

Inalienable Possession and the Morphosyntax of ‘Brown-Eyed’

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1. Introduction. This paper advances our understanding of the syntactic and semantic representation of predicative possession in Universal Grammar. It does so by providing a novel analysis of the construction in (1) (henceforth the *brown-eyed* construction; see Ackerman & Goldberg 1996, Beard 1976, Hirtle 1970, Hudson 1975, Ljung 1976, Pesetsky 1995, Tsujioka 2002) and related constructions in other languages. *Brown-eyed* is a special case of a type of predicative possession construction identified in many typologically unrelated languages by Stassen (2009), which he refers to as *predicativization*. We offer the first typologically-oriented generative analysis of this phenomenon. The results of our discussion include (i) an interesting new probe into where different possession relations are introduced into DP structure; (ii) novel support for the idea that predicative possession constructions are “built on top of” attributive possession structures (an idea implemented in different ways by Kayne 1993, Partee 1999; Szabolcsi 1981, 1983); and (iii) new evidence that categorizing heads can define special domains of interpretation (Marantz 1996; 2014), within which pragmatic constraints can be evaluated (cf. López 2005 on phase-based evaluation of pragmatic constraints).

2. The Patterns. Our empirical focus will be the following patterns in the *brown-eyed* construction, some of which have been widely remarked upon in the literature.

- (1) a. John is brown-eyed. (cf. *John has brown eyes.*)
- b. *John is brown-carred. (cf. *John has a brown car.*)
- c. *John is three-sistered. (cf. *John has three sisters.*)
- d. *John is big brown-eyed. (cf. *John has big brown eyes.*)
- e. *John is eyed. (cf. ??*John has eyes.*)
- f. John is bearded. (cf. *John has a beard.*)

The contrast between (1a) and (1b) reflects a restriction to inalienable possession -- call this the *inalienability restriction* (although note that (1c) indicates that only a subset of inalienable relations is permitted, since kinship is excluded: the allowed inalienable relations include body-parts, inanimate part-whole relations, personal attributes, and clothing which is being worn (see Heine 1997:10, 18 for an inventory of relations which can be marked as inalienable cross-linguistically)). Example (1d) shows that, even when inalienable, the possessee is grammatical only if it is maximally of compound size -- a full phrase is not permitted. We shall call this the *size restriction*. Example (1e) shows that the possessee must in fact often be *minimally* of compound size -- that is, a modifier is usually required, although (1f) shows that certain possesseees do not require a modifier. Following a long-standing intuition in the literature, we will refer to this as the *informativeness restriction*.

3. Explaining the restrictions. Our analysis of the *brown-eyed* construction revolves around the status of the *-ed* suffix found therein. Our claims concerning this *-ed* are summarized in (2). Assuming that compounds have the structure advocated in Harley (2009), the word *brown-eyed* will have the structure shown in (3).

(2) **Claims about *-ed***

- a. **Morphosyntax:** *-ed* is the realization of a derivational little *a*- head which selects an acategorial root.
- b. **Semantics:** *-ed* takes a relation as its first argument, and outputs a predicate. In particular, it has the denotation: $\lambda R_{\langle e, et \rangle} \lambda x. \exists y. R(y, x)$.
- c. **Pragmatics:** Upon completion of the *a* phase headed by *-ed*, the meaning of the structure is evaluated for pragmatic informativeness.

- (3) [a [√ [brown -Ø_a] √eye] -ed_a]

Claim (2a) accounts for the *size-restriction* straightforwardly, and also accounts for the fact that the *brown-eyed* structure is adjectival (notice that it passes the *seem* test, and can be modified by *very* when gradable).

(4) a. John seems brown-eyed (in this light). b. John is very foul-mouthed.

Denotation (2b) has the effect of mapping a possession relation to something which can be predicated of a possessor. In combination with (2a), it also derives the *inalienability restriction*. By (2b), *-ed* requires a relation semantically. By (2a), its complement can only be a root. Therefore, the construction will only be interpretable semantically if the root itself denotes a relation -- i.e., if it is an inalienable noun. Hence, (1a) is grammatical because *eye* denotes a body-part relation, and (1b) is ungrammatical because *car* denotes a predicate of individuals, triggering a fatal type-mismatch. Claim (2c) follows most literature on this topic in accounting for the difference between (1e) and (1f) in terms of informativeness: the idea is that *eyed* is ruled out because it is insufficiently informative, whereas *bearded* is ruled in because *beard* is not an obligatory body-part, and therefore *bearded* is informative. However, (2c) is an improvement over previous formulations of this idea, since it accounts for the fact that negation and the subject cannot “rescue” the informativeness of the construction, despite the fact that they can do so in the case of the verb *have*:

(5) a. *John is eyed. a'. ??John has eyes.
 b. *John is not eyed. b'. John doesn't have eyes.
 c. *The hills are eyed. c'. The hills have eyes.

This is unexplained on traditional versions of the informativeness hypothesis, but it is accounted for by (2c), which says that the informativeness requirement must be evaluated immediately on completion of the *a-* phase (which is before sentential negation or the subject of predication can be introduced; parallel to restrictions on idiomatic verb phrases).

4. Consequences and Predictions. Amongst the consequences of claim (2a) is that there is no verbal head contained in the *brown-eyed* construction, *contra* Pesetsky (1995:331, en123), who proposes that the construction involves the adjectival passive participle of a silent HAVE verb. Such an analysis is undermined by the fact that HAVE verbs do not usually passivize on their possessive uses:

(6) *Brown eyes are had by John.

Moreover, there is considerable cross-linguistic evidence that predicativizing morphemes are not always participial in form, making it plausible that the resemblance of this *-ed* to a passive participle morpheme in English is a red-herring. In German and Dutch, for example, there are constructions of the same sort, subject to the same restrictions of inalienability, size, and informativeness, but in which the adjectivalizing morpheme is *-ig*. This *-ig* is not a participial morpheme, but is instead cognate with English *-y*.

(7) ein blau-äug-ig-es Mädchen (German)
 a blue-eye-y-NEUT.SG girl
 ‘a blue-eyed girl.’

We note further that Hungarian has two suffixes analogous to the *-ed* of the *brown-eyed* construction, neither of which is participial in form (Kenesei 1996). Given that participial morphology is itself often adjectival, it should come as no surprise that *-ed* is a potential spell-out for an *a-* head even in the absence of any verbal substructure.

Since our account ties the inalienability restriction to the size restriction, we make a prediction about cross-linguistic variation: if a language is found in which a predicativizing morpheme selects a fuller DP substructure, rather than just a root, we expect the inalienability restriction not to hold in that language. This is because the DP substructure will be large enough to accommodate the Poss head, which can introduce an alienable possession relation (Barker 1995). We will show that this prediction is borne out in Quechua (Myler 2014), where the compound-like equivalents of both (1b) and (1d) are grammatical.