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Introduction

To adjectives, lexical categories, and this volume

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1. Introduction

This is a volume addressing an obvious but tricky question that has nevertheless been underrepresented in the linguistic literature, and by 'linguistic' we hardly mean 'generative': what are adjectives?

The topic has, of course, seemingly been discussed in the typological literature, with the consensus spanning somewhere between Dixon (1982), namely that adjectives are not universal, and Dixon (2004) where we find out that they might be, after all. The universality of the category 'adjective' is hardly a trivial matter and typological contributions to it are invaluable. Still, before debating the (non-)universality of adjectives, one must first at least attempt to figure out what adjectives are. To put it in marginally palatable rhetorics: what adjectives are comes before whether adjectives are universal.

As usual and as epistemologically expected, we cannot understand what the adjective category is before we have a theory of lexical categories. Back in the 1970s, when quite a few people were happy with the so-called Amherst System (Chomsky, 1970), of [±N, ±V] fame, there was none; in the 2020s we could even claim we are spoiled for choice. This volume is the first to bring together different takes on what adjectives are, with contributions informed from a variety of theoretical viewpoints. We understand that Mark Baker is right in that "the first thing one learns can be the last thing one understands" (2003, 1). This volume is precisely a collection of contributions shining the proverbial flashlights inside the dimly lit room of our understanding of the adjective category.

One would protest that we do know quite a lot about adjectives already. If anything, the whole cartographic enterprise (Rizzi, 1997; Cinque, 2002; Rizzi, 2004; Belletti, 2004, int. al.) has been organised around the position of adjectives and its empirical results have been part of the explananda of linguistic theory for more

than two decades. This is why this volume is titled A^0: our focus is not on adjective projections and their position(s) – a tough and fascinating topic nonetheless – but on the categorial status of adjectives as heads of the lexical category A(djective). Once more, the contributions in this volume concern not where adjectives are, but what they are.

2.   A brief categorial history of A^0

A way to begin our review of the categorial history of A^0, one that informs the theoretical approaches employed in this volume setting out to answer the question of what adjectives are, is to cite Fábregas & Marín (2017, 3 – our emphasis):

> *It seems extremely difficult to identify positive properties that characterise the category called 'adjective', even in one single language.* Consider, for instance, Bhat's (1994) wideranging typological study. Bhat identified a number of negative properties in adjectives (properties that they lack with respect to nouns or verbs): Inability to identify participants (Bhat 1994, 18; see also Wierzbicka 1980), inability to denote events (Bhat, 1994, 19), vagueness (Bhat 1994, 28; see also Kamp 1975), inability to behave as predicates by themselves (Bhat, 1994, 48), inability to denote changes across time (Bhat, 1994, 63), etc.

This rather pessimistic preamble is nevertheless quite telling on why the categorial status of adjectives has generally been treated in a rather throwaway fashion so far and on why a concrete theoretical account on adjectives had to more or less wait until Baker (2003).

Beginning with the customary pre-theoretical way of looking at adjectives, the one we rather uncharitably called 'throwaway', this is no other than the fact that adjectives are usually understood as "properties", e.g. in the classification of nominalisers, verbalisers and adjectivisers as "introduc[ing] entities/stuff, events, or properties" respectively (Marantz, 2012). Adjectives being 'about properties' is hardly informative, of course. As Mitrović & Panagiotidis (2020) point out:

> [B]eing a property (i.e. a one-place predicate) cannot be the defining characteristic of any lexical category, given that one-place predicates can emerge as nouns *(hue),* verbs *(exist),* or adjectives *(red),* the same way that relational nouns like *mother* or *edge* (two-place predicates) are not verbs, and so on.

A similar point is made by Fábregas & Marín (2017, 3–6).

Hence, our understanding what adjectives are must come from within the grammar, not from an appeal to coarse-grained semantics such as the appeal to a distinction between "entities/stuff, events [and] properties".

2.1   Baker (2003)

Baker (2003) offers the first complete generative theory of lexical categories (nouns, verbs, and adjectives), which is complemented and expanded by his (2008) monograph. He undertakes the task, already anticipated in Déchaine (1993), to give content to the features [N] and [V] of the Amherst system, the use of which was popularised by Jackendoff (1977). Rather than view the [N] and [V] features as convenient labels whose sole purpose is to create categorial taxonomies, he revises the [±N, ±V] system and argues for the nominal feature [N] and the verbal feature [V] to be privative, again like Déchaine (1993). Importantly, these two features are argued both to be interpretable at the interface with the Conceptual-Intentional systems and to trigger particular syntactic behaviours – as would be expected from genuinely formal features, after all. Hence [N] is argued to encode sortality and to enable the insertion of a referential index in syntax, whereas [V] is argued to encode predication and to enable the merging of a specifier in syntax.

Setting its predictions and points of criticism aside (for those interested: Panagiotidis 2015, 179–188), Baker's (2003) system yields the following lexical categories: nouns, which bear an [N] feature, verbs, which bear a [V] feature, and *adjectives,* which bear no categorial feature.

Focusing on adjectives, Baker (2003, Chapter 4) argues that categorially unmarked adjectives are indeed the "elsewhere" lexical category. He describes adjectives as "a kind of default category, a category with no positive defining essence" (Baker, 2003, 270). This intuition plays well with the Fábregas & Marín passage cited above, which of course it predates. At the same time, arguing that adjectives lack any categorial specification would make them co-extensional to uncategorised roots or to roots categorised by some sort of default process, which remains unclear in Baker's original discussion.

Nevertheless, adjectives conceived as a category lacking any specific properties and being categorially unmarked runs against typological evidence (Mitrović & Panagiotidis, 2020): first, as Dixon (2004, 9–12) observes, adjectives are actually the typologically marked lexical category: i) they typically comprise fewer members than both noun and verb classes and ii) "a higher proportion of adjectives than of nouns and verbs will be derived forms". Even before such considerations, the existence of derived adjectives, e.g. denominal and deverbal adjectives, immediately invalidates the option of the adjective category resulting from the absence of categorial features: if adjectives are categorially unmarked, what kind of features would adjectivising affixes bear?

The second problem for adjectives as the categorially unspecified member of the lexical triplet (noun, verb, adjective) is that, typologically speaking, some languages have verb-like adjectives (e.g. Korean – see Haspelmath 2001, 16542; Kim

2002), some noun-like adjectives (e.g. Indo-European), some both verb-like and noun-like (e.g. Japanese – see Miyagawa 1987; Iwasaki 1999, Chapter 4) and in some languages adjectives apparently look like neither (see Stassen 2013).

2.2 From Chomsky (1970) to Mitrović & Panagiotidis (2020) – and this volume

Of course, as noted above, most people that would for some reason be forced to say something about the Adjective category would go for the Amherst (and Jackendovian) [+N, +V] specification for them.

Following once more the review and the discussion in Mitrović & Panagiotidis (2020), a [+N, +V] specification for adjectives is at first pass compatible with the typological markedness of adjectives mentioned in the previous subsection: adjectives would be the 'heavy' lexical category, possible the marked one, too. One could also imagine that the lack of "positive properties that characterise the category called 'adjective'", which Fábregas & Marín identify, could be linked to their composite bicategorial status: rather than being unmarked for category, as in Baker (2003), adjectives would simply be all things to all people, encoding anything from one-place predicates (properties), to modal possibility, as in *available* (but see Francez & Koontz-Garboden 2015).

While categorial complexity, and even bicategoriality, appears to be on the right track, it can hardly be the case that it is the whole story: again, as noted above, in a given grammar adjectives can be verb-like, or noun-like, or both verb-like and noun-like, or like neither nouns nor verbs.

This is the conundrum Mitrović & Panagiotidis (2020) set out to resolve: how to capture (a) this typological diversity together with (b) the lack of positive properties of adjectives, while catering for (c) their typologically marked status.

3.   A brief categorial future of A^0: The road ahead

Rather than staying with open questions, it may be better to consider the future approaches and possible breakthroughs to be shaped by the context in which the present contributions are set. Two standard desiderata remain: one empirical, and a theoretical one.

Empirically, we hope the future research to elucidate on the seemingly strong image we have of the three-way taxonomy of the typology of the adjectival categoriality. In one set (such as the general Indo-European landscape suggests), languages side adjectives with nouns, in another set (with Korean perhaps being the most

vocal ambassador of this), they couple them with verbs, and in the third set, adjectives seem randomly split between siding with nouns and with verbs – Japanese is perhaps the most cited example of this distribution. It is perhaps in this latter set of world's languages that we should seek to uncover the principles and parameters that allow for, or in fact dictate, this bi-categorial distribution. The contribution by Priscilla Adenuga in Chapter 2 (§ 4.2.1) is an exemplar of such empirical investigation. Adenuga shows that the alternation between nominal-looking and adjectival elements is dictated by and dependent on the locality relations between the two elements, the modifier and the modifiee: if the relation is local enough, the modifier takes on an adjectival cape, otherwise, it is nominal.

The other strand of future enquiry is generally theoretical. The future research into the lexical-categorial status of adjectives is bound to inherit and benefit from currently hot topics in theoretical morpho-syntax. Our volume, in particular, shows how related the categorial question of adjectives is to seemingly independent questions. Adenuga's chapter, for one, requires a notion of locality to account for the alternation in nominal-adjectival constructions. Another theoretical question, which Arsenijević addresses, is the concept of referentiality which clusters adjectives, being non-referential, together with prepositions. What remains, still, is a question of reduction of adjectivity, whatever that may be or however we end up construing it, to the notion of possession, specifically syntactically, and property-bearing meanings, generally morphosemantically (in this latter regard, Mitrović's chapter is on a par). Larson, on the other hand, develops a theory that brings linkers, adjectives, and concordials (among others) under the same umbrella. Perhaps we may look forward to a completely reformulated notion of categoriality, possibly a development along the lines of Struckmeier's views in this volume. An independent question concerns the nature of extended projections, their general role and their particular existence in the adjectival domain (no explicit formulation exists really, which is what Nitschke takes up in his chapter).

Aside from these morphosyntactic questions and answers proper, a whole independently theoretical concern, where we expect to anticipate progress, lies with the semantic module – how is categoriality, as a property, interpreted? A meditation on the answer is provided by Mitrović's last chapter, who romanticises on the marriage of morphosyntactic category theory and semantic type theory. With these prospects of future advances in the field, let us turn to introducing the chapter contributions in more detail.

4.   An overview of the volume

We organised the seven chapters into three core thematic clusters to which we now turn.

4.1   Part One: Adjectives as a lexical category, and beyond

4.1.1   *Chapter 2: Struckmeier on Universal and language-specific aspects of adjectives*

Volker Struckmeier entertains a theoretically novel set of considerations which ultimately strive to make more precise the notion of adjective. His chapter presents a nuanced and 'layered' approach to categoriality, showcasing its advantages by analysing 'adjectivity' in German. In his chapter, he discusses the notion of word classes, proposing that not all properties of lexical items relate to the definition of their own word class. Rather, Struckmeier proposes that the grammatical behaviour of elements is found in the properties of the other lexical elements. The joint feature specifications of these different relevant lexical items is involved in the derivation of structures in the language, establishing the kinds of grammatical relations that an item forms over the course of a derivation. The set of relevant items and the derivational constellations items can (or must) enter are referred to as a *mold* for lexical items. The *mold* is thus not a lexical or syntactic category per se, but it still informs the properties that word classes in a language will show. One purpose of *molds* thus is to desribe via lexico-syntactic analyses why certain syntactic categories exist. After motivating his mold-based approach to lexical categories, Struckmeier analyses the lexical category of adjectives as a specific conception of *molds,* drawing mainly from German, which actually serve to show that the old 'word classes' (amongst them, adjectives) are not realistically part of the grammar of German. Rather, different items address different sets of elements, which only partially overlap with (and often do not relate to) the traditional word classes.

4.1.2   *Chapter 3: Larson on Adjectives, case, and concord*

In chapter three, Richard Larson offers a natural and attractive implementation of the three-fold distinction between elements that are governors, governed, and concordial with respect to case. Adopting a powerful metaphorical notion of 'light source' for the theoretically conceived notion of governors, i.e. those elements assigning/checking features in Minimalist terms, Larson provides an ingenious way of covering a wealth of data, spanning concord, and agreement more generally, cross-linguistically wide instantiations of adjectives, concordial case phenomena, linkers, and ezafe constructions. His light source metaphor, itself a device no less formal that those used in tree-drawing schools of generative syntax, provides a

theoretically motivated taxonomy between opaque (valued) and translucent (concordial) 'options' of agreement phenomena. Larson's chapter suggests that case properties of adjectives do not map uniformly with the noun/adjective divide. More specifically, whereas nouns are largely stable in being valued/opaque elements, adjectives are not. Larson thus shows that we find the familiar pattern of languages like Icelandic and English, where nouns are valued and adjectives are concordial. Nonetheless, there are also languages in Iran where both nouns and adjectives appear to be valued for case and, obversely, we find languages like Kinande, where at least certain classes of non-referential nouns behave concordially. Larson's chapter does therefore not only provide a wealth of cross-linguistically diverse data, but precisely those pieces of data that, while seemingly disparate, are shown to be rather uniform at their core. And it is this core that Larson aims to expound on in its theoretical dimension, too.

4.1.3   *Chapter 4: Arsenijević on Adjectives as a lexical category*

Starting with a distributional diagnostic, Boban Arsenijević groups adjectives not with nouns or verbs, but with prepositions. From the point of view of narrow syntax, adjectives have a rudimentary extended projection with little similarity to those of nouns and verbs, or none whatsoever. From the point of view of semantics, adjectives group with common nouns and intransitive (stative) verbs (set-theoretically), but to the exclusion of, as Arsenijević argues, the referential property absent from adjectival meanings. Their inability to properly refer, combined with their relational nature, clusters adjectives along with prepositions which show the same distribution in this regard. The proposed view accounts for a number of observations and generalisations. It straightforwardly captures the similarities in distributions and meanings between adjectives and PPs. The fact that the set of syntactic environments in which adjectives occur is a subset of those where PPs are found is explained by the fact that the incorporation of the complement through which adjectives are derived is subject to certain restrictions – syntactic, semantic and pragmatic. Aside from presenting an imaginatively novel arsenal of arguments against standard categorial treatment of adjectives, Arsenijević succeeds in arguing for and developing a case for thinking of adjectives in ways similar to prepositions.

4.2   Part Two: Adjectives and the nominal domain

4.2.1   *Chapter 5: Adenuga on Nominal attributive modifiers in Ògè*

Drawing from a rich collection of data in Ògè, a Benue-Congo language spoken in Nigeria, Priscilla Adenuga convincingly shows that attributive adjectives are nominal, what she calls Nominal Attributive Modifiers (NAMs). She further demonstrates that the NAM is actually involved in feature checking, which she analyses

as the source for the contribution of the overall [N] label of the modified expression featuring a NAM and a noun. While nominal in nature, this chapter actually shows that NAMs are as adjectival as they are nominal. They therefore reveal a dual profile: in some cases, as the head in genitives and possessives, and, in other cases, as an adjunct in modification expressions. The 'adjectivity' of NAMs in Ògè depends on their locality with the modified noun. If NAMs are sufficiently locally structured with the noun, an attributive adjectival structure can be discerned, if, however, NAMs are not in a local relationship with the modified noun, Adenuga shows that the resulting structure is one involving genitives or possessives. Beyond the significant empirical contribution of her chapter to the study of adjectives, Adenuga's analysis of locality-dependent structures that arise from NAM-noun or modifier-head expressions is centrally important to the questions this volume aims to ask and clarify.

4.2.2   *Chapter 6: Hu on Property, possession, and adjectives*

Hu Xuhui presents an exciting novel approach to analysing Chinese adjectives, assuming the Chinese has adjectives as such to begin with. In this chapter, Hu rethinks the nature of the possessive property concept (PC) construction and the reason for the variation regarding the possessive strategy and adjectival predication constructions adopted for the expression of PC predication. He argues that the possessive PC construction in Chinese is in fact an adjectival, hence is syntactically different from the ownership possessive constructions. The central thesis Hu defends in his chapter concerns the syntactic derivation of adjectival formation and is predicated on the view that Adjective is a bipartite functional structure that encodes possessive predication. Aside from offering a detailed set of narrow-syntactic arguments, Hu combines semantic evidence and considerations from morphology in construing his analysis of the Chinese adjectives. He concludes the chapter with a comparative outlook on these issues, offering formal parametric considerations for the cross-linguistic study of PC constructions specifically and adjectival structures more generally.

4.3   Part Three: Adjectives and the interfaces

4.3.1   *Chapter 7: Nitschke on the Extended projection of German adjectives*

The notion of Extended Projection (EP) embodies the view of how functional categories tend to realise or build upon the lexical categories, such as nouns and verbs. Remo Nitschke investigates the status of EP in German adjectives, paying specific attention to the status of comparatives, superlatives, and degree markers, which display some interesting complementary distribution effects in relationship to each

other. In this chapter, he utilises the model of the adjectival Extended Projection proposed for English and suggests some empirically motivated departures. Nitschke argues that there exists an adjectival EP in German and that it minimally contains the morphological comparative and the morphological superlative. Adopting the Containment Hypothesis of Bobaljik (2012), Nitschke puts forth a cross-linguistic generalisation: The maximal Extended Projection of adjectives in languages that exhibit a morphological comparative and superlative must *minimally contain* the positive, the (morphological) comparative and the (morphological) superlative.

4.3.2   *Chapter 8: Mitrović on First-phase semantics*

In the final chapter, Moreno Mitrović takes up an ambitious, seemingly abstract, task of aligning formally the type-theoretically driven principles of compositional analysis and the narrow-syntactic view of lexical categories. In specific terms, such an alignment would, given the bicategorial inventory that presumably builds all (three) lexical categories, as per § 2, yield an interpretational notion of category generally – and of adjectivity specifically (assuming a [+N, +V] makeup). While programmatic in its design and purpose, Mitrović's chapter combines formal semantic methods with a a decompositonal theory of word-structure, according to which lexical categories are treated as inherently functional, involving (functional) categorisation of a (lexical) root. His chapter therefore proposes a property-theoretic treatment of adjectives specifically and of all three lexical categories more generally, contending that categorisation empirically instantiates an interpretational analogue of First-Phase constructs. Aiming to retain type-theory while making formal semantics more sensitive to the morphosyntactic structure independently posited, Mitrović supposes a sort-theoretical domain of type e which can derive 'nominality', 'verbality', and 'adjectivity' as a meta-property of interpretation that standard type-theory is too blind and insensitive to distinguish, since type-theoretically all three grammatically distinctive categories are identical. A type-compliant logical structure of grammatically distinct terms must be considered a desideratum for natural language semantics, probably most attractively so for reasons of aligning the linguistic modules in a way that is as parallel and as stipulation-free as possible.

Funding

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