Adjectives and other categories in Omaha-Ponca

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Abstract: Arguments for a class of adjectives in Omaha-Ponca, as in other Siouan languages, are weak or inconclusive. There is probably no distinction between property words with adjective-like meaning and (other) stative verbs. Furthermore, significant overlap between nominal and clausal functional heads (definite articles and complementizers/auxiliaries) suggests conflation of nominal and verbal categories in general.

Keywords: adjective, stative verb, grammatical category, underspecification

1. Introduction: Do adjectives exist?

The (non)existence of adjectives is a long-standing issue in Siouan linguistics, attracting the attention of linguists from the 19th century through recent work by Rosen, Helmbrecht, Marsault, and others; Helmbrecht (2019a) gives an excellent overview of work on this issue. My goal in this paper is to revisit the question of whether "adjective" exists as a grammatical category and its implications in one Siouan language, Omaha-Ponca (OP). I will show that taking the question seriously leads to deeper issues of distinguishing nominal and verbal categories, including DP and CP, and suggests category membership can be vague, fluid, ambiguous, or underdetermined.

Consider the status of a property-designating word like to^nga 'big' in an Omaha-Ponca nominal phrase:

(1) *shóⁿge toⁿga* t^he horse big ART 'the big horse'

The meaning and to some extent the syntactic behavior of such words looks adjectival. However, linguists generally treat such words as stative verbs, for several reasons: they occur as predicates, as shown in (2a); they take verb morphology including person/number marking, as seen in (2b); they have no adjective-typical inflection (no comparative or superlative forms); and there are no derivational affixes creating adjectives from nouns or verbs in OP, as might be expected if Adjective were a separate category.

(2) a. $sho^n ge t^h e to^n ga$ horse ART big 'the horse is big'

¹Rosen claims that there is a superlative construction in Ho-Chunk. However, Helmbrecht (p.c.) reports that a search of a corpus of more than 100 texts turns up not a single instance of this construction.

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b. O^n to^n ga. / Thito<sup>n</sup> ga.
1sG.big 2sG.big
'I am big.' / 'You are big.'
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The idea that there are no adjectives in Omaha-Ponca is even enshrined in educational practice: the most complete current textbook of the language (Umónhon Language and Culture Center & Omaha Language Instruction Team 2018) contains a blanket statements that "Adjectives in Omaha are called stative verbs". The nonexistence of a lexical category of adjective is similarly assumed (and sometimes argued for) in other Siouan languages. However, the idea keeps bubbling back up that there are reasons to reconsider this belief.

In this paper I do just that: reconsider the idea that adjectives are a subclass of verbs. In section 2 I examine recent arguments for "Adjective" as a separate class and conclude that, while these arguments are not strong, the case for all property-designating words being verbs is also not watertight. Section 3 broadens the discussion to ask what consequences the decision to treat property-designating words as adjectives vs. verbs has for the syntax of the language, in particular for the structure of nominal phrases like (1) above. If property-designating words are in fact verbs, it becomes very difficult to distinguish nominals and relative clauses; DP from CP. This may be a positive development, however, as DP and CP in Omaha-Ponca share much of their structure, and there is a surprising degree of overlap in clause-final and DP-final elements. Identity (or indeterminacy) of adjective vs. verb thus seems to be part of a larger identification or blurring of nominal and verbal categories in the language.

2. Arguments for "Adjective" as a lexical category in OP and related languages

Suggestions that a class of adjectives may in fact exist in Siouan languages, including Omaha-Ponca, are based on indications that (some) property-designating words differ morphologically or syntactically from typical verbs, or on differences between modifying and predicational uses of (some) property words. In this section I consider all the arguments for a lexical category "adjective" I am aware of within Siouan, since even those based on other Siouan languages are likely to apply, to some extent, to Omaha-Ponca as well. These arguments, with a recent reference for each, are the following:

- A. Some property words lack expected verbal inflection (e.g., Marsault 2021; for Omaha)
- B. Property words in general lack verbal inflection when in NP (e.g., Helmbrecht 2004, 2019a,b; for Ho-Chunk² and to a lesser extent several other Siouan languages)
- C. Other differences exist between predicative vs. and N-modifying property words (e.g., Ullrich 2018; for Lakota)
- D. Syntactic-theory-based arguments suggest a class of adjectives (e.g., Rosen 2015, 2016; for Ho-Chunk)

²Helmbrecht uses the spelling Hoocak. Several other spellings are also in use, including Hocak and Ho-Chunk. I have opted for the spelling on the tribal website.

I examine each of these in turn, with most attention to (A), as the one argument based on Omaha-Ponca, the Siouan language I am most familiar with.

2.1. Lack of verbal inflection

In Omaha-Ponca a small subgroup of property words need auxiliary support to function as predicates and do not inflect for person/number. This was put forward in a pre-final draft of Marsault (2021) as an argument for a class of adjectives, citing data primarily from Saunsoci & Eschenberg (2016). In the final version of her thesis Marsault decides that the evidence is too sparse to justify a separate lexical class, but her problematic data are still worth noting. Marsault points out that $\dot{u}jo^n$ 'beautiful' does not take stative verb inflectional prefixes but instead requires a copula, like a predicational noun. The person/number prefixes for a typical stative verb, zhi^nga 'small, young' are bolded in (3); compare this with the paradigms for $n\dot{u}$ 'man' and $\dot{u}jo^n$ 'beautiful' in (4).

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(3) stative verb zhinga 'small, young'
onzhinga 'I am small'
thizhinga 'you are small'
wazhinga 'we are small'
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(4) adjective?? újo<sup>n</sup> 'beautiful' cf: noun nú 'man'

újo<sup>n</sup> bthí<sup>n</sup> 'I am beautiful' nú bthí<sup>n</sup> 'I am a man'

újo<sup>n</sup> ní<sup>n</sup> 'you are beautiful' nú ní<sup>n</sup> 'you are a man'

újo<sup>n</sup> o<sup>n</sup>thí<sup>n</sup> 'we are beautiful' nú o<sup>n</sup>thí<sup>n</sup> 'we are men'
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Does this mean $újo^n$ is an adjective? Perhaps, though it seems equally plausible to take this as evidence $újo^n$ is a type of noun; it may be relevant here that the copula is a conjugated form of the positional article thin (see §2.2 below for discussion of articles). In any case, the need for auxiliary support certainly suggests that $újo^n$ is not a verb. If it is an adjective, however, the class of adjectives is oddly tiny. Only one other distinct property word, $tha'\acute{e}ga$ 'ugly,' is listed in the Saunsoci & Eschenberg verb list as behaving this way:

(5) tha'éga bthin / nin / onthin 'I/you/we am/are ugly'

Two compounds³ with $\dot{u}do^n$ 'good' also take an auxiliary (6a–6b)—but note that $\dot{u}jo^n$ is a diminutive form of $\dot{u}do^n$ and 'be beautiful' can also be expressed as a parallel compound (6c), so all three of these reduce to quirky behavior of some expressions with 'good'.

- (6) a. $n\acute{o}^n de \acute{u} do^n bthi^n / ni^n / o^n thi^n$ heart good AUX.1sG/2sG/1PL 'I/you/we am/are good-hearted'
 - b. *udóⁿbe* údoⁿ *bthiⁿ* / *niⁿ* / *oⁿthiⁿ* appearance good AUX.1sG/2sG/1PL 'I/you/we am/are good-looking'
 - c. *udóⁿbe újoⁿ bthiⁿ / niⁿ / oⁿthiⁿ* appearance good.DIM AUX.1SG/2SG/1PL 'I/you/we am/are beautiful'

³These are written by Saunsoci & Eschenberg as two words but are presumably lexicalized compounds, having somewhat idiosyncratic meaning.

In these cases $\dot{u}do^n/\dot{u}jo^n$ is third person (zero inflection) because it modifies a noun $(n\dot{o}^n de/ud\dot{o}^n be)$, not the speaker or addressee. Perhaps the same is true of $\dot{u}jo^n$ in (4) and tha 'éga in (5), with a null (deleted, understood, unpronounced) $ud\dot{o}^n be$, as in (7).

(7) *udóⁿbe újoⁿ bthiⁿ/niⁿ/oⁿthiⁿ* 'I/you/we am/are beautiful (in appearance)' 'udóⁿbe tha 'éga bthiⁿ/niⁿ/oⁿthiⁿ 'I/you/we am/are ugly (in appearance)' [VP [NP N stativeV] copula]

It seems an odd coincidence that both "stative verbs" that robustly lack person-number agreement and require an auxiliary have to do with appearance. Treating them as containing an understood "appearance" noun provides an explanation, though at the cost of making the grammar slightly more abstract, and removes the argument for treating these as a separate class of adjectives.

On the other hand, it is likely there are other property-designating words which take an auxiliary instead of stative verb inflection, not listed by Saunsoci & Eschenberg (2016). Marsault (2021, section 8.3.2) mentions another one in passing: she states without showing the conjugation⁴ that *shiézhide* 'childish' is "part of the subcategory of stative verbs which cannot take person markers, and which encode their subject with a conjugated article"; that is, with the copular auxiliary thin as seen above. My own field notes contain several instances of the word *nushiáha* 'short' with an auxiliary: *nushiáha bthi*ⁿ 'I am short'.

Finally, there are unclear, even contradictory cases. One is the verb root $n\dot{o}^n$ 'be alone', which according to Saunsoci & Eschenberg takes an auxiliary in first and second persons singular but not first person plural, and also has what looks like a person prefix. The "prefix" here is actually a pronoun (wi 'I', thi 'you', $o^ng\dot{u}$ 'we', \dot{e} 's/he, that one'). When used as stand-alone pronouns these usually include the intensifier shti: wishti 'I myself' etc. It is not clear to me why Saunsoci & Eschenberg include the subject pronoun in conjugating this verb and why they write it as a single word with the root $n\dot{o}^n$. Has the pronoun in fact fused with the verb? Or were these forms simply elicited from a speaker who felt a need to translate the English pronouns? The use of the copular auxiliary in some but not all persons is entirely mysterious.

(8) winóⁿ bthiⁿ thínoⁿ niⁿ oⁿgúnoⁿ énoⁿ

'I am alone' 'you are alone' 'we are alone' 's/he is alone'

Another mysterious case is the words wa'ú 'woman' and wa'úzhiⁿga 'old woman' which, in spite of (presumably) being nouns, when predicational, occur sometimes with verbal inflection and sometimes with an auxiliary; that is, they are attested in both types of conjugational patterns seen in (3) and (4) above (but not with both inflection and auxiliary together).

It is difficult to draw any firm conclusion from such minimal and messy data. Marsault abandons the argument in the final version of her thesis (Marsault 2021), but in pre-final drafts took it as sufficient evidence to list "adjectives (very limited number)" among the Omaha parts of speech. Helmbrecht (2019a) notes similar facts in Osage, citing Quintero (2004)—a handful of property words in Osage take a "be" auxiliary instead of conjugating with the normal stative verb inflections—and similarly opts in the end to set these few cases aside: "There is no point to posit a separate adjective category based on this observation". My own conclusion is that lack of verbal inflection provides only very weak evidence at best for Adjective as a separate category.

⁴The section of the dissertation in which Marsault discusses this word is concerned with incorporation; example (685b), in which *shiézhide* appears, shows the word incorporated and therefore not conjugated.

2.2. Lack of inflection when in NP

In Siouan languages in general, property words lack verbal inflection when in NP (as opposed to being the predicate of a clause). Helmbrecht (2019a) states that in Ho-Chunk, Crow, Lakota, and Osage, property words in the frame [N __ determiner] "are never inflected for person/number, even if the noun is plural," and suggests this could be evidence that property words in this position are adjectives, not verbs. In Omaha-Ponca as well, property words in NP (boldfaced in (9)) have no person or number inflection.

- (9) a. *shóⁿge tóⁿga* t^he horse big ART 'the big horse'
 - b. wagthábaze **tu** wiwita thoⁿ paper blue my ART 'my blue paper'
 - c. *núzhiⁿga údoⁿ ama* boy good ART 'the good boys'

But notice the modified noun is always third person; since third person inflection is null, it is actually impossible to say whether the property word is uninflected or has null third person inflection. It would be good to check modified 1st or 2nd person ("you rich people"), but I do not know of examples of this type in Omaha-Ponca. Number marking on 3rd person verbs is also inconclusive. The plural suffix is not obligatory and is often ambiguous, as the same suffix also marks proximateness. It is unsurprising that it is missing in these NPs, since plurality of the horses or papers in (9a/9b), if important, would be marked with either the plural object marker wa- or the plural/proximate suffix -i on the higher verb of which these phrases are subject or object. The article ama in (9c) is often plural, but can also signify something moving or proximate. Furthermore, the plural/proximate -i suffix in modern Omaha (as opposed to older Omaha and Ponca) is nearly always missing, manifesting only as e>a ablaut of the (historically) preceding vowel in verbs ending in -e.

In short, the argument from lack of inflection in NP is less than convincing, and is very hard to test in Omaha-Ponca.

2.3. Other predicative vs. noun-modifying differences

I am not aware of other differences in the behavior of property words in predicative vs. noun-modifying contexts in Omaha-Ponca, but one has been described in another Siouan language: reduplication of a property word to indicate plurality of a modified inanimate noun occurs only NP-internally in Lakota, not when the property word is a clausal predicate (Ullrich & Black Bear 2018).

Helmbrecht (2019a) suggests that word order could be another difference between predicative and modifying property words: NP-internal property words in Ho-Chunk always immediately follow N, while predicate ones are separated from N by a determiner. However, this seems to me simply to be a matter of definition: preceding the determiner is what makes the property word NP internal. The same is true in Omaha-Ponca; compare (1) and (2a) above.

Once again, a proposed possible argument for a grammatical category of adjectives turns out not to be very strong, and does not provide evidence for adjectives in Omaha-Ponca.

2.4. Syntactic-theory-based arguments

The last type of argument that I consider is arguments rooted in syntactic theory. All of these are due to Rosen (2015, 2016), the only linguist who has argued strongly for a class of adjectives in a Siouan language. Rosen argues based on theoretical principles that Ho-Chunk result predicates (like 'red' in (10)) are Adjective Phrases (AP):

(10) Cecilga wažątirera **šuuc** hogiha.

Cecil.PROP car.DEF red 3s/o.paint
'Cecil painted the red car'

He presents three arguments for adjectival status of *šuuc* in this construction. First, the word order [red paint] instead of [paint red] violates a universal Temporal Iconicity constraint on sequences of verbs if 'red' is a verb. Second, the fact that in Ho-Chunk result predicates are restricted to gradable items like 'red' or 'short' necessitates a Degree Phrase specifier, typical of AP. Finally, Rosen cites Baker's (2003) claim that ability to occur in resultatives is "a main characteristic of adjectives" crosslinguistically; if this is true, the fact that resultative constructions exists at all in the language shows that Ho-Chunk has adjectives.

Similar arguments could perhaps be made for Omaha-Ponca (though I do not have data on resultative constructions in that language), but their impact obviously depends on how seriously one takes the theoretical/universal claims behind them.

3. Consequences for syntax

3.1. Structure of nominal phrases with Adj vs. V modifier

Section 1 leaves us with the conclusion that none of the arguments for a class of adjectives in Omaha-Ponca (or probably other Siouan languages) is strong enough to be compelling, while not absolutely ruling out the possibility that some property words might be analyzable as adjectives. The next question is: Does it matter? What difference does it make if property words are adjectives as opposed to a subclass of verbs? The clearest consequence of this decision is on the structure of nominal phrases with modifiers.

Syntactically, if property words are verbs, an Omaha-Ponca phrase with a property word modifying a noun, like (11a), is formally an internal-headed relative clause, just like (11b), which has an active verb in the same structure. In both cases the head noun is obligatorily indefinite (not followed immediately by an article), modified by a verb (clause), and the entire resulting structure is nominalized and made definite by a final article.

(11) a. *shónge tonga the* horse big ART 'the big horse'

b. *shoⁿge agthiⁿ-i* t^he horse 1sG.ride-PROX ART 'the horse I was riding'

A relative clause analysis of attributive property words is widely accepted in Siouan linguistics. Graczyk (2007) explicitly argues for it in Crow, with an argument from conjunction: stative modifiers are conjoined with the same-subject marker, "which links clauses, not noun phrases" (268/271).

On the other hand, if (some) property words are adjectives, Omaha-Ponca DPs and relative clause CPs are distinct (though very similar) structures. Nominal phrases containing an adjective would have the structure in (12a); a DP with no clausal status, while those containing a verb would have the structure in (12b), the relative clause structure described above.

(12) a. [N Adj Art] = DPb. [N V Art] = Rel clause CP

As we will see in the following section, it is difficult to tease apart any difference between these two structures in Omaha-Ponca, even leaving aside the lack of clear arguments for a separate class of adjectives in the language. Perhaps it makes more sense to abandon the effort to distinguish adjectives from verbs and also DP from CP in this language, avoiding the issue of deciding on a lexical category label. Maybe a vague label like "modifier" would better capture the difficulty of distinguishing Adj/V (cf. Ullrich's Role and Reference Grammar work on Lakota). In other words, I suggest that in Omaha-Ponca and in Siouan in general, instead of the two structures in (12), there is only one, as in (13). Noun modifiers are just that—"modifiers"—and the whole construction is ambiguous, being either nominal or clausal.

(13) [N modifier Art] = DP/CP

This vagueness or indeterminacy has wider application beyond just modified nouns/relative clauses. In fact, clauses and nominals in general are very similar in Omaha-Ponca, to the point that it can be hard to distinguish them.

3.2. DP vs. CP in Omaha-Ponca

A key to understanding the overlap of clauses and nominals in this language is the group of words known as "articles", which seem to occur both DP-finally and clause-finally. Not only do both relative clauses and other nominalized clauses take articles, like simple nouns; articles also occur in other kinds of clauses. The examples in (14) all contain the article $t^h e$; this word is glossed "EVID" in (14d) but it is arguably the same lexical item; see below.

- (14) a. noun
 [shoⁿge t^he]
 horse ART
 'the horse'
 - b. nominalized clause (object clause, in this case) [Águdi gthiⁿ t^he] ithápahoⁿ-m-azhí. where 3.live ART 1sG.know-1sG-NEG 'I do not know where she lives'

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c. relative clause
[Wathizha gahitha the] nónpe-nón-i the.
laundry 3.flap ART 3.fear-HAB-PROX/PL EVID
'They were afraid of the flapping laundry'
d. main clause ("article" = evidential marker)—also see end of (14c)
[Nónpe-nón-i the.]
3.fear-HAB-PROX/PL EVID
'They were afraid (of it).'
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Even aside from their clause-ending uses, the "articles" in Omaha-Ponca (and other Dhegiha Siouan languages) are a pretty peculiar group of words. These ten lexical items, when occurring with a noun or other nominal, indicate not only definiteness but also features not usually associated with articles crosslinguistically, including animacy, agentivity, and position or shape. Some authors (e.g., Quintero) avoid the term "article" for this reason and call them "positionals", which also seems inadequate. Many of these words derive historically from verbs (Rankin 1977) and several of them are still conjugated: thin, thon, and thinkhe have marked first and second person forms. All of them have other uses beyond their function as determiner/nominalizer at the end of noun phrases and nominalized clauses; in particular they occur at the end of clauses or sentences with a variety of auxiliary-like and complementizer-like functions. In Table 1 the articles are listed along with their meaning as determiners according to Koontz (1984), and (very roughly) their clause-final function(s). For much more detail on the meaning and usage of the articles, see Koontz (1984), Eschenberg (2005), Marsault (2021).

Table 1: Articles with their DP-final and CP-final functions

"Article"	DP-final (definite determiner/classifier)	CP-final (complementizer/auxiliary)
$k^h e$	[-animate, horizontal]	evidential; modal formative
t^he	[-animate, vertical]	evidential; modal formative
tho^n	[-animate, round]	auxiliary
ge	[-animate, scattered]	auxiliary
thi ⁿ	[+animate, -agent, moving]	copula/predicator
$t^h O^n$	[+animate, -agent, standing]	auxiliary
thi ⁿ k ^h é	[+animate, -agent, sitting]	progressive/continuative
ma	[+animate, -agent, plural]	auxiliary?
$ak^h\!cuplpha$	[+animate, +agent, -plural, -motion]	existential; 3sg.Aux
amá	[+animate, +agent, +plural, or +motion]	quotative; existential; 3PL.AUX

Complementizer-like uses are extremely frequent and include evidential and quotative particles. Auxiliary uses range from progressive to modal, existential, copular and others; we have already seen the copular use of conjugated forms of the article thi^n (animate nonagentive moving) in examples (4) through (8) above. Some of the articles' auxiliary-like functions are common and well understood, for instance the use of thi^nk^he to indicate progressive aspect. Others are rare or hard to interpret, the least clear being the usage of ma. The relation between the CP- and DP-final items (especially their semantics) is far from straightforward. To give just one example, it is not at all obvious why the copula should be based on the "animate, non-agentive, moving" article instead of

some other form. This is an enormously complicated area which I make no attempt to make sense of here.⁵

For now the point is just that all of the articles appear in both nominals and clauses, in both cases at the end of the constituent in a position that looks like the functional head of that category. In other words, they appear to function as D in DP and as C in CP (as well as possibly I in IP or other functional heads, depending on one's view of the syntax of clauses). Does this suggest C and D are not distinct in Omaha-Ponca? This conclusion does not strike me as far-fetched, certainly less far-fetched than independently accidental homophony of all the members of both classes.

Linking back to the question of adjectives, if C and D are not distinct categories in this language (let us say they are all members of the class "F" for Functional head), and if adjectives are also nondistinct from verbs, then the nominal phrases and relative clauses we started out looking at both have more or less the same structure as full sentences. Very roughly, using "Vmod" to indicate a modifier/non-predicational verb, the noun phrase (15a), relative clause (15b), and main clause (15c) all consist of a noun and a verb (modified noun or subject plus verb), along with a functional head.

a. shoⁿge ska t^he [[N V_{mod}] F]
horse white ART
'the white horse'
b. shoⁿge agthiⁿ t^he
horse ride.1sG ART
'the horse I rode'
c. shoⁿge agthiⁿ t^he
horse ride.1sG EVID
'I rode a horse'

I once claimed that clauses in Omaha-Ponca could be analyzed as a subset of DPs (Rudin 1998). This may well be backward: the case could just as easily be made that DPs in Omaha-Ponca are a subset of clauses. But the indeterminacy is real. On a practical level, in glossing texts it is often very difficult to decide whether a given instance of, say, $k^h e$ or ama is an article or some type of complementizer or auxiliary, and correspondingly difficult to say whether the phrase it marks is a nominal or a sentence.

4. Conclusion: Uncertainty is real

This paper is clearly somewhat speculative and inconclusive. It remains debatable whether adjectives and verbs are distinct categories in Omaha-Ponca, and equally debatable whether nominal and verbal categories are to be conflated in general, including articles vs. clause-final particles and CP vs. DP. The goal of this paper is not to answer the question definitively, but to point out how fluid all these categories seem to be. It is not the case that there are no category distinctions in Omaha-Ponca; nouns and verbs are clearly distinct classes with differing morphological and syntactic behavior, and there is also a rather well-established category of adverbs. However, even those categories are rather porous, with lexical items moving fairly freely between classes. Numerous

⁵For more detailed discussion, see Rudin (1998), Marsault (2021), and sources cited there.

nouns are zero-derived from verb stems (*ti* 'house' from *ti* 'to dwell'), for instance (see Marsault (2021) for extensive discussion of this and related issues).

Flexibility or underspecification of nominal and verbal categories seems typical of Siouan, and the overlap of CP and DP heads especially characterizes the Dhegiha branch of Siouan. However, neither of these is especially unusual in a broader crosslinguistic context. Permeability of lexical categories is fairly common. English, to name just one well-known example, converts very freely between noun and verb: *an ask*; *to friend*.

Non-distinctness of functional categories may be less common, but clausal and nominal heads certainly do interact in languages around the world, at least diachronically. One example from Indo-European is the Albanian subjunctive marker, a clausal particle which Sonnenhauser & Widmer (2019) argue derives historically from a nominal determiner. Such cases are probably common and surely pass through a stage of categorial vagueness or ambiguity similar to that in Omaha-Ponca (where it appears to have been stable for a long time). Another instance is an incipient complementizer-like clause-final marker in Turkish which seems to be currently developing from a verb ('say'), and which also functions as a nominalizer (Deniz Özyıldız (p.c.)). The bottom line is that linguistic categories are not immutable and are not always fully distinct, either diachronically or synchronically. Linguistic theories need to be able to handle underspecification of both lexical and grammatical categories.

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