

# Adjectives, categorization, and argument structure: Introduction

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# Intro: why another workshop on adjectives?

Martina  
works on  
relational  
adjectives ...



Laura works on  
verbal (& other)  
categorizers ...

# Intro: why another workshop on adjectives?

- ... and these two aspects of adjectival morphosyntax/-semantics are rarely treated together
    - (though there are exceptions, most of them by people sitting in this room)
  - That is, we want to know
    - under which circumstances (different types of) adjectives can take arguments and
    - how this relates to/is derivable from their formal categorial marking
- ➔ The goal of this workshop is to investigate and compare the morphology and morphosyntax of different classes of adjectives or “adjectival concepts”, their categorization/lexicalization, and their morphosemantics and argument structure from different theoretical perspectives.

Disclaimer: no diachrony

No overlap with  
the topic of the  
main session  
allowed!



# Types of adjectives & lexical categorization

(roughly) three types:

1. Property concept (PC) adjectives/qualitative adjectives (QAs)
2. Relational adjectives (RAs)
3. Verbal adjectives (VAs) & participles

All three suffer from “categorical instability”

- 1.: can be encoded as adjectival/verbal/nominal, depending on the language/root
- 2.: are “more noun-like in nature” and/or have been argued to contain a preposition (P) (Mateu 2002; Fábregas 2007, 2020; Acedo-Matellán 2022)
  - also: Fábregas (today); Gibert-Sotelo (today)
- 3.: are often considered “mixed categories” or “adjectival verb forms” (Lowe 2015)

# PC adjectives & categorization

Dixon's (1982, 2004) property concepts

DIMENSION	big, small, long, tall, short, etc.
PHYSICAL PROPERTY	hard, soft, heavy, wet, strong, etc.
COLOR	black, white, red, green, bright, dark, etc.
SPEED	fast, slow, quick, etc.
AGE	new, young, old, etc.
VALUE	good, bad, lovely, atrocious, perfect, proper, etc.
HUMAN PROPENSITY	jealous, happy, kind, clever, generous, cruel, etc.

# PC adjectives & categorization

- PCs can be encoded as adjectival, verbal, or nominal (Dixon 1982, 2004; Thompson 1989, Alfieri 2014, a.m.o.; ex. from Hanink & Koontz-Garboden 2024)
  - 1) I'm **happy**.  
→ adjectival (English/IE)
  - 2) ma:-č m-**ahan**-kəm  
2-sbj 2-**be.good**-incmpl  
'You're good'  
→ verbal (Yavapai/Yuman, Kendall 1975: 90)
  - 3) hí-nuní híí hí yé li-**mugé**  
19-bird 19.that 19.sub be 5-**quiet**  
'That bird is quiet.'  
→ nominal (Basaá/Bantu, Jenks et al. 2018: 650)

# Predicative vs. possessive usage

- “predicative” vs. “possessive” encoding of PCs (Francez & Koontz-Garboden 2015, 2017)
- The predicative strategy makes use of canonical predication devices available in a given language (e.g., the copula), (4a), the possessive strategy uses possessive morphology to express PCs, (4b).

## 4) Predicative vs. possessive lexicalization of property concepts

a. Pierre is hungry. (English)

b. Pierre a faim. (French)

Pierre has hunger



# PC categorization & possession

- Menon & Pancheva (2014); Hanink & Koontz-Garboden (2024:5): “categorizers of property concept roots are tied up with possession in the creation of nominal, verbal, and adjectival property concept words”
- In these cases, the categorizer lexically categorizes the root and at the same time introduces a possessive relation, 5)

5) Semantics of possessive categorization, Hanink & Koontz-Garboden (2024: 6)

$[[v_{\text{poss}}/n_{\text{poss}}/a_{\text{poss}}]]: \lambda P_{\langle e,t \rangle} \lambda x_e \exists y [P(y) \ \& \ \text{have}(x,y)]$

→ returns the set of individuals  $x$  in possession of a property  $P$

# PC categorization & possession

- confirms the intuition that morphological categorization is never completely vacuous (i.e., “just  $n$ ” or “just  $v$ ”, etc.)
- explains why deadjectival verbs tend to be based on the root rather than the adjectival stem (for PC adjectives, at least): the verbalizer introduces possessive semantics instead of the “vacuous” adjectival suffix
- Specifically in IE: evidence from d...y for a connection between possessive morphology and PC encoding (Grestenberger et al. 2024)

# PCs & other types of adjectives

- but there is also a growing body of literature arguing that “adjective” is not a uniform morphosyntactic class, let alone a categorial primitive (Mateu 2002; Baker 2003; Borer & Roy 2010; Fábregas 2020; Mitrović & Panagiotidis 2020; Acedo-Matellán 2022; the papers in Panagiotidis & Mitrović 2022 ...)
  - in this WS: Fábregas, Gibert-Sotelo (today); Alfieri, Acedo-Matellán & Roy, Panagiotidis, Fassi Fehri (tomorrow)
- .... raising the question of how to distinguish between different **adjectival subclasses** and cross-linguistically available lexicalization strategies for them

# Relational adjectives & adjectival subclasses: restrictions

- Relational adjectives (RAs) differ in a number of ways from quality adjectives/PC adjectives: They cannot occur in predicative position, (6b), nor in a comparative, (6c), adverbial or negated form (6d), and cannot be nominalized (see 6e; cf. e.g. Cetnarowska 2014, Fábregas 2007, 2020, among many others).

- 6)
- a. *medical examination*
  - b. *#The examination is medical.*
  - c. *# the more medical examination*
  - d. *#The examination runs (very) (non-)medical.*
  - e. *#The medicality of the examination*

- Semantics: ‘affiliation/membership’ to something that is expressed in the **head noun**

# Primacy of property semantics: evidence from shifting?

- When being used in contexts like the ones mentioned before, (some?) RAs, e.g. (7a), shift into property semantics, (7b–c).

## 7) German

- |   |               |
|---|---------------|
| a. <i>studentisches Lernen</i> ‘student’s learning, learning of students’ | (attributive) |
| b. <i>studentischeres Lernen</i> ‘more student-like learning’             | (comparative) |
| c. <i>Peter ist/wohnt studentisch.</i> ‘Peter is/lives student-like.’     | (predicative) |

→ adjectives are property words and RAs are properties of kinds (McNally & Boleda 2004)

- Adjectives are potentially ambiguous between RA and QA interpretation
- The specific interpretation may depend on the **nominal head** of the NP or on the syntactic/pragmatic **context**, cf.
  - E. *criminal lawyer* ‘lawyer dealing with criminal cases’ (RA) or ‘lawyer who is a criminal’ (QA)
  - In this WS: Bloch-Trojnar (tomorrow)

# Relational adjectives & adjectival subclasses

- Several sub-classifications of RAs have been discussed in the literature, favoring different formal/semantic aspects.
- Consensus that the **head noun** is a relevant dimension for the description of RAs (cf. Bosque 1993; Bosque & Picallo 1996; Marchis Moreno 2010, 2015; Fábregas 2007, 2020) resulting in a +/- argument structure (AS) divide:
  - **+ AS: thematic RAs (ThAs):** ThAs represent an argument (a theta role) licensed by the (deverbal) head noun (usually denoting an event), e.g., It. *circolazione sanguigna* ‘blood circulation’; E. *medical examination*
  - **- AS: classificatory As (CIAs):** CIAs semantically introduce a domain according to which the object denoted by the head noun is classified (Bosque & Picallo, 1996: 352) such as It. *vasi sanguigni* ‘blood vessels’ or G. *lederner Gürtel* ‘leather belt’
  - **+/- AS: ethnic adjectives (EAs)** such as *French*, *Londonian*, etc., denote an origin, i.e. they ascribe geographical, religious or political features to their referents.
- difference between theta role absorbers (agent, possessor, theme) vs. adjuncts (locative, temporal, benefactive, etc.)

## Interim summary: subclasses of RAs

- To sum up, one type of analysis groups CIAs and ThAs together by treating both as QAs (Boleda et al., 2012; Arsenijević et al., 2014, based on McNally & Boleda, 2004). It is argued that EAs introduce a contextually-determined relation  $R$  between the nominal kind property and the group or origin associated with the EA.
- The second analysis also groups CIAs and ThAs together but analyzes both as covert nouns (e.g., Fabregas, 2007; 2020; Marchis Moreno, 2010, 2015).
- An intermediate position is taken by Alexiadou & Stavrou (2011) by considering thematic EAs as nouns and CIAs as QAs.

# Deverbal heads <-> AS: NPs vs. compounds

- When comparing respective constructions with deverbal compounds, the observation is that RAs tend to encode the role of the external argument (8a),
- while non-heads of deverbal compounds represent the role of the internal argument (cf. Bosque & Picallo, 1996; Gunkel & Zifonun, 2008: 293; Marchis 2010, Fábregas, 2007, 2020, among others), cf. (8b).

## 8) German

- a. *kindliches Suchen* ‘children’s searching’
- b. *Kindersuchen* ‘child searching’



# Adjectives & argument structure

- In addition to argument structural properties licensed by the head noun of RAs, adjectives can also display other forms of argument structure, e.g., they can select prepositional arguments, (9), or oblique NPs, (10).

9)            *She is dependent on her job / fond of her cat / partial to ice cream*

10)          Gm.        *jemand-**em***            *nahe /*        *lieb sein*  
                         somebody-**dat**        close        dear be  
                         ‘be close/dear to somebody’

- What kinds of adjectives can take (which type of) prepositional/oblique arguments?
  - In this WS: Eythórsson (today)

# Deadjectival verbs & argument structure alternations

- derivational link between COS/degree achievement verbs and PC adjectives
  - Hale & Keyser 1998, 2002; Harley 2005, 2011; Kennedy & Levin 2008; Koontz-Garboden 2005; Bobaljik 2012; Francez & Koontz-Garboden 2017, Beavers & Koontz-Garboden 2020, etc.
- The patient undergoes a change of state between the degree to which a property P (e.g., *wide*) holds at the beginning of the event and the degree to which it holds at the end
  - Hay et al. 1999; Kennedy & Levin 2008; Beavers & Koontz-Garboden 2020
  - Different scale types for different adj.

11)        *They **widened** the road/The road **widened***

# Deadjectival verbs & argument structure alternations

- Deadjectival degree achievements are semantically extremely uniform (Dowty 1979)
  - [BE [x COOL]] stat(iv)e
  - [BECOME [x COOL]] fientive/inchoative
  - [CAUSE [BECOME [x COOL]]] factitive/causative
- light vb constructions with ‘be’, ‘become’, ‘make’ confirm this semantic (de)construction, e.g.,

12) Sanskrit (Balles 2006)

a. *śīta*- ‘cold’

b. *śītī-**bhū***- ‘become cold’

c. *śītī-**kr***- ‘make cold’

# Deadjectival verbs & argument structure alternations

- $V_{\text{BECOME}}$  VS.  $V_{\text{CAUSE}}$  verbalizer/ “flavors of  $v$ ” (Folli & Harley 2005, 2007; Harley 2017)
- Deadjectival degree achievements are root- rather than stem-derived

13) Old Latin deadjectival statives & COS verbs (Watkins 1971; Grestenberger et al. 2024)

Adjective		Stative		Fientive		Factitive	
<i>clār-us, -a</i>	‘clear’	<i>clār-ē-re</i>	‘be clear’	<i>clār-ē-sce-re</i>	‘become clear’	<i>clār-ā-re</i>	‘make clear’
<i>alb-us, -a</i>	‘white, bright’	<i>alb-ē-re</i>	‘be white’	<i>alb-ē-sce-re</i>	‘become white’	<i>alb-ā-re</i>	‘make white’
<i>niger, -ra</i>	‘dark, black’	<i>nigr-ē-re</i>	‘be black’	<i>nigr-ē-sce-re</i>	‘become black’	<i>nigr-ā-re</i>	‘make black’
<i>liqu-idus, -a</i>	‘fluid, liquid’	<i>liqu-ē-re</i>	‘be fluid’	<i>liqu-ē-sce-re</i>	‘become fluid’	<i>liqu-ā-re</i>	‘make fluid’

# Comparatives & degree achievements

- Bobaljik (2012): deadjectival degree achievements are based on the comparative, not the positive
- → verbs from suppletive adjectives always select the allomorph of the comparative
  - Engl. *to worsen*, *to better*
  - Gm. *gut* ‘good’ - *besser* ‘better’ → *ver-besser-n* ‘to better’
  - Lat. *bonus* ‘good’ - *melior* ‘better’ → *melior-āre* ‘to better’
- But the comparative morpheme isn’t always overt:
  - Engl. *to cool*, *to dark-en*
- Bobaljik speculates that this is because the verbalizer itself takes over the role of the comparative in deadjectival degree achievements
  - Acedo-Matellán (2022: 15): “verbalizers contain a “bit” of the adjective”, namely the span ⟨V > P⟩

# Deadjectival verbs: problems

- If deadjectival COS verbs contain the comparative semantically, why do we only see it in verbs from suppletive adjectives?
- Why the apparent complementary distribution between adjectival & verbalizing morphology in deadjectival verbs?
  - same function (possession, Hanink & Koontz-Garboden 2014); different span sizes/types (Acedo-Matellán 2022)...
- Related: why can't morphologically complex adjectives form deadjectival verbs, even when they're gradable?
  - *beautify* vs. *\*en-beautiful*, *\*beautifull-ify*
  - but: Lat. *mac-er*, *mac-r-* 'thin': *mac-ēscere* 'become thin' vs. *mac-r-ēscere*; Gk. *krat-ú-s* 'strong': *kratūn-ō*, *-omai* 'make/become strong'
  - In this WS: Marescotti (today), Butschety & Mišmaš (tomorrow)
  - Deadjectival verbs from non-PC adjectives? Cf. Grestenberger, Werner, Anderson & Sichrovsky (main session tomorrow)

# Deverbal adjectives & participles

- Modal, dispositional, etc. deverbal adjectives: verbal stem-derived adjectives compatible with different types of (prepositional arguments), e.g., Spanish modal adjectives in *-ble* (Oltra-Massuet 2014, Fábregas 2020):

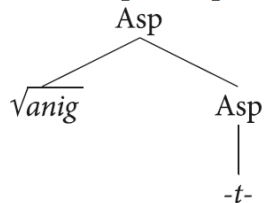
- 14)      a.      *mostra-ble*      *a*      *un experto*  
                 show-BLE      to      an expert  
                 ‘showable to an expert’
- b.      *retorna-ble*      *por*      *el*      *interesado*  
                 return-BLE      by      the      interested.party  
                 ‘returnable by the interested party’

# Deverbal adjectives & participles

- What kind of/how much functional structure is present in deverbal adjectives/participles? How is this parametrized?
  - Ptcp = Asp in nonfinite contexts (Embick 2000, 2004; Alexiadou & Anagnostopoulou 2008; Anagnostopoulou & Samioti 2013, 2014; Grestenberger 2018; 2020; Calabrese 2020 ...)
  - E.g., Modern Greek *-tos* vs. *-menos*:

15)

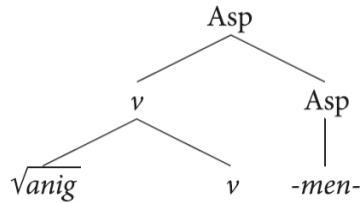
MG *tos*-participles: *anih-t(os)* 'open'



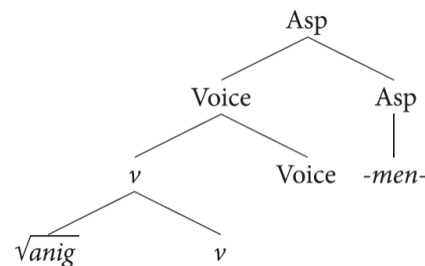
16)

MG *menos*-participles: *anig-men(os)* 'opened'

a.



b.





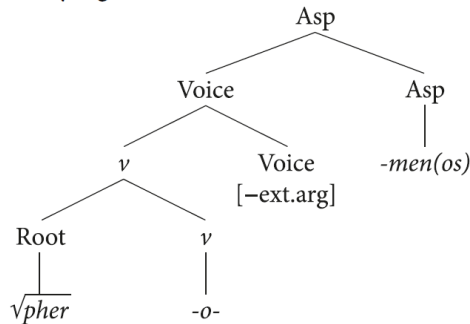
# Deverbal adjectives & participles

- How much “verbal structure” is needed for these forms to license arguments, especially direct objects, and is this reflected in the morphology of these forms?
  - a lot & yes (Grestenberger 2018, 2020) vs. ... not that much, and no (e.g., Lowe 2017 “transitive nouns & adjectives”)

17)

- a. *pher-ó-men-o-s*  
carry-V-PTCP.NACT-M-NOM.SG  
'carrying (for one's own benefit)'

b.



Ex.: transitive middle-marked participles  
in Ancient Greek (Grestenberger 2020)

# Deverbal adjectives & participles

- How do modal meanings arise?
- Why are seemingly root-derived forms sometimes associated with modal meaning/able to take arguments?
  - e.g., MG *-tos*

18)        *I*            *istoria*    *tou ine*    *pistef-t-i*                            *apo*        *olous*.  
the        story.F    his is       believe-**PTCP**-NOM.SG.F    by       everyone  
“His story can be believed by everyone.” (Anagnostopoulou & Samioti 2014: 92)

- different heights of selection/sizes of spans?
  - In this WS: Bloch-Trojnar, Alfieri et al.

# Summary

- 3 broad **classes of adjectives**: relational, qualitative/PC, deverbal/participial
- **Derivational properties** of denominal vs. (de)verbal adjectives, deadjectival verbs, etc.
- **Categorization**: universal category with cross-linguistic variation vs. decomposition of  $\alpha^0$
- **Argument structure**: if there's no  $\alpha^0$ , then argument structure properties of (different types of) adjectival classes must always follow from embedded functional layers - which ones?

# Our goals

- In this workshop we want to explore the **interdependence and interaction of adjectival morphology and argument structure** from different theoretical perspectives
- Workshop topics focussing on (among others):
  - adjectives in a cross-linguistic/typological perspective
  - adjectival subclasses, their linkages, and their dynamics
  - the division of labor between the derivational base and the adjectival “superstrate” in encoding argument structure in (different classes of) adjectives
  - the types of argument structure properties that can correlate with different kinds of morphological marking
  - universal vs. language-specific aspects of RA and QA morphosyntax
  - the interaction of RA- and QA-related morphology with morphological derivation, e.g., in the verbal domain
  - The role of adpositional elements in adjective formation and meaning

# Topics & potential synergies addressed in this workshop

- crosslinguistic evidence for adjectives as a separate or composite category (Alfieri et al., Acedo-Matellán & Roy, Panagiotidis)
- adjectival classes & role of prefixes (Gibert-Sotelo, Fábregas)
- adjectival classes & underlying verb classes (Bloch-Trojnar)
- adjectival predicates & oblique/prepositional arguments (Eythórsson)
- syntax-semantics and functional projections of adjectival classes (Fassi Fehri)
- adjectives as part of further morphological processes, e.g. comparatives as verbal bases (Butschety & Mišmaš) or verbalizing restrictions of RAs (Marescotti)

Thanks for coming!

We look forward to your talks and to stimulating discussions in & around the workshop!



# References

- Acedo-Matellán, V. 2022. Approaching the puzzle of the adjective. In *For Hagit: A celebration*. Xagigat Xagit. Special issue of Queen Mary University of London (QMUL) Occasional Papers in Linguistics 47, eds. Linnaea Stockall, Luisa Martí, David Adger, Isabelle Roy & Sarah Ouwayda.
- Alexiadou, A. & Stavrou, M. 2011. Ethnic adjectives as pseudo-adjectives: A case study on syntax-morphology interaction and the structure of DP. *Studia Linguistica* 65.2, 117–146.
- Alfieri, L. 2014. Qualifying modifier encoding and adjectival typology. In R. Simone & F. Masini (eds.), *Word classes. nature, typology and representations*, 119–139. Amsterdam: Benjamins.
- Anagnostopoulou, E. & Y. Samioti. 2013. Allosemy, idioms and their domains: Evidence from adjectival participles. In *On linguistic interfaces*, ed. R. Folli, C. Sevdali & R. Truswell, 218–250. Oxford: OUP, 2nd ed.
- Anagnostopoulou, E. & Y. Samioti. 2014. Domains within words and their meanings: A case study. In *The syntax of roots and the roots of syntax*, ed. A. Alexiadou, H. Borer & F. Schäfer, 81–111. Oxford: Oxford University Press.
- Baker, M C. 2003. *Lexical categories: Verbs, nouns and adjectives*. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9780511615047>
- Balles, I. 2006. *Die altindische Cvi-Konstruktion. Form, Funktion, Ursprung*. Bremen: Hempen.
- Beavers, J. & A. Koontz-Garboden. 2020. *The roots of verbal meaning*. Oxford: Oxford University Press.
- Bisetto, A. 2010. “Relational adjectives crosslinguistically”. *Lingue e linguaggio* 9.1. 65–85.
- Bortolotto, L. 2016. *The Syntax of Relational Adjectives in Romance: A Cartographic Approach*. PhD thesis, Università Ca'Foscari Venezia.
- Bobaljik, J. D. 2012. *Universals in Comparative Morphology*. Cambridge, MA: MIT Press.
- Borer, H. & Roy, I. 2010. The name of the adjective. In Cabredo Hofherr, P. & Matushansky, O. (eds.), *Adjectives: Formal analyses in syntax and semantics*, 85–113. Amsterdam/Philadelphia: John Benjamins. DOI: <https://doi.org/10.1075/la.153.03bor>
- Bosque, I. 1993. ‘Sobre las diferencias entre los adjetivos relacionales y los calificativos.’ In *Revista Argentina de Lingüística* 9. 9–48.
- Bosque, I. & Picallo, C. 1996. “Postnominal adjectives in Spanish DPs”. *Journal of Linguistics* 32. 349–385.
- Calabrese, A. 2020. Remarks on the role of the perfect participle in Italian morphology and on its history. *Probus* 32(2):209–269.

# References

- Cetnarowska, B. 2014. 'On the (lack of) referentiality of Polish relational adjectives.' In Veselovská L. & Janebová M. (eds.), *Complex visibles out there*, 349–368. Olomouc: Palacký University.
- Dixon, R. M. W. 1982. *Where have all the adjectives gone? And other essays in semantics and syntax*. The Hague: Mouton.
- Dixon, R. M. W. 2004. Adjective classes in typological perspective. In Dixon, R. M. W. & Alexandra Y. Aikhenvald (eds.), *Adjective classes: A cross-linguistic typology*, 1–49. Oxford: OUP.
- Embick, D. 2000. Features, syntax, and categories in the Latin perfect. *Linguistic Inquiry* 31:185–230.
- Embick, D. 2004. On the structure of resultative participles in English. *Linguistic Inquiry* 35(3):355–392.
- Fábregas, A. 2007. The internal structure of relational adjectives. *Probus* 19/1, 1-36.
- Fábregas, A. 2020. *Morphologically derived adjectives in Spanish*. Amsterdam: Benjamins.
- Folli, R. & H. Harley. 2005. Flavours of v: consuming results in Italian and English. In P. Kempchinsky & R. Slabakova (eds.), *Aspectual inquiries*, 1–25. Dordrecht: Springer.
- Folli, R. & H. Harley. 2007. Causation, obligation, and argument structure: On the nature of little v. *Linguistic Inquiry* 38(2). 197–238.
- Fradin, B. 2007. 'On the Semantics of Denominal Adjectives'. In Ralli A et al. (eds.) *Morphology and Dialectology*. Online proceedings of the Sixth MMM6. Ithaca, 27–30 September 2007.
- Francez, Itamar & Andrew Koontz-Garboden. 2015. Semantic variation and the grammar of property concepts. *Language* 91(3). 533–563.
- Francez, I. & A. Koontz-Garboden. 2017. *Semantics and morphosyntactic variation: Qualities and the grammar of property concepts*. Oxford: Oxford University Press.
- Grestenberger, L. 2018. Deponency in finite and nonfinite contexts. *Language* 94(3):487-526.
- Grestenberger, L. 2020. The diachrony of participles in the (pre)history of Greek and Hittite: Losing and gaining functional structure. *Diachronica* 37(2). <https://doi.org/10.1075/dia.18040.gre>, 215–263.



# References

- Grestenberger, L., V. Reiter & M. Malzahn. 2024. Introduction: Deadjectival verb formation in Indo-European and beyond. Language Science Press, forthcoming.
- Gunkel, L. & Zifonun, G. 2008. Constraints on relational-adjective noun constructions. *Zeitschrift für Anglistik und Amerikanistik* 56.3, 283–302.
- Hale, K. L. & S. J. Keyser. 1998. The basic elements of argument structure. *MIT Working Papers in Linguistics* 32. 73–118.
- Hale, K. L. & S. J. Keyser. 2002. *Prolegomenon to a theory of argument structure*. Cambridge, MA: MIT Press.
- Hanink, E. & A. Koontz-Garboden. 2024. Possession in categorization across language and category. Forthcoming, *Proceedings of NELS*.
- Harley, H. 2013. External arguments and the Mirror Principle: on the distinctness of Voice and v. *Lingua* 125(1). 34–57.
- Harley, H. 2017. The “bundling” hypothesis and the disparate functions of little v. In R. D’Alessandro, I. Franco & Á. J. Gallego (eds.), *The verbal domain*, 3–28. Oxford: Oxford University Press.
- Hay, J., C. Kennedy & B. 1999. Scalar structure underlies telicity in degree achievements. In *Proceedings of SALT IX*: 127–144.
- Holzer, P. 1996. *Das Relationsadjektiv in der spanischen und deutschen Gegenwartssprache*. Wilhelmsfeld: Egert.
- Jenks, P., A. Koontz-Garboden & E. Makasso. 2018. On the lexical semantics of property concept nouns in Basaá. In R. Truswell, C. Cummins, C. Heycock, B. Rabern & H. Rohde (eds.), *Proceedings of Sinn und Bedeutung* 21, vol. 1: 643–660.
- Kendall, Martha B. 1975. A preliminary survey of Upland Yuman dialects. *Anthropological Linguistics* 17. 89–101.
- Kennedy, C. & B. Levin. 2008. Measure of change: The adjectival core of degree achievements. In L. McNally & C. Kennedy (eds.), *Adjectives and adverbs: Syntax, semantics, and discourse*, 156–182. Oxford: Oxford University Press.
- Lowe, J. J. 2015. *Participles in Rigvedic Sanskrit: the syntax and semantics of adjectival verb forms*. Oxford: Oxford University Press.
- Lowe, J. J. 2017. *Transitive nouns and adjectives*. Oxford: Oxford University Press.
- Marchis Moreno, M. 2010. On the morpho-syntactic properties of relational adjectives in Romanian and Spanish. *Bucharest Working Papers in Linguistics* XII.1, 77–92.

# References

- Marchis Moreno, M. 2015. Relational adjectives as interfaces. *Studia Linguistica* 69.3, 304–332.
- Mateu, J. 2002. Argument structure: Relational construal at the syntax-semantics interface. Bellaterra, Catalonia: Universitat Autònoma de Barcelona dissertation.
- Menon, M. & R. Pancheva. 2014. The grammatical life of property concept roots in Malayalam. In U. Etxeberria, A. Fălăuș, A. Irurtzun & B. Leferman (eds.), *Proceedings of Sinn und Bedeutung* 18, 289–302. University of the Basque Country (UPV/EHU).
- Mravlag, H. 2013. *Relationsadjektive im Deutschen, Französischen und Russischen*. Innsbruck: University Press.
- Mitrović, M. & Ph. Panagiotidis. 2020. Adjectives exist, adjectivisers do not: a bicategorical typology. *Glossa: a journal of general linguistics* 5(1): 58. 1–28.
- McNally, L & Boleda, G 2004. 'Relational adjectives as properties of kinds.' In Bonami O & Cabredo Hofherr P (eds.) *Empirical Issues in Formal Syntax and Semantics* 5. 179–196.
- Oltra-Massuet, I. 2014. *Deverbal adjectives at the interface: A crosslinguistic investigation into the morphology, syntax and semantics of -ble*. Mouton de Gruyter.
- Panagiotidis, Ph. & M. Mitrović. (eds). 2022. *A<sup>0</sup> – The lexical status of adjectives*. Amsterdam: Benjamins.
- Ramaglia, F. 2011. *Adjectives at the Syntax-Semantics Interface*. München: Lincom.
- Spencer, A & Nikolaeva, I 2017. 'Denominal adjectives as mixed categories.' *Word Structure* 10.1. 79–99.
- ten Hacken, P. 2019. Relational adjectives between syntax and morphology. *SKASE Journal of Translation and Interpretation* 19(1): 77–92.
- Thompson, S. A. 1989. A discourse approach to the cross-linguistic category 'adjective'. In R. Corrigan, F. Eckman & M. Noonan (eds.), *Linguistic categorization*, 245–265. Amsterdam: Benjamins.
- Watkins, C. 1971. Hittite and Indo-European studies: The denominative statives in -ē-. *Transactions of the Philological Society*. 51–93.
- Zifonun, G. 2011. Relationale Adjektive – ein „klassisches“ Muster im europäischen Vergleich. *Deutsche Sprache* 9.2, 98–112.