



Societas Linguistica Europaea - 46th Annual Meeting

Split, 18 - 21 September 2013

## **Differential Subject Marking in Pontic Greek: Case features and morphological realization**

Vassilios Spyropoulos  
University of Athens

contact: [vspyrop@phil.uoa.gr](mailto:vspyrop@phil.uoa.gr)

# 1. Introduction

**Topic:** A Differential Subject Marking phenomenon in Pontic Greek.

## Facts

- ✓ Pontic Greek is a nominative – accusative language
- ✓ Both nominative and accusative are expressed by overt exponents
- ✓ Subjects are in nominative unless they are definite
- ✓ In the presence of the definite article the noun appears in accusative
- ✓ The phenomenon is restricted in a certain inflectional class of nouns and in the singular

## Claims

- ✓ Pontic DSM is a morphological phenomenon
- ✓ The differentiated form (accusative) is a less specific form
- ✓ DSM is the result of impoverishment of certain case properties, which leads to manifestation by a less specific exponent

## Aims

- ✓ to provide an analysis of the phenomenon in terms of the feature decomposition approach to case
- ✓ to correlate this phenomenon with the quite similar phenomenon of *Differential Object Marking* in Cappadocian Greek
- ✓ to trace its source in corresponding phenomena in Turkish, with which both Cappadocian and Pontic Greek were in long-term contact

## 2. Background: Differential Subject Marking (DSM)

A descriptive term for situations in which the subjects in a language are differentiated in certain ways:<sup>1</sup>

- case marking
- agreement
- inverse systems
- voice alternations

DSM in terms of case: the subject appears in a different case than the expected one depending on various factors

- ✓ functional: typicality of subject defined in terms of hierarchies (Comrie 1989, Aissen 2003)
- ✓ semantic features: agentivity, volitionality, control of action, definiteness, animacy etc. (de Hoop & Narasinhham 2005, 2008, Kornfilt 2008)
- ✓ clausal features: tense/aspect/mood of the verb, clause type (Kornfilt 2008)
- ✓ markedness restrictions (Woolford 2008)

## Differentiation

- ✓ overt case exponent vs. absence of case exponent
- ✓ normally, ergative or dative vs. absolutive / nominative

(1) *Hindi* (examples from de Hoop & Narashiman 2008: 64)

a. raam=ne patthar=ko / patthar- $\emptyset$  toD|-aa

Raam=ERG stone=ACC / stone-NOM break-PFV.SG.M

‘Raam broke the / a stone’

b. raam= $\emptyset$  patthar=ko / patthar- $\emptyset$  toD|-taa

hae

Raam=NOM stone=ACC / stone-NOM break-IPFV.SG.M

be.PRS.3SG

‘Raam breaks the / a stone’

- Descriptively, a similar phenomenon to *Differential Object Marking* (Bossong 1985, Comrie 1989, Aissen 2003)
- But, DSM is crosslinguistically less consistent (Woolford 2001, de Hoop & Malchukov 2007, de Hoop & de Swart 2008, Malchukov & de Swart 2009)

## Crosslinguistic – typological properties

- I. DSM is regulated by the properties of a ‘typical’ subject (Comrie 1989, Aissen 2003)
  - ✓ A typical subject is expected not to have case (exponents), whereas a non-typical subject is expected to have the relevant case (exponent) so that it is differentiated from the object
  - ✓ Typicality is defined in terms of different scales/hierarchies, usually for animacy and definiteness
  
- (2) *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

(3) *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
- Iconicity: A marked subject (i.e. non-typical) is the one that has case (exponents)
- DSM is the mirror image of DOM

- II. DSM tied to a specific property of the subject (de Hoop & Narasinhham 2005, 2008 on Hindi; Kornfilt 2008 on Turkish)
- ✓ Typical subjects or subjects carrying a certain property are the ones which are overtly case marked
  - ✓ These properties are defined in terms of definiteness, animacy, typicality as a subject (agency, volitionality, etc.)
  - ✓ In most of these situations the case-marked subject is a (more) typical subject (the inverse situation from I)



(4) *DSM in Turkish* (Kornfilt 1997, 2008)

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

b. çocuğ-u      arı-Ø      sok-tuğ-un-u      duy-du-m  
child-ACC      bee      sting-NM.EM-3SG-ACC      hear-PAST-1SG  
'I heard that bees stung the child'

c. çocuğ-u      bir arı-Ø      sok-tuğ-un-u      duy-du-m  
child-ACC      a      bee      sting-NM.EM-3SG-ACC      listen-PAST-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.EM-3SG-ACC      listen-PAST-1SG  
'I heard that a (certain) bee stung the child'

### III. DSM 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 subject
- ✓ Syntactic structure and/or operations condition the assignment of case on subject

Almost all approaches to DSM:

- ✓ explore situations with overt vs. null case exponence on subject
- ✓ explicitly or tacitly assume that the subject with no case marker is not assigned case

Keine & Müller (2008) explore instances of *Differential Argument Encoding* (DAM) which involve an alternation between different overt case exponents.

- ✓ they adhere to the typicality of subject/object approach of Aissen (2003) as the regulating factor of DAM
- ✓ typical subjects/objects are unmarked subjects/objects and are thus expected to be morphologically unmarked too
- ✓ morphological unmarkedness derives from impoverishment which deprives the subject/object from certain case properties and results in marking by a less specific morphological exponent

- 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)

## DSM in Pontic Greek

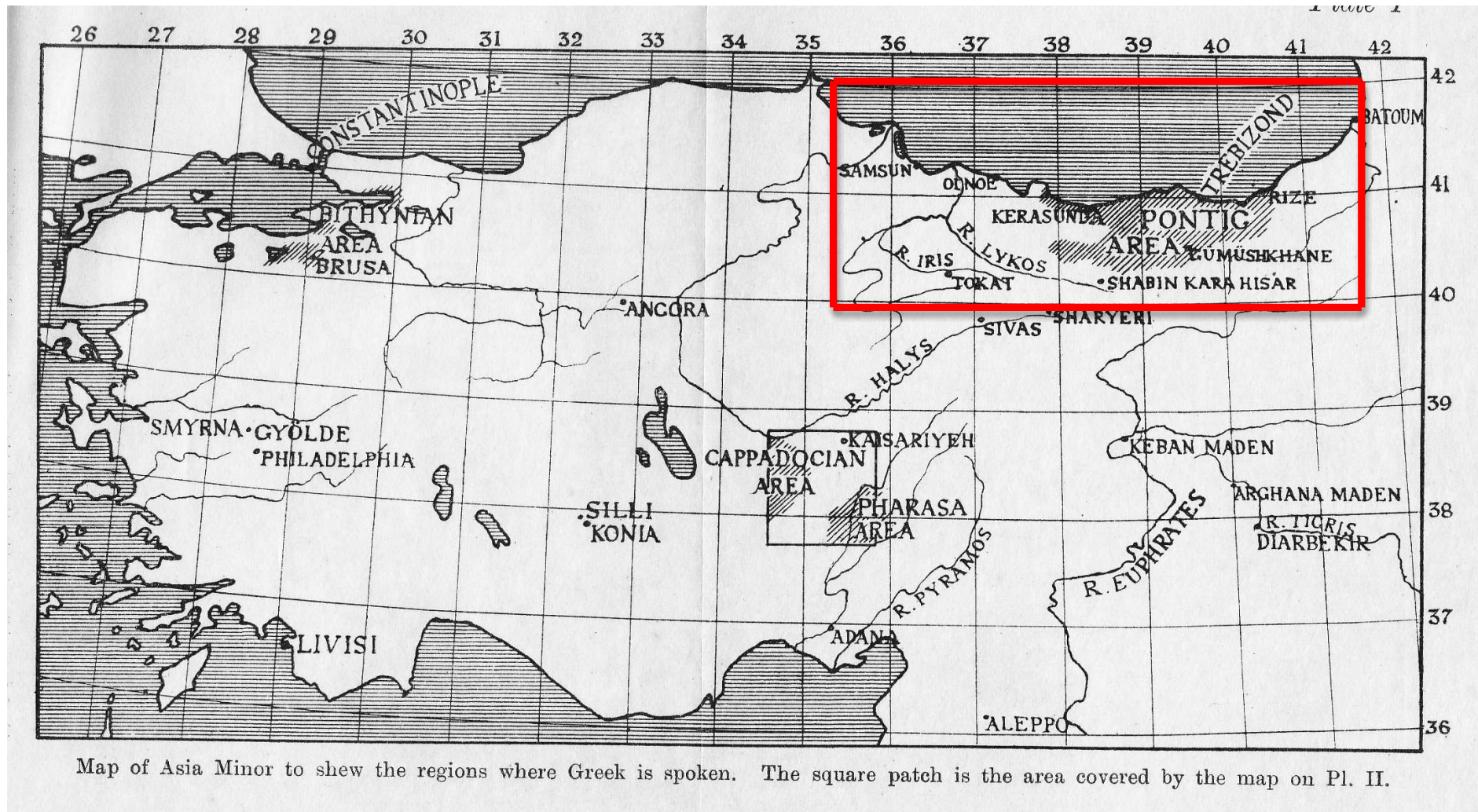
- DSM in a nominative – accusative system (or subsystem) with morphologically marked nominative
- DSM is triggered by the definiteness of subject
- DSM is constrained by number and inflectional class

### Claims:

- The differentiated subject is assigned the expected case for subject (i.e. nominative) but surfaces in a different and less specified case form (i.e. accusative)
- DSM is the result of morphological impoverishment triggered by the [+definite] specification of the D head of the DP-subject
- This impoverishment affects certain parts and not the whole DP-subject

### **3. Noun inflection of Pontic Greek: A marked nominative system (?)**

- ✓ 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)



Map from Dawkins (1916) with the distribution of Asia Minor Greek dialects

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

(5)

MASCULINE NOUNS						
-o CLASS			-a/e CLASS			
+ ANIMATE		– ANIMATE	+ ANIMATE			– ANIMATE
SINGULAR						
NOM	ḏéskal- <b>o-s</b>	xor- <b>ó-s</b>	máer- <b>a-s</b>	kólak- <b>a-s</b>	kléft- <b>e-s</b>	mín- <b>a-s</b>
GEN	ḏéskal- <b>u</b>	xor- <b>ú</b>	máer- <b>a-∅</b>	kólak- <b>a-∅</b>	kléft- <b>e-∅</b>	mín- <b>a-∅</b>
ACC	ḏéskal- <b>o-n</b>	xor- <b>ó-n</b>	máer- <b>a-n</b>	kólak- <b>a-n</b>	kléft- <b>e-n</b>	mín- <b>a-n</b>
PLURAL						
NOM	ḏéskal- <b>i</b>	xor- <b>ús</b>	máer- <b>i</b>	kólak- <b>es</b>	kléft- <b>i</b>	mín- <b>as</b>
GEN	ḏéskal- <b>íon</b>	xor- <b>íon</b>	maer- <b>íon</b>	kolak- <b>íon</b>	kleft- <b>íon</b>	min- <b>íon</b>
ACC	ḏéskal- <b>us</b>	xor- <b>ús</b>	máer- <b>us</b>	kólak- <b>as</b>	kléft- <b>us</b>	mín- <b>as</b>
	‘teacher’	‘dance’	‘cook’	‘cajoler’	‘thief’	‘month’



(6)

	FEMININE NOUNS			NEUTER NOUNS			
	-a/i class			-o CLASS	-i CLASS	IMPARISYLLABIC	
	+ ANIMATE	- ANIMATE					
SINGULAR							
NOM	θayatér-a-∅	lír-a-∅	ník-i-∅	ksíl-o-n	peð-í-n	stóma-n	rápsim-o-n
GEN	θayatér-a-s	lír-a-s	ník-i-s	ksil-íu	peð-íu	stomat-íu	rapsimat-íu
ACC	θayatér-a-n	lír-a-n	ník-i-n	ksíl-o-n	peð-í-n	stoma-n	rápsim-o-n
PLURAL							
NOM	θayatér-es	lír-as	ník-as	ksíl-a	peð-í-a	stómat-a	rapsímat-a
GEN	θayater-íon	lir-íon	nik-íon	ksil-íon	peð-íon	stomat-íon	rapsimat-íon
ACC	θayatér-es	lír-as	ník-as	ksíl-a	peð-í-a	stómat-a	raspímat-a
	‘daughter’	‘pound’	‘victory’	‘wood’	‘child’	‘mouth’	‘sewing’

## Notes

- ✓ masculine nouns, singular: the nominative is marked with the exponent /-s/, which has more specific distribution than the exponent /-n/ of the accusative
- ✓ /-n/ is the case default for singular: it marks the accusative in masculine and feminine nouns, as well as both nominative and accusative in neuter nouns
  
- ☞ masculine nouns, singular: the nominative form is more marked than the accusative form
  
  
- ✓ feminine nouns, singular: the nominative form is marked with the default zero exponent -∅
  
- ☞ feminine nouns, singular: the nominative is the unmarked form

## 4. DSM in Pontic Greek

Greek and Pontic Greek:<sup>2</sup>

- ✓ nominative – accusative language
- ✓ 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 noun head of the DP-subject appears in the accusative case
- ✓ in indefinite DP-subjects and bare DP-subjects the noun head appears in nominative
- ✓ the phenomenon appears only in the singular and with a specific class of nouns, namely masculine nouns of the *-o* class.

- (7) a. epiyen                    o                    kaloyeron  
 go-PAST.3SG    the<sub>M</sub>            monk<sub>M</sub>-SG.ACC  
 ‘The monk went’
- b. erθen                    enas                    kaloyeros  
 come-PAST.3SG a                    monk<sub>M</sub>-SG.NOM  
 ‘A monk came...’
- c. o                    ađelfon                    entoken                    aton  
 the<sub>M</sub>    brother<sub>M</sub>-SG.ACC    hit-PAST.3SG    CL3-M.SG.ACC  
 ‘The brother hit him...’
- d. enas    rđakos                    eskotosen                    aton  
 a                    dragon<sub>M</sub>-SG.NOM    kill-PAST.3SG    CL3-M.SG.ACC  
 ‘A dragon killed him...’

- (8) a. epiyen                    o                    ðespotis  
 go-PAST.3SG    the<sub>M</sub>            bishop<sub>M</sub>-SG.NOM  
 ‘The bishop went’
- b. erθen                    enas                    ðespotis  
 come-PAST.3SG a                    bishop<sub>M</sub>-SG.NOM  
 ‘A bishop came’
- c. o            vasileas                    entoken                    aton  
 the<sub>M</sub>    king<sub>M</sub>-SG.NOM    hit-PAST.3SG            CL3-M.SG.ACC  
 ‘The king hit him...’
- d. enas    vasileas                    eskotosen                    aton  
 a            king<sub>M</sub>-SG.NOM    kill-PAST.3SG            CL3-M.SG.ACC  
 ‘A king killed him...’

- (9) a. epiyen            i            kari  
 go-PAST.3SG    the<sub>F</sub>        woman<sub>F</sub>-SG.NOM  
 ‘The woman went’
- b. erθen            enas        kari  
 come-PAST.3SG a            woman<sub>F</sub>-SG.NOM  
 ‘A woman came’
- c. i            yineka            entoken            aton...  
 the<sub>F</sub>        woman<sub>F</sub>-SG.NOM    hit-PAST.3SG        CL3-M.SG.ACC  
 ‘The woman hit him...’
- d. enas        yineka            eskotosen            aton  
 a            woman<sub>F</sub>-SG.NOM    kill-PAST.3SG        CL3-M.SG.ACC  
 ‘A woman killed him...’

## The trigger of DSM: definiteness

Pontic DSM is not defined in terms of ‘typical’ subject referring to the definiteness hierarchy

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

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

- ✓ it applies only on definite DPs which contain a definite article
- ✓ it 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-PAST.3SG            PR3-M.SG.NOM    /                    PR3-M.SG.ACC  
 ‘He went...’
- b. ekinos                    /                    \*ekinon                    eskotosen                    aton  
 that-M.SG.NOM    /                    that-M.SG.ACC    kill-PAST.3SG                    CL3-M.SG.ACC  
 ‘That one killed him...’

☞ 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

(12) erθen                      [DP o                      kalon  
come-PAST.3SG            the<sub>M</sub>-SG.NOM            good-M.SG.ACC  
o                      aθropon]  
the<sub>M</sub>-SG.NOM            man<sub>M</sub>-SG.ACC  
'The good man came'

- ✓ The head noun 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 by the case relevant to the grammatical function of the DP. However, in differentiated DP-subjects a deictic determiner appears in nominative, although the head noun of the DP-subject is in accusative

- (13)
- |     |                    |                          |                          |                          |
|-----|--------------------|--------------------------|--------------------------|--------------------------|
| a.  | erθen              | autos                    | o                        | aθropon                  |
|     | come-PAST.3SG      | this-M.SG.NOM            | the <sub>M</sub> -SG.NOM | man <sub>M</sub> -SG.ACC |
| a'. | *erθen             | auton                    | o                        | aθropon...               |
|     | come-PAST.3SG      | this-M.SG.ACC            | the <sub>M</sub> -SG.NOM | man <sub>M</sub> -SG.ACC |
|     | 'This man came...' |                          |                          |                          |
| b.  | ekinos             | o                        | aθropon                  | entoken                  |
|     | that-M.SG.NOM      | the <sub>M</sub> -SG.NOM | man <sub>M</sub> -SG.ACC | hit-PAST.3SG             |
|     | aton...            |                          |                          |                          |
|     | CL3-M.SG.ACC       |                          |                          |                          |
| b'. | *ekinon            | o                        | aθropon                  | entoken                  |
|     | that-M.SG.ACC      | the <sub>M</sub> -SG.NOM | man <sub>M</sub> -SG.ACC | hit-PAST.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 which they modify.<sup>3</sup> When they modify a differentiated DP-subject, they appear in nominative, although the head noun of the DP-subject is in accusative

- (14) a. o yjon tranos entone  
 the<sub>M</sub>-SG.NOM son<sub>M</sub>-SG.ACC big-M.SG.NOM become-PAST.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 ðeskalon  
 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 on 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.

## 4. 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 because they either merge or Agree with the D head in order to satisfy its requirement.
- ✓ 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

- ✓ Retreat to a less specific form involves *impoverishment* (Bonet 1991, Noyer 1992, 1998, Halle & Marantz 1993, 1994, 2008, Halle 1997, Bobaljik 2002, 2008b, Frampton 2002, Embick & Noyer 2008, Calabrese 2008 a.o.)
- ✓ Alternation between two overt case forms for the same grammatical function  
→ certain properties of the case terminal node and not the node itself are affected
- ✓ Formulation in terms of the feature decomposition of case hypothesis (Calabrese 1996, 2008, Halle 1997, Halle & Vaux 1998, McFadden 2004, Alexiadou & Müller 2008, a.o.)<sup>4</sup>
- ✓ Case terminal nodes are decomposed in features, and case exponents refer to these features



- (15) *Case features*
- [ $\pm$ oblique]: [+oblique] is assigned to the oblique arguments of verbs and to the complements of nouns (McFadden 2004).
  - [ $\pm$ inferior]: [+inferior] is assigned to an argument in the presence of a local case competitor (McFadden 2004, Bobaljik 2008a).<sup>5</sup>
- (16) *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]

- (17) *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/

- (18) *DSM-triggering impoverishment rule*  
[-inferior] → ∅ / [DP [D +def] [N/A[-o class] -plural, -oblique, \_\_\_\_ ]]

(19) *The derivation of the differentiated subject*

MS representation after Spell-Out:

[ D[+def | -pl, -obl, -inf] ] [ rðak-o-[-pl, -obl, -inf] ]

Impoverishment:

[ D[+def | -pl, -obl, -inf] ] [ rðak-o-[-pl, -obl] ]

↕

o

↕

rðak-o-

n

→ o rðak-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 default -∅ exponent
  - ✓ The nominative singular terminal node is radically impoverished for case (and possibly number)
  - ✓ /-n/ cannot be inserted because it is more specified than the terminal node

## 5. A similar phenomenon: DOM in Cappadocian Greek

### Cappadocian Greek

- ✓ 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 includes various subdialects and varieties, such as Delmeso, Potamia, Misti, Axos, Phloita, Malakopi, Fertek, Ulaghatsh, Semendere, etc.
- ✓ It exhibits 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)
- 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)

(20) *Potamia* (Dawkins 1916: *Potamia* 1, p. 456: 1)  
istera            pikan                    yamos                    (instead of *yamo*)  
afterwards    make-PST.3PL    marriage-SG.NOM  
'After that, they got married'

(21) *Delmesos* (Dawkins 1916: 94)  
a.    ðeke            ena layos    (instead of *layo*)  
      hit-PST.3SG a    hare-SG.NOM  
      'He hit a hare'  
b.    to layo                    eskotosen  
      the hare-SG.ACC    kill-PST.3SG  
      'He killed the hare'

- ✓ The differentiated object appears in a more marked case form
  - nominative is expressed by the exponent /-s/
  - accusative is expressed by the default -∅
- ✓ Definiteness is associated with the accusative form, which is the less specific form

(22) *Case terminal nodes*  
 nominative: [..., -oblique, -inferior]  
 accusative: [..., -oblique, +inferior]

(23) The relevant formatives  
 /-s/ ↔ [-plural, ..., -oblique]  
 /-∅/ ↔ elsewhere

DOM is the result of an 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 default -∅ is the only exponent that can be inserted under this node

(24) *DOM-triggering impoverishment rule*  
[–oblique] → ∅ / [DP [D +def] [N –plural, +inferior, \_\_\_\_ ]



(25) *The derivation of the indefinite object*

MS representation after Spell-Out:

[ D[-def]] [ layo-[-pl, -obl, +inf]]

↕

ena

layo-

↕

-s

→ ena layo-s ‘a hare-SG.NOM’

(26) *The derivation of the definite object*

MS representation after Spell-Out:

[ D[+def]] [ layo-[-pl, -obl, +inf]]

Impoverishment:

[ D[+def]] [ layo- [-pl, +inf]]

↕

to

layo-

↕

-∅

→ to layo ‘the hare-SG.ACC’

Predicted fact: Cappadocian Greek does not have DSM

- (27) a. *Delmeso* (Dawkins 1916: *Delmeso* 2, p.316: 6)  
na par ke sas to đjavalos  
SUBJ take-3SG and you the devil-NOM  
'May the devil take you!'
- b. *Delmeso* (Dawkins 1916, *Delmeso* 1, p.312: 14-15)  
eljos mavrosen to prosopo  
sun-SG.NOMblacken-PAST.3SG the face-SG.ACC  
'The sun blackened my face'

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 contact-induced phenomenon from Turkish**

Common properties of Pontic DSM and Cappadocian DOM

- ✓ triggered by the [+definite] specification of the DP
- ✓ the less typical subject / object carries the less specific case exponent
- ✓ morphological effects
- ✓ at the surface level, association of definiteness with accusative

Hypothesis

- ✓ Pontic DSM and Cappadocian DOM are manifestations of the same phenomenon existing in Asia Minor Greek in general
- ✓ Differential Argument Marking triggered by definiteness as a morphological effect
- ✓ The source of the phenomenon: Turkish DOM (Enç 1991, Kornfilt 1997, 2008, Lewis 2000, Lyons 2000, Göksel & Kerslake 2005, von Heusinger and Kornfilt 2005 a.o.)

- (28)
- a. Zeynep- $\emptyset$       adam-1      gör-dü  
 Zeynep-NOM      man-ACC      see-PST  
 ‘Zeynep saw the man’
- b. Zeynep- $\emptyset$       bir adam- $\emptyset$       gör-dü  
 Zeynep-NOM      a      man      see-PST  
 ‘Zeynep saw a man’
- c. Zeynep- $\emptyset$       bir adam-1      gör-dü  
 Zeynep-NOM      a      man-ACC      see-PST  
 ‘Zeynep saw a certain man’

### Turkish DOM

- ✓ The trigger for DOM: specificity
- ✓ At a surface level, association of specificity with accusative

## Modelling the contact

- ✓ Asia Minor Greek was in long term contact with Turkish
- ✓ Most Greek speakers were bilingual in Greek and Turkish
- ✓ The surface effects of DOM were interpreted as an association between definiteness and accusative case
- ✓ The pattern was transferred in Greek and it was replicated by means of the material shapes of this language (Johanson 2009)
- ✓ It was internalized as an impoverishment rule, triggered by the [+definite] specification of the DP and resulting in blocking the insertion of the exponent of the nominative case
- ✓ These rules were 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.

## 7. Conclusions

Pontic DSM:

- ✓ DSM in a nominative – accusative system with morphologically marked nominative
- ✓ triggered by the [+definite] specification of the D head
- ✓ an MS phenomenon: the DP-subject is assigned the expected nominative case, which is however manifested by a different exponent due to postsyntactic operations
- ✓ the result of an impoverishment rule
- ✓ related to Cappadocian DOM as surface manifestations of a common Asia Minor Greek DAM phenomenon
- ✓ a contact-induced phenomenon

Residual issue: a principled explanation of why

- ✓ it applies only with the nouns of a certain inflection class
- ✓ it is restricted on singular number

## Notes

---

<sup>1</sup> See Woolford (2001, 2008), Aissen (2003), de Hoop & de Swart (2008), de Hoop & Malchukov (2007, 2008), Malchukov & de Swart (2009) for overviews.

<sup>2</sup> See Holton et al. (2012) on Greek and Papadopoulos (1955), Tombaidis (1988), Drettas (1997) on Pontic.

<sup>3</sup> See Spyropoulos (2005) for the phenomenon in Greek in general.

<sup>4</sup> 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, a.o.). See the discussion in Blake (2001, 2009) and in Corbett (2012).

<sup>5</sup> 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

See the discussion in Marantz (1992), Grosu (1994), Bittner & Hale (1996), Vogel (2003), McFadden (2004), Bobaljik (2008), Legate (2008) a.o.

## References

- Aissen, Judith. 2003. Differential object marking: iconicity vs. economy. *Natural Language & Linguistic Theory* 21: 435-483.
- Alexiadou, Artemis & Gereon Müller. 2008. Class features as probes. In Asaf Bachrach & Andrew Nevins (eds.), *Inflectional Identity*, 101-155. Oxford: Oxford University Press.
- Bierwisch, Manfred. 1967. Syntactic features in morphology: general problems of so-called pronominal inflection in German. In *To Honour Roman Jakobson: Essays on the Occasion of his Seventieth Birthday, 11 October 1966*, 239-270. The Hague: Mouton de Gruyter.
- Bittner, Maria & Ken Hale. 1996. Ergativity: Toward a theory of a heterogeneous class. *Linguistic Inquiry* 27: 531-604.
- Blake, Barry. 2001. *Case*. 2<sup>nd</sup> edition. Cambridge: Cambridge University Press.
- Blake, Barry. 2009. History of the research on case. In Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 1-26. Oxford: Oxford University Press.
- Bobaljik, Jonathan David. 2002. Syncretism without paradigms: Remarks on Williams 1981, 1994. In Geert Booij & Jaap van Marle (eds.), *The Yearbook of Morphology 2001*, 53-85. Dordrecht: Kluwer.
- Bobaljik, Jonathan David. 2008a. Where's Phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger, and Susana Béjar (eds.), *Phi-Theory: Phi features across Interfaces and Modules*, 295-328. Oxford: Oxford University Press.



- Bobaljik, Jonathan David. 2008b. Paradigms (Optimal and otherwise): A case for scepticism. In Asaf Bachrach & Andrew Nevins (eds.), *Inflectional Identity*, 29-54. Oxford: Oxford University Press.
- Bosson, Georg. 1985. *Empirische Universalienforschung. Differentielle Objektmarkierung in den neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.
- Calabrese, Andrea. 1996. Some remarks on the Latin case system and its development in Romance. In José Lema & Esthela Treviño (eds.), *Theoretical Analyses on Romance languages: Selected Papers from the 26th Linguistic Symposium on Romance Languages*, 71-126. Amsterdam: John Benjamins.
- Calabrese, Andrea. 2008. On absolute and contextual syncretism: Remarks on the structure of case paradigms and on how to derive them. In Asaf Bachrach & Andrew Nevins (eds.), *Inflectional Identity*, 156-205. Oxford: Oxford University Press.
- Chadzisavidis, Sophronis. 1995. Τα ποντιακά στον ελλαδικό χώρο [Pontic in Greece]. *Αρχαίον Πόντου [Pontus Archive]* 46: 47-72.
- Comrie, Bernard. 1989. *Language Universals and Linguistic Typology*. Oxford: Blackwell.
- Corbett, Greville. 2012. *Features*. Cambridge: Cambridge University Press.
- Dawkins, Richard McGillivray. 1910. Modern Greek in Asia Minor. *The Journal of Hellenic Studies* 30: 109-132 & 267-291.
- Dawkins, Richard. 1916. *Modern Greek in Asia Minor: a Study of the Dialects of Silli, Cappadocia and Phárasa with Grammar, Texts, Translations and Glossary*. Cambridge: Cambridge University Press.
- Dawkins, Richard. 1931. Notes on the study of the Modern Greek of Pontos. *Byzantion* 6: 389-400.

- Dawkins, Richard. 1937. The Pontic dialect of Modern Greek in Asia Minor and Russia. *Transactions of the Philological Society* 36: 15-52.
- Drettas, Georges. 1997. *Aspects Pontiques*. Publié avec le concours du Centre National du Livre. Association de recherches pluridisciplinaires.
- Embick, David & Rolf Noyer. 2007. Distributed Morphology and the syntax/morphology interface. In Gillian Ramchand & Charles Reiss (eds.), *The Oxford Handbook of Linguistic Interfaces*, 289-324. Oxford: Oxford University Press.
- Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22: 1-25.
- Frampton, John. 2002. Syncretism, impoverishment and the structure of person features. *CLS* 38: 207-222.
- Göksel, Aslı & Celia Kerslake. 2005. *Turkish: A Comprehensive Grammar*. London: Routledge.
- Grosu, Alexander. 1994. *Three Studies in Locality and Case*. London: Routledge.
- Hale, Ken. 1972. A new perspective on American Indian Linguistics. In A. Ortiz (ed.), *New Perspectives on the Pueblos*, 87-103. Albuquerque: University of New Mexico Press.
- Halle, Morris. 1997. Distributed Morphology: Impoverishment and fission. In Benjamin Bruening, Yoonjung Kang & Martha McGinnis (eds.), *PF: Papers at the Interface. MIT Working Papers in Linguistics* 30, 425-449. Cambridge Mass.: MIT Working Papers in Linguistics, Department of Linguistics, MIT.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 111-176. Cambridge, MA: MIT Press.

- Halle, Moris & Alec Marantz. 1994. Some key features of Distributed Morphology. In Andrew Carnie & Heidi Harley (eds.), *Papers on Phonology and Morphology*, 275-288. MIT Working Papers in Linguistics 21. Cambridge, MA: MIT, MIT Working Papers in Linguistics.
- Halle, Moris & Alec Marantz. 2008. Clarifying “Blur”: Paradigms, defaults, and inflectional classes. In Asaf Bachrach & Andrew Nevins (eds.), *Inflectional Identity*, 55-72. Oxford: Oxford University Press.
- Halle, Morris & Bert Vaux. 1998. Theoretical aspects of Indo-European nominal morphology: The nominal declensions of Latin and Armenian. In J. Jasanoff et al. (eds.), *Mir Curad: Studies in Honor of Calvert Watkins*, 223-240. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- von Heusinger, Klaus & Jaklin Kornfilt. 2005. The case of direct object in Turkish: Semantics, syntax and morphology. *Turkic Languages* 9: 3-44.
- Hjelmslev, Louis. 1935. *La Catégorie des Cas: Étude de Grammaire Générale I. Acta Jutlandica: Aarsskrift for Aarhus Universitet, Vol. 7.1*. Copenhagen: Munksgaard.
- Holton David, Peter Mackridge, Irene Philippaki-Warbuton & Vassilios Spyropoulos. 2012. *Greek: A Comprehensive Grammar*. 2<sup>nd</sup> Edition. London: Routledge.
- de Hoop, Helen & Andrej Malchukov. 2007. On fluid differential case marking: A bidirectional OT approach. *Lingua* 117: 1636-1656.
- de Hoop, Helen & Andrej Malchukov. 2008. Case marking strategies. *Linguistic Inquiry* 39: 565-587.
- de Hoop, Helen & Bhuvana Narasimhan. 2005. Differential case marking in Hindi. In Mengistu Amberber & Helen de Hoop (eds.), *Competition and Variation in Natural Languages: The Case for Case*, 321-346. Oxford: Elsevier.

- de Hoop, Helen & Bhuvana Narasimhan. 2008. Ergative case marking in Hindi. In Helen de Hoop & Peter de Swart (eds.), *Differential Subject Marking*, 63-78. Dordrecht: Springer.
- de Hoop, Helen & Peter de Swart. 2008. Cross-linguistic variation in differential subject marking. In Helen de Hoop & Peter de Swart (eds.), *Differential Subject Marking*, 1-16. Dordrecht: Springer.
- Jakobson, Roman. 1936. Beitrag zur allgemeinen Kasuslehre. *Travaux du Cercle Linguistique de Prague* 6.
- Janse, Mark. 2002. Aspects of bilingualism in the history of the Greek language. In James Noel Adams, Mark Janse & Simon Swain (eds.), *Bilingualism in Ancient Society: Language Contact and the Written Word*, 332-390. Oxford: Oxford University Press.
- Janse, Mark. 2004. Animacy, definiteness, and case in Cappadocian and other Asia Minor Greek dialects. *Journal of Greek Linguistics* 5: 3-26.
- Janse, Mark. 2009. Greek-Turkish language contact in Asia Minor. *Études Helléniques/Hellenic Studies* 17: 37-54.
- Johanson, Lars. 2002. *Structural Factors in Turkic Language Contacts*. London: Curzon.
- Johanson, Lars. 2009. Case and contact linguistics. In Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 494-501. Oxford: Oxford University Press.
- Karatsareas, Petros. 2011. *A Study of Cappadocian Greek Nominal Morphology from a Diachronic and Dialectological Perspective*. Doctoral dissertation, University of Cambridge.
- Keine, Stefan & Gereon Müller. 2008. Differential Argument Encoding by Impoverishment. In Marc Richards & Andrej Malchukov (eds.), *Scales*, 83-136. Universität Leipzig: Linguistische Arbeits Berichte 86.

- Kiparsky, Paul. 1997. The rise of positional licensing. In Ans van Kemenade & Nigel Vincent (eds.), *Parameters of Morphosyntactic Change*, 460-494. Cambridge: Cambridge University Press.
- Kornfilt, Jaklin. 1997. *Turkish*. London: Routledge.
- Kornfilt, Jaklin. 2008. DOM and two types of DSM in Turkish. In Helen de Hoop & Peter de Swart (eds.), *Differential Subject Marking*, 79-111. Dordrecht: Springer.
- König, Christa. 2008. *Case in Africa*. Oxford: Oxford University Press.
- König, Christa. 2009. Case in an Afrikan language: Ik – how defective a case can be. In Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 730-741. Oxford: Oxford University Press.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39: 55-101.
- Lewis, Geoffrey. 2000. *Turkish Grammar*. 2nd edition. Oxford: Oxford University Press.
- Lyons, Cristopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.
- Malchukov, Andrej & Peter de Swart. 2009. Differential case marking and actancy variations. In Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 339-355. Oxford: Oxford University Press.
- Malchukov, Andrej & Andrew Spencer. 2009. Typology of case systems: Parameters of variation. In Andrej Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 651-667. Oxford: Oxford University Press.
- Marantz, Alec. 1992. Case and licensing. *ESCOL '91*: 234-253.
- McFadden, Thomas. 2004. *The Position of Morphological Case in the Derivation: A Study on the Syntax-Morphology Interface*. Ph.D. Thesis, University of Pennsylvania.

- Noyer, Rolf. 1992. *Features, Positions and Affixes in Autonomous Morphological Structure*. PhD Thesis, MIT.
- Noyer, Rolf. 1998. Impoverishment theory and morphosyntactic markedness. In Steven G. Lapointe, Diane K. Brentari & Patrick M. Farrel (eds.), *Morphology and Its Relation to Phonology and Syntax*, 264-285. Stanford: CSLI Publications.
- Oeconomides, D. E. 1908. *Laulehre des Pontischen*. Leipzig.
- Oeconomides, D. H. 1958. *Γραμματική της Ελληνικής Διαλέκτου του Πόντου [Grammar of Pontic Greek]*. Ev Αθήναις.
- Papadopoulos, Anthimos. 1953. Χαρακτηριστικά της ποντικής διαλέκτου [Features of the Pontic dialect]. *Αρχείον Πόντου [Pontus Archive]* 18: 83-93.
- Papadopoulos, Anthimos. 1955. *Ιστορική Γραμματική της Ποντικής Διαλέκτου [Historical Grammar of Pontic Greek]*. Αθήναι.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In Richard Dixon (ed.), *Grammatical Categories in Australian Languages*, 112-171. Canberra: Australian Institute of Aboriginal Studies.
- Spyropoulos, Vassilios. 2005. Agreement and multiple case licensing in Greek. In Melita Stavrou & Arhonto Terzi (eds.), *Advances in Greek Generative Grammar*, 15-39. Amsterdam: John Benjamins.
- Spyropoulos, Vassilios & Konstantinos Kakarikos. 2009. Aspects of dialectal variation in the Greek declension: A feature-based approach. In Geert Booij, Angela Ralli & Sergio Scalise (eds.), *Morphology and Dialectology: On-line Proceedings of the 6th Mediterranean Morphology Meeting (MMM6)*, 49-62. University of Patras.

- Spyropoulos, Vassilios & Konstantinos Kakarikos. 2011. A feature-based analysis of Cappadocian Greek nominal inflection. In Mark Janse, Brian Joseph, Pavlos Pavlou, Angela Ralli & Spyros Armosti (eds.), *Studies in Modern Greek Dialects and Linguistic Theory*, 203-213. Nicosia: Research Centre of Kykkos Monastery.
- Spyropoulos, Vassilios & Marianna Tilipoulou. 2006. Definiteness and case in Cappadocian Greek. In Mark Janse, Brian Joseph & Angela Ralli (eds.), *Proceedings of the 2nd International Conference on Modern Greek Dialects and Linguistic Theory*, 366-378. Patra: University of Patras.
- Thomason, Sarah Grey & Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Tombaidis, Dimitrios. 1988. *Η Ποντιακή Διάλεκτος [The Pontic Dialect]*. Αθήνα: Επιτροπή Ποντιακών Μελετών [Παράρτημα 17 Περιοδικού Αρχείου Πόντου].
- Tombaidis, Dimitrios. 1992. Η τύχη των μικρασιατικών ιδιωμάτων στον ελληνικό χώρο [The fate of the Asia Minor dialects in Greece]. *Centre for Asia Minor Studies Bulletin* 9: 241-250.
- Tombaidis, Dimitrios. 1996. Η Ποντιακή διάλεκτος [The Pontic dialect]. In Dimitrios Tombaidis (ed.), *Μελετήματα Ποντιακής Διαλέκτου [Studies on the Pontic Dialect]*, 222-233. Θεσσαλονίκη: Κώδικας.
- Vogel, Ralf. 2003. Surface matters. Case conflict in free relative constructions and case theory. In Ellen Brandner & Heike Zinsmeister (eds.), *New perspectives in Case Theory*, 269-300. Stanford: CSLI Publications.
- Woolford, Elen. Case Patterns. In Geraldine Legendre, Jane Grimshaw & Sten Vikner (eds.), *Optimality-Theoretic Syntax*, 509-543. Cambridge MA: MIT Press.

- Woolford, Elen. 2008. Differential Subject Marking at argument structure, syntax, and PF. In Helen de Hoop & Peter de Swart (eds.), *Differential Subject Marking*, 17-40. Dordrecht: Springer.
- Wunderlich, Dieter. 1997. Cause and the structure of verbs. *Linguistic Inquiry* 28: 27-68.