ACCUSATIVE CASE MORPHOLOGY CONDITIONED BY GENDER

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TWO RELATED QUESTIONS

Q1: What determines the choice between <u>neutral</u> and <u>overt case</u> <u>alignment</u>?

Q2: Is structural case <u>exponence</u> random and idiosyncratic or systematic and patterned?

CASE VARIATION IN ACC LANGUAGES: DPs vs. Pronouns

(1) a.	O anthrop-os idh-e ton dikigor-o	Greek		
	The man.NOM.SG saw.3SG the lawyer. Acc.sG'	DP-case		
	The man saw the lawyer'			
b.	O anthropos ton idhe	pronoun-case		
	The man.NOM.SG him.CL.MASC.ACC.SG saw.3SG			
	The man saw him'			
		English		
(2) a.	The man saw the lawyer/ The lawyer saw the man	DP-no case		
b.	He saw him	pronoun-case		
		French		
(3) a	Le garçon connaît la fille/ La fille connaît le garcon The boy knows the girl/ The girl knows the boy	DP-no case		
b.	Il la connaît 'he knows her'/ Elle le connaît 'she knows him' pronoun/			
		clitic- case		

CASE VARIATION IN ACC LANGUAGES: ACC SENSITIVE TO SEMANTIC FEATURES

- (4) a. Zeynep Ali-yi/on-u/adam-i/ o masa-yi/birkaç kitab-i gördü Turkish Zeynep Ali.Acc /he.Acc /the.man.Acc /that table.Acc / some book.Acc saw definite/specific-case 'Zeynep saw Ali/him/the man/that table/some of the books'
 - Zeynep *Ali/*o/*adam/*o masa /birkaç kitab gördü
 Zeynep *Ali/*him/*the man/*that table/ √some books saw
- (5) Ha-seret her'a 'et-ha-milxama/ (*'et)-milxama
 The-movie showed ACC-the war/ (*ACC) war
 'The movie showed the war/ a war

Hebrew definite-case

- (6) El director busca el carro/a su hijo
 Spanish
 'The director is looking for the car/ his son'
 definite/specific/animate-case
- (7) Naanu sekretari-*(yannu)/ pustaka- (yannu) huDuk-utt-idd-eene Kannada
 I.NOM secretary.ACC/ book. (ACC) look.for.NPST.be.1s masculine/feminine-case
 'I am looking for a secretary/ for a book (specific)/ non-specific' inanimate/ specific-case

THE GENDER CASE HYPOTHESIS

I propose that case variation of the type seen in (1)-(7) is systematic, sensitive to Gender, as expressed by the hypothesis in (8):

(8) The Gender case Hypothesis (GCH)

Accusative case morphology is codetermined by the gender system.

<u>Synchronic</u> and <u>diachronic</u> evidence for the GCH comes from **four new generalizations** governing the distribution of accusative morphology in many **Indoeuropean**, **Semitic**, **Dravidian**, **Uralic**, **Altaic** languages:

GCH FOUR NEW GENERALIZATIONS

(9) Four gender-case Generalizations support the GCH

- Generalization 1. <u>Three-gender</u> systems (masc-fem-neut) have accusative case morphology. [e.g. German, Latin, Kannada]
- Generalization 2. In gender systems with three distinctions, accusative case surfaces on <u>non-neuter</u> NPs.
- Generalization 3. In two gender systems (masc-fem, commonneuter), accusative case morphology is either entirely absent [French, Italian, Swedish] or subject to a version of animacy and/or specificity/definiteness sensitive Differential Object Marking (DOM) [Spanish, Hebrew].
- Generalization 4. Languages <u>without gender</u> on nouns either lack accusative case [English, Afrikaans] or employ a version of DOM sensitive to definiteness/specificity [Turkish, Armenian].

GENDER ASSIGNMENT RELEVANT TO SYNTAX

Gender: a sorting mechanism for nouns into two or more classes based on biological sex, animacy, and/or human-ness (gender assignment) and reflected by agreement (gender agreement) on dependent expressions such as adjectives, determiners or verbs (Kramer 2015: 70, building on Hockett 1958, Corbett 1991).

Gender agreement has long been recognized to interact with other syntactic and semantic principles (Wechsler & Zlatić 2003, i.a.). **Gender** *assignment* is typically considered to be inert, with visible consequences restricted to the **morphological component** (Corbett 1991).

There has never been a systematic investigation of the **syntactic effects** of gender assignment.

<u>The GCH entails that gender assignment systematically determines a</u> <u>key component of the syntactic system: case (and agreement as well,</u> <u>see section IV).</u>

NEUTRAL VS. OVERT CASE ALIGNMENT AND GENDER

Case alignment tracks how languages single out subjects of transitive clauses (A), transitive objects (O) and intransitive subjects (S).

5 Alignment Types (1-3 crosslinguistically more common than 4-5; Comrie 2013, Baker 2015):

- 1)<u>Neutral</u>: A = O = S [no case]
- 2)<u>Accusative</u> : A = S ≠ O [Acc on O, unmarked nominative on A/S]
- 3) <u>Ergative</u>: A ≠ S = O [**Erg** on A, unmarked absolutive on O/S]
- 4) <u>Tripartite</u> : A ≠ S ≠ O [**different case each**]
- 5) <u>Marked nominative</u>: A = S ≠ O [(unmarked) Acc on O, marked nominative on A/S] (cf. also marked absolutive)

The GCH entails that **the distinction between 1 and 2** (and **1 vs. 5**, section V) is **not random and arbitrary** (as almost always assumed) but conditioned by gender.

But in order to see that, we need to take DOM into consideration.

WHAT IS DOM?

Differential Object Marking (DOM), (Bossong 1985, 1991): case marking sensitive to semantic features, typically associated with the use of a special preposition (*a* in Spanish, *pe* in Romanian).

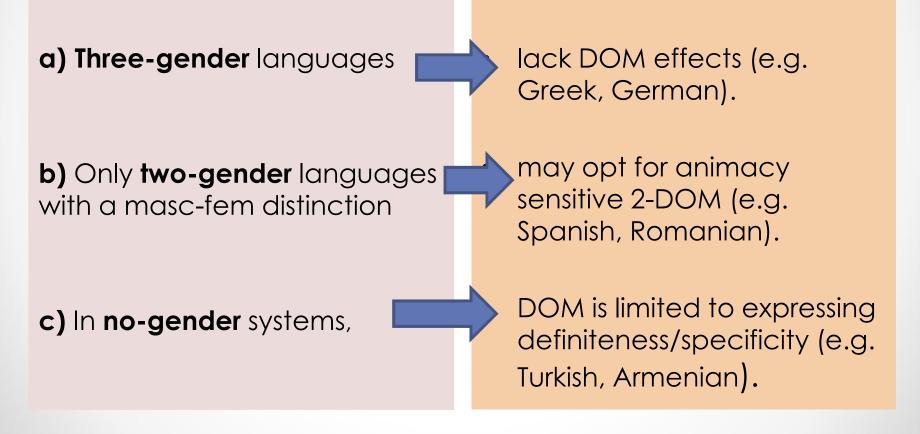
(10) *Types of DOM* (Aissen 2003)

- a. **One-Dimensional DOM (1-DOM)**, sensitive to definiteness or specificity (Turkish, Hebrew, Kannada examples (4), (5),(7)).
- b. **One-Dimensional DOM (1-DOM)**, **sensitive to animacy** (Aissen mentions Sinhalese).
- c. **Two-Dimensional DOM (2-DOM)**, sensitive to animacy and definiteness/specificity (Spanish example (6), Romanian).

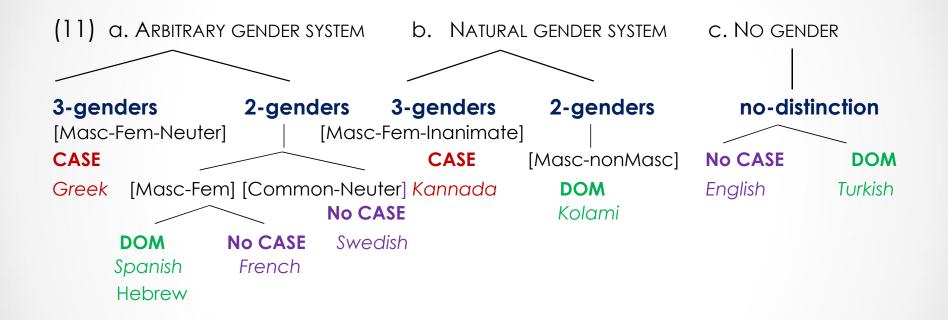
While for Aissen (2003) and the literature on DOM the variation found with DOM is arbitrary, <u>the GCH entails that the **core DOM**</u> <u>conditions are predictable from the gender assignment system.</u>

DOM SENSITIVITY TO GENDER

According to the **GCH**, DOM and obligatory accusative case marking are in **complementary distribution:**



THE CROSS-LINGUISTIC PICTURE IN A NUTSHELL



In No CASE (2- and no-gender) languages, pronouns/ clitics have CASE because they are 3gender (asymmetric case systems, Iggesen 2013).

I) EVIDENCE FOR THE GCH: HISTORICAL CHANGE

- In the diachronic studies of gender and case evolution, two phenomena have been identified that are particularly relevant to the GCH:
- I) when a new case form is employed for ACC in connection to gender,
- II) when case-loss proceeds in parallel with genderloss or gender-restructuring.

A) GENDER-LINKED CASE RISE

- Gender-linked case rise has taken place in Slavic (Kulikov 2009: 452-4, Matasović 2004, Igartua 2006, i.a.).
- In Common Slavic, the old Indo-European NOM and ACC had merged in most declension classes.
- This syncretism could not be tolerated for animate nouns, the genitive form replaced the old ACC, resulting in systems where NOM-ACC distinctions are sensitive to gender and animacy.
- For example, Russian, (Pesetsky 2013:64).

B)CASE LOSS & GENDER LOSS/RESTRUCTURING

• The phenomenon is pervasive across Indo-European, e.g.:

I) Romance (Herman 2000 for Romance, Picoche & Marchello-Nizia 1998, Polinsky & Everbroek 2003 for **French**, Maiden 1995 for **Italian**, Penny 2002 for **Spanish**).

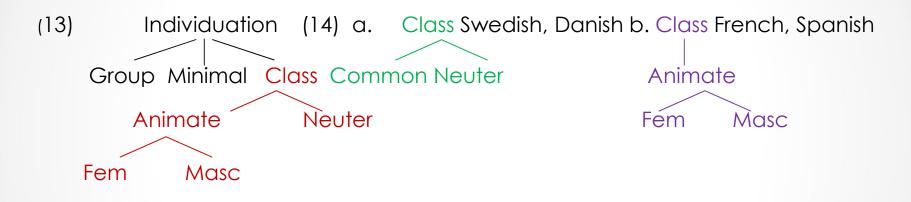
II) English (Hogg 1992, Lass 1992, Kastovsky 2000, Curzan 2003),

III) Scandinavian (Kürschner & Nübling 2011).

Differences between **formal/arbitrary** and **semantic/natural** gender: **uninterpretable** (*u*[F]) and **interpretable** features (*i*[F]; Kramer 2015, i.a.):

(12) a. *i*[FEM] = Fem natural gender
b. *u*[FEM]= Fem arbitrary gender
c. *i*[MASC] = Masc natural gender
d. *u*[MASC]= Masc arbitrary gender
e. *i*[NEUT] = Neuter inanimate gender
f. *u*[NEUT] = Neuter animate gender

Uninterpretable and **interpretable** gender hierarchically organized in the **feature geometry** (13) (Harley & Ritter 2002):



• Language variation: different activation patterns of the nodes in (13):

Three-gender systems use of all nodes in (13) (German, Greek, Kannada). Two-gender systems use (14a) (Swedish, Danish) or (14b) (French, Spanish). No-gender systems do not have Class and nodes contained (English, Turkish).

<u>Two Key Observations:</u>

- 1) Obligatory ACC marks Masc, Fem in systems activating the full Class geometry in (13).
- 2) Systems that fully activate (13) obligatorily express ACC morphology on NPs bearing *i/u[MASC]/[FEM]*, but not on NPs with [NEUT].

<u>Proposal</u>

- Model case in the gender system in close analogy to agreement in the person system:
- Just as 1st and 2nd person must be licensed by agreement, in contrast to 3rd person (see the literature on the PCC family of constraints),

Masc and Fem gender must be licensed by case, in contrast to Neuter:

(15) The Gender Licensing Condition (GLC)

[MASC], [FEM] must be licensed by ACC case, in systems fully activating Class.

• Four gender systems fit the GLC marking [MASC], [FEM] & the root node [Animate].

Two further observations:

1) Morphological vs. semantic ACC marking:

- **a)** Obligatory ACC marks Masc, Fem (combined with D) in systems activating the full Class geometry in (13).
- b) In languages with (14a), (14b) or no Class, if there is ACC marking it is sensitive to semantic properties associated with the D-system (1-DOM sensitive to definiteness/specificity, 2-DOM).

2) <u>A correlation between type of ACC marking and form of morphology</u>:

- a) Gender-sensitive ACC is found on the **noun** (and D).
- **b)** Semantically-sensitive ACC has the form of a **preposition/marker** attached above the DP.

<u>Proposal</u>

(adapting Pesetsky 2013, ch 9, discussion of prototypes)

ACC parasitic on features in the extended projection of N, cf. Marantz 1991.
ACC is realized in the smallest available domain containing the relevant features, cf. Pesetsky 2013, his condition (121b).

Gender is on the little n head categorizing the Root (Kramer 2015, i.a.).
By the GLC, [MASC]/[FEM] must be licensed by ACC in systems fully activating Class. This shows up as ACC morphology on the noun because this is the smallest available domain containing gender features, cf. Pesetsky 2013, condition (123).

•In DOM-languages, **ACC** is parasitic on features of the **D system**, explaining definiteness/ specificity. Realization of case happens at the **DP level (the smallest domain containing D-features)**.

III) QUESTIONS AND FURTHER DIRECTIONS

Question 1

Where to look for an answer

What is the explanation for the **disjunctions** in Generalizations 3 and 4 in (9), i.e. why is it that twoand no-gender languages <u>either lack</u> <u>case all together or utilize</u> <u>DOM</u>?

- Look at differences in the determiner systems, e.g.: many DOM languages lack definite Ds, French/Italian (no DOM) have partitive articles, Spanish/Romanian (with DOM) do not (cf. Uriagereka 1995).
- Variation in the D-systems may also account for variation of DOM types (1-DOM vs. 2-DOM; sensitivity to definiteness vs. specificity).

V) PANEL QUESTIONS

a. What are case features?

b. How many ways are there of getting case/ assigning case?

4 sub-questions:

- 1) Do case features exist, or are cases copies of some other features (e.g. category features, uT on D)?
- 2) Do all NPs/DPs have them?
- **3)** Why or why not? (is there a case filter?)
- 4) Can an NP/DP have more than one, and if so when? (is there (always) case stacking?).

The GCH most directly bears on sub-questions 2 and 3:

Question 2: Do all DPs/NPs have case?

- In a large set of languages falling under the GCH, not all NPs/DPs have ACC case under conditions that are systematic and general (see table on next slide).
- In the majority of the African languages with case discussed in König (2008: 292-301), accusative, marked nominative, ergative, presence vs. absence of morphological case depends on word-order (no case marking before the verb in verb initial ones), definiteness, gender, number and their combinations.
- It is implausible to attribute the systematic absence of case morphology to case syncretism in all these cases.

LANGUAGE TYPE		ACC MARKING	NO MARKING
3-genders natural (e.g. Kannada)		<i>i</i> [MASC]: ACC <i>i</i> [FEM]: ACC [NEUT] _{[DEF]/[SPEC]} : DOM	[NEUT]: NO
3-genders arbitrary (e.g. Latin, Greek, Gen	rman, Icelandic)	<i>i/u</i> [MASC]: ACC <i>i/u</i> [FEM]: ACC	[NEUT]: NO
	No DOM (e.g. French)	Clitics (3 genders): ACC on [MASC], [FEM]	<i>i/u</i> [MASC]: NO <i>i/u</i> [FEM]: NO
2-genders arbitrary Masc-Fem	With DOM (e.g. Spanish)	<i>i</i> [MASC] _{[DEF]/[SPEC]} : DOM <i>i</i> [FEM] _{[DEF]/[SPEC]} : DOM Clitics (3 genders): ACC on [MASC], [FEM]	u[MASC]: NO u[FEM]: NO
	With DOM (e.g. Hebrew)	NP[def]/[spec]: DOM	<i>i/u</i> [MASC]: NO <i>i/u</i> [FEM]: NO
2-genders Common-	Neuter	Pronouns (3 genders):	<i>i/u</i> [COM]: NO
(e.g. Swedish)		ACC on [MASC], [FEM]	<i>i/u</i> [NEUT]: NO
2-gender natural Ma (e.g. Kolami)	sc-nonMasc	NP _[ANIMATE] : DOM	NP _[lnanimate] : NO
No gondow	No DOM (e.g. English)	Pronouns (3 genders): ACC on [MASC], [FEM]	NP: NO
No genders	With DOM (e.g. Turkish)	NP[DEF]/[SPEC]: DOM	NP: NO

Question 3: Why or why not?

I proposed the Gender Licensing Condition (15) for obligatory ACC in 3gender systems in analogy to the Person Licensing Condition (PLC) (Bejar & Rejac 2003); cf. Anagnostopoulou 2003, 2005; Baker 2008.

- (15) The Gender Licensing Condition (GLC)
 [MASC], [FEM] must be licensed by (ACC) case in systems fully activating Class.
- For DOM systems: case licenses semantic features realized in the Ddomain.
- Number also enters the case licensing system: It interacts both with gender (Corbett 1991) and with the D-system yielding DOM-type phenomena (Corbett 2000, ch. 3,4).

- In sum, from the perspective of the GCH:
- Accusative case features are parasitic on individuation features of objects in a particular order of priority.
- The order in which Acc case features are assigned derives from the Gender Licensing Condition (GLC) combined with the order in which the relevant features are introduced (gender>number>D-features).
- If the GLC is correct, it adds to the arguments that case features are assigned in syntax.

What type of case do unmarked arguments bear?

- Subjects and objects with unmarked case in Acc languages look **identical** but **differ** in **agreement possibilities**.
- Classic account : Nom vs. Acc Case (abstract Case).
- Pesetsky (2013): **unmarked objects bear Nom** in Russian.
- <u>Desideratum</u>: derive agreement with unmarked subjects vs. objects from independent syntactic conditions, e.g. locality, agreement domains (2 vs. 1), treating unmarked case on subjects and objects as identical.
- This is incompatible with the view that there is **case-sensitive agreement** (Preminger 2014, Baker 2015a,b drawing on Bobaljik 2008).
- In this view, there must be a Nom vs. Acc case distinction (morphological case) for arguments bearing unmarked case, just as in the abstract Case approach, i.e. Nom must be distinct from unmarked Acc.

Why the link between Acc case on objects and licensing of gender or D features combined with number?

- The most obvious answer relates to 'markedness' conditions.
- A full answer requires an investigation of other alignments in order to determine whether they show GCH/ GLC effects. If yes, do we find them:

(i) on **objects?**

(ii) on arguments bearing **overt/marked case morphology**, i.e. on **subjects** in ergative languages, on **subjects** and **objects** in tripartite languages, on **subjects** in marked nominative languages?

A mixed picture at this stage:

1) On the one hand, in marked nominative languages GCH-type conditions affect <u>subjects</u>

- König (2008: 10): overt case morphology in marked nominative languages is influenced by definiteness (Wolaitta), person (Datooga), noun phrase structure (Dinka), gender (Cushitic), number (Cushitic), constituent order (Chai).
- Handschuh (2014: 41): Qafar (Cushitic) has NOM for masc A/S vs. zero for P and no marking for other genders (Hayward 1998), mirroring the gender split with neuters in 3-gender Indo-european languages.
- Qafar has a complex gender + number, semantic + phonologically based gender-assignment system (Hayward & Corbett 1988, Corbett 1991: 51), that could be analyzed as a 3-gender system.

- Handschuh (2014): topic-focus also determines subject marking in marked NOM languages:
- In Nandi and Turkana (Nilotic) emphatic subjects are zero-marked, while non-emphatic ones are case-marked (cf. the ban on case in preverbal position in African languages more generally; König 2008).
- Siroi, Waskia, Kunimaipa, Nabak, Kaki Ae (Papuan languages, Handschuh 2014: 108-110) have overt marking for emphatic subjects, non-overt marking for non-emphatic ones.
- Topic-focus articulation has an impact on subject marking because subjects in marked nominative languages are licensed high (in C or T; Miyagawa 2010, 2016).
- **Definiteness/indefinitness** affects **object marking** because objects are in Voice/v, the domain of Existential Closure (Diesing 1992).

On the other hand, in ergative-tripartite languages GCH-type conditions do not generally seem to affect <u>subjects:</u>

- **DOM** in e.g. Hindi (tense/aspect split ergative, **2-gender** language) and related languages (Marathi, **3-gender with DOM**, is a counterexample to the generalizations, Renuka Ozarkar, p.c.) suggests that we find GCH/GLC effects on **objects**.
- Ergative languages are known to show person splits but are not known to show gender splits.
- Baker (2015) discusses cases where the definiteness of the object determines ergative marking on the subject. This is a configurational condition very different from the local conditions I discuss here.
- There seems to be **no correlation** between **ergative marking and genders** (Jonathan Bobaljik, p.c.): ergative is marked on ergative subjects regardless of animacy/specificity or topic-focus: Inuktitut, Chukchi (both no gender systems), Hindi (2 gender), Burushaski(4 gender), vs. Hittite (2 gender, ERG marking inanimates, Laroche 1962), Mangarayi (Merlan 1982: 56-57, see next slide).

More complex systems where gender determines alignment should be looked at separately:

- Mangarayi (Australian) has accusative alignment for fem, marked nominative alignment for masc and ergative alignment for neut (Handschuh 2014: 41-42, citing Merlan 1989).
- Diyari, a 2-gender language (Corbett 1991: 11) could be analyzed as having gender-sensitive alignment in combination with number (Baker 2015: 22-23 drawing on Austin 1981).
- It must be clarified how much of this is **syncretism** (Legate 2008, 2012; Baker 2015).

Some Questions: [I will address here 7 with implications for 6)

1) Is case the morphological realization of Case? Does Case exist?

2) Is there a uniform notion of "structural case/Case" as opposed to "lexical case/Case" and/or "inherent case/Case"?

3) What is the relationship between Case/case and Agree/agreement?

4) What is the status of **Nominative** case? Is it default (Schütze 1997), environment sensitive (Marantz 1991) or assigned by Agree (Chomsky 2000, 2001)? Can it be all of these things, subject to parametrization (Pesetsky 2013, Baker 2015)?

5) What is the status of **Genitive** case in DPs? Is it like Nominative in TPs (Marantz 1991) or is it the case assigned by N (Pesetsky 2013)?

6) How is Accusative assigned? Under Agree with v/Voice (Chomsky 2000, 2001), under Feature Assignment by V (Pesetsky 2013) or is it dependent case (Marantz 1991, Baker 2015) sensitive to the presence of a higher argument?

7) How is **Dative** case assigned?

- Baker & Vinokurova (2010), Baker (2015): dative is either oblique/prepositional case or dependent case in the VP-domain.
- Anagnostopoulou & Sevdali (2016): historical change in Greek involves a transition from Classical Greek (CG) with PP-dative and genitive objects to Modern Greek (MG) with DP-objects bearing dependent case (ACC in opposition to a higher argument, GEN in opposition to a lower argument)
- The transition involves:
- (i) the loss of dative case morphology
- (ii) the generalization of accusative morphology on DOs in transitives
 & ditransitives and genitive morphology on IOs in ditransitives.
- (iii) the loss of P's capacity to assign non-accusative case.

• This analysis explains **two differences** between CG and MG:

A)

-In CG dative and genitive objects of **monotransitives** were productively attested.

-In MG genitive objects of **monadic transitive verbs** are very rare. **Most verbs that assigned dative and genitive in CG now assign accusative**.

B)

-In CG choice of dative vs. genitive IOs was subject to thematic information: e.g. dative for goals vs. genitive for sources/possessors.
-In MG genitive invariably marks all IOs: goals, sources, beneficiaries, possessors.

- **Dependent GEN** in MG is assigned in opposition to a lower argument.
- This explains why **high applicatives in MG** can combine with **static predicates** but **not** with **unergatives** (Pylkkänen 2002/2008).
- In (19) the genitive can be assigned in opposition to a lower argument, in(20) it cannot.
 - (19)Tha kratiso tis Marias mia stigmi tin tsanda FUT hold-1sg the Mary-**Gen** one moment the bag-ACC boresi to palto tis gia na vaali na can-3sg subj take off the coat her for SUBJ 'I will hold for a moment the bag for Mary, so that she can take off her coat'
 - (20)*Etreksa/*perpatisa/*kolimpisatu PetruRan-1sG/walked-1sG/swam-1sGthe Peter-GEN'I ran/ walked/ swam for Peter''I ran/walked/ swam for Peter'

- Dependent GEN also explains the (un-)availability of genitive-nominative (GEN-NOM) alternations in MG.
- GEN-NOM alternations are found with pairs like (21) involving sensation predicates:

(21)	а.	Tu Jani	tu	ponai	o lemos
		The Janis- GEN	CI.GEN	hurt-3sg	the throat- NOM
	b.	O Janis	ponai		
		The Janis- nom	hurt-3sg		
		'Junis hurts'			

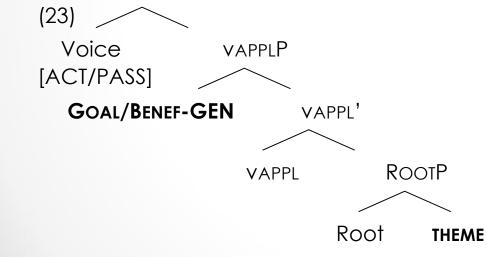
In (21a) dependent genitive is assigned on 'Janis' in opposition to the lower 'the throat'.

In (21b) dependent genitive cannot be assigned, and 'Janis' receives NOM.

GEN-NOM alternations are disallowed in passives:

(22) *O Petros dothike ena pagoto The Peter.NOM gave.NACT an ice-cream.ACC 'Peter was given an ice-cream'

In (23), **GEN** is assigned in opposition to the **lower THEME** regardless of whether Voice introduces an External Argument (EA) or not.



- The historical path described for Greek datives/genitives can be seen as one particular instantiation of the well-known fact of case developing from adpositions (see several contributions to Malchukov & Spencer 2009, i.a.).
- Extensions to **ergatives**:
 - See Polinsky (2016) for PP- vs. DP-ergative languages and the transition from PP- to DP-ergatives.
 - This is related to the well-known observation that ergative subjects often emerge from a reanalysis of instrumental and agentive PPs in passives ("passive-to-ergative reanalysis"; Polinsky 2016: 30 cites Benveniste 1952; Kuryłowicz 1964; Bubenik 1998; Kuipers 1974; Hohepa 1969; Clark 1976; S. Anderson 1977; Chung 1978; Comrie 1978; Chung and Seiter 1980; Estival and Myhill 1988; Hook 1992; Peterson 1998; Otsuka 2005d, 2011).



I argued that accusative case is subject to **The Gender Case Hypothesis (GCH)**.

Plot: 1) Evidence for the GCH- **2)** Modeling the GCH- **3)** Questions and Directions- **4)** Extensions to agreement in noun-class 5 or more gender systems.

Based on the GCH I proposed that

- -Accusative case features are parasitic on individuation features of objects in a
 particular order of priority deriving from the Gender Licensing Condition combined
 with the order in which the relevant features are introduced (gender>number>Dfeatures).
- -There is evidence that the same procedure also applies to **marked nominative case** where t**opic-focus** features of subjects are also relevant.

I provided an argument from the history of Greek that **dative/genitive** is either **oblique/prepositional** or **dependent case** in the VP-domain.