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The Development, Preservation and Loss of Differential Case Marking in Inner Asia Minor Greek

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Abstract

In Cappadocian and Phrasiot, the two main members of the inner Asia Minor Greek dialect group, the head nouns of NPs found in certain syntactic positions are marked with the accusative if the relevant NPs are definite and with the nominative if the NPs are indefinite. This differential case marking (DCM) pattern contrasts with all other Modern Greek dialects, in which the accusative is uniformly used in the relevant syntactic positions. After revisiting recent proposals regarding the synchronic status of DCM in Cappadocian and Phrasiot, I show how the two dialects developed this ‘un-Greek’ feature in the model of Turkish, which marks the head nouns of direct object NPs with an accusative suffix only if they take a specific reading leaving non-specific direct object NPs unmarked. I subsequently trace the diachronic trajectory of this contact-induced innovation within the two dialectal systems, seeking to explain why DCM was gradually lost in Cappadocian but preserved in Phrasiot.

Keywords

differential case marking – differential object marking – language contact – Asia Minor Greek – Cappadocian – Phrasiot – Turkish

1 Introduction

Inner Asia Minor Greek (henceforth iAMGr) is a Modern Greek (ModGr) dialect group that includes Cappadocian, Phrasiot, and Silliot. All three dialects

were spoken in the Cappadocian plateau of inner Asia Minor (today's central Turkey) by Greek Orthodox communities until 1924, when Greece and Turkey exchanged populations in accordance with the 1923 Treaty of Lausanne, which forced iAMGr speakers to relocate in Greece. Long before the exchange, the Greek-speaking people of Asia Minor had come into political and cultural contact with Turkish-speaking peoples, dating back to the invasion of the Seljuq Turks in parts of the peninsula even before the defeat of the Byzantine troops at Manzikert in 1071. The subsequent separation of the Greek populations of Asia Minor from the administrative centre of Constantinople; the consecutive dehellenisation of much of Asia Minor; the subsequent disintegration and fall of the late Byzantine Empire in 1453; and, the ultimate domination of the whole of Anatolia by Turkic groups, most notably the Seljuqs and the Ottomans, resulted in Asia Minor Greek developing for many centuries in linguistic isolation from the Greek-speaking contingent of the west, on the one hand, and in intense language contact with surrounding Turkish, on the other.

Owing to these sociohistorical conditions (see Dawkins, 1916; Janse, 2002; Karatsareas, 2011, 2013; Manolessou, 2019 for details), iAMGr presents the linguist with features tracing their origin to earlier stages in the history of the Greek language but also with many grammatical innovations that are found nowhere else in the Greek world. In many of these innovations, the effects of language contact with Turkish are particularly evident. Suffice it to mention here the introduction into the Greek phonemic inventory of Turkish phonemes such as /œ/, /y/, /w/ and /q/, and the merger of the interdental fricatives /θ/ and /ð/ with either the alveolar stops /t/ and /d/, the alveolar fricatives /x/ and /ç/, the sibilant /z/, or the rhotic /r/ (Dawkins, 1916: 74–80; Janse, 2009: 40); the borrowing of Turkish inflectional material and the replication of the structure of Turkish inflected forms (Janse, 2001, 2004, 2009; Karatsareas, 2011, 2016a); the use of the interrogative particle *mi* (< Turkish *mi*) to mark yes/no and alternative questions (Bağrıaçık, 2013; Janse, 2009); and, the generalised shift from head-initial to head-final order in various syntactic domains, most notably in the DP and the AdpP (Janse, 2009; Karatsareas, 2011, 2013, 2016; Karatsareas and Georgakopoulos, 2016; Lekakou and Karatsareas, 2016).

In this article, I examine the diachrony of one such contact-induced innovation attested in the two main iAMGr dialects, Cappadocian and Phrasiot: the development of differential case marking (henceforth DCM). The term is employed here to refer to the alternation in the case used to mark the head nouns, and possibly also other constituents, of NPs found in the following syntactic positions: direct object, indirect object, light verb complement, object predicative, adpositional complement, and temporal adjunct. The alternation involves

two inflectionally expressed cases, the nominative and the accusative, in such a way that the former marks the head nouns of indefinite NPs and the latter those of definite NPs.¹ ModGr does not show this type of alternation. Rather, accusative marking is uniformly found in all the aforementioned syntactic positions with the exception of a considerable number of dialects—including the standard language—in which indirect objects are marked by the genitive. In Turkish, however, a case alternation pattern is found in the encoding of direct objects whereby the accusative suffix *-(y)I* only marks head nouns whose referents take a specific reading whereas nouns denoting non-specific referents remain zero-marked.

Previous works have convincingly concluded that the development of DCM in iAMGr was contact-induced and brought about by the influence of Turkish. Against this backdrop, the aim of this article is twofold: (a) to test the proposals that have been formulated in the literature regarding the synchronic status of Cappadocian and Pharasiot DCM in the light of recent advances in the typological–crosslinguistic study of differential argument marking in general (in the sense of Seržant and Witzlack-Makarevich, 2018); and, (b) to trace its diachronic trajectory within the two dialectal systems taking into account recent work on the history of the iAMGr inflectional system that provided the essential morphological material for the implementation of the differential case alternation. Specifically, my synchronic analysis addresses the issue of the referential property that determines DCM in Cappadocian and Pharasiot, challenging Spyropoulos and Tiliopoulou's (2006) proposal that DCM in the two dialects is determined by specificity and not by definiteness as originally argued by Dawkins (1916) and later supported by Janse (2004). My diachronic analysis examines the fate of DCM in the two dialects, seeking to explain why DCM was lost in Cappadocian varieties but retained in Pharasiot. In short, I argue that, in Cappadocian, the morphological material that was employed for the expression of DCM was affected and ultimately lost as a result of an unrelated morphological change, which Pharasiot—crucially—did not undergo.

The article is structured as follows: in Section 2, I give a typological overview of the phenomenon of differential argument marking, briefly presenting the different ways in which the phenomenon is manifested crosslinguistically. Section 3 contrasts the two contact languages, ModGr and Turkish, in terms of their (non-)differential case marking systems. Section 4 examines and analyses DCM in Cappadocian and Pharasiot in terms of its synchrony (4.1), emergence (4.2), and preservation and loss (4.3). Section 5 concludes the article.

1 A few rare instances of DCM are also attested in Silliot; see the discussion in 4.2.

2 A Brief Crosslinguistic Overview of Differential Argument Marking

Seržant and Witzlack-Makarevich (2018) use the broad term differential argument marking to refer to the crosslinguistically widespread phenomenon whereby “an argument of a predicate bearing the same generalized semantic role (or macrorole) may be coded in different ways, depending on factors other than the argument role itself and/or the clausal properties of the predicate”. The most well-known and well-studied example of such a situation is the differential marking of direct objects, which occurs in a wide range of languages and which led to Bossong’s (1982) coining of the term Differential Object Marking (henceforth DOM) (Aissen, 2003; Bossong, 1985, 1991, 1998; Comrie, 1989; Croft, 1988, 2003; Dalrymple and Nikolaeva, 2011; von Heusinger and Kornfilt, 2005; Iemmolo, 2011, 2013; Klein and de Swart, 2011; Lyons, 1999; Malchukov, 2008; Moravcsik, 1978; de Swart, 2007).

There are two types of DOM systems: symmetric and asymmetric. In symmetric systems, a subset of direct objects bears one type of overt marking while another subset of direct objects bears some other type of overt marking. Compare the two markers on the direct object in the Finnish example in (1). In the affirmative clause in (1a), the direct object is marked by the accusative; in the negative clause in (1b), it is marked by the partitive case.²

2 Finnish, Spanish and Turkish data are given in the standard orthography of each respective language. Hebrew and Greek data are given in broad phonetic transcription. The only exceptions for Greek are (a) the use of the acute accent to indicate stress; and, (b) the use of <ɨ> to represent a glide that is an allophone of /i/. When preceding a tautosyllabic vowel, the glide surfaces as [j] after voiced obstruents and as [ç] after voiceless obstruents. In the case of consonants that can be palatalised (k → c, g → j, x → ç, ɣ → j, l → ʎ, n → ɲ), the glide causes palatalisation and is subsequently absorbed by the resultant palatalised consonant. The following abbreviations are used throughout the article including in the glosses of the examples: 1: first, 2: second, 3: third, ABL: ablative, ACC: accusative, ACT: active, COM: comitative, COMP: complementiser, COP: copula, DAT: dative, DCM: differential case marking, DEF: definite, DIM: diminutive, DIST: distal, DOM: differential object marking, DSM: differential subject marking, EXCL: exclamation, F: feminine, FN: factive nominal, FUT: future, GEN: genitive, IAMGR: inner Asia Minor Greek, IC: inflectional class, IMPFV: imperfective, IMPV: imperative, INDF: indefinite, INT: interior, LOC: locative, M: masculine, ModGr: Modern Greek, N: neuter, NEG: negative, NOM: nominative, NP: noun phrase, OBJ: object, PART: partitive, PL: plural, PN: proper name, PNP: perfective non-past, POSS: possessive, PROX: proximal, PRXT: proximate, PRS: present, PST: past, PTCP: participle, QUOT: quotative, SG: singular, SIM: simulative.

(1) Finnish

- a. *sö-i-n* *kaku-n*
 eat-PST-1SG cake-ACC
 'I ate the cake.'
- b. *e-n* *syö-nyt* *kakku-a*
 NEG-1SG eat-PTCP.ACT cake-PART
 'I did not eat the cake.'

In asymmetric systems, only a subset of direct objects bears overt marking while the remaining direct objects appear zero-marked. This is the case in Modern Hebrew and Spanish. In Hebrew, only definite direct object NPs are overtly marked by the prepositional element *et* (2a); indefinite NPs do not bear any overt marking (2b) (Danon, 2001; Givón, 1978: 305–306; Glinert, 1989).

(2) Modern Hebrew

- a. *axalti* *et* *ha-uga*
 eat.PST.1SG ACC DEF-cake(F).SG
 'I ate the cake.'
- b. *axalti* \emptyset *uga*
 eat.PST.1SG cake(F).SG
 'I ate (a) cake.'

Similarly, in Spanish, direct object NPs are overtly marked by the preposition *a* only if they take a specific reading and their referents are human (3a, b); if their referents have a non-specific reading or are not human, they bear no overt marking (3c, d) (von Heusinger, 2008 and references therein).

(3) Spanish (Comrie, 1989: 134)

- a. *busco* *al* *empleado*
 look_for.PST.1SG DAT.DEF.M.SG clerk(M).SG
 'I am looking for the clerk.'
- b. *busco* *a* *un* *empleado*
 look_ DAT INDF.M.SG clerk(M).SG
 for.PST.1SG
 'I am looking for a certain clerk.'

- c. *busco* \emptyset *un* *empleado*
 look_for.PST.1SG INDF.M.SG clerk(M).SG
 'I am looking for a clerk.'
- d. *busco* \emptyset *el* *carro*
 look_for.PST.1SG DEF.M.SG car(M).SG
 'I am looking for the car.'

Drawing mainly on cases such as those presented by Hebrew and Spanish, early studies identified animacy and definiteness as the two referential properties that typically condition DOM phenomena crosslinguistically, often representing them by means of hierarchies (Aissen, 2003; Bossong, 1998; Comrie, 1989; Croft, 1988, 2003). The two versions of the Animacy Hierarchy in (4) rank the referents of NPs on the basis of whether they are animate and human (or human-like).

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

The Definiteness Hierarchy in (5) ranks NPs with respect to the values their referents have for (in)definiteness and (non-)specificity.

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

Definiteness is assumed by Lyons (1999: 274–281) to be a grammatical category expressing the discourse pragmatic notions of identifiability and inclusiveness. Definite NPs are considered identifiable in the sense that their referents are familiar to both speaker and hearer because they have already been established in discourse or on the basis of general knowledge of the world. Definite NPs are considered inclusive in so far as they refer to the totality of objects or mass in the context which satisfy the description (Lyons, 1999: 11).³ The referents of indefinite NPs, on the other hand, are non-identifiable, in that they are

3 Other scholars define definiteness in terms of other notions such as familiarity, uniqueness, and reference; see Lyons (1999).

not known and familiar to the hearer because they have not been mentioned before, and non-inclusive, in that they never refer to the totality of objects or mass in the context which satisfy the description but rather to a single member of the total set of objects or to a certain amount of the total mass. The former semantic characteristic of indefinite NPs underpins their major function, which is to introduce new discourse referents into the discourse. Two types of indefinite NPs are usually distinguished in the literature: specific and non-specific. In pre-theoretical terms, in the case of specific indefinite NPs, the speaker has a referent in mind, which they want to introduce into the discourse and is unknown to the hearer. Non-specific indefinite NPs do not refer to any particular object or referent that the speaker has in mind but denote any entity that can fulfil the semantic requirements of the relevant description.

Starting with Karttunen (1968), a multitude of scholars have attempted to define and formally describe the notion of specificity in terms of notions such as the referential versus existential distinction, partitivity, presuppositionality, the weak versus strong quantifiers distinction, topicality, topic continuity, referential persistence, and noteworthiness; see von Heusinger (2011a) for an overview and references. Von Heusinger (2011a) argued that there is a core notion underlying all proposed interpretations of specificity, namely, referential anchoring. According to this proposal, “the referent of a specific indefinite is functionally dependent on some discourse participant or on another expression in the sentence” (von Heusinger 2011a: 1054). He goes on to identify the following seven types of specificity:

1. referential specificity, whereby specific indefinites yield readings that allow existential entailment whereas non-specific indefinites do not;
2. scopal specificity, which concerns the ability of certain indefinites to escape scope islands;
3. epistemic specificity, which relates to the contrast between speaker’s knowledge and speaker’s ignorance (or indifference) about the referent of the indefinite;
4. specificity as partitivity and presuppositionality;
5. specificity as topicality, where topical elements are understood as specific expressions;
6. specificity as noteworthiness; and,
7. specificity as discourse prominence.

Focusing on type (vii), von Heusinger (2011a) defines discourse prominence in terms of three aspects: noteworthiness, referential persistence, and topic continuity. Discourse referents are considered noteworthy if they have significant, unexpected or interesting properties. Referential persistence is the property of

being frequently picked up in the subsequent discourse, whereas topic continuity is the property of becoming or remaining the topic of the discourse. Indefinite NPs that show high degrees of noteworthiness, referential persistence, and topic continuity are considered specific. For applications of this approach to specificity, see Chiriacescu and von Heusinger 2010, von Heusinger 2002, 2011b as well as references therein.

More recently, a number of works have started to draw attention to DOM systems that are not conditioned by referential properties of the linguistic expressions found in the direct object position but, rather, by semantic properties of the verb such as affectedness and boundedness, polarity, and quantification (Dalrymple and Nikolaeva, 2011; Hoop and Malchukov, 2008; Iemmolo, 2011, 2013). In that connection, Iemmolo's (2013) typological study found that there is a correlation between the property or properties that condition DOM and the (a)symmetry of the DOM system in a given language. He has specifically argued, based on a sample of 159 languages, that asymmetric alternations are conditioned by referential properties of the referent encoded by the direct object NP while symmetric alternations are conditioned by verbal semantics. The Hebrew, Spanish and Finnish examples adduced in this section confirm the proposed correlations.

3 The Contact Languages

I have previously argued (Karatsareas 2011, 2013, 2016b) that, present-day ModGr and present-day Turkish, especially their standard forms, are not the "appropriate reference varieties" (Poplack and Levey, 2010: 395) to compare when attempting to establish the causes of change observed in iAMGr, whether they be internally-motivated or contact-induced. Previous research has shown that iAMGr followed a different evolutionary trajectory than ModGr dialects spoken in other parts of the wider eastern Mediterranean basin at least since the Late Medieval period (see, among others, Dawkins, 1916; Janse, 2002; Karatsareas, 2011, 2013; Manolossou, 2019). One would therefore ideally want to compare the iAMGr data with data drawn from varieties of Greek and Turkish that are closer to AMGr from a historical and/or a geographical point of view. However, the almost complete dearth of texts written in inner Asia Minor in dialectal Greek or Turkish in the period before the 19th century renders this type of comparison impossible. Present-day ModGr and present-day Turkish are, for that reason, chosen as the next best available points of reference thanks to the wealth of data and linguistic analyses that are easily accessible for them. As far as the development of DCM is concerned, suffice it to mention that the type of

case alternation that is observed in iAMGr is not known to have been a feature of Medieval Greek.

3.1 *ModGr: A Non-Differential Language*

In ModGr, no case alternations of the type presented in Section 2 are found in any of the syntactic positions in which we find DCM in iAMGr. The accusative uniformly marks direct object NPs (6); indirect object NPs, though only in some dialects including the iAMGr dialects (7) (for details, see Manollesou and Beis, 2006); benefactives, again only in some dialects including iAMGr (8);⁴ light verb complements (9); object predicatives (10); full phrasal adpositional complements (11); and, temporal adjuncts of the type shown in (12). Observe that accusative marking is found with both definite and indefinite NPs, and with both animate and inanimate referents.⁵

(6) ModGr, direct object

a.	<i>siná⁽ⁿ⁾disa</i>	<i>sto</i>	<i>ḑrómo</i>	<i>to</i>
	meet.PST.1SG	LOC.DEF.M.SG.ACC	street(M).SG.ACC	DEF.M.SG.ACC
	<i>filo</i>	<i>mu</i>	<i>to</i>	<i>manóli</i>
	friend(M).SG.ACC	1SG.GEN	DEF.M.SG.ACC	PN(N).SG.ACC
	'I came across my friend Manolis on the street.'			
b.	<i>siná⁽ⁿ⁾disa</i>	<i>sto</i>	<i>ḑrómo</i>	<i>énan</i>
	meet.PST.1SG	LOC.DEF.M.SG.ACC	street(M).SG.ACC	INDF.M.SG.ACC
	<i>filo</i>	<i>mu,</i>	<i>to</i>	<i>manóli</i>
	friend(M).SG.ACC	1SG.GEN	DEF.M.SG.ACC	PN(N).SG.ACC
	'I came across a friend of mine on the street, Manolis.'			

4 In other ModGr dialects including the standard language, indirect objects and benefactives are marked by the genitive. In all dialects, indirect objects and benefactives can also be introduced by the preposition *se* followed by an accusative-marked NP.

5 (In)definiteness in ModGr is marked by means of the definite and the indefinite articles as well as by a zero article. 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). Indefinite NPs are marked by the indefinite article or by the zero article. 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 and Babiniotis, 2004: 21–43; Holton et al., 1997: 276–285; Schroeder, 2006: 582–584, Theofanopoulou-Kontou et al., 1998: 11–29; Tzartanos, 1989: 170–180).

(7) ModGr, indirect object (some dialects, including iamGr)

a. *ípa ton ksáðerfo mu tin*
 tell.PST.1SG DEF.M.SG.ACC cousin(M).SG.ACC 1SG.GEN DEF.F.SG.ACC
istoría
 story(F).SG.ACC
 'I told the story to my cousin.'

b. *ípa énan ksáðerfo mu tin*
 tell.PST.1SG DEF.M.SG.ACC cousin(M).SG.ACC 1SG.GEN DEF.F.SG.ACC
Istoría
 story(F).SG.ACC
 'I told the story to a cousin of mine.'

(8) ModGr, benefactive (some dialects, including iamGr)

ayórase me cimá na ftçákso
 buy.IMPV.2SG 1SG.ACC minced_meat(M).SG.ACC COMP make.PNP.1SG
to jo su ceftéðes
 DEF.M.SG.ACC son(M).SG.ACC 2SG.GEN meatball(M).PL.ACC
 'Buy some minced meat for me so that I make meatballs for your son.'

(9) ModGr, light verb complement

a. *o ðímarxos évyale ton*
 DEF.M.SG.NOM mayor(M).SG.NOM take_out.PST.3SG DEF.M.SG.ACC
lóyo stin platía
 speech(M).SG.ACC LOC.DEF.SG.ACC square(F).SG.ACC
 'The mayor gave the speech at the square.'

b. *o ðímarxos évyale (énan)*
 DEF.M.SG.NOM mayor(M).SG.NOM take_out.PST.3SG INDF.M.SG.ACC
lóyo stin platía
 speech(M).SG.ACC LOC.DEF.SG.ACC square(F).SG.ACC
 'The mayor gave a speech at the square.'

(10) ModGr, object predicative

o proistámenos ton órise
 DEF.M.SG.NOM supervisor(M).SG.NOM 3SG.M.ACC appoint.PST.3SG
nixtofilaka
 nightwatchman(M).SG.ACC
 'The supervisor appointed him nightwatchman.'

(11) ModGr, adpositional complement

- a. *píra* *psomí* *apó ton* *fúrno*
 take.PST.1SG bread(N).SG.ACC ABL DEF.M.SG.ACC bakery(M).SG.ACC
 'I bought bread from the bakery.'
- b. *píra* *psomí* *apó énan* *fúrno*
 take.PST.1SG bread(N).SG.ACC ABL INDF.M.SG.ACC bakery(M).SG.ACC
 'I bought bread from a bakery.'

(12) ModGr, temporal adjunct

- a. *ton* *ceró* *ecíno* *đen* *íxame*
 DEF.M.SG.ACC time(M).SG.ACC DIST.M.SG.ACC NEG have.PST.1PL
polá *leftá*
 many.N.PL.ACC money(N).PL.ACC
 'In those days, we did not have much money.'
- b. *énan* *ceró* *pu* *m'* *éstelne*
 INDF.M.SG.ACC time(M).SG.ACC COMP 1SG.ACC send.PST.IMPV.3SG
i *mána* *mu* *sxolío*
 DEF.F.SG.NOM mother(F).SG.NOM 1SG.GEN school(N).SG.ACC
 'Once upon a time, when my mother used to send me to school...'

ModGr is, therefore, non-differential in its case marking system. It is, nevertheless, classified by Bossong (1991: 151) as exhibiting an accusative–neutral split in view of the fact that only nouns that belong to non-neuter—*i.e.*, masculine and feminine—inflectional classes (henceforth ICs) have a distinct form for the accusative case. Neuter nouns do not distinguish morphologically between the nominative and accusative, 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 or Spanish type. In these languages, DOM is synchronically active as it is based on semantic and pragmatic properties of the referents of direct object NPs, which may vary and therefore allow for the observed alternations in object marking. In contrast, the ModGr accusative–neutral split does not allow for any degree of variability. It is defined by inflectional class, which is a strictly intralinguistic feature and has little or no bearing on meaning.

In effect, however, due to a number of phonological and morphological developments that affected nominal inflection in earlier stages in the history of the language, the accusative–neutral split applies only to nouns belonging to Ralli's (2000, 2005) Inflectional Class 1 (IC₁) and to the singular of IC₂ nouns,

which are the only ones in which the accusative is expressed by a form distinct from that of the nominative.⁶ Compare, in that connection, the ACC.SG forms of the head nouns shown in (6)–(12) with their NOM.SG forms shown in (13). Observe that the nominative *versus* accusative distinction is morphologically marked by the presence *versus* absence of final *-s*.

(13) ModGr

	NOM.SG		ACC.SG	
a.	<i>fílo-s</i>	‘friend’	<i>fílo-∅</i>	[IC ₁]
b.	<i>ksáðerfo-s</i>	‘male cousin’	<i>ksáðerfo-∅</i>	[IC ₁]
c.	<i>lóyo-s</i>	‘speech’	<i>lóyo-∅</i>	[IC ₁]
d.	<i>nixtofilaka-s</i>	‘nightwatchman’	<i>nixtofilaka-∅</i>	[IC ₂]
e.	<i>fúrno-s</i>	‘bakery’	<i>fúrno-∅</i>	[IC ₁]
f.	<i>ceró-s</i>	‘time’	<i>ceró-∅</i>	[IC ₁]

In all other ICs, nominative and accusative are always syncretic. As one reviewer correctly notes, however, this state of affairs holds only for those ModGr dialects in which word-final *-n*, a historical marker of the accusative singular, has been lost. This includes the standard language but also the inner Asia Minor Greek dialects that I deal with in this article. In dialects that retain word-final /n/—for example, Dodecanesian, Cypriot, or Pontic—a morphological distinction between nominative and accusative singular is also found in ICs 3 and 4; compare Cypriot Greek *jenéka* ‘woman(F).SG.NOM’ with *jenékan* ‘woman(F).SG.ACC’ (IC₃), and *póli* ‘city(F).SG.NOM’ with *pólin* ‘city(F).SG.NOM’.

3.2 Turkish: A Differential Language

Unlike ModGr, Turkish is a differential language in which a case alternation pattern is found in the marking of direct objects. In Turkish, only the head nouns of direct object NPs whose referents are specific receive overt marking by means of the accusative suffix *-(y)I*. The head nouns of non-specific NPs, on

6 According to Ralli’s analysis, ModGr nouns are categorised into eight ICs, which are defined on the basis of (a) the set of suffixes that are employed to mark the six case/number combinations that compose the ModGr nominal paradigm, and (b) allomorphic variation in nominal stems. Stems are lexically specified for gender and IC whereas suffixes are specified for number, case and IC. Given that ModGr distinguishes between three gender values (masculine, feminine, neuter) and has eight nominal ICs, it becomes clear that the groupings of nouns into gender classes and ICs do not overlap. Rather, nouns are assigned to particular gender classes on the basis of their IC specification so that nouns that belong to IC₁ are either masculine or feminine, nouns that belong to IC₂ are masculine, nouns that belong to ICs 3 and 4 are feminine, and nouns that belong to ICs 5–8 are neuter.

the contrary, bear no overt marking (Göksel and Kerslake, 2005: 201–203; von Heusinger and Kornfilt, 2005: 4–5; Kornfilt, 1997).

This textbook case of DOM is exemplified in (14). In (14a), the head noun *anahtar* ‘key’ is marked by $-(y)I$ and appears without the indefinite article *bir*. As a result, the NP receives a definite and, therefore, specific reading. The same holds in (14b), in which the direct object NP additionally contains the demonstrative *bu* ‘this’. In (14c), $-(y)I$ co-occurs with *bir*, the combination of the two yielding an indefinite specific reading. (14d) has an indefinite non-specific reading as evidenced by the use of *bir* and lack of $-(y)I$. One reviewer notes that, very often in cases such as this one, the referent of the indefinite NP is known to the speaker but is judged to be pragmatically irrelevant to the conversation. Finally, in (14e), zero marking on the noun combined with the lack of *bir* has been argued to show that *anahtar* is not an argument in the transitive relation but has a reading similar to that of incorporating constructions (Aydemir, 2004; Erguvanlı, 1984).

(14) Turkish

- a. *Yasemin-∅ anahtar-ı kaybet-ti.*
 PN key-ACC lose-PST
 ‘Yasemin lost the key.’
- b. *Yasemin-∅ bu anahtar-ı kaybet-ti.*
 PN PROX key-ACC lose-PST
 ‘Yasemin lost this key.’
- c. *Yasemin-∅ bir anahtar-ı kaybet-ti.*
 PN INDF key-ACC lose-PST
 ‘Yasemin lost a certain key.’
- d. *Yasemin-∅ bir anahtar-∅ kaybet-ti.*
 PN INDF key lose-PST
 ‘Yasemin lost a key.’
- e. *Yasemin-∅ anahtar-∅ kaybet-ti.*
 PN key lose-PST
 ‘Yasemin lost keys.’

In terms of the Definiteness Hierarchy (5), the cut-off point for overt direct object marking in Turkish therefore lies between indefinite specific NPs and indefinite non-specific NPs, with all NPs whose specificity values fall to the left of the latter being marked by $-(y)I$ (Fig. 1).

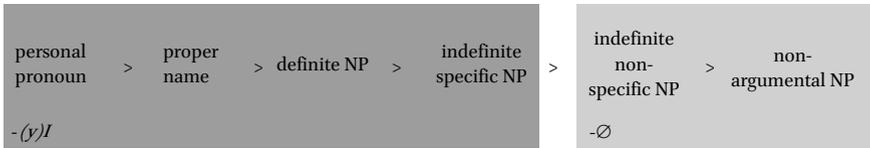


FIGURE 1 DOM in Turkish.

Crucially, the zero-marked form of the direct object noun in (14d–e) is the one used, *inter alia*, for the subject of main clauses as in (15) (Göksel and Kerslake, 2005: 173–175; Kornfilt, 1997: 212–214).

- (15) Turkish
Anahtar-∅ paspas-ın alt-ın-da.
 key doormat-GEN bottom-POSS.3SG-LOC
 ‘The key is under the doormat.’

4 The iAMGR DCM System

The data used for the analysis presented in this section have been drawn from a Cappadocian and Phrasiot corpus consisting of the published and unpublished texts shown in Table 1:

TABLE 1 The texts of the Cappadocian and Phrasiot corpus.

Source	Varieties
A. Cappadocian	
Dawkins (1916: 304–464)	Delmesó, Ferték, Araván, Ghúrzono, Ulaghátsh, Mistí, Axó, Malakopí, Phloità, Síлата, Potámia
Kesisoglou (1951: 136–161)	Ulaghátsh
Fosteris (1952: 161–177)	Araván
Kostakis (1959: 46–61, 64, 82, 88–90, 94, 146, 154, 176, 196, 198–200)	Mistí
Fosteris and Kesisoglou (1960: 98–127)	Araván
Mavrochalyvidis and Kesisoglou (1960: 186–221)	Axó
Tsitsopoulos (1962: 18–24, 26, 31–36, 38–40, 44, 48–82, 84–93, 95–99, 101, 103–106)	Phloità

TABLE 1 The texts of the Cappadocian and Pharasiot corpus. (*cont.*)

Source	Varieties
Kostakis (1962: 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)	Phloità
B. Pharasiot	
Dawkins (1916: 464–579)	Phárasa, Tshukúri, Kíska, Afshar-köi

4.1 *Synchrony*

Cappadocian and Pharasiot stand out among the ModGr and, in fact, all Greek varieties—ancient and modern—in having developed into differential languages in which a case marking alternation is found in the following syntactic positions: direct object, indirect object, light verb complement, object predicative, adpositional complement, and temporal adjuncts (Anastasiadis, 1976: 89–102; Andriotis, 1948: 47; Bağrıaçık, 2018: 59–65; Dawkins, 1916: 94, 164–165, 1950: 357–358; Janse, 2004; Spyropoulos, 2016; Spyropoulos and Kakarikos, 2009, 2011; Spyropoulos and Tiliopoulou, 2006). The iAMGr pattern is conditioned by definiteness and formally implemented by means of the morphological distinction between nominative and accusative so that nominative marking is found with indefinite NPs and accusative marking is found with definite NPs. Examine the examples in (16)–(20). Observe that DCM applies to both animate and inanimate nouns.

(16) Pharasiot, direct object (Dawkins, 1916: 540)

<i>adé</i>	<i>to</i>	<i>ffók:o</i>	<i>đóseté</i>	<i>da</i>
PROX	DEF.N.SG.ACC	boy.DIM(N).SG.ACC	give.IMPV.2PL	OBJ
<i>to</i>	<i>mutsúko</i>	<i>to</i>	<i>xazná.</i>	
DEF.M.SG.ACC	little.N.SG.ACC	DEF.M.SG.ACC	treasure(M).SG.ACC	
<i>le</i>	<i>di</i>	<i>to</i>	<i>ffók:o</i>	
say.PRS.3SG	COMP	DEF.N.SG.NOM	boy.DIM(N).SG.NOM	
<i>yo</i>	<i>xaznás</i>	<i>dzo</i>	<i>irévo</i>	
1SG.NOM	treasure(M).SG.NOM	NEG	look_for.PRS.1SG	

“Give this boy, the little fellow, the treasure.” The little boy says, “I do not ask for treasure.”

- (17) Phloïtá Cappadocian, indirect object (Tsitsopoulos, 1962: 58)
- | | | | | | |
|------------|------------|---------------|-----------|-----------|--------------|
| <i>etó</i> | <i>to</i> | <i>áðropo</i> | <i>mi</i> | <i>to</i> | <i>lalít</i> |
| PROX.SG | DEF.SG.ACC | man.SG.ACC | NEG | 3SG.ACC | talk.PRS.2PL |
- 'Do not talk to this man.'
- (18) Araván Cappadocian, light verb complement (Fosteris, 1952: 170)
- | | | | | | |
|----------------|--------------|-----------|----------------|---------------|--------------|
| <i>saránda</i> | <i>méres</i> | <i>ce</i> | <i>saránda</i> | <i>níxtes</i> | <i>éþkan</i> |
| forty | day.PL.ACC | and | forty | night.PL.ACC | do.PST.3PL |
- yámos*
wedding.SG.NOM
- 'They had a wedding that lasted for forty days and forty nights.'
- (19) Phloïtá Cappadocian, object predicative (Kostakis, 1962: 228)
- | | | | |
|------------|--------------|------------|---------------|
| <i>t'</i> | <i>álo</i> | <i>to</i> | <i>meyálo</i> |
| DEF.SG.ACC | other.SG.ACC | DEF.SG.ACC | old.SG.ACC |
- | | | |
|---------------|-----------|----------------|
| <i>ékanan</i> | <i>to</i> | <i>vasikós</i> |
| do.PST.3PL | 3SG.ACC | king.SG.NOM |
- 'They made the other one, the older one, a king.'
- (20) Delmesó Cappadocian, adpositional complement (Dawkins, 1916: 322)
- a. *se* *sálsan* *s'* *éna*
- | | | | |
|---------|--------------|-----|------|
| 2SG.ACC | send.PST.3PL | LOC | INDF |
|---------|--------------|-----|------|
- batáx* *tópos*
- | | |
|-------------|-----------------|
| slippery.SG | place(M).SG.NOM |
|-------------|-----------------|
- 'They sent you to a slippery place.'
- b. *so* *filan* *son* *tópo*
- | | | | |
|------------------|---------|------------------|-----------------|
| LOC.DEF.N.SG.ACC | such.SG | LOC.DEF.M.SG.ACC | place(M).SG.ACC |
|------------------|---------|------------------|-----------------|
- en* *éna* *korítj*
- | | | |
|-----------|------|----------------|
| COP.PRS.3 | INDF | girl(N).SG.NOM |
|-----------|------|----------------|
- 'In such and such a place there is a girl.'

According to a recent proposal by Spyropoulos and Tiliopoulou (2006), DCM in Cappadocian is not conditioned by definiteness but, rather, by specificity as in Turkish. In their analysis, the nominative marks the head nouns of non-specific NPs, which can only be indefinite, and the accusative marks those of specific NPs, which can be either definite or indefinite. Two predictions follow from this analysis regarding the case marking of indefinite NPs: first, that they should be marked by the nominative if their referents are interpreted as

non-specific; second; that they should be marked by the accusative if their referents are specific. Neither, however, is borne out by the IAMGr data.

Looking first at nominative-marked indefinite NPs, we find that they can very well have a specific reading. Consider the excerpts in (21) and (22). In (21), the indefinite NP *an ípnos* 'a dream' introduces into the discourse the dream that the little boy had. That the boy has a particular dream in mind and that the NP therefore denotes a particular referent can be adduced on the basis of referential persistence as the dream is picked up a number of times and by different linguistic expressions in the subsequent discourse. It is, specifically, picked up twice by other indefinite NPs of the same form, four times by definite NPs of the form *ton ípno*, and five times by the object marker *da/ta*. In the three paragraphs that follow and which are not provided here for the sake of space, the same referent is picked up four times by other indefinite NPs of the same form, three times by definite NPs of the form *ton ípno*, and nine times by the object marker *da/ta*.

(21) Pharasiot (Dawkins, 1916: 536)

<i>sikóði</i>	<i>dze</i>	<i>ba</i>	<i>sikóði.</i>
rise.PST.3SG	And	again	rise.PST.3SG
<i>s</i>	<i>an</i>	<i>próto</i>	<i>zamáni</i>
LOC	INDF	first.N.SG.ACC	time(N).SG.ACC
<i>ítun</i>	<i>a</i>	<i>néka</i>	<i>dʒ</i>
COP.PST.3PL	INDF	woman(F).SG.NOM	and
<i>an</i>	<i>ándras.</i>	<i>íxan</i>	<i>a</i>
INDF	man(M).SG.NOM	have.PST.3PL	INDF
<i>íjós.</i>	<i>to</i>	<i>ffók:o</i>	<i>íden</i>
son(M).SG.ACC	DEF.N.SG.NOM	boy.DIM(M).SG.NOM	see.PST.3SG
<i>an</i>	<i>ípnos.</i>	<i>ípen</i>	<i>dí</i>
INDF	dream(M).SG.NOM	say.PST.3SG	COMP
<i>yo</i>	<i>íða</i>	<i>an</i>	<i>ípnos.</i>
1SG.NOM	see.PST.1SG	INDF	dream(M).SG.NOM
<i>ípen</i>	<i>i</i>	<i>ma</i>	<i>tu</i>
say.PST.3SG	DEF.F.SG.NOM	mother(F).SG.NOM	3SG.N.GEN
<i>pe</i>	<i>me</i>	<i>da.</i>	<i>dʒo</i>
say.IMPV.2SG	1SG.ACC	OBJ	NEG
<i>léyo</i>	<i>da.</i>	<i>ga</i>	<i>katakóltsen</i>
say.PRS.1SG	OBJ	well	chase.PST.3SG
<i>da.</i>	<i>sotípos</i>	<i>dʒo</i>	<i>les</i>
OBJ	Why	NEG	say.PRS.2SG
<i>ton</i>	<i>ípno?</i>	<i>éfiye</i>	<i>to</i>

DEF.M.SG.ACC	dream(M).SG.ACC	leave.PST.3SG	DEF.N.SG.NOM
<i>ffók:o.</i>	<i>vráðine.</i>		<i>írte</i>
boy.DIM(M).SG.NOM	become_evening.PST.3SG		come.PST.3SG
<i>tu</i>	<i>ffók:u</i>	<i>o</i>	<i>dadás.</i>
DEF.N.SG.GEN	boy.DIM(M).SG.GEN	DEF.M.SG.NOM	father(M).SG.NOM
<i>a</i>	<i>néka</i>	<i>pu</i>	<i>púje</i>
EXCL	woman(F).SG.VOC	where	go.PST.3SG
<i>to</i>	<i>ffók:o?</i>	<i>z</i>	<i>íne</i>
DEF.N.SG.NOM	boy.DIM(M).SG.NOM	HORT	COP.PRS.3SG
<i>tu</i>	<i>ðevouí</i>	<i>to</i>	
DEF.M.SG.GEN	devil(M).SG.GEN	DEF.N.SG.NOM	
<i>ffók:o.</i>	<i>íðe</i>	<i>an</i>	<i>ípnos.</i>
boy.DIM(M).SG.NOM	see.PST.3SG	INDF	dream(M).SG.NOM
<i>ípa</i>	<i>di</i>	<i>pe</i>	<i>me</i>
say.PST.1SG	COMP	say.IMPV.2SG	1SG.ACC
<i>ton</i>	<i>íпно.</i>	<i>dzúpe</i>	<i>me</i>
DEF.M.SG.ACC	dream(M).SG.ACC	NEG.say.PST.3SG	1SG.ACC
<i>da.</i>	<i>dз</i>	<i>oyó</i>	<i>páli</i>
OBJ	And	1SG.NOM	again
<i>katakóltsa</i>	<i>ta.</i>	<i>ípen</i>	<i>dí</i>
chase.PST.1SG	OBJ	say.PST.3SG	COMP
<i>o</i>	<i>tatás</i>	<i>pe</i>	<i>ta</i>
DEF.M.SG.NOM	father(M).SG.NOM	say.IMPV.2SG	OBJ
<i>na</i>	<i>nárti</i>	<i>to</i>	
COMP	come.PNP.3SG	DEF.N.SG.NOM	
<i>ffók:o</i>	<i>na</i>	<i>me</i>	<i>ípi</i>
boy.DIM(M).SG.NOM	COMP	1SG.ACC	say.PNP.3SG
<i>ton</i>	<i>íпно.</i>	<i>írte</i>	<i>to</i>
DEF.M.SG.ACC	dream(M).SG.ACC	come.PST.3SG	DEF.N.SG.NOM
<i>ffók:o.</i>	<i>ípen</i>	<i>dí</i>	<i>pe</i>
boy.DIM(M).SG.NOM	say.PST.3SG	COMP	say.IMPV.2SG
<i>me</i>	<i>ta</i>	<i>tu</i>	<i>íðes</i>
1SG.ACC	OBJ	REL	see.PST.2SG
<i>ton</i>	<i>íпно.</i>	<i>ípen</i>	<i>dí</i>
DEF.M.SG.ACC	dream(M).SG.ACC	say.PST.3SG	COMP
<i>to</i>	<i>ffók:o.</i>	<i>o</i>	<i>tatá</i>
DEF.N.SG.NOM	boy.DIM(M).SG.NOM	EXCL	father(M).SG.VOC
<i>dzo</i>	<i>léo</i>	<i>se</i>	<i>ta.</i>
NEG	say.PRS.1SG	2SG.ACC	OBJ
<i>ka</i>	<i>katakóltsen</i>	<i>da</i>	<i>o</i>

well	chase.PST.3SG	OBJ	DEF.M.SG.NOM
<i>tatás</i>	<i>to</i>	<i>ffók:o.</i>	
father(M).SG.NOM	DEF.N.SG.ACC	boy.DIM(M).SG.ACC	

'He rose up and again he rose up. In the old days, there were a woman and a man. They had a son. The little boy saw a dream. He said, "I saw a dream." His mother said, "Tell it to me." "I will not tell it." She drove him right away. "Why do you not tell your dream?" The little boy ran away. It became evening. The little boy's father came. "Wife, where has the little boy gone?" "May the little boy go to the devil. He saw a dream. I said 'Tell me the dream'. He did not tell me it. And I then drove him out." The father said, "Tell the little boy to come, to tell me the dream." The little boy came. He said, "Father, I will not tell it to you." His father drove the little boy right out.'

In (22), the indefinite NP *éna devrésis* introduces into the discourse the dervish that the hero of the story met at the edge of the village. In this case, that *éna devrésis* takes a specific reading can be adduced on the basis of referential persistence and topic continuity. The same referent is picked up again in the immediately subsequent sentence by the definite NP *to devrés* and further down the text twice by the definite NP *devrésis*. Crucially, in the sentence that begins with *ce devrésis*, the dervish becomes the topic of the discourse as it is the subject of the verbs *ber* 'takes', *lex* 'says', and *ber* 'takes'. In the paragraph that follows and which is again not provided for the sake of space, the dervish remains the topic of the discourse as it is the subject of no fewer than eight verbs (*lex* 'says', *aníx* 'opens', *vyal* 'takes out', *đixni* 'shows', *fusá* 'blows' (twice), *édiksen* 'showed', *psófsen* 'died'). In that paragraph, the dervish is overtly picked up twice by the definite NP *devrésis*, once by the definite NP *do devrés*, and twice by the third person singular pronoun *do*.

(22) Phloítá Cappadocian (Dawkins, 1916: 414)

<i>abefí</i>	<i>pen</i>	<i>s</i>	<i>éna</i>
ABL.DIST	go.PRS.3SG	LOC	INDF
<i>álo</i>	<i>tópos.</i>	<i>pen</i>	<i>s</i>
other.SG	place.SG.NOM	go.PRS.3SG	LOC
<i>éna</i>	<i>xorjó.</i>	<i>abéso</i>	<i>đé</i>
INDF	village.SG.ACC	INT	NEG
<i>men</i>	<i>ce</i>	<i>filáyni</i>	<i>xorjú</i>
enter.PRS.3SG	and	wait.PRS.3SG	village.SG.GEN
<i>nákra.</i>	<i>ístera</i>	<i>đorí</i>	<i>éna</i>
edge.SG.ACC	Afterwards	see.PRS.3SG	INDF
<i>devrésis.</i>	<i>ce</i>	<i>to</i>	<i>devrés</i>
dervish.SG.NOM	And	DEF.SG.ACC	dervish.SG.ACC

<i>léi</i>	<i>to</i>	<i>ébar</i>	<i>kondá</i>
say.PRS.3SG	3SG.ACC	take.IMPV.2SG	PRXT
<i>s</i>	<i>as</i>	<i>jenó</i>	<i>to</i>
2SG.GEN	HORT	become.PNP.1SG	DEF.SG.NOM
<i>peđí</i>	<i>s.</i>	<i>ce</i>	<i>đen</i>
boy.SG.NOM	2SG.GEN	and	NEG
<i>to</i>	<i>ber.</i>	<i>ce</i>	<i>lex</i>
3SG.ACC	take.PRS.3SG	and	say.PRS.3SG
<i>đará</i>	<i>sabaxátça.</i>	<i>xanyés</i>	<i>az</i>
now	ornament.PL.NOM	which	ABL
<i>maftú</i>	<i>t</i>	<i>ta</i>	<i>peđjá</i>
RECIP	3SG.GEN	DEF.PL.ACC	boy.PL.ACC
<i>xaír</i>	<i>đen</i>	<i>žorí?</i>	<i>c</i>
pleasure.SG.ACC	NEG	see.PRS.3SG	and
<i>eýóna</i>	<i>ab</i>	<i>esé</i>	<i>ti</i>
1SG.NOM	ABL	2SG.ACC	what
<i>xaír</i>	<i>na</i>	<i>đjo?</i>	<i>c</i>
pleasure.SG.ACC	FUT	see.PNP.1SG	and
<i>ecí</i>	<i>to</i>	<i>peđí</i>	<i>lex</i>
DIST	DEF.SG.NOM	boy.SG.NOM	say.PRS.3SG
<i>đe</i>	<i>se</i>	<i>tróyo</i>	<i>ja</i>
NEG	2SG.ACC	eat.PRS.1SG	EXCL
<i>kondá</i>	<i>s</i>	<i>na</i>	<i>cimiđó</i>
PRXT	2SG.GEN	FUT	sleep.PNP.1SG
<i>na</i>	<i>sikođó.</i>	<i>devréis</i>	<i>niéte</i>
FUT	rise.PNP.1SG	dervish.SG.NOM	become.PRS.3SG
<i>karjá</i>	<i>t</i>	<i>ce</i>	<i>to</i>
heart.SG.NOM	3SG.GEN	and	3SG.ACC
<i>ber</i>	<i>kondá</i>	<i>t.</i>	
take.PRS.3SG	PRXT	3SG.GEN	

'He goes from there to another place. He goes to a village. He does not go into it, and he waits at the edge of the village. Afterwards he sees a dervish. And he says to the dervish, "Take me with you. Let me become your boy." And the dervish does not accept him and says, "This is a fine thing now! Who does not have pleasure in his own children? And I, what pleasure shall I have in you?" And the boy there says, "I will not eat you surely. Let me sleep and rise with you." The dervish lets him have his way and takes him with him.'

Nominative-marked indefinite NPs can also have non-specific readings as in (23), in which the non-referential *qavurmás* can only be non-specific in

its function as an object predicative. The same holds for the light verb complement *yámos* in the Cappadocian example in (18), which is also nominative-marked.

(23) Pharasiot (Dawkins, 1916: 476)

<i>sákseté</i>	<i>ta</i>	<i>pídžeté</i>	
kill.IMPV.2PL	OBJ	make.IMPV.2PL	
<i>ta</i>	<i>qavurmás</i>	<i>fáseté</i>	<i>ta</i>
OBJ	dried_meat(M).SG.NOM	feed.IMPV.2PL	OBJ
<i>éfsaksan</i>	<i>to</i>	<i>jáđi</i>	<i>píkan</i>
kill.PST.3PL	DEF.N.SG.ACC	cow(N).SG.ACC	make.PST.3PL
<i>ta</i>	<i>qavurmás</i>	<i>fáisan</i>	<i>to</i>
OBJ	dried_meat(M).SG.NOM	feed.PST.3PL	DEF.M.SG.ACC
<i>qavurmá</i>			
dried_meat(M).SG.ACC			

“Kill it, make it into dried meat. give it to him to eat.” They killed the cow, they made it into dried meat. They gave him the dried meat to eat.”

Turning now to accusative-marked indefinite NPs, it must be noted that they are very rarely attested in the Cappadocian texts and not at all found in the Pharasiot texts. In the few cases in which such NPs are found in Cappadocian, they should be either interpreted as an instance of the competition between the Greek accusative-neutral split, as it was exemplified with ModGr in 3.1, and the novel DCM system or should be attributed to influence from non-differential ModGr varieties. Still, the examination of the few attested cases shows that such NPs can take both a specific and a non-specific reading. Compare, for example, *én' ađelfó* in (24) with *éna kánona* in (25). The former clearly has a specific reading. It is difficult to imagine a scenario whereby the speaker uses an indefinite NP meaning ‘a brother’ without referring to the particular brother that they have. The latter, on the other hand, has a non-specific reading. In this text, a woman gives birth to a camel instead of a human being, and the woman’s relatives pay a visit to the local bishop to ask for advice. The bishop has not heard anything like this before, he opens up his books to look for an appropriate ecclesiastical rule for cases such as the one at hand but finds no such rule in the books because such a rule does not exist. It is therefore safe to assume that *éna kánona* is a non-specific indefinite.⁷

7 Non-specific accusative-marked direct object NPs are also found in Turkish under specific morphosyntactic conditions; see von Heusinger and Kornfilt (2005).

- (24) Potámia Cappadocian (Dawkins, 1916: 454)

éxo *én'* *aðelfó* *c'* *ecíno* *ef*
 have.PRS.1SG INDF brother.SG.ACC and DIST.SG.NOM have.PRS.3SG
ta
 3PL.ACC
 'I have a brother and he has them.'

- (25) Araván Cappadocian (Fosteris and Kesisoglou, 1960: 98)

ínikse *ta* *xartfá* *t* *ce*
 open.PST.3SG DEF.PL.ACC paper.PL.ACC 3SG.ACC and
ta *kitápça* *t* *ce* *tfi*
 DEF.PL.ACC book.PL.ACC 3SG.ACC and what
kitápça *erjó* *sernicí* *dén* *bórinan*
 book.PL.ACC two man.PL.NOM NEG can.PST.IMPF.3PL
na *ta* *fíkósun.* *drána* *ja*
 COMP 3PL.ACC lift.PNP.3PL look.IMPV.2SG EXCL
útfa yadáris *meyála* *kitápça* *c* *éna*
 so_much big.PL.NOM book.PL.NOM and INDF
kánona *den* *ívre* *s* *etó*
 rule.SG.ACC NEG find.PST.3SG LOC PROX.SG.ACC
to *óryo*
 DEF.SG.ACC work.SG.ACC

'He opened his papers and his books—and what books! Two men could notlift them up. And see? Such big books and he did not find one rule for this job.'

These data support Dawkins's (1916) early analysis of Cappadocian and Phara-siot DCM as being determined by definiteness, a view that was later adopted by Janse (2004), Spyropoulos and Kakarikos (2009), Alexiadou and Kornfilt (2010), and Spyropoulos (2016). Therefore, in terms of the Definiteness Hierarchy (5), the cut-off point for overt direct object marking in iAMGR lies between definite NPs and indefinite specific NPs with all NPs whose definiteness values fall to the left of the point bearing accusative marking (Fig. 2).

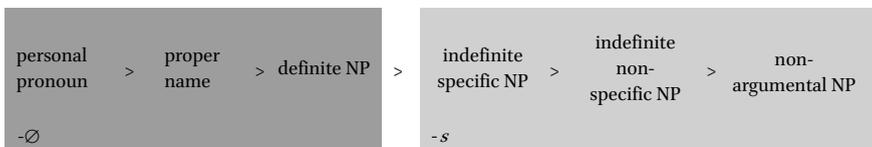


FIGURE 2 DCM in iAMGR.

Similarly to the ModGr state of affairs described in 3.1, only nouns belonging to ICs that are synchronically or diachronically associated with the masculine gender distinguish morphologically between the two core cases in the singular their inflectional paradigms. As far as Cappadocian is concerned, this holds for ICs 1, 2, and 3; see Table 2.

TABLE 2 The Cappadocian inflectional classes. Brackets indicate vowels that are dropped due to the phonological process of unstressed high vowel deletion that operates in Cappadocian. The tilde indicates cells that display interdialectal variation. IC1a only contains animate nouns, IC1b is only composed of inanimate nouns. Similarly, only human nouns belong to IC3a whereas only non-human nouns belong to IC3b. The distinction between IC4a and IC4b is based on stem allomorphy.

		IC1a	IC1b			IC2	IC3a	IC3b
SG	NOM	<i>áθropo-s</i> 'man'	<i>mílos</i> 'mill'			<i>kléfti-s</i> 'thief'	<i>papá-s</i> 'priest'	<i>ceratá-s</i> 'snail'
	ACC	<i>áθropo-Ø</i>	<i>mílo-Ø</i>			<i>kléft(i)-Ø</i>	<i>papá-Ø</i>	<i>ceratá-Ø</i>
	GEN	<i>aθróp(-u) ~ aθrop-ǰú</i>	<i>míl(-u) ~ mil-ǰú</i>			<i>kleft-ǰú</i>	<i>papá-Ø ~ papað-ǰú</i>	<i>ceratáð-ǰú</i>
PL	NOM	<i>aθróp(-i)</i>	<i>míl-us</i>			<i>kléft(-i)</i>	<i>papáð-es ~ papáð(-i)</i>	<i>ceratáð-ǰa</i>
	ACC	<i>aθróp-us ~ aθrop-ǰús ~ aθróp(-i)</i>	<i>míl-us</i>			<i>kleft-ǰús</i>	<i>papáð-es ~ papað-ǰús</i>	<i>ceratáð-ǰa</i>
	GEN	<i>aθróp(-u) ~ aθrop-ǰú</i>	<i>míl(-u) ~ mil-ǰú</i>			<i>kleft-ǰú</i>	<i>papað-ǰú</i>	<i>ceratáð-ǰú</i>
		IC4a	IC4b					
SG	NOM/ACC	<i>néka</i> 'woman'	<i>nífi(i)</i> 'bride'					
	GEN	<i>néka-s</i>	<i>nífi-s ~ nífað-ǰú</i>					
PL	NOM/ACC	<i>néc-es</i>	<i>nífi-es ~ nífað-es</i>					
	GEN	<i>nek-ón</i>	<i>nífi-ǰú</i>					
		IC5	IC6	IC7				
SG	NOM/ACC	<i>xtin-ó</i> 'cow'	<i>fti</i> 'ear'	<i>spit</i> 'house'				
	GEN	<i>xtin-ú ~ xtin-ǰú</i>	<i>fti-ú</i>	<i>spit-ǰú</i>				
PL	NOM/ACC	<i>xtin-á ~ xtin-ǰá</i>	<i>fti-á</i>	<i>spít-ǰa</i>				
	GEN	<i>xtin-ú ~ xtin-ǰú</i>	<i>fti-ú</i>	<i>spít-ǰú</i>				

TABLE 2 The Cappadocian inflectional classes. Brackets indicate vowels (*cont.*)

		IC8	IC9
SG	NOM/ACC	<i>pará</i> 'money'	<i>púma</i> 'cover'
	GEN	<i>parað-ǰú</i>	<i>pumat(-u)</i>
PL	NOM/ACC	<i>parað-ǰa</i>	<i>pumat-a</i>
	GEN	<i>parað-ǰú</i>	—

As shown in the table, in Cappadocian, too, the distinction correlates with the presence or absence of *-s*. Compare, in that connection, *xazná-s* with *xazná-∅* in (16), and *tópo-s* with *tópo-∅* in (20).

The situation in the plural of the historically masculine ICs is slightly different. As can be seen in Table 2, Cappadocian exhibits variation with respect to the marking of nominative and accusative plural. In ICs 1b and 3b, the two are syncretic across all varieties: in IC1b, the inherited accusative plural suffix *-us* is used for both case/number combinations, whereas in IC3b it is the IC7 nominative/accusative suffix *-ǰa* that assumes this function. The same holds for ICs 1a and 3a in the majority of Cappadocian varieties: in IC1a, the nominative and accusative plural are syncretically marked by the inherited nominative plural suffix *-i*, whereas in IC3a this is done by either by the inherited nominative plural suffix *-es* or by *-i*. However, the varieties of Delmesó, Potámia, Malakopí, Axó, and Mistí preserve the morphological distinction between the two cases so that the nominative plural is marked by *-i* (ICs 1a, 2, 3a) or *-es* (IC3a) and the accusative plural is marked by *-us* (IC1a) or *-ǰús* (IC1a, 2, 3a). It is interesting, though, that, despite the availability of this morphological material, DCM of the type that was exemplified in (16)–(20) above with nouns in the singular does not apply in the plural. Consider the examples in (26) and (27). In the Axó example in (26), the accusative plural suffix *-ǰús* marks both *misefirǰús* (26a), which is the head noun of a definite NP, and *ascerǰús* (26b), which is the head noun of an indefinite NP. In the Malakopí example in (27), the inherited nominative plural suffix *-i* marks the head noun of a definite NP.

(26) Axó Cappadocian (Mavrochalyvidis and Kesisoglou, 1960: 190, 202)

a.	<i>t</i>	<i>misefirǰús=um</i>	<i>me</i>	<i>to</i>	
	DEF.PL.ACC	guest.PL.ACC=1SG.GEN	COM	DEF.SG.ACC	
	<i>kaló</i>	<i>na</i>	<i>ta</i>	<i>pári</i>	<i>apésó</i>
	good.SG.ACC	COMP	3PL.ACC	take.PNP.3SG	INT
	'...that he receives my guests nicely'				

b.	<i>ναφιλός</i>	<i>jol:adúz</i>	<i>djo</i>	<i>asceriús</i>	<i>na</i>
	king.SG.NOM	send.PRS.3SG	two	soldier.PL.ACC	COMP
	<i>kópfne</i>	<i>to</i>	<i>kfílo</i>		
	cut.PNP.3PL	DEF.SG.ACC	tree.SG.ACC		
	‘The king sends two soldiers to cut the tree.’				

(27) Malakopí Cappadocian (Dawkins, 1916: 408)

<i>ifí</i>	<i>pços</i>	<i>i</i>	<i>dejí</i>	<i>ci</i>	<i>skotóns</i>
2SG.NOM	who.SG.NOM	COP.PRS.2SG	QUOT	and	kill.PRS.2SG
<i>ta</i>	<i>aθróp(-i)</i>				
DEF.PL.ACC	man.PL.ACC				
	‘‘Who are you’’, he said, ‘‘that you kill the people?’’				

In Pharasiot ICs corresponding to Cappadocian ICs 1, 2, and 3, the nominative and accusative plural are always syncretically marked by *-i* (ICs 1 and 2) and *-e(s)* (IC3); see Dawkins (1916: 163–170). DCM in iAMGr is, therefore, operative only in the singular of synchronically or diachronically masculine nouns.

In the case of nouns belonging to synchronically or diachronically feminine and neuter ICs (4, and 5, 6, 7, and 8, respectively), nominative and accusative are syncretic and always expressed by a single form in both numbers and in both dialects.

Even more limiting to the morphological expression of DCM is the collapse of the originally distinct masculine, feminine, and neuter forms of agreement targets (articles, adjectives, pronouns, participles, numerals) into a single, historically neuter form that we find in all AMGr dialects (Karatsareas 2009, 2011, 2014). Owing to this reduction and, in certain cases even complete loss, of grammatical gender, the differential distinction between definite and indefinite NPs is effectively evident by means of accusative and nominative marking mostly on head nouns of NPs. In the Cappadocian example in (28), the indefinite article and the modifying adjective appear in the historical neuter forms *éna* and *álo* and not in the historical masculine forms *énas* and *álos* despite the fact that they agree with the historical masculine noun *numátfis*. See also the forms of the indefinite article in (16a) and (20a), and of the modifying adjectives in (16a) and (20b).

(28) Araván Cappadocian (Fosteris and Kesisoglou, 1960: 102)

<i>sálse</i>	<i>éna</i>	<i>álo</i>	<i>numátfis</i>
send.IMPV.2SG	INDF	other.SG.ACC	man.SG.NOM
	‘Send another man.’		

In Pharasiot, however, as well as in the Cappadocian varieties of Delmesó, Potámia and Sílata the tripartite gender distinction is preserved on the definite article which additionally shows agreement for number and case; see (16b) and (20b).

4.2 *Emergence*

It is not unheard of from a diachronic point of view for an originally non-differential language to develop into a differential one language-internally, that is, 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, having evolved from non-differential Proto-Indo-European and Proto-Semitic, respectively (for the Romance languages and Hebrew, see Bossong, 1991; Guardiano, 2010; Melis and Flores, 2009; for the Slavonic languages, see Corbett 1991: 98–99; Igartua, 2005: 478–592; Klenin, 1983).

From that point of view, the possibility that DCM in Cappadocian and Pharasiot may have emerged through language-internal processes should not—in principle—be excluded in spite of the fact that all other known ModGr dialects are non-differential, making the Cappadocian and Pharasiot developments seem of a rather ‘un-Greek’ nature. As a matter of fact, Andriotis (1948: 47), Mavrochalyvidis and Kesisoglou (1960: 82) and Anastasiadis (1976: 94–96) identified a number of language-internal factors that, they argue, gave rise to DCM in iAMGr: Andriotis sees DCM as an analogical extension of nominative/accusative syncretism from the plural to the singular (see Table 1); Mavrochalyvidis and Kesisoglou treat it as a corollary of the loss of grammatical gender distinctions; and, Anastasiadis suggests that what is at play in iAMGr is the diachronic tendency of many Indo-European languages to reduce the number of morphologically expressed cases combined with the primacy of the nominative case within the inflectional paradigm of ModGr nouns. These proposals, however, fail to account for the fact that nominative/accusative syncretism is systematically found only in indefinite contexts and not in definite ones. In this light, Dawkins’s (1916) early proposal that DCM in Cappadocian and Pharasiot developed as a result of contact with Turkish is the strongest hypothesis formulated to date, despite its lack of detailed argumentation.

The most compelling piece of evidence in favour of a contact explanation for the development of DCM in iAMGr is the typological unlikelihood of its synchronic implementation. Previous work on differential argument marking systems of the asymmetric type, DOM in particular, has shown that “*overwhelmingly*, DOM is implemented by overtly marking the marked class of objects and leaving the unmarked ones with no morphological mark” (Aissen,

2003: 446, emphasis in the original; see also Bossong, 1985; Comrie, 1989; Croft, 2003). Markedness in the case of objects is understood in terms of semantic (proto)typicality the idea being that, crosslinguistically, (proto)typical objects tend to be indefinite, inanimate, and rhematic (Comrie, 1979: 19). From that point of view, an indefinite (and inanimate and rhematic) object is considered unmarked whereas a definite (and animate and thematic) object is considered marked (Comrie, 1989: 128; see also Battistella, 1990; Croft, 2003; Keenan, 1976). The way Aissen understands morphological markedness is not entirely clear. It seems, however, to be grounded on a very basic conceptualisation of morphological complexity whereby the more segments and/or syllables a given marker consists of the more complex it is; cf. Stolz et al.'s (2014: 22–30) discussion of the morphological complexity of spatial markers. A marker consisting of two phonological segments is therefore more complex and more marked than a marker consisting of one phonological segment, which is in turn more complex and more marked than a zero marker.

Aissen's generalisation is borne out both by languages that are known to have always been differential in their history, such as Turkish, and by languages that developed DOM at some point in their recorded history, such as Hebrew.⁸ Recall from Sections 2 and 3.2 that, in Turkish, only direct object NPs with specific referents are marked by *-(y)I*; non-specific NPs remain zero-marked. In Hebrew, *et* only precedes definite object NPs, indefinite ones bearing no overt marking. Both DOM patterns are consistent with Aissen's prediction that "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).

8 According to one reviewer, Tekin (1968: 127–130) lists a number of examples from the Orkhon Turkic inscriptions (7th–8th century ce) whereby direct object NPs that take a specific reading are zero-marked and direct object NPs that take a non-specific reading are marked by the accusative. Such cases clearly challenge both Aissen's (2003) generalisation and my claim that Turkish has always been a differential language. Erdal (2004: 362–363, 366), however, only finds zero-marked specific objects in the historical record and no objects that are non-specific and marked by the accusative. He states that, on the basis of the available data, "[w]e are at present unable to state any rule in this matter" (2004: 366). The issue clearly needs further investigation, not least in order to test the validity of Aissen's (2003) and Iemolo's (2013) robust crosslinguistic generalisations about DOM.

These observations are schematically illustrated by Turkish and Hebrew in Fig. 3.

	Semantic markedness	Formal markedness
Turkish	specific	$-(y)I$
	non-specific	$-\emptyset$
Hebrew	definite	<i>et</i>
	indefinite	$-\emptyset$

FIGURE 3 Markedness relations in Turkish and Hebrew DOM. Dark cells indicate marked options, light cells indicate unmarked ones.

The iAMGr DCM pattern violates Aissen's, Comrie's and Croft's generalisations. In Cappadocian and Pharasiot, the *-s* suffix is found on the head nouns of indefinite NPs while the zero suffix occurs with definite NPs. In other words, the overt, morphologically more complex element involved in the morphological distinction employed for the formal implementation of DCM marks the unmarked class of objects while the marked class of objects are zero-marked and therefore morphologically simpler than their semantically unmarked counterparts. See Fig. 4.

	Semantic markedness	Formal markedness
iAMGr	definite	$-\emptyset$
	indefinite	<i>-s</i>

FIGURE 4 Markedness relations in iAMGr DCM. Dark cells indicate marked options, light cells indicate unmarked ones.

This violation casts doubt on any hypothesis that would treat the emergence of DCM in iAMGr as an instance of language-internal change. If this had been the case, the expected implementation would have required forms ending in *-s* to be used for definite NPs and zero-marked forms to be used for indefinite NPs. For instance, with reference to the examples in (15)–(19), we would expect to find *xazná-∅*, *to xazná-s*; *etó to áθropo-s*; *yámo-∅*; *vasiló-∅*; *s' éna batáx tópo-∅*, *so filan son tópo-s*.

The typologically deviant means employed for the expression of DCM in Cappadocian and Pharasiot can be accounted for by comparing the iAMGr pattern with DOM in 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 DCM/DOM and that found in the head nouns of subject NPs in the three languages. In Cappadocian and Pharasiot, head nouns of indefinite NPs

and those of subject NPs appear in the same form, namely, the nominative; compare the examples in (29) and (30). The exact same relation holds in Turkish between the forms of head nouns in non-specific direct object NPs and subject NPs as they both occur in the same, zero-marked form (31).⁹

(29) Phloità Cappadocian (Tsitsopoulos, 1962: 54, 58)

a. direct object NP

jolátsan éna áθropos na to
 send.PST.3PL INDF man.SG.NOM COMP 3SG.ACC
tsjirtíf
 call.PNP.3SG
 ‘They sent out a man for him.’

b. subject NP

etó áθropos ðé=ne xan ta
 PROX.SG man.SG.NOM NEG=COP.PRS.3 SIM DEF.PL.ACC
ála ta aθróp
 other.PL.ACC DEF.PL.ACC man.PL.ACC
 ‘This man is not like other men.’

(30) Pharasiot (Dawkins, 1916: 474, 476)

a. direct object NP

ifen tfe i néka a
 have.PST.3SG and DEF.F.SG.NOM woman(F).SG.NOM INDF
γάρixos
 lover(M).SG.NOM
 ‘And the woman had a lover.’

9 In addition to the dom system, Turkish also has a differential subject marking system, which operates in embedded nominalised clauses, so that specific subjects are marked by the genitive as in (i) whereas non-specific subjects are zero-marked as in (ii):

(i) Turkish (Kornfilt, 2009: 84)

[*köy-ü bir haydut-un bas-tıĝ-in*]-ı *duy-du-m*
 village-ACC INDF robber-GEN raid-FN-3SG-ACC hear-PST-1SG
 ‘I heard that a (certain) robber raided the village.’

(ii) Turkish (Kornfilt, 2009: 84)

[*köy-ü bir haydut bas-tıĝ-in*]-ı *duy-du-m*
 village-ACC INDF robber raid-FN-3SG-ACC hear-PST-1SG
 ‘I heard that a robbers raided the village.’

For detailed analyses of this alternation, which challenges Aissen’s (2003) proposed analysis of dsm as a mirror-image implementation of the principles that govern dom, see Kornfilt (1984, 1997, 2009) and von Heusinger (2005).

b. subject NP

íðen *o* *γάρíxos* *ti*
 see.PST.3SG DEF.M.SG.NOM lover(M).SG.NOM DEF.F.SG.ACC
néka
 woman(F).SG.ACC
 ‘The lover saw the woman.’

(31) Turkish

a. direct object NP

Yasemin-∅ *bir* *anahtar-∅* *kaybet-ti.*
 PN INDF key lose-PST
 ‘Yasemin lost a key.’

b. subject NP

Anahtar-∅ *paspas-ın* *alt-ın-da.*
 key doormat-GEN bottom-POSS.3SG-LOC
 ‘The key is under the doormat.’

DCM in Cappadocian and Phrasiot therefore contrasts sharply with the overwhelming majority of DCM systems attested crosslinguistically precisely because it developed in the model of Turkish DOM.

This conclusion finds additional support in the low probability that genetic inheritance might be responsible for the occurrence of DCM in the two iAMGr dialects. As argued by Karatsareas (2011, 2013), the linguistic innovations that Cappadocian and Phrasiot share do not suggest a strong link of genetic relatedness between the two. There is not enough evidence that the two dialects once formed an independent, linguistically uniform branch within the wider AMGr dialect group, and the occurrence of DCM in both should not be considered as pointing towards such a subgrouping. Rather, the identical Cappadocian and Phrasiot DCM patterns should be viewed as two instances of the same contact-induced development that lack historical value. Consider, in that connection, the caveat expressed by Dawkins: “[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, I argue that the similarity between Cappadocian and Phrasiot DCM 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 Phrasiot 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 and Dixon, 2001: 2, 11–19; Campbell, 2006; Matras, 2009: 265–274; Stolz, 2006; Thomason and Kaufman, 1988: 95–97). Within this micro-area, the two *iAMGr* dialects acquired a novel common trait that they previously did not share and which differentiates them from the other dialects of the same dialect group (Silliot, Pontic, Crimeoazovian).

Heine and Kuteva (2005: 183) distinguish between two possible pathways developments of this kind may follow: one of the two *AMGr* dialects develops *DCM* as a result of contact with Turkish and subsequently serves as the model for the other dialect to undergo the same innovation; or, alternatively, both dialects develop *DCM* independently, but in similar fashions owing to the same original accusative–neutral system and the same Turkish model. Like most instances of areal developments discussed by Heine and Kuteva (2005: 182–218), the available data on *iAMGr* 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 a position to identify Turkish as the model language and Cappadocian and Phrasiot as the replica languages in Heine and Kuteva's terminology.

Regardless of the borrowing pathway, it is clear that the two *iAMGr* dialects replicated the Turkish *DOM* pattern without borrowing any of the linguistic material used for its implementation in Turkish, namely the *-(y)I* suffix that marks specific direct object NPs. Rather, the originally non-differential case marking system of *ModGr* was adapted to the model of Turkish *DOM* using material already available in Greek. We are therefore dealing with a case of pattern replication in the sense of Matras and Sakel (2007) or of selective copying in the sense of Johanson (1999, 2002).

In replicating Turkish *DOM*, Cappadocian and Phrasiot drew upon their existing grammatical resources to establish (a) the referential property that would determine which NPs would be overtly marked and which ones would be left unmarked in the contexts in which *DCM* would be active; and, (b) the formal means for the implementation of the *DCM* pattern. With respect to the former, Turkish specificity was matched with Greek definiteness, which was the most relevant referential property that was already morphosyntactically expressed in the grammatical system of the two *iAMGr* dialects by means of the definite and indefinite articles. The outcome of the matching was that definite and indefinite NPs in Cappadocian and Phrasiot were taken to correspond to specific and non-specific NPs in Turkish, respectively. The novel differential

distinction was subsequently formally realised by matching Turkish zero marking with the Greek nominative by virtue of the fact that they were both used to mark subject NPs in the languages involved, and the Turkish accusative with the Greek accusative by virtue of the fact that both mark the head nouns of direct object NPs. The replication is summarised in Fig. 5.

	Turkish		iAMGr
	SPECIFICITY		DEFINITENESS
Referential property	[+ specific]		[+ definite]
	[- specific]		[- definite]
Formal marking	non-specific \Rightarrow zero-marked (- \emptyset)		indefinite \Rightarrow nominative (-s)
	specific \Rightarrow zero-marked (-(<i>y</i>) <i>t</i>)		definite \Rightarrow accusative (- \emptyset)

FIGURE 5 Pattern replication in iAMGr.

The Cappadocian and Pharasiot data do not allow us to conclude with safety whether DCM applied first to some types of direct object NPs and spread to others at a later stage or whether it applied instantly to all of the syntactic contexts identified in 4.1. A hypothesis, however, can be formulated by examining the very few cases of DCM that are attested in Silliot, the third member of the iAMGr group. In his description of the dialect, Kostakis mentions that “ἀντὶ αἰτιατικῆς, ἀκούγεται κάποτε ὁ τύπος τῆς ὀνομαστικῆς στὴ θέση τοῦ ἀντικειμένου” [“the nominative form is sometimes heard instead of the accusative in the object position”] (1968: 104), providing the example in (32); see also p. 58: “σπάνιες εἶναι οἱ περιπτώσεις ποὺ ὁ τύπος τῆς ὀνομαστικῆς αντικατάστησε καὶ τὴν αἰτιατικὴ” [the cases in which the nominative form has replaced the accusative are rare]).

- (32) Silliot (Kostakis, 1968: 104)
- | | | | |
|-----------|------------|------------|--------------------------|
| <i>na</i> | <i>mas</i> | <i>pis</i> | <i>ajazmós</i> |
| COMP | 1PL.GEN | do.PNP.3SG | sanctification(M).SG.NOM |
- ‘that he performs a sanctification for us’

Nominative marking on *ajazmós* contrasts with accusative marking, which is typical for Silliot across-the-board and in all the relevant syntactic positions in which DCM is operative in Cappadocian and Pharasiot regardless of definiteness. Compare (32) with (33).

- (33) Silliot (Kostakis, 1968: 128)
- | | | | |
|-------------------|-------------|--------------------------|--------------|
| <i>kostadínos</i> | <i>píci</i> | <i>ajazmó</i> | <i>tín</i> |
| PN(M).SG.NOM | do.PST.3SG | sanctification(M).SG.ACC | DEF.F.SG.ACC |
| <i>klifá</i> | <i>mas</i> | | |
| church(F).SG.ACC | 1PL.GEN | | |
- ‘Konstantinos performed a sanctification at our church.’

The phenomenon is clearly marginal in this dialect. Dawkins does not mention it in his 1916 nor are any examples found in the Silliot texts that he documents (1916: 284–304). Kostakis’s is the only relevant mention, no occurrences are found in his texts (1964: 116–130), and he also notes that nominative marking of the type shown in (32) is very rare. It is, however, indicative that (32), which is the only example that he adduces, involves a light verb construction formed with *fiánu* ‘do’; cf. also the Cappadocian light verb construction in (18). As one of the reviewers points out, this type of construction bears semantic similarities with noun incorporation of the Turkish type exemplified in (14e). Crucially, nouns occurring in Turkish incorporating constructions are always zero-marked and can never carry the accusative $-(y)I$ suffix. It can therefore be proposed based on the Silliot data that light verb constructions were the environment in which nominative marking first became possible in iAMGr in the model of Turkish incorporating constructions. Nominative marking was subsequently extended from this low end on the Definiteness Hierarchy to other positions until it reached the indefinite specific NP–definite NP cut-off point. It should be noted in that connection that DCM as seen in positions other than in direct objects and light verb complements (indirect objects, object predicatives, adpositional complements, temporal adjuncts) cannot be considered to be the outcome of replication of Turkish patterns as Turkish does not display any case alternations in these contexts. The spread of the nominative–accusative alternation to these positions should therefore be considered a language-internal development of the iAMGr dialects.

This hypothesis is naturally based on the assumption that Silliot replicated nominative marking in this historically accusative-marked position independently and similarly to the way in which Cappadocian and Pharsiot were argued to have replicated their full-fledged DCM systems. Given the very rare occurrences of nominative marking in the available Silliot data and the most extensive and regular use of the accusative, it would not be parsimonious to hypothesise that, at some earlier point in its history, Silliot developed a DCM system out of an accusative-neutral one and then reverted to an almost regular accusative-neutral system. In any case, it is not extraordinary to propose that

the innovation first concerned only a subset of environments traditionally marked by the accusative in Greek and only later extended to additional syntactic contexts.

Note, however, that the correspondence between (in)definite NPs in Cappadocian and Phrasiot, and (non-)specific NPs in Turkish was not complete as the semantic interpretations of definiteness and specificity do not coincide. As was mentioned in Section 2, while the referents of definite NPs in principle take a specific reading, those of indefinite NPs may be interpreted as either specific or non-specific. Owing to this relation between the two referential properties, accusative marking in Turkish occurs with both definite and indefinite NPs while, in Cappadocian and Phrasiot, accusative marking is only found with definite NPs. Zero marking in Turkish is limited to non-specific indefinite NPs, while, in the two iAMGr dialects, nominative marking is found with all indefinite NPs irrespective of whether they have a specific or non-specific reading. This discrepancy is schematically illustrated in Fig. 6.

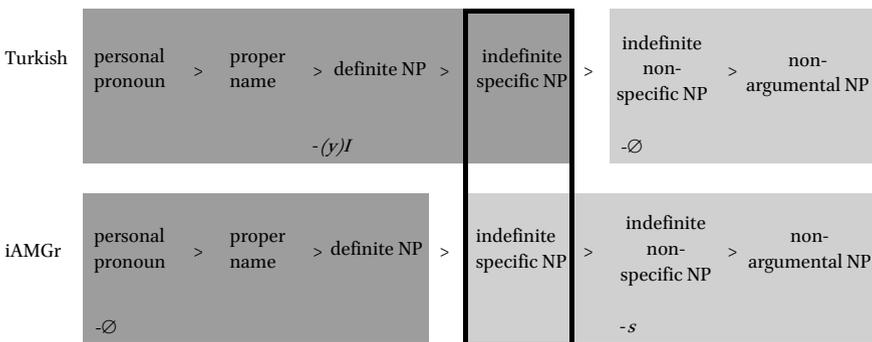


FIGURE 6 Turkish DOM and iAMGr DCM in contrast.

As shown in the figure, however, the difference between the specificity-based DOM pattern of Turkish and the definiteness-based DCM pattern of Cappadocian and Phrasiot is not great and in effect only concerns the marking of specific indefinite NPs.

4.2.1 Cappadocian and Phrasiot DCM, and Pontic DSM: two sides of the same coin?

In Pontic, masculine head nouns of subject NPs are marked by the nominative only when they are preceded by the indefinite article (34a) or when they appear bare; when preceded by the definite article, they are marked by the accusative (34b) (Koutita-Kaimaki, 1977/1978). This, however, does not apply to all masculine nouns but only to those that end in *-os* in the nominative singular; cf. IC₁ nouns in ModGr.

(34) Kerasoúnta Pontic (Lianidis, 2007 [1962]: 142)

- a. *érðen* *énan* *iméran* *énas*
 come.PST.3SG INDF.N.SG.ACC day(F).SG.ACC INDF.M.SG.NOM
kalójeros *su* *plúsionos*
 monk(M).SG.NOM LOC.DEF.M.SG.GEN rich.M.SG.GEN
 ‘One day, a monk came to the rich man’s house.’
- b. *epíjen* *o* *kalójeron* *son*
 go.PST.3SG DEF.M.SG.NOM monk(M).SG.ACC LOC.DEF.M.SG.ACC
áin *táfon*
 holy.M.SG.ACC tomb(M).SG.ACC
 ‘The monk went to the Holy Sepulchre.’

It would therefore appear that Pontic has a Differential Subject Marking (henceforth DSM) system whereby definiteness determines the case marking of at least some nouns found in the subject position in the same way that it determines the case marking of nouns found, among others, in the object position in Cappadocian and Pharasiot.¹⁰ Based on this similarity, Dawkins (1916: 94) drew a parallel between the two phenomena arguing that they constitute reflexes of an early innovative association between case and the expression of definiteness so that the accusative became associated with [+definite]

10 What conditions dsm in Pontic is a matter of debate in the literature. Hatzidakis (1934 [1911/1912]: 276), Tompaidis (1980: 224, 1988: 45–46), and Oikonomidis (1958: 145) have claimed that it is conditioned 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. There are, however, counterexamples such as (i):

- (iii) Pontic (Koutita-Kaimaki, 1977/1978: 282)
epróftasen *eceká* *áⁿjelon* *ce* *ípen* *atón*
 catch_up.PST.3SG DIST angel(M).SG.ACC and tell.PST.3SG 3SG.ACC
 ‘The angel caught up with him and said to him...’

Papadopoulos (1955: 30) has claimed that dsm is determined by the syntactic position of the NPs in which masculine nouns are found. In his view, accusative marking is found in the subject position whereas nominative marking is found in the predicate position. The evidence in (30a), 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 a subset of 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 masculine nouns that end in *-is*, *-as* or *-es* or to feminine nouns. They suggest that we might be dealing with a case of a morphologically restricted, definiteness-based syncretism of the two core cases, nominative and accusative. In support of this proposal, we might add the fact that it is only the

and the nominative with [–definite]. This is postulated to have taken place before the three dialects started to develop idiosyncratically. In a recent study, Spyropoulos (2016) restates this hypothesis and proposes that the common thread that unites Pontic DSM and Cappadocian and Pharasiot DCM can be found in language contact between the AMGr dialects and Turkish either bilaterally or more widely within an Anatolian Sprachbund context, citing Tzitzilis (1989) in that connection.

However, in order for a common origin for the two phenomena to be postulated from a historical point of view, all three AMGr dialects would have to share a (quasi-)identical or at least similar DCM pattern—or reflexes of it—that could be unambiguously identified as such either in accusative- or in nominative-marked contexts, or in both. However, none of these possibilities are consistent with the available data. On the one hand, a DCM pattern similar to that of Cappadocian and Pharasiot cannot be established for Pontic, which is non-differential with respect to typically and historically accusative-marked positions. Like the overwhelming majority of ModGr dialects, Pontic uniformly marks the head nouns of NPs found in such positions with the accusative (Drettas, 1997; Papadopoulos, 1955: 159–160). On the other hand, the Cappadocian and Pharasiot data do not provide evidence of a DSM pattern. There do exist a small number of examples in which accusative-like forms are found in subject position in Cappadocian. In (35a), *koikonó* is formally identical with the accusative singular form; similarly, in (35a), *vafikó* looks like an accusative singular. However, if we compare (35a) with (35b), we can see that definiteness plays no role in conditioning the form of the head noun of the subject NP and can infer that, in cases such as this, we are probably dealing with some type of morphological change that has shifted *koikonos* from the IC of historical masculine nouns ending in *-os* to the IC of historical neuter nouns ending in *-o*, which do not distinguish formally between the nominative and the accusative. The comparison of (36a) with (36b) shows that the seemingly accusative form *vafikó* is probably the result of a phonological process of cluster simplification (*vafikós + mas* → *vafikó mas*; see also Spyropoulos and Tiliopoulou, 2006: 372). For the analysis of a few more types of examples such as (35a) and (36a), see Karatsareas (2011: 110–115).

masculine head nouns of subject NPs that appear in the accusative form in definite contexts while other nominal elements (definite articles, modifying adjectives and pronouns) appear in the nominative form, as expected; compare, for example, accusative marking on *kalójeron* in (30b) but nominative marking on the definite article *o*. For a rather different approach, see Drettas (1999).

(35) Axó Cappadocian (Dawkins, 1916: 400, 402)

- a. *cíton* *éna* *koikonó* *c*
 be.PST.IMPV.3SG INDF cockerel.SG.NOM and
éksen *pýjen*
 go_out.PST.3SG go.PST.3SG
 ‘There was a cockerel, and it went out and away.’
- b. *ksévalen* *to* *koikonó* *to*
 put_down.PST.3SG DEF.SG.NOM cockerel.SG.NOM DEF.SG.NOM
líko
 wolf.SG.ACC
 ‘The cockerel put down the wolf.’

(36) Phloïtá Cappadocian (Tsitsopoulos, 1962: 79, 80)

- a. *krev* *se* *vafiló* *mas* *na* *se*
 look_for.PRS.3SG 2SG.ACC king.SG.NOM 1PL.GEN COMP 2SG.ACC
ðiciðí
 marry.PNP.3SG
 ‘Our king is looking for you to marry you.’
- b. *vafilós* *pále* *tjǰirtá* *to* *peðí*
 king.SG.NOM again call.PRS.3SG def.SG.ACC boy.SG.ACC
 ‘The king calls for the boy again.’

In short and on the basis of the above, I argue that, despite their apparent similarities, a connection between Cappadocian and Pharasiot DCM and Pontic DSM cannot be supported by concrete evidence. The two should therefore be treated as independently-motivated and unrelated developments.

4.3 *Preservation and Loss*

In Pharasiot, the application of DCM is exceptionless and is preserved in the dialect to the present day. In Cappadocian, on the contrary, a non-negligible number of instances are found in which the case alternation pattern described in the previous sections is not adhered to. These specifically involve definite NPs that are marked by the nominative and not by the accusative as would be expected given the fact that they appear in one of the syntactic positions in which DCM is operative. Examples of such deviant marking are found with both animate and inanimate nouns in all Cappadocian varieties. See (37).

- (37) a. Ghúrzono Cappadocian (Dawkins, 1916: 344)
os to perpénifce qarfulátfe
 while 3SG.ACC bring.PST.IPFV.3SG meet.PST.3SG
to kléftfis
 DEF.SG.ACC robber.SG.NOM
 ‘While he was bringing her, he met the robber.’
- b. Mistí Cappadocian (Kostakis, 1959: 82)
vovóntan na pan
 be_afraid.PST.IPFV.3PL COMP go.PRS.3PL
su mílus
 LOC.DEF.SG.ACC mill.SG.NOM
 ‘They were afraid to go to the mill.’
- c. Ferték Cappadocian (Dawkins, 1916: 330)
ta spítça írtan pál
 DEF.PL.NOM house.PL.NOM come.PST.3PL again
so tópos it
 LOC.DEF.SG.ACC place.SG.NOM 3.GEN
 ‘The houses came to their place again.’
- d. Ulaghátsh Cappadocian (Dawkins, 1916: 376)
na po yo épe
 FUT go.PRS.1SG 1SG.NOM say.PST.3SG
ta do çerífos it
 3PL.ACC DEF.SG.ACC man.SG.NOM 3.GEN
 ‘“I will go”, she said to her husband.’

I propose that the unexpected occurrence of nominative-looking forms in accusative environments such as the definite direct object NP in (37a), the definite adpositional complement NPs in (37b) and (37c), and the definite indirect object NP in (37d) can be understood when examined in conjunction with a morphological innovation that affected the inflection of nouns in Cappadocian and which is generally referred to in the literature as agglutinative inflection (Horrocks, 2010: 403–404; Janse, 2001: 475–476, 2004: 9–12, 2009: 41, 2019; Johanson, 2002: 59–60; Matras, 2009: 262–263, 2010: 75–76; Melissaropoulou, 2013: 321–327; Ralli, 2009: 99–102; Thomason and Kaufman, 1988: 219; Winford, 2003: 83, 2005: 405, 2010: 181).

In my recent analysis of the development of agglutinative inflection in Cappadocian (Karatsareas, 2011, 2016), I compare the variable inflection of nouns such as Sílata Cappadocian *mílos* ‘mill’ and Araván Cappadocian *áropos* ‘man’ with that of *spit* ‘house’ (38), (39). From a historical point of view, *mílos* and *áropos* belong to IC₁; *spit* belongs to IC₆ (see Table 1). Unlike *spit*, whose inflection is stable and does not show variation, *mílos* and *áropos* exhibit two inflectional paradigms: one inherited one that follows IC₁ (38a), (39a) and one innovative one that follows IC₆ (38b), (39b). On the basis of this evidence, I have argued that the Cappadocian innovation is best described in terms of a generalised inflectional class shift of nouns from their inherited ICs to IC₆.

(38) Sílata Cappadocian (Dawkins, 1916: 98)

	a. IC ₁ , inherited	b. IC ₁ , innovative	c. IC ₆
SG NOM	<i>mílo-s</i> ‘mill’	<i>mílos-∅</i> ‘mill’	<i>spit-∅</i> ‘house’
ACC	<i>mílo-∅</i>	<i>mílos-∅</i>	<i>spit-∅</i>
GEN	—	<i>mílos-ju</i>	<i>spit-ju</i>
PL NOM/ACC	<i>míl-us</i> ¹¹	<i>mílos-ja</i>	<i>spít-ja</i>

(39) Araván Cappadocian (Dawkins, 1916: 104)

	a. IC ₁ , inherited	b. IC ₁ , innovative	c. IC ₆
SG NOM	<i>áropo-s</i> ‘man’	<i>áropos-∅</i> ‘man’	<i>spit-∅</i> ‘house’
ACC	<i>áropo-(na)</i> ¹²	<i>áropos-∅</i>	<i>spit-∅</i>
GEN	<i>aróp-(u)</i>	<i>áropos-ju</i>	<i>spit-ju</i>
PL NOM/ACC	<i>aróp-(i)</i>	<i>áropos-ja</i>	<i>spít-ja</i>

Nouns of all ICs underwent the inflectional class shift. Examples include IC₃ *papás* ‘priest’, IC₄ *néka* ‘woman’, IC₅ *kfístro* ‘scraper’, IC₇ *púma* ‘cover’. In all cases, the shift involved the reanalysis of the inherited, often bimorphemic, nominative singular form as a monomorphemic base to which inflection subsequently applied by the suffixation of the zero suffix in the nominative/accusative singular, *-ju* in the genitive singular and *-ja* in the nominative/

11 In Cappadocian, inanimate IC₁ nouns form the nominative/accusative plural by means of the suffix *-us*.

12 In Araván, the accusative singular of IC₁ nouns may be extended by the suffix *-na* (Dawkins, 1916: 104). See also Kim (2008).

accusative plural (*áropo-s* 'NOM.SG' > *áropos-* : *áropos-Ø* 'NOM/ACC.SG', *áropos-iu* 'GEN.SG', *áropos-ia* 'NOM/ACC.PL').

The shift, however, affected different types of nouns differently with respect to their ability to morphologically distinguish between the nominative and the accusative. As mentioned in Sections 3 and 4.1, nouns belonging to historically feminine and neuter ICs had already lost this ability before the shift was set in motion. In contrast, nouns that belonged to the historically masculine ICs (1, 2, 3) moved from classes in which the two cases were expressed by two distinct forms (IC₁ *áθropo-s* 'NOM.SG', *áθropo-Ø* 'ACC.SG'; IC₂ *dervífi-s* 'NOM.SG', *dervífi-Ø* 'ACC.SG'; IC₃ *papá-s* 'NOM.SG', *papá-Ø* 'ACC.SG') to a class that uses only one syncretic form to express both, due to the fact that it is historically associated with the neuter gender. The impact this had on DCM can be illustrated by examples such as (40). In (40a), the head noun of the definite direct object NP is marked by the accusative, as expected. In this case, *patifáxos* retains its inherited IC₁ inflection; cf. (38a), (39a). In (40b), though, we find the historical nominative form, which evidences that the noun is undergoing shift to IC₆ thus bleeding the application of the DCM pattern; cf. (38b), (39b).

(40) Araván Cappadocian (Fosteris, 1962: 162)

- | | | | | |
|----|--------------------------------------|-------------------|-----------------|------------|
| a. | <i>na</i> | <i>ítun</i> | <i>yusméf</i> | <i>na</i> |
| | COMP | COP.PST.3SG | fate.SG.NOM | COMP |
| | <i>pérnifka</i> | <i>to</i> | <i>patifáxo</i> | |
| | take.PST.IPFV.1SG | DEF.SG.ACC | king.SG.ACC | |
| | 'If only I got married to the king.' | | | |
| b. | <i>as</i> | <i>pérnifka</i> | <i>c'</i> | <i>eyó</i> |
| | MOD | take.PST.IPFV.1SG | and | 1SG.NOM |
| | <i>to</i> | <i>patifáxos</i> | | |
| | DEF.SG.ACC | king.SG.NOM | | |
| | 'If I got married to the king, too.' | | | |

Araván Cappadocian *patifáxos* retains the ability to formally realise the DCM pattern as its shift to IC₆ is not yet complete. Phloitá Cappadocian *xorós* 'dance', on the other hand, which also belonged historically to IC₁, has completed the shift. As shown in (41), the same, historically nominative singular form is found in nominative contexts (41a) and in both definite and indefinite accusative contexts (41b, c) while the plural is formed by the suffixation of *-ia* (41d), cf.

5 Conclusions

In this article, I provided a synchronic analysis of Cappadocian and Phrasiot DCM as well as a diachronic account of its development in the two iAMGR dialects. My synchronic analysis showed that DCM is determined by definiteness, thus supporting Dawkins's (1916) and Janse's (2004) proposals and challenging Spyropoulos and Tiliopoulou's (2006) proposal, according to which DCM in iAMGR is determined by the referential property of specificity. The analysis also showed the formal implementation of Cappadocian and Phrasiot DCM to be improbable from a typological point of view. I argued this to be evidenced by the occurrence of the suffix *-s*, an overt marker that alternates with zero in expressing the morphological distinction between nominative and accusative that DCM employs. In the two iAMGR dialects, *-s* is found not on the head nouns of definite NPs—the marked class of objects—but on those of indefinite NPs—the unmarked class of objects—, thus violating robust crosslinguistic tendencies previously identified by a number of scholars.

My diachronic analysis drew on these findings. Considering in combination the typological improbability of the Cappadocian and Phrasiot DCM pattern, the weak genetic link between the two dialects that excludes the possibility of its being an innovation shared by both on account of descent, and its similarity to Turkish DOM, I refined Dawkins's and Janse's earlier analyses on the origin of iAMGR DCM. I claimed that it developed as a result of contact with Turkish within a single linguistic micro-area in which all three languages were contiguously spoken. I argued that Cappadocian and Phrasiot adapted the originally non-differential case marking system of ModGr into a differential one by replicating the Turkish model by (a) matching the referential property of specificity with that of definiteness; and, (b) adopting the use of the nominative for the unmarked set of objects and the use of the accusative for the marked set of objects (non-specific \Rightarrow zero-marked \parallel indefinite \Rightarrow nominative; specific \Rightarrow accusative \parallel definite \Rightarrow accusative). I subsequently focused on a set of Cappadocian data in which the replicated DCM pattern is not adhered to. I proposed that the apparent violations are due to the fact that the morphological material used for the expression of DCM was affected by a morphological change whereby historical masculine nouns that preserved the ability to distinguish between the nominative and accusative shifted to a historical neuter IC that did not distinguish between the two cases. As a result, the morphological distinction upon which DCM was based was lost. DCM was therefore short-lived in Cappadocian but survived in Phrasiot, whose nouns did not undergo the IC shifts that Cappadocian nouns did.

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