## A unified analysis of differential argument marking Penelope Daniel (University of Connecticut)

In this talk, I examine typological variation in *differential argument marking* (DAM) phenomena. In particular, I highlight an overlooked rare pattern and offer a unified analysis where all the attested DAM patterns result from valuation of deficient (=unvalued) interpretable features. DAM refers to case patterns where a marked case is assigned only when arguments have a particular semantic property (e.g. specificity, animacy, person). Normally, the case is assigned to the argument with the relevant semantic property, but not always. Surprisingly, it is also possible for the case to be assigned to another argument of the same verb. Focusing on patterns with an external argument (EA) and an internal argument (IA), this yields four logically possible DAM patterns, represented schematically in (1-4), where the argument with the DAM-triggering property is in bold.

(1) EA IA-ACC (2) EA-ERG IA (3) EA-ERG IA (4) EA IA-ACC Patterns (1-3) have been discussed in the literature, while (4) has not. In this talk, I show that all four patterns are in fact attested, which poses a problem for existing analyses of DAM. I then offer a new analysis that can derive all four DAM patterns as a unified phenomenon.

**Previous approaches** The patterns in (1-4) have not received uniform treatment in previous approaches to DAM. Some researchers focus on pattern (1), found in Turkish (Enç 1991), Hindi (Mohanan 1994), Spanish (Fábregas 2013), etc., and (2), found in Umpithamu (Fauconnier 2012), Kham (Coon & Preminger 2012), Nepali (Verbeke 2013), etc. They argue that the case-marking is either a direct morphological reflex of the marked semantics of the argument (e.g. Haspelmath 2021), or that the case-marking is a reflex of the additional syntactic licensing required by such arguments (e.g. Kalin 2018). This kind of approach is designed to deal only with *self-driven* DAM patterns where the case-marking and marked semantic property are on the same argument (1, 2), but not *externally-driven* patterns where the two are on different arguments. Another approach to DAM focuses on patterns driven by the IA, usually assumed to undergo object-shift when semantically marked (e.g. Baker 2015). This style of analysis has been applied to self-driven patterns like (1), as well as the externally-driven pattern (3), where case-marking on the EA is *IA-driven* (found in Eastern Ostyak, Ika, Kanuri (Baker 2015)). Crucially, this analysis cannot be extended to any *EA-driven* pattern. As a result, neither of these approaches treats DAM as a unified phenomenon.

Furthermore, pattern (4), which has not been considered by either of these approaches, is also attested. In Ik, the IA is ACC when the EA is 3P, but not when the EA is 1P or 2P (5).

(5)	a.	ŋƙa	təbəŋź-á=na.	b.	ŋƙ-i-á	təbəŋ-a=na.	
	eat:3SG mush-ACC=this			eat-1SG-a mush-NOM=this			
		'She ea	ts this meal mush.'		'I eat th	his meal mush.' (Schrock 20	017)

Neither existing approach can account for the existence of this pattern; (4) is externally-driven, problematic for the first approach, and also EA-driven, problematic for the second approach. I argue that the existence of all four logically possible DAM patterns does not require abandoning a universal treatment of DAM: a unified analysis of all four patterns is possible within a framework where they result from valuation of an argument's interpretable feature.

**Analysis** I adopt an approach where case assignment is the result of valuation from a functional head under Agree. Crucially, I propose that DAM is the result of valuation of *interpretable* features, where I assume a dissociation between valuation and interpretability (Bošković 2011). Since what unifies all DAM patterns is that they are driven by semantic properties of an argument, a natural way to implement this is to attribute the case-marking directly to interpretable features that encode

those properties, by making them unvalued. Variation arises from differences in the argument that carries the feature, the case-assigning head, and the relationship between Voice and *v*.

This proposal accounts for IA-driven *differential object marking* (DOM) (1) through a slight modification of the movement approach discussed above, where movement of the IA is driven by valuation of the IA's interpretable feature ([iF]) by v, which results in ACC case (6) (underlining indicates a previously unvalued [iF] that has been valued). EA-driven *differential subject marking* (DSM) (2) is similar, except that the EA has the unvalued [iF] and Voice values it, which occurs in-situ and is realized as ERG (7). What both of these self-driven patterns have in common is that the arguments receive case when their unvalued [iF] is valued.

(6)  $[_{vP} IA_i[ACC iF] v[ACC uF] [_{VP} V t_i]]$  (7)  $[_{VoiceP} EA[ERG iF] Voice[ERG uF] ...]$ Externally-driven patterns also involve valuation of [iF]s, but instead of being realized as case on that argument, valuation either feeds or bleeds case assignment to the other argument, depending on the relationship between the head that values the [iF], and the head that values case, which is a distinct, *uninterpretable* feature ([uK]). In IA-driven DSM (3), I propose a *selectional relationship between Voice and v*: Voice assigns ERG to the EA according to whether it selects for a *v*P where the IA has valued its [iF] on *v*, shown in (8). (3) can thus be derived through a combination of the previous two derivations, except the [iF] that drives movement of the IA is morphologically inert.

- (8) a. [VoiceP EA[ERG uK] Voice[ERG uK] [vP IA[val iF] v[val uF...]]]
  - b.  $[VoiceP EA[_uK] Voice [_vP v[val uF] [_VP V IA]]]$

Most importantly, this framework can also derive the fourth DAM pattern. While in IA-driven DSM, valuation of the IA's [iF] feeds case assignment to the EA, in EA-driven DOM (4), I propose that valuation of the EA's [iF] bleeds case assignment to the IA by triggering deletion of v's ACC feature. I argue that this is possible due to an even tighter relationship between Voice and v, specifically when *Voice and v are bundled* (cf. Pylkkänen 2008), which I represent as a single head, Voice+v. I treat EAs in (4) as minimal pronouns (which I provide evidence for in the talk), which Stegovec (2019) argues have unvalued person features (which are interpretable, represented as  $[i\pi]$ ). Voice+v may have valued 1P or 2P features, or may lack person features, in which case the EA fails to agree and receives a 3P value by default. Successful valuation of the EA's  $[i\pi]$  deletes both the person *and* case feature on Voice+v (I elaborate in the talk why valuation of the EA must always occur first, due to the bundling of Voice and v), so the IA cannot receive ACC (9a). However, when the EA receives a default 3P value, the case feature will not be deleted, so the IA will receive ACC (9b). Note that this pattern will only arise when both the EA is a minimal pronoun, and Voice and v are bundled, which could explain why (4) is so rare.

- (9) a.  $[_{\text{Voice}+\nu P} \text{ EA}[\underline{1/2} i\pi] \text{ Voice}+\nu[\underline{1/2} u\pi, \text{ ACC} uK] [_{VP} V \text{ IA}[\_uK]]]$ 
  - b. [<sub>Voice+vP</sub> EA Voice+v[ACC uK] [<sub>VP</sub> V IA[<u>ACC</u> uK]]]

**Conclusion** All four logically possible DAM patterns are attested and can be accounted for through limited variation in (i) which argument carries the unvalued [iF] (the IA in IA-driven patterns, and the EA in EA-driven patterns), (ii) which head is the case-assigner (v in DOM, and Voice in DSM), and (iii) the relationship between Voice and v (independent in self-driven patterns, selectional in IA-driven DSM, and bundling in EA-driven DOM). This account can also be extended to *global case splits*, where interpretational properties of *both* the EA and IA affect case-marking. Given the role of semantic properties, global case splits can naturally be analyzed as another type of DAM through a slight modification of the analysis of (4), where both the EA and IA have unvalued [iF]s, which I will show in the talk. The proposed analysis therefore has the advantage of being able to

derive all DAM patterns, including the previously unaccounted for EA-driven DOM pattern in Ik, as well as global case splits, through the unified mechanism of valuation of interpretable features.