchy is given in (4) below.

(4) Animacy Hierarchy (adapted from Dahl 2000: 99)
human > animal (non-human animate) > inanimate

The Definiteness Hierarchy ranks NPs with respect to the values their referents have for (in)definiteness and (non-)specificity. Personal pronouns occupy the rightmost and highest end of the hierarchy, whereas non-argumental NPs occupy the leftmost and lowest end of the hierarchy as shown in (5) (for a unification of the two hierarchies into a single hierarchy of potential agentivity and inherent topicworthiness, see Melis & Flores 2009: 279):

(5) Definiteness Hierarchy (von Heusinger 2008: 5; see also Aissen 2003: 437)[6]
personal pronoun > proper name > definite NP > indefinite specific NP > indefinite non-specific NP > non-argumental NP

Prototypical subjects are higher in prominence in either the Animacy or the Definiteness Hierarchy, or in both hierarchies. Definite NPs referring to human entities are therefore highest in prominence and prototypical subjects. NPs occupying the lower ends in either one or both hierarchies such as indefinite non-specific NPs

[6] Von Heusinger combines Croft's Referentiality and Definiteness Hierarchies (2003: 130) into the hierarchy in (5) for which he uses the term Referentiality Scale. Here, I follow Aissen (2003) who uses the term Definiteness Hierarchy in light of the central role that definiteness plays in the analysis of DOM in Cappadocian. It is worth noting that, in light of von Heusinger's (2002, 2003) view on the relation between definiteness and specificity, his very use of the hierarchy is self-contradictory. In von Heusinger (2002: 250), he sets off to refute the assumption that "definiteness and specificity are ordered according to a scale which excludes a definite non-specific interpretation".

denoting inanimate entities are, on the other hand, prototypical objects.[7] According to Aissen, in languages in which DOM is operative, "the higher in prominence a direct object, the more likely it is to be overtly case-marked" (2003: 436; see also Croft 2003: 166). In this analysis, NPs that refer to human entities and/or are definite should be overtly marked when found in object position as in *mal'čika* in (1a) or *et David* in (2a). Similarly, NPs that refer to inanimate entities and/or are indefinite non-specific need not be overtly marked as in *dub* in (1b) or *dag* in (2b). This interpretation finds support in Comrie's earlier generalisation that

> the most natural kind of transitive construction is one where the A(gent) [i.e., the subject] is high in animacy and definiteness, and the P(atient) [i.e., the object] is lower in animacy and definiteness; and any deviation from this pattern leads to a more marked construction (1989: 128).

The semantic markedness of high prominence objects is matched with their morphological marking. In the overwhelming majority of differential languages, morphological marking is always more complex in high prominence objects than in low prominence ones, which are most commonly zero marked. This is true of DOM systems that use a diverse variety of linguistic elements to mark high prominence objects overtly such as case markers, prepositional and postpositional elements, and object-verb agreement strategies (Aissen 2003: 446; Melis & Flores 2009: 273-274). Compare, for example, the overt case marking of *mal'čik-a* and *begemot-a* with the zero marking or *dub-Ø* and *stol-Ø* in Russian (1); or, the overt prepositional marking in Hebrew *et ha-dag* and *et David* with the zero marking of *Ø dag* in (2). This correlation of structural and formal markedness is found both in languages whose typological profile has always included DOM as a genetic feature—at least to the extent of available historical documentation, such as the Turkic languages (Bossong 1998: 246-249)—and in languages that developed DOM systems at some point in their history as did, for example, Hebrew or the Slavonic languages (Bossong 1998: 209-218, 249-254).

So far as the latter case is concerned, the development of DOM in languages that were originally non-differential is generally thought to repair the ambiguity caused by phonological developments affecting the morphological marking of cases expressing the core arguments of transitive constructions (Bossong 1991: 152; see

[7] This, of course, excludes non-argumental nouns.

Bossong 1991: 145-146, 149-151 for Hebrew; Igartua 2005: 478-592 for the Slavonic languages and references therein). The development of DOM in some Romance languages, such as Spanish or Catalan, challenges this view, however. The general consensus in the literature about the development of Spanish DOM is that its first manifestations involved the accusative forms of tonic personal pronouns and, most probably, those of first and second person *mí* and *ti* (*a mí*, *a ti*) that are formally distinguishable from the respective nominative forms *yo* and *tú*. In this case, there is no need to disambiguate between subject and object in transitive constructions nor is any phonological development affecting the irregular morphological marking of case (Melis & Flores 2009 and references therein).

Næss (2004) takes issue with Bossong's (1998) and Aissen's (2003) popular analyses. Drawing on Hopper and Thompson (1980), she rejects the view that prototypical object NPs refer to inanimate entities and/or are indefinite and non-specific. Contrary to this view, Næss follows Hopper and Thompson in considering prototypical objects to be highly individuated. Individuation is defined on the basis of the array of referential properties in (6). Referents of NPs having the properties listed on the left column are taken to be more highly individuated; those having the properties on the right column are less highly individuated.

(6) Degrees of Individuation (Hopper & Thompson 1980: 253)

INDIVIDUATED	NON-INDIVIDUATED
proper	common
human, animate	inanimate
concrete	abstract
singular	plural
count	mass
referential, definite	non-referential

In Hopper and Thompson's analysis, "an action can be more effectively transferred to a patient which is individuated than to one which is not" (1980: 253). In that sense, high individuation correlates with affectedness, the degree to which the action encoded by the verb in a transitive construction is transferred to an argument that is not the subject. In general, the non-subject argument that is most saliently

affected by the verbal action is crosslinguistically encoded as the direct object (Dixon 1994: 8). Therefore, with respect to animacy, prototypical object NPs refer to human or animate entities because a verbal action will likely have a more significant effect on human and animate entities than on inanimate ones. With respect to definiteness, prototypical object NPs are definite and referential (that is, they are specific even if they are indefinite) because they refer to wholes rather than parts, which are encoded by indefinite and non-referential NPs. The assumption here is that wholes are more completely affected than parts.

Applying this analysis to her account of DOM, Næss proposes that what is overtly marked in DOM patterns is not a high degree of individuation or prominence in the sense conveyed by Aissen (2003), but a high degree of affectedness (2004: 1202). She explains the fact that animacy and definiteness are the two referential properties found to determine DOM crosslinguistically on account of the basic role that these properties play in the definition and perception of affectedness, as argued also by Hopper and Thompson (1980). Following this approach, overt object marking is found in Russian *mal'čika* and *begemota* in (1a), in Hebrew *et hadag* and *et David* in (2a), and in Spanish *al empleado* and *a un empleado* in (3a) because the referents of these NPs are highly affected by the verbal actions encoded by the verbs of the respective sentences. It is exactly their high degree of affectedness that triggers overt object marking.

With these theoretical considerations in mind, I now turn to presenting the contrasting object marking systems of Turkish and MGr. As I show in the remainder of this section, Turkish is a representative example of a differential language whereas MGr is one of a non-differential language. The discussion of the two systems will illustrate comparatively what the original object marking system of Cappadocian and Pharasiot is assumed to have been like before the development of DOM; the discussion will also illustrate the way in which DOM functions in the language that is thought to have provided the model for this innovation. It will thus form the basis for the synchronic and diachronic analysis of DOM in the two AMGr dialects that follows later in this chapter.

3.1.2 Turkish: a differential language

Turkish is a differential language. DOM in Turkish is generally considered to be one-dimensional in principle and determined by specificity. Direct object NPs are marked as specific by means of the accusative ending *-(y)I*, which can co-occur with the indefinite article *bir*—derived from the numeral *bir* 'one'—that marks NPs as indefinite (recall that Turkish lacks a definite article). *-(y)I* also co-occurs with definite determiners such as the demonstrative pronouns *bu*, *şu*, *o* and the universal quantifiers *her* 'every' and *bütün* 'all'. Proper names and most pronouns are inherently definite and therefore appear marked by *-(y)I* when occurring in the direct object position (Göksel & Kerslake 2005: 201-203; von Heusinger & Kornfilt 2005: 4-5).

In Turkish transitive constructions, immediately preverbal direct object NPs can be realised in a variety of ways. Firstly, they can be realised as bare NPs that are unmarked for case and which do not co-occur with the indefinite article (7a). These have been shown not to be arguments in the transitive relation, but rather to have a reading similar to that of incorporating constructions (Aydemir 2004). Secondly, they can be realised as bare NPs that are marked with the accusative ending *-(y)I* and which do not include the indefinite article (7b). These NPs are most commonly translated as definite, as are NPs including definite determiners that are obligatorily marked with the accusative ending (7c). Thirdly, they can be realised as NPs that are unmarked for case but which include the indefinite article (7d). These are considered to be indefinite non-specific. Lastly, they can be realised as NPs that are marked with the accusative ending and which include the indefinite article (7e). These NPs are considered indefinite specific and counted as evidence that *-(y)I* marks specificity and not definiteness, as is sometimes assumed in the literature (Hopper & Thompson 1980: 275; Lewis 2000: 34-35, 244), since the ending is found to combine with the indefinite article.

(7) Turkish (adapted from Aydemir 2004: 465)

a. *Yasemin anahtar-Ø kaybetti.* (incorporated, non-argumental)
Yasemin key-Ø she.lost
'Yasemin lost keys.'

b. *Yasemin anahtar-ı kaybetti.* (definite)
Yasemin key-ACC she.lost
'Yasemin lost the key.'

c. *Yasemin bu anahtar-ı kaybetti.* (definite)
Yasemin this key-ACC she.lost
'Yasemin lost this key.'

d. *Yasemin bir anahtar-Ø kaybetti.* (indefinite non-specific)
Yasemin a key-Ø she.lost
'Yasemin lost a key.'

e. *Yasemin bir anahtar-ı kaybetti.* (indefinite specific)
Yasemin a key-ACC she.lost
'Yasemin lost a certain key.'

For a direct object NP to be case marked with the accusative ending, it suffices that its referent be specific. In terms of the Definiteness Hierarchy in (5), the cut-off point for overt object marking in Turkish is between indefinite specific NPs and indefinite non-specific NPs with all NPs whose definiteness and specificity values fall to the left of indefinite specific NPs being overtly marked with *-(y)I*. In Lyons's (1999) approach, overt case marking is used if the referent of the object NP is familiar to and identifiable by the speaker but not necessarily the hearer. This covers both definite NPs whose referents are unambiguously identifiable by both speaker and hearer, and indefinite specific NPs whose referents are identifiable only by the speaker and are being introduced into the discourse as new items on the assumption that they are not identifiable by the hearer (Göksel & Kerslake 2005: 175-176; 370-387; von Heusinger 2002; von Heusinger & Kornfilt 2005; Kornfilt 2000: 273-280, 2009).

Crucially, the unmarked form of the direct object noun in (7a) and (7d) is the one used *inter alia* to express the subject of main clauses as in (8) (Göksel & Kerslake 2005: 173-175; Kornfilt 2000: 212-214).

(8) Turkish

Anahtar-Ø *paspas-ın* *alt-ın-da.*
key-Ø doormat-GEN space.beneath-3SG.POSS-LOC
'The key is under the doormat.'

Dede (1986) challenges the strictly one-dimensional DOM pattern illustrated in (7), drawing attention to the fact that indefinite object NPs that are unmarked for case and whose referents are inanimate entities, for example *bir anahtar* in (7d), are ambiguous with respect to specificity and can have both a specific and a non-specific reading (9a) (see also von Heusinger & Kornfilt 2005: 13-14; Johanson 2006: 236; Kornfilt 2000: 214). Dede further goes on to show that accusative marking with NPs of this type is in fact ungrammatical (9b). This means that, in the case of such NPs, what determines DOM is actually definiteness, not specificity, as the distinction that applies is between indefinite direct object NPs (9a) and definite direct object NPs (9c). It therefore appears that a certain degree of interaction exists between specificity and animacy in Turkish DOM, which, in the light of Dede's examples below, is two-dimensional to an extent.

(9) Turkish (based on Dede 1986: 158)

a. *Bir kitap kaybettim. Bulamıyorum.* (indefinite specific)
a book I.lost I.cannot.find (indefinite non-specific)
'I lost a (certain) book. I cannot find it.'

b. **Bir kitab-ı kaybettim. Bulamıyorum.* (indefinite specific)
a book-ACC I.lost I.cannot.find
'I lost a certain book. I cannot find it.'

c. *Kitab-ı kaybettim. Bulamıyorum.* (definite)
book-ACC I.lost I.cannot.find
'I lost the book. I cannot find it.'

According to Dede (1986: 158-159), accusative marking may not appear even in indefinite object NPs with animate referents when they are objects of verbs of

propositional attitudes, such as *ara-* 'look for' and *iste-* 'want'. In these cases, unmarked indefinite NPs can have both a specific and a non-specific reading as in (10a). Accusative indefinite phrases can only have a specific reading (10b).

(10) Turkish (adapted from Dede 1986: 158-159)

a. *Bir öğrenci arıyorum. Bulamıyorum.* (indefinite specific/
a student I.look.for I.cannot.find indefinite non-specific)
'I am looking for a (certain) student. I cannot find him/her/one.'

b. *Bir öğrenci-yi arıyorum. Bulamıyorum.* (indefinite specific)
a student-ACC I.look.for I.cannot.find
'I am looking for a certain student. I cannot find him/her.'

It is sufficient for the purposes of our thesis to conclude from this brief presentation that Turkish represents a textbook case of a differential language in which the referential property of specificity determines DOM. The head nouns of direct object NPs that take a specific reading are marked by the accusative ending *-(y)I*. Those of non-specific NPs are left unmarked. This formal implementation of DOM complies with the typological considerations of §3.1.1 in that high prominence (or affectedness) NPs are marked with overt morphological material whereas low prominence (or affectedness) NPs bear zero marking. Zero marking is also crucially found on the head nouns of subject NPs in main clauses. In addition to specificity, animacy also has an effect on Turkish DOM in blocking accusative marking on indefinite direct object NPs whose referents denote inanimate entities, regardless of their specificity reading. In the case of such NPs, DOM appears to be determined by definiteness.

In contrast to Turkish, MGr makes no referential distinctions in its marking of direct objects, all of which are marked in a uniform way. This non-DOM system is presented in the next section.

3.1.3 Modern Greek: a non-differential language

MGr is a non-differential language. In MGr, the head nouns of all direct object NPs are uniformly marked by the accusative case irrespective of their position or that of their referents on the Animacy and Definiteness Hierarchies.

MGr makes a distinction between definite and indefinite NPs that, however, plays no role in object marking. (In)definiteness is marked by means of the definite and the indefinite articles (*ο*, *η*, *το*; *ένας*, *μία*, *ένα*, respectively), which are inherited from Medieval Greek, as well as by a zero article (see Anagnostopoulos 1922; Manolessou & Horrocks 2007 for the diachronic development of the definite article in Greek; for the development of the indefinite article see Chila-Markopoulou 2000). The definite article is used with a wide range of NPs of varying semantic types from simple definite and generic NPs to possessive and proper noun NPs (Lyons 1999: 337; Napoli 2009), all of which it marks as definite. Indefinite NPs are marked by the indefinite article or by the zero article. In contrast to Turkish, there is no grammaticalised marking of specificity in MGr (or in any other stage in the history of Greek, for that matter). Definite NPs generally have a specific reading except for generic NPs which are, nevertheless, still marked by the definite article; indefinite NPs marked as such by the indefinite article can have both a specific and a non-specific reading whereas bare indefinite NPs can be interpreted as either non-specific or generic (Clairis & Babiniotis 2004: 21-43; Holton *et al.* 1997: 276-285; Schroeder 2006: 582-584; Theofanopoulou *et al.* 1998: 11-29; Tzartzanos 1989: 170-180).

In MGr transitive constructions, the head nouns of all direct object NPs are marked by the accusative case regardless of their specification for definiteness, specificity or animacy. Accusative case marking is found in the following environments: on bare indefinite direct object NPs that complement light verbs such as *βγάζω* in (11a), in which the direct object NP contributes more to the meaning of the predicate than the verb itself; on bare indefinite direct object NPs that have a non-specific or generic reading (11b); on indefinite direct object NPs including the indefinite article that can take a specific (11c) or a non-specific reading (11d); and, on definite object NPs of all semantic types (11c, e, f) (Clairis & Babiniotis 1999: 222-253; Holton *et al.* 1997: 187-196, 257-261; Tzartzanos 1989: 92-99).

(11) MGr

a. *Ο δήμαρχος έβγαλε λόγο* (light verb complement)
the mayor he.took.out speech.ACC (inanimate)
στην πλατεία.
In.the square
'The mayor gave a speech in the square.'

b. *Χρειάζομαι χάρακα για να σχεδιάσω* (indefinite generic)
I.need ruler.ACC in.order.to I.draw (inanimate)
ευθείες γραμμές.
Straight lines
'I need a ruler to draw straight lines.'

c. *Είδα στο δρόμο έναν φίλο μου,* (indefinite specific)
I.saw in.the street a.ACC friend.ACC my (animate)
το Μανόλη. (definite proper noun)
the.ACC Manolis.ACC (animate)
'I saw a (certain) friend of mine on the street, Manolis.'

d. *Θέλω να αγοράσω έναν εκτυπωτή.* (indefinite non-specific)
I.want to I.buy a.ACC printer.ACC (inanimate)
'I want to buy a printer (any printer).'

e. *Συνάντησα τον συγγραφέα του* (simple definite)
I.met the.ACC author.ACC the (animate)
αγαπημένου μου βιβλίου.
Favourite my book
'I met the author of my favourite book.'

f. *Δεν τον τρώω τον πατσά.* (definite generic)
not him I.eat the.ACC tripe.ACC (inanimate)
'I do not eat tripe.'

MGr is, therefore, non-differential with respect to direct object marking. It is, nevertheless, classified by Bossong (1991: 151) as exhibiting an accusative-neutral split whereby only non-neuter—that is, masculine or feminine—nouns have a distinct form for the accusative case. Neuter nouns do not distinguish between the nominative and accusative cases, which are always expressed by a single syncretic form. While Bossong sees this as a kind of differential split, he does not consider it to be on a par with DOM patterns of the Hebrew, Spanish or Turkish type. In these languages, DOM is synchronically active and meaningful as it is based on semantic and pragmatic properties of the referents of object NPs, which are largely extralinguistic and therefore allow for variability in object marking. In contrast, the MGr accusative-neutral split does not allow for any degree of variability. It is defined by inflectional class, which is a strictly intralinguistic feature found in the most advanced stages of its development. As a result, it has little or no bearing on meaning.

In effect, however, due to phonological and morphological developments that affected nominal inflection in the Late Koiné and Medieval periods in the history of Greek, the MGr accusative-neutral split applies only in *ος*-masculine nouns and in the singular of *ας-*, *ης-*, *ες-*, *ους*-masculine nouns which are the only noun groups in which the accusative is expressed by a form distinct from that of the nominative. Compare, in that connection, the accusative singular forms of the masculine nouns *λόγο*, *χάρακα*, *φίλο*, *Μανόλη*, *εκτυπωτή*, *συγγραφέα*, *πατσά* in (11) with their nominative singular forms *λόγος*, *χάρακας*, *φίλος*, *Μανόλης*, *εκτυπωτής*, *συγγραφέας*, *πατσάς*. Notice that the distinction of nominative *versus* accusative is morphologically expressed by the presence *versus* absence of final *–ς* (12).

(12) MGr

	NOM.SG	ACC.SG
a. *ος*-masculine nouns	*λόγο-ς*	*λόγο-Ø*
	φίλο-ς	*φίλο-Ø*
b. *ας-*, *ης*-masculine nouns	*εκτυπωτή-ς*	*εκτυπωτή-Ø*
	Μανόλη-ς	*Μανόλη-Ø*
	χάρακα-ς	*χάρακα-Ø*
	συγγραφέα-ς	*συγγραφέα--Ø*
	πατσά-ς	*πατσά-Ø*

In all the other inflectional classes and noun groups, namely in the plural of *αϛ-*, *ηϛ-*, *εϛ-*, *ουϛ*-masculine nouns, and in both numbers of the feminine and neuter inflectional classes, nominative and accusative are always syncretic.[8]

In conclusion, we see that in contrast to Turkish, the referential property that is morphosyntactically operative in MGr, namely definiteness, is not relevant to object marking. In MGr, the accusative case uniformly marks the head nouns of all direct object NPs, regardless of their reading as (in)definite or (non-)specific and of the semantic type of their referent (animate *versus* inanimate). This principle, however, finds its application only with a subset of masculine nouns that preserve a morphological distinction between nominative and accusative, formally expressed by the presence *versus* absence of final -ϛ. This non-DOM system is assumed here to have been the one preceding the development of DOM in Cappadocian and Pharasiot. It is found without exception in previous stages in the history of Greek as well as in all other MGr dialects and varieties, including the closely related dialects of the AMGr group, Pontic, Rumeic and Silliot.

3.1.4 Summary

In languages exhibiting DOM, only a subset of the direct objects is overtly marked as such while the remaining direct objects bear no overt marking of their syntactic behaviour. Overt marking is crosslinguistically found in direct objects NPs that occupy the rightmost, and therefore high, ends of the Definiteness and/or Animacy Hierarchies, which are considered to be either too subject-like (Aissen 2003; Bossong 1998) or highly affected by the verbal action (Næss 2004). Turkish is a language in which DOM is active. It is generally determined by the referential property of specificity and overtly marked by the accusative ending *-(y)I*. There are, however, a number of cases in which animacy also comes into play in disallowing overt marking on direct object NPs that have inanimate referents. MGr, on the other hand, is in principle non-differential. The head nouns of all direct object NPs are uniformly marked with the accusative, which in the singular is morphologically distinct from

[8] This generalisation does not apply in the case of MGr dialects that preserve the final *-ν* in the accusative singular of masculine and feminine inflectional classes such as Cypriot Greek or Pontic. In these dialects, the distinction between nominative and accusative is expressed by means of the final *-ϛ versus* final *-ν* opposition in masculine, and by means of the *-Ø versus* final *-ν* in feminine inflectional classes.

the nominative only in masculine inflectional classes. Originally having such a non-DOM system as a starting point, Cappadocian and Pharasiot developed a DOM pattern that is reminiscent of that of Turkish in many respects. In what follows, I look at this pattern both from a synchronic and a diachronic point of view with the aim to account for its origin and subsequent development based on the linguistic data available from the two AMGr dialects. The next section presents these data.

3.2 Cappadocian and Pharasiot: two differential Modern Greek dialects

3.2.1 Differential object marking in Cappadocian

Cappadocian and Pharasiot stand out among the MGr and, in fact, all Greek varieties, ancient and modern, in having developed into differential languages in which DOM is determined by definiteness (Anastasiadis 1976: 89-102, 1995: 93-94; Andriotis 1948: 47; Dawkins 1916: 94, 164-165, 1950: 357-358; Janse 2004; Spyropoulos & Kakarikos 2009). It should be borne in mind that the use of the term DOM to refer to the Cappadocian and Pharasiot phenomenon that I deal with in this chapter is only accurate to a certain extent, since differential marking in the two AMGr dialects extends beyond the direct object position and is operative in all syntactic contexts in which the accusative case is normally found in MGr. I will, however, adhere to the use of the term DOM for lack of a better term and in light of its wide use in the relevant literature.

As all MGr dialects, Cappadocian distinguishes between definite and indefinite NPs which are marked by means of the definite and the indefinite article (*το*, formally subject to interdialectal variation; *ένα*, respectively) as well as by a zero article. The definite article is used with the same kinds of NPs as in MGr, which are marked as definite. The indefinite article and the zero article mark NPs as indefinite. *Contra* Spyropoulos and Tiliopoulou (2006) (henceforth S&T), and following Janse (2004: 8), I support the view that there is no morphological means for the marking of specificity in Cappadocian, which aligns with the other MGr dialects in this respect. Definite NPs in principle have a specific reading. Indefinite NPs that are marked as such by the indefinite article can have both a specific and a non-specific reading whereas bare indefinite NPs can be interpreted as either non-specific or generic.

As we saw in Chapter 2, the definite article in Cappadocian is realised as null in the nominative singular and plural when immediately preceding nouns that belong to formerly masculine or feminine inflectional classes. This, however, is not to be confused with the zero article, at least in the singular. Subject NPs whose head nouns belong to formerly masculine or feminine classes are always interpreted as definite, despite the article's being realised as null (see example (1) in §2.5.3). The zero article, by contrast, is used only in marginal cases in the subject position, and even singular subject NPs that are interpreted as non-specific or generic are obligatorily marked by the indefinite and the definite article respectively. On the other hand, confusion can potentially arise in the plural where the lack of an article before a nominative noun form can correspond either to a definite article that is realised as null or to a zero article. In the former case the subject NP should be interpreted as definite, while in the latter it should take an indefinite non-specific or generic reading. These complications notwithstanding, the null realisation of the definite article is not directly relevant to DOM since it only affects nominative forms. Accusative forms, which are the ones licensed by the syntactic contexts in which DOM phenomena surface, are always overtly realised as *το* in the singular and *τα* in the plural (or, their variants).[9] As for the indefinite article, its accusative form is always overtly realised as *ένα* in the singular, but lacks plural forms.

DOM in Cappadocian is determined by definiteness and is formally implemented by means of the morphological distinction between nominative and accusative. The two cases mark the head nouns of NPs found in all syntactic contexts in which the use of the accusative is the only grammatical option in all other MGr varieties (except Pharasiot, of course). These most importantly include the direct object position, the indirect object position, object predicatives, complements of prepositions, and adverbial uses of NPs. When an NP is found in any one of these syntactic positions, a morphological accusative marks its head noun only if the NP is definite. If the NP is indefinite, its head noun appears in the nominative case irrespective of whether the NP has a specific or a non-specific reading. Compare, for example, the marking on the head nouns of the definite NPs in (13a) and (14a) with that of the head nouns of the indefinite NPs in (13b), (14b), (15) and (16).

[9] In the varieties of Delmesó, Potámia and Sílata, which preserve traces of gender, the accusative of the definite article is realised as *τον* in the case of masculine nouns and *την* in the case of feminine nouns; the latter is again subject to interdialectal variation.

(13) Phloïtá Cappadocian (*ILNE/811*, 54, 58)

a. *ετό το άθρωπο μη το λαλείτ* (definite)
this the man.ACC not him you.talk
'do not talk to this man'

b. *γιολλάτσαν ένα άθρωπος να* (indefinite non-specific)
they.sent.out a man.NOM that
το τσιγιρτήζ
him he.calls
'they sent out a man to call him'

(14) Delmesó Cappadocian (*Dawkins*, 322)

a. *σο φιλάν σον τόπο* (definite)
to.the such to.the.ACC place.ACC
'to such and such a place'

b. *σ' ένα μπατάχ τόπος* (indefinite specific)
to a slippery place.NOM
'to a slippery place'

(15) Phloïtá Cappadocian (*ILNE/812*, 228)

το μεγάλο έκανάν το βασιλιός (object predicative)
the older.one they.made him king.NOM
'they made the older one a king'

(16) Araván Cappadocian (*KMS/P*, 170)

σαράντα μέρες και σαράντα νύχτες
forty days and forty days
έπκαν γάμος (light verb complement)
they.made wedding.NOM
'they had a wedding that lasted forty days and forty nights'

Owing to the loss of gender agreement in Cappadocian and the collapse of the originally distinct masculine, feminine, and neuter forms of all agreement targets into a single, originally neuter form, the differential distinction between definite and indefinite NPs is morphologically expressed by means of accusative and nominative marking only on head nouns of NPs that largely preserve their inflections. Consider, for example, the nominative singular form *άθρωπος versus* the accusative singular *άθρωπο* in (13), or *τόπος versus τόπο* in (14). All other nominals that may agree with head nouns within the NP—such as articles, adjectives, participles or pronouns—appear in their originally neuter forms. These forms are syncretic for nominative and accusative and therefore do not make a morphological distinction between the two cases. In (17) below, the indefinite article and the modifying indefinite pronoun appear as *ένα* and *άλλο* and not as *ένας* and *άλλος*. In other words, they do not appear as the originally masculine nominative singular forms to agree with the originally *ης*-masculine *νουμάτῶης*. It is therefore unclear on the basis of Cappadocian examples such as (17) whether all the constituents of NPs found in syntactic positions in which DOM is operative are subject to it or whether DOM is limited to the head nouns of NPs.

(17) Araván Cappadocian (*KMS/P&K*, 102)
σάλσε ένα άλλο νουμάτῶης
you.send a other man.NOM
'send another man'

Even more limiting to the morphological expression of DOM is nominative/accusative syncretism in the feminine and neuter inflectional classes, as well as in the plural of *ας*-, *ης*-, *ες*-, *ους*-masculine nouns. The only noun (sub)classes that in principle preserve a morphological distinction between nominative and accusative in Cappadocian are the *ος*-masculine class and the *ας*-, *ης*-, *ες*-, *ους*-masculine class in the singular. In (13)-(17) above, all nouns subject to DOM belong the former class. Even in these two classes, however, nouns behave differently with respect to the nominative/accusative distinction depending on animacy but also on the variety of Cappadocian involved.

Regarding animacy, in the plural of inanimate *ος*-masculine nouns, nominative and accusative are expressed by syncretic forms that are formally

identical to the original accusative; for example, Delmesó Cappadocian *τόπους* 'place.PL.NOM/ACC', *μύλους* 'mill.PL.NOM/ACC' (Dawkins 1916: 95; for details see §2.5.2, §4.4.4). *ας-*, *ης-*, *ες-*, *ους*-masculine nouns of the same semantic type lack the final *-ς* in the nominative singular, whereas in the plural they have *ι*-neuter heteroclitic nominative/accusative forms (see §5.3.3). As a result, these nouns do not distinguish between the two cases in either of the two numbers; for example, Malakopí Cappadocian *παρά* 'money.SG.NOM/ACC', *παράδια* 'money.PL.NOM/ACC' (Dawkins 1916: 110).

Turning to the differences with respect to variety, animate *ος*-masculine nouns have distinct nominative and accusative plural forms only in Delmesó, Potámia, Malakopí and Axó Cappadocian; for example, Potámia Cappadocian *δασκάλ'(οι)* 'teacher.PL.NOM' *versus* *δασκάλους* or *δασκαλιούς* 'teacher.PL.ACC' (Dawkins 1916: 96). In the rest of the Cappadocian varieties, such nouns have syncretic nominative/accusative forms that are formally identical to the original nominative (see §5.2.2); for example, Mistí Cappadocian *Τούρτσ'(οι)* 'Turk.PL.NOM/ACC.PL', *λύτσ'(οι)* 'wolf.PL.NOM/ACC' (Dawkins 1916: 101). Thus, the morphological distinction between (definite) accusative and (indefinite) nominative case can effectively be realised only in the singular of animate *ος*-masculine and *ας-*, *ης-*, *ες-*, *ους*-masculine nouns. Compare, for example, the nominative forms *άθρωπος*, *τόπος* with accusative *άθρωπο*, *τόπο* in (13) and (14) respectively. Note that the distinction between the two cases is also expressed by the presence *versus* absence of final *-ς*.

In the Cappadocian texts, a number of cases occur in which DOM does not appear to apply in the way expected. These fall mainly in two categories. The first category includes indefinite NPs whose head nouns are marked by the accusative case, where nominative case marking would be expected according to the Cappadocian DOM pattern. See, for example, the head nouns in (18).

(18) Cappadocian

a. *σάλσε* *Καστρού* *το* *πατιῶάχο* *ένα* *ελτῶή*
he.sent capital the king a ambassador.ACC
'he sent an ambassador to the capital's king' (Araván, *KMS/P&K*, 108)

b. *θα σε δώκ θησαυρό*
will you he.gives treasure.ACC
'he will give you a treasure' (Phloïtá, *ILNE/811*, 58)

Deviant NPs of this type are not great in number and occur relatively rarely in the texts. They appear to be reflexes of the non-differential accusative case object marking of MGr and should most probably be attributed either to the competition between the innovative Cappadocian DOM system and the original MGr object marking system, or to crossdialectal influence from non-differential MGr varieties. The latter possibility is supported by the presence in many of these deviant examples of more structural features that are not characteristic of Cappadocian but which are distinctive of non-differential MGr varieties such as the future marker *θα* in (18c) as opposed to the Cappadocian future marker *να*.

Definite NPs whose head nouns appear to be marked by the nominative case and not by the accusative case—as would be expected in the Cappadocian DOM pattern—constitute the second category of deviant NPs. Consider, for example, the head nouns in (19).

(19) Cappadocian

a. *qαρôουλάτôε το κλέφτôης*
he.met the robber.NOM
'he met the robber' (Ghúrzono, *Dawkins*, 344)

b. *να παν σου μύλους*
that they.go to.the mill.NOM
'that they go to the mill' (Mistí, *ILNE/755*, 82)

Deviant NPs such as the ones in (19) are found relatively often in the texts, especially with inanimate nouns, and in the varieties of Ferték and Ulaghátsh. This, however, does not mean that they are confined to this semantic type or the latter two varieties. As I will argue in more detail in §3.4.2.2, nominative definite NPs occur as a result of structural pressure within the Cappadocian inflectional system, favouring the syncretism of nominative and accusative into a single form. The phenomenon is

further related to the development of 'agglutinative' inflection, dealt with in detail in Chapter 5. Suffice it to say at this point that *κλέφτῶης* and *μύλους* in (19) above should be analysed as instances of nominative/accusative syncretism, expressing both cases at the same time and would therefore be more accurately glossed as accusative rather than nominative.

3.2.2 Differential object marking in Pharasiot

Pharasiot is also a differential language exhibiting a DOM pattern identical to that of Cappadocian. It, too, distinguishes between definite NPs that are marked by the definite article and indefinite NPs that are marked either by the indefinite article or by the zero article. In contrast to Cappadocian, the definite article inflects for three genders, three cases and two numbers in Pharasiot, and preserves forms largely similar to those in other MGr varieties. The indefinite article has the form *α/αν*, which is uniform for all genders and cases (Dawkins 1916: 163). Specificity is not overtly marked morphologically. As in all MGr dialects, Pharasiot definite NPs in principle have a specific reading. Indefinite NPs that are marked as such by the indefinite article can have both a specific and a non-specific reading, whereas bare indefinite NPs can be interpreted as either non-specific or generic.

As in Cappadocian, DOM in Pharasiot is determined by definiteness and is operative in all syntactic contexts in which the use of the accusative is the only grammatical option in all other MGr varieties. When an NP is found in any one of these syntactic positions, its head noun is marked with the accusative case only if the NP is definite. If the NP is indefinite, its head noun appears in the nominative case irrespective of whether the NP has a specific or a non-specific reading (Anastasiadis 1976: 89-102, 1995: 93-94; Andriotis 1948: 47; Dawkins 1916: 164-165, 1950: 357-358). Consider the examples below.

(20) Pharasiot (Dawkins 1916: 508, 510)

a. *ήρτεν σ' αν ντερβίῶης ιράστα* (indefinite specific)
he.came to a dervish.NOM opposite
'he came across a dervish'

b. *δώτζ̂εν τον ντερβίσ̂η* (definite)
it.struck the.ACC dervish.ACC
'it struck the dervish'

(21) Pharasiot (Dawkins 1916: 536)

a. *γω είδα αν ύπνος* (indefinite specific)
I I.saw a dream.NOM
'I saw a dream'

b. *σοτίπος τζ̂ο λες τον ύπνο;* (definite)
why not you.say the.ACC dream.ACC
'why do you not tell the dream?'

(22) Pharasiot (Andriotis 1948: 47)

να ποίτσ̂ει το γϊάδι μας τανάς (indefinite non-specific)
will it.make the cow our calf.NOM
'our cow will have a calf'

(23) Pharasiot (Andriotis 1948: 47)

να ποίτσ̂ετε τοβάς (light verb complement)
that you.make prayer.NOM
'you should pray'

In a manner similar to Cappadocian, Pharasiot distinguishes between definite and indefinite NPs morphologically by means of accusative and nominative case marking mainly on the head nouns of NPs; the majority of modifying agreement targets (adjectives, pronouns, participles) exhibit neuter agreement (see Chapter 4 for details). Unlike in Cappadocian, however, the definite article preserves inflections for gender and case, and appears in the accusative form in definite NPs. See, for example, the masculine accusative singular form *τον* in (20b) and (21b). In contrast, the form of the indefinite article does not distinguish between the nominative and accusative case in any of the three genders.

In Pharasiot, too, the distinction between the two cases is morphologically expressed only in the singular of the masculine inflectional classes by means of the presence *versus* absence of final -ς; for example, nominative singular *δερβίῶης*, *ύπνος* *versus* accusative singular *δερβίῶη*, *ύπνο* in (20) and (21) above. In the feminine and neuter classes, and in the plural of masculine classes, nominative and accusative are syncretic and always expressed by a single form (Andriotis 1948: 35-41; Dawkins 1916: 163-170).

3.2.3 Summary

In this section, I presented the linguistic data on DOM in Cappadocian and Pharasiot. I showed that the two AMGr dialects, in a uniquely innovative way, have developed into differential languages. DOM in Cappadocian and Pharasiot is determined by definiteness and formally implemented by means of the morphological distinction between nominative and accusative. The two cases are distributed complementarily in syntactic contexts where accusative marking is the only grammatical option in all other MGr varieties. In Cappadocian and Pharasiot, accusative marking only appears on head nouns of definite NPs; nominative marking appears on head nouns of indefinite NPs. This DOM pattern is reminiscent of that of Turkish in which direct object NPs that take a specific reading are accusative-marked, while those that take a non-specific reading are zero-marked, just as NPs found in subject position—the typically nominative marked context—in MGr. This similarity between the two DOM patterns, along with the historical and sociolinguistic circumstances of language contact between Turkish and the two AMGr dialects, has led previous researchers to attribute the development of DOM in AMGr dialects to the influence of Turkish without, however, accounting for the linguistic mechanisms and processes that brought this innovation about. It is this problem that I address in the next section.

3.3 An ‘un-Greek’, contact-induced development

3.3.1 Previous accounts

Dawkins (1916: 94, 203) was the first to document, in pretheoretical terms, the development of DOM in Cappadocian and Pharasiot, which he considered to have

resulted from contact with Turkish. Costakis (1963: 104) also maintains this view in order to explain sporadic occurrences of the nominative singular instead of the expected accusative in Silliot. More recently, Janse (2004) and S&T, who were the first to identify the Cappadocian development as an instance of DOM in its modern linguistic sense, have adopted Dawkins's view, without, however, discussing in detail the linguistic evidence and criteria that form the basis of establishing language contact with Turkish as the origin of the innovation.

Focusing on Axó Cappadocian, Mavrochalyvidis and Kesisoglou (1960: 82), on the other hand, do not treat DOM as a contact-induced change. They consider the use of the nominative instead of the expected accusative in singular NPs headed by formerly masculine nouns to be a corollary of the collapse of the tripartite gender distinction into a single gender that formally coincides with the historical neuter, whose inflectional morphology does not distinguish between nominative and accusative. As we will see below, this view will prove to be relevant to the later stages of the development of DOM in Cappadocian. It is, however, challenged as an account for the initial trigger of the development by the evidence of Pharasiot that preserves gender distinctions in a minimal domain defined by the definite article and a head noun (see Chapter 4 for details) and yet exhibits a DOM pattern identical to that of Cappadocian (Anastasiadis 1976: 94). Of course, the trigger for the development of DOM could, in principle, be different in each of the two AMGr dialects. What the Pharasiot evidence rather suggests with respect to Cappadocian is that the loss of gender distinctions is not a necessary condition for DOM to develop, as Mavrochalyvidis and Kesisoglou seem to suggest.

Regarding Pharasiot, Andriotis (1948: 47) considers the use of the nominative in place of the accusative in singular direct object NPs to be due to the analogical extension of the syncretism of the two cases found in the plural of all nouns in the dialect, an explanation rejected by Anastasiadis in his study of Pharasiot syntax (1976: 94-96). Drawing on a limited sample adduced by Andriotis (1948: 47) from MGr dialects of mainland Greece that seemingly exhibit a DOM pattern similar to that of Cappadocian and Pharasiot, Anastasiadis further dismisses Dawkins's early treatment of the phenomenon as a case of contact-induced change. In his account of DOM, he resorts to the combined effect of the diachronic tendency of many Indo-European languages to reduce the number of morphologically expressed cases and the primacy

of the nominative case within the inflectional paradigm of nouns in MGr. Both Andriotis's and Anastasiadis's analyses have the shortcoming identified by Dawkins (1950: 357-358) with reference to Andriotis's analysis: they fail to account for the fact that this instance of syncretism is systematically realised only in indefinite NPs but not in definite NPs. In this light, Dawkins's original hypothesis, taking language contact with Turkish as the trigger for the development of DOM in Cappadocian and Pharasiot, appears reasonably likely to be correct, despite its lack of detailed elaboration. This is the task that I take on in the remainder of this section.

3.3.2 The typological improbability of Cappadocian and Pharasiot differential object marking

It is not unheard of from a diachronic point of view for an originally non-differential language to develop language-internally into a differential one without the influence of a contact language. A number of Romance languages that developed out of non-differential Vulgar Latin—most notably Spanish, Catalan and Sardinian—are differential, as are most Slavonic languages and Hebrew, evolving from non-differential Proto-Indo-European and Proto-Semitic respectively (see Bossong 1991; Guardiano 2010; Melis & Flores 2009 for the Romance languages and Hebrew; Corbett 1991: 98-99; Igartua 2005: 478-592; Klenin 1983 for the Slavonic languages). With these observations in mind, the possibility that DOM in Cappadocian and Pharasiot emerged through language-internal processes should not be, in principle, excluded in spite of the fact that literally all other known MGr dialects and varieties are non-differential, making the Cappadocian and Pharasiot developments seem of a rather 'un-Greek' nature.

However, closer examination of Cappadocian and Pharasiot DOM within this crosslinguistic context reveals the typological unlikelihood of its formal implementation from a synchronic point of view. In §3.1.1, we saw that in Comrie's (1989) approach, DOM matches the semantic markedness of direct objects whose referents resemble typical subjects in terms of high prominence on either the Definiteness or the Animacy Hierarchy (or both) with some kind of overt morphological or syntactic marking. In this connection, Aissen concludes that "*overwhelmingly,* DOM is implemented by overtly marking the marked class of objects, and leaving the unmarked ones with no morphological mark" (2003: 446, emphasis in

the original). This generalisation is borne out both by languages that have always been differential, such as Turkish, and by languages that developed DOM systems at some point in their recorded history, such as Hebrew. In Turkish, only direct object NPs with specific referents are marked with *-(y)I*; NPs whose referents are non-specific are zero marked. Similarly, in Hebrew, prepositional *et* only marks definite object NPs; indefinite object NPs have no overt marking of their syntactic function. These two DOM patterns are consistent with Aissen's typological prediction with respect to definiteness and specificity, according to which "if a language case marks any objects, it will case-mark definite ones. A language may mark specific objects, and leave non-specific ones unmarked. But no language will case-mark specific indefinites, but not definites" (2003: 456). Along similar lines, Croft argues that "if a language uses a nonzero case marking for a P[atient] argument on the animacy/definiteness hierarchies, then it uses a nonzero case marking for P arguments higher on the hierarchies" (2003: 166).

In Cappadocian and Pharasiot, final -ς appears in the nominative forms of head nouns of indefinite NPs (see examples in §3.2.1 and §3.2.2). In the two AMGr dialects, the overt, morphologically more complex element involved in the morphological distinction employed for the formal expression of DOM marks the unmarked class of objects. On the other hand, accusative forms of head nouns of definite object NPs—that is, the marked class of objects—are zero marked and therefore morphologically simpler than their unmarked counterparts. The formal implementation of the Cappadocian and Pharasiot DOM pattern evidently constitutes a counterexample to Aissen's, Comrie's and Croft's typological generalisations.

In response to this apparent violation of what appears to be a very robust typological pattern, it could be argued that the nominative case is used for the semantically unmarked indefinite NPs because it is syntactically unmarked. Along similar lines, it could be thought that the accusative is used for the semantically marked definite NPs because it is syntactically marked. However, in differential languages with rich nominal inflection, the syntactic markedness of the cases involved in DOM generally coincides with the morphological markedness of their respective forms. In the inflection of masculine nouns in Russian, the nominative is both syntactically and morphologically unmarked, being expressed by a zero morpheme *-Ø*. In contrast, the syntactic markedness of the accusative matches its

morphological markedness, which is expressed by the ending *-a* (see (1); also Corbett & Fraser 2000). Similarly, in Turkish, the nominative (or, absolutive) is zero marked while the accusative is expressed overtly by *-(y)I*. As a result, the cases employed in these languages in the implementation of DOM show the same degree of syntactic and morphological markedness, which always matches the semantic markedness of object NPs.

MGr, on the other hand, does not exhibit this kind of markedness correlation. As Español-Echevarría and Ralli (2003: 190-191) point out, the syntactic unmarkedness of the nominative case in MGr does not always coincide with its morphological markedness; the nominative forms are often marked in nominal paradigms. This is especially the case of nouns belonging to masculine inflectional classes which are the only ones in which DOM can be morphologically expressed in Cappadocian and Pharasiot. As we have seen, forms of the syntactically unmarked nominative are marked in the masculine classes by a final *-ς* while forms of the syntactically marked accusative bear the zero ending *-Ø*. What matters in the context of DOM, however, is that the semantic markedness of NPs be matched not with the syntactic markedness of their cases but, rather, with the morphological markedness of their head nouns. Compared to the crosslinguistic evidence adduced by Aissen (2003), Comrie (1989) and Croft (2003), the expression of the morphological distinction between nominative and accusative in Cappadocian and Pharasiot renders the implementation of DOM in these dialects synchronically deviant from a typological point of view. Diachronically, it casts doubt on a hypothesis that treats such DOM as an instance of language-internal change. If this had been the case, the expected implementation would have involved the ς-final nominative forms to be used for definite NPs and zero marked accusative forms to be used for indefinite NPs. For instance, with reference to the Cappadocian examples in (13)-(16), one would expect to find *ετό το άθρωπος*, *ένα άθρωπο*; *σο φιλάν σον τόπος*, *σ' ένα μπατάχ τόπο*; *βασιλιό*; *γάμο*.[10]

[10] Spyropoulos and Kakarikos (2009) propose a syntactic analysis of DOM in Cappadocian based on the feature decomposition of case, following Halle and Vaux (1998) and McFadden (2004). They analyse nominative and accusative as being the *par excellence* structural cases that differ only in terms of the [±inferior] feature that is assigned to DPs due to the presence of a higher argument within the case domain. According to Spyropoulos and Kakarikos, the nominative is specified as [-inferior] whereas the accusative is specified as [+inferior]. In their analysis, syntax in Cappadocian provides the same terminal node for nominative and accusative; DOM is the effect of a rule that negatively specifies the [±inferior] feature in indefinite environments as in (i):

(i) [α inferior] → [-inferior] / [_, -definite].

The typologically deviant means employed for the expression of DOM in Cappadocian and Pharasiot can be accounted for by comparing the DOM pattern of the two AMGr dialects with that of Turkish. Particularly illuminating in that connection is the relation between the case form used for the head nouns of the unmarked class of NPs in DOM and that found in the head nouns of subject NPs in the three languages. In Cappadocian and Pharasiot, head nouns of indefinite NPs appear in a form that coincides with that in which head nouns of subject NPs appear: namely, the nominative. Compare the forms of the indefinite direct object NPs in (24a) and (25a) with those of the subject NPs in (24b) and (25b). The exact same relation holds in Turkish between the forms of head nouns in non-specific direct object NPs and subject NPs (26). Kornfilt (1997: 212-214) terms this the nominative/absolute case. Göksel and Kerslake (2005: 173-175), on the other hand, refrain from using the term nominative to refer to noun forms such as *anahtar* in (26) below, to which they simply refer as non-case-marked forms.

(24) Phloïtá Cappadocian (*ILNE/811*, 54, 58)

a. *γιολλάτσαν ένα άθρωπος να το τσ͡ιγιρτήʂ*
they.sent.out a man.NOM that him he.calls
'they sent out a man to call him'

b. *ετό άθρωπος δέ-ναι χαν τα άλλα τα αθρώπ*
this man.NOM not-he.is like the other the men
'this man is not like the other men'

(25) Pharasiot (Dawkins 1916: 508)

a. *ήρτεν σ' αν ντερβίσ̂ης ιράστα*
he.came to a dervish.NOM opposite
'he came across a dervish'

As the distinctive marker of the nominative case, final -ς is, in Spyropoulos and Kakarikos's analysis, specified as [-inferior] and is inserted in [-definite] environments where it is not normally expected to occur by virtue of the rule in (i).

b. *έφαεν ο ντερβίσης*
he.ate the.NOM dervish.NOM
'the dervish ate'

(26) Turkish

a. *Yasemin bir anahtar-Ø kaybetti.*
Yasemin a key-Ø she.lost
'Yasemin lost a key.'

b. *Anahtar-Ø paspas-ın alt-ın-da.*
key-Ø doormat-GEN space.beneath-3SG.POSS-LOC
'The key is under the doormat.'

This analysis lends substantial support to Dawkins's early hypothesis that DOM in Cappadocian and Pharasiot developed as a result of language contact with differential Turkish. Precisely because it developed in the model of the Turkish DOM pattern, Cappadocian and Pharasiot DOM contrasts starkly with the overwhelming majority of DOM patterns attested crosslinguistically.

This conclusion is also supported by the low probability that genetic inheritance caused the occurrence of DOM in the two AMGr dialects. As argued in Chapter 2, Cappadocian and Pharasiot do not exhibit a compelling number of shared grammatical innovations that would suggest a strong link of genetic relatedness between them. There is not enough evidence that the two dialects once formed an independent, linguistically uniform branch within the AMGr dialect group, and the occurrence of DOM in both of them should not be considered as pointing towards such a subgrouping. The identical Cappadocian and Pharasiot DOM patterns should rather be viewed as two instances of the same contact-induced development that lack historical value. This methodological stand is described by Dawkins in the following words:

> [the AMGr dialects] are very strongly under Turkish influence, and this cause may be supposed to produce everywhere the same effects. A Turkism common to two or more of the dialects has therefore no value as a mark of historical relationship (1916: 204).

Along the same lines, albeit in more modern terms, I argue that the similarity between Cappadocian and Pharasiot DOM does not trace its origin to a common development of the two dialects. In contrast, I view it as a case of areal convergence whereby Cappadocian and Pharasiot underwent the same grammatical innovation under the common influence of Turkish within a single linguistic micro-area, in which the three languages were contiguously spoken (in the sense of Heine and Kuteva 2005: 177-178; see also Aikhenvald 2007: 11-15; Aikhenvald & Dixon 2001: 2, 11-19; Campbell 2006; Matras 2009: 265-274; Stolz 2006; Thomason & Kaufman 1988: 95-97). Within this area, the two AMGr dialects extended the grammatical expression of definiteness from the syntactic domain and the article to the morphological domain and noun inflection on the model of the grammatical expression of specificity in Turkish. They thus acquired a novel common trait that they previously did not share and which differentiates them from the other AMGr dialects.

Heine and Kuteva (2005: 183) distinguish two possible pathways developments of this kind may follow: one of the two AMGr dialects develops DOM as a result of language contact with Turkish and subsequently serves as the model for the other AMGr dialect to undergo the same innovation; or, alternatively, both AMGr dialects develop DOM independently, but in similar fashions, owing to the same original object marking system and the same Turkish model. Like most instances of areal developments discussed by Heine and Kuteva (2005: 182-218), the available Cappadocian and Pharasiot data on DOM do not allow us to determine unambiguously which of the two pathways was followed in our case. In contrast to many cases of areal diffusion, however, we are in the position of being able to identify Turkish as the model language and the two AMGr dialects as the replica languages, in Heine and Kuteva's (2005) terminology.

3.3.3 Matching Modern Greek definiteness with Turkish specificity

3.3.3.1 Contact-induced innovation and change

Adopting one of the basic tenets in the study of language contact, I take speakers who are bi- or multilingual in two or more languages spoken in one geographical area at a certain point in time to be the agents of contact-induced language change (*inter alia* Drinka 2010; Field 2002; Hickey 2010; Matras 1998, 2000, 2007, 2009; Matras & Sakel

2007; Sakel & Matras 2008; Thomason 2001; Thomason & Kaufman 1988; van Coetsem 1988, 2000; Weinreich 1963; Winford 2005, 2010). Theories of language contact consider bilinguals to be able to draw upon the resources, structures and elements of the linguistic systems available to them with a relative degree of freedom. On this assumption, innovations occurring in the grammar of one of the bilinguals' languages are considered to be contact-induced when they are the result of a transfer of patterns, structures or rules from the grammatical system of another language available to the bilingual.

The motivations underlying this transfer remain a matter of debate in language contact literature. Field (2002), Matras (1998, 2000, 2007) and Matras and Sakel (2007) have argued that bilingual speakers resort to language mixing in an attempt to reduce the processing overload caused by the availaibility of two or more linguistic systems which can differ to varying degrees in aspects of their grammatical structure. To this end, they eliminate the linguistic elements that cause them cognitive inconvenience: those elements that make it hard for them to differentiate between systems. According to van Coetsem (2000), bilinguals adapt the grammatical structures of the language in which they are psychologically less dominant to corresponding structures of the language in which they are more dominant.

Matras (2009) maintains that, in their introduction of contact-induced innovations, bilinguals access their linguistic repertoire and select the grammatical structure of that language which in their view best expresses their intended communicative meaning (Language A). When using the language that lacks that particular structure and therefore does not express their intended meaning equally well (Language B), they apply the structure of A to the linguistic system of B in order to be more precise in their expression. In Matras's view, they do this irrespective of van Coetsem's notion of dominance. Within this context, contact-induced language change is understood as the diachronic result of such innovations that are successfully diffused within the bi- or multilingual speaker communities, which in their turn provide the necessary setting and circumstances for language contact to occur (Oksaar 1996).

3.3.3.2 Pattern replication in Cappadocian and Pharasiot

In the case of the development of DOM in Cappadocian and Pharasiot, I consider Cappadocian-Turkish and Pharasiot-Turkish bilinguals to have acted as the innovators of change by transferring the Turkish DOM pattern into their grammatical systems of Cappadocian and Pharasiot respectively. The actual form used to express DOM in Turkish—that is, the accusative ending *-(y)I*—was not borrowed. Rather, the originally non-DOM system of MGr was adapted to the model of Turkish DOM using available Greek material. This process is best described in terms of Matras's (2009) and Sakel's (2007) theoretical notion of grammatical pattern replication (see also Matras & Sakel 2007). Pattern replication involves the organisation, distribution and mapping of grammatical or semantic meaning of the model language—in our case Turkish—onto grammatical structure and material of the replica language—in our case Cappadocian and Pharasiot—without borrowing actual linguistic material from the model language.

In replicating DOM in Cappadocian and Pharasiot, bilinguals drew upon the grammatical resources of the two AMGr dialects in order to establish the formal means for the implementation of DOM and the referential property that would determine which NPs would be overtly marked and which would be left unmarked in contexts in which DOM is active. With respect to the former, Turkish case marking provided a suitable and easily adaptable model. The Turkish nominative and accusative cases were matched with the nominative and accusative cases of Cappadocian and Pharasiot since the corresponding cases express the same prototypical functions in the three languages. The nominative prototypically expresses the subject and the accusative prototypically expresses the direct object in both MGr and Turkish.

As far as the referential property determining DOM is concerned, the grammatically expressed notion of specificity in Turkish had to be matched with an analogous semantic notion that would also have to be grammatically expressed in Cappadocian and Pharasiot. That notion was definiteness. Turkish specificity was matched with MGr definiteness so that, for the purposes of DOM, definite NPs in Cappadocian and Pharasiot were taken to correspond to specific NPs in Turkish. Cappadocian and Pharasiot indefinite NPs were taken to correspond to Turkish non-specific NPs. As a result, the head nouns of NPs occurring in contexts that were originally marked across the board with the accusative retained their original case

marking only in definite NPs whereas the head nouns of indefinite NPs began to appear in the nominative case, wherever such a case form was inflectionally available.

The morphological correspondence between the nominative and accusative cases in the two AMGr dialects and Turkish can be considered to have been relatively straightforward. By contrast, the semantic correspondence between definite and indefinite NPs in Cappadocian and Pharasiot on the one hand and specific and non-specific NPs in Turkish on the other was only partial. The semantic interpretations of definiteness and specificity do not always coincide. In the traditional views discussed in §3.1.1, while definite NPs in principle do have specific referents, the referents of indefinite NPs may be interpreted as either specific or non-specific. Owing to this relation between the two notions, accusative marking in Turkish occurs with both definite NPs and indefinite NPs whose referents are specific; in Cappadocian and Pharasiot accusative marking occurs only with definite NPs. Accordingly, nominative marking in Turkish is limited to indefinite NPs with non-specific referents. In the two AMGr dialects it is found with all indefinite NPs, irrespective of whether they have a specific or a non-specific reading.

In effect, the difference between the specificity-based DOM pattern of Turkish and the definiteness-based DOM pattern of Cappadocian and Pharasiot manifests itself in the marking of indefinite NPs with specific referents. These are marked by the accusative in Turkish but with the nominative in the two AMGr dialects. Bear in mind, though, that this discrepancy concerns only NPs headed by animate nouns since, as we saw in §3.1.2, accusative marking is blocked in Turkish on indefinite NPs headed by inanimate nouns. This means that nominative case marking may be found with some NPs whose referents are specific and inanimate, a factor that surely facilitated the matching of definite and indefinite NPs in Cappadocian and Pharasiot with Turkish accusative and nominative case marked NPs respectively.

This process of grammatical pattern replication is summarised in Table 3.1 below:

Table 3.1. *The diachronic development of DOM in Cappadocian and Pharasiot by means of grammatical pattern replication.*

Stage I	Non-differential object marking: all direct object NPs are marked with the accusative, irrespective of definiteness, specificity or animacy.	
	μη φωνάζετε αυτόν τον άνθρωπο *έστειλαν έναν άνθρωπο να τον φωνάξει*	(all MGr varieties, Pontic, Rumeic, Silliot)
	σ' αυτόν τον τόπο *σ' έναν τόπο*	
Change 1	Replication of Turkish DOM: Turkish specificity is matched with MGr definiteness (Turkish specific and non-specific NPs with MGr definite and indefinite NPs). Turkish nominative and accusative case marking are matched with MGr nominative and accusative case marking in typically accusative-marked contexts.	
Stage II	Differential object marking: in typically accusative marked contexts, accusative marks definite NPs, nominative marks indefinite NPs	
	ετό το άθρωπο μη το λαλείτ *γιολλάτσαν ένα άθρωπος να το τῶιγιρτήȿ*	(Cappadocian, Pharasiot)
	σο φιλάν σον τόπο *σ' ένα μπατάχ τόπος*	

This analysis supports Dawkins's pretheoretical analysis of Cappadocian and Pharasiot DOM as being determined by definiteness, which was later adopted by Janse (2004), Spyropoulos and Kakarikos (2009), and Alexiadou and Kornfilt (2010). As Dawkins put it, "[in the inflection of *ος*-masculine nouns in Pharasiot] the acc. sg., as in Cappadocia, has its special ending [i.e., *-ο*] only after the definite article" (1916: 164). The analysis further casts doubt on S&T's proposal according to which DOM in Delmesó, Potámia and Axó Cappadocian is determined by specificity, as is the case in Turkish. S&T (2006: 374) claim that, in developing DOM in the model of Turkish,

Cappadocian encoded a novel semantic distinction between NPs with specific referents and NPs with non-specific referents as the semantic criterion determining the differential use of case in DOM contexts. S&T therefore differentiate between specific NPs whose head nouns are marked by the accusative and which can be definite or indefinite, and non-specific NPs whose head nouns are marked by the nominative and which can only be indefinite. This mirrors the way Turkish specific and non-specific NPs bear accusative and nominative marking respectively. The difference between the two languages is that, owing to the presence of the definite, indefinite, and zero articles, definiteness is expressed by more overt grammatical means in Cappadocian than in Turkish.

The results of both S&T's specificity-based and our definiteness-based analysis of Cappadocian and Pharasiot DOM coincide in the case of accusative definite NPs since they are generally thought to have specific readings. The differences between the two analyses become evident in accounting for case marking in indefinite NPs. In our analysis, indefiniteness triggers nominative case marking on the head nouns of all indefinite NPs irrespective of their specific or non-specific reading. In S&T's analysis, the head nouns of indefinite NPs are marked by the nominative only if the NPs are interpreted as non-specific. In contrast, accusative marking is found on the head nouns of indefinite NPs that have a specific reading.

Accounting first for nominative indefinite NPs, S&T claim that as in Turkish, "[in Cappadocian] nominative is used with indefinite non-specific NPs" (2006: 374). They therefore exclude the possibility of nominative marking on head nouns of indefinite NPs that have a specific reading since it is the "accusative case [that] is associated with specificity" (2006: 369). This, however, is not what we find in the Cappadocian texts. As shown by the examples in (27) below, nominative indefinite NPs can have a specific reading as evidenced by the variety of ways in which the referents of such NPs are referred back to in the text that follows them. These show that their referents are known to and unambiguously identifiable by the speaker. In other words, they are specific. For example, the same referent as that of the indefinite NP *ένα ισσάζ μύλος* in (27a) is repeated as the head noun of the definite NP *το μύλο*, which complements the preposition found in the clause directly following the indefinite direct object NP. In (27b, c), the third person pronouns *το* and *τ* corefer to the indefinite direct object NPs *ένα τôομπάνος* and *ένα άθρωπος* respectively.

Coreference by means of a pronoun would be impossible if the referents of the indefinite direct object NPs in (27) had a non-specific reading and therefore referred to arbitrary members of the class described by the NP that neither the speaker nor hearer could identify. Note also that Pharasiot presents the same case, as shown by the examples in (28).

(27) Cappadocian

a. *ηύρεν [ένα ισσάζ μύλος]$_i$· σέμεν*
he.found a deserted mill.NOM he.went.in
[εκεί στο μύλο]$_i$
that in.the mill.ACC
'he found a deserted mill; he went in that mill' (Axó, *KMS/M&K*, 196)

b. *βρίσκει [ένα τσομπάνος]$_i$ και λεγ το$_i$*
he.finds a shepherd.NOM and he.says him
'he finds a shepherd and says to him' (Araván, *KMS/P*, 174)

c. *είδαν [ένα άθρωπος]$_i$· σα πουδάρα-τ$_i$ έχισκεν...*
they.saw a man.NOM in.the feet-his he.had
'they saw a man; on his feet he had...' (Phloïtá, *ILNE/811*, 79)

(28) Pharasiot (Dawkins 1916: 538, 543-544, 564)

a. *α τζυνοάρ γκατιέσε [αν αγός]$_i$ (...) τάβρησε*
an eagle it.hunted a hare.NOM it.snatched
[τον αγό]$_i$
the.ACC hare.ACC
'an eagle hunted a hare (...) it snatched the hare'

b. *συ ες [α υγιός]$_i$· υρεύει τα$_i$ ο βασιλός*
you you.have a son.NOM he.looks.for him the king
'you have a son; the king wants him'

c. *συ εί̂δες [αν ύπνος]$_i$· εδώ πε με ντα$_i$*
you you.saw a dream.NOM here you.tell me it
'you saw a dream; come, tell it to me'

Turning now to accusative indefinite NPs, I mentioned in §3.2.1 that these are only marginally attested in the Cappadocian texts. This fact preliminarily suggests that definiteness and not specificity determines DOM. I also argued that the use of the accusative in such cases should either be interpreted as an instance of the competition between the inherited MGr accusative case marking system and the novel DOM system of Cappadocian, or be attributed to influence from non-differential MGr varieties. Making no mention of their rarity, S&T argue that such NPs are "always interpreted as specific" (2006: 396), as are accusative direct object NPs in Turkish. However, examination of the few attested cases shows that this is not the case. Accusative indefinite NPs in Cappadocian can be either specific or non-specific exactly like nominative indefinite NPs. Compare, for example, *έν' αδελφό* in (29a) with *ένα ελτῶ́ή* in (29b). The former has a specific reading, shown by the demonstrative pronoun *εκείνο* that corefers with the indefinite direct object NP. In contrast, the latter has a non-specific reading; the head noun of the indirect object NP is neither repeated as the head noun of another NP—for instance a subject NP—nor does any linguistic expression—such as a pronoun or a relative clause—refer to its referent in the text that follows. S&T's strong claim that "accusative is incompatible with non-specificity" (2006: 369) is therefore incorrect.

(29) Cappadocian

a. *έχω [έν' αδελφό]$_i$ κι εκείνο$_i$ εξ̂ τα* (specific)
I.have a brother.ACC and that he.has them
'I have a brother and he has them' (Potámia, *Dawkins*, 454)

b. *σάλσε Καστρού το πατιῶ́άχο ένα ελτῶ́ή* (non-specific)
he.sent capital the king a ambassador.ACC
'he sent an ambassador to the king of the capital' (Araván, *KMS/P&K*, 108)

3.3.4 Summary

In this section, I established language contact with Turkish as the origin of DOM in Cappadocian and Pharasiot based on (a) the synchronic typological improbability of the formal implementation of DOM in the two AMGr dialects, (b) its systematic similarity to Turkish DOM, (c) the sociolinguistic and historical circumstances of the three languages, and (d) the low probability that DOM in Cappadocian and Pharasiot is due to genetic inheritance. I argued that the development of DOM is a case of areal convergence brought about by Cappadocian-Turkish and Pharasiot-Turkish bilinguals who replicated Turkish DOM by adapting the MGr object marking system on its model. In so doing, they matched the Turkish nominative and accusative that Turkish uses to formally express DOM with the respective cases in Cappadocian and Pharasiot. They also crucially equated the referential property of specificity, which determines DOM in Turkish, with MGr definiteness, which came to determine DOM in the two AMGr dialects. This analysis lends substantial theoretical support to Dawkins's original pretheoretical description of DOM as being determined by definiteness. It also casts doubt on S&T's proposal that treats Cappadocian DOM as specificity-based, a claim which I showed to be disproven by the Cappadocian texts. In the next section, I look at the implications that these changes had for Cappadocian, focusing on how they relate to the other developments affecting the dialect's nominal morphology that were introduced in Chapter 1. I show for the first time that DOM, too, contributed to rendering Cappadocian nouns more neuter-like in terms of their morphosyntax. First, though, I put to the test two hypotheses that have been formulated in the literature regarding the reanalysis of final -ς as an indefiniteness marker and a consequent definiteness split in Cappadocian.

3.4 The implications of the development of differential object marking in Cappadocian

3.4.1 Two old hypotheses

Following the pretheoretical identification of the DOM pattern in Cappadocian, Dawkins (1916) suggested that this innovation triggered two further developments in the dialect involving final -ς, the marker of the distinction between accusative and nominative. He records "a rudimentary use of the [nominative] ending in -ς to mark

indefiniteness, positively by adding -ς to neuters and negatively by the disuse of -ς in the nom., when the definite article is used" (1916: 94). These two uses have recently been taken by Janse (2004) to constitute evidence for the reanalysis of -ς as an indefiniteness marker and, subsequently, for an emerging definiteness split in Cappadocian. In this proposed split, the differential distinction between accusative definite NPs and nominative indefinite NPs is extended from contexts that typically require a syntactic accusative case, such as the direct object position, to contexts that typically require a syntactic nominative case, most notably the subject position.

Examples supporting these two hypotheses are limited in number, a caveat pointed out by Dawkins concerning both the "positive" use of -ς as an indefiniteness marker with non-masculine nouns ("this is quite rare"; Dawkins 1916: 94) and its "negative" use, which gives rise to accusative case marking across the board for definite NPs irrespective of their syntactic function ("slight tendency"; Dawkins 1916: 94). In what follows, I test the validity of these two hypotheses and show them to be false.

3.4.1.1 The reanalysis of final -ς as an indefiniteness marker

Dawkins's (1916: 94) observation regarding the reanalysis of final -ς as an indefinieness marker is based on examples such as the ones in (30), in which the head nouns of indefinite NPs *χωριό*, an *o*-neuter noun, and *αϊνά*, a Turkish loanword, appear in the forms *χωριός* and *αϊνάς* respectively. According to this hypothesis, indefiniteness ends up being double marked by both the indefinite article and -ς.

(30) Delmesó Cappadocian (*Dawkins*, 316, 322)

a. *πήγεν σ' ένα μικρό χωριό-ς*
he.went to a small village-INDEF
'he went to a little village'

b. *εχ εν' αϊνά-ς*
it.has a mirror-INDEF
'there is a mirror'

Dawkins (1916: 94) admits that the number of examples that could potentially lend support to the reanalysis hypothesis is limited. In spite of this caveat, Janse (2004) adopts the hypothesis and goes on to put forward a stronger position. He considers the reanalysis of final -ς to be a "psychological reality" (2004: 14), further evidence for which can be found, in his view, in possessive NPs such as *βαῶιλιό-μας* in (31a), in which the genitive form of the personal pronoun expressing possession is suffixed to a nominative singular form of the *ος*-masculine noun *βαῶιλιός* that seems to be lacking the final –ς. Consider in comparison the form in (31b) in which *βαῶιλιός* is not followed by a pronoun:

(31) Phloïtá Cappadocian (*ILNE/811*, 79, 80)

a. *κρεβ σε (...) βαῶιλιό-μας να σε δικηθεί*
he.looks.for you king.NOM-our to you he.marries
'our king is looking for you to marry you'

b. *βαῶιλιός πάλε τσιγιρτά το παιδί*
king.NOM again he.calls the child
'the king calls for the child again'

Janse (2004: 15) argues that the final -ς of masculine nouns drops in possessive NPs due to a conflict between the apparent definiteness of such NPs and the indefiniteness expressed by the -ς marker. Lyons (1999: 22-26, 124-134) has shown, though, that possessives are not inherently definite and that in Greek the suffix-like forms of the personal pronouns expressing possession do not induce a definite reading. This is shown by examples such as (32), in which the pronoun *μας* cooccurs with the indefinite article in the subject NP. Notice that the cooccurrence of the two has no effect on the form of the head noun *χωριανός*.

(32) Phloïtá Cappadocian (*ILNE/811*, 38)

ένα χωριανός μας, Μαγγαντζής, πήγεν Τουρκού τα χωριά
a villager our Maggantzis he.went Turks' the villages
'a fellow villager, Maggantzis, went over to the Turkish villages'

Janse's proposal is further challenged by the numerous examples of nominative singular forms of masculine nouns that retain their final -ς when they occur as head nouns of definite subject NPs whose definite reading is induced by a variety of means. If -ς were indeed a marker of indefiniteness, it should not be found on subject nouns such as *βαῶιλιός* in (31b), which receives a definite reading in spite of the null realisation of the definite article; or, in *ετό άθρωπος* in (24b), repeated here as (33), in which the demonstrative pronoun unmistakably triggers a definite reading (Lyons: 1999: 17-21, 107-121).

(33) Phloïtá Cappadocian (*ILNE/811*, 58)

ετό	*άθρωπος*	*δέ-ναι*	*χαν*	*τα*	*άλλα*	*τα*	*αθρώπ*
this	man.NOM	not-he.is	like	the	other	the	men

'this man is not like the other men'

I therefore reject Dawkins's and Janse's hypothesis that -ς has been reanalysed as an indefiniteness marker in Cappadocian. The dropping of final -ς in possessive NPs such as *βαῶιλιό-μας* in (31a) is probably the result of phonological simplification of the [-ς + consonant] cluster that occurs from the suffixation of genitive forms of personal pronouns to nominative singular forms of masculine nouns (see also Spyropoulos & Tiliopoulou 2006: 371). This simplification must have first applied in singular forms of personal pronouns which, following the loss of word-final unstressed [u] due to high vowel deletion, were reduced to single consonants: *μου* > *μ*, *σου* > *ς*, *του* > *τ*. The suffixation of these monoconsonantal forms to nominative singular forms of masculine nouns ending in -ς resulted in disallowed word-final consonant clusters, a process illustrated in (34).

(34) Cappadocian

'my king'	*βαῶιλιός* + *μου*	> *βαῶιλιός* + *μ*	> *βαῶιλιόσ-μ*	> *βαῶιλιό-μ*
'your king'	*βαῶιλιός* + *σου*	> *βαῶιλιός* + *ς*	> *βαῶιλιόσ-ς*	> *βαῶιλιό-ς*
'his/her/its king'	*βαῶιλιός* + *του*	> *βαῶιλιός* + *τ*	> *βαῶιλιόσ-τ*	> *βαῶιλιό-τ*

Cluster simplification must then have applied to the third person plural form *τνε* also leading to an impossible consonant cluster. Ultimately simplification must have applied across the board to include the first and second plural forms *μας*, *σας*,

which would not otherwise create difficult or impossible clusters (cf. *χωριανός μας* in (32)). The same phenomenon is attested in Pontic but also in Cretan Greek that are non-differential with respect to object marking. Compare, for example, the Cappadocian forms in (34) with the suffixed forms of *φίλος* 'friend' *ο φίλο-μ* 'my friend' and *ο φίλο-ς* 'your friend' from Chaldía Pontic (Drettas 1997: 135), or with the Cretan Greek forms *ο γάιδαρό μας* 'our donkey' and *ο βοσκό μας* 'our shepherd' (Hatzidakis 1905: 184).[12]

Returning to the forms that first led Dawkins to the formulation of the reanalysis hypothesis, cases such as *χωριός* in (30a) might actually involve a shift from the *ο*-neuter to the *ος*-masculine inflectional class as in *χωριό* 'village.*ο*-neuter' > *χωριός* 'village.*ος*-masculine'. Similar shifts that appear to be based on the common accusative singular ending *-ο* can be found in other Cappadocian varieties, as well. For example, Axó Cappadocian *λείψαντος* 'relic.*ος*-masculine' < *λείψανο(ν)* 'relic.*ο*-neuter', *χυνιατός* 'censer.*ος*-masculine' < *θυμιατό(ν)* 'censer.*ο*-neuter' (Mavrochalyvidis & Kesisoglou 1960: 33; see also Kesisoglou 1951: 32 for Ulaghátsh Cappadocian, Costakis 1963: 33 for Anakú Cappadocian). Cases such as *αϊνάς* in (30b) appear to be morphological adaptations of Turkish loanwords to the *ας*-masculine inflectional class as in *ayna* 'mirror' > *αϊνάς* 'mirror.*ας*-masculine'. The *ας-*, *ης-*, *ες-*, *ους*-masculine class is the one to which Turkish loanwords ending in a stressed vowel are morphologically adapted in MGr (see Chapter 5 for details). *χωριός* and *αϊνάς* in (30) should therefore not be viewed as an *ο*-neuter and a Turkish loanword to which the indefiniteness marker *-ς* is attached, but rather as an *ος*-masculine and an *ας*-masculine noun respectively that are marked by the nominative in their respective indefinite NPs due to DOM.

3.4.1.2 Definiteness split

In connection with the reanalysis hypothesis, Dawkins (1916) notes, again on the basis of a very limited number of examples, "a slight tendency to use the acc. form (in *-ο*) always after the [definite] article, whether the case be nom. or acc (...) that only applies to inanimates" (1916: 94). Janse (2004: 5) considers this to be indicative of an

[12] Dawkins (1940) takes a different stand regarding the deletion of *-ς* in the Cretan examples. He considers it to be an instance of dissimilation whereby an [s] drops in the environment of another neighbouring [s], "a not uncommon happening in Greek" (1940: 32).

emerging definiteness split, whereby the nominative marks the head nouns of all definite NPs and the accusative marks those of all indefinite NPs. This occurs irrespective of whether the NPs are found in accusative contexts, such as the direct object position, or in nominative contexts, such as the subject position. The effects of this apparent definiteness split become essentially manifest only in the latter contexts as DOM controls case alternations in the former.

According to Janse, the split is particularly evident in the Cappadocian varieties of Sílata, Anakú, Phloïtá and Malakopí, though examples seemingly supporting the definiteness split hypothesis can be found in other Cappadocian varieties and for nouns of other semantic types, as well. Consider, for example, the forms *μύλου*, *κάμο* and *κοϊκονό* in (35) below that lack the final -ς of the nominative singular, despite occurring in the subject NPs of their respective clauses:

(35) Cappadocian

a. *ντου μύλου (...) τσῦν γυο τρία σαάτια μακρά*
the mill.ACC it.lay two three hours away
'the mill lay two-three hours away' (Mistí, *ILNE/755*, 82)

b. *φον γενεί το κάμο*
when it.happens the wedding.ACC
'when the wedding happens' (Phloïtá, *ILNE/812*, 96)

c. *ξέβαλεν το κοϊκονό το λύκο*
it.set.down the cockerel.ACC the wolf
'the cockerel set down the wolf' (Axó, *Dawkins*, 402)

Dawkins (1916: 94) notes that this split only applies to inanimate nouns and accounts for its restriction to this semantic type by evoking the null realisation of the definite article, which is found predominantly with non-human and animal nouns. Null realisation, according to Dawkins, explains why human and animal nouns retain their -ς in subject NPs as in (31b) and do not lose it as the nouns in (35) above. This explanation, however, fails to account for examples such as the ones in (36), in which inanimate nouns preceded by an overt definite article appear in their nominative

form, as expected. It also fails to account for cases such as (37), in which a human noun preceded by a null definite article occurs without the final -ς.

(36) Cappadocian

a. *τι έχ το τôεχμετζ̂ές μέôη-τ;*
what it.has the box.NOM inside-its
'what is inside the box?' (Phloïtá, *Dawkins*, 428)

b. *το μύλος άπανσə στάρη*
the mill.NOM suddenly it.stopped
'the mill suddenly stopped' (Araván, *KMS/P*, 164)

(37) Phloïtá Cappadocian (*ILNE/812*, 102)
και νυφ τρώισκεν και καμπρό τρώισκεν
and bride she.ate and groom.ACC he.ate
'both the bride and groom ate' (Phloïtá, *ILNE/812*, 102)

The definiteness split hypothesis also falls short of explaining cases such as (38) in which *κοϊκονό* and *άτρωπο* appear in the accusative form despite their appearance in indefinite subject NPs.

(38) Cappadocian

a. *κείτον ένα κοϊκονό*
it.lay a cockerel.ACC
'there lay a cockerel' (Axó, *Dawkins*, 400)

b. *ήρτε ένα άτρωπο*
he.came a man.ACC
'a man came' (Ferték, *Dawkins*, 330)

The examples in (37) and (38) refute Dawkins's and Janse's definiteness split hypothesis. The use or lack of final -ς in the singular of masculine nouns does not appear to be conditioned by the definiteness of the NPs in which the nouns are found.

Some of the examples in which subject nouns appear in the accusative form involve unaccusative verbs such as *τῶείμι*, *κείμαι* 'to lay' in (35a), (38a), *νίῶκομαι* 'to become' in (35b) or *έρχουμαι* 'to come' in (38b). The accusative of these verbs' subjects could therefore be explained in terms of Perlmutter's (1978) and Burzio's (1981) Unaccusativity Hypothesis, which states that the subjects of unaccusative verbs originate as initial direct objects, which in MGr are prototypically marked by the accusative. Bear in mind, however, that the number of relevant examples occurring in the Cappadocian texts is limited and does not allow for any robust generalisations. Note, also, that, even in the few available examples, unaccusativity does not always trigger accusative marking in subject NPs as in (36b).

What is more, accusative marking appears both with accusative verbs such as *βγάλω* 'to take out' in (35c) and with unergative ones such as 'to eat' in (37). In accounting for the apparent accusative in *κοϊκονό* and *καμπρό*, I propose that it should most probably be attributed to the effect of alliterative concord: the tendency to use the same gender agreement marker for different agreement targets and controllers (Corbett 1991: 117-119, 2006: 87-90). Recall that, following the loss of gender distinctions in Cappadocian, all agreement targets surface in their originally neuter forms, which in most cases end in *-ο*. Take, for example, Axó Cappadocian *το καλό άρχωπος* 'the good man' (Mavrochalyvidis & Kesisoglou 1960: 43). Both agreement targets *το* and *καλό* bear the same agreement marker *-ο*, while the agreement controller *άρχωπος* is marked by *-ος*. The effect of alliterative concord would, therefore, be an identical agreement marker of targets and controller, thus giving rise to forms such as (*το καλό*) *κοϊκονό* and (*το καλό*) *καμπρό*.

In refuting Dawkins's and Janse's hypothesis, the analysis presented here also disputes the connection postulated by Dawkins (1916: 14; 1937: 31) between the apparent definiteness split in Cappadocian and a phenomenon reminiscent of differential subject marking (henceforth DSM) found in Pontic. In Pontic, masculine head nouns of subject NPs are marked by the accusative case when preceded by an overtly realised definite article (39a) and by the nominative case when preceded either by a definite article that is realised as null (39b) or by the indefinite article (39c) (Koutita-Kaimaki 1977/1978). It therefore appears that definiteness, or rather its overt realisation, determines the case marking of nouns found in subject position in Pontic

in the same way that it determines the case marking of nouns found in the object position in Cappadocian.[13]

(39) Pontic (Koutita-Kaimaki 1977/1978: 279, 285, 289)

a. *κι ο άγγελον είπεν ατόν*
and the angel.ACC he.said him
'and the angel said to him' (Chaldía)

b. *και είπε ιμάμ(η)ς*
and he.said imam.NOM
'and the imam said' (Soúrmena)

c. *έρται ένας άγγελος εκεί*
he.comes a angel.NOM there
'an angel comes there' (Chaldía)

[13] What determines differential case marking in Pontic, as illustrated by the examples in (39), remains a matter of debate in the literature. Hatzidakis (1934 [1911/1912]:276), Tompaidis (1980: 224, 1988: 45-46) and Oeconomides (1958: 145) have claimed that it is determined by the overt *versus* null realisation of the definite article so that masculine head nouns of subject NPs appear in the accusative case when preceded by an overtly realised definite article and in the nominative elsewhere. Consider, however, the following counterexamples:

(ii) Pontic (Koutita-Kaimaki 1977/1978: 282, 283)

a. *επρόφτασεν εκαικά άγγελον και είπεν ατόν*
he.caught.up there angel.ACC and he.said him
'the angel caught up to him and said to him' (Chaldía)

b. *την πόρτα εκλείδωσε ο ιμάμ(η)ς*
the door he.locked the imam.NOM
'the imam locked the door' (Soúrmena)

Papadopoulos (1955: 30) has claimed that differential case marking is determined by the syntactic function of the NPs in which masculine nouns are found. In his view, head nouns of NPs are marked by the accusative when found in the subject position, whereas they are marked by the nominative when found in the predicate position. The Pontic evidence in (ii), however, challenges this account. More recently, Revithiadou and Spyropoulos (2009: 52-53, 60-61) have questioned the analysis of the Pontic phenomenon as a case of DSM, mainly on the grounds that it is limited to masculine nouns and does not apply to other groups of nouns that retain the morphological distinction between nominative and accusative in the singular such as feminine nouns. Without providing a conclusive answer to the question of what determines the distribution of case marking in Pontic subject NPs, Revithiadou and Spyropoulos suggest that perhaps we are dealing with a case of a morphologically restricted, definiteness-based syncretism of nominative and accusative. For a rather different approach, see Drettas (1999).

Dawkins (1916: 94) draws a parallel between Pontic examples such as (39a) and Cappadocian examples such as (35), in which the masculine head nouns of definite subject NPs (*άγγελον*; *μύλου*, *κάμο*, *κοϊκονό*) are supposedly marked by the accusative case. He argues that such examples are reflexes of an early innovative association between case and the expression of definiteness that emerged before Pontic and Cappadocian evolved into different dialects. This association ultimately led to the split between accusative marked definite NPs and nominative marked indefinite NPs. Interestingly, this split is supposed to have developed differently in the two dialects so that in Pontic it is found in nominative contexts—hence the DSM pattern—whereas in Cappadocian it concerns accusative contexts, hence the observed DOM pattern.

In order for a common origin for Pontic DSM and Cappadocian DOM to be postulated from a historical point of view, both modern dialects would have to share a (quasi-)identical or at least similar pattern of differential case marking—or reflexes of it—that could be unambiguously identified as such either in accusative or nominative contexts, or in both. However, none of these possibilities is consistent with the available data. On the one hand, a DOM pattern similar to that of Cappadocian cannot be established for Pontic, which is non-differential with respect to typically accusative-marked contexts. Like the overwhelming majority of MGr varieties, Pontic uniformly marks the head nouns of NPs in such contexts with the accusative (Drettas 1997: 273; Papadopoulos 1955: 159-160). On the other hand, I showed above that the few examples adduced as evidence for a DSM pattern in Cappadocian may be explained in terms of the Unaccusative Hypothesis or alliterative concord. Overwhelmingly, the head nouns of NPs found in nominative contexts are accordingly marked by a morphological nominative in Cappadocian, which is therefore not a DSM language. In short, there is no evidence to suggest that Cappadocian exhibits a case marking pattern similar to that of Pontic, the exact nature of which remains to be defined. In conclusion, there appears to be no connection between Cappadocian DOM and Pontic DSM, which I treat as two independently-motivated and unrelated developments.

3.4.2 A new connection

3.4.2.1 The introduction of neuter-like case syncretism in masculine nouns

In focusing on the reanalysis and definiteness split hypotheses, previous research has overlooked a crucial connection between DOM and other developments affecting the inflection of nouns in Cappadocian, especially with respect to the syncretism of nominative and accusative. This relation has only been hinted at by Janse (2004: 6) but has not been elaborated in detail before. In this section, I show for the first time how DOM helped render masculine nouns in Cappadocian more neuter-like in terms of their morphology.

In all MGr dialects and varieties, the expression of nominative and accusative by a single inflected form serves as a defining criterion for the organisation of nouns into inflectional classes. As already mentioned, in the majority of Cappadocian varieties, the masculine inflectional classes are the only ones that retain a morphological distinction between the two cases in the singular. In all other classes, nominative and accusative are always syncretic. Accordingly, the subject and direct object functions are expressed by two distinct inflected forms in the case of masculine nouns, and by a single, syncretic form in all other nouns. Consider, for example, the partial inflectional paradigms from Anakú Cappadocian in (40):

(40) Anakú Cappadocian (Costakis 1963: 38)

	a. *ος*-masculine	b. *ας-*, *ης*-masculine
	‘man’	‘priest’
SINGULAR		
NOM	*άθρωπο-ς*	*παπά-ς*
ACC	*άθρωπο-Ø*	*παπά-Ø*
PLURAL		
NOM/ACC	*αθρώπ(-οι)*	*παπάδ-ες*

	c. *α*-, *η*-feminine ‘sister’	d. *ο*-neuter ‘village’	e. *ι*-neuter ‘child’	f. *μα*-, *ας*-, *ας*-neuter ‘milk’
SINGULAR				
NOM/ACC	*αδελφή-Ø*	*χωρι-ό*	*παιδί-Ø*	*γάλα-Ø*
PLURAL				
NOM/ACC	*αδελφ-έ(ς)*	*χωρι-ά*	*παιδι-ά*	*γάλατ-α*

To illustrate nominative/accusative syncretism in action, compare the morphological distinction between the nominative form of the *ης*-masculine noun *ντεϊρμεντζ̂ής* and its accusative form *ντεϊρμεντζ̂ή*, corresponding to the head noun of the subject NP and that of the definite direct object NP in (41a). By contrast, in (41b) and (41c), the syncretic nominative/accusative form of the *α*-feminine *ναίκα* and that of the *ι*-neuter *φιδ* occur as the head nouns of both the subject and the direct object NPs in (41b) and (41c). Note that in the latter cases, definiteness does not affect the form of the head noun.

(41) Potámia Cappadocian (*Dawkins*, 454, 458, 460)

a. *ήρτεν* *ντεϊρμεντζ̂ής* (...) *λάχσεν* *το* *ντεϊρμεντζ̂ή*
he.came miller.NOM she.pushed the miller.ACC
ασ’ *άλογο*
from.the horse
‘the miller came (...) she pushed the miller off the horse’

b. *εκείνο* *τη* *ναίκα* *φερέτ* *το* *εδώ* (...)
that the woman.ACC you.bring her here
και *ναίκα* *είπεν*
and woman.NOM she.said
‘bring that woman over here (...) and the woman said’

c. *σκοτώνουν ένα φιδ (...)*
they.kill a snake.ACC

και το φιδ είπεν
and the snake.NOM it.said
'they are killing a snake (...) and the snake said'

In the context of indefinite direct object NPs, however, DOM in Cappadocian requires that the direct object function be expressed not by the accusative, but by the nominative case. As a consequence, in the masculine inflectional classes, the inflected form that was at first typically used to express solely the subject acquires an additional function, that of the direct object. The nominative form of the *ος*-masculine noun *άθρωπος* expresses both the subject function in (42a) and, crucially, the object function in (42b).

(42) Sílata Cappadocian (*Dawkins*, 448)

a. *ένα άθρωπος ήφερεν με*
a man.NOM he.brought me
'a man brought me'

b. *κότôα ένα άθρωπος έραψα το*
lately a man.NOM I.sewed him
'lately I sewed up a man'

As I have shown, this is due to the replication of the relation that holds in Turkish between the case used to mark the head nouns of non-specific direct object NPs and that used for the head nouns of subject NPs. In Turkish, this relation bears no particular grammatical implications for the morphosyntax of nouns and is only relevant to the purposes of DOM. In Cappadocian, on the other hand, it is meaningful. Apart from serving as a criterion for inflectional class organisation, its morphological expression in terms of nominative/accusative syncretism is prototypically correlated with the semantic types occupying the lower end of the Animacy Hierarchy (4), especially inanimate entities. This semantic link is explainable from a typological standpoint. Based on cross-linguistic evidence, Baerman *et al.* (2005: 47) identify a

positive correlation between animacy and the distinction between nominative and accusative, with arguments of lower animacy being less likely to have distinct forms for the expression of the two core syntactic functions (see also Baerman & Brown 2008). The positive correlation between low animacy and nominative/accusative syncretism finds its fully grammaticalised expression, according to Baerman *et al.* (2005: 47), in the inflection of neuter nouns in the Indo-European languages, Greek being a representative example. As we will see in Chapters 4 and 5, nouns belonging to the highly homogeneous neuter inflectional classes in all MGr dialects and varieties prototypically denote inanimate entities and, in confirmation of Baerman *et al.*'s typological correlation, always express the two cases with a single, syncretic inflected form.

Establishing this, it becomes clear that in creating a novel grammatical condition requiring the application of nominative/accusative syncretism to the masculine inflectional classes that did not previously exhibit such a neuter-like inflectional pattern, DOM allowed for the morphological association of masculine nouns with the neuter inflectional classes. This association in turn formed one of the conditions for developments that will prove to be crucial for the inflection of nouns in the dialect. In §3.4.2.2 below, I finally show what this condition was.

3.4.2.2 DOM and noun inflection

In §3.2.1, we saw that the second category of deviant cases in which Cappadocian DOM does not appear to work in the expected manner includes definite NPs whose masculine head nouns are marked by the nominative and not by the accusative case, as DOM would require. Recall the examples in (19), repeated here as (43).

(43) Cappadocian

a. *qαρôουλάτôε* *το* *κλέφτôης*
he.met the robber.NOM
'he met the robber' (Ghúrzono, *Dawkins*, 344)

b. *να* *παν* *σου* *μύλους*
that they.go to.the mill.NOM
'that they go to the mill' (Mistí, *ILNE/755*, 82)

In light of the discussion in §3.4.2.1, the unexpected use of the nominative in such deviant occurrences can be considered to evidence an extension of the nominative/accusative syncretism pattern that DOM introduced for masculine nouns from indefinite to definite NPs. As a result of this extension, masculine nouns gradually lose the morphological distinction between nominative and accusative, as the former begins to generalise and be used universally in both nominative and accusative contexts.

The extension was surely facilitated by the systemic pressures favouring the generalisation of nominative/accusative syncretism within the noun inflection system in Cappadocian (Janse 2004: 6; cf. also Mavrochalyvidis & Kesisoglou's early account of Cappadocian DOM, §3.3.1). These are clearly illustrated by the variety of Anakú in (40). Interestingly, however, the attested examples in which the head nouns of definite NPs are marked by the nominative in typically accusative DOM contexts seem to suggest that, at its outset, the extension of nominative/accusative syncretism to contexts beyond those determined by DOM initially concerned inanimate nouns. In Delmesó Cappadocian, nominative marking in definite NPs is found only with inanimate nouns such as *μύλος* 'mill' and *κόσμος* 'world' (44a, b). Nominative marking is not attested with human nouns in this variety. Note, however, that in other cases of definite NPs, *κόσμος* is marked with the accusative, as would be expected (44c).

(44) Delmesó Cappadocian (*Dawkins*, 308, 322, 324)

a. *ηύρεν* *το* *μύλος*
he.found the mill.NOM
'he found the mill'

b. *τον* *κόσμος* *δείχνει* *σε* *το*
the world.NOM it.shows you it
'it shows you the world'

c. *σον* *κόσμο* *επάνω*
to.the world.ACC on
'all over the world'

The limitation of this first extension of nominative/accusative syncretism to inanimate nouns, as evidenced by the Delmesó Cappadocian cases, can only be explained on account of the semantic content of the syncretism and its prototypical association with the lower end of the Animacy Hierarchy. Human and animal masculine nouns preserve the expression of the two cases by distinct forms, whereas inanimate nouns tend to employ only a single, syncretic form for the expression of both the subject and the direct object functions. It is exactly through this use of a single nominative/accusative form that the corollaries of the introduction of DOM in Cappadocian become evidently relevant to developments affecting noun inflecion in the dialect, especially to the emergence of 'agglutinative' inflectional patterns.

'Agglutinative' inflection is dealt with in detail in Chapter 5. Suffice it to say at this point that, in my analysis, 'agglutinative' patterns are best accounted for as inflectional class shifts of masses of nouns to the *ι*-neuter inflectional class. In the case of masculine nouns, this shift involved, among other processes of morphological adaptation, moving from a class in which nominative and accusative are expressed by two distinct forms to a class that uses only one syncretic form to express both of them. As I will show in Chapter 5, inanimate masculine nouns were the first to shift to the *ι*-neuter class, and the use of a single, nominative-like form to mark such nouns in both definite and indefinite direct object NPs in examples such as (45), provided exactly the inflected form needed for the inflectional class shift.

(45) Delmesó Cappadocian (*Dawkins*, 308)

a. *ηύρεν* *το* *μύλος*
he.found the mill.NOM
'he found the mill'

b. *νά* *'βρεις* *ένα* *μύλος*
will you.find a mill.NOM
'you will find a mill'

The process I postulate is illustrated in Table 3.2.

Table 3.2. *The development of nominative/accusative syncretism in inanimate masculine nouns as a result of DOM in Cappadocian and its consequences.*

Stage I	DOM applies for all masculine head nouns of NPs, irrespective of their semantics. Nominative marks NPs only in indefinite contexts. Syncretism surfaces only between nominative and indefinite accusative. SINGULAR NOM *μύλο-ς* ACC DEF *μύλο-Ø* INDEF *μύλο-ς*
Change 1	The nominative extends its use to all accusative contexts in the case of inanimate masculine nouns.
Stage II	Nominative/accusative syncretism surfaces across the board for inanimate masculine nouns. SINGULAR NOM/ACC *μύλο-ς*
Change 2	The syncretic nominative/accusative form facilitates the shift of inanimate masculine nouns to the *ι*-neuter inflectional class.
Stage III	As *ι*-neuter nouns, former inanimate masculine nouns have a single, syncretic form that expresses both nominative and accusative. SINGULAR NOM/ACC *μύλος-Ø*

The originally *ος*-masculine *χορός* in Phloïtá Cappadocian can be shown to have undergone this series of stages to the end. In (46), the single form *χορός* is used in both nominative- (46a) and accusative-marked contexts, both definite and indefinite

(46b-c), whereas in (46d) the *ι*-neuter plural form *χορόσια* leaves no doubt that the noun is no longer an *ος*-masculine but an *ι*-neuter.

(46) Phloïtá Cappadocian

a. *χορός* *με* *τα* *χουλιέρα*
dance.NOM/ACC with the spoons
'the spoon dance' (*ILNE/811*, 49)

b. *πιάνισκαν* *ένα* *χορός*
they.caught a dance.NOM/ACC
'they would start to dance' (*ILNE/812*, 15)

c. *πιάσνε* *το* *χορός*
they.caught the dance.NOM/ACC
'they started to dance' (*ILNE/811*, 50)

d. *τα* *χορόσια* *κολούν* *τρία* *μέρες*
the dances.NOM/ACC they.last three days
'the dances last for three days' (*ILNE/811*, 50)

That the introduction of DOM (Stage I) and the extension of nominative marking to definite NPs that ultimately led to universal nominative/accusative syncretism in inanimate masculine nouns (Stage II) predate the inflectional class shifts (Stage III) is evidenced by the fact that the former two developments are both attested in Cappadocian varieties that have not yet undergone the latter development. Delmesó Cappadocian, from which I have drawn most of the examples in this section, is one of them. The data from Delmesó and Potámia Cappadocian also show that DOM developed before the complete loss of gender, as well. Consider, for example, the use of the masculine and feminine definite articles *τον* and *την* in the phrases *εκείνο τη ναίκα* and *τον κόσμος*, *σον κόσμο* in the examples from Potámia and Delmesó Cappadocian in (41b) and (44b, c).

The interplay between the development of DOM, nominative/accusative syncretism and inflectional class shifts that I have illustrated with repect to inanimate

masculine nouns paved the way for the extension of nominative/accusative syncretism and inflectional class shifts for animal and human nouns, which, as we will see in Chapter 5, are attested only for some Cappadocian varieties. As will be argued in that chapter, evidence suggests that in their shift from the *ος*-masculine to the *ι*-neuter inflectional class, animate nouns followed the same path as inanimate nouns, a path which can be thought to have been parallel to that proposed in Table 3.2. This path was triggered by the extension of nominative marking to definite NPs and the subsequent extension of neuter-like nominative/accusative syncretism across the board.

In support of this hypothesis, consider the following examples from Araván Cappadocian in which nominative and accusative are found side by side in the marking of *πατιῶάχος* in both a definite and an indefinite direct object NP (47a-b). Note that the noun in question has not yet shifted to the *ι*-neuter inflectional class, as shown by its heteroclitic genitive singular form *πατιῶαχιού* in (47c); had the noun shifted, its genitive form would have been *πατιῶάχοσιου*. This situation is analogous to what we find with inanimate nouns in Delmesó Cappadocian above (44)-(45), whereby *κόσμος* and *μύλος* show signs of the generalisation of nominative/accusative syncretism but have not yet shifted to the *ι*-neuter inflectional class.

(47) Araván Cappadocian (*KMS/P*, 162, 164)

a. *να ήτουν γəσμές να παίρνιῶκα το πατιῶάχο*
that it.was fate that I.took the king.ACC
'I wish I married the king'

b. *ας παίρνιῶκα κι εγώ το πατιῶάχος*
let I.took and I the king.NOM
'if I were to marry the king'

c. *ετό να ενεί πατιῶαχιού ναίκα*
this will she.becomes king's wife
'she will become a king's wife'

This analysis therefore accounts for the first time for the second category of deviant cases in which DOM does not appear to apply in the way expected in the Cappadocian texts, in which head nouns of definite NPs are marked by the nominative in accusative-marked DOM environments. More importantly, though, it shows how the development of DOM in Cappadocian relates as a contributing factor to the changes that ultimately brought about one of the most distinctive developments that affected the noun inflectional system of the dialect.

3.4.3 Summary

In this final section, I discussed the implications of the introduction of DOM in Cappadocian on the dialect's grammatical structure. I first looked at the two implications of DOM that have been previously hypothesised in the literature: the reanalysis of final -ς as an indefiniteness marker and a consequent definiteness split. I showed both to be unsubstantiated and based on a limited set of examples that are better interpreted as inflectional class shifts, unaccusativity effects, and alliterative concord effects. I then went on to elaborate on a major ramification of the development of DOM in Cappadocian that has gone largely unnoticed in the literature by drawing attention to the connection between DOM and developments affecting the inflection of nouns. I highlighted nominative/accusative syncretism, a pattern semantically correlated with the neuter inflectional classes. In allowing for the use of the nominative to express the direct object function in indefinite NPs, DOM created in Cappadocian a novel instance for the syncretism of nominative and accusative in masculine nouns that were not previously characterised by this property of formal, neuter-like identity. In this way, on account of DOM, masculine nouns became morphologically associated with the neuter gender and inflectional classes; they also acquired a syncretic nominative/accusative form that was later employed in the shift of many of them to the *ι*-neuter inflectional class, which I analyse in detail in Chapter 5. This account therefore shows for the first time that DOM was one of the factors that helped render non-neuter nouns in Cappadocian more neuter-like in terms of their morphosyntax.

3.5 Conclusions

In this chapter, I have provided a synchronic analysis of Cappadocian and Pharasiot DOM as well as a diachronic account of its development in the two AMGr dialects.

My synchronic analysis showed Cappadocian and Pharasiot DOM to be determined by definiteness, thus supporting Dawkins's (1916) and Janse's (2004) preliminary accounts but also rejecting Spyropoulos and Tiliopoulou's (2006) recent proposal, according to which DOM in Cappadocian is determined by the referential property of specificity. The analysis also showed the formal implementation of Cappadocian and Pharasiot DOM to be improbable from a typological point of view. I argued this to be evidenced by the occurrence of final -ς, an overt marker that alternates with zero in expressing the morphological distinction between nominative and accusative DOM employs. In the two AMGr dialects, -ς is found not on the head nouns of definite NPs—the marked class of objects—but on those of indefinite NPs, that is, the unmarked class of objects.

My diachronic analysis drew on these findings. Considering in combination the typological improbability of the Cappadocian and Pharasiot DOM pattern, the weak genetic link between the two AMGr dialects that excludes the possibility of its being an innovation shared by both of them on account of descent, and its similarity to Turkish DOM, I refined the preliminary hypotheses regarding the origin of DOM in Cappadocian and Pharasiot. I supported the idea that it developed as a result of language contact with Turkish within a single linguistic micro-area in which all three languages were contiguously spoken. Drawing on research on contact-induced language change, I identified Cappadocian-Turkish and Pharasiot-Turkish bilingual children as the agents who introduced DOM in their Cappadocian and Pharasiot grammatical systems, adapting the originally non-differential object marking system of MGr into a differential one by replicating the Turkish model. With respect to Cappadocian, this innovation crucially predates the completion of developments in noun inflection that I examine in the following chapters. In that connection, I demonstrated for the first time that the development of DOM contributed to the emergence of 'agglutinative' inflectional patterns in masculine nouns which I view in this study as cases of inflectional class shift to the ι-neuter inflectional class. It did this by creating a set of novel grammatical conditions for the emergence of nominative/

accusative syncretism, a pattern semantically associated with inanimate nouns, which are, in their turn, prototypical members of the neuter inflectional classes.

4

The loss of grammatical gender

4.0 Introduction

As introduced in Chapter 1, the Greek distinction between masculine, feminine, and neuter nouns has been lost in Cappadocian. All nouns in the dialect behave as neuters in that the elements that agree with them appear in what is the neuter form in other MGr dialects. In this chapter, I provide an account of the historical origin and subsequent diachronic developments that led to the collapse of the original tripartite gender distinction in Cappadocian drawing on data from other AMGr dialects that exhibit notable and, in my analysis, related innovations in gender as well as on the findings of typological work on the development of gender systems crosslinguistically. Challenging the dominant view in the literature, I argue that the loss of gender in Cappadocian came about language-internally and was not caused by language contact with Turkish, as is most commonly assumed. I analyse the loss of gender as a second level development that followed an earlier innovation, that of semantic agreement, whereby inanimate masculine and feminine nouns began triggering agreement in the neuter gender on elements agreeing with them. Based on evidence from Medieval Pontic and the occurrence of reflexes of semantic agreement in all core AMGr dialects (Cappadocian, Pharasiot, Pontic, Rumeic), I propose that the origins of this innovative agreement pattern must be sought in the common linguistic

ancestor of the modern dialects that was discussed in Chapter 2. I further suggest that the progressive extension of semantic agreement in the neuter with respect to agreement targets, agreement domains and, crucially, with respect to semantic noun types that trigger it ultimately led to the generalisation of neuter agreement in Cappadocian across the board. Finally, I identify the strong correlation between gender and inflectional class membership in MGr as the key factor that facilitated this generalisation.

The theoretical framework for the study of gender is introduced in §4.1 that also presents the tripartite gender system of MGr and the lack of gender distinctions in Turkish. In §4.2 I provide the data on gender and gender agreement in Cappadocian and the other core AMGr dialects. In §4.3 I review previous proposals that have been brought forth to explain the Cappadocian and Pontic phenomena. My diachronic analysis is given in §4.4. §4.5 concludes this chapter with a summary of the main findings.

4.1 Gender in Modern Greek and Turkish

4.1.1 The typology of gender

4.1.1.1 Defining gender: agreement controllers, targets and domains

In Hockett's oft-cited words, "genders are classes of nouns reflected in the behavior of associated words" (1958: 231). This definition captures succinctly both the double nature of gender and the unanimously accepted criterion for identifying it. That is, while gender is generally thought of as a noun categorisation device (Aikhenvald 2003, 2004), it is realised by means of agreement between a head noun and some modifier that exhibits formal variability in terms of gender. Agreement is therefore the only unambiguous indicator for the existence of gender as a grammatical feature in a language (Aikhenvald 2003: 28; Aronoff 1994: 66; Corbett 1991: 4; Curzan 2003: 13; Unterbeck 2000: xv). Steele defines agreement as "the systematic and predictable covariance between a semantic or a formal property of one grammatical form and a formal property of another" (1978: 610).

The following example from MGr illustrates the point. In (1), the forms of the definite article and that of the modifying adjective vary (*ο/η/το* and

άσπρος/άσπρη/άσπρο 'white') when they combine with nouns that belong to different genders such as *τοίχος* 'wall.M', *πετσέτα* 'house.F' and *σπίτι* 'house.N'. MGr nouns are thus considered to display a three-fold gender distinction of masculine, feminine and neuter:

(1) MGr

a. *ο άσπρος τοίχος* 'the.M white.M wall.M'

b. *η άσπρη πετσέτα* 'the.F white.F towel.F'

c. *το άσπρο σπίτι* 'the.N white.N house.N'

Following Corbett's terminology (2006: 4-5), the nouns *τοίχος*, *πετσέτα* and *σπίτι* act as the agreement controllers in that they determine the form of the other linguistic elements (in this case, the definite article and the adjective), which constitute the agreement targets. The NPs in which agreement occurs form the agreement domain, the syntactic environment within the boundaries of which agreement is operative. Gender agreement in MGr extends even further, beyond the NP. It is also found in the predicate as in (2a), where the predicative *άσπρος* agrees in gender with its subject *τοίχος*; and in pronominal anaphora as in (2b), where the third person pronoun *τον* 'him' agrees in gender with its antecedent.[14]

(2) MGr

a. *Ο τοίχος είναι άσπρος.*
the.M wall.M is white.M
'The wall is white.'

b. *[Ο τοίχος]$_i$ είναι άσπρος. Εγώ τον$_i$ έβαψα.*
the.M wall.M is white.M I him I.painted
'The wall is white. I painted it.'

[14] Drawing on Steele's definition of agreement, Corbett (1991) accepts pronominal anaphora as a domain of agreement and this is also what I adopt here. For a different view, see Wiese (1983) and the discussion in Corbett (1991: 112, 244-248 and references therein). Audring (2009: 20-24) provides a brief review of the relevant arguments.

Crosslinguistically, a wide range of linguistic elements can function as agreement targets with respect to gender: adjectives, definite and indefinite articles, numerals, possessives, participles, pronouns, verbs, adverbs, adpositions, and complementisers. Similarly, gender agreement can operate in a variety of domains: within the NP; beyond the NP but within the clause; beyond the clause but within the sentence; and beyond the sentence (Corbett 1991: 106-115, 2006: 19-23, 54-70).

4.1.1.2 Gender assignment: semantic and formal systems

All languages in which gender distinctions are operative have a number of different principles (or, rules) by which nouns are assigned to the different genders available. Corbett and Fraser, based on work on gender in Russian, make the strong claim that

> languages never have to specify gender for the majority of nouns. (...) The gender of the overwhelming majority of nouns can always be predicted, either from semantic information which must, in any case, be stored in the lexical entry, or from semantic information supplemented by formal information, which may be morphological or phonological (2000: 61-62).

Languages of the first type are said to have semantic assignment systems (Aikhenvald 2003: 2-24; Corbett 1991: 7-32). In these languages aspects of the meaning of nouns form the main criteria upon which they are allotted to the different genders available. They are usually given in the form of binary oppositions such as, *inter alia*, rational *versus* non-rational, male *versus* female, animate *versus* inanimate, large *versus* small. Dahl (2000; also Dahl & Fraurud 1996) identifies animacy as a fundamental semantic distinction in that connection and postulates the following universal property of gender systems: "In any gender system, there is a general semantically-based principle for assigning gender to animate nouns and NPs." (2000: 101). According to Dahl, the variation encountered in the ways in which languages apply the above principle are limited and relate to the Animacy Hierarchy that was introduced in Chapter 3 and which is repeated here in (3):

(3) Animacy Hierarchy (adapted from Dahl 2000: 99)
human > animal (non-human animate) > inanimate

Languages may organise nouns into genders on the basis of arbitrary cut-off points on the hierarchy: between humans and animals, between higher and lower animals, between animals and inanimates. This means that nouns denoting entities found on different sides of the cut-off point will belong to different genders. Dahl argues that variation is further heavily restricted by sex, another major criterion in gender organisation: "If the principle referred to [above] distributes animate nouns among different genders, sex is the major criterion" (2000: 102). The gender system of Tamil, a Dravidian language, is a representative example of Dahl's generalisations. In Tamil, nouns are divided into rational (i.e., human) and non-rational (neuter). The rational nouns are further divided into masculine (i.e., male rational) and feminine (female rational) (Aikhenvald 2003: 22-23; Corbett 1991: 8-9; Dahl 2000: 101).

Languages that supplement the semantic information with formal information are said to have formal assignment systems (Aikhenvald 2003: 25-28; Corbett 1991: 33-69). In such languages, the role that semantics plays in distributing nouns to the different genders is demoted. This does not mean, though, that formal assignment systems lack any semantic motivation. Corbett explicitly points out, with reference to morphological assignment systems, that "they always have a semantic core" (Corbett 1991: 34; see also Aikhenvald 2003: 25), which is normally defined by a basic semantic distinction along the lines of the Animacy Hierarchy and Dahl's variation conditions. Nouns whose meaning is relevant for the basic semantic distinction, such as nouns denoting men and women, are assigned to the semantically appropriate gender on the basis of their meaning. In this sense, there are no purely formal assignment systems. It is only nouns whose meaning is not relevant for the basic semantic distinction, the semantic residue, that are assigned to the different genders by formal assignment rules. In this way, each gender will have a semantic core consisting of nouns in which the basic semantic distinction can apply and, crucially, also a relatively large number of nouns belonging to the semantic residue, which, according to Dahl, "practically always consists of inanimate nouns" (2000: 102). As we will see below, the feminine gender in MGr contains nouns like *μητέρα* 'mother.F' and *γυναίκα* 'woman.F' which are allotted to the feminine gender by application of the basic semantic assignment rule; but it also contains nouns like *πετσέτα* 'towel.F' and *τύχη* 'luck.F' by application of the formal assignment rules of the language.

Formal assignment rules can be either phonological or morphological. In languages with phonological rules, nouns receive their gender based on their phonological properties: initial vowel(s), final consonant(s), accent, tone (Aikhenvald 2003: 25-28; Corbett 1991: 51-62). Morphological rules, on the other hand, refer to different inflected forms of a noun, either a whole inflectional paradigm or a subset of it, or constituent parts of noun forms, such as stems and derivational affixes, in order for nouns to be assigned to a gender (Corbett 1991: 34-50). The gender of nouns in Russian, for example, can be safely inferred from the inflectional class to which they belong, that is, by taking into consideration the full set of a noun's inflected forms (Corbett 1982, 1991: 34-43; Corbett & Fraser 1993, 2000; though see Doleschal 2000 for an alternative analysis). Leaving aside sex-differentiable nouns that can be assigned to the masculine and feminine genders by virtue of their meaning, the Russian morphological rules distribute nouns belonging to the semantic residue across the three genders so that nouns of inflectional class I are masculine, nouns of inflectional classes II and III are feminine, and all others nouns are neuter (Corbett 1991: 36). Since there are more than one feminine inflectional classes (II and III), Corbett argues that gender cannot be a predictor of inflectional class. Rather, inflectional class membership, which he takes to be part of each noun's lexical entry, is a predictor of gender (Corbett 1991: 65).

4.1.1.3 Gender agreement: syntactic *versus* semantic

Steele's definition of agreement allows for the form of an agreement target to vary depending on either a formal or a semantic property of the agreement controller. Cases in which a target agrees with a formal property of a controller (for our purposes, gender) involve syntactic agreement. Cases in which a target agrees with a semantic property of a controller involve semantic agreement (Corbett 2006: 155). In many instances, the formal and semantic properties of a controller coincide such that syntactic and semantic agreement yield the same form for agreeing target(s), as in the German example in (4) where the indefinite article *eine* 'a.F' and the adjective *junge* 'young.F.' are in the feminine form and agree with the feminine head noun *Frau* 'woman.F' both syntactically and semantically:

(4) German
eine junge Frau
a.F young.F woman.F
'a young woman'

In (5a), on the other hand, the forms of the indefinite article and the adjective are in the neuter gender and agree with the neuter *Mädchen* 'girl.N' syntactically. Semantic agreement, which would require feminine forms for the two targets, is ungrammatical (5b):

(5) German
a. *ein junges Mädchen*
a.N young.N girl.N
'a young girl''

b. **eine junge Mädchen*
a.F young.F girl.N
'a young girl'

Nouns such as *Mädchen* are thought to exhibit a mismatch between their semantic and syntactic properties. *Mädchen* could potentially be assigned to the feminine gender in German on the basis of its meaning: nouns denoting female entities prototypically belong to the feminine gender in the language. *Mädchen*, however, is assigned to the neuter gender by virtue of being a diminutive formed with the derivational ending *-chen*, which in German is inherently specified as neuter. The morphology of *Mädchen* overrides its semantics. Crosslinguistically, such mismatches are often the cause for variation between syntactic and semantic agreement for some types of targets. Corbett (1979, 1983, 1991, 2006) has shown that, wherever it occurs, variation of this kind is constrained by the Agreement Hierarchy in (6):

(6) Agreement Hierarchy
attributive > predicate > relative pronoun > personal pronoun

In (6), Corbett ranks four general types of targets with respect to their typical syntactic distance from a controller. Attributives, a label that encompasses a variety of elements that can have an attributive function (adjectives, numerals, pronouns, participles), are taken to be syntactically closest to the controller. Personal pronouns, on the contrary, are taken to be syntactically furthest from it (see fn. 14 for the treatment of personal pronouns as agreement targets). According to Corbett (1991, 2006), targets that are closest to the controller are more likely to show syntactic agreement with it. Targets that are further away from the controller are increasingly likely to show semantic agreement with it. In his words, "for any controller that permits alternative agreement, as we move rightwards along the Agreement Hierarchy, the likelihood of agreement with greater semantic justification will increase monotonically (that is, with no intervening decrease)" (2006: 207).

Found at the rightmost edge of the Agreement Hierarchy, personal pronouns are the targets most likely to show semantic agreement with their antecedents. Indeed, in many languages nouns exhibiting a mismatch between their semantic and syntactic properties such as German *Mädchen* can be referred to by pronouns belonging to more than one gender. In (7), both the feminine pronoun *sie* and the neuter pronoun *es* can be used to refer back to *Mädchen*.

(7) German

Kennst	*du*	[*dieses*	*Mädchen*]$_i$*?*	*Sie*$_i$*/es*$_i$	*spielt*	*geige.*
you.know	you	this.N	girl.N	she/it	plays	violin

'Do you know this girl? She plays the violin.'

In German, personal pronouns are the only target that can show semantic agreement with an antecedent such as *Mädchen*. Relative pronouns, adjectives and other attributives can only agree with their head nouns syntactically and never semantically (5), (7). In other languages semantic agreement can extend along the Agreement Hierarchy and be found in targets other than the pronoun.

The typological tools briefly introduced in this section will be used throughout this chapter to describe the synchronic status and especially the diachronic development and ultimate the loss of gender in Cappadocian and the other AMGr dialects. Before I proceed to addressing these issues, however, I discuss gender

in MGr and Turkish in the remainder of this section. MGr has a well-developed tripartite gender system, defined by highly grammaticalised morphological assignment rules and strict syntactic agreement. Turkish, on the other hand, lacks gender distinctions and agreement altogether. The former is taken here to represent a system similar to that from which the AMGr dialects developed in their idiosyncratic ways. The latter is considered by previous research to have been the trigger for the demise of gender agreement. The discussion that follows will therefore serve as the basis of comparison for the diachronic analysis following later in this chapter.

4.1.2 Modern Greek: a gender language

4.1.2.1 Gender assignment

MGr makes a tripartite gender distinction among masculine, feminine and neuter. Nouns in the language are distributed into the three genders on the basis of a formal assignment system that, in line with Corbett's and Dahl's generalisations on gender organisation, has a semantic core defined primarily by animacy and secondarily by sex. The basic semantic distinction in MGr is between animate and inanimate nouns. Animate nouns, including nouns denoting animals—mainly domesticated ones—are further divided into masculine and feminine on the basis of sex (Ralli 2002; Ruge 1979). These principles are summarised in (8) and (9).

(8) Primary semantic assignment rules
   a. Nouns denoting animate entities (male or female) are non-neuter (masculine or feminine): *γιος* 'son.M', *αδελφός* 'brother.M', *γάτος* 'male cat.M', *κόρη* 'daughter.F', *αδελφή* 'sister.F', *γάτα* 'female cat.F';
   b. Nouns denoting inanimate entities are neuter: *φύλλο* 'leaf', *πόδι* 'foot', *όνομα* 'name', *κρέας* 'meat', *γράψιμο* 'writing'.

(9) Secondary semantic assignment rules
   a. Animate nouns denoting male entities (human and some animals) are masculine: *γιος* 'son', *αδελφός* 'brother', *γάτος* 'male cat';
   b. Animate nouns denoting female entities (human and some animals) are feminine: *κόρη* 'daughter', *αδελφή* 'sister', *γάτα* 'female cat'.

These principles account for the gender of a large number of nouns and generally leave no exceptions once some apparent but explainable deviations are taken into consideration. For example, a low number of nouns denoting human beings of young age such as *μωρό* 'baby' and *βρέφος* 'infant' are assigned to the neuter gender, which is not unheard of from a typological point of view (Corbett 1991: 14). The principles in (8) and (9), however, do not account for the gender of an even larger number of inanimate nouns belonging to the semantic residue of the sex-based distinction in (9). Such nouns are prototypically assigned to the neuter gender by application of the primary semantic assignment rules in (8). Yet, not all inanimate nouns are neuter but are distributed in the three genders by application of formal assignment rules that evidently take precedence over the semantic rules above.

The formal assignment rules of MGr are strictly morphological. The most fundamental principles are based on the correlation between gender and inflectional class. In the modern language, this correlation has become so strong that for any given noun the former can be safely inferred from the latter (Coker 2009: 38; Matasović 2004: 48; Morpurgo-Davies 1968: 14-16, 31). As in Russian, nouns or, more precisely, noun stems in MGr are inherently marked for inflectional class membership at the level of their lexical entry. This marker is then used to derive the gender value of each noun by morphological rule in an attribute-value pair fashion (Ralli 2002, 2003b). For example, nouns that inflect like, and therefore belong to the same inflectional class as, *φάρος* 'lighthouse' are masculine, those that belong to the same inflectional class as *ελπίδα* 'hope' are feminine and those that inflect like *φύλλο* 'leaf' are neuter (see Chapter 5 for a detailed description of MGr noun inflection).[15] These morphological assignment rules of MGr are given in (10).

[15] In her analysis of nominal inflection in SMGr, Ralli (2000, 2002, 2003b, 2005) argues that, alongside their inherent specification for inflectional class, some noun stems are inherently specified for gender. These are stems of nouns belonging to Ralli's Inflectional Class 1 that includes masculine and feminine nouns ending in *-ος* such as *δρόμος* 'street.M' and *οδός* 'feminine.F'. In the case of these nouns, inflectional class membership cannot be a safe predictor for gender since masculine and feminine nouns inflect in the same way. However, as I will argue in Chapter 5, nouns belonging to this inflectional class are prototypically masculine; feminine members are learnèd. They were reintroduced into the standard language from *Καθαρεύουσα* and are generally not found in the spoken language or most MGr dialects (Holton & Manolessou 2010: 556). In that light, I propose that, in SMGr, only feminine nouns of Inflectional Class 1 need to be specified for both inflectional class and gender. Masculine nouns can be assigned gender by application of morphological assignment rules.

(10) MGr morphological assignment rules

c. Nouns that inflect like *φάρος* 'lighthouse', *κανόνας* 'rule' or *παπάς* 'priest' are masculine;

d. Nouns that inflect like *ελπίδα* 'hope' or *κυρά* 'lady' are feminine;

e. Nouns that inflect like *φύλλο* 'leaf', *πόδι* 'foot', *όνομα* 'name', *κρέας* 'meat' or *γράψιμο* 'writing' or are indeclinable are neuter.

Other morphological rules involve specific derivational suffixes. Derived nouns formed with the suffixes *–ισμ(ός)* or *-τηρα(ς)* are masculine while those formed with *-άλα* or *–οσύνη* are feminine (Ralli 2005: 148-149). The most productive diminutive suffixes are generally specified as neuter. The examples in Table 4.1 show the distribution of nouns into the three genders in MGr by application of the semantic and formal assignment rules.

Table 4.1. *The masculine, feminine and neuter genders in MGr.*

MASCULINE	SEMANTIC	*άντρας* 'man', *πατέρας* 'father', *γιος* 'son', *αδελφός* 'brother', *γάτος* 'male cat'
	FORMAL	*φάρος* 'lighthouse', *κανόνας* 'rule', *καθρέφτης* 'mirror', *ελληνισμός* 'hellenism', *ανεμιστήρας* 'fan'
FEMININE	SEMANTIC	*γυναίκα* 'woman', *μητέρα* 'mother', *κόρη* 'daughter', *αδελφή* 'sister', *γάτα* 'female cat'
	FORMAL	*ώρα* 'hour', *εβδομάδα* 'week', *ελπίδα* 'hope', *τρεχάλα* 'scamper', *νοικοκυροσύνη* 'tidiness'
NEUTER	SEMANTIC/FORMAL	*φύλλο* 'leaf', *πόδι* 'foot', *όνομα* 'name', *κρέας* 'meat', *γράψιμο* 'writing', *μωρό* 'baby'
	FORMAL	*αγόρι* 'boy', *κορίτσι* 'girl', *ανεμιστηράκι* 'fan.DIM'

4.1.2.2 Gender agreement

In MGr, nouns and other nominalised expressions act as gender agreement controllers. The set of agreement targets includes adjectives, definite and indefinite articles, a small number or cardinal numerals ('one', 'three' and 'four'), all attributive

numerals (ordinal, multiplicative, proportional), participles and pronouns. Gender agreement operates within all four domains identified by Corbett with the NP forming the main agreement domain in the language.

Gender agreement in MGr is strictly syntactic (Chila-Markopoulou 2003; Holton *et al.* 1997: 498; Thumb 1912: 67). This is evidenced by agreement with nouns that exhibit a mismatch between their semantic and their syntactic gender: that is, between the gender they would be assigned to by virtue of their meaning had gender assignment in the language been semantic, and the gender they are actually assigned to on the basis of their morphology. In the case of agreement with such nouns, targets appear in a form that agrees with the syntactic gender of their controllers and not with their semantic gender. This is shown in the examples in (11):

(11) MGr

a. *Αυτοί οι τέσσερις τοίχοι είναι βαμμένοι κόκκινοι.*
these.M the.M four.M walls.M are painted.M red.M

Εγώ τους έβαψα.
I them.M I.painted
'These four walls are painted red. I painted them.'

b. *Αυτό το ξανθό αγοράκι είναι πολύ άτακτο.*
this.N the.N blond.N boy.DIM.N is very mischievous.N

Θα το μαλώσω.
I it I.will.tell.off
'This little blond boy is very mischievous. I will tell him off.'

In the NP *αυτοί οι τέσσερις τοίχοι* 'these four walls' in (11a), the masculine forms of the demonstrative pronoun *αυτοί*, the numeral *τέσσερις* and the definite article *οι* agree in gender with the masculine controller *τοίχοι*. *τοίχοι* also controls the gender of the medio-passive participle *βαμμένοι* found in the predicative position as well as the gender of the adjective *κόκκινοι* in secondary predication and the third person personal pronoun *τους* referring back to *τοίχοι* in the second sentence of the example. Similarly, in (11b), *αυτό*, *το*, *ξανθό*, *άτακτο* and *το* appear in the neuter form to agree

with *αγοράκι*. Any deviation from this rule gives rise to ungrammaticality, as we see in (12).

(12) MGr

a. **Αυτά τα τέσσερα τοίχοι είναι βαμμένα κόκκινα.*
these.N the.N four.N walls.M are painted.N red.N

Εγώ τα έβαψα.
I them.N I.painted
'These four walls are painted red. I painted them.'

b. **Αυτός ο ξανθός αγοράκι είναι πολύ άτακτος.*
this.M the.M blond.M boy.DIM.M is very mischievous.M

Θα τον μαλώσω.
I him I.will.tell.off
'This little blond boy is very mischievous. I will tell him off.'

The neuter noun *κορίτσι* 'girl' appears to be the single exception to this strong generalisation. Chila-Markopoulou (2003: 148-149) argues that some targets agreeing with *κορίτσι* may appear in the feminine gender, thereby agreeing with it semantically. However, semantic agreement is an available option only with targets found at the rightmost end of the Agreement Hierarchy, namely personal and relative pronouns. Semantic agreement in the predicate is marginally allowed given enough syntactic distance from *κορίτσι* while it is disallowed with attributive targets (see also Joseph & Philippaki-Warburton 1987: 159; Valiouli 1997). Note, though, that semantic agreement is not at all possible with the neuter noun *αγόρι* 'boy', which is in a sense the masculine counterpart of *κορίτσι*.

4.1.2.3 Gender and prototypicality: Anastassiadis-Symeonidis and Chila-Markopoulou (2003)

Elaborating on the semantic and morphological principles of gender assignment in Greek, Anastassiadis-Symeonidis and Chila-Markopoulou (2003) (henceforth A-S and C-M) identify a prototypical core in the MGr gender system that is formed by three

prototypical classes of nouns, one for each gender. Each class in their scheme is defined by a specific gender value, specific morphological properties, and specific semantic content. All three correlate strongly to one another in defining the three prototypical gender classes so that a given gender value will prototypically have specific semantic content and specific morphological properties for its formal realisation and *vice versa* (2003: 21-22).

For A-S and C-M, morphological properties refer to nominative singular endings, which they take as indicators of inflectional class. For example, final *-α* in the nominative singular is taken to prototypically indicate membership to the inflectional class of feminine nouns such as *μαμά* 'mom' or *θεία* 'aunt'. This seems to raise a number of problems as final *-α* is, in A-S and C-M's approach, also one of the prototypical indicators of neuter nouns such as *γράμμα* 'letter' or *ρεύμα* 'current'. A-S and C-M tackle this by postulating and emphasising a strong relation between these morphological properties and semantic properties. The latter refer to the basic animacy and sex distinctions between animate and inanimate, and between male and female as well as other semantic aspects such as the meaning of action or quality. The relation between the morphological and semantic properties helps maintain the distinction between homophonous nominative singular endings belonging to different inflectional classes. In this sense, nouns that end in *-α* and have an inanimate meaning are prototypically neuter (*γράμμα*, *ρεύμα*). Conversely, nouns that have the same ending but denote female animate entities are prototypically feminine (*μαμά*, *θεία*).

The defininings characteristics of the three prototypical classes are presented in Table 4.2 (adapted from A-S & C-M 2003: 34). Notice the overlap of A-S and C-M's classes with the MGr semantic and morphological gender assignment rules discussed in §4.1.1.2 above.

Table 4.2. *The three prototypical noun classes in MGr (Anastassiadi-Symeonidi & Chila-Markopoulou 2003: 34).*

	I.	II.	III.
GENDER	masculine	feminine	neuter
SEMANTICS	male animate	female animate	inanimate
MORPHOLOGY	*-ς*	*-α*	*-ο*
		-η	*-ι*
		-ού	*-α*
			indeclinable

The three prototypical classes are thought of as highly productive, frequently occurring open-class categories that have the ability to constantly gain new members. They are considered to be "*αμιγείς*" 'pure, unmixed' (A-S & C-M 2003: 23) in terms of gender, semantics and morphology. So, for example, the prototypical class labelled III in the table above strictly contains nouns that are neuter in gender, denote inanimate entities and end in *-ο*, *-ι* or *-α* in the nominative singular or are indeclinable. Unsurprisingly, there exist numerous non-prototypical nouns that do not belong to any of the three prototypical classes. These are nouns whose gender, semantics and/or morphology do not all correspond to the same prototypical class. For example, the loanwords *σεφ* 'chef.M' and *γκολκίπερ* 'goalkeeper.M' that are assigned to the masculine gender in MGr by virtue of their semantics are non-prototypical members of class I in terms of their morphology as they are indeclinable and do not end in the characteristically masculine *-ς* in the nominative singular. Conversely, while being prototypical with respect to their morphology, the inanimate masculine nouns *δρόμος* 'way.M' and *χρόνος* 'time.M' are non-prototypical members of class I with respect to their semantics as they denote inanimate, and not male animate, entities.

The three prototypical classes exert strong influence ("*κεντρομόλα δύναμη*", A-S & C-M 2003: 23) on the MGr noun system as a whole, both synchronically and diachronically (A-S & C-M 2003: 34). The main effect of the prototypical core is that nouns that do not belong to one of the three prototypical classes tend to move towards them over time, becoming more prototypical in terms of their gender and morphology. The semantic component of the prototypical noun classes is therefore

thought to remain diachronically stable. In that connection, masculine and feminine nouns that are non-prototypical with respect to their semantics in denoting inanimate entities are predicted to diachronically move towards the neuter noun class of which they would be prototypical members by virtue of their semantics. The diachronic development of the nouns in (13) confirms this prediction. In denoting inanimates, the Ancient Greek nouns in the left column are non-prototypical members of the masculine and feminine gender classes in terms of their meanings. As shown by their MGr cognates in the right column, these nouns shifted in the course of their history to the neuter gender and survive in the modern language as members of the neuter class. In MGr, they are prototypical in terms of both their semantics and their morphology, as they end in *-o*.

(13)

	Ancient Greek			MGr	
a.	*δάκτυλος*	'finger.M'	>	*δάχτυλο*	'finger.N'
	κόκκαλος	'kernel.M'	>	*κόκκαλο*	'bone.N'
b.	*βάσανος*	'touchstone.F'	>	*βάσανο*	'torture.N'
	ὕπαιθρος	'field.F'	>	*ύπαιθρο*	'countryside.N'

Note that, apart from gender shift, these nouns underwent concomitant inflectional shift, as well. For instance, Ancient Greek *δάκτυλος* 'finger.M' survives in MGr as *δάχτυλο* 'finger.N' which is neuter in gender and belongs to a neuter inflectional class (plural *δάχτυλα*). There are no cases whereby a noun shifts solely in terms of gender (**δάχτυλος* 'finger.N', plural *δάχτυλοι*) or solely in terms of inflection (**δάχτυλο* 'finger.M', plural *δάχτυλα*).

The gender system hitherto presented is assumed in this chapter to be largely identical to that which characterised Cappadocian and the other AMGr dialects before they started innovating new gender agreement patterns. This system, in its most basic principles, has been incessantly operative in Greek since its earliest recorded stages, stretching from Mycenaean and Homeric Greek through to Ancient, Koiné and Medieval Greek, and still survives as such in the overwhelming majority of dialects and varieties of the modern language. However, even if one chooses not to attribute significant historical value to this consideration, there is evidence from

AMGr dialects such as Pontic and Pharasiot that supports this assumption. As we will later see, these dialects preserve the gender system described here, albeit in competition with a novel gender system that relies far more heavily on semantics rather than morphology for the purposes of agreement. There is therefore no reason to assume that, before the onset of their idiosyncratic development, the gender system of AMGr differed greatly from that which has been exemplified here.

4.1.3 Turkish: a genderless language

Turkish lacks gender distinctions or any other noun categorisation device. All nouns in the language are treated in a uniform way for the purposes of agreement or, rather, non-agreement. Elements that in other languages constitute gender agreement targets show no formal variation in cooccuring with nouns that may differ with respect to their semantic and formal properties, be they phonological or morphological. In (14), the proximal demonstrative *bu*, the attributive adjective *yaşlı*, the predicate *hasta* in the first sentence and the third person pronoun *onun* in the second sentence remain invariable when modifying or referring to nouns denoting entities of different (or no) sex.

(14) Turkish

a. [*Bu yaşlı adam*]$_i$ *hasta. Onun*$_i$ *için üzgünüm.*
this old man ill him for I.am.sorry
'This old man is ill. I feel sorry for him.'

b. [*Bu yaşlı kadın*]$_i$ *hasta. Onun*$_i$ *için üzgünüm.*
this old woman ill her for I.am.sorry
'This old woman is ill. I feel sorry for her.'

c. [*Bu yaşlı ağaç*]$_i$ *hasta. Onun*$_i$ *için üzgünüm.*
this old tree ill it for I.am.sorry
'This old tree is diseased. I feel sorry for it.'

The only domain in which the semantic property of animacy might be considered to condition the selection of an appropriately agreeing form is *wh*-questions. In the cases

in which the target of the question is human or animate, the *wh*-phrase *kim* 'who' is used whereas questions whose target is inanimate are introduced by *ne* 'what' (Göksel & Kerslake 2005: 296-299). This, however, is not surprising. Other genderless languages also make similar distinctions in *wh*-questions such as Finnish (*kuka* 'who' *versus mikä* 'what') or Basque (*nor* 'who' *versus zein* 'what').

There are, of course, other, lexical or derivational possibilities for expressing sex-based distinctions in Turkish. Compare, for example, *dayı* 'maternal uncle' with *teyze* 'maternal aunt', or *imparator* 'emperor' with *imparator-içe* 'empress'. Braun (2000, 2001) also notes that some otherwise gender-neutral terms systematically get sex-biased readings. *kuyumcu* 'gold seller' and *sürücü* 'driver' are usually taken to denote male entities while *sekreter* 'secretary' gets an overwhelmingly female-biased reading. However, since they do not trigger any "systematic covariation" (Pollard & Sag 1994: 60) in cooccurring elements, these cases do not qualify as gender distinctions in the sense in which the term is employed in the present study. Turkish can be safely demonstrated to be a genderless language.

4.1.4 Summary

In languages in which gender distinctions are operative, nouns are classified into groups, usually on account of a combination of semantic and formal properties; the latter can be phonological or morphological. Nouns that belong to the same gender class (controllers) trigger the same forms in elements that agree with them, such as adjectives or pronouns (targets). The forms of such elements differ when they combine with nouns of different genders. Agreement in the sense of systematic covariation is therefore the only reliable criterion that can be used to identify gender in a given language. In order to select their appropriate form, targets can refer to a semantic or a formal property of controllers, triggering in each case two different types of agreement, semantic or syntactic. Some languages normally exhibit only one of the two agreement types; others may exhibit both. In the latter case, Corbett (1991, 2006) has shown that the distribution of semantic *versus* syntactic agreement is generally conditioned by the Agreement Hierarchy: the farther away a target is from the controller, the more likely it is that it will exhibit semantic agreement. MGr is a gender language that makes a tripartite distinction into masculine, feminine and neuter nominals. Agreement in MGr is overwhelmingly syntactic. As for assignment,

nouns are allotted to the three genders on the basis of a formal system that, like all systems of its kind, has a pervasive semantic core. Building on this assignment system, A-S and C-M propose that the three genders form a prototypical core in the MGr gender system, each defined by specific semantic and morphological properties. MGr nouns are thought to be prototypical or non-prototypical based on the degree to which their semantics and morphology comply with those defining the gender class to which they belong. This core exerts strong influence on non-prototypical nouns that tend to diachronically become more prototypical in terms of their gender and/or morphology. Turkish, on the other hand, is a language that lacks gender distinctions and agreement altogether. Elements that in other languages constitute gender agreement targets show no formal variation in cooccuring with nouns which may differ with respect to their semantic or formal properties. With these considerations in mind, I now turn to the examination of gender and gender agreement in Cappadocian and the other AMGr dialects.

4.2 Gender in Cappadocian and other Asia Minor Greek dialects

4.2.1 Cappadocian: neuter agreement

In Cappadocian, the tripartite gender distinction into masculine, feminine and neuter nouns has been lost. As in genderless Turkish, all nouns in the dialect are treated in a uniform way in that elements that in other MGr varieties constitute targets for gender agreement show no formal variation when they cooccur with nouns whose cognates in other MGr dialects belong to different genders. Irrespective of the semantic or morphological properties of their controllers, targets appear in what was historically their neuter form (Costakis 1964: 32, 40; Dawkins 1916: 87, 115-116; Kesisoglou 1951: 4, 29, 48; Mavrochalyvidis & Kesisoglou 1960: 29, 42-43, 81; Phosteris & Kesisoglou 1960: 10). Cappadocian is therefore said to exhibit neuter agreement, and any discussion of gender assignment in the dialect is irrelevant. It has to be noted, though, that targets agree with their controllers for number, and in certain instances, case, as well.

Neuter agreement in Cappadocian is found in all domains in which gender agreement is operative in other MGr varieties, that is, both within the NP and beyond it. The examples in (15) and (16) below illustrate this development with a variety of controllers (animate and inanimate, originally masculine or feminine, belonging to

different inflectional classes), targets (definite and indefinite articles, adjectives, participles, pronouns, numerals), and domains (within the NP and beyond it).

(15) Cappadocian

a. *πολύ βαθικό ένα τόπους*
very deep.N a.N place.M
'a very deep place' (Malakopí, *Dawkins*, 406)

b. *δυο δεμένα μυλόπετρες*
two tied.N millstones.F
'two tied millstones' (Phloïtá, *ILNE/811*, 79)

c. *ετό κλέφτῶης*
this.N thief.M
'this/the thief' (Ghúrzono, *Dawkins*, 342)

d. *άλλα τρία ασκελίμες*
another.N three.N steps.F
'another three steps' (Mistí, *ILNE/755*, 50)

(16) Cappadocian

a. *ντερέ μάνα-μ νηῶτκό-ναι*
now mother.F-my unfed.N-is
'even now my mother is without food' (Axó, *Dawkins*, 392)

b. *τ' σπιτιού τα ντοίχ(ου)ς χτισμένα*
the house the.N walls.M built.N
'the walls of the house (are) built' (Axó, *KMS/M&K*, 210)

c. *΄Ερεται σ' (...) το πιῶτικό. Παρακαλεί το.*
he.comes to the.N shepherd.M he.begs it
'He comes to the shepherd. He begs him.' (Axó, *KMS/M&K*, 204)

d. *Ẑήλεψε και τ' άλλο ôυννύφσα.*
she.envied and the.N other.N sister-in-law.F
Πήγε κι ετό σο dώμα.
she.went and it to.the roof
'And the other sister-in-law was jealous. She also went to the roof.'
(Ghúrzono, *Dawkins*, 346)

As can be seen in the examples, the various agreement targets appear in what is from a historical point of view their neuter form: articles *ένα*, *τα*; adjectives *βαθικό*, *νηôτκό*; participles *δεμένα*, *χτισμένα*; pronouns *ετό*, *άλλο*, *άλλα*, *το*; numerals *τρία*. These targets are, however, controlled by nouns that do not appear to have undergone any kind of shift to the neuter gender reminiscent of the ones that we saw in §4.1.2.3. On the contrary, a significant number of controllers in (15) and (16) would be prototypical members of the masculine and feminine classes in terms of both their semantics and morphology, in the sense described by A-S and C-M, had gender distinctions not been lost in Cappadocian. *κλέφτôης* 'thief', *πιôτικός* 'shepherd', *μάνα* 'mother' and *ôυννύφσα* 'sister-in-law' denote male and female human beings and end in *-ς* and *-α* respectively (cf. Table 4.2). In other words, there is nothing about the semantics or the morphology of these nouns that would justify neuter agreement. The occurrence of neuter agreement is also in need for an explanation in the case of the remaining nouns in (15) and (16), namely *τόπους* 'place', *μυλόπετρες* 'millstones', *ασκελίμες* 'steps' and *ντοίχ(ου)ς* 'walls' that do not appear to have undergone any shift to the neuter. The semantics of these nouns may be associated with neuter gender as they are inanimate but their morphology remains prototypically masculine or feminine.

The Cappadocian varieties of Delmesó, Potámia and Sílata are the only ones to preserve traces of gender in a low number of targets. These mainly involve the residual use of the feminine form of the definite article in the accusative singular when it immediately precedes a feminine noun. In Delmesó, the feminine form of the third person personal pronoun and that of the distal demonstrative are also found but only when the referent is human (17a). Note, however, that the neuter forms of these targets also occur alongside the feminine ones, sometimes even in the same context as in (17b).

(17) Delmesó Cappadocian (*Dawkins*, 316, 324)

a. *τῶη* *ναίκα-τ* *άσο* *μεϊδέν γερί* *άσο* *qουγί*
the.F wife.F-his from.the public place from.the well

ξέβαλεν *τῶη* *και* *πήρεν* *τῶην* (...) *και* *λούσεν* *τῶην*
he.took.out her and he.took her and he.washed her
'he took his wife out of the public space, out of the well and took her and washed her'

b. *τῶη* *ναίκα-τ* *ναίκα* *πήρεν* *ντο* *και* *πήγεν* *ντο* *σο*
the.F wife.F-his wife.F he.took it and took it to.the

μεϊδέν γερί (...) *και* *τῶη* *ναίκα-τ* (...) *πίχωσέν* *ντο*
public place and the.F wife.F-his he.buried it
'he took his wife and took her to the public space (...) and he buried his wife'

In Potámia, feminine forms are restricted to the accusative singular of the definite article, which cooccur with the neuter ones. Note that all other targets appear in their neuter form, even when they are found within the same NP as the controller (18).

(18) Potámia Cappadocian (*Dawkins*, 460)

εκείνο *τη* *ναίκα* *φερέτ* *το* *εδώ* (...) *ασκέρ* *πήγαν*
that.N the.F woman.F you.bring it over soldiers they.went

και *έφεραν* *ντο*
and they.brought it
'bring that woman over here (...) soldiers went and brought her.'

A few occurrences of the nominative and accusative form of the masculine definite article *ο* and *τον* are found in Dawkins's texts from Potámia as in (19). They, too, however, are rare (Dawkins 1916: 87) and, as shown in the example, appear in competition with the neuter forms of the definite article, often in the same contexts.

(19) Potámia Cappadocian (*Dawkins*, 454)

a. *αλιπήκα πήγεν σον βασιλέα και είπεν*
fox it.went to.the.M king.M and it.said
'the fox went to the king and said'

b. *αλιπήκα πήγεν πάλι σο βασιλέα και είπεν*
fox it.went again to.the.N king.M and it.said
'the fox went to the king again and said'

The null realisation of the definite article occurring in (19), which was dealt with in detail at the end of Chapter 2, may also be thought to represent a kind of residual gender agreement. Recall that the definite article in Cappadocian is realised as null in the nominative singular and plural when immediately preceding nouns that were historically masculine or feminine. In the environment before nouns originally belonging to the neuter gender, the article is always overtly realised. Null realisation applies even in the presence within the NP of attributive targets that in other MGr dialects require definiteness to be overtly expressed like the demonstrative pronouns or certain quantifiers, as in (20):

(20) Cappadocian

a. *κι εκείνο βαῶιλέγας είπεν κι, «Καλό»*
and that.N king.M he.said that well
'and that king said, "Well"' (Sílata, *Dawkins*, 452)

b. *ιτό μάνα δόνια δέν είχən*
this.N mother.F teeth not she.had
'this mother had not teeth' (Malakopí, *Dawkins*, 404)

The distribution of null realisation in Cappadocian *prima facie* challenges our claim that the dialect has lost gender distinctions altogether as, in the specific environments where the phenomenon is attested, it appears to be conditioned by gender. Yet the lack of gender agreement between the controllers and their targets in (20) holds us from accepting that *βαῶιλέγας* and *μάνα* are marked for gender; *εκείνο*

and *ιτό* appear in the historically neuter form. Instead, as will be shown in Chapter 5, the two nouns are marked for inflectional class, which is taken here to be the conditioning factor for the distribution for the null and overt realisation of the definite article in Cappadocian. That is, the definite article is realised as null in the nominative singular and plural when immediately preceding nouns that belong to specific inflectional classes, namely those that, prior to the loss of gender distinctions in the dialect, were correlated with the masculine and feminine genders.

4.2.2 Pharasiot: syntactic and neuter agreement

In contrast to Cappadocian, Pharasiot preserves—albeit to a limited extent—the gender classification of masculine, feminine and neuter. Nouns in the dialect are assigned to the three genders on the basis of semantic and morphological rules that do not differ significantly from the ones described for MGr in §4.1.2.1, in spite of differences in the inflection of nouns between Pharasiot and other MGr varieties. Pharasiot can therefore also be thought to still have, in principle, a formal gender assignment system with an animacy-based semantic core. Table 4.3 below shows some examples of Pharasiot nouns assigned to the three genders by application of the formal and semantic assignment principles.

Table 4.3. *The masculine, feminine and neuter genders in Pharasiot.*

MASCULINE	SEMANTIC	*υγιός* 'son', *δεσπότ* 'bishop', *ντελιqανούς* 'young man'
	FORMAL	*φσόντυος* 'neck', *αραβάς* 'waggon', *χωρόκκος* 'village.DIM'
FEMININE	SEMANTIC	*ναίκα* 'woman', *κόρη* 'daughter', *αδελφή* 'sister'
	FORMAL	*φωλᾶ* 'nest', *καρντία* 'chest', *λίμπλη* 'lake'
NEUTER	SEMANTIC/FORMAL	*ρουβί* 'mountain', *δώμα* 'roof', *μήο(ν)* 'apple', *κρᾶς* 'meat'
	FORMAL	*κορίτζι* 'girl', *νυφόκκο* 'bride.DIM'

This tripartite gender system is made manifest through syntactic agreement, which, however, applies only to a restricted domain defined by a head noun and the definite article. The latter is the only target to retain masculine, feminine and neuter forms in Pharasiot as shown in (21) below, in which the occurring definite articles are controlled by a masculine and a feminine noun and therefore appear in the respective gender forms.

(21) Pharasiot (Dawkins 1916: 488)

έβγκαλε	*ο*	*ντερβίσης*	*στην*	*τσάκαν*	*του*	*α*	*μήο*
he.took.out	the.M	dervish.M	from.the.F	pocket.F	its	a	apple

'the dervish took an apple out of his pocket'

In all other cases, Pharasiot exhibits neuter agreement which is found with all agreement targets from attributives (22a) and predicates (22b), to personal pronouns (22c, d) (Andriotis 1948: 35-41, 46-47; Dawkins 1916: 163, 170).

(22) Pharasiot (Dawkins 1916: 468, 510, 526, 560)

a.

φερίνκε	*ατζείνο*	*η*	*ναίκα*	*χορτάρε*
she.brought	that.N	the.F	woman.F	herbs

'that woman used to bring herbs'

b.

είπεν	*ντι κι*	*τζ'*	*ο*	*τôιράχος*	*του,*	*«Γω*	*είμαι*	*μέγο»*
he.said	that	and	the.M	servant.M	its	I	am	big.N

'and his servant said, "I am big"'

c.

ντις	*θύρες*	*νεχ*	*τα*
the.F	doors.F	you.open	them.N

'open the doors'

d.

πήγεν	*η*	*μα*	*του·*	*είπεν*	*ντα*	*το*	*υγιόν*	*του.*
she.went	the.F	mother.F	its	she.said	it	the.M	son.M	its

Είπεν ντι κι ο υγιός του
he.said that the.M son.M its
'his mother went and told it to her son. Her son said...'

As in all AMGr dialects, definiteness spreading is obligatory in Pharasiot. This grammatical condition affects the patterning of agreement in polydefinite constructions, that is, in definite NPs in which definiteness is marked by means of the definite article both before the head noun and before any modifying adjectives. As shown in (23a), in these constructions, the prenominal article exhibits syntactic agreement whereas the preadjectival article exhibits neuter agreement. Note, though, that in a few cases this mismatch between the forms of the two articles is repaired, and both the prenominal and the preadjectival article appear in the neuter form as in (23b):

(23) Pharasiot (Dawkins 1916: 466, 576)

a. *σηκώθην τζ̑αι του Θεού το καό ο νομάτ*
he.rose.up and the God's the.N good.N the.M man.M
'and the God's good man rose up'

b. *το μιτσίκο το αδελφός είνι καλ*
the.N young.N the.N brother.M he.is bald
'the youngest brother is bald'

Note, finally, that some residual uses of the feminine form of the personal pronoun can be found in examples such as (24):

(24) Phárasa Greek (Dawkins 1916: 510)
δώτζ̑εν ντα την κόρη του σο υγιό τς
he.gave it the daughter its to.the son her
'he gave his daughter to her son'

4.2.3 Pontic: syntactic and semantic agreement

In Pontic, gender distinctions are preserved. Pontic nouns are marked for one of the three genders—masculine, feminine or neuter—to which they are assigned on the basis of principles similar to the ones we have seen for MGr and Pharasiot. Therefore, gender assignment in the dialect can be considered fundamentally morphological with semantic distinctions based on animacy also taken into consideration. Table 4.4 shows some examples of nouns assigned to the three genders by application of the semantic and formal assignment rules.

Table 4.4. *The masculine, feminine and neuter genders in Pontic.*

MASCULINE	SEMANTIC	*βασιλέας* 'king', *ποπάς* 'priest', *γιοσμάς* 'young man'
	FORMAL	*ŝειμός* 'winter', *δρόμος* 'way', *γύρος* 'round'
FEMININE	SEMANTIC	*γαρή* 'woman', *μάνα* 'mother', *νύφä/νύφε* 'bride'
	FORMAL	*τιμή* 'price', *λαϊστέρα* 'hammock', *λäκά̋* 'stain'
NEUTER	SEMANTIC/FORMAL	*όρος* 'mountain', *πράμα(ν)* 'thing', *δεντρό(ν)* 'tree', *θεμέλ(ιν)* 'foundation'
	FORMAL	*κορίτζ(ιν)* 'girl', *αγούρ(ιν)* 'boy', *καρδόπο(ν)* 'heart.DIM'

Agreement in Pontic can be either syntactic, as in MGr, or semantic. The distribution of the two agreement patterns is conditioned by a combination of animacy and gender (Dawkins 1937: 27-29; Drettas 1997: 167-169; Koutita-Kaimaki 1988/1989; Oeconomides 1958: 140-143; Papadopoulos 1955: 162-163; Tompaidis 1980; Topcharas 1998 [1932]: 23-24). Taking animacy as the basis of description, we see that human nouns whose referents are found at the high end of the Animacy Hierarchy trigger syntactic agreement on all kinds of agreement targets (25).[16]

[16] As pointed out in §4.1.1.3, the formal and semantic properties of masculine and feminine nouns denoting human beings such as *νύφä* coincide. As a result, the application of syntactic and semantic agreement would yield the same form in agreeing targets in examples such as (25). In a strict sense, we are not able to say whether agreement in such cases is underlyingly syntactic or semantic. However, for reasons of uniformity that will become clear later in section, I prefer to analyse it as syntactic rather than semantic.

(25) Chaldía Pontic (Drettas 1997: 684)

η	*μικρέσσα*	*η*	*νύφä*	(...)	*έτον*	*κι*	*άλλο*
the.F	small.F	the.F	daughter-in-law		she.was	and	more

πονηρέσσα
crafty.F
'the younger daughter-in-law was even craftier'

On the contrary, nouns whose referents are found at the low end of the Animacy Hierarchy trigger predominantly semantic agreement. This innovative pattern becomes apparent in the case of inanimate masculine and feminine nouns. These are morphologically assigned to the two genders on the basis of their inflectional class membership, as in other MGr varieties, but are associated with the neuter gender class from a semantic point of view by virtue of their meaning. In a clear case of semantic agreement, the overwhelming majority of targets controlled by such nouns appear in their neuter form to agree with the semantic, rather than formal, properties of their controllers. The singular forms of definite articles that agree with their controllers syntactically when immediately preceding them are the only exception to this pattern that is otherwise found with all remaining targets in all agreement domains, stretching from attributives within the NPs to pronominal anaphora beyond it. Consider, in that connection, the examples in (26) below. Note that in a fashion reminiscent of Pharasiot, the prenominal article in Pontic polydefinite constructions agrees with the controller noun syntactically, but the preadjectival article agrees with it semantically; for example, *τ' ασημένιον ο μαστραπάς* in (26a).

(26) Pontic

a.

τ'	*ασημένιον*	*ο*	*μαστραπάς*	*πάλι*	*κρέμεται*
the.N	silver.N	the.M	tankard.M	again	it.is.hanging

'the silver tankard is hanging again' (Oenóe, Lianidis 2007 [1962]: 228)

b.

εγέμισεν	*το*	*μαστραπά*	*και*	*πριν*	*ακόμα*	*να*	*φέρει*
she.filled	the.M	tankard.M	and	before	even	that	she.brings

ατό σα ôείλια τες
it to.the lips her
'she filled the tankard and even before she brought it to her lips'
(Oenóe, Lianidis 2007 [1962]: 228)

c. *σα πρώτα τα καιρούς έτον ένας βασιλέας*
in.the.N first.N the.N times.M there.was a king
'in the old times there was a king'
(Argyroúpolis, Papadopoulos 1955: 194)

d. *έρθαν σ' έναν τρανόν μάγαραν καικά. Κι εκείν'*
they.came to a.N big.N cave.N near and that.N
η μάγαρα ντο είôεν η πόρτα (...) μόνο ήμσον ώρα
the.F cave.F that it.had the.F door.F only half.N hour.F
έστεκνεν ανοιχτόν
it.stayed open.N
'They came near a big cave. The door to that cave had stayed open for only half an hour.' (Argyroúpolis, Papadopoulos 1955: 194)

e. *εχαϊλαôεύτανε σα ετρακόôα λίρας*
they.agreed to.the.N three.hundred.N liras.F
'they agreed on three hundred liras' (Óphis, Lianidis 2007 [1962]: 240)

The agreement patterns triggered by animal nouns that are found in the middle of the Animacy Hierarchy illustrate the combined effect of animacy and gender in Pontic. As can be seen in the examples in (27), targets controlled by masculine nouns of this type agree with them syntactically and therefore appear in their masculine forms; targets controlled by feminine nouns agree with them semantically in appearing in their neuter form. Masculine nouns thus display the agreement patterns found in human nouns whereas feminine nouns group with inanimate nouns with respect to agreement.

(27) Pontic

a. *επήρε τον πετεινό και ξημολογά τονα και λέει*
he.took the.M cock.M and he.shrives him and he.says

ατονα (...) και έφαγεν ατον (...) επήρε την παπή
him and he.ate him he.took the.F duck.F

και ξημολογά 'το και λέει ατο (...) και έφαγεν ατο
and he.shrives it and he.says it and he.ate it
'he took the cockerel and shrove and said to it (...) and he ate it (...) he took the duck and shrove it and said to it (...) and he ate it'

(Soúrmena, Papadopoulos 1955: 226)

b. *Τα κάτας εξενίτεψαν κι οι πεντικοί χορεύνε.*
the.N cats.F they.are.gone and the.M mice.M they.dance
'The cats are away and the mice are dancing.' (Papadopoulos 1961: 215)

Masculine nouns denoting animals do not always trigger syntactic agreement. In some cases, nouns denoting smaller animals or insects seem to trigger semantic agreement on targets found farther away from the controller, as in the following example:

(28) Pontic

εσκότσεν τον σκορπόν (...) εξήβεν άλλ' έναν,
he.killed the.M scorpion.M it.came.out another.N one.N

εντώκεν εείνο πα εσκότσεν
he.hit it.N part he.killed
'he killed the scorpion (...) another one came out, he hit and killed it'

(Nikópolis, Lianidis 2007 [1962]: 208)

Finally, there can be found a few instances of neuter agreement with human masculine and feminine nouns (29a). In his description of the Pontic variety of Chaldía, Drettas (1997) provides neuter forms for the plural of all feminine human nouns as alternatives to the normally expected feminine forms (29b):

(29) Pontic

a. *το* *ρούσικο* *ο* *ποπάς* *είπε*
the.N Russian.N the.M priest.M he.said
'the Russian priest said' (Rizaíon, Oeconomides 1958: 416)

b. *οι* *Τουρκ* (...) *τα* *γαρήδας* *επαίρνανε*
the Turks the.N women.F they.took
'the Turks (...) took the women' (Chaldía, Drettas 1997: 531)

4.2.4 Rumeic: semantic agreement

Rumeic is another AMGr dialect that preserves the distinction of masculine, feminine and neuter nominals. In contrast to MGr, Pontic and Pharasiot, however, Rumeic nouns are not assigned to the three genders by application of a formal, morphological assignment system. Rather, they receive their gender specification on the basis of their semantics. Nouns denoting male human entities are masculine, those denoting female human entities are feminine, and all other nouns are neuter (Pappou-Zhuravliova 1995: 196-210, 1997; Symeonidis & Tompaidis 1999: 44-56). Some nouns that are assigned to the dialect's three genders by application of this semantic assignment system are shown in Table 4.5.

Table 4.5. *The masculine, feminine and neuter genders in Rumeic.*

MASCULINE	*γαμπρός* 'groom', *πιθιρός* 'father-in-law', *πάππους* 'grandfather', *παλίκαρους* 'stout-hearted man'
FEMININE	*θείγια* 'aunt', *νυφ* 'bride', *υναίκα* 'woman', *μανάκα* 'grandmother'
NEUTER	*ήλιους* 'sun', *μήνα* 'month', *ψύλλου* 'flea', *χαρά* 'joy', *γιουρτή* 'feast', *κουρώνα* 'crow', *νύ̂* 'fingernail', *νιρό* 'water', *ôτô̂όπαγμα* 'cover', *καρτόπλα* 'potato'

As we see in the table, the neuter gender in Rumeic includes nouns that were historically masculine or feminine; for example, *ήλιους* (cf. SMGr *ήλιος* 'son.M'), *ψύλλου*

(cf. SMGr *ψύλλος* 'flea.M'), *χαρά* (cf. SMGr *χαρά* 'joy.F'), *γιουρτή* (cf. SMGr *γιορτή* 'feast.F'). It is possible that some of these nouns may have been assigned to the neuter as a result of shifts to neuter inflectional classes, comparable the ones we saw in §4.1.2.3. Evidence supporting such a hypothesis comes from nouns that were originally masculine and ending in *-ος*—such as *ψύλλου*—which in their nominative singular form lack the distinctive masculine *-ς*. The neuter ending *-ο* is found instead, which in Rumeic may surface as *-ου* when unstressed. Such an explanation, however, is challenged by the fact that nouns such as *ψύλλου* lack neuter plural forms. This means that, if some masculine nouns did indeed undergo a shift to the neuter in Rumeic, they must have done so only in the singular.

Other categories of neuter nouns show no evidence whatsoever of a possible earlier inflectional class shift. Many originally *ος*-masculine nouns preserve their *-ος* ending such as *ôουμός* 'winter', *άνιμους* 'wind', *ήλιους* 'sun', *ουρανός* 'sky' while the formerly feminine *χαρά* (cf. SMGr *χαρά* 'joy.F') and *γιουρτή* (cf. SMGr *γιορτή* 'feast.F') inflect in exactly the same way as feminine human nouns, such as *θείγια* 'aunt' or *νυφ* 'bride' (Symeonidis & Tompaidis 1999: 48-49, 52).

As in all languages with purely semantic gender assignment systems, agreement in Rumeic is overwhelmingly semantic as shown in (30):

(30) Rumeic

a. *υρεύου να ντρανού την μάνα-μ, τουν ντατά-μ*
I.am.looking to I.see the.F mother.F-my the.M father.M-my
'I want to see my mother and my father' (Pappou-Zhouravliova 1995: 254)

b. *του κο μας το ôουμός εν χλίτσκου*
the.N our.N our the.N winter.N it.is tepid.N
'our winter is tepid' (Symeonidis & Tompaidis 1999: 54)

c. *του μηλέγια κουπανίς την*
the.N apple.tree.N it.hit her
'the apple tree hit her' (Pappou-Zhouravliova 1995: 255)

Nevertheless, there can be found a few residual cases of masculine and feminine nouns denoting inanimate entities or animals. Such nouns are the only ones that trigger syntactic agreement in Rumeic (31a). All of these nouns, however, have neuter variants or counterparts (31b), which seem to be in the process of replacing these exceptions to the semantic assignment system of the dialect.

(31) Rumeic (Pappou-Zhouravliova 1997: 732)

a. *μέγας* *άνιμους*
strong.M wind.M
'strong wind'

b. *μέγα* *άνιμου(ς)*
strong.N wind.N

On the other hand, masculine and feminine nouns denoting human beings may trigger neuter agreement in a number of cases, as in (32).

(32) Rumeic

a. *άλλια* *πουλλά* *γιρόδοι*
other.N many.N old.men.M
'many other old men' (Symeonidis & Tompaidis 1999: 84)

b. *γιος* *μας* *πήριν* *όμουρφου* *υναίκα*
son our he.took beautiful.N woman.F
'our son married a beautiful woman' (Pappou-Zhouravliova 1995: 209)

4.2.5 Two innovations in Asia Minor Greek

Two major developments emerge from the description of the gender agreement patterns in Cappadocian, Pharasiot, Pontic and Rumeic: semantic agreement in Pontic and Rumeic, and neuter agreement in Cappadocian and Pharasiot. In the former case, inanimate and/or animal masculine and feminine nouns trigger agreement in the neuter on the various targets controlled by them. Targets controlled by human masculine or feminine nouns appear in their masculine and feminine forms. In the

latter case, all masculine and feminine nouns trigger agreement in the neuter on their targets, irrespective of their meaning. Both developments are clear innovations of the AMGr dialects compared to MGr syntactic agreement, which is, however, still preserved in Pontic and Pharasiot, albeit to different extents.

Table 4.6 summarises the gender agreement patterns of AMGr. In each case, I note the type of agreement (syntactic, semantic, neuter) that is triggered by each type of controller noun with respect to gender (masculine, feminine), animacy (human, animal, inanimate) and number (singular, plural) on the various targets (definite article, attributive modifiers, predicate, personal pronoun) in the four AMGr dialects examined in this section. The type of agreement that is found in principle for each controller/target combination is given in Roman typeface. Agreement patterns that are found as variants are given in Italic typeface. Brackets mark agreement patterns for which I did not find any examples in the texts that I examined but which would be expected to occur in a larger corpus of texts.

Table 4.6. *Gender agreement patterns in AMGr.*

		definite article	attributive modifiers	predicate	personal pronoun
Cappadocian					
		neuter	neuter	neuter	neuter
	FEMININE *	neuter/ *syntactic*	neuter	neuter	neuter/ *syntactic*
Pharasiot					
		syntactic	neuter	neuter	neuter
Pontic					
HUMAN					
	MASCULINE	syntactic	syntactic	syntactic	syntactic
	FEMININE	syntactic/ *neuter*	syntactic/ *neuter*	syntactic/ (*neuter*)	syntactic/ (*neuter*)

ANIMAL					
	MASCULINE	syntactic	syntactic	syntactic	syntactic/ *semantic*
	FEMININE	SG: syntactic PL: semantic	semantic	semantic	semantic
INANIMATE		SG: syntactic PL: semantic	semantic	semantic	semantic
Rumeic					
HUMAN		semantic/ *neuter*	semantic/ *neuter*	semantic/ (*neuter*)	SG: semantic PL: semantic/ *neuter*
NON-HUMAN		semantic	semantic	semantic	semantic

*In the varieties of Delmesó, Potámia and Sílata.

The AMGr varieties present striking similarities with respect to agreement patterns. These become most evident in the case of inanimate nouns, especially in the plural, where we find semantic and neuter agreement in all four varieties. Despite the differences between the two, it is important to point out that both agreement types trigger the same gender form on the targets involved, namely the neuter (33).

(33) a. Cappadocian

σον τ’ άλλα τα ημέρες
like the.N other.N the.N days.F
‘like the other days’ (Araván, *KMS/P&K*, 108)

b. Pharasiot

τέσσερα μέρες
four.N days.F
‘four days’ (Dawkins 1916: 520)

c. Pontic

τα *πολλά* *τα* *γλώσσας*
the.N many.N the.N languages.F
'the many languages' (Kars, Papadopoulos 1988/1989: 132)

d. Rumeic

τα *ρουμαίικα* *τα* *γιουρτίς* (cf. MGr *γιορτές* 'feasts.F')
the.N Greek.N the.N feasts.N
'the Greek feasts' (Symeonidis & Tompaidis 1999: 82)

Similarities across the AMGr dialects expand beoynd agreement types to concomitant inflectional developments, as well. In Pontic, inanimate masculine and feminine nouns form their plural with a single, syncretic nominative/accusative form that is morphologically identical to the original accusative. Reflexes of this syncretism can also be found in Cappadocian (34), suggesting a closer relation between the two AMGr dialects to the exclusion of Pharasiot that shows no evidence of this or any other related development (see also Chapter 2).

(34) a. Pontic

εδέβαν *χρόνä* *και* *καιρούς* (cf. SMGr *καιρούς* 'time.PL.ACC')
they.passed years and time.M.PL.NOM
'years and years passed' (Chaldía, Papadopoulos 1928: 196)

b. Cappadocian

τα *νdοίχ(ου)ς* *έχνε* *αυτιά* (cf. SMGr *τοίχους*
the.N.PL.NOM wall.M.PL.NOM they.have ears 'wall.PL.ACC')
'even walls have ears' (Axó, *KMS/M&K*, 178)

The occurrence of neuter agreement is another point of convergence between the AMGr dialects. While it is in principle found in Cappadocian and Pharasiot, instances of neuter agreement are marginally attested in Pontic and Rumeic, as well. The examples in (35) show the correspondence between neuter agreement patterns in the four dialects.

(35) a. Cappadocian

ένα μέγα χερίφος

a.N big.N man.M

'a big man' (Phloïtá, *Dawkins*, 412)

b. Pharasiot

ατζ̂είνο ο φοβᾰ̈ς

that.N the.M coward.M

'that coward' (Dawkins 1916: 551-552)

c. Pontic

το ρούσικο ο ποπάς

the.N Russian.N the.M priest.M

'the Russian priest' (Rizaíon, Oeconomides 1958: 416)

d. Rumeic

καλό άθραπους

good.N man.M

'good man' (Pappou-Zhouravliova 1995: 204)

By examining the agreement patterns in the AMGr dialects, a number of generalisations can be formulated regarding the correlation between semantic and neuter agreement on the one hand, and the types of targets and the features of animacy, gender and number, on the other. With respect to target types, we observe that the definite article is the target to which syntactic agreement pertains for longer both in the development of semantic agreement—as in the case of inanimate nouns in Pontic—and in the development of neuter agreement, as in Pharasiot. Drawing from the examples we have seen so far, consider in that connection Pontic *ο μαστραπάς* 'the.M tankard.M' and Pharasiot *ντις θύρες* 'the.F doors.F'. We further observe that the personal pronoun is the last target to give away to neuter agreement, as in the Delmesó, Potámia and Sílata varieties of Cappadocian. At the same time, pronouns are the first target to display semantic agreement, as is evident by the agreement triggered by animal masculine nouns in Pontic: for example, *τον σκορπόν* (...) *εείνο πα εσκότσεν* 'the scorpion (...) he killed that one'.

Inanimate and animal nouns in Pontic provide good evidence for the role gender and animacy play in the development of semantic agreement. Semantic agreement is most advanced in inanimate nouns and less so in animal nouns, in whose case it is conditioned by gender. Semantic agreement in the latter type is attested in feminine nouns but only incipiently in masculine ones. Feminine nouns are also the first ones to be affected by neuter agreement, as shown by feminine, but not masculine, nouns denoting human entities in Pontic for which neuter agreement is more widely attested, as shown by Drettas (1997). The feminine gender, therefore, appears to be more vulnerable to developments in agreement than the masculine.

Similarly, in terms of number, the plural precedes the singular in the development of both semantic and neuter agreement. The definite article forms for inanimate and animal feminine nouns in Pontic make this clear in connection to semantic agreement. With respect to neuter agreement, the personal pronouns referring to human nouns in Rumeic provide relevant evidence: neuter agreement is first manifested in the plural rather than the singular.

Taken as a whole, the development of semantic agreement is considered here as evidence that the semantic core of the MGr gender assignment system plays a central role in gender assignment and agreement in AMGr. It is also evident from the data presented that this role can change and strengthen at the expense of syntactic agreement and morphological assignment. It is also crucial to remark with respect to neuter agreement that it appears to build upon semantic agreement for inanimate and animal nouns, as both agreement types trigger the neuter gender form on the variety of targets. In this sense, neuter agreement is considered an extension of the gender of target forms triggered by semantic agreement to target forms controlled by nouns that do not fulfil the semantic criterion that would trigger that gender, that is, human nouns. Neuter agreement therefore appears to be a later development than semantic agreement in AMGr. On this assumption, Pontic, which also preserves inherited syntactic agreement to the most significant extent among the AMGr dialects, is taken to illustrate an earlier stage in the series of developments in gender agreement in AMGr, whereas Cappadocian and Pharasiot are thought of as representing later stages.

This hypothesis is borne out by the agreement patterns in Pontic and Rumeic, in which neuter agreement is found as a variant to well-developed semantic

agreement patterns. In Rumeic, semantic agreement for non-human nouns has reached all types of targets, leading to gender shift from the masculine or feminine to the neuter. It is only after this shift has been completed that human nouns begin to show neuter agreement. Note, though, that this is not necessarily always the case. In Pharasiot, neuter agreement is found on attributive modifiers, on the predicate and on personal pronouns for both human and non-human nouns.

4.2.6 Summary

In this section, I presented the data on gender assignment and agreement in Cappadocian, Pharasiot, Pontic and Rumeic. Focusing on the latter, I identified two innovative types of agreement in these dialects, semantic and neuter. Neuter agreement is found more widely in Cappadocian and Pharasiot, with instances of inherited syntactic agreement also attested. These are systematic in Pharasiot while in Cappadocian they are of a more residual nature. Hence, the tripartite gender distinction of masculine, feminine and neuter is considered not to be operative in Cappadocian and only minimally preserved in Pharasiot. Pontic and Rumeic, on the other hand, display semantic agreement. In the former, semantic agreement is generally found with inanimate and animal feminine nouns; animal masculine and human nouns trigger syntactic agreement. In the latter, morphological gender assignment and syntactic agreement have totally given way to semantic gender assignment and semantic agreement for the overwhelming majority of nouns. Both Pontic and Rumeic, however, seem to allow for neuter agreement in some cases, as well.

I further formulated a number of generalisations with respect to agreement that hold across the four AMGr dialects. In short, the definite article is the last target to lose syntactic agreement in favour of both semantic and neuter agreement. The personal pronoun is the first target to exhibit semantic agreement and simultaneously the last target to give way to neuter agreement. The feminine gender appears to be more vulnerable than the masculine to the development of both semantic and neuter agreement. Of the two numbers, the plural gives way first to developments affecting agreement, be it semantic or neuter. Finally, semantic agreement first develops for inanimate nouns and then extends to animal nouns

which mark the limit up to which semantic agreement can spread. When the neuter gender is found on targets controlled by human nouns, neuter agreement is at play.

Following the presentation of the AMGr data and before I proceed to my diachronic account of the identified developments, I first review previous proposals that have been brought forth in the literature in order to explain the innovative agreement patterns in Cappadocian and the other AMGr dialects. As I show in the next section, these proposals do not take into consideration the genetic link that ties the various dialects together or the relation that holds between the development of semantic agreement and that of neuter agreement but, rather, examine each dialect and each development in isolation, thus failing to provide adequate explanations for the changes observed.

4.3 Previous accounts of the Asia Minor Greek developments in agreement

4.3.1 Cappadocian neuter agreement

The loss of gender distinctions in Cappadocian is found in various discussions of the contact-induced changes observed in the dialect, which seem to imply that language contact with Turkish was the decisive factor in this development. Gender loss is seen as a simplification of "one of the less essential, semantically relatively empty distinctions [that] is often dispensable as it can be eliminated without compensation" (Johanson 2002: 104; for a similar earlier view see Vendryes 1921:108; Jespersen 1922: 346-348). Janse holds that "the loss of gender distinctions is due to Turkish influence, since Turkish has no grammatical gender" (2002: 366), a view often encountered elsewhere in the literature:

> Dawkins considers the loss of grammatical gender which is almost complete in Cappadocia and occurs less extensively in Sílli and Phárasa, to be due to Turkish influence; Turkish has no gender (Thomason & Kaufman 1988: 219-220);

> Again under Turkish influence, there was a progressive loss of gender distinctions, especially in South Cappadocian (Winford 2005: 405; see also Winford 2010: 181);

> In most cases when gender was lost in Indo-European, its loss can be attributed to some substratum, or adstratum language (...) In other cases the influence of genderless languages are (*sic*) easier to prove: Turkish in the case of Asia Minor Greek (Matasović 2004: 76-77);
>
> The loss of gender as a nominal category has occurred (...), dialectally, in Modern Greek (...) due to contact with Turkish (Igartua 2006: 56);
>
> The loss of gender distinctions in Anatolian Greek was obviously brought on by Turkish influence (Johanson 2002: 104).

Quotations such as the ones above refer to the absence of grammatical gender distinctions in Turkish that we saw in §4.1.3. Without having been overtly formulated, contact-oriented explanations for the loss of gender in Cappadocian appear to assume that Cappadocian-Turkish bilinguals extended Turkish non-agreement to their grammatical systems of Cappadocian in a fashion similar to the one we saw in Chapter 3 with respect to the development of DOM, that is, through grammatical pattern replication in the sense of Matras (2009) and Sakel (2007). Alternatively, it could be argued that bilinguals possibly failed to acquire gender agreement in Cappadocian on account of the absence of agreement in Turkish (see Brendemoen 1999: 537).

Evidence relevant to the role bilinguals can play in developments leading to the loss of gender comes from a number of studies reporting on the acquisition of SMGr gender by bilinguals and L2 speakers. Georgalidou *et al.* (2005), in their study of the bilingual SMGr-Turkish speech of the Muslim community of the island of Rhodes, document the confusion and avoidance of gender marking in SMGr and the use of the neuter for targets controlled by masculine or feminine nouns (36):

(36) SMGr-Turkish bilingual speakers (Georgalidou *et al.* 2005)

a. *μεγάλο* *θεία*
big.N aunt.F
'the elder aunt'

b. *ήρτε* *σκύλος* (...) *πεινασμένο* *ήτα*
it.came dog.M hungry.N it.was
'the dog came (...) it was hungry'

The examples in (37) below, produced by L2 speakers of SMGr who are bilingual in Russian and Turkish, are reported by Tsimpli (2003). They also show the use of the neuter for targets controlled by masculine or feminine nouns.

(37) SMGr-Russian/Turkish bilingual speakers (Tsimpli 2003: 183-184)

a. *αυτό* *το* *βοήθεια*
this.N the.N help.F
'this help'

b. *σ'* *ένα* *μακρινό* *περιοχή*
in a.N remote.N area.F
'in a remote area'

c. *μεγάλο* *αδελφός*
big.N brother.M
'elder brother'

The results of Hadjidemetriou's (2009: 201-210) investigation of the acquisition of gender in Cypriot Greek by Cypriot Greek-Armenian bilinguals and L2 speakers of Cypriot Greek with Armenian as their L1 also reveal a similar pattern: the neuter is primarily used in deviant constructions involving masculine or feminine controller nouns and a modifier as in (38). Analogous results are also reported by Chondrogianni (2007: 241-244) in her study on the acquisition of determiners and clitic pronouns by child and adult L2 speakers of SMGr with Turkish as their L1 (see also Seaman 1972).

(38) Cypriot Greek - Armenian bilingual and L2 speakers (Hadjidemetriou 2009: 207)

a. *το* *μεγάλον* *μεγάλον* *εκκλησία*
the.N big.N big.N church.F
'the big church'

b. *τούτο γενοκτονία*
this.N genocide.F
'this genocide'

Taken as a whole, these data seem to lend support to contact-oriented accounts for the loss of gender in Cappadocian. They show that bilingual and L2 speakers of MGr have difficulty in acquiring gender and that when deviating from grammatical gender agreement, the gender they most often use for targets controlled by masculine and feminine nouns is the neuter. From this perspective, the agreement patterns in (36)-(38) are reminiscent of neuter agreement in Cappadocian.

Konstantinidou (2005), in her short treatise on the AMGr dialect of Prousa (Bursa), also reports on frequent instances of deviant agreement patterns similar to those attested in Cappadocian. These occur in the speech of that group whose speakers are in intense contact with other linguistic communities (Turkish, Armenian, Hebrew) and who did not receive formal education in SMGr. Examples of neuter agreement are shown in (39), below. Note that Konstantinidou does not report on any similar agreement patterns in the speech of the group of the community whose speakers were in no contact with other linguistic groups and who were educated in SMGr.

(39) Prousa Greek (Konstantinidou 2005: 134)

a. *το πόλη*
the.N city.F
'the city'

b. *μεγάλο σάλα*
big.N parlour.F
'big parlor'

c. *οι γονείς του*
the parents its
'her parents'

Secondary evidence in support of a contact-based explanation for the loss of gender in Cappadocian comes from the fact that the dialect did not undergo any phonological changes that would affect the various distinctive gender markers of nouns and/or the inflectional endings that mark agreement between targets and controllers. The partial or complete loss of such markers due to phonological attrition and subsequent confusion and morphological restructuring are considered to form the typical diachronic trajectory that leads to reduction or even loss of gender distinctions (Aikhenvald 2003: 379; Corbett 1991: 315; Duke 2009: 76-78; Ibrahim 1973: 86; Matasović 2004: 76; Priestly 1983: 342-343). The loss of gender in the history of English and the reduction from three to two genders in the history of the Romance languages are well known cases of such developments (see Curzan 2003; Hogg 1992: 124-146; Kastovsky 2000; Lass 1992: 103-123 for English; for the Romance languages Hermann 2000: 49-69; for French, Picoche & Marchello-Nizia 1998: 217-223; for Italian, Maiden 1995: 106-111; for Spanish, Penny 2002: 119-131). In Cappadocian and the other AMGr dialects, however, the inflectional endings that are most saliently related to the three genders in MGr (cf. A-S and C-M's prototypical noun classes) are all preserved, as we see in (40):

(40) AMGr

a. Cappadocian

λαγός	'hare'	cf. SMGr	*λαγός* 'hare.M'
τύρα	'door'		*θύρα* 'door.F'
πούμα	'cover'		*πώμα* 'cover.M'

b. Pharasiot

παπάς	'priest.M'	cf. SMGr	*παπάς* 'priest.M'
κόρη	'daughter.F'		*κόρη* 'daughter.F'
πουλί	'bird.N'		*πουλί* 'bird.N'

c. Pontic

πόνος	'pain.M'	cf. SMGr	*πόνος* 'pain.M'
ζεμία	'damage.F'		*ζημιά* 'damage.F'
γόνατον	'knee.N'		*γόνατο* 'knee.N'

d. Rumeic

τῶιρός	'weather.N'	cf. SMGr	*καιρός* 'weather.M'
φουλέγια	'nest.N'		*φωλιά* 'nest.F'
κρέγιας	'meat.N'		*κρέας* 'meat.N'

One could also argue that the loss of gender in Cappadocian is an exceptional case by referencing Priestly's (1983) notion of drift in Indo-European gender systems. For Priestly, "the N[euter] was the IE gender in the greatest jeopardy" (1983: 343) due to its being "relatively unmotivated semantically, but (...) also imperfectly opposed to to the M[asculine] formally" (1983: 341). Cappadocian and the other AMGr dialects constitute counterexamples to Priestly's observation, which may be true in the case of many Indo-European languages and language groups (*inter alia* Hindi, Irish; Romance, East Baltic; Matasović 2004: 75) but certainly does not find any support in AMGr. In AMGr, the neuter gender extends over the masculine and the feminine. At the same time, its use becomes increasingly semantically justified.

Accounts of gender loss in Cappadocian in terms of language contact with Turkish take neuter agreement at face value without tackling the question of what the intermediate stages of the process were through which Cappadocian went from having a tripartite gender distinction to having no gender distinctions. On the other hand, they examine the dialect in isolation and without investigating at all gender in the other AMGr dialects, which show evidence of developments in agreement in the larger AMGr dialectal context that precede the complete loss of gender distinctions in Cappadocian. This, however, does not mean that language contact with Turkish did not play a role in the development of neuter agreement. The bilingual and L2 data as well as the dialectal evidence from other speaker communities in contact with Turkish (and other languages) discussed above provide evidence for the effect language contact can have on gender agreement. What is of paramount significance for our purposes here, though, is what preceded the development of neuter agreement and on what sort of a gender agreement system language contact had an effect.

The Greek linguists who described specific Cappadocian varieties in the 1950s and 1960s hint at the relations between the AMGr dialects in terms of gender agreement (Andriotis 1948: 46; Kesisoglou 1951: 48; Mavrochalyvidis & Kesisoglou

1960: 81; see also Anastasiadis 1995: 86-88; Papadopoulos 1998 [1919]: 127). More importantly, Dawkins appears to have identified the connection between an instance of semantic agreement with an inanimate masculine noun in Sinasós Cappadocian reported by Archelaos (1899: 150)[17] and Pontic semantic agreement, as well as that between Cappadocian and Pharasiot. In his description, he writes that

> it may be inferred that it [i.e., Pontic semantic agreement] is the stage which everywhere in Cappadocia preceded the present entirely genderless state of the adjectives. This entire loss of gender can hardly but be due to the influence of the genderless Turkish. But the disuse of the *m.[asculine]* and *f.[eminine]* adjectival endings before *ἄψυχα*, but not before *ἔμψυχα*, in Pontos and, to judge from this evidence from Sinasós, in the least Turkised of the Cappadocian dialects, shews (*sic*) that the germ of this loss is involved in the distinction between *ἔμψυχα* and *ἄψυχα*, a distinction which is certainly not of Turkish origin. It would seem that the Turkish influence found already existing a loss of grammatical gender or at least a tendency to lose grammatical gender, and carried this further to its own condition of total absence of any distinctions of gender. The dialect of Phárasa, with a fem.[inine] article and a few fem.[inine] demonstratives, but no fem.[inine] adjectives, is in an intermediate stage (1916: 116; see also Dawkins 1937: 27-30).

Horrocks also considers the correspondences between Cappadocian and Pontic as "[pointing] strongly to an earlier period when the two groups formed a single dialect area. The initial development of the gender system along these lines clearly had nothing to do with Turkish, which has no grammatical distinctions based on animacy"

[17] Archelaos documents the following example:

(iii) Sinasós Cappadocian (Archelaos 1899: 150)
το *καλό* *ο* *λόγος*
the.N good.N the.M speech.M
'the good speech'

This example challenges the claim that neuter agreement is the rule in Cappadocian as the definite article *ο* appears to agree syntactically with its controller *λόγος*. The agreement in this example is reminiscent of Pontic semantic agreement; cf. Archelaos's agreement rule: "*ἐπὶ ἀψύχων ἀρσ.[ενικῶν] καὶ θηλ.[υκῶν] τὸ ἐπίθετ.[ο] τίθεται κατ' οὐδέτερον γένος*" 'with inanimate masculine and feminine [nouns] the adjective is used in the neuter gender' (1899: 150). In that connection, Dawkins notes that Archelaos's description of Sinasós Cappadocian is "professedly of a past state of things" (1916: 27). However, even if one does not wish to discard this example on the basis of Dawkins's remarks, thus considering it as truly representing the synchronic state of that Cappadocian variety at the time of its documentation in the 1890s, it could well be the case that Sinasós Cappadocian was one of the least innovative Cappadocian varieties with respect to gender agreement that never underwent the changes characteristic of the overwhelming majority of Cappadocian varieties. The Sinasós agreement pattern in (iii) could then be thought of as illustrating an earlier stage in the development of gender agreement in Cappadocian.

(2010: 402; see also Henrich 1999: 661-667; Hovdhaugen 1976: 149). However, despite Dawkins's and Horrocks's writings and despite the other occurrences in the literature where the relations between the AMGr dialects are being called upon, the dominant view on gender loss in Cappadocian remains heavily in favour of a language contact explanation. It becomes clear, however, that Dawkins did not consider contact with Turkish as the initiating trigger for the developments that led to gender loss in Cappadocian. Instead, he viewed it as a catalyst that pushed ahead developments that were already under way. What is more, he took semantic agreement in Pontic and neuter agreement in Cappadocian and Pharasiot to represent an early and an intermediate stage in these developments respectively. In §4.4, I will show in detail what the relation between the two innovative agreement patters—Cappadocian and Pharasiot neuter agreement and Pontic semantic agreement—is, how the development of neuter agreement built upon that of semantic agreement and also, very importantly, what the trigger and motivation for the emergence of semantic agreement in the AMGr dialects were.

4.3.2 Pontic semantic agreement

Dawkins's and Horrocks's hypothesis that developments in gender agreement in AMGr should be traced back to a period predating language contact with Turkish finds support in the language of the *Trebizond Almanac*, a Medieval Pontic manuscript written in Trebizond in 1336. The text of the *Almanac* is published in Lamprou (1916). At first sight, nothing relevant to our discussion is found in the edited version of the text. However, Henrich (1996: 178) spotted the following instances of semantic agreement in the *apparatus criticus*:

(41) Medieval Pontic, Almanac for Trebizond, 1336 (Lamprou 1916)

a. *ὁ* *χειμῶν* *κάθυγρον* (edited *κάθυγρος* 'very wet.M')
the.M winter.M very.wet.N
'the winter (will be) very wet' (39, line 5)

b. *βροχὴ πολλὴ (= πολύ) καὶ ὀφέλημον* (edited *ὠφέλιμος* 'beneficial.F')
rain.F much.N and beneficial.N
'much beneficial rain' (39, line 7)

c. *φῆμαι δὲ τινὰ ἀληθεῖ (= ἀληθή)* (edited *τινες ἀληθεῖς* 'some.F true.F')
rumours.F and some.N true.N
'some true rumours' (39, line 10)

d. *ὁ δὲ χειμῶν μέσον* (edited *μέσος* 'moderate.M')
the.M and winter.M moderate.N
'the winter (will be) moderate' (41, line 28)

e. *ἔσται υγρὸν καὶ χαροποιὸν καιρὸς* (edited *ὑγρὸς* 'wet.m' and *χαροποιὸς* 'gladdening.M')
it.will.be wet.N and gladdening.N weather.M
'there will be wet and gladdening weather' (42, lines 4-5)

f. *παγετὸς δυνατὸν* (edited *δυνατός* 'strong.M')
frost.M strong.N
'strong frost' (45, line 21)

In the examples in (41), we see that targets controlled by masculine and feminine nouns denoting abstract notions appear in the neuter form both in the predicate (41a, d) and in attributive position (41b, c, e, f). These examples constitute evidence that the development of semantic agreement in AMGr, at least for nouns denoting abstract notions, is an early phenomenon that predates the intensification of language contact between Pontic and Turkish. Recall that Trebizond did not fall under Ottoman rule until 1461. As will be discussed extensively below, the positions in which we find semantic agreement in the *Trebizond Almanac* are expected to exhibit novel agreement distinctions in line with Corbett's Agreement Hierarchy after they have been already introduced in the pronoun. This means that the emergence of semantic agreement in

AMGr has to be dated at least before the early 14th century with 1336 as a *terminus ante quem* for this development (Henrich 1999: 665-666).

Semantic agreement in Pontic has attracted significant attention in the dialectological literature. Oeconomides (1890: 236-239), in his attempt to explain the occurrence of the neuter article *τα* in the plural of non-human *α*-feminine nouns in Pontic—for example *τα λαϊστέρας* 'the.N.PL hammock.F.PL' and *τα φοράδας* 'the.N.PL mare.F.PL'—posits that the form of the article is the result of a reanalysis of the accusative plural form of the feminine definite article *τας* as *τα* when followed by a feminine noun beginning with a *σ-* due to sound coincidence as in *τας στράτας* 'the ways' > *τας στράτας* > *τα στράτας*. From that initial environment, the neuter form of the definite article was later extended to all *α*-feminines by analogy, even to those that do not begin with a *σ-*, such as *τα ημέρας* 'the days' or *τα νύχτας* 'the nights'. The neuter article form further triggered neuter forms in attributives and the predicate. However, Oeconomides does not provide any account of why this phonological reanalysis was restricted to non-human nouns and misses the fact that the change is not restricted to *α*-feminines; consider, for example, *τα πίστεις/πίστας* 'the.N.PL faith.F.PL' from *πίστη*, *τα μäζäδας* 'the.N.PL meze.F.PL' from *μäζä*. He also fails to explain semantic agreement on adjectival predicates controlled by non-human feminine nouns in the singular that lack an attributive and which still trigger syntactic agreement on the definite article, as in (42):

(42) Pontic

H	*σεβτά*	*ς*	*εν*	*πολλά*	*τρανόν.*
the.F	love.F	your	is	very	big.N

'Your love is very big.' (Kotýora, Anastasiadis 1995: 86)

Moreover, Oeconomides does not address the issue that the form of the article *τας* is not attested in Pontic; the form *τοι* is found instead, as shown by human nouns which were left unaffected by this change: *τοι μανάδες* 'the.PL.ACC mother.PL.ACC', *τοι προξενέτρες* 'the.PL.ACC matchmaker.PL.ACC'.

Like Oeconomides, Papadopoulos (1955: 45-46; 1958: 191-194), focuses on the plural of non-human feminine nouns. He attributes their emergence to analogy to plural forms of *ο*-neuter nouns that denote non-human entities such as *τα πρόβατα*

'the sheep' and *τα δεντρά* 'the trees'. The basis of this analogy is, according to Papadopoulos, semantic. He further postulates that neuter plurals for feminine nouns such as *τα εβδομάδας* 'the.N.PL week.F.PL' were later extended to inanimate masculine nouns as in *τα δρόμους* 'the.N.PL street.M.PL' and *τα όρκους* 'the.N.PL oath.M.PL'.

In accounting for the neuter forms of attributive adjectives controlled by non-human feminine nouns, Papadopoulos (1955: 162-163) resorts once again to analogy and postulates a series of analogical reanalyses operating on the sentence level. He hypothesises that similative sentences such as the one in (43a) were the origin of this development, with the sentences in (43b-d) illustrating the intermediate stages in his series of reanalyses.

(43) Pontic (Papadopoulos 1955: 163)

a. *έχει* *λαλίαν* *άμον* *κωδώνιν*
s/he.has voice.F like bell.N
's/he has a voice like a bell'

b. *έχει* *λαλίαν* *κωδώνιν*
s/he.has voice.F bell.N
's/he has a bell-like voice'

c. *έχει* *κωδώνιν* *λαλίαν*
s/he.has bell.N voice.F
's/he has a bell-like voice'

d. *έχει* *ἔμορφον* *λαλίαν*
s/he.has beautiful.N voice.F
'S/he has a beautiful/loud voice.'

Tompaidis has pointed out the many weaknesses of Papadopoulos's hypothesis, stressing that the transition from a similative construction as in (43c), which he takes as being marginally acceptable, to a neuter adjectival modifier as in (43d) is "*ἀδιανόητη*" 'inconceivable' (1979: 232). Unfortunately, Tompaidis does not offer an alternative account for the development of semantic agreement in Pontic but simply

pinpoints a number of inflectional changes that, according to him, jointly form an extensive context of noun and adjective neuterisation in which any explanation for semantic agreement must be couched. However, apart from semantic agreement of the plural definite article in examples like *τα κοσσάρας* 'the.N.PL chicken.F.PL' and *τα εικόνας* 'the.N.PL icon.F.PL', the changes that Tompaidis mentions either do not seem to be directly related to the developments under consideration here (such as the presence in Pontic of a special category of neuter adjectives ending in *-ιν* that lack masculine and feminine forms; for example, *ανάλιν* 'saltless.N', *κατενίν* 'clear.N'), or are completely irrelevant to them (for instance, the preservation in Pontic of adjectives that have a single form for the masculine and the feminine gender like *άσ̂κεμος* 'ugly.M/F' or *άκλερος* 'heirless.M/F'; 1979: 232-233).

In her approach, Koutita-Kaimaki (1988/1989: 261-268) resorts to a combination of phonologically-triggered cluster simplification—like Oeconomides—and analogy, like Papadopoulos. Starting from accusative NPs such as *τας καντήλας* 'the.F.PL.ACC lamp.F.PL.ACC' and *τας φτείρας* 'the.F.PL.ACC louse.F.PL.ACC' and, thus, also assuming an earlier feminine form *τας* for the definite article, she argues that the neuter form *τα* is the result of cluster simplification between the final *-ς* of the article and the initial consonant of the following noun: *τας καντήλας* > *ταϛ καντήλας* > *τα καντήλας*. The newly formed neuter definite article was later extended to feminine nouns beginning with a vowel, a development aided by analogy to the plural of neuter nouns such as *τα ôέρä* 'the hands'. NPs containing a neuter head noun and an adjectival modifier like *τα καλά ôέρä* 'the good hands' also acted as models for adjectival modifiers controlled by non-human feminine nouns to appear in the neuter, as in *τα καλά ημέρας* 'the.N.PL good.N.PL day.F.PL'. As to why this change was only relevant for non-human feminine nouns, Koutita-Kaimaki claims that these are frequently used within the household domain. On a wider scale of considerations, she observes the progressive strengthening of the neuter gender in Pontic and identifies the precedence of semantic over morphological criteria as well as the central role that animacy plays in gender agreement in Pontic, mentioning also in passing that language contact with Turkish might have played a role in this development.

Summing up, by resorting to unmotivated, phonetically based explanations and to highly untenable processes of analogical change, previous proposals miss a holistic view of the Pontic phenomena and fail to provide adequate accounts of the

emergence and development of semantic agreement. The main reason for this is that they all take definite plural NPs headed by non-human feminine nouns as the *locus* in which semantic agreement first emerged and therefore as the starting point for its extension to other targets such as attributive modifiers and the predicate, always with reference to feminine nouns. This emphasis can be explained considering that semantic agreement in the dialect is more advanced with feminine nouns than with masculine ones, a fact that drew the attention of scholars from very early on. Nevertheless, even when dealing solely with non-human feminine nouns, none of the proposals reviewed tackle the problem of semantic agreement in the personal pronouns, which, as we will see in the next section, is crucial to explaining the developments in agreement not only in Pontic, but in all the AMGr dialects as well.

4.3.3 Summary

In this section, I looked at the previous explanations proposed to account for the innovative agreement patterns found in Cappadocian and Pontic. As far as Cappadocian is concerned, neuter agreement is almost exclusively treated as the extreme outcome of language contact with Turkish. This hypothesis appears to be preliminarily corroborated by data drawn from the acquisition of SMGr gender by bilinguals and L2 speakers. However, the scholars who support this contact-oriented view in the literature do not address the issue of what the stages Cappadocian went through in developing neuter agreement were. In the case of Pontic, the noun is falsely identified as the starting point for the innovation of semantic agreement, and a series of unlikely phonological and analogical changes is then postulated to explain its extension to other targets, such as attributives and predicates, leaving semantic agreement of pronouns unaccounted for. Despite the fact that the connection between the two dialects with respect to agreement did not go completely unnoticed by early scholars, more recent explanations have targeted one dialect at a time without any attempt at examining comparatively the various attested agreement patterns in the larger dialectological framework of AMGr, in the sense I discussed in Chapter 2. It is this task that I undertake in the next section, in which I put forward my diachronic explanation for the origin and development of semantic and neuter agreement in AMGr.

4.4 A fresh look

4.4.1 The typological and crosslinguistic context

There is a strong consensus in the typological literature that demonstrative and personal pronouns are the *locus* of developments affecting gender systems (Corbett 1991: 248-259, 310-2, 2006: 264-271; Greenberg 1978). Such developments can involve both the first introduction of gender distinctions in a previously genderless language, and the introduction of novel semantic distinctions to already existing gender assignment and agreement systems. Focusing on the latter case, Corbett argues that, when a novel distinction is introduced to an extant gender system, it is first expressed in the personal pronouns and that its subsequent development follows the path defined by the Agreement Hierarchy, which is repeated here as (44):

(44) Agreement Hierarchy (Corbett 1979, 1983, 1991, 2006)
attributive > predicate > relative pronoun > personal pronoun

From the personal pronouns the novel distinction is extended to the relative pronouns; from there it is extended to the predicate; and from there, finally, to attributive modifiers. When the novel distinction is expressed in all possible agreement targets for a given noun, that is, from personal pronouns to attributives, then that noun undergoes gender shift and also potential morphological adaptation to the new gender (Fernández-Ordóñez 2009: 56).

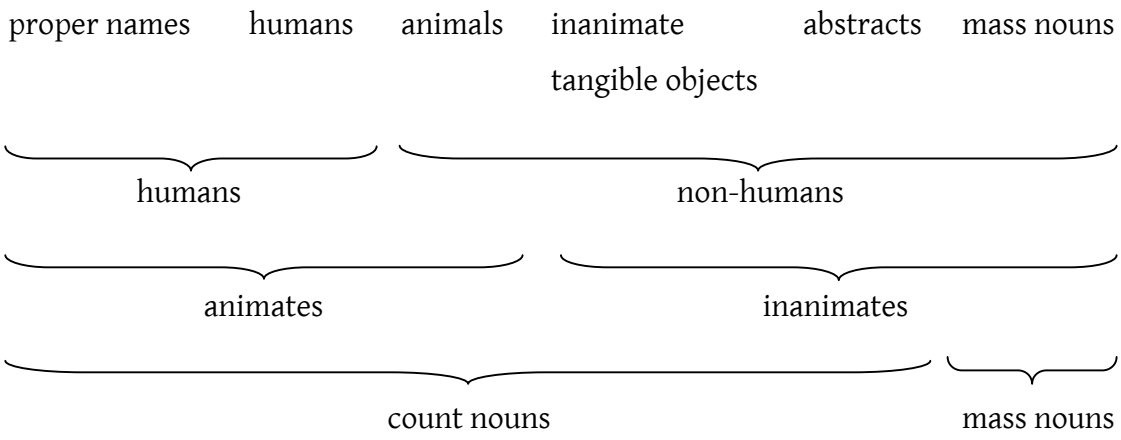
Greenberg (1978: 75-78) offers an alternative to the path defined by Corbett's Agreement Hierarchy. Identifying demonstrative pronouns as the "initiator" (Greenberg 1978: 75) of changes in gender agreement, Greenberg postulates a second stage of development that involves the extension of the novel gender distinction to the NP within which the innovative demonstrative pronouns are used as articles combining with the noun. In Greenberg's scheme, the novel distinction reaches the predicate at a third stage and only after it has been morphologised in the noun.

Novel distinctions that are most often introduced to existing gender assignment and agreement systems generally refer to common semantic oppositions such as human *versus* non-human, animate *versus* inanimate and count *versus* mass, depending, of course, on the type of the gender system already existing (Audring 2008: 107). These oppositions can have various effects in other domains in the

language's grammar, such as in the gender assignment system. As we saw in §4.1.1.2, oppositions based on animacy are commonly found in the core of semantic and morphological gender assignment systems. Most importantly, however, in languages with formal assignment systems such as MGr, oppositions of this type normally play no role in gender agreement that is typically syntactic.

The semantic oppositions that can play a role in gender assignment and agreement systems are thought of as forming a conceptual continuum or scale. The version of the scale that is most commonly used in the literature is a variant of the Animacy Hierarchy called the Individuation Hierarchy (Sasse 1993).[18] In the graphic representation of the hierarchy in Figure 4.1, Sasse ranks referents according to decreasing individuation on the basis of their "'human-like' character" (1993: 659). As Audring explains, "referents are most highly individuated when they are adult persons, and (...) individuation decreases with greater conceptual distance to this referent point" (2009: 125). Proper names and human beings are therefore considered the most individuated semantic type and abstracts and mass nouns the least individuated semantic type.

Figure 4.1. *The Individuation Hierarchy (adapted from Sasse 1993: 659)*



The distinction between mass and count nouns figures prominently in developments involving the introduction of novel semantic distinctions to existing

[18] The term actually used by Sasse is "a continuum of 'individuality'" (1993: 659). Here, though, I use the term Individuation Hierarchy in line with the studies that make use of Sasse's graphic representation of this conceptual scale (*inter alia* Audring 2008, 2009; Enger 2004; Siemund 2008).

gender agreement systems in a variety of Western Indo-European languages. Fernández-Ordóñez (2009) shows how different languages represent different stages with respect to these developments, which confirms Corbett's hypothesis regarding the path gender developments of this type follow, namely the one defined by the Agreement Hierarchy. Starting with a language that represents an incipient stage in the introduction of the mass/count distinction in agreement, Siemund (2002a, 2002b, 2005, 2008) reports on a number of English dialects (Southwest of England, Newfoundland in Canada, Tasmania in Australia) in which the personal pronouns *he* and *she* are systematically used to refer to nouns denoting inanimate, countable and concrete entities. In these dialects, *it* is restricted to refer to nouns denoting mass and abstract entities. In the Southwest of England, for instance, the masculine pronoun *he* replaces count nouns (45a) whereas *it* replaces mass nouns (45b):

(45) Southwestern English (Siemund 2008: 43)

a. [What's the matter with your hand?]
Well, th' old horse muved on, and the body of the butt valled down, and he [the hand] was a jammed in twixt the body o' un and the sharps (bran-pollard).

b. Tommy, where 'v 'ee bin to? — neet vive minits agone I do'd your hair vitty, and now 'tis all up on een again.

Spoken Dutch is currently undergoing a development similar to that undergone by Southwestern English (Audring 2006, 2009; De Vogelaer 2009; De Vogelaer & De Sutter 2011). Dutch makes a bipartite distinction between common—deriving historically from masculine and feminine—and neuter genders in nouns, articles, adjectives, demonstratives and relative pronouns. Personal pronouns, though, have different forms for three genders: masculine, feminine and neuter (Audring 2009: 27). Due to this mismatch, pronominal reference in Dutch is generally thought to be quite problematic, especially in the case of common nouns denoting inanimate entities. Previous researchers had concluded that the masculine personal pronoun is used in pronominal reference with these nouns (Dekeyser 1980; Geeraerts 1992; Geerts 1995; cited in Audring 2006: 93). However, Audring (2006) shows that in

Spoken Dutch the masculine pronouns *hij* and *hem* are used to refer only to count nouns (46a) whereas it is the neuter pronoun *het* that is used to refer to mass nouns (46b).

(46) Spoken Dutch

a. *de vriezer maakt een hoop lawaai hè? Hij is nu*
the.C freezer.C it.makes a lot noise he he is now
al een hele tijd niet open geweest
already a whole time not open been
'The freezer makes a lot of noise, doesn't it? It has been open for quite a while now' (Audring 2009: 158)

b. *Ik vind puree van echte aardappelen altijd lekkerder*
I I.find purée.C of real potatoes always tastier
want het is wat steviger.
because it is somewhat firmer
'I always prefer purée made of real potatoes, because it is firmer.'
(Audring 2006: 96)

According to Audring's (2006) account for this development, the mismatch between the bipartite gender system of nouns and other targets and the tripartite gender distinction of personal pronouns triggered the resemanticisation of the pronominal gender system of spoken Dutch (in the sense of Wurzel 1986). The semantic content of the masculine and neuter pronouns was functionally reinterpreted as being associated to a high and low degree of individuation respectively. Audring accounts for the association of the neuter gender pronouns with a low degree of individuation by referring to results of work within the Indo-European tradition that reveal the neuter gender consistently expresses semantic types that are found "on the lowest end of the animacy hierarchy" (Matasović 2004: 134), such as masses and fluids.

The distinction between mass and count nouns is found to have progressed further in the Scandinavian languages in terms of the number of targets on which it is expressed in agreement. The gender system of the Scandinavian languages is similar to that of Dutch, with nouns and most agreement targets exhibiting a bipartite

distinction into common and neuter, and personal pronouns retaining a tripartite distinction of masculine, feminine and neuter (see Haberland 1994 for Danish: 323-324, 326-328; Askedal 1994: 229-231, 232-234 for Norwegian; Andersson 1994: 280, 282-284 for Swedish). In these languages, the mass/count distinction is expressed in the personal pronouns in the same way as in Dutch. Taking the example of Danish, masculine pronouns refer to common nouns denoting count entities and neuter pronouns refer to common nouns denoting mass entities. The distinction is further expressed in the predicate, which appears in the common gender when controlled by a common noun denoting a count entity, and in the neuter gender when controlled by a common noun denoting a mass entity (47).

(47) Danish (Fernández-Ordóñez 2009: 60)

Olie	*er*	*godt / ?god.*	*Det / *den*	*er*	*godt.*
oil.C	is	good.N / good.C	it.N / it.C	is	good.N

'Oil is good. It is good.'

Enger (2004b) analyses corresponding agreement patterns in Swedish as cases of semantic agreement complying with Corbett's Agreement Hierarchy. He identifies nouns that act as controllers in sentences such as (47) as being low on the Individuation Hierarchy and correlates the neuter gender with the lower end of that scale. Josefsson (2006) also argues in favour of both a grammatical (that is, syntactic) and a semantic type of gender agreement in Swedish, albeit from a more formal point of view (see also Andersson 2000; Corbett 2006: 150, 223-224).

Turning now to the Romance languages, we find that the mass/count distinction is operative in agreement patterns in dialects of Spanish, in which it is expressed in the majority of agreement targets making part of the Agreement Hierarchy. Spanish generally distinguishes between two genders—masculine and feminine—in nouns and three genders—masculine, feminine and neuter—in the definite article, and the personal and demonstrative pronouns. In the standard language, the neuter form of the article combines with adjectives to convey abstract notions, whereas the neuter forms of the pronouns are used to refer to clauses or sentences. When referring to nouns, only the masculine and feminine forms of the pronouns can be used and masculine and feminine nouns control the respective forms

of the definite article (Hualde *et al.* 2001: 137-143). In a number of Spanish dialects, though, the neuter forms of the personal and demonstrative pronouns have extended their domain of use and may refer to masculine or feminine nouns denoting mass entities, having undergone a process of resemanticisation reminiscent of that posited by Audring with reference to Dutch (Fernández-Ordóñez 2006, 2007a, 2007b, 2009 and references therein). In the Spanish dialects in question, this semantic agreement pattern is found in predicates and even post-nominal attributive adjectives. Note, however, that prenominal targets such as demonstrative pronouns and definite articles agree with the controller nouns syntactically (48).

(48) South Cantabrian Spanish (Mata de Hoz; Fernández-Ordóñez 2006: 89, 94)

a. *esta miel es riquísimo, además es muy bueno pa la*
this.F honey is delicious.N also is very good.N for the
garganta
throat
'This honey is delicious, it is also very good for the throat.'

b. *¿Qué es lo que apretaban? La cera. Lo apretábamos*
what is the that they.pressed the.F wax.F it.N we.pressed
y salía la miel pero ahora (...) sale
and it.came.up the.F honey.F but now it.comes.up
limpio, una miel buenísimo, buenísimo
clean.N a.F honey.F very.good.N very.good.N
'What did they press? The wax. We pressed it and the honey came up but now (...) it comes up clean, very good quality honey.'

Other Spanish dialects are more advanced in this respect. In Quirós Asturian, the neuter forms of the demonstrative pronouns function as determiners with masculine nouns denoting mass entities. This gives rise to a new lexical gender in the dialect as the novel semantic distinction is expressed on all agreement targets controlled by nouns which belong to this particular semantic type (49a). This is evident also by the change in the nouns' morphology. Targets appear in the masculine form when the nouns receive a count reading as in (49b):

(49) Quirós Asturian Spanish (Fernández-Ordóñez 2009: 62)

a. *esto* *queiso* / *eso* *pan* / *aquello* *vino*
this.N cheese.N that.N bread.N that.N wine.N
'this cheese' 'that bread' 'that wine'

b. *este* *queisu* / *ese* *pan* / *aquel* *vinu*
this.M cheese.M that.M bread.M that.M wine.M
'this piece of cheese' 'that loaf of bread' 'that kind of wine'

Overall, the developments involving the introduction of the mass/count distinction in agreement in the languages above provide evidence in support of Corbett's Agreement Hierarchy.[19] In Southwestern English and Dutch, the novel distinction is incipiently expressed only in personal pronouns. In the Scandinavian languages, it extends to the predicate and in many Spanish dialects it is additionally found in post-nominal attributive modifiers. This trajectory of developments appears to be complete in Quirós Asturian in which the mass/count distinction is expressed in all possible agreement targets, creating a new lexical gender in the dialect.

In all cases above, the novel semantic distinction was introduced into the existing gender agreement systems through the reinterpretation of the semantic content of existing genders (in the sense of noun classes) based on innovative association of these genders with specific semantic types defined on the basis of the Individuation Hierarchy. This resemanticisation in turn led to the restructuring of previously syntactic agreement systems into more semantic ones. It is important to draw attention to the fact that, despite occurring in languages that are mutually related in varying degrees, these developments involved the same reinterpretation of the neuter gender that underwent in all the languages examined highly similar reinterpretations in becoming associated with that part of the novel semantic opposition that occupied the lower end of the Individuation Hierarchy.

The cases reviewed here form a typological framework that proves particularly enlightening in accounting for the AMGr innovations identified in previous sections. In what follows, I elaborate on the thesis that the development of

[19] See, though, Fernández-Ordóñez (2007, 2009: 63-65; also Haase 2000) for discussion of a related case from the South-Central Italian dialects that does not appear to follow Corbett's modelling but instead follows the path hypothesised by Greenberg (1978).

semantic agreement preserved in Pontic and Rumeic followed a path similar to that just illustrated with reference to the various Western Indo-European languages.

4.4.2 The development of semantic agreement in Asia Minor Greek: resemanticisation and restructuring

My account of the development of semantic agreement in AMGr benefits greatly from the distribution of semantic and syntactic agreement in Pontic, which, as shown in §4.2.3, is conditioned by animacy and gender. First, the preservation of syntactic agreement in the definite article, the target that is found closest to the controller for all semantic types of nouns in the singular (human *ο άντρας* 'the.M man.M', *η γυναίκα* 'the.F woman.F'; animal *ο πετεινός* 'the.M cockerel.M', *η κοσσάρα* 'the.F hen.F'; inanimate *ο καιρός* 'the.M weather.M', *η στράτα* 'the.F way.F'), suggests that semantic agreement initially applied in a domain outside the NP and therefore the novel semantic distinction introduced was initially expressed in a target found outside that domain.

Other than this, however, the Pontic data at first sight do not seem to provide evidence for all the intermediate stages in the extension of semantic agreement to increasingly more types of targets. Semantic agreement in the majority of targets controlled by inanimate masculine and feminine nouns is almost (but not yet) complete, with the exception of the definite article in the singular. Compare *ο καιρός* with *τα καιρούς*, and *η στράτα* with *τα στράτας*. The preservation of syntactic agreement in the singular of the definite article keeps these nouns from shifting to the neuter. Recall, though, that we find this in Rumeic, in which semantic agreement for inanimate nouns is found in all targets, having resulted in their shift to the neuter gender; for example, *του τσιρός* 'the.N time.N', *του στράτα* 'the.N way.N'.

Evidence corroborating the hypothesis that the development of semantic agreement in AMGr followed a path similar to the one illustrated in §4.4.1 above comes from animal nouns in Pontic. The gender-based distribution of syntactic and semantic agreement with these nouns offers valuable insights both into the incipient stages in the introduction of the novel semantic distinction in agreement and into its later development. As shown in §4.2.3, animal feminine nouns pair up with inanimate nouns in triggering semantic agreement in all agreement targets except for the definite article in the singular (50a). On the other hand, animal masculine nouns in principle trigger syntactic agreement on all agreement targets (50b).

(50) Pontic

a. *εδέκεν ατον δύο κοσσάρας, τ' έναν ψ̂εμένον*
s/he.gave him two chickens.F the.N one.N cooked.N
και τ' άλλο άψ̂ετον
and the.N other.N uncooked.N
's/he gave him two chickens, one cooked one and one uncooked one'
(Kotýora, Koutita-Kaimaki 1988/1989: 273)

b. *ο δυνατόν ο γάιδαρον*
the.M strong.M the.M donkey.M
'the strong donkey' (Saltsis 1959: 5577)

The only target with which semantic agreement is possible when controlled by a masculine animate noun is the personal pronoun, which can appear in the neuter form as in (51):

(51) Óphis Pontic (Lianidis 2007 [1962]: 242)
πούλησο με αού το ŝκύλλο (...) κ́ι πορώ να πουλώ ατό
you.sell me this.M the.M dog.M not I.can to I.seel it
'sell me your dog (...) I cannot sell it'

The distinction that conditions semantic agreement with masculine nouns is animate *versus* inanimate; with feminine nouns, semantic agreement is based on the human *versus* non-human distinction. As a result, nouns that belong to the same semantic type but to different genders do not trigger the same type of agreement, syntactic or semantic. This difference is taken to suggest that the novel semantic distinction that became operative in agreement was originally between animate and inanimate, with the neuter gender expressing the part of the dictinction occupying the lower end of the Individuation Hierarchy, namely inanimate. This original distinction was later redefined as human *versus* non-human, shown by animal feminine nouns. Again, the neuter is associated with the expression of the non-human part of the distinction, the one found lower on the Hierarchy. This development involved a rightward shift of the

cut-off point defining semantic agreement from a left/lower (animate/inanimate) to a right/higher (human/non-human) position on the Hierarchy.

In animal masculine nouns, the personal pronoun is the first target to be affected by the redefinition of the semantic distinction determining semantic agreement, in line with the typological findings. This allows us to postulate that the personal pronoun must have been the first target to express the distinction between animate and inanimate when this became initially operative in AMGr agreement. From there, I further postulate that semantic agreement was extended to more targets along the path defined by Corbett's Agreement Hierarchy. The postulated stages of this series of developments are exemplified in Table 4.7 using an inanimate feminine noun. This should be taken as indicative of the developments that nouns of other semantic types also followed, namely inanimate masculine nouns, animal feminine nouns and animal masculine nouns.

Table 4.7. *The diachronic development of semantic agreement in AMGr.*

Stage I	Nouns are assigned to the three genders, masculine, feminine and neuter, morphologically. Agreement is syntactic for all targets. *Η άσπρη η πόρτα είναι κλειστή. Εγώ την έκλεισα.* (SMGr) 'The white door is closed. I closed it.'
Change 1	Resemanticisation: the semantic content of the three genders is reinterpreted based on the animate *versus* inanimate distinction. The neuter gender is associated with inanimate nouns.
Change 2	Restructuring: semantic agreement is introduced for targets found farther away from controllers.
Stage II	Nouns are assigned to the three genders, masculine, feminine and neuter, morphologically. Personal pronouns show semantic agreement. The predicate, determiners of attributives, attributives, and prenominal determiners show syntactic agreement.

	Η άσπρη η πόρτα είναι κλειστή. Εγώ το έκλεισα. (Pontic, animal masculine nouns)
Change 3	Extension of semantic agreement rightwards along the Agreement Hierarchy.
Stage III	Nouns are assigned to the three genders, masculine, feminine and neuter, morphologically. Personal pronouns and the predicate show semantic agreement. Determiners of attributives, attributives, and prenominal determiners show syntactic agreement. *Η άσπρη η πόρτα είναι κλειστό. Εγώ το έκλεισα.*
Change 4	Further extension of semantic agreement rightwards along the Agreement Hierarchy.
Stage IV	Nouns are assigned to the three genders, masculine, feminine and neuter, morphologically. Personal pronouns, the predicate, determiners of attributives, and attributives show semantic agreement. Prenominal determiners show syntactic agreement. *Το άσπρο η πόρτα είναι κλειστό. Εγώ το έκλεισα.* (Pontic)
Change 5	Semantic agreement reaches all targets on the Agreement Hierarchy.
Stage V	Nouns are assigned to the three genders, masculine, feminine and neuter, semantically. Agreement is semantic for all targets. *Το άσπρο το πόρτα είναι κλειστό. Εγώ το έκλεισα.* (Rumeic)

It is important to bear in mind that, as is clear from the discussion above, the extension of semantic agreement did not advance in a uniform way across the different semantic types, genders and numbers. According to our proposal, semantic

agreement initially applied to inanimate nouns and only at a later stage did it apply also to animal nouns. In terms of gender, feminine nouns were the first ones to be affected by these changes, followed by masculine nouns. Lastly, as far as number is concerned, semantic agreement was first expressed in the plural and later in the singular. It is along these lines, shown in (52), that the developments illustrated in Table 4.7 should be considered.

(52) a. animacy/individuation
inanimate > non-human

b. gender
feminine > masculine

c. number
plural > singular

An obvious question that follows from this discussion is what the original trigger for the development of semantic agreement in AMGr was. Recall from §4.1.2.1 that gender assignment in MGr is largely morphological and a large number of inanimate nouns are assigned to the masculine or feminine gender on account of their inflectional class membership. We have also seen that A-S and C-M consider these nouns to be non-prototypical in the sense that they belong to the right gender for their morphology but to the wrong gender for their semantics just as German *Mädchen* 'girl.N'. Corbett (1991: 256) argues that such gender conflicts (in the sense of Dahl 2000:107-112) between semantic and formal assignment are potential triggers for changes in gender which are in turn initiated by the personal pronoun as they "can occur at various distances from the potential controller [and] may be used deictically (and so take the form justified by semantics)" (Corbett 2006: 271). It is exactly such a conflict between the semantic and morphological properties of non-prototypical masculine and feminine nouns that I hypothesise triggered the development of semantic agreement in AMGr. I should emphasise that, according to this proposal, this development occurred language-internally. Language contact did not play any, or at least the decisive, role in bringing it about. This I base both on the findings of the typological literature, which show that there is no need for such developments to

have language-external triggers, and on the early attestations of semantic agreement in Medieval Pontic which predate the period of intense language contact with Turkish as well as any other languages spoken in Asia Minor.

Audring argues along the same lines that semantic agreement in spoken Dutch personal pronouns was caused by the speakers' feeling that nouns have the "wrong gender for the purposes of pronominalization" (2009: 156) following the association of the common (masculine and feminine) gender with a high degree of individuation and that of the neuter gender with a low degree of individuation. Conflicts between semantics and morphology, she continues, "are expected to be strongest at the extreme ends of the individuation hierarchy" (Audring 2009: 156). Non-prototypical masculine and feminine inanimate nouns in AMGr represent such a case of strong conflict. Consider, in this connection, the following quotation from Topcharas, a native speaker of Pontic, who wrote a grammatical description of the dialect in the 1930s. In the part of his description where he deals with gender in Pontic, Topcharas writes

> *Τα γενι ινε τρια λοεν: αρνικον, θελκον κε υδετερον* (...) *Παντα το γενος κι ανταποκρινετε ςο πραματικον τιν φισιν τοντιον λ.χ. ο υρανον εν αρνικον, εκι πυ πρεπ να εν υδετερον· ι πετρα εν θελκον, εκι πυ πρεπ να εν κιατο υδετερον*
>
> 'The genders are of three kinds: masculine, feminine and neuter (...) Gender does not always correspond to the nature of beings, for example *ο υρανον* [the sky] is masculine when it should be neuter; *ι πετρα* [the stone] is feminine when it too should be neuter' (1998 [1932]: 12).

Swahili presents with a relevant case of conflict between semantic content and morphological properties that has an effect on agreement. In Swahili, nouns fall into 14 noun classes which come in singular-plural pairs. Each noun class is marked by a nominal prefix as in *m-toto* 'CL1-child', *wa-toto* 'CL2-children; *ki-kombe* 'CL7-cup', *vi-kombe* 'CL8-cups'. Adjective, numeral and verb stems agree with head nouns in terms of noun class by exhibiting the nominal prefix characteristic of the head noun's class: *m-toto m-dogo* 'CL1-small CL1-child', *wa-toto wa-dogo wa-tatu* 'CL2-children CL2-small CL2-three'. Noun classes in Swahili are semantically homogeneous to a high degree. Human nouns belong to classes 1 and 2, nouns denoting tools to classes 7 and 8 and animal nouns to classes 9 and 10 (Krifka 1995). However, a number of animate

nouns are found in classes other than 1 and 2, and 9 and 10. This creates a conflict between the semantic and morphological properties of these nouns which is resolved by the so-called animate concord, an instance of semantic agreement whereby animate nouns trigger class 1 and 2 agreement in their agreeing targets irrespective of their noun class specification (53) (Wald 1975):

(53) Swahili (Wald 1975: 273)

yu-le	*ki-pofu,*	*ni-li-mw-ona*
CL1-that	CL7-blind.man	1SG-PST- CL1-see

'That blind man, I saw him.'

Wald (1975) provides substantial data from a variety of Bantu languages that show how animate concord developed initially in targets positioned sufficiently far from the controller. Chichewa represents that early stage (Corbett & Mtenje 1987, cited in Corbett 1991: 248-250). Animate concord then extended to the predicate as an alternative to class concord (syntactic agreement), as in Kimbundu, until it reached the attributive position in Chonyi. Swahili illustrates the last stage of this development, in which animate concord is obligatory for the majority of targets (Corbett 1991: 252-256). This trajectory of changes complies with the Agreement Hierarchy and bears important similarities to the trajectory that I hypothesised for the development of semantic agreement in AMGr. It also involves genetically related languages that are shown to be in different stages with respect to the development of animate concord in the same way that I argue that the various AMGr dialects represent different chronological stages in the trajectory of the extension of semantic agreement. What remains to be accounted for is neuter agreement in Cappadocian and Pharasiot. I tackle this in the next section.

4.4.3 The development of neuter agreement in Cappadocian and Pharasiot

In §4.4.1, we saw that the final stage in developments involving the extension of semantic agreement in increasingly more types of targets is reached when all targets express a novel semantic distinction. At that point, the affected nouns shift their gender and can potentially undergo morphological adaptation to match their new

gender. This is the stage reached by Rumeic, in which all nouns denoting non-human entities have shifted to the neuter gender with some of the *ος*-masculines adjusting their morphology to the *ο*-neuters, while agreement in the masculine and feminine is restricted to human nouns. This stage could be considered to mark the end in a series of developments whereby syntactic agreement ends up becoming semantic. As we have seen, though, Cappadocian and Pharasiot undergo a second development, that of neuter agreement, which ultimately leads to the complete loss of gender distinctions in the two dialects.

Neuter agreement builds upon semantic agreement in extending the neuter gender of targets controlled by inanimate and/or animal nouns to targets controlled by human nouns that do not fulfil the semantic criterion for the neuter. I propose that this extension was facilitated by the strong correlation between gender and inflection in MGr which I consider as having played the key role in bringing about neuter agreement in Cappadocian and Pharasiot. As was shown in §4.1.2.1 and §4.2, in MGr as well as in the AMGr dialects that preserve gender distinctions even to a limited extent like Pharasiot, gender assignment relies almost exclusively on the inflectional class specification of each noun. With the development of semantic agreement in AMGr, however, this morphological system is disrupted and gender assignment becomes ambiguous, as nouns that belong to the same inflectional class trigger different types of agreement, that is, in different genders. This is evident in Pontic. Compare the inflection of a human and an inanimate noun from each of the two genders, masculine and feminine in (54) with the gender of the targets controlled by them in (55):

(54) Pontic (Drettas 1997: 119)

	a. masculine		b. feminine	
	‘friend’	‘way’	‘mother’	‘road’
SINGULAR				
NOM	*ο φίλον*	*ο δρόμον*	*η μητέρα*	*η στράτα*
GEN	*τη φιλ*	*τη δρομ*	*τη μητέρας*	*τη στράτας*
ACC	*τον φίλον*	*τον δρόμον*	*την μητέραν*	*την στράταν*

(55) Pontic

a. *ο* *καλός* *ο* *φίλον*
the.M good.M the.M friend.M
'the good friend'

but

το *καλόν* *ο* *δρόμον*
the.N good.N the.M way.M
'the good way'

b. *η* *καλέσσα* *η* *μητέρα*
the.F good.F the.F mother.F
'the good mother'

but

το *καλόν* *η* *στράτα*
the.N good.N the.F way.F
'the good road'

This discrepancy becomes especially pronounced in Rumeic. Human masculine and feminine nouns, and inanimate nouns that were formerly masculine and feminine belong to the same inflectional class but to different genders following the shift of all inanimate nouns to the neuter (56):

(56) Rumeic (Pappou-Zhouravliova 1995: 205-208; Symeonidis & Tompaidis 1999: 51-52)

	a. *α*-masculine		b. *α*-feminine	
	'man.M'	'month.N'	'woman.F'	'day.N'
SINGULAR				
NOM/ACC	*άντρα*	*του μήνα*	*υναίκα*	*του μέρα*

PLURAL				
NOM/ACC	*άντρις*	*τα μήνις*	*υναίκις*	*τα μέρις*

Many Cappadocian varieties provide evidence for the same identity in the inflection of nouns that originally belonged to the same gender and inflectional class but which would trigger different types of agreement in a semantic agreement system of the Pontic type, as shown in (57):

(57) Axó Cappadocian (Mavrochalyvidis & Kesisoglou 1960: 35, 38-39)

	a. *α*-feminine		b. *η*-feminine	
	'nun'	'door'	'bride'	'trouble'
SINGULAR				
NOM/ACC	*καλόγəργια*	*ťύρα*	*νυφ(η)*	*νοργή*
GEN	*καλόγəργιας*	*ťύρας*	*νυφ(η)ς*	*νοργής*
PLURAL				
NOM/ACC	*καλόγəργιες*	*ťύρες*	*νυφάγες*	*νοργές*
GEN	*καλόγəργιεσγιου*	*ťύρεσγιου*	*νυφάγεσγιου*	*νοργεσγιού*

Corbett's term Trojan horses (1991: 98, 103, 251) accurately describes the way in which large numbers of masculine and feminine nouns that triggered semantic agreement in the neuter gender—such as *δρόμον* and *στράτα* in Pontic, or *ťύρα* and *νοργή* in Axó Cappadocian—could have "open[ed] the door for many more nouns" (Corbett 1991: 98) of the same gender and inflectional class, but of different semantic type to take agreement in the neuter in spite of the fact that they did not fulfil the semantic criterion for that target gender. Pontic and Rumeic data suggest that this most probably happened only after semantic agreement had been extended to most or all types of targets on the Agreement Hierarchy. Consider the following examples:

(58) a. Rumeic (Pappou-Zhouravliova 1995: 255)

τώρα	*ξέην*	*ατή,*	*ένα*	*όμουρφου*	*κουρασέγια*
now	she.came.out	she.F	a.N	beautiful.N	young.girl.F

'then a beautiful young girl showed up'

b. Pontic (Drettas 1997: 169)

το	*έμορφον*	*η*	*γαρή*
the.N	beautiful.N	the.F	woman.F

'the beautiful woman'

In the Pontic example (58b), the human noun *γαρή* 'woman' triggers neuter agreement in the attributive and its definite article in the same way as non-human feminine nouns (cf. *τα άσπρον η κοσσάρα* 'the white hen'). Recall that semantic agreement in the feminine is more advanced than in the masculine and is triggered by both inanimate and non-human nouns. Therefore, in terms of the Individuation Hierarchy, the extension of agreement in the neuter from non-human to human feminine nouns is not a surprising development. What calls for special attention here is the fact that, in this extension, human nouns appear to adopt the agreement pattern of non-human nouns wholesale, that is, with no intermediate stages parallel to the ones we saw in the development of semantic agreement in §4.4.2. Compared to the development of semantic agreement, which must have been a relatively long and gradual process, that of neuter agreement appears to have been an abrupt and quick change, whereby nouns denoting human beings assumed the agreement patterns of nouns that triggered semantic agreement in the neuter in a shift-like fashion, ultimately leading to the total loss of gender distinctions in Cappadocian.

This, however, is not the only possible scenario for the development of neuter agreement. Corbett (1991: 142-143) reports on the progressive loss of gender distinctions in different types of targets in a variety of languages, in which determiners and personal pronouns retain gender distinctions longer, as in the Kru languages (Marchese 1988: 332-336). The preservation of gender distinctions in personal pronouns is in fact typical of developments leading to partial or complete gender loss, English being a well-known example of such a retention (Aikhenvald 2000: 398-399; Corbett 1991: 259; Duke 2009: 78-79; Priestly 1983: 339-341). Cappadocian and Pharasiot are not special cases of gender loss in that respect, as third person pronouns retaining gender distinctions marginally survive both in a few varieties of Cappadocian and in Pharasiot. Pharasiot, in which the definite article is the only target to preserve the tripartite gender distinction of masculine, feminine and neuter, represents the last stage before the complete loss of gender. Apart from

the evidence discussed here, though, the available data do not seem to suggest a progressive development of neuter agreement in Cappadocian and Pharasiot in terms of agreement targets.

On the other hand, neuter agreement, like semantic agreement, appears to have progressed differently with respect to gender and number. In Cappadocian, feminine nouns trigger neuter agreement in the plural of the definite article significantly more often than masculine nouns with which definite articles are realised as null (Axó Cappadocian *Ø πιῶτικοί* 'the shepherd.M.PL' but *τα ναίκες* 'the.N.PL woman.F.PL'; Mavrochalyvidis & Kesisoglou 1960: 29-32). Feminine nouns also illustrate the difference in terms of number, as neuter agreement in the plural is much more common than in the singular (*Ø ναίκα* 'the/a woman.F.SG' but *τα ναίκες* 'the.N.PL woman.F.PL'). Therefore, the generalisations regarding the effect of gender and number in the development of semantic agreement that were formulated in (52b) and (52c) seem to hold for the development of neuter agreement, as well. The relevant schematisation is repeated in (59):

(59) a. gender
feminine > masculine

b. number
plural > singular

As a final note, based on the historical and sociolinguistic background discussed in Chapter 2, as well as on the findings of studies on the L2 acquisition of SMGr gender reviewed in §4.3.1, the possibility that the influence of Turkish, and possibly other languages, as well, had a role to play in the loss of gender in Cappadocian and Pharasiot cannot be excluded. These are the two AMGr dialects that evolved in an environment of most intense and long-standing language contact compared to all other dialects in the AMGr group. In contrast to the dominant view, however, I do not consider language contact as the decisive or primary factor that triggered the developments that ultimately led to this loss. Rather, I argue that the effects of contact could be relevant, if at all, only at a later stage following the emergence and considerable development of semantic agreement in AMGr. Language

contact might have favoured the extension of the neuter gender to targets controlled by human nouns in a way similar to that in which bilingual and L2 speakers of SMGr use the neuter gender for targets controlled by nouns of any of the three genders. In my approach, language contact with Turkish is taken as having catalysed already ongoing changes in gender agreement that had been initiated long before the AMGr dialects came into intense contact with Turkish at the social, cultural, and, most importantly, linguistic level.

4.4.4 The relationships between the Asia Minor Greek dialects with respect to agreement

Cappadocian, Pharasiot, Pontic and Rumeic illustrate different stages with respect to the development of semantic and neuter agreement. Pontic represents the earliest attested stage in the development of semantic agreement that has progressed to a significant degree in terms of targets and semantic types at the expense of inherited syntactic agreement, which is also preserved to a considerable extent. The final stage in the development of semantic agreement is found in Rumeic. Neuter agreement is found incipiently in Pontic whereas it appears to be more widely available in Rumeic. Cappadocian and Pharasiot are the two dialects in which neuter agreement is found most extensively, with Cappadocian exhibiting neuter agreement across the board. However, a caveat must be stressed at this point: I do not suppose that the agreement patterns found in the four AMGr dialects represent, strictly speaking, different developmental stages of a single and uniform instance of change succeeding one another implicationally as if occurring in one single language. Rather, I consider the changes affecting agreement in AMGr to be mutually related, to have followed similar paths of development, and to trace their origin in the first emergence of semantic agreement in their common ancestor, the AMGr Koiné that was spoken in the area in Medieval times as hypothesised in Chapter 2. Nevertheless, the mutual relatedness of the AMGr dialects in terms of agreement is of varying degrees and some dialects are related to one another in a way suggesting at least some extent of common development and shared innovation.

It has already been mentioned that the syncretic nominative/accusative plural forms for inanimate masculine nouns, which are morphologically identical to

the original accusative, such as the ones in (60), constitute evidence for a higher degree of relatedness between Pontic and Cappadocian.

(60) a. Pontic (Oeconomindes 1958: 142)
τα φόβ(ου)ς 'the.N.PL fear.M.PL.NOM/ACC' (cf. MGr *φόβους* 'fears.M.ACC')
τα ῶειμούς 'the.N.PL winter.M.PL.NOM/ACC'

b. Malakopí Cappadocian (Dawkins 1916: 99-100)
τα φόβους
τα ῶειμούς

It seems reasonable to assume based on this highly idiosyncratic morphological innovation shared by Cappadocian and Pontic that the two dialects underwent the same developments in agreement at least until a stage similar to that in which Pontic is found at present: that is, a stage where semantic agreement is triggered by all inanimate nouns in the overwhelming majority of targets, with the exception of the definite article in the singular.

In contrast, in Pharasiot we find no parallels to Pontic agreement patterns, or any reflexes reminiscent of any stage in the development of semantic agreement such as the ones we find in Cappadocian. Neuter agreement in the overwhelming majority of targets in this dialect has destroyed all possible environments where we could potentially find patterns that could be associated more clearly with Pontic and Cappadocian ones. Unlike the latter two dialects, Pharasiot preserves syntactic agreement in the definite article in both numbers for all semantic types of nouns, both human and non-human, as in (61) and (62), examples which differ from their Pontic and Cappadocian equivalents.

(61) Pharasiot (Andriotis 1948: 39)
a. *ο θείος - οι θείοι* 'the.M.SG-PL.NOM uncle.M.SG-PL.NOM'

b. *ο μύος - οι μύοι* 'the.M. SG-PL.NOM mill.M. SG-PL.NOM'

(62) Pharasiot (Andriotis 1948: 40)

a. *η ναίκα - οι ναίτῶες* 'the.F. SG-PL.NOM woman.F. SG-PL.NOM'

b. *η φωλᾰ́ - οι φωλᾰ́δες* 'the.F. SG-PL.NOM nest.F. SG-PL.NOM'

This is taken to suggest that Pharasiot diverged from Pontic and Cappadocian with respect to the developments in agreement at a point before the expression of semantic agreement in the definite article for any semantic type of noun, only to converge with Cappadocian later in terms of the extensive neuter agreement. Unfortunately, the stage in which the dialect is found as reported in the available sources does not allow for the formulation of hypotheses regarding the development of semantic and neuter agreement in targets other than the definite article. It may well be that Pharasiot underwent some developments similar to, or even in common with either Pontic or Cappadocian up to a certain point but, again, we are in no position to have any insights in this connection. In any case, Pharasiot corroborates the proposal in Chapter 2 that Pontic and Cappadocian share a larger number of common innovations than they both do with Pharasiot.

Turning finally to Rumeic, it has already been pointed out that the dialect illustrates the final stage in the development of semantic agreement with all formerly masculine and feminine nouns denoting non-human entities shifting to the neuter gender as shown in (63). This is the stage that is expected to complete the series of changes represented in Pontic and, therefore, demonstrates the close relation between the two dialects.

(63) Rumeic (Symeonidis & Tompaidis 1999: 48-49)

a. *του λαγό* 'the.N hare.N' (cf. MGr *λαγός* 'hare.M')
του ήλιους 'the.N sun.N' (cf. MGr *ήλιος* 'sun.M')

b. *του κάτα* 'the.N cat.N' (cf. MGr *γάτα* 'cat.F')
του χαρά 'the.N joy.N' (cf. MGr *χαρά* 'joy.F')

Semantic agreement with non-human nouns in all targets in Rumeic could potentially indicate a stage that Cappadocian might have undergone before the

development of neuter agreement. Note, however, that if this turns out to be the case, this point of convergence in the two dialects should not be viewed as a shared innovation given their geographic and genetic distance. Rather, it should be examined whether Cappadocian went through a stage similar to that of Rumeic independently in the course of changes in agreement. In some Cappadocian varieties, most nouns denoting non-human entities that were originally masculine or feminine take an overt definite article in the singular. The relevant examples in (64) are clearly reminiscent of the Rumeic ones in (63).

(64) Cappadocian

a.	*το ποντικός*	'the.N.SG.NOM mouse.N.SG.NOM'	(Phloïtá, *ILNE/811*, 64)
	το γάμος	'the.N.SG.NOM wedding.N.SG.NOM'	(Axó, *KMS/M&K*, 204)
b.	*το πισίκα*	'the.N.SG.NOM cat.F.SG.NOM'	(Ghúrzono, *Dawkins*, 338)
	το στράτα	'the.N.SG.NOM way.F.SG.NOM'	(Araván, *KMS/P&K*, 120)

These data appear to confirm the hypothesis at first glance. However, there can still be found instances whereby the definite article is realised as null when preceding formerly masculine or feminine nouns denoting animals (65a) and even inanimate entities (65b):

(65) Phloïtá Cappadocian (*ILNE/811*, 31, 64, 84)

a.	*Ø ποντικός*	'the mouse.M.NOM'
	Ø πισίκα	'the cat.F.NOM'
b.	*Ø καλοκαίρης*	'the summer.M.NOM'
	Ø καμπάνα	'the bell.F.NOM'

Cappadocian, therefore, has not reached the final stage in the development of semantic agreement found in Rumeic. The data in (65) suggest that, in the course of its development, semantic agreement in Cappadocian never reached the masculine and definite article in the singular. This corroborates the claim made above that

Cappadocian shares a significant number of common innovations with Pontic, in which the definite article in the singular retains syntactic agreement.

As for the neuter forms of the definite article in Cappadocian examples such as (64), they are best analysed as the result of the extension of neuter agreement and obligatory definiteness spreading. In many Cappadocian varieties, obligatory spreading is blocked in the case of some formerly masculine and feminine nouns that trigger the null realisation of the definite article. In cases such as (66), the definite article appears only before the attributive adjective and is always neuter in form.

(66) Cappadocian

a. *το* *μέγα* *Ø* *αδελφός*
the.N big.N brother.M
'the older brother' (Phloïtá, *Dawkins*, 410)

b. *το* *μεγάλο* *Ø* *νευλή*
the.N big.N yard.F
'the big yard' (Axó, Mavrochalyvidis & Kesisoglou 1960: 31)

Definiteness spreading is, however, obligatory and operative in the overwhelming majority of definite NPs containing an attributive in Cappadocian. As a result, in some varieties, instances such as the ones above are eliminated and the neuter definite article appears in front of all nouns as in Ulaghátsh Cappadocian. Constructions such as the ones in (67) most probably resulted in the presence of the article in NPs originally lacking an article, such as those in (68).

(67) Ulaghátsh Cappadocian (*KMS/K*, 138, 142)

a. *ντο* *γιαβανίν* *ντο* *κανείς*
the.N wild.N the.N man.M
'the wild looking man'

b. *ντο* *γκοτζάν* *ντο* *ναίκα*
the.N old.N the.N woman.F
'the old woman'

(68) Ulaghátsh Cappadocian (*Dawkins*, 350, 264)

a. *ντο* *χερίφος*
the.N man.M
'the man'

b. *ντο* *ναίκα*
the.N woman.F
'the woman'

In conclusion, we see that despite their differences, Pontic, Cappadocian, Pharasiot and Rumeic can be shown to be related to one another in varying degrees. Pontic has genetic links with all the other dialects and appears to illustrate a stage in the development of semantic agreement that all three underwent. Pontic is, therefore, considered to be a rather conservative dialect within the AMGr group, at least with respect to agreement. The other three dialects are more innovative, having developed relatively independently but in a similar fashion. This similarity they owe to their origin from a common ancestor, in which changes affecting agreement had most probably already been set in motion, but also to a degree of common development as in the case of Cappadocian and Pontic, and Rumeic and Pontic between which shared innovations are more readily confirmed by the data.

4.4.5 Summary

In this section, I put forward my account of the developments of semantic agreement and neuter agreement in AMGr. Drawing on a wealth of typological data, I proposed that semantic agreement developed as a result of the resemanticisation and restructuring of the inherited syntactic agreement system on the basis of the distinction between animate *versus* inanimate, which came to be expressed in agreement. Resemanticisation was triggered by non-prototypical masculine and feminine nouns denoting inanimate entities that were felt by speakers to have the right gender for their morphology but the 'wrong' gender for their semantics. The animate *versus* inanimate distinction was first expressed in personal pronouns and progressed further along the lines defined by Corbett's Agreement Hierarchy: that is,

from personal pronouns to the predicate, from the predicate to the attributives, and, finally from attributives to determiners. Pontic represents an intermediate stage while Rumeic illustrates the final stage of this series of changes. Feminine nouns triggered semantic agreement before masculine nouns, the plural number before the singular and inanimate nouns before those denoting animals. This last development resulted in the redefinition of the semantic distinction serving as the basis for semantic agreement from animate *versus* inanimate to human *versus* non-human. Semantic agreement served as the basis for the development of neuter agreement, whereby the neuter gender was extended from targets controlled by non-human and/or inanimate nouns to human nouns that did not fulfil the semantic criterion for agreement in the neuter on their targets. The strong relation between gender and inflectional class in MGr played a key role in this extension which became possible *via* Trojan horses. Masculine and feminine nouns that triggered semantic agreement in the neuter but belonged to the same inflectional classes as masculine and feminine nouns that triggered syntactic agreement in the masculine and feminine gender respectively. In contrast to the development of semantic agreement—which progressed in more or less well defined stages—neuter agreement developed abruptly as human nouns assumed the agreement patterns of nouns that triggered semantic agreement in the neuter in a shift-like fashion. Feminine nouns underwent these developments earlier than masculine nouns, and so did the plural number with respect to the singular. The further advance of neuter agreement ultimately led to the complete demise of gender distinctions in Cappadocian.

4.5 Conclusions

In this chapter, I have brought forth my account of the historical origin and subsequent diachronic developments that resulted in the loss of gender distinctions in Cappadocian.

In contrast to previous approaches in the literature, I argued strongly in favour of a language-internal explanation for gender loss. Placing particular emphasis on the genetic relations between Cappadocian and the other AMGr dialects, I drew on a wealth of data on gender agreement in Pharasiot, Pontic and Rumeic as well as on the robust findings of typological work concerning the development of gender systems crosslinguistically. My investigation showed that the loss of gender in

Cappadocian followed an earlier AMGr innovation, that of semantic agreement, whereby inanimate nouns belonging to the masculine and feminine genders began triggering agreement in the neuter on targets contolled by them. Semantic agreement came about when the inherited MGr gender system was resemanticised on the basis of the semantic distinction of animate *versus* inanimate that gradually became expressed in agreement. Resemanticisation was in turn triggered by inanimate masculine and feminine nouns that were non-prototypically assigned to the right gender for their morphology but to the wrong gender for their semantics. Semantic agreement first became manifest in personal pronouns and then followed a trajectory defined by Corbett's Agreement Hierarchy, moving from the pronouns to the predicate to the attributives and, ultimately, to the determiners. Based on evidence from Medieval Pontic and on the attestation of reflexes of semantic agreement in all core AMGr dialects, I suggested that the earliest manifestations of these developments must go back to the Medieval AMGr Koiné, the common ancestor of the modern dialects, thus predating the intensification of language contact with Turkish.

I treated neuter agreement in Cappadocian as a chronologically later, second level development that built upon that of semantic agreement. In its development, the neuter gender of targets controlled by inanimate, and later also animal, nouns was extended to targets controlled by human nouns that did not fulfil the semantic criterion that would justify selection of the neuter. The strong correlation between gender and inflection in MGr was the catalyst in facilitating this extension. Due to semantic agreement, nouns that belonged to the same inflectional class were found to trigger agreement in different genders, either in the masculine and/or the feminine, or in the neuter. Nouns that triggered agreement in the neuter then acted as Trojan horses in favouring the generalisation of that gender over the masculine and the feminine, ultimately leading to the complete loss of gender distinctions in Cappadocian.

5

The neuterisation of noun inflection

5.0 Introduction

In Chapter 3, I looked at how the development of DOM in Cappadocian rendered masculine nouns in the dialect more neuter-like in terms of their syncretism patterns. In Chapter 4, I showed that following the loss of gender distinctions all Cappadocian nouns behave as neuters as far as agreement is concerned. In this chapter, I deal with those developments that rendered the inflection of nouns in Cappadocian more like that of *ι*-neuters such as *σπίτ* 'house' and *παιδί* 'boy'. As introduced in Chapter 1, there are two such developments: neuter heteroclisis, and 'agglutinative' inflection. Both innovations involve the use of the endings *-ιού* and *-ια* that are characteristic of *ι*-neuter nouns to express the genitive singular/plural and the nominative/accusative plural, respectively, in nouns that do not belong, diachronically or synchronically, to the *ι*-neuter inflectional class. They, however, differ with respect to the kind of linguistic unit to which they attach in inflection in realising these case/number combinations. In neuter heteroclisis, the two endings attach to noun stems whereas in 'agglutinative' inflection they attach to what appear to be nominative singular forms of nouns.

The development of neuter heteroclisis bears major historical significance. In Chapter 2 we saw that it constitutes one of the shared innovations in light of which

the AMGr dialects are shown to be related by descent from a common ancestor. Heteroclitic forms are also found in a few Northern Greek (henceforth NGr) dialects spoken on or just off the western coast of Asia Minor. This suggests that neuter heteroclisis most probably emerged at a time before the genetic split of the two dialect groups—AMGr and NGr. What is more, neuter heteroclisis is shown to have been one of the contributing factors that facilitated the second neuterising development dealt with here, namely that of 'agglutinative' inflection. These considerations notwithstanding, the phenomenon has gone largely unnoticed in the literature. In response to this gap, I aim in this chapter to provide an account of the historical origin and subsequent development of neuter heteroclisis in Cappadocian. As in Chapter 4, data drawn from a variety of AMGr and NGr dialects offer valuable insights in that connection. As I will show in detail, neuter heteroclisis developed as a repair strategy to overcome structural difficulties in the inflection of nouns, having to do mostly with stress placement, diagrammaticity and prototypicality.

In contrast to neuter heteroclisis, 'agglutinative' inflection has attracted a lot of attention in the literature. Due to its superficial similarity to Turkish noun inflection that is prototypically agglutinative, it is generally viewed as a contact-induced development by most extant analyses. Contrarily, I account for the development of 'agglutinative' inflection in Cappadocian on purely language-internal grounds and show that noun paradigms that have been considered agglutinative by previous researchers in reality evidence the shift of large numbers of nouns to the *ι*-neuter inflectional class that was triggered by prototypicality deviations within the masculine and feminine inflectional classes. Since 'agglutinative' inflection is a distinctively Cappadocian development, my analysis in this chapter is based only on data from the various Cappadocian varieties whose differences in the distribution of 'agglutinative' forms allow for the internal reconstruction of their origin and development.

The chapter is structured as follows: §5.1 provides an outline of noun inflection in MGr and Turkish. The general characteristics of Cappadocian noun inflection are presented in §5.2. In §5.3 I develop my diachronic analysis of neuter heteroclisis while that of 'agglutinative' inflection is found in §5.4. §5.5 concludes this chapter.

5.1 Noun inflection in Modern Greek and Turkish

5.1.1 Modern Greek

5.1.1.1 General typological characteristics

MGr nouns inflect for case—which has the values nominative, genitive, accusative, and vocative[20]—and for number, which has the values singular and plural. Inflection in MGr is stem-based. Stems can be allomorphic or non-allomorphic, and are bound. In Ralli's (2000, 2002, 2005: 116-122) analysis, allomorphic stems have two allomorphs, one ending in a vowel and one ending in a consonant. For example, *στρατιώτης* 'soldier' has the stem allomorphs *στρατιωτη-* and *στρατιωτ-*. Endings in MGr are of the portmanteau type. They exhibit cumulative exponence (Coates 2000: 618; Matthews 1972: 65-77) in that they express both case and number at the same time in a one-to-many relation between form and function. *-ς* in *στρατιώτη-ς* realises nominative case and singular number as does *-ος* in *πάγ-ος* 'ice.SG.NOM'.

The difference between *στρατιώτης* and *πάγος* in the realisation of the same case/number combination as well as in the form of the stem used in that realisation shows that MGr nouns are classified in inflectional classes. In the literature, a number of criteria have been traditionally used to describe inflectional class organisation in MGr: gender, used by Triantaphyllides (1941) and Sotiropoulos (1972); (im)parisyllabicity, used by Tsopanakis (1948) and Mirambel (1949, 1959); and case syncretism, used by Kourmoulis (1964), Babiniotis and Kontos (1967), and Clairis and Babiniotis (1996: 15-25). More linguistically-informed descriptions of MGr noun inflection have been proposed by Malikouti (1970) and Thomadaki (1994).

More recently, Ralli, in a series of publications (among others 1992, 2000, 2002, 2003a, b, 2005; see also Alexiadou & Müller 2008), has criticised traditional approaches to noun inflection, pointing out that none of the above criteria can account for the variety of inflectional classes in SMGr. She instead proposes a classification of nouns in eight inflectional classes on the basis of systematic stem allomorphy and of the forms of the whole set of endings that are combined with stems in inflection (2003a: 86; 2005: 118). According to Ralli, SMGr noun stems and

[20] The vocative is generally thought to be non-structural and is rarely found to play a role in triggering change of any sort in the inflection of nouns in MGr. I will therefore not deal with its morphology in this chapter.

inflectional endings are inherently specified for inflectional class at the level of their lexical entry. Inflectional class marking on both stems and endings ensures the correct combination of the two in yielding grammatical inflected forms. As shown in Chapter 4, inflectional class specification in stems further provides the necessary information for gender assignment by application of the morphological gender assignment rules in the case of nouns belonging to the semantic residue (Ralli 2002: 528-529, 537-539, 2003b: 71-72, 83-86).[21] For example, Ralli's Inflectional Class 6 includes nouns such as *σπίτι* 'house' in (1). These have a single stem of the type *σπιτι-* that is inherently specified as belonging to Inflectional Class 6. As all nouns of that class, *σπίτι* combines with the set of endings shown below to express the various case/number combinations, and is neuter in gender.

(1) SMGr

	SINGULAR	PLURAL
NOM/ACC	*σπίτι-Ø*	*σπίτι-α*
GEN	*σπιτι-ού*	*σπιτι-ών*

In this chapter, I follow Ralli in classifying MGr nouns into inflectional classes, placing particular emphasis on the strong correlation between inflection and gender that has otherwise been pointed out by many researchers (Anastassiadis-Symeonidis & Chila-Markopoulou 2003; Christofidou 2002, 2003; Coker 2009: 38; Luraghi 2004: 374; Morpurgo-Davies 1968: 14-16; Seiler 1958: 59-65). However, since Ralli's analysis refers strictly to SMGr, which is only one variety of MGr, I do not use or make any reference to the classes she identifies. Rather, I organise nouns into three groups: masculine, feminine, and neuter. Within each group, I differentiate between the various inflectional classes using the nominative singular ending as a reference point. For example, in my classification, *σπίτι* in (1) belongs to the *ι*-neuter inflectional class (for a similar noun organisation system in analysing the grammar of Medieval and Early MGr, see Holton *et al.* (forthcoming 2011); also Thumb 1912: 43-44). It must be clarified at this point that, despite using gender and nominative singular endings to define the MGr inflectional classes, I do not adhere to the position that any of the

[21] In Ralli's analysis, Inflectional Class 1 nouns present the only exception to the strong correlation between inflectional class and gender in SMGr; in the standard language, it can be either masculine, like *πάγος* 'ice.M', or feminine like *ήπειρος* 'continent.F' (see fn.15, in Chapter 4).

two can be used to account for inflectional class assignment and therefore I agree with Ralli in her criticism of previous descriptive approaches to MGr noun inflection.

The inflectional classes that I take as forming the core of the MGr noun system are presented in Table 5.1. By core I mean that these classes are found at the basis of the inflectional systems of both SMGr and the MGr dialects. I will use this core in this chapter as the point of reference in my discussion of the various developments in the inflection of nouns in Cappadocian and other AMGr and NGr dialects.

Table 5.1. *The MGr inflectional classes.*

I. MASCULINE			
	a. *-ος*	b. *-ας, -ης, -ες, -ους*	
	'lighthouse'	'rule'	priest'
SINGULAR			
NOM	*φάρ-ος*	*κανόνα-ς*	*παπά-ς*
GEN	*φάρ-ου*	*κανόνα-Ø*	*παπά-Ø*
ACC	*φάρ-ο*	*κανόνα-Ø*	*παπά-Ø*
PLURAL			
NOM	*φάρ-οι*	*κανόν-ες*	*παπάδ-ες*
GEN	*φάρ-ων*	*κανόν-ων*	*παπάδ-ων*
ACC	*φάρ-ους*	*κανόν-ες*	*παπάδ-ες*

II. FEMININE		
	a. *-α, -η, -ε, -ου*	
	'hope'	'lady'
SINGULAR		
NOM/ACC	*ελπίδα-Ø*	*κυρά-Ø*
GEN	*ελπίδα-ς*	*κυρά-ς*
PLURAL		
NOM/GEN	*ελπίδ-ες*	*κυράδ-ες*
GEN	*ελπίδ-ων*	*κυράδ-ων*

III. NEUTER				
	a. *-ο*	b. *-ι*	c. *-μα, -μο, -ας*	d. *-ος*
	‘leaf’	‘foot’	‘name’	‘forest’
SINGULAR				
NOM/ACC	*φύλλ-ο*	*πόδι-Ø*	*όνομα-Ø*	*δάσ-ος*
GEN	*φύλλ-ου*	*ποδι-ού*	*ονόματ-ος*	*δάσ-ους*
PLURAL				
NOM/GEN	*φύλλ-α*	*πόδι-α*	*ονόματ-α*	*δάσ-η*
GEN	*φύλλ-ων*	*ποδι-ών*	*ονομάτ-ων*	*δασ-ών*

Within the MGr inflectional system, the neuter inflectional classes display a high degree of homogeneity in terms of the prototypicality of their members, in the sense of A-S and C-M that was discussed in Chapter 4. The overwhelming majority of nouns belonging to these clases denote inanimate entities and are therefore prototypical with respect to both their morphology and semantics. For example, *αβγό* ‘egg’, *πρόσωπο* ‘face’, *καλοκαίρι* ‘summer’, *νησί* ‘island’, *γράμμα* ‘letter’, *κύμα* ‘wave’, *γράψιμο* ‘writing’, *δέσιμο* ‘tying’, *κρέας* ‘meat’, *μέρος* ‘place’, *βέλος* ‘arrow’. They also contain a small number of non-prototypical nouns denoting animate—both animal and human—nouns such as *πρόβατο* ‘sheep’, *παιδί* ‘child’, *κορίτσι* ‘girl’, *αγόρι* ‘boy’. As noted in Chapter 4, however, it is not rare from a typological point of view for nouns denoting human beings of young age to be found in neuter inflectional classes.

The masculine and feminine classes are not homogeneous in that respect. While containing many nouns denoting animate male and female entities respectively that are prototypical members of the two classes in terms of both their semantics and their morphology—such as *γιος* ‘son.M’, *άντρας* ‘man.M’, *μαθητής* ‘male student.M’, *κόρη* ‘daugher.F’, *γυναίκα* ‘woman.F’, *μαθήτρια* ‘female student.F’—they both include large numbers of inanimate nouns—such as *ήλιος* ‘sun.M’, *σωλήνας* ‘pipe.M’, *καναπές* ‘sofa.M’, *άγκυρα* ‘ancor.F’, *βρύση* ‘tap.F’, *λύπη* ‘sorrow.F’—that are prototypical members of the masculine and feminine classes only in terms of their morphology. From a semantic point of view, these nouns are more saliently associated with the neuter gender class.

5.1.1.2 The *ι*-neuter inflectional class

The *ι*-neuter class figures prominently among the MGr inflectional classes. Its formation represents a major inflectional development in the restructuring of Ancient Greek (henceforth AGr) noun inflection in Koiné and Medieval times. Nouns belonging to this class originate in AGr diminutives formed with the suffix *-ιον* like *πόδιον* from *ποὺς* 'foot' (stem *ποδ-*) and *παιδίον* from *παῖς* 'child' (stem *παιδ-*). By the end of the Classical period, this diminutive formation process had become particularly productive to the extent that forms such as *πόδιον* and *παιδίον* lost their diminutive meaning and replaced the original, underived nouns *ποὺς* and *παῖς* (Holton & Manolessou 2010: 555; Papanastassiou 2007a: 659-660, 2007b: 613-614). Subsequent phonological developments (Georgacas 1948; Horrocks 2010: 175-176; Malikouti-Drachman 2009: 22-29) gradually led to the formation of *ι*-neuter nouns in MGr, as shown in (2):

(2) Greek
ποὺς 'foot.M' > *πόδιον* 'foot.N.DIM' > *πόδιν* 'foot.N' > *πόδι* 'foot.N'

It is generally accepted in the literature that a major advantage of the process in (2) was that it provided regular alternatives to nouns of the collapsing third declension that were characterised by difficulties with respect to stem allomorphy and phonological operations (Holton & Manolessou 2010: 555-556; Horrocks 2010: 175-176; Papanastassiou 2007b: 614). The underived noun *ποὺς* had a stem *ποδ-* that interacted in many different ways with endings in inflection. Consider, in that connection, nominative singular *ποδ-ς* > *ποὺς*, genitive singular *ποδ-ος* > *ποδὸς* and dative plural *ποδ-σι* > *ποσί.* The stem *ποδι-* of its diminutive *πόδιον*, on the other hand, remained stable across the inflectional paradigm and therefore presented no difficulties in combining with the various endings in inflection.

However, many *ι*-neuter nouns in MGr derive from AGr nouns that did not belong to the difficult third declension, but to the more regular first and second declensions that were essentially preserved in the modern language (3).

(3) Greek

	AGr			MGr	
a.	*ἄκανθα*	‘thorn.F’	>	*αγκάθι*	‘thorn.N’
	καλύβη	‘hut.F’	>	*καλύβι*	‘hut.N’
b.	*κλάδος*	‘branch.M’	>	*κλαδί*	‘branch.N’
	ῥάβδος	‘rod.F’	>	*ραβδί*	‘rod.N’

These examples corroborate A-S and C-M’s (2003: 39-40) hypothesis that the formation of the *ι*-neuter class was employed as a morphological adaptation device with the aim of decreasing the number of non-prototypical nouns in masculine and feminine inflectional classes originating in the ancient first and second declensions. As a result, the masculine and feminine classes became more homogeneous with respect to the prototypicality of their members while the already highly homogeneous neuter class was strengthened further by the addition of large numbers of prototypical nouns. A-S and C-M interpret these processes as evidencing a wider tendency in MGr for inanimate nouns to belong to the neuter gender and, since its development, to the *ι*-neuter inflectional class in particular, which they treat as the default among the neuter classes. The many cases of neuter nouns that shifted to the *ι*-class from inflectional classes that were otherwise preserved in MGr, such as the ancient second and third declension neuters in (4), lend further support to A-S and C-M’s hypothesis.

(4) Greek

	AGr			MGr	
a.	*σάνδαλον*	‘sandal.N’	>	*σαντάλι*	‘sandal.N’
	δρέπανον	‘sickle.N’	>	*δρεπάνι*	‘sickle.N’
b.	*δέμα*	‘band.N’	>	*δεμάτι*	‘band.N’
	κόμμα	‘cut-off piece.N’	>	*κομμάτι*	‘piece.N’

The tendency for inanimate nouns to belong to the neuter gender and the *ι*-neuter class is generally first manifested in the plural as shown by inanimate

masculine nouns that have *ι*-neuter plural forms, alongside the expected masculine plurals. These are mainly *ος*-masculine nouns and are found both in the standard language and in the MGr dialects, in which they appear to be much more common (5). In some dialects, masculine plural forms are not reported at all, as in Siátista and Southern Italian Greek (5c, d). In the former dialect, *ι*-neuter plurals are found even with some feminine nouns.

(5) MGr

a. SMGr (Clairis & Babiniotis 1996: 30; Holton *et al.* 1997: 71; Triantaphyllides 1948: 17-18)

SINGULAR	*βράχος*	'rock.M'	PLURAL	*βράχοι*	and	*βράχια*
	λόγος	'word.M'		*λόγοι*		*λόγια*
	χρόνος	'year.M'		*χρόνοι*		*χρόνια*

b. NGr dialects (Papadopoulos 1926: 59)

SINGULAR	*κόπους*	'labour.M'	PLURAL	*κόποι*	and	*κόπια*
	κάλανους	'carved stone.M'		*καλάν(οι)*		*καλάνια*
	ρόζους	'burl.M'				*ρόζια*
	τόπους	'place.M'				*τόπια*

c. Siátista Greek (Tsopanakis 1953: 284)

SINGULAR	*μύθους*	'myth.M'	PLURAL	*μύθια*
	τσοίχους	'wall.M'		*τσοίχια*
	μπαχτσές	'garden.M'		*μπαχτσέδια*
	γαλότσα	'gumshoe.F'		*γαλότσια*
	παντόφλα	'slipper.F'		*παντόφλια*

d. Southern Italian Greek (Karanastasis 1997: 57)

SINGULAR	*άθθο*	'flower.M'	PLURAL	*αθθία*
	καννό	'smoke.M'		*καννία*
	πόδα	'foot.M'		*πόδια*

Neuter plurals are also found with masculine nouns denoting kinship terms, as in (6) below. In this case, neuter forms have a collective meaning and are used to refer to both male and female kin indiscriminately.

(6) MGr (Triantaphyllides 1941: 258)

SINGULAR	*αδερφός*	'brother.M'	PLURAL	*αδερφοί*	and	*αδέρφια*
	ανιψιός	'nephew.M'		*ανιψιοί*		*ανίψια*
	εγγονός	'grandson.M'		*εγγονοί*		*εγγόνια*

It is obvious that the *ι*-neuter class is extremely productive in MGr in the sense of Dressler (2003), Gardani (2009) and Wurzel (1989: 149). This is supported by the many aspects of productivity that we have already encountered, such as the inflectional class shifts of nouns from various inflectional classes to the *ι*-neuter class or the formation of *ι*-neuter plurals. The highly productive status of this class is further evidenced by the high numbers of loanwords with unfitting properties that are morphologically adapted to this class when borrowed into MGr. Some examples are given in (7).

(7) MGr

Turkish	*kapak*	'cover'	>	*καπάκι*
French	*gant*	'glove'	>	*γάντι*
Russian	*самовар*	'samovar'	>	*σαμοβάρι*
English	winch		>	*βίντσι*

5.1.2 Turkish

Turkish nouns inflect for case—which has the values nominative (or, absolutive), genitive, dative, accusative, locative, and ablative—and for number, which has the values singular and plural.[22] As shown in (8) below, singular number is realised by the null morpheme *-Ø*, whereas plural number is realised by the ending *-LAr*.[23] Each of the endings corresponding to the six cases that are morphologically expressed in Turkish

[22] According to Göksel and Kerslake (2005: 49), Turkish nouns inflect for person, as well.
[23] Capital notation is used to mark segments that are subject to phonological alternations due to vowel harmony and voicing assimilation.

realises one value for case and one value only in a one-to-one relation between form and function; there are no endings that express case/number combinations. Endings in Turkish therefore exhibit separate exponence. These remain constant in the inflection of all nouns in the language; Turkish therefore lacks inflectional classes. Leaving aside the accountable phonological alternations affecting the ending forms, the inflection of *ip* 'rope' in (8a) is identical to that of *kız* 'girl' in (8b). Notice that Turkish has base form inflection: the element to which endings attach in inflection for the realisation of the various case/number combinations is always that which corresponds to the least marked cell in the nominal paradigm, namely the nominative singular form (Göksel & Kerslake 2005: 49, 68-72; Lewis 2000: 23-49).

(8) Turkish

	a. *ip* 'rope'		b. *kız* 'girl'	
	SINGULAR	PLURAL	SINGULAR	PLURAL
NOM	*ip-Ø*	*ip-ler-Ø*	*kız-Ø*	*kız-lar-Ø*
GEN	*ip-Ø-in*	*ip-ler-in*	*kız-Ø-ın*	*kız-lar-ın*
DAT	*ip-Ø-e*	*ip-ler-e*	*kız-Ø-a*	*kız-lar-a*
ACC	*ip-Ø-i*	*ip-ler-i*	*kız-Ø-yı*	*kız-lar-ı*
LOC	*ip-Ø-te*	*ip-ler-de*	*kız-Ø-da*	*kız-lar-da*
ABL	*ip-Ø-ten*	*ip-ler-den*	*kız-Ø-dan*	*kız-lar-dan*

5.1.3 Summary

In this section, I presented the noun inflection systems of MGr and Turkish. Nouns in MGr inflect for four cases and two numbers. Inflected forms of nouns are structured into stems and inflectional endings, the latter of which are of the portmanteau type and express both case and number at the same time. Nouns in MGr are classified into a number of inflectional classes which correlate to gender. Inflectional class marking is found in both noun stems and endings. Drawing on Ralli's analysis of SMGr noun inflection and stressing the correlation between gender and inflection in MGr, I further sketched the noun classification system that I will use throughout this chapter as reference. In this system, I defined each inflectional class on the basis of the gender to which it correlates and of the nominative singular ending characteristic of that class. I also showed that within the MGr inflectional system, the neuter inflectional

classes are highly homogeneous with respect to the prototypicality of their members while the masculine and feminine classes include large numbers of non-prototypical nouns. I finally elaborated on the *ι*-neuter class that is by far the most productive class, both among the neuter classes and the noun system as a whole. It is also the one that is most prototypically neuter as evidenced by the numerous cases of shift from many different classes to the *ι*-neuter class and by the morphological adaptation of loanwords to this class. In that light, I identified with A-S and C-M a diachronic tendency in MGr for inanimate nouns to shift to the neuter gender and to the *ι*-neuter inflectional class in particular. This outline should serve as the basis for our discussion of Cappadocian noun inflection in the next section.

Turkish nouns inflect for six cases and two numbers. The structure of inflected forms, however, differs from that of MGr in that endings in Turkish express only one morphosyntactic property at the time whereas they attach to the nominative singular form in inflection. In addition, nouns in the language are not organised in inflectional classes and all inflect in a uniform way regardless of their semantic or otherwise morphological properties. The differences between the two systems will be shown to be relevant in the analysis of 'agglutinative' inflection in Cappadocian that is taken in the literature to have developed in the model of Turkish noun inflection.

I first turn, though, to the discussion of the general typological characteristics of Cappadocian noun inflection in the next section.

5.2 Noun inflection in Cappadocian

5.2.1 An inflectional system of the Modern Greek type

Noun inflection in Cappadocian has attracted significant scholarly attention, mainly from a descriptive point of view. The most comprehensive description that covers the varieties of all Cappadocian-speaking villages is Dawkins (1916: 89-115; see also 1910: 271-277). Brief accounts of noun inflection in the varieties of specific villages can be found in early ethnographic monographs such as Alektoridis (1833: 487) and Krinopoulos (1889: 35) on Ferték, Archelaos (1899: 149-150) on Sinasós, and anonymous (1914: 45) on Anakú. Later and more extensive descriptions of noun inflection in specific Cappadocian varieties are Costakis (1964: 33-38) on Anakú,

Kesisoglou (1951: 30-34) on Ulaghátsh, Mavrochalyvidis and Kesisoglou (1960: 33-42) on Axó, and Phosteris and Kesisoglou (1960: 10-11) on Araván. More recently, Janse (2004: 6-12) and Spyropoulos and Kakarikos (2009, forthcoming) have provided linguistically-informed, synchronic analyses of Cappadocian noun inflection.

As in all MGr varieties, nouns in Cappadocian inflect for case—which has the values nominative, genitive, accusative and vocative[24]—and for number, which has the values singular and plural. Inflection is stem-based. Stems can be allomorphic or non-allomorphic, and are generally bound. Some analyses present certain classes or groups of nouns in some Cappadocian varieties as having free stems and/or base form inflection. This, according to Janse (2001: 475-476; see also 2004: 9-11), is the case of nouns such as *γύπνος* 'sleep' in Axó Cappadocian whose base *γυπνοσ-* is formally identical to the nominative singular form, on the basis of which genitive singular *γύπνοσ-ιου* and nominative/accusative plural *γύπνοσ-ια* are built. This issue is addressed in detail in §5.4.2.2.

Endings in Cappadocian generally exhibit cumulative exponence. Following Spyropoulos and Kakarikos's (forthcoming) analysis, the ending *-οι* in Delmesó Cappadocian *αθρώπ-οι* 'man.PL.NOM' realises both nominative case and plural number, whereas *-ιους* in *αθρωπ-ιούς* 'man.PL.ACC' realises accusative case and plural number. Some endings have been argued to exhibit separate exponence such as *-ιου* and *-ια* in the Axó Cappadocian forms *γύπνοσ-ιου* and *γύπνοσ-ια* mentioned above. As will be shown in §5.4.2.1, these are taken by some approaches to express solely genitive case and plural number, respectively (Janse 2004: 9; see also 2001: 475). In other inflected forms, though, in the same variety, case and number are expressed jointly by endings such as *-ς* and *-ες* in *νοργή-ς* 'trouble.SG.GEN' and *νοργ-ές* 'trouble.PL.NOM/ACC' (Mavrochalyvidis & Kesisoglou 1960: 41).

The differences in the inflection of Axó Cappadocian *γύπνος* and *νοργή* evidence the organisation of nouns in inflectional classes in the dialect. Despite intradialectal differences and divergent developments among the various Cappadocian varieties, the inflectional classes that were presented in the previous section for MGr can be identified as the basis of noun inflection in Cappadocian (see the available descriptions listed at the beginning of this section for details). These

[24] The available descriptions of Cappadocian noun inflection do not generally make specific mention of vocative forms. An exhaustive discussion of vocative forms in Cappadocian is found in Henrich (1976: 248-263).

classes as well as some examples of nouns belonging to each of them are given in Table 5.2 using the system introduced in the previous section (*ος*-masculine, *α*-feminine, *ι*-neuter, etc.). Note that reference to the various classes by means of gender serves only illustrative and comparative purposes as, due to the collapse of gender distinctions, Cappadocian inflectional classes do not correlate with gender values. The loss of this correlation, however, does not affect that between inflection and semantics. Following A-S and C-M's approach, I assume that Cappadocian inflectional classes preserve their prototypical semantic content. Therefore classes that formerly correlated with the masculine and feminine genders prototypically include nouns denoting male and female animate entities respectively. Similarly, formerly neuter classes prototypically include inanimate nouns. As we will see later on, though, in some varieties prototypicality correlations begin to blur as a result of certain inflectional developments.

Note that some nouns in the table may be found to belong to different inflectional classes in different Cappadocian varieties. This is especially the case of inanimate nouns such as *γάμος* 'wedding' and *στρωϛ̂* 'mattress' which in some varieties belong to the *ος*-masculine and *η*-feminine classes respectively whereas in others they are found in the *ι*-neuter class. The reasons for this shift will be made clear in §5.4. Notice also that, due to high vowel deletion, word-final *-η* and *-ι* are dropped in the nominative/accusative singular of originally paroxytone nouns in the *η*-feminine and *ι*-neuter classes.

Table 5.2. *The Cappadocian inflectional classes.*

I. MASCULINE	
-ος	*πιῶτικός* 'shepherd', *βαῶιλιός* 'king', *γιόρος* 'old man', *ινσάνος* 'man', *χερίφος* 'person', *γάμος* 'wedding', *τόπος* 'place'
-ας, -ης, -ες, -ους	*άντρας* 'man', *παπάς* 'priest', *χότζας* 'hodja', *κλέφτῶης* 'thief', *αφέντζ̂ης* 'master', *ντεϊρμεντζ̂ής* 'miller', *τῶεχμετζ̂ές* 'drawer', *νους* 'mind'
II. FEMININE	
-α, -η	*ναίκα* 'woman', *βαλδάζα* 'sister-in-law', *τῶίνα* 'sparrow', *ἄλιβήκα* 'fox', *χύρα* 'door', *αδελφή* 'sister', *νύφ* 'bride', *κολφή* 'top', *ντροπή*

	'shame', *στρωξ̂* 'mattress'
III. NEUTER	
-ο	*λερό* 'water', *δεντρό* 'tree', *χτηνό* 'cow', *ξ̂ύλο* 'wood', *κότσ̃ιλο* 'bone', *άχυρο* 'hay'
-ι	*σπιτ* 'house', *χερ* 'hand', *ψωμί* 'bread', *ποτάμ* 'river', *γαϊdούρ* 'donkey', *πλάρ* 'colt', *καπάκ* 'cover', *κιötülűχ'* 'harm', *κάζ* 'goose', *γκελιντζίκ* 'bride', *φσ̃άχ* 'child', *κορίτξ̂* 'girl'
-μα, -μο, -ας	*στόμα* 'mouth', *όιμα* 'blood', *κόμμα* 'field', *ψάλσ̃ιμο* 'chanting', *λάσιμο* 'ploughing, *σπάρσιμο* 'sowing', *κιργιάς* 'meat', *άλας* 'salt'

Cappadocian inflectional classes show roughly the same degree of semantic homogeneity in terms of noun semantics as their MGr cognates. The masculine and feminine inflectional classes are not homogeneous in containing nouns denoting human, animal and inanimate entities; for example, *βασ̃ιλιός*, *ντεϊρμεντξ̂ής*, *τόπος*; *ναίκα*, *äλιβήκα*, *κολφή*. The neuter classes, on the other hand, remain largely homogeneous. The overwhelming majority of nouns belonging to these classes denote inanimate entities such as *λερό*, *ξ̂ύλο*, *σπιτ*, *κιötülűχ*, *όιμα*, *λάσιμο*, *κιργιάς*. In Cappadocian, too, the *ι*-neuter inflectional class is by far the most productive one among the neuter classes and the default one for inanimate nouns.

5.2.2 Some common dialectal variation

Within the basic organisation of nouns into the major MGr inflectional classes, the Cappadocian varieties additionally exhibit a certain degree of inflectional variation. In some cases this involves phenomena that are fairly widespread in the MGr dialects such as the use of imparisyllabic plural forms of feminine nouns, for example *νυφάδες* 'brides' in Potámia Cappadocian (Dawkins 1916: 115), or that of the *ο*-neuter genitive singular ending *-ου* with *μα-*, *μο-*, *ας*-neuter nouns as in Delmesó Cappadocian *πουμάτ(ου)* 'cover' (Dawkins 1916: 93). These variants are particularly widespread in the MGr dialects (Thumb 1912: 59, 64-66; Triantaphyllides 1941: 242, 244) and do not seem to point towards any special genetic relation between Cappadocian and any other MGr dialect.

Other types of inflectional variation, however, are more geographically restricted to the AMGr and NGr dialects and appear to suggest that the genetic links between the two groups may actually be stronger than generally thought. The syncretism of nominative and accusative in the plural of *ος*-masculine nouns in favour of a form that coincides with that of the original nominative is one such phenomenon. This pattern is found in most Cappadocian varieties and AMGr dialects, and is also characteristic of the NGr dialects as shown in (9)-(11):

(9) Cappadocian

a. *σκότωσαν τα Χριστιανοί*
they.killed the Christian.PL.ACC
'they killed the Christians' (Anakú, *KMS/C*, 82)

b. *ηύρα μαστόρ(οι), ηύρα εργάτ(οι)*
I.found craftsman.PL.ACC I.found worker.PL.ACC
'I found craftsmen and workers' (Phloïtá, *ILNE/811*, 18)

(10) AMGr

a. *αποί* 'fox.PL.NOM/ACC.' (Pharasiot, Dawkins 1916: 165)
b. *αθρώπ(οι)* 'man.PL.NOM/ACC' (Kouvoúklia Bithynian, Deliyannis 2002: 95)
c. *δάσκαλ(οι)* 'teacher.PL.NOM/ACC' (Rumeic, Symeonidis & Tompaidis 1999: 52)

(11) NGr

a. *αγιοί* 'saint.PL.NOM/ACC' (Lesbian, Anagnostou 1903: 16)
b. *λύκ(οι)* 'wolf.PL.NOM/ACC' (Saránta Ekklisiés Thracian, Psaltes 1905: 65)
c. *φανοί* 'lamp.PL.NOM/ACC' (Kozáni Macedonian, Ntinas 2005: 111)

Notice that in (9b) the syncretism involves two nouns of the *ας*-, *ης*-, *ες*-, *ους*-masculine class, *μάστορας* and *εργάτης*. Yet, in the nominative/accusative plural forms of *μαστόρ(οι)* and *εργάτ(οι)*, case and number are expressed by *-οι*, which is marked for the *ος*-masculine inflectional class. Instances of this innovative stem/ending combination are occasionally found in MGr varieties but are more

extensive in the AMGr and NGr dialects. Consider, in that connection, the examples in (12) and (13):

(12) AMGr

a. *αργάτ(οι)* 'worker.PL.NOM' (Pontic, Oeconomides 1958: 167)

b. *προφήτοι* 'prophet.PL.NOM/ACC' (Pharasiot, Andriotis 1948: 38)

c. *άντροι* 'man.PL.NOM' (Proúsa Bithynian, Konstantinidou 2005: 128)

(13) NGr

a. *κλέφτ(οι)* 'thief.PL.NOM/ACC' (Kydoníes Greek, Saccaris 1940: 104)

b. *γιρόντ(οι)* 'old man.PL.NOM/ACC' (Papadopoulos 1926: 59)

c. *σαλιαγοί* 'snail.PL.NOM' (Papadopoulos 1926: 59)

Another aspect of inflectional variation that Cappadocian shares with NGr and some AMGr dialects is the rare use of genitive plural forms (see Costakis 1968: 37 for Anakú Cappadocian; Kesisoglou 1951: 33 for Ulaghátsh; Mavrochalyvidis & Kesisoglou 1960: 39 for Axó). In many MGr dialects, especially NGr ones, these have largely fallen into disuse and are usually replaced by prepositional phrases formed with *από* (Papadopoulos 1926: 60-61; Thumb 1912: 31, 34; Triantaphyllides 1941: 227-228; for Kozáni Macedonian see Ntinas 2005: 111-117; for Samian see Zapheiriou 1914: 45, Zapheiriou 1995: 88-91; for Saránta Ekklisiés Thracian see Psaltes 1905: 64-66). A similar situation is found in some AMGr dialects, as well, such as Kydoníes Greek (Saccaris 1940: 104-110), Bithynian (for Demírdesi see Danguitsis 1943: 75-80; for Kouvoúklia see Deliyannis 2002: 95-98), Silliot (Costakis 1968: 67), and Pharasiot (Dawkins 1916: 170; note, though, that Andriotis 1948: 35-41 gives genitive plural forms for this dialect). In Cappadocian, genitive plural forms occur rarely in the texts and, where they do, are often mistaken for genitive singular forms (Mavrochalyvidis & Kesisoglou 1960: 39; Phosteris & Kesisoglou 1960: 11). This is due to the formal coincidence of the endings realising genitive singular and genitive plural that characterises many inflectional classes. Consider, for example, the single form *φιδιού* in (14) below. In (14a), it is a singular form; in (14b) it is a plural form.

(14) Phloïtá Cappadocian (*ILNE/811*, 57, 58)

a. *σα* *χέρα-τνε* *έχνε* *ένα* *φιδιού* *κουλάκ*
in.the hands-their they.have a snake.SG.GEN young.of.animal
'in their hands they have the young of a snake'

b. *βα-μ* *είναι* *βασιλιός* *ούλου* *φιδιού*
father-my he.is king all.PL.GEN snake.PL.GEN
'my father is the king of all snakes'

The syncretism of the two case forms, and the subsequent neutralisation of the number opposition between them, is due to two phonological developments that affected the original genitive plural *-ων*: the loss of word-final *-ν* and the raising of [o] to [u]. As a result, genitive plural *-ων* and genitive singular *-ου* became formally identical. Therefore the genitive plural form *φιδιού* in (14b) is taken here to derive from an earlier form **φιδιούν*, in its turn derived from original *φιδιών*. Evidence in support of this explanation is found in occasional genitive plural forms that retain word-final *-ν* and also show the vowel raising such as *στρατούν* in (15):

(15) Phloïtá Cappadocian (*ILNE/812*, 184)
τέσσερα *στρατούν* *ορταλού*
four road.PL.GEN found.in.the.middle
'in the middle of four roads'

Note that the loss of word-final *-ν* and the raising of [o] to [u] in the genitive plural ending are attested in other MGr dialects, as well, both from the AMGr and the NGr dialect group. For example, Silliot *αρτουπουριώ* 'human.PL.GEN', *κλεφτῶηριώ* 'thief.PL.GEN' (Dawkins 1916: 47); Pharasiot *μυλίουν* 'mill.PL.GEN', *ναιτῶίουν* 'woman.PL.GEN' (Andriotis 1948: 39, 40); NGr *μανάδου* 'mother.PL.GEN', *πατιράδου* 'father.PL.GEN' (Papadopoulos 1926: 60).

5.2.3 Inflectional innovations

The inflectional profile of Cappadocian is completed by a series of innovative developments that are even more geographically restricted than the ones discussed

above. The diatopic distribution of such inflectional innovations is for the most part confined to dialects of the AMGr group while other interesting developments are found only in Cappadocian varieties.

Accusative singular forms of *ος*-masculine nouns extended with the suffix *-να* as in *χερίφονα* in (16a) are an example of such a minor inflectional development. In Cappadocian, these forms are restricted to the variety of Araván (Dawkins 1910: 276, 1916: 103-104; Phosteris & Kesisoglou 1960: 11). They are also marginally found in varieties of Pontic (Kim 2008; Oeconomides 1958: 233, 240; Papadopoulos 1955: 58, 61-62) as shown by *λαόνα* in (16b) in which we further come across another innovation shared by Cappadocian and Pontic, that of nominative/accusative syncretism in the plural of inanimate masculine nouns as in *τα νόμους*. We have already seen in previous chapters that reflexes of this syncretism are also found in Cappadocian.

(16) a. Araván Cappadocian (Phosteris & Kesisoglou 1960: 106)
πήρε *το* *χερίφονα*
he.took the man.ACC
'he took the man'

b. Oenóe Pontic (Lianidis 2007: 222)
να *ντράνεινεν* (...) *τα* *νόμους* *και* *το* *λαόνα*
that he.took.care.of the law.PL.NOM/ACC and the people.ACC
'that he would take care of the laws and the people'

Another minor inflectional development involves the formation of imparisyllabic nominative/accusative plurals for *ος*-masculine nouns on the basis of a stem allomorph modelled on the imparisyllabic *ας*-, *ης*-masculine nouns such as *πεερόρε* 'fathers-in-law' from an earlier form **πεθερόδες* and *μιτροπόρε* 'superintendents' from **μιτροπόδες* (Dawkins 1916: 105). These formations are extremely rare and only found somewhat more extensively in Bithynian; for example, Demírdesi *θείοδες* 'uncles', *κουμπάροδες* 'best men' (Danguitsis 1943: 76); Kouvoúklia *γιόδες* 'sons', *διάβολοδες* 'devils' (Deliyannis 2002: 96).

Undoubtedly, however, neuter heteroclisis and 'agglutinative' inflection are the innovations that affect the morphology of nouns in Cappadocian most pervasively. As already mentioned, both developments produce genitive singular/plural and nominative/accusative plural forms of nouns from all inflectional classes in which the respective case/number combinations are realised by means of the endings *-ιού* and *-ια*, that is, two endings distinctive of the *ι*-neuter inflectional class. The difference between neuter heteroclisis and 'agglutinative' inflection is that in the former the two endings attach to noun stems whereas in the latter they attach to what appear to be nominative singular forms of nouns. In (17a), *-ιού* attaches to the stem *πιῶτικ-* of *ος*-masculine *πιῶτικός* 'shepherd'; in (17b), *-ια* attaches to the stem *παραδ-* of *ας*-masculine *παρά* 'money' (for the loss of final *-ς* in inanimate *ας*-masculine nouns, see §5.3.3). As we will later see, cognates of these forms are found in all the AMGr dialects as well as in a few NGr dialects spoken in the immediate vicinity of the AMGr-speaking areas.

(17) Cappadocian

a. *'να πιῶτικιού ναίκα*
a shepherd.SG.GEN wife
'a shepherd's wife' (Axó, *KMS/M&K*, 214)

b. *Πόσα παράδια πήρες;*
how.many money.PL.ACC you.took
'How much money did you earn?' (Phloïtá, *ILNE/812*, 218)

In contrast, in (18a) the genitive singular ending appears to attach to the nominative singular form of *ος*-masculine *γάμος* 'wedding'. Similarly, in (18b), the nominative/accusative plural ending is found attached to what looks like the nominative singular form of *άγιος* 'saint'. These 'agglutinative' formations can be considered to be true Cappadocian innovations as they are not attested in any other MGr dialect, either in the AMGr group or beyond.

(18) Cappadocian

a. *χαζιρλάτανεν τραπέζ χαν γάμοζιου*[25]
it.prepared table like wedding.SG.GEN
'she prepared a table like that of a wedding' (Phloïtá, *ILNE/811*, 49)

b. *νταğάλσαν άγιοζια*
they.scattered saints.PL.NOM
'the saints scattered' (Ghúrzono, *Dawkins*, 346)

It is in these two developments that my investigation focuses in the remainder of this chapter.

5.2.4 Summary

In this section, I looked at noun inflection in Cappadocian. I showed that it generally shows the basic typological characteristics of MGr noun inflection in terms of morphologically expressed morphosyntactic features (case and number), structure of inflected forms that are combinations of stems and endings, and cumulative exponence of endings as well as organisation of nouns into inflectional classes. I argued that, despite the loss of the correlation between gender and inflection that followed the collapse of gender distinctions, inflectional classes in Cappadocian preserve their prototypical meaning and the degree of their semantic homogeneity. Therefore, as in other MGr varieties, formerly masculine and feminine classes prototypically include nouns denoting male and female animate entities in addition to large numbers of non-prototypical nouns that denote inanimate entities. Formerly neuter classes prototopically include inanimate nouns and remain homogeneous in terms of the meanings of their members. I then went on to examine various types of variation in Cappadocian noun inflection focusing on inflectional developments that appear to be geographically restricted to dialects of the AMGr and NGr groups, thus potentially suggesting a closer genetic relation between the two. I finally identified those innovations that have the most pervasive effect on the inflection of nouns in

[25] Final [s] is sometimes voiced to [z] when an ending beginning with a vowel or a voiced consonant is added (Dawkins 1916: 70). In the case of genitive singular and plural forms, *s*-voicing is caused by synizesis which turns the initial [i] of the ending into a glide.

Cappadocian, namely neuter heteroclisis and 'agglutinative' inflection. In the next section, I provide my account for the development of the former.

5.3 The development of neuter heteroclisis

5.3.1 Morphological reanalysis of the *ι*-neuter inflectional endings

Following Noyer (2004) and Stump (2006), I use the term heteroclisis to refer to the property of inflected forms of nouns whose constituent parts—stem and inflectional ending—do not share the same inflectional class specification. Heteroclitic forms can therefore be conceived as belonging to two inflectional classes simultaneously. For example, the Phloïtá Cappadocian nominative/accusative plural forms *μαστόρ(οι)* and *εργάτ(οι)* in (9b) above are heteroclitic in that their stem allomorphs *μαστορ-* and *εργατ-* are specified for the *ας-*, *ης*-masculine class but their ending *-οι* is specified for the *ος*-masculine class.

In this section, I am concerned with heteroclitic forms in which the genitive singular and plural, and the nominative/accusative plural case/number combinations are realised by the endings *-ιού* (or, its variants) and *-ια* respectively, which are characteristic of the *ι*-neuter inflectional class in which inanimate nouns such as *σπιτ* 'house' and *χερ* 'hand' are prototypically found. Such forms are found widely in all the AMGr dialects. In Cappadocian, neuter heteroclitic forms of this type occur in the paradigms of nouns belonging to most, if not all, inflectional classes, irrespective of their prototypical meaning or the gender for which they were marked before the loss of gender distinctions. For example, in (19a) we find the heteroclitic genitive singular form *μυλιού* of the *ος*-masculine noun *μύλος* 'mill' whereas in (19b) we find the heteroclitic nominative/accusative plural form *κάλφαρια* (< **κάλφαδια*)[26] of the *ας*-masculine *κάλφας* 'apprentice'.

(19) Cappadocian

a. *ζ' μυλιού το τεκνέ*
to mill.SG.GEN the trough
'into the mill's trough' (Axó, *KMS/M&K*, 200)

[26] In Araván Cappadocian, inherited [ð] is rhotacised to [ɾ]. Other examples include *παιρί* 'child' < *παιρί*, *είρα* 'I saw' < *είδα*, *γιορτάρες* 'feasts' < *γιορτάδες* (Dawkins 1916: 75).

b. *όσα* *ουστάρε* *κι* *όσα* *κάλφαρια* *ειν*
those.who masters and those.who apprentice.PL.NOM they.are
'those masters and those apprentices who are...' (Araván, *KMS/P&K*, 112)

Recall from §5.1.1.1 that in MGr the endings combining with *ι*-neuter noun stems in forming the genitive singular and nominative/accusative plural are generally considered to be *-ου* and *-α* respectively, whereas the genitive plural ending is *-ων*. Consider, for example, the inflection of *κεφάλι* 'head' in (20). Note that in MGr dialects that have undergone synizesis, the genitive endings are always stressed.

(20) MGr

	SINGULAR	PLURAL
NOM/ACC	*κεφάλι-Ø*	*κεφάλι-α*
GEN	*κεφαλι-ού*	*κεφαλι-ών*

However, the endings found in heteroclitic forms in both Cappadocian and the other AMGr dialects are (variants of) *–ιου*, *-ιων* and *-ια*. These result from an instance of morphological reanalysis whereby the stem-final *-ι* of inflected forms of nouns such as *κεφάλι* was taken as part of the ending. This reanalysis of a non-affixal part of the root as part of affixes, termed secretion by Haspelmath (1995: 8-10), is illustrated in (21). The example is carefully chosen from Pontic to illustrate that the reanalysis predates the introduction of synizesis, a development that, as we saw in Chapter 2, Pontic never underwent. Therefore it must be dated significantly early in the history of AMGr. Note that the stress of the reanalysed genitive endings is also fixed in Pontic and falls always on the ending-initial [i].

(21) Pontic

	SINGULAR				
NOM/ACC	*κεφάλι-ν*		*κεφάλ-ιν*		
GEN	*κεφαλί-ου*	>	*κεφαλ-ίου*	>	*-ίου*

PLURAL					
NOM/ACC	*κεφάλι-α*	>	*κεφάλ-ια*	>	*-ια* (> *-ä*)
GEN	*κεφαλί-ων*	>	*κεφαλ-ίων*	>	*-ίων*

What triggered this reanalysis is not clear. Dawkins (1916: 98; see also 1910: 274; Janse 2001: 475-476, 2004: 6-7; Karatsareas 2007: 51-56; Ralli 2009: 101-102), proposes that the reanalysed endings emerged specifically from paroxytone *ι*-neuters such as *σπίτι* 'house' that, due to high vowel deletion, had lost their word-final *-ι* in the nominative/accusative singular to produce forms such as *σπιτ*. In Dawkins's analysis, *ι*-less nominative/accusative singular forms were later interpreted as bases upon which endings were added in inflection on account of the shared phonetic material found in all inflected forms triggering morphological reanalysis as shown in (22).

(22) Cappadocian

	Stage I		**Stage II**		**Stage III**		
SINGULAR							
NOM/ACC	*σπίτι-Ø*	*high vowel deletion*	*σπιτ-Ø*	*reanalysis*	*σπιτ-Ø*		
GEN	*σπιτι-ού*		*σπιτι-ού*		*σπιτ-ιού*	>	*-ιού*
PLURAL							
NOM/ACC	*σπίτι-α*		*σπίτι-α*		*σπίτ-ια*	>	*-ια*
GEN	*σπιτι-ών*		*σπιτι-ών*		*σπιτ-ιών*	>	*-ιών*

High vowel deletion is indeed operative in many dialects in which the *ι*-neuter endings have undergone the reanalysis in (21). This is, however, not always the case as shown by the following examples from the Pontic varieties of Áno Amisós and Oenóe, and Silliot. These dialects do not generally show high vowel deletion (for Pontic, see Oeconomides 1958: 64-70; Papadopoulos 1953: 89, 1955: 17-19; for Silliot, see Costakis 1968: 31-33, 35; Dawkins 1916: 42), yet exhibit the morphological reanalysis of the *ι*-neuter endings.

(23) Pontic

τ' *αφεντίου* *του* *λόγος*
the master.GEN his word
'his master's word' (Áno Amisós, Lianidis 2007: 26)

σου *παχτῶαδίου* *το* *σπίτι*
to.the garden.GEN the house
'in the garden house' (Oenóe, Lianidis 2007: 214)

(24) Silliot (Costakis 1968: 60)

παπαριώ *ρούχα*
priests.GEN clothes
'priests' clothes'

The above examples cast doubt on Dawkins's account for the development of the novel *ι*-neuter endings and call for an alternative explanation. The genitive singular and plural forms *παχτῶαδίου* and *παπαριώ* in (23) and (24) further show that, in the analysis proposed here, neuter heteroclitic forms preserve the stems or stem allomorphs defining the inflectional classes to which nouns primarily belong. For example, *παχτῶαδίου* is composed of the stem allomorph *παχτῶαδ-*, normally found in plural forms, and the reanalysed ending *-ίου*. This goes against Ralli *et al.*'s (2004: 575-577) and Ralli's (2006: 136-141) analysis, which assumes that neuter heteroclitic forms such as *κριγιατιού* 'meat.SG.SEN' and *λάθια* 'mistake.PL.NOM/ACC' in the dialects of Lésbos, Kydoníes and Moschonísia are built upon the novel stem allomorphs *κριγιατι-* and *λαθι-*, modelled on the *ι*-neuter inflectional class. There appears to be no reason, however, for the postulation of such an *ad hoc* allomorph that surfaces in no other word formation process apart from neuter heteroclisis. In the present analysis, the stems or stem allomorphs of neuter heteroclitic forms do not differ from those of cognate forms in other MGr dialects that are not heteroclitic.

5.3.2 Genitive singular and plural heteroclisis

ι-neuter heteroclitic forms in the genitive singular and plural are found in all Cappadocian varieties and for nouns belonging to most inflectional classes: *ος-*, *ας-*,

ης-masculine nouns (25a), *α*-feminine nouns (25b), *ο*-neuter nouns (25c). *μα*-neuter nouns and the very few *ας*-neuter nouns are the only exceptions in that respect.

(25) Cappadocian

a. *σ’ ένα μπαδ̂κά πατιδ̂αχιού παιρί*
to a other padishah.SG.GEN child
‘to another padishah’s son’ (Ghúrzono, *Dawkins*, 344)

ζαπτιαδιού τα χέρα
policeman.PL.GEN the hands
‘the policemen’s hands’ (Phloïtá, *Dawkins*, 416)

δεσποτιού το στράτα
bishop.SG.GEN the way
‘the bishop’s way’ (Phloïtá, *ILNE/812*, 174)

b. *στράταριου το άκρα*
way.SG.GEN the edge
‘the edge of the way’ (Araván, *KMS/P&K*, 116)

c. *προγατιού το φόρο*
sheep.SG.GEN the tax
‘the sheep’s tax’ (Phloïtá, *ILNE/812*, 118)

ένα χτηνιού αγέλ
a cow.PL.GEN herd
‘a herd of cows’ (Potámia, *Dawkins*, 456)

Note the genitive singular form *στράταριου* of the parisyllabic *α*-feminine *στράτα* in (25b) that is built on an allomorph *στραταρ-* (< *στρατα*δ-; see fn. 26) modelled on the imparisyllabic *α*-feminine nouns. Imparisyllabic stem allomorphs for nouns that do not generally have them are recorded for Araván and Ghúrzono by Dawkins (1916: 107) and Phosteris and Kesisoglou (1960: 10-11), who provide *ι*-neuter

heteroclitic forms for *ο*-neuter nouns built on imparisyllabic stems such as *φυτοριού* 'plant.SG.GEN', *μέταποριου* 'forehead.GEN' (see also Hatzidakis 1912).

Neuter heteroclitic forms have received little attention in the various descriptions of Cappadocian noun inflection, and no satisfying explanation for their origin and development has been proposed to date. Dawkins notes the use of the ending *-ιού* to form the genitive singular of masculine nouns in Cappadocian, mentioning in passing that it is "based upon the decl.[ension] of diminutives in *-ί* and *-ι,* [the ending] being taken direct" (1916: 95). Along similar lines, Costakis (1964: 34) argues that numerous masculine and feminine nouns in Anakú Cappadocian have shifted to neuter diminutives in the genitive singular and plural while other scholars merely state the occurrence of heteroclitic forms in their descriptions of Cappadocian varieties (Kesisoglou 1951: 34; Mavrochalyvidis & Kesisoglou 1960: 34-35). In his analysis, Janse (2004: 8), guided by its extensive use in the formation of 'agglutinative' forms of Cappadocian, treats *-ιού* in forms such as *αθρωπιού* 'man.SG.GEN' as an agglutinative ending despite its expressing at least two morphosyntactic properties at the same time—case and number—and not merely one of them, as would be typical of a truly agglutinative ending.

With reference to Pontic, Hatzidakis (1934 [1911/1912]: 278-280), elaborating on a proposal by Kousis (1884: 86), claims that the ending *-ίων* in genitive plural forms such as *αρθεπίων* 'man.PL.GEN' originates in the group of *ας*-masculine adjectives exemplified by *οκνέας* 'lazy'. These build their plural forms on a stem allomorph *οκνεαρ-* combined with the *ος*-masculine plural endings: *οκνεάρ(οι)*, *οκνεαρίων*, *οκνεάρ(ου)ς*. According to Hatzidakis, such plural forms arose when a plural collective suffix *-άριοι* was attached to adjective stems to give *οκνεάρι-οι*, *οκνεαρί-ων, οκνεάρι-ους*. The former, Hatzidakis argues, was simplified to *οκνεάρ(οι)* by deletion of the first of two consecutive [i]s. Focusing on genitive plural forms in which the ending *-ίων* is found, Hatzidakis claims that they are based on the original stem *οκνεαρι-* that preserves the first [i] of the collective suffix. He, thus, rejects the view that they are related to neuter nouns. He, however, provides no explanation as to why the original stem does not appear in accusative plural forms such as *οκνεάρ(ου)ς* in which no consecutive [i]s are found. As for genitive singular *-ίου*, Hatzidakis treats it as an analogical formation on the basis of plural *-ίων*, even though the former is not found in adjectives of the *οκνέας* type that form their genitive singular as *οκνέα*. More

importantly, this type of adjectives is restricted to Pontic and Pharasiot (Dawkins 1916: 167-168) and is not attested in Cappadocian or in any other dialect in which heteroclitic forms are found.

It is true that the distribution of neuter heteroclitic forms within the Cappadocian noun inflection system is so wide and uniform across the different varieties of the dialect that it does not appear to be possible to formulate hypotheses regarding their origins and development dialect-internally. The dialectological approach introduced in Chapter 2 can, however, overcome this obstacle due to the fact that neuter heteroclisis in the genitive singular and plural is not confined to Cappadocian. Heteroclitic forms are found in all other AMGr dialects but also in the NGr dialects of Lésbos and Kydoníes, and Sámos that are spoken on or just off the western coast of Asia Minor. This seems to suggest that neuter heteroclisis probably emerged at a time before the split of the two dialect groups—AMGr and NGr—as they are known to us today. Yet, with the exception of Anastasiadis (1995: 82-83) and a few brief mentions in the descriptions of Pharasiot (Andriotis 1948: 35) and Silliot (Costakis 1968: 57), this possibility has gone for the most part unnoticed in the literature. The analysis in the remainder of this section draws on the broad geographic distribution of neuter heteroclisis in the genitive singular and plural in order to reconstruct its early and later development in Cappadocian and the other AMGr dialects.

5.3.2.1 Stress uncertainty as the trigger for the early development of neuter heteroclisis

The NGr dialects of Lésbos and Kydoníes, and Sámos offer valuable insights as regards the origins of neuter heteroclisis. Heteroclitic forms have a limited and accountable distribution in the noun inflection of the two dialects, compared with the various AMGr dialects in which they are found to a much wider extent. Lésbos and Kydoníes, and Sámos Greek can therefore be thought of as representing an incipient stage in the development of this morphological innovation.

In Lésbos and Kydoníes, neuter heteroclisis is most distinctively attested with proparoxytone nouns belonging to the *oς*-masculine and *o*-neuter inflectional classes, and, in the case of genitive plural, with a small number of *α*-feminine nouns, as well (26). In Sámos, only neuter nouns have heteroclitic forms in the genitive singular and

plural, most of them being proparoxytone members of the *ο*-neuter inflectional class (27).

(26) Lésbos and Kydoníes Greek (Anagnostou 1903: 16-17; Melissaropoulou 2007: 30; Papadopoulos 1926: 57; Saccaris 1940: 107)

a. *ος*-masculine nouns

NOM.SG	*άθρουπους* 'man'	GEN.SG	*αθρουπ-ιού*	GEN.PL	*αθρουπ-ιούν*
	άτζηλους 'angel'		(*ατζηλ-ιού*)		*ατζηλ-ιούν*
	άνιμους 'wind'		*ανιμ-ιού*		(*ανιμ-ιούν*)

b. *α*-feminine nouns

	θάλασσα 'sea'		*θαλασσ-ιούν*

c. *ο*-neuter nouns

πρόβατου 'holm-oak'	*προβατ-ιού*	*προβατ-ιούν*
σίδηρου 'iron'	*σιδηρ-ιού*	(*σιδηρ-ιούν*)
άλουγου 'horse'	*αλουγ-ιού*	(*αλουγ-ιούν*)

(27) Sámos Greek (Zapheiriou 1914: 48; Zapheiriou 1995: 91-92)

NOM.SG	*άδιρου* 'intestine'	GEN.SG	*αδιρ-ιού*	GEN.PL	*αδιρ-ιούν-ις*[27]
	γόνατου 'knee'		*γουνατ-ιού*		*γουνατ-ιούν-ις*
	άλουγου 'horse'		*αλουγ-ιού*		*αλουγ-ιούν-ις*

The heteroclitic forms in (26) and (27) have cognates in all the AMGr dialects. Compare, for example, Lesbian *αθρουπιού* and *αθρουπιούν* with Malakopí Cappadocian *αθρουπιού,* Pontic *ανθρωπί(ου)* and *ανθρωπίων*, Silliot *αρτουπιού* and *αρτουπιώ* (Dawkins 1916: 47, 99; Papadopoulos 1955: 46); or, Samian *αλουγιού* with Bithynian Greek *αλογιού* (Danguitsis 1943: 80). Neuter heteroclisis therefore figures as a morphological innovation shared by the AMGr dialects, on the one hand, and the NGr dialects of Lésbos and Kydoníes, and Sámos, on the other. This common development cannot be due to chance. On the contrary, it appears to suggest a relation between the two that may actually be stronger than generally thought. This in turn lends support to the

[27] Note the peculiar extension of the genitive plural ending by the addition of *-ις*, which is the nominative/accusative plural ending of *ας-*, *ης-*, *ες-*, *ους*-masculine and *α-*, *η-*, *ε-*, *ου*-feminine nouns such as *άντρ-ις* 'men' or *γυναίκ-ις* 'women'.

methodological approach of treating Lesbian and Samian as representing the earliest attested stages in the development of neuter heteroclisis in AMGr.

In accounting for this stage and on the basis of the attestation profile exemplified in (26) and (27), it stands to reason to assume that proparoxytone *ος*-masculine and *ο*-neuter nouns were the first ones to exhibit neuter heteroclisis. In search for the trigger of this change, we observe with Triantaphyllides (1963) that these two particular noun groups are characterised by a significant degree of uncertainty and instability with respect to stress placement in the genitive singular and plural cells of their nominal paradigms. This uncertainty is caused by the clash between the inherited, Ancient Greek rule of stress movement and the later MGr tendency for columnar stress. Stress movement is triggered by endings that contain vowels originating in Ancient Greek long vowels or diphthongs which caused the accent to change position in the ancient language due to accentuation limitations. The genitive singular and plural *-ου* and *–ων* are of this type. Despite the loss of length distinctions in MGr, the stress movement rule was inherited and, in many MGr dialects and varieties, it still has a particular effect in many proparoxytone nouns belonging to the *ος*-masculine and *ο*-neuter classes. For example, masculine *δάσκαλος* 'teacher' and neuter *πρόβατο* 'sheep' tend to move their stress in the penultimate syllable in their genitive forms in the standard language and in more formal registers: *δασκάλου*, *δασκάλων*; *προβάτου*, *προβάτων*.

In contrast, the tendency of columnar stress is manifested in keeping the stress of inflected forms of nouns stable on the syllable on which it is found in the nominative singular (Triantaphyllides 1941: 41, 228). This results in forms such as *δάσκαλου*, *δάσκαλων* and *πρόβατου*, *πρόβατων*. In MGr, older, inherited nouns and nouns occurring in higher registers—such as *άγγελος* 'angel', *άνθρωπος* 'man', *πρόσωπο* 'face'—usually move their stress, whereas later formations and compounds—such as *κάρβουνο* 'coal', *καλόγερος* 'monk', *αντρόγυνο* 'husband and wife'—generally have columnar stress across their paradigms (see, however, Clairis & Babiniotis 1996: 22-24; Holton *et al.* 1997: 51-53, 63-64; Thumb 1912: 45, 60 for the impossibility of defining which nouns preferably follow which rule).

It has been shown that this kind of instability and stress uncertainty can lead to particular affected forms becoming diachronically defective. Holton and Manolessou (2010: 554), and Sims (2006, 2007, forthcoming) have demonstrated this to

be the case of genitive plural forms of parisyllabic *α*-feminine nouns in MGr. This class contains inherited nouns tracing their origin either to the ancient first declension such as *γλώσσα* 'tongue, language' or to the ancient third declension such as *ασπίδα* 'shield' that underwent major inflectional restructuring in Koiné times. The two declensions differed in their accentuation, and the stress of *α*-feminine nouns in MGr generally falls on the syllable corresponding to their accentuated syllable in Ancient Greek. Nouns of the former origin are accordingly stressed on the ultima in the genitive plural, as in *γλωσσών*; nouns of the latter origin are stressed on the penult, as in *ασπίδων*. As a result of this class-internal conflict and the consequent uncertainty as to stress placement, genitive plural forms of parisyllabic *α*-feminine nouns were avoided and became gradually unproductive in MGr, thus rendering the paradigms of many feminine nouns defective in this respect.

With these considerations in mind and following Stump (2006: 297-301), who views heteroclisis as a mechanism against morphosyntactic property neutralisation and defectiveness, I propose that neuter heteroclisis in the genitive singular and plural of proparoxytone *ος*-masculine and *ο*-neuter nouns, and in the genitive plural of parisyllabic *α*-feminine nouns is the result of a repair strategy whose aim was to overcome the uncertainty of stress placement in the two paradigmatic cells. In this view, heteroclisis was employed in order to counteract stress uncertainty, which could potentially lead to a significant defectiveness in the affected nouns' paradigms. The likelihood of this can be retrospectively shown to have been high in light of the unproductive status of the genitive plural of *α*-feminine nouns in MGr. The means for the implementation of the repair strategy were provided by the *ι*-neuter inflectional class. Apart from being extremely productive, this class also offered two genitive endings that, following morphological reanalysis, were inherently specified for stress which was stably found on the [i], *-ίου* and *-ίων*. This is supported by the Pontic data, which provide uncontroversial evidence that heteroclisis developed before: the stress shift from [i] to [u] in the genitive singular ending and to [o] in the genitive plural ending (*-ίου* > *-ιού*; *-ίων* > *-ιών*); the subsequent application of synizesis; and the phonological changes that led to the coincidence of the genitive plural ending with that of the genitive singular in Cappadocian. This account of the origin of neuter heteroclisis is illustrated in (28):

(28) AMGr and NGr dialects

a. paroxytone *ος*-masculine nouns

NOM.SG	*άνεμος* 'wind'		
GEN.SG	*ανέμου/άνεμου*?	>	*ανεμ-ίου*
GEN.PL	*ανέμων/άνεμων*?	>	*ανεμ-ίων*

b. paroxytone *ο*-neuter nouns

NOM/ACC.SG	*πρόβατο* 'sheep'		
GEN.SG	*προβάτου/πρόβατου*?	>	*προβατ-ίου*
GEN.PL	*προβάτων/πρόβατων*?	>	*ανεμ-ίων*

c. parisyllabic *α*-feminine nouns

NOM/ACC.SG	*θάλασσα* 'sea'		
GEN.PL	*θαλασσών/θάλασσων*?	>	*θαλασσ-ίων*

I therefore treat proparoxytone *ος*-masculine and *ο*-neuter, and parisyllabic *α*-feminine nouns as the *locus* of the early development of neuter heteroclisis in AMGr. Having these noun groups as its starting point, the phenomenon began spreading within the noun inflection system of the various AMGr dialects in which it extends to nouns of different stress properties and inflectional classes. It is to these subsequent developments in Cappadocian that I now turn in the next section.

5.3.2.2 Diagrammaticity as a conditioning factor for the spread of neuter heteroclisis

In Cappadocian, neuter heteroclisis in the genitive singular/plural has spread extensively and is found with nouns that do not belong to any of the three noun groups identified in §5.3.2.1 as the first ones to have developed heteroclitic forms. In (19) and (25c) we came across heteroclitic genitive singular/plural forms of *ος*-masculine and *ο*-neuter nouns that were, however, paroxytone such as *μυλιού* for *μύλος* 'mill' and *χτηνιού* for *χτήνο* 'cow'. We also saw in (25a) that the paroxytone *ης*-masculine *δεσπότης* 'bishop' and the *ας*-masculine *ζαπτιάς* 'policeman' have the heteroclitic forms *δεσποτιού* and *ζαπτιαδιού*. Here I show that this extension was not unconditioned.

Stress appears to have played a key role in the extension of neuter heteroclisis in the genitive singular of paroxytone *ος*- and *ης*-masculine, and *ο*-neuter nouns such as *μύλος*, *δεσπότης* and *χτήνο*. As a result of high vowel deletion, which is operative in all Cappadocian varieties, the genitive of nouns of this type is expressed by a null ending. For example, in Delmesó Cappadocian, the genitive singular of *μύλος* is *μυλ-Ø* (Dawkins 1916: 95). This leads to a situation whereby the nominative singular, that is, the unmarked form, in the inflectional paradigm of this noun has an overt exponent, while the genitive singular, which is a more marked form in the morphological expression of case and number, has a zero exponent as in (29a), below. The same is found with paroxytone *ο*-neuter nouns such as *χτήνο* in (29b) as well as with paroxytone *ης*-masculine nouns such as *δεσπότης* in (29c). Note, though, that in the latter inflectional class the genitive singular is expressed by a null morpheme by definition. In this case, high vowel deletion affects the final vowel of the stem allomorph, yielding a similar relation between the exponents of nominative and genitive in the singular.

(29) a. paroxytone *ος*-masculine

NOM.SG *μύλ-ος*

GEN.SG *μυλ-Ø* (< *μύλ-ου*)

b. paroxytone *ο*-neuter

NOM.SG *χτήν-ο*

GEN.SG *χτην-Ø* (< *χτήν-ου*)

c. paroxytone *ης*-masculine

NOM.SG *δεσπότη-ς*

GEN.SG *δεσπότ-Ø* (< *δεσπότη-Ø*)

From a typological point of view, this is not an expected distribution of overt and zero exponents within the paradigm as it goes against diagrammaticity, namely the optimal alignment of semantic relations between categories by the formal relations between the markers of those categories (Koch 1996: 235; see also Dressler & Acson 1985: 116-117, 119; Koch 1995 and references therein). Being based on the

theory of markedness, the idea behind diagrammaticity is that, within noun inflection, marked values for case and number tend to be morphologically expressed by more complex material than that used to express unmarked values. Neuter heteroclisis is in this light taken here to have spread to nouns such as *μύλος*, *χτήνο* and *δεσπότης* in order to repair this break in diagrammaticity by replacing the zero exponent in the genitive singular with an overt exponent, the *ι*-neuter ending *-ιού*, that, as a result of the developments that we saw in §5.3.2.1, had gained further in productivity. The attested forms in (30) exemplify this development:

(30) a. Axó Cappadocian (*KMS/M&K*, 200)

NOM.SG	*μύλ-ος*				
GEN.SG	*μυλ-ιού*	<	*μυλ-Ø*	<	*μύλ-ου*

b. Potámia Cappadocian (*Dawkins*, 456)

NOM.SG	*χτήν-ο*				
GEN.SG	*χτην-ιού*	<	*χτην-Ø*	<	*χτήν-ου*

c. Phloïtá Cappadocian (*ILNE/812*, 174)

NOM.SG	*δεσπότη-ς*				
GEN.SG	*δεσποτ-ιού*	<	*δεσπότ-Ø*	<	*δεσπότη-Ø*

The same motivation lies behind the extension of neuter heteroclisis to imparisyllabic *ας*-masculine nouns such as *ζαπτιάς* ‘policeman’ that, like *ης*-masculine nouns, had a null exponent in their genitive singular. Some varieties preserve these non-heteroclititic forms, such as Potámia Cappadocian in which the genitive singular of *παπάς* ‘priest’ is *παπά-Ø* bearing a null exponent for the expression of case and number (31a). These paradigms of such nouns also go against diagrammaticity, triggering the repair exemplified by the form *παπαδιού* from Anakú Cappadocian in (31b).

(31) a. Potámia Cappadocian (Dawkins 1916: 109)

NOM.SG	*παπά-ς*
GEN.SG	*παπά-Ø*

b. Anakú Cappadocian (Costakis 1964: 38)

NOM.SG *παπά-ς*

GEN.SG *παπαδ-ιού* < *παπά-Ø*

At this point, I should also note the possibility that some neuter heteroclitic forms might have been borrowed from the paradigms of cognate nouns found in the *ι*-neuter inflectional class. For example, the genitive plural *πουταμιούν* of the *ος*-masculine *πουταμός* in Lésbos Greek (Anagnostou 1903: 16) might have been borrowed from the cognate *ι*-neuter *πουτάμ(ι)*. While it is to a certain degree probable that such cognate nouns might have facilitated the early development of neuter heteroclisis, the number of *ι*-neuters corresponding to nouns exhibiting heteroclisis in their genitive singular and/or plural is limited and in no way comparable to the wealth of heteroclitic forms attested in the AMGr and NGr dialects. For example, *ι*-neuter nouns such as **ανθρώπι* or **βουτύρι* that could have lent their genitive singular and plural to form the Pontic *αρθωπί(ου)*, *αρθωπίων* and *βουτουρί(ου)*, *βουτουρίων* (Oeconomides 1958: 149) are not attested in either Pontic or any other MGr dialect according to the Historical Lexicon of the Greek Language of the Academy of Athens.

5.3.3 Nominative/accusative plural heteroclisis

In §5.1.1.2, I noted the MGr tendency for inanimate nouns to belong to the neuter gender and, in particular, to the *ι*-neuter inflectional class. We saw that this tendency appears to be first manifested in the plural, as evidenced by a wealth of data from a wide variety of MGr dialects. Cappadocian is no exception in that respect, as shown by the *ι*-neuter nominative/accusative plural heteroclitic forms of inanimate nouns in (32) below, cognates of which can be found in most, if not all, MGr dialects.

(32) Cappadocian

που *είπα* *σι* *τα* *λόγια*

that I.said you the word.PL.ACC

'the words I told you' (Malakopí, *Dawkins*, 404)

πέρνασαν (...) *χρόνια*
they.passed year.PL.NOM
'years passed' (Araván, *KMS/P&K*, 100)

In Cappadocian, we further find heteroclitic forms of nouns denoting kinship terms that have a collective meaning such as the ones in (33) which, just as the examples in (32), have cognates in most MGr dialects.

(33) Sílata Cappadocian (*Dawkins*, 448)
είπεν σα αδέλφια-τ
he.said to.the sibling.PL.ACC-its
'he said to his siblings'

In Cappadocian, the morphological process whereby inanimate nouns form *ι*-neuter plurals has been grammaticalised in the *ας*-, *ης*-masculine inflectional class. All imparisyllabic inanimate nouns of this class form neuter plurals (34a), as opposed to human nouns that form masculine plurals (34b) (Dawkins 1916: 108-111). The same is found in Pharasiot. Compare the forms of the inanimate nouns in (35a) with those of human nouns in (35b).

(34) Cappadocian
a. *να ϱαζαντίς παράδια*
that he.earns money.PL.ACC
'that he earns money' (Potámia, *Dawkins*, 456)

τελούτανε σα μαχαλάδια
he.wandered in.the neighbourhood.PL.ACC
'he would wander in the neighbourhoods' (Phloïtá, *ILNE/812*, 155)

b. *δέκεν τα σα παῶάδες*
he.gave them to.the pasha.PL.ACC
'he gave them to the pashas' (Delmesó, *Dawkins*, 316)

δείξεν *εδυό* *ζαπτιέδες*
he.showed two policeman.PL.ACC
'he appointed two policemen' (Delmesó, *Dawkins*, 316)

(35) Pharasiot (Andriotis 1948: 35, 40; Dawkins 1916: 166-167)

a. *καβγάδε* 'fight.PL.NOM/ACC' (< *καβγάδια*)
πελᾰ́δε 'trouble.PL.NOM/ACC' (< *πελᾰ́δια*)
odάδε 'rooms.PL.NOM/ACC' (< *odάδια*)

b. *αβτζήδες* 'hunter.PL.NOM/ACC'
δελιqανούδες 'young man.PL.NOM/ACC'

Notice that all the nouns in (34) and (35) are loanwords originating in Turkish nouns that end in a stressed vowel (*par*['a], *dakik*['a], *mahal*['a], *paş*['a], *zaptiy*['e], *kavg*['a], *bel*['a], *od*['a], *avc*['ɯ], *delikanl*['ɯ]). Turkish loanwords of this type are in principle borrowed as imparisyllabic *ας-*, *ης-*, *ες-*, *ους*-masculine nouns in the MGr dialects, depending on their final vowel (Kyranoudis 2009: 89-106). This is the case in Pharasiot as evidenced by *odάς* in (36) (see also Anastasiadis 1980: 322-323).

(36) Pharasiot (Dawkins 1916: 492)
odάς *πάλι* *τζ̂ούσε*
room again he.had.not
'but he had no room'

In Cappadocian, nouns of this type lack the distinctively masculine final -ς in the nominative singular in which they appear in the same form as their Turkish originals (Dawkins 1916: 110); for example, *παλτά* (< Turkish *balta*), *τôεôμέ* (< Turkish *çeşme*) (37a). However, attested forms such as *τογάς* (< Turkish *dua*) in (37b) leave no doubt that these nouns were originally borrowed as masculine at an earlier stage in the history of the dialect. The attested ς-less forms in (37a) must have been reborrowed into the language later, replacing the original forms.

(37) Cappadocian

a. *το παλτά σακούται*
the axe.SG.NOM breaks
'the axe breaks' (Ghúrzono, *Dawkins*, 338)

το τôεôμέ (...) *ας τρεξ̂*
the fountain.SG.NOM let it.flow
'let the fountain flow' (Axó, *KMS/M&K*, 204)

b. *τογάς qαβούλ δεν γίνεται*
prayer.SG.NOM acceptance not it.becomes
'prayer is not accepted' (Phloïtá, *Dawkins*, 432)

As a result of their morphological adaptation, inanimate loanwords of this type are found in inflectional classes of which they are non-prototypical members in terms of their meaning. Neuter heteroclisis in the nominative/accusative plural of nouns such as *παρά* 'money' and *μαχαλά* 'neighbourhood' in (34a) is therefore interpreted as a morphological and semantic adaptation strategy aiming at repairing deviations with respect to prototypicality in the masculine inflectional classes by shifting the plural of inanimate masculine nouns to the semantically appropriate and morphologically productive *ι*-neuter inflectional class. This is achieved by extending the domain of application of the MGr tendency that was noted above to the imparisyllabic masculine nouns, with which it was not generally found. Preliminary evidence in support of this analysis is found in forms parallel to the imparisyllabic neuter plurals in (34a) and (35a) that are attested in some NGr dialects such as Siátista Greek (cf. (5c) above, partially repeated here as (38a); see also Ntinas 2005: 114 on Kozáni Greek) and marginally in the standard language (38b), as well. Notice that the nouns in (38) have also been borrowed from Turkish.

(38) a. Siátista Greek (Tsopanakis 1953: 284)
μπαχτσέδ-ια 'garden.PL.NOM/ACC'
τσινικέδ-ια 'tin.PL.NOM/ACC'
σαρμάδ-ια 'stuffed vine leaf.PL.NOM/ACC'

b. SMGr

βερεσέδ-ες	and	*βερεσέδ-ια*	'credit.PL.NOM/ACC'
τενεκέδ-ες		*τενεκέδ-ια*	'tin.PL.NOM/ACC'
τεντζερέδ-ες		*τεντζερέδ-ια*	'pan.PL.NOM/ACC'

On the model of inanimate nouns, a small number of human nouns of both Turkish and Greek origin begin to exhibit neuter plurals in some Cappadocian varieties. Note the conflicting use of the masculine plural for the noun *ουστάς* and that of the neuter plural for *κάλφας* in the same sentence in the example from Araván (39).

(39) Cappadocian

όσα	*ουστάρε*	*κι*	*όσα*	*κάλφαρια*		*είν*
those.who	masters	and	those	apprentice.PL.NOM		they.are

'those masters and those apprentices who are...' (Araván, *KMS/P&K*, 112)

με	*τα*	*πεθεράδια,*	*με*	*τα*	*πεθερούδια*
with	the	mother.in.law. PL.ACC	with	the	father.in.law.PL.ACC

'with the mothers- and fathers-in-law' (Phloïtá, *ILNE/812*, 92)

Imparisyllabic masculine nouns of this type have neuter heteroclitic forms in the genitive singular/plural irrespective of their semantics in Cappadocian. For example, in Malakopí Cappadocian we find both *παπαδιού* 'priest.SG.GEN' and *παραδιού* 'money.SG.GEN' (Dawkins 1916: 109-110). In Pharasiot, on the other hand, neuter heteroclitic forms are not found at all in the genitive singular which is formed with a null exponent for all imparisyllabic masculine nouns as in *odά-Ø* 'room.SG.GEN' and *παπά-Ø* 'priest.SG.GEN.' (Dawkins 1916: 166). This suggests that neuter heteroclisis in the nominative/accusative plural is an independently motivated development that most probably predates the emergence of genitive heteroclisis for these nouns in Cappadocian. The fact that human masculine nouns of this type have heteroclitic forms in the genitive singular/plural but not in the nominative/accusative plural lends further support to the hypothesis that the two developments are independent from one another.

In the case of some *ος*- and *ης*-masculine nouns, though, neuter heteroclisis in the genitive singular/plural appears to have analogically triggered the

development of heteroclitic nominative/accusative plural forms in some Cappadocian varieties. Compare, the masculine nominative plural of *ασκέρης* 'soldier' in (40a) with the neuter heteroclitic nominative/accusative plural of the same noun in (40b).

(40) Cappadocian

a. *ήρταν* *ασκέρ(οι)*
they.came soldier.PL.NOM
'the soldiers came' (Potámia, *Dawkins*, 456)

b. *ποίκετ* *κι* *εμάς* *ασκέρια*
you.make and us soldier.PL.ACC
'make us soldiers, too' (Sílata, *Dawkins*, 452)

In both Potámia and Sílata, *ασκέρης* has a heteroclitic form *ασκεριού* in the genitive singular, as shown in (41). In Potámia, the noun forms a masculine nominative plural *ασκέρ(οι)* whereas in Sílata it has a neuter heteroclitic nominative/accusative *ασκέρια*, formed by analogy to the heteroclitic genitive singular. It is possible that this analogical process was triggered in order to replace the zero exponence of nominative plural in forms such as Potámia *ασκέρ(οι)* caused by high vowel deletion with an overt one thus repairing the break in diagrammaticity in a fashion similar to that elaborated in §5.3.2 regarding the extension of heteroclitic genitive singular forms to *ας*- and *ης*-masculine nouns.

(41) Cappadocian (Dawkins 1916: 113)

	a. Potámia	b. Sílata
SINGULAR		
NOM	*ασκέρη-ς*	*ασκέρη-ς*
GEN	*ασκερ-ιού*	*ασκερ-ιού*
PLURAL		
NOM	*ασκέρ-(οι)*	*ασκέρ-ια*
ACC	*ασκερ-ιούς*	

Finally, the same analogical process led to the development of neuter heteroclitic nominative/accusative plural forms in a number of *ος*- and *ης*-masculine nouns, such as *χεκίμ-ια* 'doctor.PL.NOM/ACC' and *βεζίρ-ια* 'vezir.PL.NOM/ACC' in Araván Cappadocian (Phosteris & Kesisoglou 1960: 106, 112), or *ατρώπια* 'man.PL.NOM/ACC' *ντασκάλια* 'teacher.PL.NOM/ACC' and *γιαβόλια* 'devil.PL.NOM/ACC' in Ulaghátsh Cappadocian (Dawkins 1916: 102, 106; Kesisoglou 1951: 34).

5.3.4 The implications of neuter heteroclisis in Asia Minor Greek

Neuter heteroclisis caused a break in the inferential correlation between gender and inflectional class in AMGr. In acquiring neuter heteroclitic forms in their paradigms, large numbers of non-neuter nouns became morphologically associated with the neuter gender and the *ι*-neuter inflectional class in particular. As a result, membership of specific inflectional classes and, by extension, of specific genders became less distinct in the case of heteroclitic nouns.

The break in the correlation between the two grammatical features was a consequence of the morphological reanalysis that gave rise to the *ι*-neuter heteroclitic endings *-ιού*, *-ιών* and *-ια*. Dealing first with the genitive endings, before the reanalysis at a stage in the development of noun inflection assumed to be similar to that described in §5.1.1 with reference to MGr, *-ου* and *–ων*—in which the reanalysed *ι*-neuter genitive endings originate—were both the default endings for the expression of the genitive singular and genitive plural, respectively. The plural ending was invariant across all inflectional classes; the singular ending was the least specific among the possible genitive singular realisations (*-ου*, *-Ø*, *-ς*, *-ους*) as it appeared in four out of seven major inflectional classes. This stage is illustrated in (42) (see also Spyropoulos & Kakarikos's (forthcoming) analysis of noun inflection in Delmesó Cappadocian; also Alexiadou & Müller (2008: 119-125) with reference to SMGr).

(42) AMGr

	a. masculine classes		b. feminine classes
	-ος	*-ας, -ης, -ες, -ους*	*-α, -η, -ου, -ε, -ω*
	‘lighthouse’	‘rule’	‘hope’
GEN.SG	*φάρ-ου*	*κανόνα-Ø*	*ελπίδα-ς*
GEN.PL	*φάρ-ων*	*κανόν-ων*	*ελπίδ-ων*

	c. neuter classes			
	-ο	*-ι*	*-μα, -μο, -ας*	*-ος*
	‘leaf’	‘foot’	‘meat’	‘forest’
GEN.SG	*φύλλ-ου*	*ποδι-ού*	*κρεάτ-ου*	*δάσ-ους*
GEN.PL	*φύλλ-ων*	*ποδι-ών*	*κρεάτ-ων*	*δασ-ών*

After the morphological reanalysis and before the development of neuter heteroclisis, the novel endings *-ίου* and *-ίων* were limited to the *ι*-neuter inflectional class. As *-ου* and *-ων* preserved their original form in the other classes in which they were found before the development of neuter heteroclisis, *-ίου* and *-ίων* were no longer default in expressing the genitive singular and plural but were on the contrary uniquely associated with the *ι*-neuter class. In Carstairs-McCarthy’s (1994) terms, the two endings developed from general defaults into class identifiers and, due to the correlation between inflection and gender, into gender identifiers, as well. This stage is illustrated in (43).

(43) AMGr

	a. masculine classes		b. feminine classes
	-ος	*-ας, -ης, -ες, -ους*	*-α, -η, -ου, -ε, -ω*
	‘lighthouse’	‘rule’	‘hope’
GEN.SG	*φάρ-ου*	*κανόνα-Ø*	*ελπίδα-ς*
GEN.PL	*φάρ-ων*	*κανόν-ων*	*ελπίδ-ων*

	c. neuter classes			
	-ο	*-ι*	*-μα, -μο, -ας*	*-ος*
	‘leaf’	‘foot’	‘meat’	‘forest’
GEN.SG	*φύλλ-ου*	*ποδ-ιού*	*κρεάτ-ου*	*δάσ-ους*
GEN.PL	*φύλλ-ων*	*ποδ-ιών*	*κρεάτ-ων*	*δασ-ών*

Turning now to the nominative/accusative plural ending, before the morphological reanalysis, it too was the least specific among the possible nominative and accusative plural endings. It was syncretic and therefore used for the expression of both case/number specifications at the same time. It also appeared in three out of seven major inflectional classes (see also Spyropoulos & Kakarikos (forthcoming) for Delmesó Cappadocian and Alexiadou & Müller (2008: 119-125) for SMGr). Unlike the genitive endings, which were found in inflectional classes correlated with all three genders, the original nominative/accusative ending *-α*, in which the reanalysed *ι*-neuter nominative/accusative ending originates, was found only in neuter classes as shown in (44). Therefore, *-α* already had the status of gender identifier even before the ending was reanalysed in AMGr.

(44) AMGr

	a. masculine classes		b. feminine classes
	-ος	*-ας, -ης, -ες, -ους*	*-α, -η, -ου, -ε, -ω*
NOM.PL	*φάρ-οι*	*κανόν-ες*	*ελπίδ-ες*
ACC.PL	*φάρ-ους*		

	c. neuter classes			
	-ο	*-ι*	*-μα, -μο, -ας*	*-ος*
	‘leaf’	‘foot’	‘meat’	‘forest’
NOM/ACC.PL	*φύλλ-α*	*πόδι-α*	*κρέατ-α*	*δάσ-η*

Similarly to the novel genitive endings, the novel nominative/accusative plural ending *-ια* developed after the morphological reanalysis into a class-identifier for the *ι*-neuter class while retaining its status as a neuter gender identifier.

After the emergence of these class- and gender-identifying endings and as a result of the subsequent development of neuter heteroclisis, large numbers of nouns in the AMGr dialects acquired mixed paradigms. Some parts of these paradigms inflected according to each noun's primary inflectional class which could be correlated with the masculine, feminine or even the neuter. The remaining parts of these mixed paradigms inflected according to the *ι*-neuter inflectional class. In this way, membership into specific inflectional classes and specific genders was blurred and became uncertain as nouns were found to belong to two inflectional classes and to two genders simultaneously, one of which was always the neuter and the *ι*-neuter inflectional class. Compare the mixed inflectional paradigms of masculine and feminine nouns with those of *ι*-neuter nouns in Cappadocian and Pontic in (45) and (46). As is shown below, this change affected animate and inanimate nouns alike.

(45) Cappadocian (Phloïtá, Sílata, Ferték, Delmesó; Dawkins 1916: 90, 99, 106, 109, 110)

	a. *ος*-masculine 'mill'	b. *ας*-masculine 'room'	c. *ι*-neuter 'shirt'
SINGULAR			
NOM/ACC	*μύλ-ος*	*οδά-(ς)*	*μετ-Ø*
GEN	*μυλ-ιού*	*οδαδ-ιού*	*μετ-ιού*
PLURAL			
NOM/ACC	*μύλ-ους*	*οδάδ-ια*	*μέτ-ια*
GEN	*μυλ-ιού*	*οδαδ-ιού*	*μετ-ιού*

	d. *ος*-masculine 'man'	e. *ας*-masculine 'priest'	f. *ι*-neuter 'shirt'
SINGULAR			
NOM/ACC	*άτρωπ-ο*	*παπά-(ς)*	*μετ-Ø*
GEN	*ατρωπ-ιού*	*παπαδ-ιού*	*μετ-ιού*
PLURAL			
NOM/ACC	*ατρώπ-ια*	*παπάδ-ες*	*μέτ-ια*
GEN	*ατρωπ-ιού*	*παπαδ-ιού*	*μετ-ιού*

(46) Pontic (Oeconomides 1958: 176, 196; Papadopoulos 1955: 42-43, 46)

	a. *α*-feminine ‘money’	b. *η*-feminine ‘yard’	c. *ι*-neuter ‘belt’
PLURAL			
NOM/ACC	*παράδ-ας*	*αυλ-άς*	*λωρ-ία*
GEN	*παραδ-ίων*	*αυλ-ίων*	*λωρ-ίων*

	b. *ος*-masculine ‘man’	c. *α*-feminine ‘niece’	d. *ι*-neuter ‘belt’
SINGULAR			
NOM	*άνθρωπ-ος*	*ανεψᾶ-Ø*	*λωρ-ίν*
GEN	*ανθρωπ-ί(ου)*	*ανεψᾶ-ς*	*λωρ-ί(ου)*
ACC	*άνθρωπ-ον*	*ανεψᾶ-ν*	*λωρ-ίν*
PLURAL			
NOM	*ανθρώπ(-οι)*	*ανεψᾶδ-ες*	*λωρ-ία*
GEN	*ανθρωπ-ίων*	*ανεψᾰ̈δ-ίων*	*λωρ-ίων*
ACC	*ανθρώπ-(ου)ς*	*ανεψᾶδ-ες*	*λωρ-ία*

As is shown in (45) and (46), with the development of neuter heteroclisis, nouns belonging to all inflectional classes and semantic types became morphologically associated with the neuter gender and the *ι*-neuter inflectional class. Naturally, the effect of this association was stronger in inanimate nouns such as Cappadocian *μύλος* and *οδά(ς)* or Pontic *παρά* and *αυλή*, which were already more saliently related to the neuter than animate nouns by virtue of their meaning. It is therefore clear that neuter heteroclisis provided a morphological mechanism that strengthened the grammatical association of the inanimate semantic type with the neuter gender and the *ι*-neuter class in AMGr, which, as I argue in the next section, acted as the catalyst in bringing about the second neuterising development dealt with in this chapter, namely ‘agglutinative’ inflection.

One might argue that, in the case of Cappadocian, neuter heteroclisis could only strengthen the association of the inanimate semantic type with the *ι*-neuter inflectional class but not with the neuter gender since gender distinctions are not operative in the dialect. However, its occurrence in all the AMGr dialects—of which

only Cappadocian has lost gender—and also in the NGr dialects of Lésbos and Kydoníes, and Sámos, which do not show any gender-related phenomena reminiscent of the ones discussed in Chapter 4, evidences that neuter heteroclisis must be dated back to a time predating the dialectal split between the AMGr and the NGr dialect groups and, therefore, the developments that affected gender agreement in AMGr.[28] With that in mind, it would not be an exaggeration to suggest that neuter heteroclisis is perhaps the earliest attested neuterising innovation affecting the morphosyntax of nouns in AMGr. As such, it could be viewed as one of the factors that potentially contributed even to the development of semantic agreement in AMGr, if one views it as the overt expression of the grammatical association of the inanimate semantic type with the neuter morphological gender by means of agreement.

5.3.5 Summary

In this section, I provided my account of the emergence and subsequent development of neuter heteroclisis. I showed that this morphological innovation is not confined to Cappadocian but is found, in varying degrees, in all the AMGr dialects but also in the NGr dialects of Lésbos and Kydoníes, and Sámos. This suggests that neuter heteroclisis emerged before the split between the two dialect groups—AMGr and NGr. Neuter heteroclisis became possible after a morphological reanalysis whereby the final *-ι* of *ι*-neuter noun stems was taken to be part of the original genitive singular and plural, and nominative/accusative plural endings, giving rise to the novel *-ίου*, *-ίων* and *-ια*. All the heteroclitic forms examined in this section are formed with these novel endings. As regards the genitive singular and plural, I identified proparoxytone *ος*-masculine and *ο*-neuter nouns, and parisyllabic *α*-feminine nouns as the first noun groups to develop neuter heteroclisis, an innovation that I attributed to the uncertainty as to stress placement in these paradigmatic cells. Heteroclitic forms

[28] This could be the case even of neuter heteroclitic forms that are only found in Cappadocian for which it is not possible to decide with historical certainty whether they were formed before or after gender was lost; for example, the nominative/accusative plural forms of human masculine nouns such as *ατρώπια* 'men' or *ντασκάλια* 'teachers'. It could be argued that the lack of gender distinctions in Cappadocian allowed for the formation of such plural forms for nouns whose semantics would not otherwise allow for their belonging to the neuter gender. However, neuter plurals are attested for masculine nouns denoting kinship terms such as *αδέρφια* 'brothers', *ανίψια* 'nephews and nieces', *εγγόνια* 'grandchildren' in all MGr dialects including Cappadocian. These plurals entail a collective meaning. If Cappadocian forms like *ατρώπια* and *ντασκάλια* were formed before the complete loss of gender, it is possible that they could have initially entailed such a meaning which they later lost.

were built with the novel *ι*-neuter endings that were stable with respect to stress and thus helped overcome stress uncertainty. From that *locus*, neuter heteroclisis was further extended to other noun types that presented with different structural difficulties such as breaks in diagrammaticity, found in nouns that had an overt exponent for the nominative but a zero exponent for the genitive in the singular due to high vowel deletion. Neuter heteroclisis in the nominative/accusative plural was analysed as evidencing an extension of the MGr tendency for inanimate nouns to belong to the neuter gender and to the *ι*-neuter inflectional class, in particular, which is first manifested in the plural. I argued that Cappadocian extended the domain of application of this tendency to inanimate nouns belonging to inflectional classes with which it is not normally found in other MGr dialects in order to repair deviations with respect to prototypicality. I analysed neuter heteroclisis in the plural of human nouns as an analogical development based on heteroclisis in the genitive singular/plural. This series of developments had major implications for the organisation of nouns into specific inflectional classes and genders in AMGr as, in acquiring heteroclitic forms, large numbers of nouns from all inflectional classes, genders and semantic types became more neuter-like in terms of their inflectional morphology, an effect that was more pronounced in inanimate masculine and feminine nouns that were otherwise already associated with the neuter gender due to their semantics. In the next section, I show how this was the catalyst in the development of 'agglutinative' inflection in Cappadocian.

5.4 The development of 'agglutinative' inflection

5.4.1 A contact-induced morphological innovation?

'Agglutinative' inflection has attracted more attention in the literature than any other distinctively Cappadocian development. 'Agglutinative' forms are genitive singular/plural, and nominative/accusative plural forms in which case and number are expressed by the reanalysed *ι*-neuter endings *-ιου* and *-ια* respectively. In contrast to *ι*-neuter heteroclitic forms, the *ι*-neuter endings in 'agglutinative' inflection do not attach to noun stems but to nominative singular forms of nouns, which have been reanalysed as stems, or, according to some analyses discussed below, free bases. 'Agglutinative' forms occur with nouns whose cognates in other MGr varieties may

belong to any inflectional class. Consider, for example, the forms *γάμοζιου*, *τύραγιου*, *παραγιού*, *άγιοζια* and *λίραγια* from *γάμος* 'wedding', *άγιος* 'saint', *παρά* 'para', *τύρα* 'door' and *λίρα* 'lira' in (47). Note that in SMGr the cognates of these nouns belong to the *ος*-masculine (*γάμος*, *άγιος*), the *ας*-masculine (*παράς*) and the *α*-feminine class (*θύρα*, *λίρα*).

(47) Cappadocian

a. *χαζιρλάτανεν τραπέζ χαν γάμοζιου*
she.prepared table like wedding.SG.GEN
'she prepared a table like that of a wedding' (Phloïtá, *ILNE/811*, 49)

απ' τύραγιου ντο ντελίκα
from door.SG.GEN the hole
'from the keyhole' (Ulaghátsh, *KMS/K*, 140)

b. *σ' πέντε ντέκκα παραγιού όργο*
to five ten para.PL.GEN work
'to five-ten paras' worth of work' (Axó, *KMS/M&K*, 194)

c. *νταγόλσαν άγιοζια*
they.scattered saints.PL.NOM
'the saints scattered' (Ghúrzono, *Dawkins*, 346)

ντες ερυό κατό λίραγια
you.give two hundred liras.PL.ACC
'give me two hundred lira' (Ulaghátsh, *Dawkins*, 368)

In the case of *α*-feminine nouns in some Cappadocian varieties, the genitive ending *-ιού* appears to have lost its number specification and is found attached to forms that consist of the nouns' stems and original *α*-feminine nominative/accusative plural ending. This produces such novel 'agglutinative' genitive plural forms as *ονομασίεσιου* from *ονομασία* 'nameday' in (48), in which number is expressed by *-ες* and case by *–ιου*.

(48) Phloïtá Cappadocian (*ILNE/811*, 48)
παίνισκαν σα ονομασί-εσ-ιου τα σπίτια
they.went to.the nameday-PL-GEN the houses
'they would go to the houses that celebrated namedays'

Dawkins (1916: 97-98) was the first to use the term 'agglutinative' to refer to these Cappadocian forms based on their superficial similarity to Turkish noun inflection, in which endings separately expressing case and number are attached to the nominative singular form of nouns in inflection. Dawkins recorded 'agglutinative' forms only in the varieties of Sílata, Malakopí, Axó, Mistí, Ulaghátsh, Semenderé, Araván, Ghúrzono and Ferték. According to his description, no such forms were found in Delmesó, Potámia and Phloïtá at the time of his documentation. However, as we can see in (47a) and (48) above, 'agglutinative' forms are attested in the Phloïtá Cappadocian texts of the chronologically later *ILNE* corpus, which suggests that the variety developed them after Dawkins's documentation in 1909-1911.

In the literature, 'agglutinative' inflection in Cappadocian is taken as the outcome of heavy structural borrowing from Turkish and is often considered to indicate a typological shift from inherited fusional inflectional morphology to agglutinative inflection (Janse 2001: 475-476, 2004: 9-12, 2009: 41; Johanson 2002: 59-60; Karatsareas 2007; Matras 2009: 262-263, 2010: 75-76; Ralli 2009: 99-102; Spyropoulos & Kakarikos forthcoming; Thomason 2001: 63-64; Thomason & Kaufman 1988: 219; Winford 2003: 83, 2005: 405, 2010: 181). In accounting for their development, extant analyses such as Janse (2009: 41, 51 endnote 16) and Ralli (2009: 99-102) identify the *ι*-neuter inflectional class, exemplified by *ζωνάρ* 'belt' in (49a), as the origin of the endings *-ιου* and *-ια* which they take to have spread to "all nouns and inflectional paradigms" (Ralli 2009: 101) resulting in forms such as *γύπνοζιου* and *γύπνοζια* from *ος*-masculine *γύπνος* 'sleep' in Axó Cappadocian (49b). In these forms, the two *ι*-neuter endings are treated as functioning in exactly the same way as the Turkish genitive ending *-nun* and plural ending *-lar* in the corresponding inflected forms *uykunun* and *uykular* of *uyku* 'sleep' in (49c), that is, as cases of single exponence whereby *-ιου* solely expresses genitive case and *-ια* solely expresses plural number. The use of the nominative/accusative singular form *γύπνος* as the element to which the *ι*-neuter endings attach "in the Turkish fashion" (Horrocks 2010: 404)—similarly to *uyku*—is

further identified by Ralli (2009: 102) as another point of structural convergence between Cappadocian and Turkish noun inflection.

(49)

	a. Axó Cappadocian (Mavrochalyvidis & Kesisoglou 1960: 36-40)	b. Axó Cappadocian	c. Turkish
SINGULAR			
NOM/ACC	*ζωνάρ-Ø*	*γύπνος-Ø*	*uyku-Ø*
GEN	*ζωναρ-ιού*	*γύπνοζ-ιου*	*uyku-nun*
PLURAL			
NOM/ACC	*ζωνάρ-ια*	*γύπνοζ-ια*	*uyku-lar*[29]
GEN	*ζωναρ-ιού*	*γύπνοζ-ιου*	*uyku-lar-ın*

No form combining the two endings resulting in such a genitive plural as **γύπνοζ-ια-γιου* that would parallel Turkish *uyku-lar-ın* is attested in the Cappadocian texts. As shown in (49), the genitive plural in Cappadocian is in most cases formally identical to the genitive singular. Sasse (1992: 65) claims to have elicited the genitive plural form *άτρωποσιαγιου* for *άτρωπος* 'man' from one of the last speakers of Ulaghátsh Cappadocian who was living in Athens, Greece in the 1960s (see also Janse 2004: 10-12, 2010: 41; Ralli 2009: 101-102). However, since there is not even a single occurrence of this type of genitive plural in our corpus, I will not deal with it any further.

The main problem with existing analyses of Cappadocian 'agglutinative' forms is that they rely too heavily on the superficial structural similarity and linear intermorphemic correspondence between genitive singular and nominative/ accusative plural inflected forms in Cappadocian and Turkish. These are employed as evidence to establish language contact with the latter as the single cause for the development of 'agglutinative' forms in the former. Such analyses are generally ahistorical. They do not account for the actual linguistic mechanisms and processes of change whereby nominative singular forms of nouns such as *γύπνος* were reanalysed as stems, or for those that allowed for the attachment of the *ι*-neuter endings to such reanalysed nominative singular forms, a process generally portrayed as abrupt and as

[29] *Uykular* bears zero marking for case and is found in the direct object position only with non-specific NPs. In the case of specific NPs, the form *uykular-ı* is found instead.

not having undergone intermediate stages of development before. Previous approaches make no reference to the general typological profile or the more specific characteristics of the Cappadocian noun inflection system either before or after the development of 'agglutinative' forms, which are examined in isolation both from a synchronic and a diachronic point of view. In the remainder of this section, I aim to overcome these shortcomings.

5.4.2 A synchronic analysis

5.4.2.1 Endings: single or cumulative exponence?

In examining the 'agglutinative' forms synchronically and dealing first with the exponence of *ι*-neuter endings, in accepting that *-ιου* and *-ια* in forms such as *γύπνοζιου* and *γύπνοζια* in (49b) express only genitive case and plural number, one would have to assume that the same holds in the corresponding forms of *ι*-neuter nouns in which the endings originate, i.e., in forms such as *ζωναριού* and *ζωνάρια* in (49a). Yet, Ralli asserts that *-ιου* and *-ια* "are still used as fusional morphemes [i.e., they express both case and number] for some Cappadocian nouns" (2009: 102) including *ι*-neuter nouns such as *ζωνάρ*. Ralli's claim, however, is completely unjustified since the same case/number combinations are expressed by the same endings in both *γύπνος* and *ζωνάρ*; therefore, the two nouns belong to the same inflectional class, namely the *ι*-neuter one. There is no reason to analyse the same endings, *-ιού* and *-ια*, as cases of cumulative exponence in *ι*-neuter noun forms such as *ζωναριού* and *ζωνάρια* but as cases of single exponence in inflected forms of nouns that appear to have historically belonged to other inflectional classes such as *γύπνοζιου* and *γύπνοζια* from originally *ος*-masculine *γύπνος*.

The claim that *-ιου* and *-ια* in forms such as *γύπνοζιου* and *γύπνοζια* are single exponents is based on the apparent neutralisation of the specification for case and number affecting the two endings within the inflectional paradigm of nouns like *γύπνος* in (49b). As we have seen, in the case of *-ιου*, the loss of word final *-ν* and the raising of [o] to [u] in the original genitive plural ending *-ιών* resulted in the formal coincidence of the formerly distinct genitive singular and plural endings into a single form *-ιου*. This led to number syncretism and, consequently, number neutralisation in the genitive. This kind of transnumber syncretism is typologically rare (Baerman *et al.*

2005: 92-95) but is, nonetheless, found in Cappadocian as shown by (47b) above where the form *παραγιού* 'para.PL.GEN' follows the numerals *πέντε ντέκκα* 'five ten'. Examples such as (50) below support the claim that *παραγιού* is also a plural and not merely a singular form, showing that the plural indeed follows numerals in Cappadocian.

(50) Axó Cappadocian (*KMS/M&K*, 196)
ντυο γαζάνια λίρες
two cauldron.PL gold.coins
'two cauldrons full of gold coins'

Similarly, in the case of *-ια*, case neutralisation is the result of syncretism between nominative and accusative in the plural of not only the *ι*-neuter inflectional class, in which *-ια* originates, but of all neuter classes; this characterises all MGr dialects. This type of syncretism has been distinctive of the neuter classes since the earliest recorded stages in the history of Greek and goes back to Proto-Indo-European times (Clackson 2007: 93-94, 100-104; Matasović 2004: 136). Consider, for example, the plural of the four neuter inflectional classes identified by Ralli (2000, 2005) for SMGr in (51).

(51) SMGr (Ralli 2005: 121)

	a. IC5	b. IC6	c. IC7	d. IC8
	'mountain'	'house'	'body'	'state'
NOM/ACC.PL	*βουν-ά*	*σπίτι-α*	*σώματ-α*	*κράτ-η*
GEN.PL	*βουν-ών*	*σπιτι-ών*	*σωμάτ-ων*	*κρατ-ών*

As we see in (51), in SMGr, nominative/accusative syncretism in the plural—the same condition for case neutralisation as in Axó Cappadocian (49a, b)—is found in all four classes. In the standard language, the two cases are syncretically expressed either by the more general ending *-α* or by the more specific ending *-η*. Nowhere in the literature, however, can there be found an analysis claiming that *-α* and *-η* are single exponents of number in SMGr noun inflection. Conversely, according to Alexiadou and Müller (2008: 119-125), these endings express plural number and non-oblique case—nominative or accusative—and contrast within the plural of the

inflectional paradigm with the ending *-ων* that expresses plural number and oblique (genitive) case. There is therefore no reason to assume that the Cappadocian ending *-ια* under the same paradigmatic conditions as SMGr *-α* and *-η* solely expresses number. Note also that it, too, contrasts within the inflectional paradigm with the genitive singular/plural syncretic ending *-ιου*.

Following Ralli's (2000, 2005) analysis of SMGr noun inflection and Spyropoulos and Kakarikos's (forthcoming) analysis of noun inflection in Delmesó and Ulaghátsh Cappadocian, I further assume that besides case and number, endings in Cappadocian are marked for the grammatical feature of inflectional class and so are noun stems. In stems, the inflectional class feature is inherently specified. In endings, it can be inherently specified, in which case the correct combination of stem and ending to produce grammatical inflected forms is achieved on the basis of inflectional class specification shared between the two; or, it can be underspecified, which is the case for endings that serve as defaults in the expression of particular case/number combinations.

In Axó Cappadocian (52), as in most Cappadocian varieties, both *-ιου* and *-ια* are inherently specified for inflectional class and bear the value *ι*-neuter as they, in principle, only combine with nouns whose stems are specified for the *ι*-neuter inflectional class (52e). Among the other possible realisations for genitive singular and/or plural, *-ου* is found in three out of six inflectional classes (*ος*-masculine, *ο*-neuter, *μα*-, *μο*-, *ας*-neuter) and is therefore the default for this case/number combination; *-ς* is specified for the *α*-, *η*-feminine inflectional class; *-Ø*, found in the *ας*- and *ης*-masculine class, is the general default that bears no specification for case, number or inflectional class. In the nominative/accusative plural, *-α* is found in two neuter inflectional classes and *-ες* in the *α*-, *η*-feminine inflectional class. In the other classes, nominative and accusative plural are expressed by different endings.

(52) Axó Cappadocian (Mavrochalyvidis & Kesisoglou 1960: 40-42)

	a. *ος*-masculine ‘shepherd’	b. *ας-*, *ης*-masculine ‘man’	c. *α-*, *η*-feminine ‘spindle’
SINGULAR			
NOM	*πιῶτικ-ός*	*νουμάτη-ς*	*κλωχάρα-Ø*
GEN	*πιῶτικ-ού*	*νουμάτ(η)-Ø*	*κλωχάρα-ς*
ACC	*πιῶτικ-ό*	*νουμάτ(η)-Ø*	*κλωχάρα-Ø*
PLURAL			
NOM	*πιῶτικ-οί*	*νουμάτ-ε(ς)*	*κλωχάρ-ες*
GEN	*πιῶτικ-ού*	*νουμάτ-εζ-ιου*	*κλωχάρ-εζ-ιου*
ACC	*πιῶτικ-ιούς*	*νουματ-ιούς*	*κλωχάρ-ες*

	d. *ο*-neuter ‘water’	e. *ι*-neuter ‘belt’	f. *μα-*, *μο-*, *ας*-neuter ‘dream’
SINGULAR			
NOM/ACC	*λερ-ό*	*ζωνάρ-Ø*	*όρουμα-Ø*
GEN	*λερ-ού*	*ζωναρ-ιού*	*ορουμάτ(-ου)*
PLURAL			
NOM/ACC	*λερ-ά*	*ζωνάρ-ια*	*ορούματ-α*
GEN	*λερ-ού*	*ζωναρ-ιού*	*ορουμάτ(-ου)*

After Aronoff (1994) and Carstairs-McCarthy (1994), I consider inflectional class specification to be part of the endings’ information content in the cases in which they bear an inherent value. On this basis, I argue that *-ιού* and *-ια* in forms such as *γύπνοζιου*, *γύπνοζια* and *ζωναριού*, *ζωνάρια* in (49b) and (52) are not cases of single exponence solely expressing genitive case and plural number respectively in the ‘agglutinative’ way. On the contrary, they exhibit cumulative exponence by virtue of their additional inflectional class feature specification which Alexiadou and Müller characterise as “the very device that brings about fusional inflection” (2008: 101). This contrasts starkly with noun inflection in typical agglutinative languages like Turkish, which lacks inflectional classes and in which there is a single set of endings separately expressing the various case and number values that is used uniformly in the inflection of all nouns.

Recall, however, that *-ιου* is also found in heteroclitic forms of nouns that do not belong to the *ι*-neuter class. For example, in Axó Cappadocian, we find *ος*-masculine *ντιασκαλιού* 'teacher.SG.GEN/PL', *λυκιού* 'wolf.SG.GEN/PL'; *ης*-masculine *κλεφτιού* 'thief.SG.GEN/PL'; *ο*-neuter *χτηνιού* 'cow.SG.GEN/PL', *ξυλιού* 'wood.SG.GEN/PL' (Dawkins 1916: 100, 107, 112-113; Mavrochalyvidis & Kesisoglou 1960: 41). This means that within the same inflectional class the same case/number combination can have two distinct realisations, either the default genitive singular/plural ending *-ου* or the *ι*-neuter specific ending *-ιού* (*πιῶτικ-ού versus ντιασκαλ-ιού*; *νουμάτ(η)-Ø versus κλεφτ-ιού*; *λερ-ού versus ξυλ-ιού*). Combined with the growing productivity of the *ι*-neuter inflectional class, the competition between the two gradually led to the generalisation of *-ιου* as the default genitive singular/plural ending at the expense of other possible realisations. The first manifestations of the *ι*-neuter ending's winning over the former default ending can be found in the only truly agglutinative forms: the genitive plural forms such as Axó Cappadocian *νουμάτ-εζ-ιου* and *κλωχάρ-εζ-ιου* in (52b, c) in which number is expressed by -ες and case by *-ιου*, in spite of the fact that *-ιου* remains inherently specified for the *ι*-neuter inflectional class in this variety. The completion of this replacement is attested in Ferték and Ulaghátsh. Consider the inflectional classes of Ulaghátsh Cappadocian in (53):

(53) Ulaghátsh Cappadocian (adapted from Spyropoulos & Kakarikos forthcoming based on Dawkins 1916: 102, 107, 109 and Kesisoglou 1951: 30-34)

	a. *ος*-masculine 'man'	b. *ας-*, *ης*-masculine 'priest'	c. *α-*, *η*-feminine 'woman'
SINGULAR			
NOM/ACC	*χερίφ-ος*	*παπά-ς*	*ναίκα-Ø*
GEN	*χεριφ-ιού*	*παπά-γιου*	*ναίκα-γιου*
PLURAL			
NOM/ACC	*χερίφ-ια*	*παπά-για*	*ναίκ-ες*
GEN	*χεριφ-ιού*	*παπά-γιου*	*ναίκ-εζ-ιου*

	d. *o*-neuter 'water'	e. *ι*-neuter 'shirt'	f. *μα*-, *ας*-, *ας*-neuter 'cover'
SINGULAR			
NOM/ACC	*λερό-Ø*	*μέτ-Ø*	*πούμα-Ø*
GEN	*λερο-γιού*	*μετ-ιού*	*πούμα-γιου*
PLURAL			
NOM/ACC	*λερ-ά*	*μέτ-ια*	*πούματ-α*
GEN	*λερο-γιού*	*μετ-ιού*	*πούμα-γιου*

In Ulaghátsh, *-ιου* is the only available genitive singular/plural ending. What is more, in the nominative/accusative plural, the *ι*-neuter ending *-ια* has developed into the default ending for that case/number specification as it is found in three out of six inflectional classes. Therefore, only in varieties such as Ulaghátsh could one argue that *-ιου* and *-ια* are cases of single exponence solely expressing genitive case and plural number, their inflectional class specification being null. Bear in mind, though, that this could only hold if we again disregard the fact that *-ιου* is used both in the singular and in the plural number, and that *-ια* is used both in the nominative and in the accusative case. In all other Cappadocian varieties, the two endings show cumulative exponence: *-ιου* is marked for case, arguably number, and inflectional class; *-ια* is marked for number, non-oblique case, and inflectional class.

5.4.2.2 Bound stems or free bases?

Ralli (2009: 102) treats nominative singular forms such as *γύπνος* in (49b) to which *-ιου* and *-ια* attach to build the 'agglutinative' forms *γύπνοζιου* and *γύπνοζια* as free bases, i.e., as monomorphemic forms that are unmarked compared with other inflected forms within the inflectional paradigm and which are systematically used as the unit to which endings are added in word formation processes, both inflectional and derivational. On this assumption, she considers 'agglutinative' forms to be "reminiscent of the Turkish nominal inflectional paradigms, where the inflected forms are shaped on the basis of a nominative singular word form" (2009: 102). For example, the inflected forms *uykunun*, *uykuların* and *uykular* in (49c) are built on the nominative singular base form *uyku* (see also Janse 2001: 476; however, in 2004: 9 and 2009: 41 Janse makes use of the term stem). Ralli contrasts this to SMGr stem-based

inflection, in which endings and other derivational formatives are attached to bound stems, which do not in principle formally coincide with either the base form or any other inflected form of nouns. In SMGr, all inflected forms, including nominative singular forms, are always analysed as bimorphemic and morphologically structured into a stem and an ending. For example, nominative singular *ύπνος* 'sleep', the cognate of Axó Cappadocian *γύπνος*, consists of the stem *υπν-* and of the ending *-ος*.

As Wurzel (1989: 44-50, 74-82) and Carstairs-McCarthy (2000: 603-605) are careful to make clear, inflectional systems do not always fall neatly within one of the two typological types with respect to the unit used as the basis for inflection—base inflection of the Turkish type or stem inflection of the SMGr type. Some inflectional systems, such as the Turkish one, belong solely to one type. In Turkish, all nouns exhibit base inflection in all their inflected forms and, since the language lacks inflectional classes, there are no nouns or groups of nouns that do not belong to this inflectional type either in whole or in some of their inflected forms. In other inflectional systems, most commonly ones in which nouns are divided into different inflectional classes, the majority of nouns (or inflectional classes) as well as of inflected forms within the paradigm exhibit one of the two inflectional types. At the same time, though, a smaller number of nouns (or inflectional classes) and possibly some inflected forms in the paradigm of some or even all inflectional classes may belong to the other inflectional type. This is the case in German, which generally has base form inflection in all inflectional classes with the exception of some peripheral partial classes of the *n*-declension, the plural of which is formed by stem inflection (Wurzel 1989: 75-76).

Inflected forms in MGr are built on stems that do not generally coincide formally with particular inflected forms. For example, the stem *υπν-* of *ος*-masculine *ύπνος* never surfaces *per se* and always needs an ending to form a grammatical word. However, in the case of nouns belonging to feminine and neuter inflectional classes that exhibit stem allomorphy, one stem allomorph—most commonly the one ending in a vowel—is always formally identical to the nominative/accusative singular form of nouns; for example, *α*-feminine *ελπίδα* 'hope.SG.NOM/PL' (*ελπιδα-*); *μα*-neuter *όνομα* 'name.SG.NOM/PL' (*ονομα-*).

The *ι*-neuter class is the only one in which all inflected forms of the paradigm are built upon a morphemic unit that formally coincides with the nominative/

accusative singular, that is, the base form of nouns belonging to this class. Consider, for example, the inflection of *σπίτι* 'house' in SMGr.

(54) SMGr

	SINGULAR	PLURAL
NOM/ACC	*σπίτι-Ø*	*σπίτι-α*
GEN	*σπιτι-ού*	*σπιτι-ών*

The forms in (54) can be thought of as built upon a free base *σπίτι*, which, as *uyku* in Turkish (49c), is monomorphemic. On this assumption, the inflection of *ι*-neuter nouns in MGr can be analysed as a case of base form inflection. This, however, would mean not taking into account the system defininig structural properties of MGr inflection which is, as we have seen, stem-based and in which all inflected forms are structured into stems and endings. Keeping in line with this general typological profile for MGr, Ralli considers *σπιτι-* in (54) to be a stem in her analysis of SMGr noun inflection (2000: 223, 2005: 121), and not a base. The nominative/accusative singular form *σπίτι* is therefore treated as consisting of the stem *σπιτι-* and of a null ending *-Ø* (see also Alexiadou & Müller 2008: 120; Malikouti 1970: 32-35; Thomadaki 1994: 217-222).

Turning now to Cappadocian noun inflection, we have seen that it, too, is in principle stem-based. Taking noun inflection in Axó Cappadocian in (52) as an example, we find that the inflected forms of *ος*-masculine and *ο*-neuter nouns are built upon single stems (*πιῶτικ-*; *λερ-*), that *ας-*, *ης*-masculine, *α-*, *η*-feminine and *μα-*, *μο-*, *ας*-neuter nouns have two stem allomorphs, one ending in a vowel and one ending in a consonant (*νουματη- ~ νουματ-*; *κλωχαρα- ~ κλωχαρ-*; *ορουμα- ~ ορουματ-*), and that *ι*-neuter nouns have a single stem that is used in the inflection of all forms in the paradigm (*ζωναρ-*). Overall, the inflectional classes in Axó Cappadocian and in most other Cappadocian varieties are defined by the same kind of stem allomorphy and the same intraparadigmatic distribution of stem allomorphs as their cognate inflectional classes in other MGr dialects (see also the analysis of Delmesó Cappadocian noun inflection in Spyropoulos & Kakarikos forthcoming). Recall also that neuter heteroclitic forms, which are found in all Cappadocian varieties, are built

by attaching *-ιου* and *-ια* to the various nouns' stems and thus preserve the stem allomorphic patterns defining each inflectional class.

Stems and stem allomorphs are preserved to a significant degree even in the inflection of Ulaghátsh and Ferték Cappadocian, in which 'agglutinative' forms are found most widely compared to the rest of the Cappadocian varieties. As can be seen in (53), inflectional classes in Ulaghátsh Cappadocian generally preserve their defining stem allomorphy. *ας-*, *ης*-masculine nouns are the only exception in that respect as they appear to have lost their consonant-ending stem allomorph and all their inflected forms are built upon a single, vowel-ending stem. Nevertheless, the distribution of stem allomorphs in the singular of some inflectional classes is different from that of other Cappadocian varieties. The genitive singular/plural of *ο-* and *μα-*, *μο-*, *ας*-neuter nouns is formed on the basis of the vowel-ending stem allomorph (*λερο-γιού*, *πούμα-γιου*) and not the consonant-ending one which is, however, still found in the plural of these nouns (*λερ-ά*, *πούματ-α*). The vowel-ending allomorph is the one that appears in the nominative/accusative singular form of nouns in these two inflectional classes and the genitive forms in question are formed with the *ι*-neuter genitive singular/plural endings. The relevance of this will become clear in §5.4.3.

In light of the discussion above, I consider the treatment of nominative/accusative singular forms like *γύπνος* in (49b) as free bases to be biased in favour of an analysis that sees the development of 'agglutinative' forms in Cappadocian as the outcome of contact-induced change under the influence of Turkish. On the other hand, I argue that the inflected forms of nouns originating in inflectional classes other than the *ι*-neuter inflectional class and those of nouns that have always belonged to the *ι*-neuter class should be analysed in the same way so long as the full set of case/number combinations making up the paradigm is expressed by the same endings in both historical types of nouns. Therefore, forms like *γύπνος* should be analysed as being structured into a stem *γυπνοσ-* and a null ending *-Ø*, that is, similarly to nominative/accusative singular forms of *ι*-neuter nouns like *ζωνάρ* in (49a). In light of this and of the discussion on the exponence of the *ι*-neuter endings in §5.4.2.1, I conclude that 'agglutinative' inflection in Cappadocian is not in reality agglutinative.

5.4.3 A diachronic analysis: 'agglutinative' inflection as inflectional class shift

5.4.3.1 The early manifestations of shift

In Dawkins's documentation, the Cappadocian varieties of Malakopí and Sílata are the ones in which 'agglutinative' forms have the most limited distribution within the noun inflectional system, in which they are only found with inanimate *ος*-masculine nouns. I therefore assume that these two varieties illustrate the earliest attested stages in the development of 'agglutinative' inflection and take inanimate *ος*-masculine nouns as the *locus* of its first manifestation.

In Malakopí Cappadocian, inanimate *ος*-masculine nouns form their nominative/accusative plural in two different ways. They have either a fusional form that is morphologically identical to the original accusative, structured into a bound stem and the *ος*-masculine accusative plural ending *-ους*, or an 'agglutinative' form in which the *ι*-neuter nominative/accusative plural ending *-ια* attaches to a stem that formally coincides with the nouns' nominative singular form. For example, the plural of *ος*-masculine *ôειμός* 'winter' in Malakopí Cappadocian is either *ôειμούς* or *ôειμόζια* (Dawkins 1916: 99-100; for cases of similar variation in Axó Cappadocian, see Dawkins 1916: 100). Dawkins does not record any 'agglutinative' forms in the genitive singular/plural in Malakopí. On the other hand, inanimate *ος*-masculine nouns in the variety of Sílata form both their genitive singular/plural and their nominative/accusative plural in the 'agglutinative' way while retaining the original fusional form as an alternative in the plural. Consider the inflection of *μύλος* 'mill' in (55), below. The variation in the accusative singular is due to DOM.

(55) Sílata Cappadocian (Dawkins 1916: 97-98)

	SINGULAR	PLURAL
NOM	*μύλ-ος*	*μύλ-ους/μύλοζ-ια*
GEN	*μύλοζ-ιου*	*μύλοζ-ιου*
ACC	*μύλ-ο/μύλ-ος*	*μύλ-ους/μύλοζ-ια*

Two competing inflectional paradigms can be identified in (55). The original, fusional paradigm that can also be found in other AMGr dialects such as Pontic (56a), and the innovative, 'agglutinative' paradigm that is only found in Cappadocian (56b):

(56) Sílata Cappadocian

a.

	SINGULAR	PLURAL
NOM	*μύλ-ος*	*μύλ-ους*
GEN	—	—
ACC	*μύλ-ο*	*μύλ-ους*

b.

	SINGULAR	PLURAL
NOM/ACC	*μύλος-Ø*	*μύλοζ-ια*
GEN	*μύλοζ-ιου*	*μύλοζ-ιου*

As was shown in §5.4.2, the 'agglutinative' inflection of *μύλος* in (56b) is identical to that of *ι*-neuter nouns such as *λουλούθ* 'flower' in (57) with respect to both endings and stem non-allomorphy.

(57) Sílata Cappadocian (Dawkins 1916: 91)

	SINGULAR	PLURAL
NOM/ACC	*λουλούθ-Ø*	*λουλούδ-ια*
GEN	*λουλουδ-ιού*	*λουλουδ-ιού*

We see that the full set of case/number combinations making up the nominal paradigm is expressed by the same set of endings in the inflection of both *μύλος* in (56b) and *λουλούθ* in (57). We also see that the inflected forms of both nouns are built upon single stems formally coinciding with the nouns' nominative/accusative singular form, which in both cases ends in a consonant. On this basis, I consider *μύλος* and *λουλούθ* to belong to one and the same inflectional class, namely the *ι*-neuter one. By extension I argue that all nouns that inflect according to the *ι*-neuter inflectional class belong to it irrespective of their historical inflectional class membership. This may not be clear in the case of *μύλος* that has a mixed inflection but is, however, without a doubt the case of nouns that only inflect according to the 'agglutinative' pattern such as Axó Cappadocian *γύπνος* in (49b) above.

Apart from the identical sets of endings and type of stem, further evidence supporting this proposal comes from the synchronic analysis of noun inflection in Axó Cappadocian that we discussed in §5.4.2.1. There we saw that the genitive singular/plural ending *-ιου* and the nominative/accusative plural ending *-ια* are inherently specified for the *ι*-neuter inflectional class. As such, they attach only to stems of nouns that are also inherently specified for the *ι*-neuter class. Therefore, the stems of nouns such as *μύλος* and *γύπνος* that do not historically belong to the *ι*-neuter class but which combine with *-ιου* and *-ια* in their inflection must be inherently specified for the *ι*-neuter class. 'Agglutinative' forms are therefore interpreted here as evidencing the inflectional class shift of such nouns to the *ι*-neuter inflectional class.

Considering the relation between the historical inflectional class and the semantic type of nouns that are the first to shift to the *ι*-neuter class in Malakopí and Sílata Cappadocian, I propose that prototypicality was the main trigger for inflectional class shifts. As we saw in §5.2.1, despite the loss of gender distinctions, the prototypicality correlation between inflectional class and semantics remains in principle operative in most Cappadocian varieties. In this respect, the inflectional classes that were formerly masculine do not lose their prototypical meaning, and still prototypically include nouns denoting male entities; inanimate nouns remain non-prototypical members of these classes. Since the semantic homogeneity of the Cappadocian inflectional system does not present significant differences compared to other MGr dialects, formerly masculine classes contain both prototypical as well as many non-prototypical nouns that denote inanimate entities.

On this account, I view the incipient shifts to the *ι*-neuter class in Malakopí and Sílata Cappadocian as having been triggered in order to repair deviations with respect to prototypicality within the *ος*-masculine inflectional class by assigning inanimate, hence non-prototypical, members of the class to the semantically appropriate, overwhelmingly homogeneous and morphologically most productive *ι*-neuter inflectional class of which they would be prototypical members. The grammatical association of the inanimate semantic type with the neuter gender and the *ι*-neuter inflectional class acted as the catalyst in this instance of change. As has been argued, this association exerts very strong influence on noun inflection and plays a key role in inflectional and other developments affecting the morphosyntax of nouns in all the AMGr dialects.

As shown by the Malakopí and Sílata evidence, the morphological coincidence of *ος*-masculine nominative singular forms to *ι*-neuter nominative/accusative singular forms facilitated the first shifts from the former to the latter class. The final *-ς* of *ος*-masculines was taken as one of the many consonants in which *ι*-neuter nouns ended following the loss of word-final *-ι* due to high vowel deletion. On the basis of this similarity, nominative singular forms of inanimate *ος*-masculine nouns consisting of a bound stem and the ending *-ος*, for example *μύλος* 'mill.*ος*-masculine' (< *μυλ-* + *-ος*), were reanalysed as *ι*-neuter nominative/accusative singular forms structured into a stem and a null ending, for example *μύλος* 'mill.*ι*-neuter' (< *μυλοσ-* + *-Ø*). This is shown in (58). As discussed in detail in Chapter 3, DOM contributed to the reanalysis by creating a novel instance of syncretism between the nominative and the accusative in the singular of masculine nouns.

(58) Cappadocian

NOM.SG	*μύλος*:	*μυλ-* + *-ος*	>	*μυλοσ-* + *-Ø*
		ος-masculine	>	*ι*-neuter

Considered in combination, the prototypicality correlation between inflectional class and noun semantics, and the formal similarity between *ος*-masculine and *ι*-neuter nominative singular forms can account for the early manifestations of shift in Malakopí and Sílata Cappadocian. In these two varieties, no cases of shift are attested that involve prototypical nouns in other—masculine, feminine or neuter—inflectional classes or non-prototypical nouns in the other masculine class. Regarding the latter, inanimate nouns in the *ας-*, *ης*-masculine class have heteroclitic forme in the genitive singular/plural and nominative/accusative plural. In addition, they have lost the final *-ς* in their nominative singular that consequently ends in a vowel. Consider *odá* 'room' in (59), for example. In most cells of their inflectional paradigms, these nouns are, as a result, already prototypical members of the *ι*-neuter class on account of their heteroclitic forms whereas their ς-less, vowel-ending nominative singular does not allow for their reanalysis as consonant-ending *ι*-neuter nouns.

(59) Sílata Cappadocian (Dawkins 1916: 110)

	SINGULAR	PLURAL
NOM/ACC	*odά-Ø*	*odάδ-ια*
GEN	*odαδ-ιού*	*odαδ-ιού*

In the feminine classes, the majority of non-prototypical, inanimate nouns fail to undergo shift to the *ι*-neuter class for the same phonological reason as the *ας*-, *ης*-masculine nouns, namely due to their nominative/accusative singular forms ending in a vowel, either *-α* or stressed *-η*; for example, Sílata Cappadocian *λαχτυλίδα* 'ring.SG.NOM/ACC', *κλωσ̂τή* 'thread.SG.NOM/ACC' (Dawkins 1916: 442, 444). This, however, is not the case for non-oxytone *η*-feminine nouns that lose their final *-η* due to high vowel deletion, such as *στρωξ̂* 'mattress' (cf. SMGr *στρώση*) or *ρεχ* 'back' (cf. SMGr *ράχη*) that have shifted to the *ι*-neuter class in most Cappadocian varieties. Consider the inflection of *ρεχ* in (60) that provides additional support for the relevance of word-final consonants to inflectional class shifts.

(60) Araván Cappadocian (Dawkins 1916: 115)

	SINGULAR	PLURAL
NOM/ACC	*ρεχ-Ø*	*ρέχ-ια*
GEN	*ρεχ-ιού*	*ρεχ-ιού*

As for the first manifestation of shift in the nominative/accusative plural and not in the genitive singular/plural, as evidenced by Malakopí Cappadocian, it is accounted for in the context of the general MGr tendency for inflectional developments that repair prototypicality deviations to be first expressed in the plural. Recall, in that connection, the neuter plurals *λόγια* 'words' and *βράχια* 'rocks' as alternatives to the masculine plurals *λόγοι* and *βράχοι* that are found in all MGr varieties but also the grammaticalised neuter plurals for all inanimate nouns of the *ας*-, *ης*-masculine class in Cappadocian and Pharasiot; for example, *odάδια* in (59) above.

5.4.3.2 The generalisation of inflectional class shifts

Owing to the early shifts of inanimate *ος*-masculine and *η*-feminine nouns, the *ι*-neuter class strengthened with respect to the number of its prototypical members thus gaining significantly in semantic homogeneity and productivity. Productivity in the *ι*-neuter class grows at the expense of productivity in the *ος*-masculine and *η*-feminine classes, which lose members to the neuter class. They, however, gain in prototypicality and semantic homogeneity as they are left containing mostly nouns denoting male and female entities. Nevertheless, productivity appears to play a more central role in inflectional developments than prototypicality in certain Cappadocian varieties in which shifts to the *ι*-neuter class begin to generalise and affect human nouns, as well. This is what we find in the varieties of Mistí, Ulaghátsh, Semenderé, Araván, Ghúrzono and Ferték, always according to Dawkins's description.

Formal similarity to the consonant-ending nominative/accusative singular of *ι*-neuter nouns was an important factor in the generalisation of inflectional class shifts. In most of the abovementioned varieties, *ος*-masculine and *ας*-, *ης*-masculine nouns as well as *η*-feminine nouns that have lost their word final *-η* due to high vowel deletion are the only noun types to undergo shift. Consider, for example, the competition between the *ος*-masculine and the *ι*-neuter class in the inflection of Ghúrzono Cappadocian *γιάσκαλος* 'teacher' in (61), or the inflection of *η*-feminine *νυφ* 'bride' in Malakopí Cappadocian in (62). *νυφ* is the only prototypical noun in this variety to undergo shift. Note also the *ι*-neuter heteroclitic form in its genitive singular/plural.

(61) Ghúrzono Cappadocian (Dawkins 1916: 106)

a.	SINGULAR	PLURAL
NOM	*γιάσκαλ-ος*	*γιασκάλ(-οι)*
GEN	*γιασκάλ(-ου)*	*γιασκάλ(-ου)*
ACC	*γιάσκαλ-ο*	*γιασκάλ(-οι)*

b.	SINGULAR	PLURAL
NOM/ACC	*γιάσκαλος-Ø*	*γιάσκαλοζ-ια*
GEN	*γιάσκαλοζ-ιου*	*γιάσκαλοζ-ιου*

(62) Malakopí Cappadocian (Dawkins 1916: 115)

	SINGULAR	PLURAL
NOM/ACC	*νυφ(-η)*	*νύφ-ια*
GEN	*νυφαδ-ιού/νυφ-ιού*	*νυφαδ-ιού/νυφ-ιού*

In some varieties, most notably Ulaghátsh, Ferték and Semenderé Cappadocian, the relevance of phonological similarity to the *ι*-neuter nouns begins to lose its significance. The extensive shifts to the *ι*-neuter class and the concomitant increase in its productivity allow for nominative/accusative singular forms that end in vowels to be reanalysed as *ι*-neuter nominative/accusative singular forms. As a consequence, inflected forms of nouns belonging to literally any inflectional class and semantic type shift to the *ι*-neuter class, from human *ας*-masculine nouns (63a) to human *α*-feminine nouns (63b) and even to neuter nouns belonging to inflectional classes other than the *ι*-neuter class (63c), (64). These massive shifts cause a disruption to the prototypicality correlations between inflectional class and noun semantics, as increasing numbers of human nouns join the *ι*-neuter class, whose members prototypically denote inanimate entities.

(63) Ferték Cappadocian (Dawkins 1916: 111, 107, 114)

a. 'father'

	SINGULAR	PLURAL
NOM/ACC	*μπαδά-Ø*	*μπαδά-για*

b. 'woman'

	SINGULAR	PLURAL
NOM/ACC	*ναίκα-Ø*	*ναίκ-ες*
GEN	*ναίκα-γιου*	*ναίκ-εσ-ιου*

c. 'bath'

	SINGULAR	PLURAL
NOM/ACC	*λουτρό-Ø*	*λουτρό-για*
GEN	*λουτρο-γιού*	*λουτρο-γιού*

(64) Ulaghátsh Cappadocian (Dawkins 1916: 93)
'cover'

	SINGULAR	PLURAL
NOM/ACC	*πούμα-Ø*	*πούματ-α*
GEN	*πούμα-γιου*	*πούμα-γιου*

Contrary to the shifts of non-prototypical nouns that are first manifested in the plural, it is the genitive singular/plural of the inflectional paradigm of prototypical masculine, feminine and neuter nouns that first seems to undergo shift to the *ι*-neuter class. The nominative/accusative plural forms of most prototypical nouns appear to be more resistant. This is the case of all *α*-feminine nouns, such as *ναίκα* (63b), as well as of all *μα*-neuter nouns, such as *πούμα* (64), that retain their original nominative/accusative forms in all Cappadocian varieties: *ναίκες* and *πούματα* respectively.

The inflectional systems of Ulaghátsh, Ferték and Semenderé Cappadocian illustrate the last attested stage in the series of developments that could potentially lead to the uniformisation of noun inflection under the *ι*-neuter class, which never reached completion in any Cappadocian variety. It should be noted that there is evidence of developments involving inflectional class shifts that go beyond the stages recorded by Dawkins in certain varieties, though not further than the stage represented by Ulaghátsh, Ferték and Semenderé Cappadocian. In his description, Dawkins documents only two human masculine nouns having undergone shift to the *ι*-neuter class in Axó Cappadocian, both in the plural: *ος*-masculine *ντιάκοζια* and *ας*-masculine *παπάγια* (1916: 100, 109). Shifts in this variety are overwhelmingly restricted to inanimate *ος*- and *ας*-masculine nouns (Dawkins 1916: 100, 111). In their 1960 description of Axó Cappadocian, Mavrochalyvidis and Kesisoglou record a good deal of human *ος*-masculine nouns shifting to the *ι*-neuter class: *καλόγιοροζιου* 'monk.SG.GEN', *ṫείοζιου* 'uncle.SG.GEN', *ôύντεκνοζιου* 'best man.SG.GEN', *ôύντεκνοζια* 'best man.PL.NOM/ACC', *αφέντηζια* 'master.PL.NOM/ACC' (1960: 33, 37). Similarly, Dawkins does not record any shifts in Phloïtá Cappadocian with the exception of *η*-feminine *σεμαδεμέν* 'betrothed' lit. 'marked' (cf. MGr *σημαδεμένη*), which forms the genitive singular/plural *σεμαδεμενιού* (1916: 115). In the 1962 ILNE corpus by contrast, we find a number of cases of shift in both human and inanimate *ος*-masculine nouns as well as

a few cases of 'agglutinative' *α*-feminine genitive plural forms: *γάμοζιου* 'wedding.SG.GEN' (*ILNE/811*, 49), *γάμοσια* 'wedding.SG.GEN' (*ILNE/811*, 40), *χορόζια* 'dance.PL.NOM/ACC' (*ILNE/812*, 90), *αναπόροσια* 'poor.PL.NOM/ACC' (*ILNE/811*, 44), *ονομασίεσιου* 'nameday.PL.GEN' (*ILNE/811*, 48). In none of these two varieties, however, are examples found illustrating stages that would be more advanced than the ones in Ulaghátsh, Ferték and Semenderé Cappadocian. The developments evidenced in the later documentation of Axó and Phloïtá Cappadocian are familiar developments, already recorded by Dawkins for other Cappadocian varieties.

5.4.4 Summary

In this section, I revisited Cappadocian 'agglutinative' inflection. In the literature, this development has been overwhelmingly attributed almost without exception to the effect of language contact with Turkish. All extant approaches accordingly treat 'agglutinative' forms in Cappadocian as parallel formations of Turkish agglutinative inflected forms and analyse them as consisting of a free base and single exponence endings solely expressing case and number. They, however, do not provide any account of the processes or mechanisms that brought this change about. I took issue with such previous accounts. My synchronic analysis showed that those Cappadocian forms that are most commonly analysed as 'agglutinative' are not in reality agglutinative. In terms of exponence, the endings used in their formation, *-ιού* and *-ια*, both express a bundle of different morphosyntactic features (case, number, inflectional class) whereas the elements used as the basis of inflection are bound stems considering the system defining properties of nominal inflection in Cappadocian. In this light, I argued that all nouns that inflect according to the *ι*-neuter inflectional class with respect to stem allomorphy and the set of endings used in inflection as belonging to that class, regardless of their historical origin in other masculine, feminine or neuter classes. Therefore, I considered nouns that used to belong to other classes, but which inflect according to the *ι*-neuter class in Cappadocian, as cases of diachronic inflectional class shift. In accounting for this, I examined those Cappadocian varieties in which shifts have the most limited distribution and identified inanimate *ος*-masculine and non-oxytone *η*-feminine nouns as the first noun groups to have shifted to the *ι*-neuter class. I further proposed that this shift was motivated in order to repair prototypicality deviations within the

masculine and feminine classes by assigning inanimate nouns to the semantically suitable and morphologically productive *ι*-neuter class. These shifts were conditioned by the formal similarity of nominative singular forms of masculine and feminine nouns to consonant ending nominative/accusative singular forms of *ι*-neuter nouns. Early shifts enhanced the productivity of the *ι*-neuter inflectional class which in turn allowed for their extension to more numbers of nouns, irrespective of their inflectional class, semantics or phonological similarity to *ι*-neuters in some Cappadocian varieties.

5.5 Conclusions

In this chapter, I looked at the two neuterising developments affecting noun inflection in Cappadocian: neuter heteroclisis and 'agglutinative' inflection, both of which I approached from a language-internal, dialectological perspective.

I treated neuter heteroclisis as an inflectional development of major historical significance. We saw that apart from dialects belonging to the AMGr dialect group, neuter heteroclisis is also found in the NGr dialects of Lésbos and Kydoníes, and Sámos. I took this geographical distribution to suggest that the early development of neuter heteroclisis could go back to a time before the split between the two dialect groups—AMGr and NGr. I examined neuter heteroclisis in the genitive singular and plural, and in the nominative/accusative plural and proposed that heteroclisis in the genitive first became manifest in proparoxytone *ος*-masculine and *ο*-neuter nouns, and parisyllabic *α*-feminine nouns that presented with a considerable degree of uncertainty with respect to stress placement in the genitive singular and plural forms. In that light, I argued that neuter heteroclisis developed as a repair strategy with the aim of overcoming this uncertainty by providing inflected forms whose stress was fixed. From that source, neuter heteroclisis started spreading within the noun inflection system to fix, as it were, other structural difficulties such as the breaks in diagrammaticity in inflected forms whose endings expressing marked case/number combinations had been reduced to null for phonological reasons. In the case of the nominative/accusative plural, I considered neuter heteroclisis within the general MGr tendency for inanimate nouns to belong to the neuter gender and specifically to the *ι*-neuter inflectional class. I argued that this tendency extended its domain of application in Cappadocian to inanimate nouns belonging to inflectional classes with

which the phenomenon is not normally found in other MGr dialects and thus helped repair prototypicality deviations in the non-neuter classes by providing neuter plurals to inanimate nouns that were already associated with the neuter gender by virtue of their semantics. I showed that the development of neuter heteroclisis had major implications for the organisation of nouns into inflectional classes and genders in AMGr. The most important of these implications was that it provided the morphological means for the association of large numbers of non-neuter nouns from all inflectional classes, genders and semantic types with the neuter gender, an effect that was obviously more pronounced in inanimate nouns. It also contributed significantly to the productivity of the already highly productive *ι*-neuter inflectional class. Neuter heteroclisis thus paved the way for 'agglutinative' inflection.

In contrast to the accepted view in the literature that considers the development of 'agglutinative' inflection in Cappadocian to be an instance of contact-induced language change brought about by the influence of Turkish, I argued that the inflected forms that have been treated by previous analyses as 'agglutinative' and modelled on Turkish inflected forms are not in reality agglutinative. Based on synchronic analysis, I showed that such forms are built upon bound stems and cumulative exponence endings, a structural composition typical of languages with fusional inflection. I analysed all nouns that combine with the *ι*-neuter endings in their inflection as belonging to the *ι*-neuter inflectional class, irrespective of their original inflectional class or that in which their cognates are found in other MGr varieties. From a historical point of view, I interpreted nouns that used to belong to other classes but which inflect like *ι*-neuter as instances of inflectional class shift. As in the case of neuter heteroclisis in the nominative/accusative plural, in my diachronic analysis I argued that prototypicality and the grammatical association between the inanimate semantic type, the neuter gender and the *ι*–neuter inflectional class were the key factors that can account for the diachronic shifts to the *ι*-neuter class. Identifying inanimate *ος*-masculine and non-oxytone *η*-feminine nouns as the first noun groups to have undergone this morphological change, I proposed that the shifts were first motivated in order to repair prototypicality deviations within the masculine and feminine classes by assigning inanimate nouns found in non-neuter classes to the semantically appropriate and morphologically productive *ι*-neuter class. These early shifts, which were conditioned by the phonological similarity of

masculine and feminine nouns to *ι*-neuter nouns, added many new members to the *ι*-neuter inflectional class, which thereby gained significantly in productivity. High productivity gradually allowed for the generalisation of shifts to nouns that did not fulfill the semantic or formal condition of early shifts with the result that in some Cappadocian varieties, many more nouns underwent shift, irrespective of their inflectional class, semantics or phonological similarity to *ι*-neuters.

6

Conclusions

The aim of this dissertation has been to provide a diachronic account of the development of DOM, the loss of gender distinctions, and the neuterisation of noun inflection in Cappadocian. The main objective has been to overcome the methodological and analytical shortcomings of previously proposed explanations of the innovations that Cappadocian has undergone in these three domains by identifying their historical origin and by illustrating the course of their diachronic development. Shifting the focus away from the effects of language contact with Turkish to the geographical context of Cappadocian and to its genealogical relationships with the other dialects of the AMGr group (Pontic, Rumeic, Pharasiot, Silliot), in this study I set out to address more readily the possibility that at least some of the observed Cappadocian innovations may actually be the result of language-internal processes of change.

To this end, in Chapter 2 I developed a methodological approach that is based on the systematic grammatical similarities shared by the AMGr dialects as well as on their points of dialectal divergence. Drawing on the former, I elaborated on the idea that the modern AMGr dialects are related by descent from a common linguistic precursor, which I hypothesised was a regional variety of Greek that was spoken

contiguously in inner Asia Minor approximately until the medieval period. I proposed that this Medieval AMGr Koiné was characterised by a number of distinctive dialectal features that differentiated it from other forms of Greek spoken elsewhere at the time and which, crucially, are the origin of the similarities defining the AMGr dialect group. Unfortunately, there is an almost complete dearth of historical records that would grant direct access to the hypothesised Medieval AMGr Koiné as well as to later periods in the history of AMGr. This makes the systematic comparison between early, intermediate and most recent attested stages of linguistic change an almost impossible task. In order to overcome this limitation, my methodological approach relied on the points of grammatical divergence between the different AMGr dialects. These can be more conservative or innovative with respect to change, some of them representing earlier and others later developmental stages in the course of specific instances of diachronic innovation. I argued that in such cases the synchronic stages in which the various dialects are found can be used to reconstruct the mechanisms, trajectories and, ultimately, origins of change. It is with these considerations in mind that I approached the Cappadocian developments in DOM, gender and inflection, which I examined in comparison with parallel developments attested mainly in Pontic, Rumeic and Pharasiot.

Based on my comparative analysis, I argued in Chapter 3 that language contact with Turkish has been correctly identified as the main cause of change only as far as the development of DOM is concerned. I showed that the formal implementation of the phenomenon in Cappadocian and Pharasiot is improbable from a typological point of view. Unlike what is found in the overwhelming majority of DOM languages, in the two AMGr dialects -ς, the overt marker that alternates with zero in expressing the morphological distinction between nominative and accusative that DOM employs, is found not on the head nouns of definite NPs—the marked DOM class—but on those of indefinite NPs, that is, the unmarked DOM class. I took this typological deviation to suggest that it is unlikely that the two dialects developed DOM language-internally. Considering further the similarity of the Cappadocian, Pharasiot and Turkish DOM patterns in terms of the relation between the case form used for the head nouns of the unmarked class of DOM NPs and that used for the head nouns of subject NPs in the three languages, I supported the idea that Turkish provided the model for the Cappadocian and Pharasiot innovation. I identified

Cappadocian-Turkish and Pharasiot-Turkish bilinguals as the agents of change, who introduced DOM in their Cappadocian and Pharasiot grammatical systems by adapting the originally non-DOM system of the two dialects into a differential one by replicating the Turkish pattern. I treated the occurrence of DOM in both Cappadocian and Pharasiot as indicative of areal convergence whereby they both underwent the same change under the common influence of Turkish within a single linguistic micro-area in which all three languages were contiguously spoken. Finally, I showed that, with its development, DOM created a set of novel grammatical conditions for the prototypically neuter syncretism of nominative and accusative in masculine inflectional classes, which were not previously characterised by this property of formal identity. Masculine nouns were thus rendered more neuter-like in terms of their syncretism patterns, whereas the use of the nominative for the expression of both the subject and the (indefinite) direct object favoured the form that would later be used in the shift of inanimate masculine nouns to the *ι*-neuter inflectional class.

On the contrary, regarding the historical origins of those innovations that had the most pervasive effect on the grammatical structure of Cappadocian, namely the loss of gender distinctions and the neuterisation of noun inflection, I put forward the position that they can be traced back to the Medieval AMGr Koiné. Through a series of synchronic and diachronic analyses, I further argued and illustrated that what we find in Cappadocian is the final stage in a long succession of typologically plausible, language-internal developments affecting gender and inflection, reflexes of which can be found in all the modern AMGr dialects. I therefore rejected the common view that language contact with Turkish was the trigger for the emergence of these two phenomena or the primary factor that conditioned their subsequent development.

In the domain of gender, in Chapter 4 I developed an account that drew on a wealth of data on gender in Cappadocian, Pharasiot, Pontic and Rumeic as well as on the robust findings of typological work on the diachronic development of gender systems crosslinguistically. Focusing on gender agreement, I proposed that the loss of gender in Cappadocian is a more recent innovation that followed an earlier development, that of semantic agreement whereby inanimate nouns belonging to the masculine and feminine genders began triggering agreement in the neuter on targets controlled by them. This agreement pattern came about when the inherited MGr

gender system was resemanticised on the basis of the semantic distinction of animate *versus* inanimate that gradually became expressed by means of agreement. I suggested that resemanticisation was triggered by inanimate masculine and feminine nouns that were non-prototypically assigned to the right gender for their morphology but to the wrong gender for their semantics. Semantic agreement first became manifest in personal pronouns and then followed a trajectory defined by Corbett's Agreement Hierarchy, moving from the pronouns to the predicate, from there to the attributives, and finally to the determiners. Semantic agreement is attested as early as the 14th century in Medieval Pontic documents and is still preserved in Pontic and Rumeic whereas reflexes of it can be identified in Cappadocian and Pharasiot. In light of this, I analysed the generalisation of agreement in the neuter in Cappadocian, which evidences the loss of gender distinctions in the dialect, as a chronologically later development. Neuter agreement built upon semantic agreement in extending the gender used for targets controlled by inanimate, and later also animal, nouns to targets controlled by human nouns that did not fulfil the semantic criterion for the neuter. I argued that the strong correlation between gender and inflection that holds in MGr played a key role in this extension as, due to semantic agreement, nouns belonging to the same inflectional class triggered agreement in different genders, either the masculine or feminine, or the neuter. Nouns that triggered agreement in the neuter subsequently acted as Trojan horses in favouring the generalisation of that gender over the masculine and the feminine, ultimately leading to the demise of gender distinctions in Cappadocian.

In the domain of inflection, in Chapter 5 I drew attention, for the first time, to neuter heteroclisis, which I considered a development of major historical significance. I took its broad geographical distribution in the dialects of the whole of Asia Minor and those of the islands of Lésbos and Sámos to suggest that neuter heteroclisis is a very early inflectional innovation, which probably emerged at a time before the genetic split between the two dialect groups—AMGr and NGr. Examining the noun inflection systems of a variety of AMGr and NGr dialects, I postulated that proparoxytone *ος*-masculine and *ο*-neuter as well as parisyllabic *α*-feminine nouns were the first ones to develop heteroclitic forms in order to overcome uncertainty as to stress placement in the genitive singular and plural cells of their inflectional paradigms. Neuter heteroclisis acted as a repair strategy against this uncertainty by

providing inflected forms whose stress was fixed. From that *locus*, the phenomenon spread within the noun inflection system of Cappadocian and the other AMGr dialects, fixing, as it were, other structural and inflectional difficulties. As for neuter heteroclisis in the nominative/accusative plural, I proposed that it was employed to repair deviations with respect to prototypicality in non-neuter inflectional classes by furnishing neuter plurals to inanimate nouns that were already semantically associated with the neuter gender by virtue of their meaning. As a result of these developments, a large number of non-neuter nouns became morphologically associated with the *ι*-neuter inflectional class and, by extension, the neuter gender, owing to the heteroclitic forms found in their paradigms. On this basis, I viewed neuter heteroclisis as a morphological mechanism that strengthened the grammatical association of the inanimate semantic type with the neuter gender and the *ι*-neuter inflectional class in AMGr, which acted as the catalyst in the development of Cappadocian 'agglutinative' inflection.

Challenging the dominant view in the literature, which treats 'agglutinative' inflection as an instance of contact-induced language change modelled on Turkish noun inflection, I accounted for it in strictly language-internal terms. Based on my synchronic analysis of the Cappadocian noun inflection system and its system defining properties, I suggested that noun paradigms that have been analysed as agglutinative by previous researchers are not actually agglutinative. 'Agglutinative' forms in Cappadocian are built upon bound stems and cumulative exponence endings, a composition typical of fusional languages. I showed that 'agglutinative' paradigms display the same structure as those of nouns belonging to the *ι*-neuter inflectional class not only in terms of the full set of endings expressing the various case/number combinations that make up the nominal paradigm but also in terms of stem allomorphy. On these grounds, I treated all nouns whose paradigms exhibit this structure as belonging to the *ι*-neuter class, irrespective of their historical inflectional class membership. From a diachronic point of view, I interpreted nouns that used to belong to other classes, but which inflect like *ι*-neuters in Cappadocian, as instances of inflectional class shift. After examining relevant data from Cappadocian varieties in which the phenomenon has the most limited distribution and occurs only in inanimate *oς*-masculine nouns, I argued that the early shifts to the *ι*-neuter class were the result of the combined effect of prototypicality and of the MGr tendency for

inanimate nouns to belong to the neuter gender and in particular to the *ι*-neuter inflectional class. I therefore suggested that shifts were initially triggered to repair prototypicality deviations within the non-neuter inflectional class by assigning inanimate nouns to the semantically appropriate, and morphologically productive, *ι*-neuter class. These early shifts added considerably to the productivity of the *ι*-neuter class, a factor, which in a number of Cappadocian varieties, allowed for the further extension of shifts within the noun inflection system.

In Chapter 1, I drew attention to the fact that all the Cappadocian innovations that I examined in this dissertation have/had the effect of rendering the morphology and syntax of nouns in the dialect more like that of neuters. From a different point of view, the innovations could be thought of as making the role of the neuter gender more prominent in the morphosyntax of nouns in Cappadocian. This synergy between the various different innovations could be considered to represent a case of drift in the sense of Sapir, that is, as "the unconscious selection on the part of [the language's] speakers of those individual variations that are cumulative in some special direction" (1921: 151; see also Andersen 1990; Malkiel 1981). As interesting as examining the Cappadocian changes from the perspective of drift would be, it falls beyond the scope of the present work. It does, however, lend itself as a very promising avenue for future research given not only the recent resurgence of interest among linguists on the phenomenon of drift (consider, for example, Sitaridou & Willis 2011) but also the extensive, ongoing projects documenting the last surviving AMGr dialects that are currently being undertaken both in Greece (by Janse and by Karatsareas on Cappadocian varieties; by Revithiadou & Spyropoulos on Pontic varieties) and in Turkey (by Sitaridou on Pontic varieties). The present-day linguistic data collected by these projects could provide a valuable testing ground of the hypotheses put forward in this dissertation concerning the directionality, or drift, of change not only in Cappadocian but in AMGr in general—especially in the case of the gradual innovations examined here such as the development of semantic agreement in Pontic and that of 'agglutinative' inflection in Cappadocian. A representative example concerns the extension of agreement in the neuter from feminine nouns denoting non-human animate entities to human nouns, for instance *τα μανάδἄς* 'the.N mothers.F', that is evident in the Óphis Pontic varieties that are still spoken today in the area of Trabzon

in Turkey (Ioanna Sitaridou, personal communication; for a parallel in the Óphis Pontic varieties spoken in Greece see Revithiadou & Spyropoulos 2009: 51-52).

On the whole, it is hoped that a significant contribution has been made to our knowledge of the history of Cappadocian, which had been hitherto dealt with mainly from a synchronic standpoint. The major point stemming from the findings of this study is that diachronic change in Cappadocian, as well as in the other dialects of the AMGr group for that matter, is best understood when examined within a larger dialectological context. This appears to be the only perspective able to compensate for the lack of early historical records, to illuminate those aspects and manifestations of change which may have been obscured in the synchronic form in which we find the various dialects, but also to reassess the language-internal and –external dynamics that shaped them in time and space. Having attempted to illustrate how this approach can be implemented in accounting for the development of DOM, the loss of gender and the neuterisation of noun inflection in Cappadocian, it is also hoped that this study will open a fresh round of scientific discussion on the historical origins and the diachronic development of many other innovations that are attested in AMGr and which are considered by historical linguists and MGr dialectologists to be untypically Greek or contact-induced or both.

References

Aerts, Willem Johan (1965). *Periphrastica: An Investigation into the Use of* εἶναι *and* ἔχειν *as Auxiliaries or Pseudo-Auxiliaries in Greek from Homer up to the Present Day*. Amsterdam: A. M. Hakkert.

Aikhenvald, Alexandra Y. (2003). *Classifiers: A Typology of Noun Categorization Devices*. Oxford: Oxford University Press.

Aikhenvald, Alexandra Y. (2004). Gender and noun class. In Geert E. Booij, Christian Lehmann, Joachim Mugdan and Stavros Skopeteas in collaboration with Wolfgang Kesselheim (Eds.), *Morfologie: Ein Handbuch zur Flexion und Wordbildung. 2. Halbband/Morphology: A Handbook on Inflection and Word Formation. Volume 2*. Berlin/New York: Mouton de Gruyter, 1031-1045.

Aikhenvald, Alexandra Y. (2007). Grammars in contact: a cross-linguistic perspective. In Alexandra Y. Aikhenvald and Robert M. W. Dixon (Eds.), *Grammars in Contact: A Cross-Linguistic Typology*. Oxford: Oxford University Press, 1-66.

Aikhenvald, Alexandra Y. & Robert M. W. Dixon (2001). Introduction. In Alexandra Y. Aikhenvald and Robert M. W. Dixon (Eds.), *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*. Oxford: Oxford University Press, 1-26.

Aissen, Judith (2003). Differential object marking: iconicity vs. economy. *Natural Language & Linguistic Theory* 21, 435-483.

Alektoridis, Anastasios S. (1883). Λεξιλόγιον τοῦ ἐν Φερτακαίνοις τῆς Καππαδοκίας γλωσσικοῦ ἰδιώματος. *Deltion Istorikis Ethnologikis Etaireias* 1, 480-508.

Alexiadou, Artemis & Gereon Müller (2008). Class features as probes. In Asaf Bachrach and Andrew Nevins (Eds.), *Inflectional Identity*. Oxford: Oxford University Press, 101-155.

Alexiadou, Artemis & Jaklin Kornfilt (2010). Object positions and the role of clitics in Cappadocian. Paper presented at the *Mediterranean Syntax Meeting 3, 8-10 October 2010*, National and Kapodistrian University of Athens, Greece.

Anagnostopoulos, G. P. (1922). Περὶ τοῦ ἄρθρου. *Athina* 34, 166-247.

Anagnostou, Spyridon (1903). *Λεσβιακά, ἤτοι συλλογὴ λαογραφικῶν περὶ Λέσβου πραγματειῶν*. Athens: Konstantinidis.

Anastasiadis, Vasileios K. (1975). Ἱστορία καὶ γλώσσα τῆς Καππαδοκίας καὶ τὸ ἰδίωμα τῶν Φαράσων. *Mikrasiatika Chronika* 16, 150-184.

Anastasiadis, Vasileios K. (1976). *Ἡ Σύνταξη στὸ Φαρασιώτικο Ἰδίωμα τῆς Καππαδοκίας σὲ Σύγκριση πρὸς τὰ Ὑπόλοιπα Ἰδιώματα τῆς Μικρᾶς Ἀσίας, καθὼς καὶ πρὸς τὴν Ἀρχαία, τὴ Μεσαιωνικὴ καὶ τὴ Νέα Ἑλληνικὴ Γλῶσσα*. Thessaloniki.

Anastasiadis, Vasileios K. (1980). Φωνητικὲς μορφολογικὲς ἀλλοιώσεις τῶν τουρκικῶν λέξεων τοῦ φαρασιώτικου ἰδιώματος τῆς Καπαδοκικῆς (*sic*) διαλέκτου. *Mikrasiatika Chronika* 17, 304-325.

Anastasiadis, Vasileios K. (1995). Μερικές ομοιότητες της Ποντιακής διαλέκτου με Νεοελληνικά Μικρασιατικά γλωσσικά ιδιώματα. *Archeion Pontou* 46, 73-124.

Anastassiadis-Symeonidis, Anna & Despina Chila-Markopoulou (2003). Συγχρονικές και διαχρονικές τάσεις στο γένος της ελληνικής: μια θεωρητική πρόταση. In Anna Anastassiadis-Symeonidis, Angela Ralli and Despina Chila-Markopoulou (Eds.), *Το Γένος*. Athens: Patakis, 13-56.

Andersen, Henning (1990). The structure of drift. In Henning Andersen and Ernst Frideryk Konrad (Eds.), *Historical Linguistics 1987: Papers from the 8th International Conference on Historical Linguistics (8. ICHL): (Lille, 31 August - 4 September 1987)*. Amsterdam/Philadelphia: John Benjamins, 1-20.

Andersson, Erik (1994). Swedish. In Ekkehard König and Johan van der Auwera (Eds.), *The Germanic Languages*. London/New York: Routledge, 271-312.

Andersson, Erik (2000). How many gender categories are there in Swedish? In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 545-559.

Andriotis, Nikolaos P. (1948). *Τὸ γλωσσικὸ ἰδίωμα τῶν Φαράσων (Le dialecte de Farassa)*. Athens: Ikaros.

Andriotis, Nikolaos P. (1950). Τὸ γένος τῶν τουρκικῶν λέξεων στὴν ποντιακὴ διάλεκτο. *Pontiaki Estia* 1, 199-200, 274-275.

Andriotis, Nikolaos P. (1961). *Τὸ Ἰδίωμα τοῦ Λιβισίου τῆς Λυκίας*. Athens: Centre for Asia Minor Studies.

Andriotis, Nikolaos P. (1995). *Ιστορία της Ελληνικής Γλώσσας (Τέσσερις Μελέτες)*. Thessaloniki: Aristoteleio Panepistimio Thessalonikis – Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi].

Anonymous (1910). Ὑπόμνημα περὶ τῶν ἑλληνικῶν χωρῶν καὶ ἐκκλησιῶν κατὰ τὸν δέκατον πέμπτον αἰῶνα. *Neos Ellinomnimon* 7, 4: 360-371.

Anonymous (1914). *Γλωσσάριον καὶ ᾄσματα τῆς Ἀνακοῦς (Μικρὰ Ἀσία)*. Manuscript № 7. Manuscript archive of the Kentro Erevnis ton Neoellinikon Dialekton kai Idiomaton - Istoriko Lexiko tis Neas Ellinikis (Research Centre for the Study of Modern Greek Dialects and Idioms - Historical Dictionary of Modern Greek). Academy of Athens, Athens, Greece.

Arapopoulou, Maria (2001). Διαλεκτικοί θύλακοι της ελληνικής. In Anastasios-Foivos Christidis (Ed.), *Εγκυκλοπαιδικός Οδηγός για τη Γλώσσα*. Thessaloniki: Kentro Ellinikis Glossas, 175-179.

Archelaos, I. Sarantidis (1899). *Ἡ Σινασός, ἤτοι θέσις, ἱστορία, ἠθικὴ καὶ διανοητικὴ κατάστασις, ἤθη, ἔθιμα καὶ γλῶσσα τῆς ἐν Καππαδοκίᾳ κωμοπόλεως Σινασοῦ. Ἐν ἐπιμέτρῳ δὲ καὶ σύντομος περιγραφὴ τῶν ἐν ταῖς ἐπαρχίαις Καισαρείας καὶ Ἰκονίου Ἑλληνικῶν Κοινοτήτων ὡς καὶ τῶν ἐν αὐταῖς σῳζομένων ἑλληνικῶν διαλέκτων ἐν σχέσει πρὸς τὴν ἐν Σινασῷ λαλουμένην*. Athens: Ioannis Nikolaidis.

Aronoff, Mark (1994). *Morphology by Itself: Stems and Inflectional Classes*. Cambridge, MA/London: MIT Press.

Askedal, John Ole (1994). Norwegian. In Ekkehard König and Johan van der Auwera (Eds.), *The Germanic Languages*. London/New York: Routledge, 219-270.

Audring, Jenny (2008). Gender assignment and gender agreement: evidence from pronominal gender languages. *Morphology* 18: 93-116.

Audring, Jenny (2009). *Reinventing Pronoun Gender*. Amsterdam: Landelijke Onderzoekschool Taalwetenschap.

Augustinos, Gerasimos (1992). *The Greeks of Asia Minor: Confession, Community, and Ethnicity in the Nineteenth Century*. Kent, Ohio: Kent State University Press.

Aydemir, Yasemin (2004). Are Turkish preverbal bare nouns syntactic arguments? *Linguistic Inquiry* 35, 3: 465-474.

Babinger, Franz (1923). *Hans Dernschwam's Tagebuch einer Reise nach Konstantinopel und Kleinasien (1553/55)*. Munich/Leipzig: Duncker & Humblot.

Babiniotis, Georgios & Panagiotis Kontos (1967). *Συγχρονικὴ Γραμματικὴ τῆς Κοινῆς Νέας Ἑλληνικῆς*. Athens.

Baerman, Matthew & Dunstan Brown. 2008. Case Syncretism. In Martin Haspelmath, Matthew Dryer, David Gil, David and Bernard Comrie (Eds.) *The World Atlas of Language Structures Online*. Munich: Max Planck Digital Library. Available online at http://wals.info/feature/28. Accessed on 30 October 2010.

Baerman, Matthew, Brown, Dunstan & Greville G. Corbett (2005). *The Syntax-Morphology Interface: A Study of Syncretism*. Cambridge: Cambridge University Press.

Balta, Evangelia & Ilias Anagnostakis (1994). *La Découverte de la Cappadoce au 19e Siècle*. Istanbul: Eren.

Bortone, Pietro (2009). Greek with no models, history or standard: Muslim Pontic Greek. In Alexandra Georgakopoulou and Michael Silk (Eds.), *Standard Languages and Language Standards: Greek, Past and Present*. Farnham/Burlington: Ashgate, 67-89.

Bossong, Georg (1985). *Empirische Universalienforschung: Differentielle Objectmarkierung in den Neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.

Bossong, Georg (1991). Differential object marking in Romance and beyond. In Dieter Wanner and Douglas A. Kibbee (Eds.), *New Analyses in Romance Linguistics: Selected Papers from the XVIII Linguistic Symposium on Romance Languages, Urbana-Champaign, April 7-9, 1998*. Amsterdam/Philadelphia: John Benjamins, 143-170.

Bossong, Georg (1998). Le marquage differential de l'objet dans les langues d'Europe. In Jack Feuillet (Ed.), *Actance et Valence dans les Langues de l'Europe*. Berlin/New York: Mouton de Gruyter, 193-258.

Braun, Friederike (2000). Gender in the Turkish language system. *Turkic Languages* 4, 3-21.

Braun, Friederike (2001). The communication of gender in Turkish. In Marlis Hellinger and Hadumod Bußmann (Eds.), *Gender Across Languages: the Linguistics Representation of Women and Men, Volume 1*. Amsterdam/Philadelphia: John Benjamins, 283-310.

Brendemoen, Bernt (1999). Greek and Turkish language encounters in Anatolia. In Bernt Brendemoen, Elizabeth Lanza and Else Ryen (Eds.), *Language Encounters Across Time and Space*. Oslo: Novus Press: 353-378.

Brixhe, Claude (1987). *Essai sur le Grec Anatolien au Début de Notre Ère*. Nancy: Presses Universitaires de Nancy.

Browning, Robert (1983). *Medieval and Modern Greek*. Cambridge: Cambridge University Press.

Bubenik, Vit (1989). *Hellenistic and Roman Greece as a Sociolinguistic Area*. Amsterdam/Philadelphia: John Benjamins.

Burguière, Paul & Robert Mantran (1952). Quelques vers grecs du XIII[e] siècle en caractères arabes. *Byzantion* 22, 63-80.

Burzio, Luigi (1981). *Intransitive Verbs and Italian Auxiliaries*. Unpublished doctoral dissertation. Massachusetts Institute of Technology, Cambridge, MA, United States of America.

Campbell, Lyle (2006). Areal linguistics: a closer scrutiny. In Yaron Matras, April McMahon and Nigel Vincent (Eds.), *Linguistic Areas: Convergence in Historical and Typological Perspective*. Basingstoke: Palgrave Macmillan, 1-31.

Campbell, Lyle and William J. Poser (2008). *Language Classification: History and Method*. Cambridge: Cambridge University Press.

Carstairs-McCarthy, Andrew (1991). Inflection classes: two questions with one answer. In Frans Plank (Ed.), *Paradigms: The Economy of Inflection*. Berlin/New York: Mouton de Gruyter, 213-253.

Carstairs-McCarthy, Andrew (1994). Inflection classes, gender, and the Principle of Contrast. *Language* 70, 4: 737-788.

Carstairs-McCarthy, Andrew (2000). Lexeme, word-form, paradigm. In Geert Booij, Christian Lehmann and Joachim Mugdan in collaboration with Wolfgang Kesselheim and Stavros Skopeteas (Eds.), *Morphologie: Ein internationales Handbuch zur Flexion und Wortbildung. 1. Halbband/Morphology: An International Handbook on Inflection and Word-Formation. Volume 1*. Berlin/New York: Walter de Gruyter, 595-607.

Chatzikyriakidis, Stergios (2010). *Clitics in Four Dialects of Modern Greek: A Dynamic Account*. Unpublished doctoral dissertation. King's College London, University of London, London, United Kingdom.

Chesterman, Andrew (1991). *On Definiteness: A Study with Special Reference to English and Finnish*. Cambridge: Cambridge University Press.

Chila-Markopoulou, Despina (2000). The indefinite article in Greek: a diachronic approach. *Γλωσσολογία/Glossologia* 11-12, 111-130.

Chila-Markopoulou, Despina (2003). Γένος και συμφωνία στη νέα ελληνική. In Anna Anastassiadis-Symeonidis, Angela Ralli and Despina Chila-Markopoulou (Eds.), *Το Γένος*. Athens: Patakis, 132-167.

Chondrogianni, Vasiliki (2007). *The Acquisition of Determiners and Clitic Pronouns by Child and Adult L2 Learners of Greek*. Unpublished doctoral dissertation. University of Cambridge, Cambridge, United Kingdom.

Christofidou, Anastasia (2002). Gender and noun declension in Greek: a natural approach. In Christos Clairis (Ed.), *Recherches en linguistique grecque I*. Paris: L'Harmattan, 143-146.

Christofidou, Anastasia (2003). Γένος και κλίση στην ελληνική (Μια φυσική προσέγγιση). In Anna Anastassiadis-Symeonidis, Angela Ralli and Despina Chila-Markopoulou (Eds.), *Το Γένος*. Athens: Patakis, 100-131.

Clackson, James P. T. (2007). *Indo-European Linguistics: An Introduction*. Cambridge: Cambridge University Press.

Clairis, Christos & Georgios Babiniotis (1996). *Γραμματική της Νέας Ελληνικής: Δομολειτουργική - Επικοινωνιακή. Ι. Το Όνομα: Αναφορά στον Κόσμο της Πραγματικότητας*. Athens: Ellinika Grammata.

Clairis, Christos & Georgios Babiniotis (1999). *Γραμματική της Νέας Ελληνικής: Δομολειτουργική - Επικοινωνιακή. ΙΙ. Το Ρήμα: Η Οργάνωση του Μηνύματος*. Athens: Ellinika Grammata.

Clairis, Christos & Georgios Babiniotis (2004). *Γραμματική της Νέας Ελληνικής: Δομολειτουργική - Επικοινωνιακή. Ι2. Τα Ονοματικά Στοιχεία (Άρθρα, Επίθετα, Αντωνυμίες): Η Εξειδίκευση της Αναφοράς στον Κόσμο της Πραγματικότητας*. Athens: Ellinika Grammata.

Clogg, Richard (1992). *A Concise History of Greece*. Cambridge: Cambridge University Press.

Coates, Richard (2000). Exponence. In Geert Booij, Christian Lehmann and Joachim Mugdan in collaboration with Wolfgang Kesselheim and Stavros Skopeteas (Eds.), *Morphologie: Ein internationales Handbuch zur Flexion und Wortbildung. 1. Halbband/Morphology: An International Handbook on Inflection and Word-Formation. Volume 1*. Berlin/New York: Walter de Gruyter, 616-630.

van Coetsem, Frans (1988). *Loanword Phonology and Two Transfer Types in Language Contact*. Dordrecht: Foris.

van Coetsem, Frans (2000). *A General and Unified Theory of the Transmission Process in Language Contact*. Heidelberg: Universitätsverlag Winter.

Coker, Amy (2009). Analogical change and grammatical gender in ancient Greek. *Journal of Greek Linguistics* 9, 34-55.

Comrie, Bernard (1978). Genitive-accusatives in Slavic: the rules and their motivation. *International Review of Slavic Linguistics* 3, 1-2: 27-42.

Comrie, Bernard (1989). *Language Universals and Linguistic Typology: Syntax and Morphology*. Chicago: The University of Chicago Press.

Condoravdi, Cleo & Paul Kiparsky (2001). Greek clitics and clause structure. *Journal of Greek Linguistics* 2, 1-39.

Condoravdi, Cleo & Paul Kiparsky (2004). Clitics and clause structure: the Late Medieval Greek system. *Journal of Greek Linguistics* 5, 159-183.

Corbett, Greville G. (1979). The agreement hierarchy. *Journal of Linguistics* 15, 2: 203-224.

Corbett, Greville G. (1982). Gender in Russian: an account of gender specification and its relationship to declension. *Russian Linguistics* 6, 2: 197-232.

Corbett, Greville G. (1983). *Hierarchies, Targets and Controllers: Agreement Patterns in Slavic*. London: Croom Helm.

Corbett, Greville G. (1991). *Gender*. Cambridge: Cambridge University Press.

Corbett, Greville G. (2006). *Agreement*. Cambridge: Cambridge University Press.

Corbett, Greville G. & Alfred D. Mtenje (1987). Gender agreement in Chichewa. *Studies in African Linguistics* 18, 1: 1-38.

Corbett, Greville G. & Norman M. Fraser (1993). Network morphology: a DATR account of Russian nominal inflection. *Journal of Linguistics* 29, 1: 113-142.

Corbett, Greville G. & Norman M. Fraser (1997). Defaults in Arapesh. *Lingua* 103, 1: 25-57.

Corbett, Greville G. & Norman M. Fraser (2000). Default genders. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 55-97.

Costakis, Athanasios P. (1964). *Le parler grec d'Anakou*. Athens: Centre for Asia Minor Studies.

Costakis, Athanasios P. (1968). *Τὸ γλωσσικὸ ἰδίωμα τῆς Σίλλης*. Athens: Centre for Asia Minor Studies.

Croft, William (2003). *Typology and Universals*. Cambridge: Cambridge University Press.

Curzan, Anne (2003). *Gender Shifts in the History of English*. Cambridge: Cambridge University Press.

Dahl, Östen (2008). Animacy and egophoricity: grammar, ontology and phylogeny. *Lingua* 118, 2: 141-150.

Dahl, Östen, (2000). Animacy and the notion of semantic gender. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 99-115.

Dahl, Östen & Kari Fraurud (1996). Animacy in grammar and discourse. In Thorstein Fretheim and Jeanette K. Gundel (Eds.), *Reference and Referent Accessibility*. Amsterdam/Philadelphia: John Benjamins, 45-64.

Danguitsis, Constantin (1943). *Étude descriptive du dialecte de Démirdési (Brousse, Asie Mineure)*. Paris: Maisonneuve.

Danon, Gabi (2001). Syntactic definiteness in the grammar of Modern Hebrew. *Linguistics* 39, 6: 1071-1116.

Dawkins, Richard M. (1910). Modern Greek in Asia Minor. *The Journal of Hellenic Studies* 30, 109-132, 267-291.

Dawkins, Richard M. (1916). *Modern Greek in Asia Minor: a Study of the Dialects of Sílli, Cappadocia and Phárasa with Grammar, Texts, Translations and Glossary*. Cambridge: Cambridge University Press.

Dawkins, Richard M. (1931). Notes on the study of the Modern Greek of Pontos. *Byzantion* 6, 389-400.

Dawkins, Richard M. (1937). The Pontic dialect of Modern Greek in Asia Minor and Russia. *Transactions of the Philological Society* 36, 1: 15-52.

Dawkins, Richard M. (1940). The dialects of Modern Greek. *Transactions of the Philological Society* 39, 1: 1-38.

Dawkins, Richard M. (1950). Review of N. P. Andriotis's *Τὸ Γλωσσικὸ Ἰδίωμα τῶν Φαράσων*. *Byzantion* 20, 354-364.

Dede, Müşerref (1986). Definiteness and referentiality in Turkish verbal sentences. In Dan Isaac Slobin and Karl Zimmer (Eds.), *Studies in Turkish Linguistics*. Amsterdam/Philadelphia: John Benjamins, 147-164.

Dedes, Dimitris (1993). Τά ἑλληνικά ποιήματα τοῦ Μαυλανᾶ Ρουμῆ καί τοῦ γυιοῦ του Βαλέντ κατά τόν 13^{ον} αἰώνα. *Ta Istorika* 10, 18-19: 3-22.

Dekeyser, Xavier (1980). The diachrony of the gender systems in English and Dutch. In Jacek Fisiak (Ed.), *Historical Morphology*. The Hague/New York: Mouton, 97-111.

Deliyannis, Kyriacos P. (2002). *Κουβουκλιώτικα: Το Γλωσσικό Ιδίωμα των Κουβουκλίων Προύσας*. Adelaide: Webb & Son Inc. Claxton Press.

Dixon, Robert M. W. (1994). *Ergativity*. Cambridge: Cambridge University Press.

Doleschal, Ursula (2000). Gender assignment revisited. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 117-165.

Dressler, Wolfgang U. (2003). Degrees of grammatical productivity in inflectional morphology. *Rivista di Linguistica* 15, 1: 31-62.

Dressler, Wolfgang U. & Veneeta Acson (1985). On the diachrony of subtractive operations: evidence for semiotically based models of Natural Phonology and Natural Morphology from Northern and Anatolian Greek dialects. In Jacek Fisiak (Ed.), *Papers from the 6th International Conference on Historical Linguistics*. Amsterdam: John Benjamins, 105-128.

Drettas, George (1997). *Aspects pontiques*. Paris: Association de recherches pluridisciplinaires.

Drettas, George (1999). Ergative versus accusative structure: the case of Pontic Greek in a typological perspective. *Mediterranean Language Review* 11, 90-117.

Drettas, Georges (1999). Το ελληνο-ποντιακό διαλεκτικό σύνολο. In Anastasios-Foivos Christidis in collaboration with Maria Arapopoulou and Giannoula Giannoulopoulou (Eds.), *Διαλεκτικοί Θύλακοι της Ελληνικής Γλώσσας/Dialect Enclaves of the Greek Language*. Athens: Ministry of National Education and Religious Affairs/Centre for the Greek Language, 15-24.

Drinka, Bridget (2010). Language Contact. In Silvia Luraghi and Vit Bubenik (Eds.), *The Continuum Companion to Historical Linguistics*. London/New York: Continuum, 325-345.

Duke, Janet (2009). *The Development of Gender as a Grammatical Category: Five Case Studies from the Germanic Languages*. Heidelberg: Universitätsverlag Winter.

Enç, Mürvet (1991). The semantics of specificity. *Linguistic Inquiry* 22, 1: 1-25.

Enger, Hans-Olav (2004a). On the relation between gender and declension: a diachronic perspective from Norwegian. *Studies in Language* 28, 1: 51-82.

Enger, Hans-Olav (2004b). Scandinavian pancake sentences as semantic agreement. *Nordic Journal of Linguistics* 27, 1: 5-34.

Español-Echevarría, Manuel & Angela Ralli (2000). Case mismatches in Greek: evidence for the autonomy of morphology. *Acta Linguistica Hungarica* 47, 1-4: 170-203.

Farkas, Donka F. (1995). Specificity and scope. In Léa Nash and George Tsoulas (Eds.), *Actes du Premier Colloque Langues & Grammaire*. Paris: Garland, 119-137.

Fernández-Ordóñez, Inés (2006). Del Cantábrico a Toledo: el "neutro di materia" hispánico en un contexto románico y tipológico. *Revista de Historia de la Lengua Española* 1, 67-118.

Fernández-Ordóñez, Inés (2007a). Del Cantábrico a Toledo: el "neutro di materia" hispánico en un contexto románico y tipológico (continuación). *Revista de Historia de la Lengua Española* 2, 29-81.

Fernández-Ordóñez, Inés (2007b). El "neutro di materia" en Asturias y Cantabria: análisis gramatical y nuevos datos. In Inmaculada Delgados Cobos and Alicia Puigvert Ocal (Eds.), *Ex admiratione et amicitia. Homenaje a Ramón Santiago*. Madrid: Ediciones del Orto, 395-434.

Fernández-Ordóñez, Inés (2009). The development of mass/count distinctions in Indo-European varieties. In Vit Bubenik, John Hewson and Sarah Rose (Eds.), *Grammatical Change in Indo-European Languages. Papers Presented at the Workshop on Indo-European Linguistics at the XVIIIth International Conference on Historical Linguistics, Montreal 2007*. Amsterdam/Philadelphia: John Benjamins, 55-68.

Field, Fredric W. (2002). *Linguistic Borrowing in Bilingual Contexts*. Amsterdam/Philadelphia: John Benjamins.

Folli, Raffaella & Heidi Harley (2008). Teleology and animacy in external arguments. *Lingua* 118, 2: 190-202.

Gardani, Francesco (2009). *Dynamics of Morphological Productivity: A Synchronic Analysis and Diachronic Explanation of the Productivity of Nominal Inflection Classes from Archaic Latin to Old Italian in Terms of Natural Morphology*. Unpublished doctoral dissertation. University of Vienna, Vienna, Austria.

Geeraerts, Dirk (1992). Pronominale-masculiniserings-parameters in Vlaanderen. In Hans Bennis and Jan W. de Vries (Eds.), *De binnenbouw van het Nederlands: Een bundel artikelen voor Piet Paardekooper*. Dordrech: ICG Publications, 73-84.

Geerts, Guido (1995). Genusfouten: hollanditis in Vlaanderen? In Guido Geerts (Ed.), *Nederlands, een en veelzijdig - Festschrift voor Guido Geerts*. Leuven: Universitaire Pers, 67-76.

Georgacas, Demetrius John (1948). On the nominal endings *-ις*, *-ιν*, in later Greek. *Classical Philology* 43, 4: 243-260.

Georgalidou, Marianthi, Spyropoulos Vassilios, Kaili, Hasan & Anthi Revithiadou (2005). Linguistic and sociolinguistic aspects of a Rhodian Greek variety. Paper presented at the 6th International Linguistics Conference of the Organisation for the Propagation of the Greek Language 'The dialectal varieties of Greek from the ancient era until today, Coriliano Otranto, 6-8 October 2005.

Givón, Talmy (1978). Definiteness and Referentiality. In Joseph H. Greenberg, Charles A. Ferguson and Edith A. Moravcsik (Eds.), *Universals of Human Language IV: Syntax*. Stanford: Stanford University Press, 291-330.

Glinert, Lewis (1989). *The Grammar of Modern Hebrew*. Cambridge: Cambridge University Press.

Göksel, Aslı & Celia Kerslake (2005). *Turkish: A Comprehensive Grammar*. London/New York: Routledge.

Golden, Peter B. (1985 [1987]). The Byzantine Greek elements in the Rasūlid Hexaglot. *Archivum Eurasiae Medii Aevi* 5, 41-166.

Gourgoutis, Christos N. (1922 [1893]). *Ἄισματα Καππαδοκικὰ καὶ ἰδίως τῆς Κωμοπόλεως Ἀνακοῦς, ἐπαρχίας Ἰκονίου*. Manuscript № 374. Manuscript archive of the Kentro Erevnis ton Neoellinikon Dialekton kai Idiomaton - Istoriko Lexiko tis Neas Ellinikis (Research Centre for the Study of Modern Greek Dialects and Idioms - Historical Dictionary of Modern Greek). Copy of the original manuscript of the Greek Philological Society of Constantinople (Manuscript № 7209). Academy of Athens, Athens, Greece.

Greenberg, Joseph H. (1978). How does a language acquire gender markers? In Joseph H. Greenberg, Charles A. Ferguson and Edith A. Moravcsik (Eds.), *Universals of Human Language, Volume 3: Word Structure*. Stanford, CA: Stanford University Press, 47-82.

Guardiano, Cristina (2010). L' oggetto diretto preposizionale in siciliano: una breve rassegna e qualche domanda. In Jacopo Garzonio (Ed.), *Quaderni di lavoro ASIt 11 (2010). Studi sui Dialetti della Sicilia*. Padova: Unipress, 95-115.

Haase, Martin (2000). Reorganization of a gender system: the Central Italian dialects. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari

(Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 221-236.

Haberland, Hartmut (1994). Danish. In Ekkehard König and Johan van der Auwera (Eds.), *The Germanic Languages*. London/New York: Routledge, 313-348.

Hadjidemetriou, Chryso (2009). *The Consequences of Language Contact: Armenian and Maronite Arabic in Contact with Cypriot Greek*. Unpublished doctoral dissertation. University of Essex, Colchester, United Kingdom.

Halasi-Kun, Tibor, Golden, Peter B., Ligeti, Louis & Edmund Schütz (2000). *The King's Dictionary. The Rasûlid Hexaglot: Fourteenth Century Vocabularies in Arabic, Persian, Turkic, Greek, Armenian and Mongol*. Leiden/Boston/Köln: Brill.

Halle, Morris and Bert Vaux (1998). Theoretical aspects of Indo-European nominal morphology: the nominal declensions of Latin and Armenian. In Jay H. Jasanoff, H. Craig Melchert, Lisi Oliver and Calvert Watkins (Eds.), *Mír Curad: Studies in Honor of Calvert Watkins*. Innsbruck: Innsbrucker Beiträge zur Sprachenwissenschaft, 223-240.

Haspelmath, Martin (1995). The growth of affixes in morphological reanalysis. In Geert Booij and Jaap van Marle (Eds.), *Yearbook of Morphology 1994*. Dordrecht/Boston/London: Kluwer Academic Publishers, 1- 29.

Haspelmath, Matin (2009). An empirical test of the Agglutination Hypothesis. In Sergio Scalise, Elisabetta Magni and Antonietta Bisetto (Eds.), *Universals of Language Today*. Dordrecht: Springer, 13-29.

Hatzidakis, Georgios (1905). Περὶ φθογγολογικῶν νόμων καὶ τῆς σημασίας αὐτῶν εἰς τὴν σπουδὴν τῆς νέας ἑλληνικῆς. *Μεσαιωνικὰ καὶ Νέα Ἑλληνικὰ Α'*. Athens: P. D. Sakellarios, 154-201.

Hatzidakis, Georgios (1907). Συμβολὴ εἰς τὴν κλίσιν τῆς νεωτέρας ἑλληνικῆς. *Μεσαιωνικὰ καὶ Νέα Ἑλληνικὰ Β'*. Athens: P. D. Sakellarios, 1-30.

Hatzidakis, Georgios N. (1912). Περὶ τῆς ἐν Ἀραβανίῳ κλίσεως. *Athina* 24, 343-344.

Hatzidakis, Georgios N. (1934 [1911/1912]). Περὶ τῆς ποντικῆς διαλέκτου καὶ ἰδίᾳ περὶ τῶν ἐν αυτῇ ἀναλογικῶν σχηματισμῶν. *Γλωσσολογικαὶ Ἔρευναι 1*. Athens: Akadimia Athinon, 265-291.

Hawkins, John A. (1978). *Definiteness and Indefiniteness: A Study in Reference and Grammaticality Prediction*. London: Croom Helm.

Heine, Bernd and Tania Kuteva (2005). *Language Contact and Grammatical Change*. Cambridge: Cambridge University Press.

Henrich, Günther S. (1976). *Κλητικὲς καὶ Γενικὲς σὲ -ο ἀπὸ Ἀρσενικὰ σὲ -ος στὰ Μεσαιωνικὰ καὶ Νέα Ἑλληνικά*. Unpublished doctoral dissertation. Aristotle University of Thessaloniki, Thessaloniki, Greece.

Henrich, Günther S. (1996). Δύο πρώιμα γραπτά μνημεία της Ποντιακής και της Κριμαιοαζοφικής διαλέκτου. In José María Egea and Javier Alonso (Eds.), *Prosa y verso en Griego medieval: Rapports of the International Congress «Neograeca Medii Aevi III» Vitoria 1994*. Amsterdam: Adolf M. Hakkert, 177-191.

Henrich, Günther S. (1999). Γραμματικά των κριμαιοαζοφικών ή ταυρορουμαίικων διαλέκτων. In Asterios Argyriou, Konstantinos A. Dimadis and Anastasia Danai Lazaridou (Eds.), *Ο Ελληνικός Κόσμος Ανάμεσα στην Ανατολή και τη Δύση. Πρακτικά του Α' Ευρωπαϊκού Συνεδρίου Νεοελληνικών Σπουδών. Βερολίνο, 2-4 Οκτωβρίου 1998. Τόμος Α'*. Athens: Ellinika Grammata, 661-670.

Herman, József (2000). *Vulgar Latin*. University Park, PA: Pennsylvania State University Press.

von Heusinger, Klaus (2002). Specificity and definiteness in sentence and discourse structure. *Journal of Semantics* 19, 3: 245-274.

von Heusinger, Klaus (2003). Cross-linguistic implementations of specificity. In Katarzyna Jaszczolt and Ken Turner (Eds.), *Meaning Through Language Contrast. Volume 2*. Amsterdam/Philadelphia: John Benjamins, 405-421.

von Heusinger, Klaus (2008). Verbal semantics and the diachronic development of DOM in Spanish. *Probus* 20, 1-31.

von Heusinger, Klaus & Jaklin Kornfilt (2005). The case of the direct object in Turkish: semantics, syntax and morphology. *Turkic Languages* 9, 3-44.

Hickey, Raymond (2010). *The Handbook of Language Contact*. Malden, MA/Oxford: Wiley-Blackwell

Hinskens, Frans, Auer, Peter & Paul Kerswill (2005). The study of dialect convergence and divergence: conceptual and methodological considerations. In Peter Auer, Frans Hinskens and Paul Kerswill (Eds.), *Dialect Change: Convergence and Divergence in European Languages*. Cambridge: Cambridge University Press, 1-48.

Hockett, Charles F. (1958). *A Course in Modern Linguistics*. New York: Macmillan.

Hogg, Richard M. (1992). Phonology and morphology. In Richard M. Hogg (Ed.), *The Cambridge History of the English Language. Volume I: The Beginnings to 1066*. Cambridge: Cambridge University Press, 67-167.

Holton, David & Io Manolessou (2010). Medieval and Early Modern Greek. In Egbert J. Bakker (Ed.), *A Companion to the Ancient Greek Language*. Malden, MA/Oxford: Wiley-Blackwell, 539-563.

Holton, David, Horrocks, Geoffrey C., Janssen, Marjolijne, Manolessou, Io, Lendari, Tina & Notis Toufexis (forthcoming 2011). *The Cambridge Grammar of Medieval and Early Modern Greek*. Cambridge: Cambridge University Press.

Holton, David, Mackridge, Peter & Irene Philippaki-Warburton (1997). *Greek: A Comprehensive Grammar of the Modern Language*. London/New York: Routledge.

de Hoop, Helen & Monique Lamers (2006). Incremental distinguishability of subject and object. In Leonid Kulikov, Andrej Malchukov and Peter de Swart (Eds.), *Case, Valency and Transitivity*. Amsterdam/Philadelphia: John Benjamins, 269-287.

Hopper, Paul J. & Sandra A. Thompson (1980). Transitivity in grammar and discourse. *Language* 56, 2: 251-299.

Horrocks, Geoffrey (2010). *Greek: A History of the Language and Its Speakers*. Malden, MA/Oxford: Wiley-Blackwell.

Hovdhaugen, Even (1976). Some aspects of language contact in Anatolia. *Working Papers in Linguistics (Oslo)* 7, 142-160.

Hualde, José Ignacio, Olarrea, Antxon & Anna María Escobar (2001). *Introducción a la lingüística hispánica*. Cambridge: Cambridge University Press.

Ibrahim Muhammad Hasan (1973). *Grammatical Gender: Its Origin and Development*. The Hague/Paris: Mouton.

Igartua, Iván (2005). *Origen y Evolución de la Flexión Nominal Eslava*. Bilbao: Servicio Editorial. Universidad del País Vasco/Euskal Herriko Unibertsitatea.

Igartua, Iván (2006). *Genus alternans* in Indo-European. *Indogermanische Forschungen* 111, 56-70.

Janse, Mark (1993). La position des pronoms personnels enclitiques en grec néo-testamentaire à la lumière des dialects néo-helléniques. In Claude Brixhe (Ed.), *La Koiné Grecque Antique I: Une Langue Introuvable?*. Nancy: Presses Universitaires de Nancy, 83-121.

Janse, Mark (1994). Son of Wackernagel: the distribution of object clitic pronouns in Cappadocian. In Irene Philippaki-Warburton, Katerina Nicolaidis and Maria Sifianou (Eds.), *Themes in Greek Linguistics. Papers from the First International Conference on Greek Linguistics, Reading, September 1993*. Amsterdam/Philadelphia: John Benjamins, 435-442.

Janse, Mark (1997). Synenclisis, metenclisis, dienclisis: the Cappadocian evidence. In Gaberell Drachman (Ed.), *Greek Linguistics 95: Proceedings of the Second International Conference on Greek Linguistics (Salzburg, 22-24 September 1995), Volume II*. Graz: Neugebauer, 695-706.

Janse, Mark (1998a). Cappadocian clitics and the syntax-morphology interface. In Brian D. Joseph, Geoffrey C. Horrocks and Irene Philippaki-Warburton (Eds.), *Themes in Greek Linguistics II*. Amsterdam/Philadelphia: John Benjamins, 257-281.

Janse, Mark (1998b). Grammaticalization and typological change: the clitic cline in Inner Asia Minor Greek. In Mark Janse (Ed.), *Productivity and Creativity. Studies in General and Descriptive Linguistics in Honor of E. M. Uhlenbeck*. Berlin: Mouton de Gruyter, 521-547.

Janse, Mark (1999). Greek, Turkish and Cappadocian relavites revis(it)ed. In Amalia Moser (Ed.), *Ελληνική Γλωσσολογία: Πρακτικά του 3ου Διεθνούς Γλωσσολογικού Συνεδρίου για την Ελληνική Γλώσσα/Greek Linguistics: Proceedings of the 3rd International Conference on Greek Linguistics*. Athens: Ellinika Grammata, 453-462.

Janse, Mark (2001). Morphological borrowing in Asia Minor Greek. In Yoryia Aggouraki, Amalia Arvaniti, Jim Davy, Dionysis Goutsos, Marilena Karyolaimou, Anna Panagiotou, Andreas Papapavlou, Pavlos Pavlou and Anna Roussou (Eds.), *Proceedings of the 4th International Conference on Greek Linguistics. Nicosia 17-19 September 1999*. Thessaloniki: University Studio Press, 473-479.

Janse, Mark (2002). Aspects of bilingualism in the history of the Greek language. In James Noel Adams, Mark Janse and Simon Swain (Eds.), *Bilingualism in Ancient Society: Language Contact and the Written Text*. Oxford: Oxford University Press, 332-390.

Janse, Mark (2003). Παλιό κρασί σε καινούρια ασκιά: τουρκοελληνικά «αναφορικά» στην κεντρική Μικρασία. *Neoelliniki Dialektologia 4. Praktika tou Tetarou Diethnous Synedriou Neoellinikis DialektologiasΝεοελληνική Διαλεκτολογία 4. Πρακτικά του Τέταρου Διεθνούς Συνεδρίου Νεοελληνικής Διαλεκτολογίας*. Athens: Etaireia Neoellinikis Dialektologias, 173-182.

Janse, Mark (2004). Animacy, definiteness, and case in Cappadocian and other Asia Minor Greek dialects. *Journal of Greek Linguistics* 5, 3-26.

Janse, Mark (2006). Object position in Cappadocian and other Asia Minor Greek dialects. In Mark Janse, Brian Joseph and Angela Ralli (Eds.), *Proceedings of the 2nd International Conference on Modern Greek Dialects and Linguistic Theory*. Patras: University of Patras, 115-129.

Janse, Mark (2007). De Cappadociërs en hun talen. *Tetradio* 16, 57-78.

Janse, Mark (2008a). Clitic doubling from Ancient to Asia Minor Greek. In Dalina Kallulli and Liliane Tasmowski (Eds.), *Clitic Doubling in the Balkan Languages*. Amsterdam/Philadelphia: John Benjamins, 165-202.

Janse, Mark (2008b). Grieks lichaam, Turkse ziel: multiculturele symbiose in Cappadocië en de Cappadocische diaspora. In Danny Praet (Ed.), *Us and Them: Essays over Filosofie, Politiek, Religie en Cultuur van de Antieke Oudheid tot Islam in Europa ter ere van Herman de Ley*. Ghent: Academia Press, 107-137.

Janse, Mark (2009). Greek-Turkish language contact in Asia Minor. *Études Helléniques/Hellenic Studies* 17, 1: 37-54.

Jensen, Peter Kincaid (1979). The Greco-Turkish War, 1920-1922. *International Journal of Middle East Studies* 10, 553-565.

Jespersen, Otto (1922). *Language: Its Nature, Development, and Origin*. London: George Allen & Unwin Ltd.

Johanson, Lars (2002). *Structural Factors in Turkic Language Contacts*. Richmond: Curzon.

Johanson, Lars (2006). Two approaches to specificity. In Leonid Kulikov, Andrej Malchukov and Peter de Swart (Eds.), *Case, Valency and Transitivity*. Amsterdam/Philadelphia: John Benjamins, 225-247.

Josefsson, Gunlög (2006). Semantic and grammatical genders in Swedish – independent but interacting dimensions. *Lingua* 116, 9: 1346-1368.

Joseph, Brian D. & Irene Philippaki-Warburton (1987). *Modern Greek*. London: Croom Helm.

Kaegi, Walter E. (2008). Confronting Islam: emperors versus caliphs (641 - *c.* 850). In Jonathan Shepard (Ed.), *The Cambridge History of the Byzantine Empire, c. 500-1492*. Cambridge: Cambridge University Press, 365-394.

Kapsomenos, Stylianos G. (2003 [1985]). *Ἀπὸ τὴν Ἱστορία τῆς Ἑλληνικῆς Γλώσσας: Ἡ Ἑλληνικὴ Γλώσσα ἀπὸ τὰ Ἑλληνιστικὰ ὡς τὰ Νεότερα Χρόνια. Ἡ Ἑλληνικὴ Γλώσσα*

στὴν Αἴγυπτο. Thessaloniki: Aristoteleio Panepistimio Thessalonikis – Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi].

Karachristos, Ioannis (2003a). Cappadocian migration to Constantinople. *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=7995. Accessed on 10 November 2010.

Karachristos, Ioannis (2003b). Cappadocian migration to the Pontus. *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=7996. Accessed on 10 November 2010.

Karachristos, Ioannis (2003c). Cappadocian migration to the Smyrna region. *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=7997. Accessed on 10 November 2010.

Karachristos, Ioannis (2003d). Cappadocian out-migration. *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=7994. Accessed on 10 November 2010.

Karanastasis, Anastasios (1997). *Γραμματική των Ελληνικών Ιδιωμάτων της Κάτω Ιταλίας*. Athens: Akadimia Athinon.

Karatsareas, Petros (2007). *Contact-Induced Morphological Change: The 'Leap' from Fusional to Agglutinative Morphology in Cappadocian*. Unpublished master's thesis. University of Cambridge, Cambridge, United Kingdom.

Karatsareas, Petros (2009). The loss of grammatical gender in Cappadocian Greek. *Transactions of the Philological Society* 107, 2: 196-230.

Karolidis, Pavlos (1874). *Καππαδοκικά, ἤτοι πραγματεία ἱστορικὴ καὶ ἀρχαιολογικὴ περὶ Καππαδοκίας*. Constantinople: Evangelinos Misailidis.

Karolidis, Pavlos (1885). *Γλωσσάριον Συγκριτικὸν Ἑλληνοκαππαδοκικῶν Λέξεων, ἤτοι ἡ ἐν Καππαδοκίᾳ λαλουμένη ἑλληνικὴ διάλεκτος καὶ τὰ ἐν αὐτῇ σῳζόμενα ἴχνη τῆς ἀρχαίας καππαδοκικῆς γλώσσης*. Smyrna: O Typos.

Kastovsky, Dieter (2000). Inflectional classes, morphological restructuring, and the dissolution of Old English grammatical gender. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, 709-727.

Kesisoglou, Ioannis I. (1951). *Τὸ γλωσσικὸ ἰδίωμα τοῦ Οὐλαγὰτς (Le dialecte d'Oulagatch)*. Athens: Institut Français d'Athènes.

Kibort, Anna & Greville G. Corbett (2008). Gender. *Grammatical Features*. 7 January 2008. Available online at http://www.grammaticalfeatures.net/features/gender.html. Accessed on 22 January 2011.

Kim, Ronald (2008). An individual twist on the individualizing suffix: definite *n*-stem nouns in Pontic Greek. *Glotta* 84, 72-113.

King, Ruth (2000). *The Lexical Basis of Grammatical Borrowing: A Prince Edward Island French Case Study*. Amsterdam/Philadelphia: John Benjamins.

King, Ruth (2005). Crossing grammatical borders: tracing the path of contact-induced linguistic change. In Markku Filppula, Juhani Klemola, Marjatta Palander and Esa Pentillä (Eds.), *Dialects Across Borders: Selected Papers from the 11th International Conference on Methods in Dialectology (Methods XI). Joensuu, August 2002*. Amsterdam/Philadelphia: John Benjamins, 233-251.

Kitromilides, Paschalis & Giannis Mourelos (1980-1982). *Ἡ Ἔξοδος: Μαρτυρίες ἀπὸ τὶς Ἐπαρχίες τῆς Κεντρικῆς καὶ Νότιας Μικρασίας. Τόμοι Α' καὶ Β'*. Athens: Kentro Mikrasiatikon Spoudon.

Klein, Udo & Peter de Swart (2011). Case and referential properties. *Lingua* 121:1, 3-19.

Klenin, Emily R. (1983). *Animacy in Russian: A New Interpretation*. Columbus: Slavica.

Koch, Harold (1995). The creation of morphological zeroes. In Geert Booij and Jaap van Marle (Eds.), *Yearbook of Morphology 1994*. Dordrecht/Boston/London: Kluwer Academic Publishers, 31-71.

Koch, Harold (1996). Reconstruction in morphology. In Mark Durie and Malcolm Ross (Eds.), *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*. New York/Oxford: Oxford University Press, 218-263.

Konstantinidou, Magdalini (2005). Μικρασιατικά ιδιώματα περιοχής Βιθυνίας και Ιωνίας (αποτελέσματα μίας γλωσσικής αποστολής). *Lexikografikon Deltion* 25, 119-148.

Konstantinidou, Magdalini (2009). Διαλεκτικά Μικράς Ασίας: γενικοί φωνητικοί και μορφοσυντακτικοί χαρακτήρες του νεοελληνικού γλωσσικού ιδιώματος της Κίου Βιθυνίας. *Μελέτες για την Ελληνική Γλώσσα. Πρακτικά της Ετήσιας Συνάντησης του Τομέα Γλωσσολογίας του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. 10-11 Μαΐου 2008./Studies in Greek Linguistics. Proceedings of the Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki. May 10-11 2008*.

Thessaloniki: Aristoteleio Panepistimio Thessalonikis. Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi], 338-354.

Kontossopoulos, Nikolaos (1981). *Διάλεκτοι καὶ ἰδιώματα τῆς Νέας Ἑλληνικῆς*. Athens: Grigoris.

Kornfilt, Jaklin (2000). *Turkish*. London/New York: Routledge.

Kornfilt, Jaklin (2009). DOM and two types of DSM in Turkish. In Helen de Hoop and Peter de Swart (Eds.), *Differential Subject Marking*. Dordrecht/London: Springer, 79-111.

Korobeinikov, Dimitri A. (2008). Raiders and neighbours: the Turks (1040 - 1304). In Jonathan Shepard (Ed.), *The Cambridge History of the Byzantine Empire,* c. *500-1492*. Cambridge: Cambridge University Press, 692-727.

Kourmoulis, Georgios (1964). Μορφολογικαὶ ἐξελίξεις τῆς ἑλληνικῆς γλώσσης. *Epistimoniki Epetiris Filosofikis Scholis Panepistimiou Athinon* 15, 9-22.

Kousis, Eleftherios T. (1884). Περὶ τῆς Τραπεζουντίας διαλέκτου. *Platon* 6, 83-89, 309-324.

Koutita-Kaimaki, Myrto (1977/1978). Ἡ ὀνομαστικὴ σὲ -ν τῶν ἀρσενικῶν ὀνομάτων τῆς Ποντιακῆς. *Archeion Pontou* 34, 259-298.

Koutita-Kaimaki, Myrto (1988/1989). Περιπτώσεις ασυμφωνίας του γένους στην Ποντιακή. *Archeion Pontou* 42, 239-275.

Krifka, Manfred (1995). Swahili. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld and Theo Vennemann (Eds.), *Syntax: Ein internationales Handbuch zeitgenössischer Forschung / An International Handbook of Contemporary Research. Volume 2*. Berlin: Walter de Gruyter, 1397-1418.

Krinopoulos, Socrates (1889). *Τὰ Φερτάκαινα ὑπὸ Ἐθνολογικὴν καὶ Φιλολογικὴν Ἔποψιν Ἐξεταζόμενα*. Athens: Fexis.

Kyranoudis, Panagiotis (2009). *Μορφολογία των Τουρκικών Δανείων της Ελληνικής Γλώσσας*. Thessaloniki: Institouto Neoellinikon Spoudon (Idryma Manoli Triantafyllidi).

Lagarde, Paul (1886). *Neugriechisches aus Kleinasien*. Göttingen.

Lamprou, Spyridon P. (1916). Τραπεζουντιακὸν ὡροσκόπιον τοῦ ἔτους 1336. *Neos Ellinomnimon* 13, 33-50.

Lampsides, Odysseus (1952). Γλωσσικὰ σχόλια εἰς μεσαιωνικὰ κείμενα τοῦ Πόντου. *Archeion Pontou* 17, 227-238.

Lass, Roger (1992). Phonology and morphology. In Norman Blake (Ed.), *The Cambridge History of the English Language. Volume II: 1066-1476*. Cambridge: Cambridge University Press, 23-155.

Lehmann, Christian (1988). On the function of agreement. In Michael Barlow and Charles A. Ferguson (Eds.), *Agreement in Natural Language: Approaches, Theories, Descriptions*. Stanford: Center for the Study of Language and Information, 55-65.

Lewis, Geoffrey (2000). *Turkish Grammar*. Oxford: Oxford University Press.

Lianidis, Simos (2007 [1962]). *Τα Παραμύθια του Ποντιακού Λαού*. Athens: Epitropi Pontiakon Meleton.

Löbner, Sebastian (1985). Definites. *Journal of Semantics* 4, 4: 279-326.

Luraghi, Silvia (2004). The evolution of the Greek nominal paradigms from Mycenean to Modern Greek. *Classica et Mediaevalia* 55, 361-379.

Lyons, Christopher (1999). *Definiteness*. Cambridge: Cambridge University Press.

Mackridge, Peter (1990). 'Some pamphlets on dead Greek dialects': R. M. Dawkins and Modern Greek dialectology. *The Annual of the British School at Athens* 85, 201-212.

Mackridge, Peter (2000). The position of the weak object pronoun in Medieval and Modern Greek. *Jazyk i Rechevaya Deyatel'nost'* 3, 133-151.

Mackridge, Peter (2009). *Language and National Identity in Greece 1766-1976*. Oxford: Oxford University Press.

Magdalino, Paul (2002). The medieval empire (780 - 1204). In Cyril Mango (Ed.), *The Oxford History of Byzantium*. Oxford: Oxford University Press, 169-208.

Maiden, Martin (1995). *A Linguistic History of Italian*. London/New York: Longman.

Malchukov, Andrej L. (2008). Animacy and asymmetries in differential case marking. *Lingua* 118, 2: 203-221.

Malikouti, Aggeliki M. (1970). *Μετασχηματιστικὴ Μορφολογία τοῦ Νεοελληνικοῦ Ὀνόματος*. Athens: Filekpaideftiki Etaireia.

Malikouti-Drachman, Aggeliki (2009). Στο μεταίχμιο προσωδίας και μορφολογίας: μαρτυρίες της Ελληνικής. *Μελέτες για την Ελληνική Γλώσσα. Πρακτικά της Ετήσιας Συνάντησης του Τομέα Γλωσσολογίας του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. 10-11 Μαΐου 2008./Studies in Greek Linguistics. Proceedings of the Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki. May 10-11 2008*. Thessaloniki: Aristoteleio Panepistimio Thessalonikis. Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi], 15-41.

Malkiel, Yakov (1981). Drift, slope, and slant: background of, and variations upon, a Sapirian theme. *Language* 57, 3: 535-570.

Manolessou, Io (2000). *Greek Noun Phrase Structure: A Study in Syntactic Evolution.* Unpublished doctoral dissertation. University of Cambridge, Cambridge, United Kingdom.

Manolessou, Io (2003). Οι αναφορικές προτάσεις της ελληνικής: διαχρονική προσέγγιση. *Proceedings of the 6th International Conference of Greek Linguistics, Rethymno, 18-21 September 2003*. Available online at http://www.philology.uoc.gr/conferences/6thICGL/ebook/h/manolessou.pdf. Accessed on 23 November 2010.

Manolessou, Io & Geoffrey Horrocks (2006). The development of the definite article in Greek. *Μελέτες για την Ελληνική Γλώσσα. Πρακτικά της Ετήσιας Συνάντησης του Τομέα Γλωσσολογίας του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. 6-7 Μαΐου 2006./Studies in Greek Linguistics. Proceedings of the Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki. May 6-7 2006*. Thessaloniki: Aristoteleio Panepistimio Thessalonikis. Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi], 224-236.

Manolessou, Io & Stamatis Beis (2006). Syntactic isoglosses in Modern Greek dialects: the case of the indirect object. In Mark Janse, Brian Joseph and Angela Ralli (Eds.), *Proceedings of the 2nd International Conference on Modern Greek Dialects and Linguistic Theory*. Patras: University of Patras, 220-235.

Marchese, Lynell (1988). Noun classes and agreement systems in Kru: a historical approach. In Michael Barlow and Charles A. Ferguson (Eds.), *Agreement in Natural Language: Approaches, Theories, Descriptions*. Stanford: Center for the Study of Language and Information, 323-341.

Markopoulos, Theodore (2009). *The Future in Greek: From Ancient to Medieval*. Oxford: Oxford University Press.

Matasović, Ranko (2004). *Gender in Indo-European*. Heidelberg: Universitätsverlag Winter.

Matras, Yaron (1998). Utterance modifiers and universals of grammatical borrowing. *Linguistics* 36, 2: 281-331.

Matras, Yaron (2000). How predictable is contact-induced change in grammar? In Colin Renfrew, April McMahon and Robert L. Trask (Eds.), *Time Depth in Historical*

Linguistics. Volume 1. Cambridge: McDonald Institute for Archaeological Research, 563-583.

Matras, Yaron (2007). The borrowability of structural categories. In Yaron Matras and Jeanette Sakel (Eds.), *Grammatical Borrowing in Cross-Linguistic Perspective*. Berlin/New York: Mouton de Gruyter, 31-73.

Matras, Yaron (2009). *Language Contact*. Cambridge: Cambridge University Press.

Matras, Yaron (2010). Contact, convergence, and typology. In Raymond Hickey (Ed.), *The Handbook of Language Contact*. Malden, MA/Oxford: Wiley-Blackwell, 66-85.

Matras, Yaron & Jeanette Sakel (2007). Investigating the mechanisms of pattern replication in language convergence. *Studies in Language* 31, 4: 829-865.

Matthews, Peter H. (1972). *Inflectional Morphology: A Theoretical Study Based on Aspects of Latin Verb Conjugation*. Cambridge: Cambridge University Press.

Mavrochalyvidis, Georgios & Ioannis I. Kesisoglou (1960). *Τὸ γλωσσικὸ ἰδίωμα τῆς Ἀξοῦ (Le dialecte d'Axos)*. Athens: Institut Français d'Athènes.

McFadden, Thomas (2004). *The Position of Morphological Case in the Derivation: A Study on the Syntax-Morphology Interface*. Unpublished doctoral dissertation. University of Pennsylvania, Philadelphia, United States of America.

McKenzie, Roderick (1916). Review of Dawkins (1916). *The Journal of Hellenic Studies* 36, 406-408.

Melis, Chantal & Marcela Florer (2009). On the interplay between forces of erosion and forces of repair in language change: a case study. *Folia Linguistica Historica* 30, 271-310.

Melissaropoulou, Dimitra (2007). *Μορφολογική Περιγραφή και Ανάλυση του Μικρασιατικού Ιδιώματος της Περιοχής Κυδωνίων και Μοσχονησίων: Η Παραγωγή Λέξεων*. Unpublished doctoral dissertation. University of Patras, Patras, Greece.

Mertzios, Constantinos D. (1958). Quelques vers grecs du XIII^{e} siècle en caractères arabes. *Byzantinische Zeitschrift* 51, 1: 15-16.

Meyer, Gustav (1895). Die griechischen Verse im Rabâbnâma. *Byzantinische Zeitschrift* 4, 3: 401-411.

Mirambel, André (1949). *Grammaire du grec moderne*. Paris: C. Klincksieck.

Mirambel, André (1959). *La langue grecque moderne: description et analyse*. Paris: C. Klincksieck.

Moravcsik, Edith A. (1978). On the case marking of objects. In Joseph H. Greenberg, Charles A. Ferguson and Edith A. Moravcsik (Eds.), *Universals of Human Language IV: Syntax*. Stanford: Stanford University Press, 249-289.

Morpurgo-Davies, Anna (1968). Gender and the development of the Greek declensions. *Transactions of the Philological Society* 67, 12-36.

Moser, Amalia (1988). *The History of the Perfect Periphrases in Greek*. Unpublished doctoral dissertation. University of Cambridge, Cambridge, United Kingdom.

Næss, Åshild (2004). What markedness marks: the markedness problem with direct objects. *Lingua* 114, 9-10:1186-1212.

Napoli, Maria (2009). Aspects of definiteness in Greek. *Studies in Language* 33, 3: 569-611.

Newton, Brian (1963). The grammatical integration of Italian and Turkish substantives into Modern Greek. *Word* 19, 20-30.

Newton, Brian (1972). *The Generative Interpretation of Dialect: A Study of Modern Greek Phonology*. Cambridge: Cambridge University Press.

Nicholas, Nick (1998). *The Story of* pu*: The Grammaticalisation in Space and Time of a Modern Greek Complementiser.* Unpublished doctoral dissertation. University of Melbourne, Melbourne, Australia.

Noyer, Rolf (2004). A constraint on interclass syncretism. In Geert Booij and Jaap van Marle (Eds.), *Yearbook of Morphology 2004*. Dordrecht: Springer, 273-315.

Ntinas, Kostas (2005). *Το Γλωσσικό Ιδίωμα της Κοζάνης*. Kozani: Institouto Vivliou kai Anagnosis.

Oeconomides, Demosthenes I. (1890). Γλωσσικὰ ἐκ Πόντου. *Athina* 2, 236-248.

Oeconomides, Demosthenes I. (1958). *Γραμματικὴ τῆς Ἑλληνικῆς Διαλέκτου τοῦ Πόντου*. Λεξικογραφικὸν Δελτίον, Παράρτημα 1. Athens: Akadimia Athinon.

Oksaar, Els (1996). The history of contact linguistics as a discipline. In Hans Goebl, Peter H. Nelde, Zdeněk Starý and Wolfgand Wölck (Eds.), *Kontaktlinguistik: Ein Internationales Handbuch Zeitgenössischer Forschung/ Contact Linguistics: An International Handbook of Contemporary Research/ Linguistique de Contact: Manuel International des Recherches Comtemporaines*. Berlin: Walter de Gruyter, 1-12.

Ouspensky, Th. & V. Bénéchevitch (1927). *Actes de Vazelon. Materiaux pour Servir a l'Histoire de la Propriété Rurale et Monastique à Byzance aux XIII – XV Siècles - Вазелонские Акты. Материалы для Истории Крестьянского и Монастырского*

Землевладения в Византии XIII – XV Веков. Leningrad: Издание Государственной Публичной Библиотеки.

Pachtikos, Georgios D. (1905). *260 Δημώδη Ἑλληνικὰ Ἄισματα ἀπὸ τοῦ στόματος τοῦ Ἑλληνικοῦ Λαοῦ τῆς Μικρᾶς Ἀσίας, Θρᾴκης, Μακεδονίας, Ἠπείρου καὶ Ἀλβανίας, Ἑλλάδος, Κρήτης, Νήσων τοῦ Αἰγαίου, Κύπρου καὶ τῶν Παραλίων τῆς Προποντίδος*. Athens: P. D. Sakellarios.

Papadopoulos, Anthimos A. (1926). *Γραμματικὴ τῶν Βορείων Ἰδιωμάτων τῆς Νέας Ἑλληνικῆς Γλώσσης*. Athens: P. D. Sakellarios.

Papadopoulos, Anthimos A. (1933). Συμβολὴ εἰς τὴν ἔρευναν τῆς Ποντικῆς διαλέκτου (ἤτοι γραμματικὰ καὶ συντακτικὰ ζητήματα). *Athina* 45, 15-48.

Papadopoulos, Anthimos A. (1953). Χαρακτηριστικὰ τῆς Ποντικῆς διαλέκτου. *Archeion Pontou* 18, 83-93.

Papadopoulos, Anthimos A. (1955). *Ἱστορικὴ Γραμματικὴ τῆς Ποντικῆς Διαλέκτου*. Athens: Epitropi Pontiakon Meleton.

Papadopoulos, Anthimos A. (1958). Γλωσσικὰ ποικίλα. *Archeion Pontou* 22, 191-198.

Papadopoulos, Anthimos A. (1961). *Ἱστορικὸν Λεξικὸν τῆς Ποντικῆς Διαλέκτου, Τόμος Δεύτερος*. Ἀρχεῖον Πόντου, Παράρτημα 3. Athens: Epitropi Pontiakon Meleton.

Papadopoulos, Anthimos A. (1998 [1919]). *Ὁ Ὑπόδουλος Ἑλληνισμὸς τῆς Ἀσιατικὴς Ἑλλάδος Ἐθνικῶς καὶ Γλωσσικῶς Ἐξεταζόμενος*. Athens: Syllogos Pros Diadosin Ofelimon Vivlion.

Papadopoulos, Savvas P. (1988/1989). Παραδόσεις - θρύλοι περιοχῆς Κάρς. *Archeion Pontou* 42, 105-133.

Papanastassiou, George C. (2007a). General characteristics of the ancient Greek vocabulary. In Anastasios-Foivos Christidis with the assistance of Maria Arapopoulou and Maria Chriti (Ed.), *A History of Ancient Greek: From the Beginnings to Late Antiquity*. Cambridge: Cambridge University Press, 654-666.

Papanastassiou, George C. (2007b). Morphology: from Classical Greek to the Koine. In Anastasios-Foivos Christidis with the assistance of Maria Arapopoulou and Maria Chriti (Ed.), *A History of Ancient Greek: From the Beginnings to Late Antiquity*. Cambridge: Cambridge University Press, 610-617.

Pappas, Panayiotis A. (2004). *Variation and Morphosyntactic Change in Greek: From Clitics to Affixes*. Basingstoke/New York: Palgrave Macmillan.

Pappou-Zhouravliova, Ekaterina (1995). Η ταυροροσυμαίικη διάλεκτος των Ελλήνων της Αζοφικής στη Νοτιοανατολική Ουκρανία (περιοχή Μαριούπολης). *Archeion Pontou* 46, 165-274.

Pappou-Zhouravliova, Ekaterina (1997). The gender of the Noun in the 'Tavrorumeic' dialect of Ukrainian Greeks (of the Sea of Azov). In Gaberell Drachman, Angeliki Malikouti-Drachman, Cyla Klidi and Ioannis Fykias (Eds.), *Greek Linguistics 95. Proceedings of the Second International Conference on Greek Linguistics (Salzburg 22-24 September 1995). Volume II: Syntax, Dialects, Historical, and Greek and Other Languages*. Graz: W. Neugebauer Verlag, 727-748.

Penny, Ralph (2002). *A History of the Spanish Language*. Cambridge: Cambridge University Press.

Perlmutter, David M. (1978). Impersonal passives and the unaccusative hypothesis. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 4, 157-189. Unpublished doctoral dissertation. Massachusetts Institute of Technology, Cambridge, Massachusetts, United States of America.

Phosteris, Dimitrios (1952). Τὸ Ἀραβάνιον. *Mikrasiatika Chronika* 5, 133-177.

Phosteris, Dimitrios & Ioannis I. Kesisoglou (1960). *Λεξιλόγιο τοῦ Ἀραβανὶ (Vocabulaire d'Aravani)*. Athens: Institut Français d'Athènes.

Picoche, Jacqueline & Christiane Marchello-Nizia (1998). *Histoire de la langue française*. Paris: Nathan.

Pierce, Richard H. (1971). Egyptian loan-words in ancient Greek. *Symbolae Osloenses* 46, 1: 96-107.

Pollard, Carl & Ivan A. Sag (1994). *Head-Driven Phrase Structure Grammar*. Chicago/London: University of Chicago Press.

Poplack, Shana & Stephen Levey (2009). Contact-induced grammatical change: a cautionary tale. In Peter Auer and Jürgen Erich Schmidt (Eds.), *Language and Space: An International Handbook of Linguistic Vatiation. Volume 1: Theories and Methods*. Berlin/New York: Walter de Gruyter, 391-419.

Priestly, Tom M. S. (1983). On 'drift' in Indo-European gender systems. *Journal of Indo-European Studies* 11, 4: 339-363.

Psaltes, Stamatios V. (1905). *Θρᾳκικά, ἢ μελέτη περὶ τοῦ γλωσσικοῦ ἰδιώματος τῆς πόλεως Σαράντα Ἐκκλησιῶν*. Athens: P. D. Sakellarios.

Psaltes, Stamatios V. (1918). Review of Dawkins (1916). *Lexikografikon Archeion* 5, 248-261.

Ralli, Angela (1992). Η Θεωρία των Χαρακτηριστικών και η δομή των κλιτών λέξεων της Νέας Ελληνικής. *Μελέτες για την Ελληνική Γλώσσα/Studies in Greek Linguistics* 1992, 193-212. *Μελέτες για την Ελληνική Γλώσσα. Πρακτικά της 24ης Ετήσιας Συνάντησης του Τομέα Γλωσσολογίας του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. 9-11 Μαΐου 2003./Studies in Greek Linguistics. Proceedings of the 24th Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki. 9-11 May 2003*. Thessaloniki, 568-579.

Ralli, Angela (2000). A feature-based analysis of Greek nominal inflection. *Γλωσσολογία/Glossologia* 11-12, 201-227.

Ralli, Angela (2002). The role of morphology in gender determination: evidence from Modern Greek. *Linguistics* 40, 3: 519-551.

Ralli, Angela (2003a). Morphology in Greek linguistics: the state of the art. *Journal of Greek Linguistics* 4, 77-129.

Ralli, Angela (2003b). Ο καθορισμός του γραμματικού γένους στα ουσιαστικά της νέας ελληνικής. In Anna Anastassiadis-Symeonidis, Angela Ralli and Despina Chila-Markopoulou (Eds.), *Το Γένος*. Athens: Patakis, 57-99.

Ralli, Angela (2005). *Μορφολογία*. Athens: Patakis.

Ralli, Angela (2006). On the role of allomorphy in inflectional morphology: evidence from dialectal variation. In Giandomenico Sica (Ed.), *Open Problems in Linguistics and Lexicography*. Monza-Milano: Polimetrica, 123-151.

Ralli, Angela (2009). Morphology meets dialectology: insights from Modern Greek dialects. *Morphology* 19, 87-105.

Ralli, Angela, Melissaropoulou, Dimitra & Thanasis Tsiamas (2004). Φαινόμενα αναδιάρθρωσης του ονοματικού κλιτικού παραδείγματος στη μικρασιατική διάλεκτο των Κυδωνίων (Αϊβαλί) και Μοσχονησίων. *Μελέτες για την Ελληνική Γλώσσα. Πρακτικά της 24ης Ετήσιας Συνάντησης του Τομέα Γλωσσολογίας του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. 9-11 Μαΐου 2003./Studies in Greek Linguistics. Proceedings of the 24th Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki. 9-11 May 2003*. Thessaloniki, 568-579.

Revithiadou, Anthi & Vassilios Spyropoulos (2009). *Οφίτικη Ποντιακή: Έρευνα Γλωσσικής Καταγραφής με Έμφαση στη Διαχρονία και Συγχρονία της Διαλέκτου*. Report submitted to the John S. Latsis Public Benefit Foundation. Available

online at http://www.latsis-foundation.org/files/Meletes2009/11.report.pdf. Accessed on 26 October 2010.

Rizos, N. S. (1856). *Καππαδοκικά, ἤτοι δοκίμιον ἱστορικῆς περιγραφῆς τῆς Ἀρχαίας Καππαδοκίας, καὶ ἰδίως τῶν ἐπαρχιῶν Καισαρείας καὶ Ἰκονίου*. Constantinople: Anatoli - Evangelinou Misailidou.

Ruge, Hans (1969). *Zur Entstehung der neugriechischen Substantivdeklination*. Stockholm: Almqvist & Wiksell.

Saccaris, Georgios (1940). Περὶ τῆς διαλέκτου τῶν Κυδωνιέων ἐν συγκρίσει πρὸς τὰς Λεσβιακάς. *Mikrasiatika Chronika* 3, 74-141.

Sakel, Jeanette (2007). Types of loan: matter and pattern. In Yaron Matras and Jeanette Sakel (Eds.), *Grammatical Borrowing in Cross-Linguistic Perspective*. Berlin/New York: Mouton de Gruyter, 15-29.

Sakel, Jeanette & Yaron Matras (2008). Modelling contact-induced change in grammar. In Thomas Stolz, Dik Bakker and Rosa Salas Palomo (Eds.), *Aspects of Language Contact: New Theoretical, Methodological and Empirical Findings with Special Focus on Romancisation Processes*. Berlin/New York: Mouton de Gruyter, 63-87.

Saltsis, Ioakeim (1959). Συμβολὴ στὴ χρονικὴ τοποθέτηση τῆς Ποντιακῆς διαλέκτου. *Pontiaki Estia* 9, 121-122: 5576-5579.

Sapir, Edward (1921). *Language: An Introduction to the Study of Speech*. New York: Harcourt, Brace and Company.

Sapkidi, Olga (2003a). Collection of Cappadocian folkloric and linguistic material. *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=10090. Accessed on 11 November 2010.

Sapkidi, Olga (2003a). Nikolaos Rizos' book "Kappadokika". *Encyclopaedia of the Hellenic World. Asia Minor*. Available online at http://www.ehw.gr/l.aspx?id=8961. Accessed on 11 November 2010.

Sasse, Hans-Jürgen (1992). Language decay and contact-induced change: similarities and differences. In Matthias Brenzinger (Ed.), *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*. Berlin: Mouton de Gruyter, 59-80.

Sasse, Hans-Jürgen (1993). Syntactic categories and subcategories. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld and Theo Vennemann (Eds.), *Syntax: Ein internationales Handbuch zeitgenössischer Forschung / An International Handbook of Contemporary Research. Volume 1*. Berlin: Walter de Gruyter, 646-686.

Schroeder, Christoph (2006). Articles and article systems in some areas of Europe. In Giuliano Bernini and Marcia L. Schwartz (Eds.), *Pragmatic Organization of Discourse in the Languages of Europe*. Berlin/New York: Mouton de Gruyter, 545-611.

Seaman, David P. (1972). *Modern Greek and American English in Contact*. The Hague: Mouton.

Seiler, Hansjakob (1958). Zur Systematik und Entwicklungsgeschichte der griechischen Nominaldeklination. *Glotta* 37, 41-67.

Siemund, Peter (2002a). Mass versus count: pronominal gender in regional varieties of Germanic languages. *Zeitschrift für Sprachtypologie und Universalienforschung* 55, 3: 213-233.

Siemund, Peter (2002b). Animate pronouns for inanimate objects: pronominal gender in English regional varieties. In Dieter Kastovsky, Gunther Kaltenböck and Susanne Reichl (Eds.), *Proceedings of Anglistentag 2001 Universität Wien*. Trier: Wissenschaftlicher Verlag, 19-34.

Siemund, Peter (2005). Reanalyzing gender markers as mass/count agreement. In Elżbieta Górska and Günther Radden (Eds.), *Metonymy-Metaphor Collage*. Warsaw: Warsaw University Press, 223-254.

Siemund, Peter (2008). *Pronominal Gender in English: A Study of English Varieties from a Cross-Linguistic Perspective*. New York/London: Routledge.

Sims, Andrea D. (2005). Declension hopping in dialectal Croatian: two predictions of frequency. In Geert Booij and Jaap van Marle (Eds.), *Yearbook of Morphology 2005*. Dordrecht/Boston/London: Kluwer Academic Publishers, 201-225.

Sims, Andrea D. (2006). *Minding the Gaps: Inflectional Defectiveness in a Paradigmatic Theory*. Unpublished doctoral dissertation. The Ohio State University, Columbus OH, United States of America.

Sims, Andrea D. (2007). Why defective paradigms are, and aren't, the result of competing morphological patterns. *Proceedings from the Annual Meeting of the Chicago Linguistic Society* 43, 2: 267-281

Sims, Andrea D. (forthcoming). Avoidance strategies, periphrasis and paradigmatic competition in Modern Greek. In Juliette P. Blevins, Farrell Ackerman and Gregory T. Stump (Eds.), *Periphrasis and Paradigms*. Stanford, CA: Center for the Study of Language and Information Publications.

Sitaridou, Ioanna (2010). Fieldworking in Romeyka of Pontus today. Paper presented at the first workshop on *Greek Language in Pontus: Romeyka in Contemporary Trebizond*, Queens' College, Cambridge, 13 March 2010.

Sitaridou, Ioanna & David Willis (2011). Drift and long-term morphosyntactic change. Workshop held at the *20th International Conference on Historical Linguistics (ICHLXX), July 25-30 2011, Osaka, Japan*.

Smyth, Herbert W. (1920/1956). *Greek Grammar. Revised by Gordon M. Messing*. Cambridge, MA: Harvard University Press.

Sotiropoulos, Dimitri (1972). *Noun Morphology of Modern Demotic Greek*. The Hague/Paris: Mouton.

Spencer, Andrew (1997). Extending deponency: implication for morphological mismatches. *Proceedings of the British Academy* 145, 45-70.

Spyropoulos, Vassilios & Konstantinos Kakarikos (2009). Aspects of dialectal variation in the Greek declension: a feature-based approach. In Geert Booij, Angela Ralli and Sergio Scalise (Eds.), *Morphology and Dialectology: On-line Proceedings of the 6th Mediterranean Morphology Meeting (MM6)*. Patras: University of Patras, 49-62. http://www.philology.upatras.gr/LMGD/el/research/downloads/MMM6_Proceedings.pdf. Accessed on 26 October 2010.

Spyropoulos, Vassilios & Konstantinos Kakarikos (forthcoming). A feature-based analysis of Asia Minor Greek declension. In Mark Janse, Brian Joseph, Pavlos Pavlou and Angela Ralli (Eds.), *Proceedings of the 3rd International Conference on Modern Greek Dialects and Linguistic Theory*. Patras: University of Patras.

Spyropoulos, Vassilios & Maria-Anna Tiliopoulou (2006). Definiteness and case in Cappadocian Greek. In Mark Janse, Brian Joseph and Angela Ralli (Eds.), *Proceedings of the 2nd International Conference on Modern Greek Dialects and Linguistic Theory*. Patras: University of Patras, 365-378.

Steele, Susan (1978). Word order variation: a typology study. In Joseph H. Greenberg, Charles A. Ferguson and Edith A. Moravcsik (Eds.), *Universals of Human Language IV: Syntax*. Stanford: Stanford University Press, 585-623.

Stolz, Thomas (2006). All or nothing. In Yaron Matras, April McMahon and Nigel Vincent (Eds.), *Linguistic Areas: Convergence in Historical and Typological Perspective*. Basingstoke: Palgrave Macmillan, 32-50.

Stump, Gregory T. (2006). Heteroclisis and paradigm linkage. *Language* 82, 2: 279-322.

de Swart, Peter (2006). Case markedness. In Leonid Kulikov, Andrej Malchukov and Peter de Swart (Eds.), *Case, Valency and Transitivity*. Amsterdam/Philadelphia: John Benjamins, 249-267.

de Swart, Peter (2007). *Cross-linguistic Variation in Object Marking*. Published doctoral dissertation. Radboud University Nijmegen, Nihmegen, Netherlands. LOT Publications.

Symeonidis, Charalampos & Dimitrios Tompaidis (1999). *Η Σημερινή Ελληνική Διάλεκτος της Ουκρανίας (Περιοχή Μαριούπολης)*. Αρχείον Πόντου, Παράρτημα 20. Athens: Epitropi Pontiakon Meleton.

Symeonidis, Charalampos P. (2006). *Ιστορία της Κυπριακής Διαλέκτου: Από τον 7ο Αιώνα προ Χριστού έως Σήμερα*. Nicosia: Kentro Meleton Ieras Monis Kykkou.

Taylor, Archer (1916). Review of Dawkins (1916). *Modern Philology* 15, 12: 735-737.

Theofanopoulou-Kontou, Dimitra, Katsimali, Georgia, Moser, Amalia, Nikiforidou, Kiki & Despina Chila-Markopoulou (1998). *Θέματα Νεοελληνικής Σύνταξης 2: Θεωρία - Ασκήσεις*. Athens: Ethniko kai Kapodistriako Panepistimio Athinon.

Theodoridis, Dimitri (2004). Versuch einer Neuausgabe von drei griechischen Doppelversen aus dem *Dīwān* von Sultan Walad. *Byzantion* 74, 2: 433-451.

Thomadaki, Evangelia (1994). *Μορφολογικά Προβλήματα της Νεοελληνικής: Η Κλίση του Ουσιαστικού*. Unpublished doctoral dissertation. National and Kapodistrian University of Athens, Athens, Greece.

Thomason, Sarah Grey (2001). *Language Contact: An Introduction*. Edinburgh: Edinburgh University Press.

Thomason, Sarah Grey & Terrence Kaufman (1988). *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.

Thumb, Albert (1901). *Die Griechische Sprache im Zeitalter des Hellenismus: Beiträge zur Geschichte und Beurteilung der Koινή*. Strassburg: K. J. Trübner.

Thumb, Albert (1906). Prinzipienfragen der Koine-Forschung. *Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik* 9, 246-263.

Thumb, Albert (1912). *Handbook of the Modern Greek Vernacular. Grammar, Texts and Glossary. Translated from the second improved and enlarged German edition by S. Angus*. Edinburgh: T. & T. Clark.

Thumb, Albert (1914). On the value of Modern Greek for the study of Ancient Greek. *The Classical Quarterly* 8, 3: 181-205.

Tompaidis, Dimitrios (1980). Συμβολὴ στὴν ἔρευνα τοῦ ὀνοματικοῦ συνόλου τῆς Ποντιακῆς. *Archeion Pontou* 36, 220-237.

Tompaidis, Dimitrios (1988). *Η Ποντιακή Διάλεκτος: Διαλεκτικά Χαρακτηριστικά, Κατάταξη Ιδιωμάτων, Διαλεκτικά Κείμενα*. Αρχείον Πόντου, Παράρτημα 17. Athens: Epitropi Pontiakon Meleton.

Tompaidis, Dimitrios (1996). *Μελετήματα Ποντιακής Διαλέκτου*. Thessaloniki: Kodikas.

Topcharas, Konstantinos (1998 [1932]). *Η Γραμματική της Ποντιακής/Ι Γραματικι τι Ρομεικυ τι Ποντεικυ τι Γλοςας*. Thessaloniki: Kyriakidis.

Toufexis, Notis (2008). Diglossia and register variation in Medieval Greek. *Byzantine and Modern Greek Studies* 32, 2: 203-217.

Treadgold, Warren (2002). The struggle for survival (641 - 780). In Cyril Mango (Ed.), *The Oxford History of Byzantium*. Oxford: Oxford University Press, 129-150.

Triantaphyllides, Manolis (1941). *Νεοελληνικὴ Γραμματική (τῆς Δημοτικῆς)*. Athens: Organismos Ekdoseos Scholikon Vivlion.

Triantaphyllides, Manolis (1963). Ὁ τονισμὸς τῆς γενικῆς τῶν προπαροξύτονων ἀρσενικῶν σὲ -ος καὶ οὐδετέρων σὲ -ο. *Ἅπαντα Μανόλη Τριανταφυλλίδη, Τόμος Β': Ἐρευνητικά*. Thessaloniki: Aristoteleion Panepistimion Thessalonikis - Institouton Neoellinikon Spoudon [Idryma Manoli Triantafyllidi], 172-185.

Triantaphyllides, Manolis (2002 [1938]). *Νεοελληνικὴ Γραμματική. Πρῶτος Τόμος: Ἱστορικὴ Εἰσαγωγή*. Thessaloniki: Aristoteleio Panepistimio Thessalonikis – Institouto Neoellinikon Spoudon [Idryma Manoli Triantafyllidi].

Trudgill, Peter (2003). Modern Greek dialects: a preliminary classification. *Journal of Greek Linguistics* 4, 45-64.

Tsalikoglous, Emmanouil I. (1970). Πότε καὶ πῶς ἐτουρκοφώνησεν ἡ Καππαδοκία. *Mikrasiatika Chronika* 14, 9-30.

Tsimpli, Ianthi-Maria (2003). Η κατάκτηση του γένους στην ελληνική ως δεύτερη γλώσσα. In Anna Anastassiadis-Symeonidis, Angela Ralli and Despina Chila-Markopoulou (Eds.), *Το Γένος*. Athens: Patakis, 168-189.

Tsopanakis, Agapitos G. (1948). Συμβολὴ στὴ ρύθμιση τοῦ νεοελληνικοῦ κλιτικοῦ συστήματος. *Epistimoniki Epetiris Filosofikis Scholis Panepistimiou Thessalonikis* 6, 243-280.

Tsopanakis, Agapitos G. (1953). Τὸ σιατιστινὸ ἰδίωμα. *Makedonika* 2, 266-298.

Tzartzanos, Achilleus A. (1989). *Νεοελληνικὴ Σύνταξις (τῆς Κοινῆς Δημοτικῆς). Τόμος Α'*. Thessaloniki: Adelfoi Kyriakidi.

Unterbeck, Barbara (2000). Gender: new light on an old category. An introduction. In Barbara Unterbeck, and Matti Rissanen, Terttu Nevalainen and Mirja Saari (Eds.), *Gender in Grammar and Cognition. I Approaches to Gender. II Manifestations of Gender*. Berlin/New York: Mouton de Gruyter, xv-xlvi.

Valavanis, Ioannis (1937). Παραμύθια. *Archeion Pontou* 7, 83-124.

Valiouli, Maria (1997). Grammatical gender clash: slip of the tongue or shift of perspective? *Linguistics* 35, 89-110.

Vasileiadis, Savvas (1896). Συλλογὴ λέξεων λαϊκῶν ἐν Ζήλῃ Ἰκονίου τῆς Μικρᾶς Ἀσίας. *Xenofanis* 1.

Vayacacos, Dicêos V. (1964). Διαλεκτικὰ ἐκ τοῦ μεσαιωνικοῦ Πόντου. *Archeion Pontou* 26, 267-289.

Vendryes, Joseph (1921). *Le langage: introduction linguistique à l'histoire*. Paris: Renaissance du livre.

de Vogelaer, Gunther & Gert De Sutter (2011). The geography of gender change: pronominal and adnominal gender in Flemish dialects of Dutch. *Language Sciences* 33, 1: 192-205.

de Vogelaer, Gunther (2009). Changing pronominal gender in Dutch: transmission or diffusion? In Stavroula Tsiplakou, Marilena Karyolemou and Pavlos Pavlou (Eds.), *Language Variation - European Perspectives II: Selected Papers from the 4th International Conference on Language Variation in Europe (ICLaVE 4), Nicosia, June 2007*. Amsterdam/Philadelphia: John Benjamins, 71-80.

Vryonis, Speros Jr. (1971). *The Decline of Medieval Hellenism in Asia Minor and the Process of Islamization from the Eleventh through the Fifteenth Century*. Berkeley: University of California Press.

Wald, Benji (1975). Animate concord in Northeast Coastal Bantu: its linguistic and social implications as a case of grammatical convergence. *Studies in African Linguistics* 6, 3: 267-314.

Weinreich, Uriel (1963). *Languages in Contact: Findings and Problems*. The Hague: Mouton.

Wiese, Bernd (1983). Anaphora by pronouns. *Linguistics* 21, 2: 373-418.

Winford, Donald (2003). *An Introduction to Contact Linguistics*. Oxford: Blackwell.

Winford, Donald (2005). Contact-induced changes: classification and processes. *Diachronica* 22, 373-427.

Winford, Donald (2010). Contact and borrowing. In Raymond Hickey (Ed.), *The Handbook of Language Contact*. Malden, MA/Oxford: Wiley-Blackwell, 170-187.

Woodard, Roger D. (2008). Attic Greek. In Roger D. Woodard (Ed.), *The Ancient Languages of Europe*. Cambridge: Cambridge University Press, 14-49.

Wurzel, Wolfgang Ullrich (1986). Die wiederholte Klassifikation von Substantiven. *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 39, 1: 76-96.

Wurzel, Wolfgang Ullrich (1989). *Inflectional Morphology and Naturalness*. Dordrecht/Boston/London: Kluwer Academic Publishers.

Zapheiriou, Menekratis P. (1995). *Το Γλωσσικό Ιδίωμα της Σάμου*. Athens: Grigoris.

Zapheiriou, Nikolaos I. (1914). *Περὶ τῆς Συγχρόνου Σαμίας Διαλέκτου*. Athens: P. D. Sakellarios.