Differential Argument Marking in Asia Minor Greek: Abstract and morphological case in nominative–accusative systems with Differential Case Marking

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1. Introduction

**Topic:** Differential Case Marking phenomena in Asia Minor Greek: In certain environments the subject/object appears in a case different from that imposed by its syntactic function:

(1) *Differential Subject Marking in Pontic Greek*¹
a. erθen enas kalɔyeros
   come-PST.3SG a monk₉-SG.NOM
   ‘A monk came’

b. epiyan o kalɔyeron (instead of kalοyeros)
   go-PST.3SG the₉ monk₉-SG.ACC
   ‘The monk went’
(2) **Differential Object Marking in Cappadocian Greek**

a. *ama tranį3ne to liko*
   
   *when see-*3PL *the wolf-SG.ACC*
   
   ‘as soon as they see the wolf’  
   
   (Axos; Dawkins 1916: 396)

b. *ivren ena likos* (instead of *liko*)
   
   *find-PST.3SG a wolf-SG.NOM*
   
   ‘He found a wolf’  
   
   (Axos; Dawkins 1916: 402)
Facts

- Pontic Greek and Cappadocian Greek have a nominative – accusative case system
- In both dialects the nominative is expressed by means of an overt suffix, while the accusative in the singular is the morphological default
- In Pontic Greek, when the DP-subject has a definite article the N head appears in the accusative form, instead of the expected nominative (Differential Subject Marking)
- In Cappadocian Greek, when the object is indefinite it appears in the nominative form, instead of the expected accusative (Differential Object Marking)
- These phenomena appear only in the singular
- Differentiation does not involve a retreat to zero case exponent
  - in Pontic Greek the alternation is between two overt case forms: /-s/ for nominative, /-n/ for accusative
  - in Cappadocian Greek it is the differentiating case form that has overt exponent
Claims

✓ These phenomena are instantiations of a generalized Differential Argument (Case-)Marking situation in Asia Minor Greek
✓ They are morphological in nature and they derive from postsyntactic impoverishment rules at Morphological Structure, which affect the constitution of the case node of the N head and determine its exponence
✓ These rules are triggered by the [+definite] specification of the D head of the relevant DP-argument
2. Background I: Asia Minor Greek

✓ A branch of Greek which includes the Greek varieties spoken by the indigenous Greek population of Asia Minor until the population exchange that took place after the Greek-Turkish war in the 1920s (Dawkins 1910, 1916)
✓ It covers various dialectal groups and stray varieties, the most salient of which are Pontic, Cappadocian, Pharasa, Silli, Livisi, etc.
✓ These dialects and varieties have developed in isolated areas and independently from the rest of the Greek-speaking world since the Selçuk invasion in the late 11th century AD and the collapse of Byzantine rule after the fall of Constantinople to the crusaders (1204 AD) and mostly after the 15th century AD, i.e. during the Ottoman period (Anastasiadis 1976; Horrocks 2010; Karatsareas 2011; Janse in press).
✓ Inevitably, the long-term language contact with Turkish profoundly affected the AMG dialects and varieties so that they exhibit interference at all grammatical levels to a bigger or lesser extent, depending on historical and sociolinguistic factors (Dawkins 1910, 1916; Janse 2002, 2009, in press; see also Thomason & Kaufman 1988; Johanson 2002).
Map from Dawkins (1916) with the distribution of Asia Minor Greek dialects
3. Background II: Differential Argument Marking (DAM) for case


DAM in terms of case: the subject/object appears in a different case from the expected one depending on various factors
✓ functional: typicality of subject defined in terms of hierarchies (Comrie 1989, Aissen 2003)
✓ clausal features: tense/aspect/mood of the verb, clause type (Kornfilt 2008)
✓ markedness restrictions (Woolford 2008)
Differentiation is normally obtained by means of the alternation: overt case exponent vs. absence of case exponent.

Hypothesis: The argument that carries no case exponent is not assigned (syntactic, abstract) case.

(3) Hindi (examples from de Hoop & Narashiman 2008: 64)
   a. raam=ne patthar=ko / patthar-∅ toD|-aa
      Raam=ERG stone=ACC / stone-NOM break-PFV.SG.M
      ‘Raam broke the / a stone’
   b. raam=∅ patthar=ko / patthar-∅ toD|-taa hae
      Raam=NOM stone=ACC / stone-NOM break-IPFV.SG.M be.PRS.3SG
      ‘Raam breaks the / a stone’

But, Keine & Müller (2008) explore DAM instances, which involve an alternation between different overt case exponents
✓ DAM derives from impoverishment which deprives the subject/object from certain case properties and results in marking by a less specific morphological exponent
3.1. Typology of DAM

I. DAM is regulated by the properties of a ‘typical’ subject/object (Comrie 1989, Aissen 2003)

✓ A typical subject/object is expected not to have case (exponents), whereas a non-typical subject/object is expected to have the relevant case (exponent)
✓ Typicality is defined in terms of different scales/hierarchies, usually for animacy and definiteness

(4) Hale/Silverstein Hierarchies (Hale 1972, Silverstein 1976)

a. Grammatical Function Hierarchy
   Subject > Object

b. Person/Animacy Hierarchy
   1PL > 1SG > 2PL > 2SG > 3HUMAN.SG > 3ANIMATE.PL > 3ANIMATE.SG > 3INANIMATE.SG > 3INANIMATE.PL

c. Definiteness Hierarchy
   Pronoun > Proper Name > Definite > Indefinite Specific > NonSpecific
(5) Aissen’s Harmonic Alignment for Grammatical Function and Definiteness
   a. Subject/Pronoun > Subject/Proper Name > Subject/Definite > Subject/Indefinite Specific > Subject/NonSpecific
   b. Object/NonSpecific > Object/Indefinite Specific > Object/Definite > Object/Proper Name > Object/Pronoun

Properties:

- **Distinctiveness**: A subject carries case (exponents) so that it is distinguished from objects and vice versa
- **Iconicity**: A marked subject/object (i.e. non-typical) is the one that has case (exponents)
- **Differential Subject Marking (DSM)** is the mirror image of Differential Object Marking (DOM)
II. DAM is tied to a specific property of the subject/object (de Hoop & Narasinham 2005, 2008 on Hindi; Kornfilt 2008 on Turkish)

✓ Typical subjects/objects or subjects/objects carrying a certain property (e.g. definiteness, animacy, agency, volitionality, etc.) are the ones which are overtly case marked
✓ The inverse situation from I
(6) DOM in Turkish
   a. Zeynep-∅ adan-1 gör-dü
      Zeynep-NOM man-ACC see-PST
      ‘Zeynep saw the man’
   b. Zeynep-∅ bir adan-∅ gör-dü
      Zeynep-NOM a man see-PST
      ‘Zeynep saw a man’
   c. Zeynep-∅ bir adan-1 gör-dü
      Zeynep-NOM a man-ACC see-PST
      ‘Zeynep saw a certain man’
(7) DSM in Turkish

a. arı-nın  çocuk-u  sok-tuğ-un-u  duy-du-m
   bee-GEN  child-ACC  sting-NM.EM-3SG-ACC  hear-PST-1SG
   ‘I heard that the bee stung the child’

b. çocuk-u  arı-∅  sok-tuğ-un-u  duy-du-m
   child-ACC  bee  sting-NM.EM-3SG-ACC  hear-PST-1SG
   ‘I heard that bees stung the child’

c. çocuk-u  bir arı-∅  sok-tuğ-un-u  duy-du-m
   child-ACC  a  bee  sting-NM.EM-3SG-ACC  listen-PST-1SG
   ‘I heard that a bee stung the child’

d. çocuk-u  bir arı-nın  sok-tuğ-un-u  duy-du-m
   child-ACC  a  bee-GEN  sting-NM.EM-3SG-ACC  listen-PST-1SG
   ‘I heard that a (certain) bee stung the child’
III. DAM as a syntactic or morphological effect (Woolford 2008, Kornfilt 2008)

✓ Morphological conditions (well-formedness, restrictions on marked combination of features) block or force case marking on the subject/object
✓ Syntactic structure and/or operations condition the assignment of case on the subject/object
3.2. Some notes on DSM

- DSM is crosslinguistically less consistent (Woolford 2001, de Hoop & Malchukov 2007, de Hoop & de Swart 2008, Malchukov & de Swart 2009)

- DSM case studies are mainly documented by ergative languages

- DSM is hardly found in nominative – accusative languages and more specifically in the nominative – accusative case alternation axis:
  - the case of subject, i.e. nominative, is usually the unmarked (or less specific) case form and it cannot impoverish further so as to derive a differentiated less marked/specific form

- DSM could be found in nominative – accusative systems, in which nominative is morphologically the marked/more specific form (marked nominative systems: König 2008, 2009)

- Pontic Greek: DSM in a nominative – accusative system with morphologically marked nominative
4. DSM in Pontic Greek

Pontic Greek:

- nominative – accusative case system
- DP-subjects are marked with nominative irrespective of the construction (transitive, unaccusative, unergative) and the theta-role they realize
- definite DPs are marked with the definite article

In certain varieties of Pontic Greek (Kerasunda, Kotiora, Trapezunda, Ophis, Surmena and Chaldia):

- in the presence of the definite article the N head of the DP-subject appears in the accusative case
- in indefinite DP-subjects and bare subjects the N head appears in the nominative
- the phenomenon appears only in the singular and with a specific class of nouns, namely masculine nouns of the -o class.
(8) a. epiγen  o  kaloyeron  
go-PST.3SG  theM  monkM-SG.ACC  
‘The monk went’

b. erθen  enas  kaloyeros  
come-PST.3SG  a  monkM-SG.NOM  
‘A monk came...’

c. o  aδelfon  entoken  aton  
theM  brotherM-SG.ACC  hit-PST.3SG  CL3-M.SG.ACC  
‘The brother hit him...’

d. enas  rðakos  eskotosen  aton  
a  dragonM-SG.NOM  kill-PST.3SG  CL3-M.SG.ACC  
‘A dragon killed him...’
(9) a. epiγen o òdespotis
go-PST.3SG theₘ bishopₘ-SG.NOM
‘The bishop went’

b. erθen enas òdespotis
come-PST.3SG a bishopₘ-SG.NOM
‘A bishop came’

c. o vasileas entoken aton
theₘ kingₘ-SG.NOM hit-PST.3SG CL3-M.SG.ACC
‘The king hit him…’

d. enas vasileas eskotosen aton
a kingₘ-SG.NOM kill-PST.3SG CL3-M.SG.ACC
‘A king killed him…’
(10) a. epiɣen i kari
    go-PST.3SG the\textsubscript{F} woman\textsubscript{F}-SG.NOM
    ‘The woman went’

b. erθen enas kari
    come-PST.3SG a woman\textsubscript{F}-SG.NOM
    ‘A woman came’

c. i yineka entoken aton…
    the\textsubscript{F} woman\textsubscript{F}-SG.NOM hit-PST.3SG CL3-M.SG.ACC
    ‘The woman hit him…’

d. enas yineka eskotosen aton
    a woman\textsubscript{F}-SG.NOM kill-PST.3SG CL3-M.SG.ACC
    ‘A woman killed him…’
The trigger of DSM: definiteness

✓ DSM applies only on definite DPs which contain a definite article
✓ DSM does not apply on personal pronouns and deictic pronouns and determiners, which are by definition definite and higher in the hierarchy than definite DPs

(11)  a. epiyen atos / *aton
      go- PST.3SG PR3-M.SG.NOM / PR3-M.SG.ACC
      ‘He/this one went...’

      b. ekinos / *ekinon eskotosen aton
      that-M.SG.NOM / that-M.SG.ACC kill-PST.3SG CL3-M.SG.ACC
      ‘That one killed him...’
Pontic DSM is not defined in terms of a ‘typical’ subject referring to the definiteness hierarchy

(12)  *Definiteness hierarchy* (Hale 1972, Silverstein 1976)

- Pronoun > Proper Name > Definite > Indefinite Specific > Non Specific

*DSM   DSM   DSM   *DSM   *DSM

Pontic DSM does not apply on functional elements that are inherently specified as [+definite] and realize the relevant features of the D head.
The case properties of the differentiated subject

(13) erøen [DP o kalon
come-PST.3SG the_{M-SG}.NOM good-M.SG.ACC
o aθropon]
the_{M-SG}.NOM man_{M-SG}.ACC
‘The good man came’

✓ The N head and its adjectival modifiers appear in accusative
✓ The definite article appears in the nominative
✓ all occurrences of the definite article are in nominative (Pontic Greek has obligatory polydefiniteness or definiteness agreement)

☞ The whole DP-subject is case marked for nominative. More evidence:
Pontic Greek exhibits case concord within the DP. All elements of the DP are case marked with the case relevant to the grammatical function of the DP. However, in differentiated DP-subjects a deictic determiner appears in nominative, although the N head of the DP-subject is in accusative
(14)  

a. erθen  autos  o  aθropon  
come-PST.3SG  this-M.SG.NOM  the_{M}-SG.NOM  man_{M}-SG.ACC  

a’. *erθen  auton  o  aθropon...  
come-PST.3SG  this-M.SG.ACC  the_{M}-SG.NOM  man_{M}-SG.ACC  
‘This man came...’  

b. ekinos  o  aθropon  entoken  
that-M.SG.NOM  the_{M}-SG.NOM  man_{M}-SG.ACC  hit-PST.3SG  
aton  CL3-M.SG.ACC  

b’. *ekinon  o  aθropon  entoken  
that-M.SG.ACC  the_{M}-SG.NOM  man_{M}-SG.ACC  hit-PST.3SG  
aton  CL3-M.SG.ACC  
‘That man hit him’
In Pontic Greek the nominal and adjectival predicates as well as the predicative modifiers always agree in case with the DP they modify. When they modify a differentiated DP-subject, they appear in nominative, although the N head of the DP-subject is in the accusative:
(15)  

(a) o ḷjon transos entone  
the<sub>M</sub>-SG.NOM son<sub>M</sub>-SG.ACC big-M.SG.NOM become-PST.3SG  
‘The son grew big’

(b) autos o aθropon kalos en  
this-M.SG.NOM the<sub>M</sub>-SG.NOM man<sub>M</sub>-SG.ACC good-M.SG.NOM is  
‘This man is good’

(c) atos kalos aθropos en  
PR3-M.SG.NOM good-M.SG.NOM man<sub>M</sub>-SG.NOM be-3SG  
‘He is a good man’

(d) autos o ḷeskalon  
this-M.SG.NOM the<sub>M</sub>-SG.NOM teacher<sub>M</sub>-SG.ACC kalos aθropos en  
good-M.SG.NOM man<sub>M</sub>-SG.NOM be-3SG  
‘This teacher is a good man’
Interim summary

- Pontic DSM is triggered by definiteness but it does not refer to the definiteness hierarchy; it rather refers to the feature itself.

- It is a DP-internal phenomenon, in the sense that it applies only to the lexical items of the DP and it does not affect the case properties of the whole DP.

- It is morphologically conditioned: it applies only in the singular number of a certain inflectional class of masculine nouns and adjectives.

- The differentiated subject is assigned the expected abstract case for subject (i.e. nominative) which however surfaces in a different case form (i.e. accusative).

- This case form, i.e. the accusative, involves an overt exponent too and it is the unmarked case form.
4.1. Noun inflection of Pontic Greek involves marked-nominative subsystems

(16a) Pontic Greek noun declension (a relevant fragment of it; abstracting away from dialectal and lexical variation and heteroclisis)

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| ‘teacher’  | ‘dance’       | ‘cook’     | ‘cajoler’      | ‘thief’         | ‘month’          |

University of Geneva | Abstract and morphological case in nominative – accusative systems with DAM
### (16b)

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Patterns:  
- 'daughter’  ‘pound’  ‘victory’  ‘wood’  ‘child’  ‘mouth’  ‘sewing’
Notes

Masculine nouns, singular:
✓ the nominative is expressed by the exponent /-s/, which has more specific distribution than the exponent /-n/ of the accusative
✓ /-n/ is the case default for singular: it expresses the accusative in masculine and feminine nouns, as well as both the nominative and the accusative in neuter nouns

劳务派遣 the nominative form is more marked than the accusative form

Feminine nouns, singular
✓ the nominative form is expressed by the elsewhere zero exponent -∅

劳务派遣 the nominative is the unmarked form
4.2. Pontic DSM as a morphological effect

✓ Syntactically, DP-subjects are always marked with nominative
✓ When the D head is specified as [+def] it triggers DSM in all lexical elements inside the DP
✓ Functional elements that are inherently specified as [+definite] are not affected, perhaps because they merge with a D head in order to satisfy its requirements.
✓ The noun surfaces in an accusative form, which is a less specific form in singular

Pontic DSM is the effect of certain operations that take place at the Morphological Structure (MS) after Spell-Out and regulate the insertion of case exponents in the case terminal nodes of the lexical items

These operations have the effect of blocking the insertion of the expected nominative exponent in favour of the less specified one (accusative)
The elements of the analysis


✓ Alternation between two overt case forms for the same grammatical function → certain properties of the case terminal node are affected


✓ Case terminal nodes are decomposed in features, and case exponents refer to these features
(17) Case features
   ▪ [±oblique]: [+oblique] is assigned to the oblique arguments of verbs and to the complements of nouns (McFadden 2004).
   ▪ [±inferior]: [+inferior] is assigned to an argument in the presence of a local case competitor (McFadden 2004, Bobaljik 2008a).⁷

(18) Case terminal nodes
   nominative: [..., –oblique, –inferior]
   accusative: [..., –oblique, +inferior]
The relevant /-s/ and /-n/ exponents differ only in that /-s/ is additionally specified as [–inferior]

(19) *The relevant exponents*

/-s/ ↔ [–plural, ..., –inferior]
/-n/ ↔ [–plural, ...,]

DSM is the result of an impoverishment rule which removes the [–inferior] feature specification from the nominative case node

- it blocks the insertion of /-s/
- it allows the insertion of the less specified exponent /-n/
(20) **DSM-triggering impoverishment rule**
\[-\text{inferior}] \rightarrow \emptyset / [\text{DP} [D +\text{def}] [N/A[-\text{o class} –\text{plural, –oblique, ___ }]]

(21) **The derivation of the differentiated subject**

MS representation after Spell-Out:
[ D[+\text{def} | –\text{pl, –obl, –inf}]] [ rõak-o-[–\text{pl, –obl, –inf}]]

Impoverishment:
[ D[+\text{def} | –\text{pl, –obl, –inf}]] [ rõak-o-[–\text{pl, –obl}]]

\[\downarrow\] o [ rõak-o-\text{n}]

\[\rightarrow\] o rõak-o-n ‘the dragon-SG.ACC’
Predicted facts

- Pontic Greek lacks DOM:
  - /-s/ is specified as [-inferior]
  - It is incompatible with the accusative terminal node specification, which includes the [+inferior] specification
  - No rule can provide the appropriate environment for its insertion

- DSM does not apply in feminine nouns of the -a/i/e class
  - The nominative singular in these nouns is expressed by the zero exponent -∅
  - The nominative singular terminal node is radically impoverished for case (and possibly number) (a case of metasyncretism, see Harley 2008)
  - /-n/ cannot be inserted because it is more specified than the terminal node
5. DOM in Cappadocian Greek

The varieties that make a distinction between nominative and accusative in the singular, exhibit Differential Object Marking, in the sense that indefinite and incorporating objects appear in nominative, instead of the expected accusative (Dawkins 1916, Janse 2004, Spyropoulos & Tiliopoulou 2006, Spyropoulos & Kakarikos 2009, 2011, Karatsareas 2011)

(22) a.  истерα πικαν γάμος (instead of γάμο)
   afterwards make-PST.3PL marriage-SG.NOM
   ‘After that, they got married’ (Potamia; Dawkins 1916: 456)

   b.  μεγά λόγος μης λόγες (instead of λόγο)
   big word-SG.NOM NEG say-2SG
   ‘Don’t say big words’
   (Axos; Mavroxalyvidis & Kesisoglou 1960: 172)
(23)  

a. ἔκεκε ἐνα λᾶγος (instead of λαγός)
   hit-PST.3SG a hare-SG.NOM
   ‘He hit a hare’ (Delmesos; Dawkins 1916: 94)

b. xτινυ ἀὖθρα μῖλος (instead of μῖλος)
   build-3PL now mill-SG.NOM
   ‘They are now building a mill’ (Misti; Dawkins 1916: 94)

c. ἄνα κλέφτισ (instead of κλέφτι)
   catch-PST.1SG a thief-SG.NOM
   ‘I caught a thief’ (Axos; Mavroxalvyvidis & Kesisoglou 1960: 169)
d. to ūklī feri s ta provata likos the dog-SG.NOM bring-3SG to the sheep-PL.ACC wolf-SG.NOM (instead of liko) ‘The dog brings a wolf to the sheep’ (Axos; Mavroxalvaidis & Kesisoglou 1960: 180)

e. iferen paltadʒis (instead of paltadzi) bring-PST.3SG wood-cutter-SG.NOM ‘He brought a wood-cutter’ (Delmesos; Dawkins 1916: 312)
The differentiated object appears in a more marked case form
- nominative is expressed by the exponent /-s/
- accusative is expressed by the elsewhere exponent -∅
- the exponent /-n/ does not exist in Cappadocian Greek

Cappadocian Greek has also a marked-nominative case system

Definiteness is associated with the accusative form, which is the less specific form

(24)  Case terminal nodes
nominative: [..., –oblique, –inferior]
accusative: [..., –oblique, +inferior]

(25)  The relevant formatives
/-s/  ↔  [–plural, ..., –oblique]
/-∅/  ↔  elsewhere
DOM is the result of impoverishment, which removes the [-oblique] feature specification from the accusative case node

- it blocks the insertion of the /-s/ exponent
- the exponent /-n/ does not exist in Cappadocian Greek
- the elsewhere exponent -∅ is the only exponent that can be inserted under this node

(26)  \( DOM\text{-triggering impoverishment rule} \)
\[ [-\text{oblique}] \rightarrow \emptyset / [\text{DP} \ [\text{D} +\text{def}] [\text{N} -\text{plural, } +\text{inferior}, \text{___} ] \]
(27) The derivation of the indefinite object

MS representation after Spell-Out:
\[
[D\![-\text{def}]] \left[ \text{layo}\![-\text{pl}, -\text{obl}, +\text{inf}] \right]
\]
\[
\uparrow \quad \downarrow \quad \uparrow \quad \downarrow
\]
\[
\text{ena} \quad \text{layo-} \quad -\text{s}
\]
\[
\Rightarrow \text{ena layo-s ‘a hare-SG.NOM’}
\]

(28) The derivation of the definite object

MS representation after Spell-Out:
\[
[D\! [+\text{def}]] \left[ \text{layo}\![-\text{pl}, -\text{obl}, +\text{inf}] \right]
\]

Impoverishment:
\[
[D\! [+\text{def}]] \left[ \text{layo}\![-\text{pl}, +\text{inf}] \right]
\]
\[
\uparrow \quad \downarrow \quad \uparrow \quad \downarrow
\]
\[
\text{to} \quad \text{layo-} \quad -\emptyset
\]
\[
\Rightarrow \text{to layo ‘the hare-SG.ACC’}
\]
Predicted fact: Cappadocian Greek does not have DSM

(29)  a. na par ke sas to ójavolos
SUBJ take-3SG and you the devil-NOM
‘May the devil take you!’ (Delmesos; Dawkins 1916: 316)

b. eljos mavrosen to prosopo
sun-SG.NOM blacken-PST.3SG the face-SG.ACC
‘The sun blackened my face’ (Delmesos; Dawkins 1916: 312)

The DOM-triggering impoverishment rule cannot apply on the nominative terminal node because of its structural description (confliting [inferior] values)
6. Pontic DSM + Cappadocian DOM = Asia Minor Greek DAM: A morphological DAM

Common properties of Pontic DSM and Cappadocian DOM
✓ triggered by the [+definite] specification of the DP
✓ morphological restrictions
  ▪ they apply only in singular
  ▪ Pontic DSM is restricted to a certain inflectional class
✓ at the surface level, association of definiteness with the accusative form
✓ they are both indentificational (in the sense of de Hoop & Narasimhan 2005, 2008 and Kornfilt 2008), i.e. the differentiated subject/object is identified as definite
⇒ Pontic DSM and Cappadocian DOM are surface instantiations of the same postsyntactic MS operation existing in Asia Minor Greek
✓ an impoverishment rule, triggered by the [+definite] specification of the DP and resulting in blocking the insertion of the exponent of the nominative case in favour of a less specified exponent
✓ in the marked-nominative subsystems of these dialects this less specified exponent coincides with the accusative exponent resulting in case differentiation ⇐ it explains why these phenomena appear only in the singular (only in the singular the nominative is more marked than the accusative)
✓ this impoverishment rule was subject to the specific properties of the nominal inflectional system(s) of the recipient dialect(s) and the general conditions that govern the morphological manifestation of the terminal nodes that syntax provides as its output so that it gave DSM in Pontic and DOM in Cappadocian
⇒ A DAM situation which is clearly morphological, in the sense that the differentiated subject/object is assigned the expected abstract case in syntax, and differential case marking is the result of the way MS processes and manifests the relevant case nodes

⇒ Asia Minor Greek DAM is very similar to Turkish DOM (Enç 1991, Kornfilt 1997, 2008, Lewis 2000, Lyons 2000, Göksel & Kerslake 2005, von Heusinger and Kornfilt 2005), in which accusative case is identified with specificity. The two systems are probably historically connected either by means of direct contact or in the context of an Anatolian Sprachbund (Tzitzilis 1989, in press).
6.1. Some interesting developments

The impoverishment rules underlying Asia Minor Greek DAM, its identificational status and the surface patterns it resulted in, triggered a number of interesting developments:

✓ Since accusative was associated with definiteness, the /-s/ formative of the nominative started being associated with indefiniteness. Sporadically, this /-s/ formative is found to express the indefinite accusative of nouns which do not have a nominative form with this exponent, such as the nouns that belonged to the old neuter class and the loan words that followed this pattern (Dawkins 1916: 94; see also Janse 2004):

(30) na me výalis ena peýaði-s (instead of peýaði)
    SUBJ CL1-SG.ACC take out-2SG a well-SG.NOM
    ‘Dig me a well’

(Delmesos; Dawkins 1916: 304)
This development was facilitated by the fact that the inanimate old masculine nouns got assimilated to the old neuter inflection, in which nominative and accusative singular are expressed by the zero exponent -∅:
(a) the exponent /-s/ was reanalysed as belonging to the stem resulting in agglutination (Spyropoulos et al. submitted)
(b) the exponent /-s/ was omitted irrespective of the function of the DP

⇒ unpredictable variation in the surface forms

(31) **definite subject without /-s/**

a. to milo en makrja (instead of *milos*)
   the mill be-3SG far
   ‘The mill is far away’
   (Potamia; Dawkins 1916: 94)

b. to milo djavolju ɣjatax ton (instead of *milos*)
   the mill devil-GEN shelter be-PST.3SG
   ‘the mill was the devil’s shelter’
   (Axos; Mavroxalyvidis & Kesisoglou 1960: 196)
(32)  a. **definite object with **/s/**

   ivren     to   milo-s (instead of milo)
   find-PST.3SG   the   mill-SG.NOM
   ‘He found the mill’

   (Delmesos; Dawkins 1916: 308)

b. **indefinite object without **/s/**

   ivra     ena milo (expected milos due to DOM)
   find-PST.3SG   the   mill-SG.NOM
   ‘I found a mill’

   (Axos; Dawkins 1916: 390)
### Table 1: Morphological Case in Delmesos / Potamia and Axos

<table>
<thead>
<tr>
<th></th>
<th>Delmesos / Potamia</th>
<th>Axos</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SG</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NOM</strong></td>
<td>milo(s)</td>
<td>milo</td>
</tr>
<tr>
<td><strong>GEN</strong></td>
<td>milu &gt; mil</td>
<td>miloju</td>
</tr>
<tr>
<td><strong>ACC</strong></td>
<td>milo(s)</td>
<td>milo</td>
</tr>
<tr>
<td><strong>PL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NOM</strong></td>
<td>milus</td>
<td>miloja</td>
</tr>
<tr>
<td><strong>GEN</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>ACC</strong></td>
<td>milus</td>
<td>miloja</td>
</tr>
</tbody>
</table>
The impoverishment rules started to spread to more nouns: (a) in Cappadocian Greek it seems that DOM affects all nouns that have distinct nominative and accusative forms; (b) in some Pontic varieties (e.g. Nikopolis), DSM affects all masculine nouns, not only those ending in -os.

(34)  

Cappadocian

a. ıferen paltadʒis (instead of paltadzi)
   bring-PST.3SG wood-cutter-SG.NOM
   ‘He brought a wood-cutter’       (Delmesos; Dawkins 1916: 312)

b. pʃasa ena kleftis (instead of klefti)
   catch-PST.1SG a thief-SG.NOM
   ‘I caught a thief’           (Axos; Mavroxalyvidis & Kesisoglou 1960: 169)
(35)  *Nikopolis Pontic* (Papadopoulos 1955: 159)

a. erθen o ḏespotin so xorion
come-PST.3SG the<sub>M</sub>-SG.NOM bishop<sub>M</sub>-SG.ACC in-the village

‘The bishop came to my village’

b. o psaran epiasen enan opsarin
the<sub>M</sub>-SG.NOM fisherman<sub>M</sub>-SG.ACC catch-PST.3SG a fish

‘The fisherman caught a fish’
7. A potential extension. Applying the analysis in Turkish

Turkish DOM (Enç 1991, Kornfilt 1997, 2008, Lewis 2000, Lyons 2000, Göksel & Kerslake 2005, von Heusinger and Kornfilt 2005): when [–specific] the object appears in the nominative case, which is the unmarked form, i.e. it involves no overt morphology

\[(36)\]

a. Zeynep-∅ adam-ı gör-dü
   Zeynep-NOM man-ACC see-PST
   ‘Zeynep saw the man’

b. Zeynep-∅ bir adam-∅ gör-dü
   Zeynep-NOM a man see-PST
   ‘Zeynep saw a man’

c. Zeynep-∅ bir adam-ı gör-dü
   Zeynep-NOM a man-ACC see-PST
   ‘Zeynep saw a certain man’
Turkish DSM (Kornfilt 1997, 2008, Göksel & Kerslake 2005): in certain complement clauses the subject appears in the genitive case. In the same environment, when the subject is [–specific], it appears in the nominative, i.e. the unmarked form

(37) a. arı-nın çocuğ-u sok-tuğ-un-u duy-du-m
   bee-GEN child-ACC sting-NM-3SG-ACC hear-PST-1SG
   ‘I heard that the bee stung the child’

   b. çocuğ-u arı-∅ sok-tuğ-un-u duy-du-m
   child-ACC bee sting-NM-3SG-ACC hear-PST-1SG
   ‘I heard that bees stung the child’

   c. çocuğ-u bir arı-∅ sok-tuğ-un-u duy-du-m
   child-ACC a bee sting-NM-3SG-ACC listen-PST-1SG
   ‘I heard that a bee stung the child’

   d. çocuğ-u bir arı-nın sok-tuğ-un-u duy-du-m
   child-ACC a bee-GEN sting-NM-3SG-ACC listen-PST-1SG
   ‘I heard that a (certain) bee stung the child’
DOM and DSM does not apply on certain occasions (Kornfilt 2008)

✓ When the object is assigned an oblique or lexical case

(38) a. Hasan kitab-ı çocuğ-a (*bir çocuk-∅) ver-di
Hasan book-ACC child-DAT give-PST
‘Hasan gave a book to the/a child’

b. Hasan at-a (*at-∅) biner
Hasan horse-DAT ride-HAB
‘Hasan rides horses’ or ‘Hasan rides the horse’
When the object/subject carries an agreement suffix, e.g. in partitive constructions (Kornfilt 2008):

(39) **Blocked DOM: Partitive as object** (Kornfilt 2008: 88)

a. Kitap-lar-ı in iki-sin-i al,
   book-PL-GEN two-3-GEN buy.IMP
   geri-sin-i kotu-du birak
   remainder-3-ACC box-LOC leave.IMP

a’. *Kitap-lar-ı in iki-sin al,
   book-PL-GEN two-3-GEN buy.IMP
   geri-sin-i kotu-du birak
   remainder-3-ACC box-LOC leave.IMP
b. Kitap-lar-dan iki-sin-i al,
book-PL-DAT two-3-GEN buy.IMP
geri-sin-i kotu-du birak
remainder-3-ACC box-LOC leave.IMP

b’. *Kitap-lar-dan iki-sin al,
book-PL-DAT two-3-gen buy.IMP
geri-sin-i kotu-du birak
remainder-3-ACC box-LOC leave.IMP
‘Take (any) two of the books and leave the rest in the box’
(both specific and non-specific)
(40)  *Blocked DSM: Partitive as a subject in complement clause*  
(Kornfilt 2008: 89)

book-PL-GEN  two-3-GEN disappear-NM-3SG-ACC  know-PROG-1SG  

a’. *Kitap-lar-ınn  iki-sin kaybol-duğ-un-u  bil-iyor-um  
book-PL-GEN  two-3  disappear-NM-3SG-ACC  know-PROG-1SG  

book-PL-DAT  two-3-GEN disappear-NM-3SG-ACC  know-PROG-1SG  

b’. *Kitap-lar-dan  iki-sin kaybol-duğ-un-u  bil-iyor-um  
book-PL-DAT  two-3  disappear-NM-3SG-ACC  know-PROG-1SG  

‘I know that (any) two of the books got lost’  
(both specific and non specific)
Similarities with Asia Minor Greek DAM

✓ retreat to an unmarked form
✓ blocking of DSM and DOM in Turkish may be viewed as an indication that the expected abstract case is always assigned to the relevant argument and that DOM and DSM mask its overt manifestation
⇒ DOM and DSM in Turkish involve some kind of postsyntactic operation which may fail to apply under certain circumstances

Hypothesis: Turkish has a similar DAM rule

✓ an impoverishment rule that deletes certain features from the case node, blocking the insertion of the accusative and genitive formative in favour of the zero exponent -∅, which is also the exponent of the nominative
✓ The relevant feature may be [–oblique], since DOM/DSM does not affect lexical/oblique cases
✓ The impoverishment rule affects only the case nodes on lexical heads

(37)  \( \textit{Turkish DOM/DSM rule} \)

\[
[\text{–oblique}] \rightarrow \emptyset / [\text{DP \ [D spec \ [N ,..., ___ ]}]}
\]
Explaining the blocking of DOM/DSM

✓ The impoverishment rule affects only the [+oblique] feature, which is arguably included in the specification of both the accusative and the genitive, given that the genitive is ‘structural’ in the sense that it depends on agreement checking (Kornfilt 2003, 2006, 2008). Lexical and other ‘inherent’ cases are [+oblique], thus they are not affected by the impoverishment rule.

✓ Cancellation due to the existence of an Agr morpheme in partitive constructions: The case marker depends on the Agr morpheme (Kornfilt 2008), which is a functional element. Similarity with Pontic Greek, where the rule affects only the terminal case nodes on lexical items.
7. Conclusions

✓ Differential Subject and Object Marking in Pontic and Cappadocian Greek are morphological in nature
✓ Differential Argument (Case-)Marking is not a uniform phenomenon
✓ Its effects may derive from PF-interface properties and postsyntactic processing
✓ Asia Minor Greek Differential Argument (Case-)Marking reveals the non-isomorphism between abstract and morphological case
✓ The relation between abstract case and morphological case on such occasions can be captured by means of a feature decomposition of case approach and postsyntactic operations at MS that affect the feature constitution of the case terminal node resulting in differentiating exponence
A final note: Can we apply Baker’s (2015) dependent case analysis of DOM to Cappadocian Greek DOM? Probably not:

- The analysis relies on the assumption that the differentiated objects occupy different positions in the syntactic structure → assignment of a dependent case may be cancelled if the argument is not ‘dependent’ on another argument in a given Spell-Out domain
- There is no evidence that objects occupy different positions relevant to their case marking in Cappadocian Greek (see Janse 2006 for a discussion of object positioning in Cappadocian Greek)
- Such an analysis would miss the correlation with Pontic DSM
- Difficult to account for the morphological conditions on the phenomena
Notes

1 Pontic Greek is an Asia Minor Greek dialect, which was spoken in the areas at the north coast of Asia Minor (nowadays Turkey) until the population exchange after the Greek-Turkish War in the 1920’s. In its original form it was a dialectal group consisting of various subdialects and varieties (Oeconomides 1908, 1958, Papadopoulos 1919, 1953, 1955, Dawkins 1931, 1937, Tombaidis 1988, 1996, Drettas 1997). It is now spoken in Greece by the descendants of the exchanged population mostly in the form of Pontic Greek Koine (Tombaidis 1992, 1996, Chadzisavidis 1995 on this development).

2 Cappadocian Greek was an Asia Minor Greek dialectal group spoken by the indigenous Greek population in the Cappadocian plateau in central Turkey until the population exchange in the 1920s (Dawkins 1910, 1916). It included various subdialects and varieties, such as Delmesos, Potamia, Misti, Axos, Phloita, Malakopi, Fertek, Ulaghatsh, Semendere, etc. It exhibited severe interference at all grammatical levels from Turkish, due to the long-term contact with it (Dawkins 1910, 1916, Janse 2002, 2009; see also Thomason & Kaufman 1988, Johanson 2002). It is now considered extinct.

3 After the defeat of the Byzantine army in the battle of Manzikert in 1071 AD and the subsequent collapse of the Byzantine rule in Asia Minor, which was completed by the fall of Constantinople first to the crusaders (1204 AD) and then to the Ottomans (1453 AD),
and the establishment of the Ottoman Empire in the mid 15th century, the Greek-speaking population of Asia Minor went into a gradual cultural transformation which resulted in their religious islamization and linguistic turkicization (see Tsalikoglou 1970; Vryonis 1971). According to a document dated back in 1437 and cited in Dawkins (1916: 1, fn1; published in Lambros 1910), the Greek vernacular had already lost ground in many Asia Minor areas by the mid of the 15th century. Several pockets of Greek-speaking populations, however, many of which were bilingual in Greek and Turkish, were still extant in the beginning of the 20th century (see Dawkins 1916; Papadopoulos 1919; Vryonis 1971; Kitromilides & Alexandris 1984-1985; Augustinos 1992; Balta & Anagnostakis 1994; Janse 2002, in press).

5 See Spyropoulos (2005) for the phenomenon in Greek in general.
6 An idea that goes back to the European Structuralists (Hjelmslev 1935, Jakobson 1936) and has been developed extensively in work in all of sorts of frameworks since then (Bierwisch 1967, Kiparsky 1997, Wunderlich 1997, among others). See the discussion in Blake (2001, 2009) and in Corbett (2012).
Alternatively, the [+inferior] features marks the dependent case(s) in a case hierarchy:

(i) **Case Hierarchy** (Blake 2001, Malchukov & Spencer 2009)
    nominative > accusative > oblique/lexical case
    nominative > ergative, accusative > genitive > dative > locative > instrumental, ablative > others

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