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BUILDING POSSESSIVE ADJECTIVES

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WHAT THIS TALK IS ABOUT

Stassen (2009, 137):

- *Predicativization*: the **possessee** is re-analyzed as a predicate with the **possessor** as its subject
 - the possessee is marked by a **derivational** morpheme, which can be a nominalizer or **an adjectivizer**; the resulting words are **property-indicating**:

(1) Wai Wai (Carib, Brazil)

Tu-wuhre-ke-m komo kîwyam.

ADV-weapon-ADV-NOM COLL IPL.INCL

‘We all have weapons.’ (Stassen 2009:159)

(2) John is blue-ey-**ed**. (Myler 2016: 345)

PARAMETERS OF VARIATION

- Myler (2016: 382) *Typology of Predicativization*
 1. Category of the morpheme: n vs. a, Quechua *-yoq* = n; English *-ed* = a
 2. Category of the complement: DP vs. nP, in Quechua all possessive relations can be expressed via predicativization, in English the distribution is much more restricted (inalienable possession)
 3. Modifier requirement: Yes vs. No
 4. Complexity filter on modifier: Yes vs. No vs. Not Applicable
- Little is known about predicativization in Greek and its place in and contribution to this typology, cf. Kampanarou (2023) for some preliminary discussion, and Andreou (2014), Andreou & Ralli (2015) on possessive compounds

POSSESSIVE RELATIONS

■ Myler (2014: 223):

- (3) a. John has a Playstation 3.
b. John has a sister.
c. John has blue eyes.
d. This table has four sturdy legs.
e. John has a cold.
f. John has a great deal of resilience.

Ownership

Kinship

Body Part

Part-Whole

Disease

Attribute

POSSESSIVE RELATIONS AND ADJECTIVIZATION: ENGLISH

- Nevins & Myler (2014: 249):
 - adjectivization via *-ed* in English is able to convey body-part possession (*big-nosed*), spatial relations (*glass-bottomed*), inanimate part-whole relations (*five-pointed star*), mental states (*strong-willed*), and clothing that is being worn (*ragged-trouserred*)
 - However, it is apparently unable to convey kinship relations (**three-sistered*)

POSSESSIVE RELATIONS AND ADJECTIVIZATION: SPANISH

- Fábregas (2020: 127): "Perhaps the best candidates to produce adjectives that characterise entities by what they possess are those that can express *part-whole* relations, and not inalienability in the strict sense."
- Since in Spanish forms such as *furgonet-ado* 'with a van', and *cucarach-ado* 'with coackroaches' are possible, Fábregas (2020: 128-129) states that "there is no sense in which one can properly restrict possessive adjectives to just inalienable possession"
- Underspecified notion of possession
- What is the correct generalization for Greek?

SEMANTIC CLASSES

Two semantic classes of possessive adjectives, Ljung (1976) for English, Fábregas for Spanish (2020: 118):

- i) pure possession and
- ii) possession involving valuation, i.e., the entailment that the entity possessed appears in an **excessive quantity** – if it is mass, or interpreted as a group – or as **unexpectedly big** – if the possessum is a delimited entity

- (4) a. pec-oso 'freckly', bearded *pure possession*
b. barrig-udo 'big-bellied', toothy *possession + valuation*

- Do we have a similar distinction in Greek? Form-meaning mapping?

GREEK POSSESSIVE STRUCTURES

- Koufaki (2014), Kampanarou (2023): ways to express possession in Greek

- HAVE alternating with BE + P (with):

(5) Ο Janis ehi/ine me pireto/gripi. *diseases*

the-John has/BE-3SG with fever/flu

'John is with/has fever/the flu.'

(6) I kukla tis ehi/ine me prasina matja. *body part*

the doll her has/BE-3SG with green eyes

'Her doll is with/has green eyes'.

GREEK POSSESSIVE STRUCTURES

- HAVE alternating with **BE + P (with)**:

(7) To amaksi tis ehi/ine me tesseris portes.

part whole

the car her has/BE-3SG with four doors

'Her car is with/has four-doors.'

(8) I Danai ehi/ine me to amaksi simera.

temporary possession

the Danai has/BE-3SG with the car today

'Danai is with/has the car today.' (=Danai took the car today)

GREEK POSSESSIVE STRUCTURES

- Ownership and kinship are excluded from the *BE +with* pattern:

(9) a. ○ Janis ehi ena vivlio./*○ Janis ine me vivlio.

John has a book./ John is with book.

b. ○ Janis ehi mia adelfi/*○ Janis ine me adelfi.

John has a sister./John is with sister.

- Myler (2016) for Icelandic, Kampanarou (2023) for Greek: *BE+with* is subject to the *accompaniment requirement*

- DP construal: all but temporary possession in $DP_{\text{possessee}}-DP_{\text{gen_possessor}}$

(10) to vivlio/ta matia/o piretos/i adelfi tu Jani

the book/the eyes/the fever/the sister the John.GEN

ADJECTIVAL PARTICIPLES & ADJECTIVES

- Greek also has predicativization as a strategy: adjectivization

(11) Ο Janis ine gripjas-**menos**. *participial morphology*

the John is flu-ed.MASC

'John has the flu.'

(12) Η kukla tis ine **prasin-o-mata**. *adjective, compound (modification)*

the doll her is green-LE-eyed.FEM

'Her doll has green eyes.'

NB. Andreou & Ralli (2015: 176f.) discuss few nominal compounds, e.g. *vromóglosa* 'having a filthy tongue (FEM)' and *voidokiliá* 'having a big belly (FEM)', which have adjectival counterparts, *vromóglosos* and *voidokílis*. The nominal forms refer to humans. 11

ADJECTIVES: SUFFIXED

- (13) a. O Janis ine fakid-**iaris**. / O Janis ine mus-**atos**.
the John is freckl-ed.MASC /the John is beard-ed.MASC
'John is freckled.' /John is bearded.'
- a'. O Janis ehi fakides./O Janis ehi musi/musia.
John has freckles/John has beard/beards.
- b. mal-**iaros** gatos
hair-ed-MASC cat.MASC
A cat with lots of hair
- b'. O gatos ehi malia.
the cat has hair-s
- -*iaris* affix also associated with noun formation

POSSESSIVE RELATIONS

- In Greek, the following relations can be expressed via predicativization:
 1. diseases (suffixed: -iaris, participle)
 2. body part (compounds, participle, suffixed)
 3. part whole (compounds, suffixed: -atos)
 4. certain ownership relations, e.g., *skafatos* 'boat-ed' (suffixed: -atos), *matsomenos* 'money-ed' (participle)
- As in English/Spanish, kinship is not expressed via predicativization; (Fábregas 2020): roots expressing animates are excluded from the formation of possessive adjectives
- Inalienability does not seem to be the right generalization for Greek, as in Spanish

FURTHER QUESTIONS TO BE ADDRESSED

i. **Overt vs. covert affix in compounds:** a) overt derivational affix, the neuter and sometimes also the feminine may contain a different derivational affix, *-us-* and *-ik-* respectively (14a), and b) zero affix, (14b, Andreou & Ralli 2015); several minimal pairs with overt/covert affix:

- | | | | | | |
|---------|----------------------------|----------------|----|------------------|------------|
| (14) a. | ksanth-o-mál- <u>i</u> -s | 'blond-haired' | b. | kser-o-kéfal-os | 'stubborn' |
| | blond-LE-hair-SUFFIX. | MASC | | dry-LE-head-MASC | |
| | ksanth-o-mal- <u>us</u> -a | | | kser-o-kéfal-i | |
| | blond-LE-hair-SUFFIX. | FEM | | dry-LE-head-FEM | |
| | ksanth-o-mál- <u>ik</u> -o | | | kser-o-kéfal-o | |
| | blond-LE-hair-SUFFIX. | NEUT | | dry-LE-head-NEUT | |

The affix *ik* in the neuter typically adjectivizes nouns, Alexiadou & Stavrou (2011)

FURTHER QUESTIONS TO BE ADDRESSED

ii. **modification requirement:** as in English, modification is not always obligatory.

Modification subject to the complexity requirement:

(15)	ksanth-o-mál-i-s	*malis	vs.	mous-atos	fakid-iaris
	blond-LE-haired	haired		bearded	freckled

- **Question:** what regulates this?

POSSESSIVE BASICS

- Myler (2016: 50):
 - Possession is fundamentally a relationship between two DPs—the possessor and the possessee (Szabolcsi 1981, 1994; Kayne 1993; Partee 1999)
 - Inalienable relations of various sorts are introduced low in the structure (root or nP)
 - Alienable possession is introduced via PossP

(16) a. [DP [PossP alienable [nP]]]

b. [DP [nP inalienable [Root]]]

Español-Echavarría (1997), Alexiadou (2003), Nevins & Myler (2014), Myler (2016), Adamson (to appear)...

POSSESSIVE STRUCTURES

Possessive adjectives:

(17) a. [vP BE [PredP DP_{Possessor} [**aP** ed [nP [**Root**]]]] Myler (2016: 370)

"-ed embeds a nominal substructure too small to contain PossP, it is limited to the expression of inalienable possession"

- Fabrégas (2020: 136): "In possessive adjectives, in contrast to nominal genitival constructions, the prepositional head Poss does not project the possessor as an external argument; instead, this argument is introduced as the subject of a PredP head. The role of PredP is essentially the same that Schäfer (2008) associates with a VoiceP unable to assign a theta-role by itself: it simply passes up the theta-role related to the denotation of its complement."

b. [vP BE [PredP DP_{Possessor} [**PossP** [nP]]]]

PREDICTIONS

- Myler (2016: 367):
 1. alienable possession should be available in a language with predicativization only if the derivational morpheme embeds a DP substructure big enough to contain PossP
 2. if the derivational morpheme selects a DP substructure too small to accommodate the Poss head, then we expect that the morpheme will be able to express only inalienable relations (i.e., relations inherent to the possessee noun itself)
- This holds for English: blue-eyed vs. *blue-carred
- But not in Greek: *skafatos* 'boat-ed', *amaksatos* 'carr-ed', see also Spanish *furgonet-ado* 'with a van', Fábregas (2020: 128), suggesting that a version of (17b) is more accurate

GREEK PREDICATIVIZATION STRUCTURES

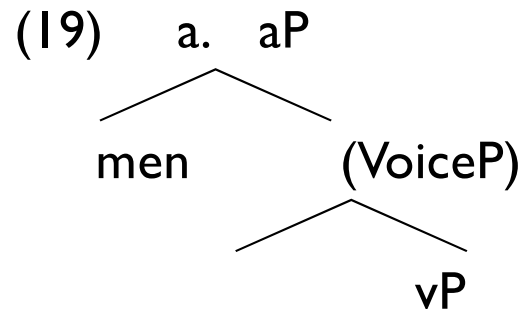
1. aP selecting a verbal structure (participle), marginally possible in English, e.g., *be-spectacl-ed*, possible in German and Dutch, *ge-stiefel-t* 'boot-ed', see Myler (2016), Pross (2019)
2. compounds (stem-stem): nPs that are adjectivized, modification requirement?
3. aP selecting an nP/PossP (overt affix)?

GREEK PARTICIPLE FORMATION

Anagnostopoulou (2003), Alexiadou, & Anagnostopoulou (2008): two affixes for participles

(18) vraz-o 'boil.1Sg' vras-**men**-os 'boiled.MASC' vras-**tos** 'boiled.MASC'

- **menos** participles attach to verbal layers, i.e. at least v (and sometimes VoiceP): can be modified by instrumental adverbials and *by*-phrases, (19b):



b. O tixos ine xtis-**menos** me mistri/ apo ton ergati
 The wall is built with trowel/ by the worker

'The wall is built with a trowel/ by the worker' (Anagnostopoulou & Samioti 2014: 89)

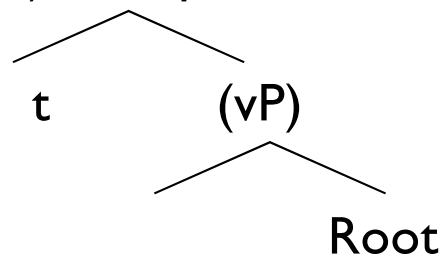
GREEK PARTICIPLE FORMATION

Anagnostopoulou & Samioti (2014: 99f.): restrictions on *-tos* participles:

(20) *-tos* selects expressions naming events

- direct attachment to $\text{Root}_{\text{event}}$, e.g., *vras-t-ós* 'boiled'
- attachment to $\text{Root}_{\text{thing}}^+$ verbalizer, e.g., *vid-o-t-ós* 'screwed' *vid-* = screw
- attachment to $\text{Root}_{\text{state}}^+$ verbalizer, e.g. *kokin-is-t-ós* 'with red sauce' *kokin-* = red
- attachment to $\text{Root}_{\text{undefined}}^+$ verbalizer, e.g., *trekl-is-t-ós* 'staggering'

(21) Asp/aP



PARTICIPLES AND POSSESSION

- *-men-os* participles figure in possessive interpretation:

(22) a. paputs-**o**-men-os b. mats-**o**-men-os
booted.MASC moneyed. MASC

- **-o-**: signal of a v head within *-men-os* participles:

(23) a. paputs-on-o b. mats-on-ome
shoe-v-ISG group/lots-v-NACT ISG
to put shoes get lots of money

(22b): excessive interpretation part of root meaning and thus part of verbal meaning that leads to participle formation

PARTICIPLES AND POSSESSION

- *-t-os* participles: attachment to $\text{Root}_{\text{thing}}^+$ verbalizer, in Ancient Greek the verb *trih-o-o* (hair-v-1SG) meant to cover with hair

(24) trih-**o**-tós 'haired'

- Thus, in the case of the participle, we have evidence for an overt verbalizer, i.e. a *v* head present in the adjectival structure
- Excessive interpretation of adjective in the case of participle formation inherited from verbal meaning

PARTICIPLES AND POSSESSION

- Interpretation of participles: Koontz-Garboden, Deo & Francez (2012) advance a uniform analysis for verbal (*the meat is cooked*) and nominal attaching -ed (*bearded*), but cf. Myler (2016): -ed morphology uniformly contributes an underspecified possessive-like relation
- In Greek, these are two different patterns: there is a special affix (e.g., -*íaris/iarós*, -*átos*)
- Still in the spirit of Koontz-Garboden, Deo & Francez (2012) in Greek, the participial structure contains a verbal layer as result state participles always contain v in Greek; further support for the view that result state and possession are systematically related (Burton & Davis 1996, see also Pross 2019), *htismeno* 'built' vs. *matsomenos* 'moneyed'

POSSESSIVE COMPOUNDS

Possessive compounds are **stem-stem** compounds, as in Slavic (Chovanová & Štichauer 2014):

- (25) O Janis ehi prásina matia **Adj + máti = N neuter** ine prasin-**o**-matis Masculine
John has greed eyes is green-LE-eyed
- (26) ehi makriá heria **Adj + héri = N neuter** ine makr-**i**-heris Masculine
has long arms is long-LE-armed

Ralli (2013), Andreou & Ralli (2015):

1. Greek compounding: first member is a bare stem (no affix may be included)
2. a *linking element* (LE), -o-, is mostly included
3. the inflectional endings of the second members **do not** match the endings these elements would have in isolation
4. possessive compounds are instances of stem-stem compound and derivation

POSSESSIVE COMPOUNDS

- More compounds forms:

(27) *compound (all forms are illustrated in MASC) elements in isolation*

ksanth-**o**-mális blond-haired ksanthó malí 'blond.NEUT hair.NEUT'

sten-**ó**-mialos narrow-minded stenó mialó 'narrow. NEUT brain.NEUT'

di-kéfalos two-headed dio kefália 'two heads.NEUT'

vrom-**ó**-stomos foul-mouthed vrómiko stóma 'dirty.NEUT mouth.NEUT'

kser-**o**-kéfalos stubborn kseró kefáli 'dry.NEUT head.NEUT'

OVERT VS. COVERT AFFIX

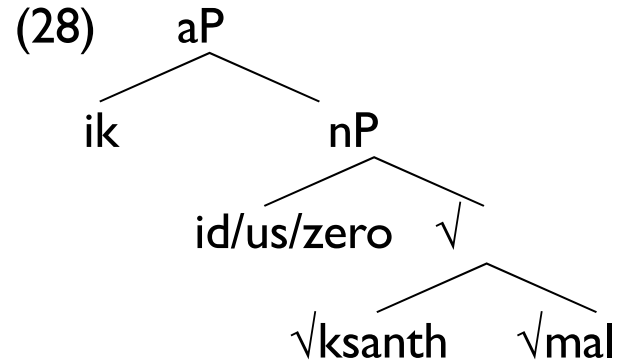
- Overt and zero affix, cf. in earlier stages of Greek often affixed, *aspr-alogátos* 'white-horsed' i.e., having a white horse, Andreou & Ralli (2015: 182 Medieval Greek)
- minimal pairs with overt and covert affix.

MASC	FEM	NEUT	
1. <i>ksanth-o-mál-i-s</i>	<i>ksanth-o-mal-ús-a/mál-a</i>	<i>ksanth-o-mál-ik-o</i>	blond-haired
2. <i>ksanth-ó-mal-os</i>	<i>ksanth-ó-mal-i</i>	<i>ksanth-ó-mal-o</i>	blond-haired

- Andreou & Ralli (2015: 179): in exocentric compounds such as I. *ksanthomális* there is an nP layer; in the plural, *-i-* is substituted by an allomorphic variation */ið/* (*ksanth-o-mal-id-es* 'blond-LE-hair-Dsuf-PL')

OVERT VS. COVERT AFFIX

- Markopouloss (2019): /ið/ → [+hum, -fem] and no [-hum] or [-fem] nouns, realizes n
- *us* is restricted apparently to hair, eyes and brows and gives feminine nominalizations
- neuter may contain -ik suggesting that aP may actually embed nP



AFFIXATION: (I)ÁRIS AND ÁTOS

(29) fakid-iaris: freckled NB: with –iaris, neuter contains -ik

psor-iaris: having scabbs

(30) mus-átos: beard-ed koter-átos: yachted

skaf-átos: boat-ed

kabin-áto: cabin-ed (Sipitanos 2016)

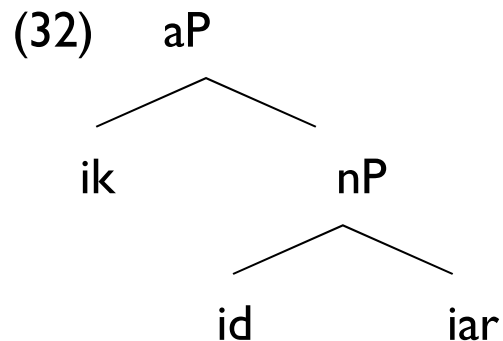
amaks-átos: carred

- Each selects a particular set of roots; there does not seem to exist a restriction on (in)alienability
- Both affixes are Romance borrowings
 - -iaris > arius, yielding a pejorative reading, denoting illnesses, typical characteristics, Anastasiadi-Simeonidi (2010)
 - -atos > atus, used already in Latin to derive possessive adjectives, Fábregas (2020)

AFFIXATION



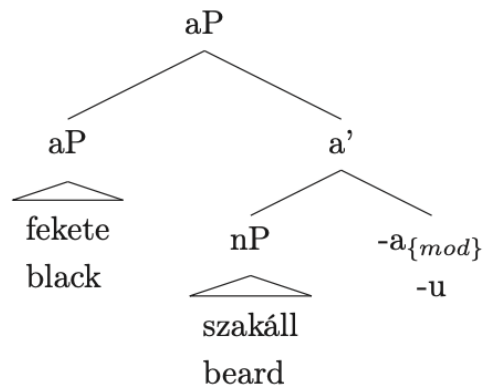
With *iaris*, we have evidence for nP, plural form contains /ið/ *fakid-iar-id-es* 'freckled.PL.MASC.', NEUT again contains *-ik* *fakid-iar-ik-o* 'freckled.NEUT', cf. Anastasiadi-Simeonidi (2010):



STRUCTURES

- Structures, building on Myler (2016) and Roy (2012), Fábregas (2020):
(33) [VoiceP –ext.arg. [vP BE [**PredP subject of predication = possessor [aP]]]]**
- in Greek VoiceP lacks an external argument: NActive Voice on BE, Kampanarou (2023)
- aP= Participle, adjective, compound
- Possessor introduced in PredP, Fábregass (2020), inalienability does not play a role
- Semantics of possession introduced via a, Myler (2016), Andreou & Ralli (2015)
- aP built on the basis of a verbal sub-structure excluding the external argument
 - idiomatic readings, due to lack of external argument in the embedded structure

MODIFICATION REQUIREMENT



- Myler (2016) argues against pragmatic accounts of the modification requirement
- He proposes a special type of predicativizing heads, Co-Predicativizing heads, which take a modifier as a specifier in the syntax

MODIFICATION REQUIREMENT

- Evidence: Hungarian has two distinct affixes, one that requires the modifier, and one that doesn't:

(34) a. * szakáll-u. b. szakáll-as.
 beard-U 'bearded' beard-OS 'bearded'

(35) Specifier Requirements in English Predicativization:

-ed ¹ {-mod}	bearded
-ed ² {+mod}	blue-eyed

- But in Greek compounding is stem based (Ralli 2013)

MODIFICATION REQUIREMENT

Greek also has various affixes, the requirement seems to apply to a sub-set thereof, cf. Slavic (Chovanová & Štichauer 2014):

(36) ksanth-o-mal-i-s vs. mus-atos
 blond haired bearded

■ Same root can be involved in formations with and without modification:

(37) a. trih-otós 'haired' vs. b. kokin-o-tríh-is 'red-haired'

(38) a. mal-iarós 'haired' vs. b. kokin-o-mál-is 'red-haired'

■ a examples have the valuation component

MODIFICATION REQUIREMENT

- Ljung (1976: 162): first degree inalienability = all the referents of a certain noun are supposed to have as inherent part or property the referents of some other noun
- (39) ehi malia vs. ehi makria/ksanthia malia has hair/ has long/blond hair
ehi matia vs. ehi prasina matia has eyes/has green eyes
ehi stoma vs. ehi vromiko stoma has mouth/ has dirty mouth
- (40) ehi fakides, ehi musu/musia ehi psora ehi skafos ehi kabines
has freckles has beard has scrabbs has boat has cabins
- Possessive compounds perhaps better classified as *part-whole*, as in Slavic (Chovanová & Štichauer 2014)

VALUATION

- English: Ljung (1976: 161), Spanish: Fábregas (2020)
 - inalienable nouns adjectivalize under precisely the circumstances that the alienables do not, i.e. with the suffix *-ed* typically when the noun is premodified: *three-legged, blue-eyed*
 - inalienably possessed nouns permit adjective-formation without premodification and with ***non-ed*** suffixes as in e.g. *leggy, toothy, buttocky*; these adjectives always express **possession of the nouns to an unusual degree or in an unusual number**.
- Similar observations hold for the Greek pairs in (41-42), cf. Anastasiadi-Simondi (2010) for *-iaris*; in (41) the participle inherits the meaning of the verb, but the meaning of (42) is negotiated between the root/nP (mass, group) and the affix:

(41)	trihotós	'haired, lots of hair'	vs.	kokin-o-tríhis	'red-haired'
(42)	mal-iáris/iarós	'haired, lots of hair'	vs.	kokin-o-mális	'red-haired'

CONCLUSIONS

Back Myler's (2016) typology

1. Category of the morpheme: Greek = a (but n also possible) & productive use of participles
2. Category of the complement: vP, nP, PossP as an intermediate projection active in Greek and Spanish (no restriction to inalienable possession, but no kinship terms because DP is lacking)?
3. Modifier requirement: as in English, Yes and No
4. Complexity filter on modifier: Yes



APPENDIX

IDIOMATIC INTERPRETATION

- As Nevins & Myler (2014) observe, *-ed* formations are a closed locality domain for the purposes of the interfaces; thus, it is expected that these formations could be a suitable domain for idiosyncratic interpretations

- This hold for Greek as well:

(I) galaz-o-ematos	blue-blooded, noble
sfiht-o-héris	stingy
kser-o-kéfalos	stubborn
mats-o-menos	moneyed

This applies to the participial forms as well as to the compound adjectives

KINSHIP TERMS

- Nevins & Myler (2014: 250): English like many Australian languages does not treat kinship relations as inalienable
- NB: kinship terms can built adjectives and enter other derivational processes, e.g., *patriko spiti* 'paternal house', *adelfikos filios* 'brotherly friend', they just cannot built possessive adjectives, see Myler (2016) for English
- Semantics: adjectivization applies to part-whole?
- Morpho-syntax of kinship terms?
 - Kinship terms behave differently in various languages from other 'inalienable' possessives (*split possession*, Stolz et al. 2008, Dahl & Koptjevskaja-Tamm 2001)
 - Myler (2016: 375): they must enter a relationship with D in order to project an argument, inherently definite (Dahl & Koptjevskaja-Tamm 2001)