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# Preface

The Siouan and Caddoan Languages Conference marked its annual meeting this year by moving completely online for the first time. The COVID-19 pandemic massively disrupted traditional manner in which presenters delivered their papers, having to rely on sharing their computer screens over Zoom. One positive outcome of this "new normal" is that many attendees who otherwise would not have been able to make the journey to the original location of the conference (Little Big Horn College in the Crow Nation in Montana) were able to attend talks and participate in discussion.

Edwin Ko did a stellar job of organizing the conference. Initially, he had done the legwork to reach out to individuals in the Crow Nation to facilitate the meeting of Siouanists and Caddoanists there, and when the severity of the pandemic became apparent, he asked the community what they would like to do about it. It was obvious that holding an in-person conference would be risky and irresponsible, so various Siouanists and Caddoanists added their thoughts to a discussion via the Siouan Listserv. In the end, it was preferable to meet in an online capacity than to not meet at all.

COVID-19 had farther-reaching impacts than merely disrupting travel plans. This disease bore a terrible toll on many Native communities throughout the United States and Canada. A year after the initial severity of the disease became better understood, it became obvious that this pandemic had deleterious effects on Indigenous groups. The APM Research Lab (a research group that analyzes demographics and data trends through media releases and self-published reports) compiled statistics that demonstrate that Indigenous Americans in the United States suffered COVID-19 related deaths at twice the rate of White Americans.[1] Numerous Indigenous communities throughout North America and beyond suffered the dual sorrow of losing loved ones as well as losing speakers of traditional languages.

Submissions to the Proceedings of SCLC sharply declined this year, in part because some submiters withrew their papers after seeking to publish their papers elsewhere or due to the stressful time period of managing the changes to life in quarantine. There are no hard feelings for anyone who sought to publish elsewhere, as the important thing is to continue to raise the profile of the languages of the Siouan and Caddoan language families. My hope is that the availability of these proceedings will continue to encourage scholars to publish information on these languages and to entice others into learning more about them.

In closing, I would like to thank Edwin Ko a second time for volunteering (or being volunteered) to organize SCLC 41. We had hoped that the pandemic would be under control by that time so that we all could visit the Crow Nation for the next conference, but that was just not in the cards. My thanks as well to Samiron Dutta for diligently reviewing and proofreading these papers and for being so proactive in helping to make these Proceedings available. *Ahó!*

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[1] https://www.apmresearchlab.org/covid/deaths-by-race

# 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 *toⁿga* 'big' in an Omaha-Ponca nominal phrase:

(1)   *shóⁿge **toⁿga** tʰe*
      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);[1] 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.  *shóⁿge tʰe **toⁿga***
          horse  ART big
          'the horse is big'

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[1]Rosen 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.

b. *Oⁿtoⁿga. / Thitoⁿga.*
   1SG.big   2SG.big
   'I am big.' / 'You are big.'

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-Chunk[2] 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)

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[2]Helmbrecht uses the spelling Hoocąk. Several other spellings are also in use, including Hocąk 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 *újo$^n$* '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$^n$ga* 'small, young' are bolded in (3); compare this with the paradigms for *nú* 'man' and *újo$^n$* 'beautiful' in (4).

(3)   **stative verb** *zhi$^n$ga* 'small, young'
  ***onzhí$^n$ga*** 'I am small'
  ***thizhí$^n$ga*** 'you are small'
  ***wazhí$^n$ga*** 'we are small'

(4)   **adjective??** *újo$^n$* 'beautiful'  cf: **noun** *nú* 'man'
  *újo$^n$* ***bthí$^n$*** 'I am beautiful'   *nú* ***bthí$^n$*** 'I am a man'
  *újo$^n$* ***ní$^n$***  'you are beautiful'  *nú* ***ní$^n$***  'you are a man'
  *újo$^n$* ***o$^n$thí$^n$*** 'we are beautiful'  *nú* ***o$^n$thí$^n$*** 'we are men'

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'éga* 'ugly,' is listed in the Saunsoci & Eschenberg verb list as behaving this way:

(5)   *tha'éga* ***bthi$^n$ / ni$^n$ / o$^n$thi$^n$*** 'I/you/we am/are ugly'

Two compounds[3] with *údo$^n$* 'good' also take an auxiliary (6a–6b)—but note that *újo$^n$* is a diminutive form of *údo$^n$* 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.  *nó$^n$de údo$^n$* ***bthi$^n$ / ni$^n$ / o$^n$thi$^n$***
   heart  good AUX.1SG/2SG/1PL
   'I/you/we am/are good-hearted'

  b.  *udó$^n$be*  *údo$^n$* ***bthi$^n$ / ni$^n$ / o$^n$thi$^n$***
   appearance good AUX.1SG/2SG/1PL
   'I/you/we am/are good-looking'

  c.  *udó$^n$be*  *újo$^n$*  ***bthi$^n$ / ni$^n$ / o$^n$thi$^n$***
   appearance good.DIM AUX.1SG/2SG/1PL
   'I/you/we am/are beautiful'

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

In these cases *údoⁿ/újoⁿ* is third person (zero inflection) because it modifies a noun (*nóⁿde/udóⁿbe*), not the speaker or addressee. Perhaps the same is true of *újoⁿ* in (4) and *tha'éga* in (5), with a null (deleted, understood, unpronounced) *udóⁿbe*, 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 conjugation[4] 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 bthiⁿ* 'I am short'.

Finally, there are unclear, even contradictory cases. One is the verb root *nóⁿ* '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 (*wí* 'I', *thí* 'you', *oⁿgú* 'we', *é* 's/he, that one'). When used as stand-alone pronouns these usually include the intensifier *shti*: *wíshti* '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 *nóⁿ*. 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.

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[4]The 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** tʰe*
          horse   big   ART
          'the big horse'

      b.  *wagthábaze **tu**   wiwíta 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***     *tʰe*
    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] = DP
       b.  [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 *tʰe*; this word is glossed "EVID" in (14d) but it is arguably the same lexical item; see below.

(14)   a.  *noun*
       *[shoⁿge tʰe]*
       horse   ART
       'the horse'

      b.  *nominalized clause (object clause, in this case)*
       *[Águdi gthiⁿ  tʰe] ithápahoⁿ-m-azhí.*
       where  3.live ART 1SG.know-1SG-NEG
       'I do not know where she lives'

    c.  *relative clause*
       *[Wathízha gahítha 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).'

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) |
|---|---|---|
| *kʰe* | [−animate, horizontal] | evidential; modal formative |
| *tʰe* | [−animate, vertical] | evidential; modal formative |
| *thoⁿ* | [−animate, round] | auxiliary |
| *ge* | [−animate, scattered] | auxiliary |
| *thiⁿ* | [+animate, −agent, moving] | copula/predicator |
| *tʰoⁿ* | [+animate, −agent, standing] | auxiliary |
| *thiⁿkʰé* | [+animate, −agent, sitting] | progressive/continuative |
| *ma* | [+animate, −agent, plural] | auxiliary? |
| *akʰá* | [+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 *thiⁿ* (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 *thiⁿkʰe* 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.

(15)   a.  *sho<sup>n</sup>ge ska   t<sup>h</sup>e*        [[N V$_{mod}$] F]
            horse   white ART
            'the white horse'

       b.  *sho<sup>n</sup>ge agthi<sup>n</sup>   t<sup>h</sup>e*        [[N V$_{mod}$] F]
            horse   ride.1SG ART
            'the horse I rode'

       c.  *sho<sup>n</sup>ge agthi<sup>n</sup>   t<sup>h</sup>e*        [[N V] F]
            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<sup>h</sup>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

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[5]For 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.

# References

Baker, Mark C. 2003. *Lexical categories: Verbs, nouns, and adjectives*. Cambridge, UK: University of Cambridge Press.

Eschenberg, Ardis. 2005. *The article system of Umóⁿhoⁿ (Omaha)*. Buffalo, NY: State University of New York Buffalo dissertation.

Graczyk, Randolph. 2007. *A grammar of Crow*. Lincoln, NE: University of Nebraska Press.

Helmbrecht, Johannes. 2004. Are there adjectives in Hocank (Winnebago)? In Christian Lehmann (ed.), *Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt*, vol. 14, 3–24. Erfurt, Germany: University of Erfurt Linguistics Department.

Helmbrecht, Johannes. 2019a. The morphosyntax of adjectives in Hoocąk and other Siouan languages: Variation of a weak syntactic category. Ms. Regensburg, Germany: University of Regensburg.

Helmbrecht, Johannes. 2019b. Siouan Listserv posts. Discussion over Siouan Listserv at siouan@listserv.unl.edu.

Koontz, John. 1984. Preliminary sketch of the Omaha-Ponca language. Ms. Boulder, CO: University of Colorado.

Marsault, Julie E. 2021. *Valency-changing operations in Umóⁿhoⁿ: Affixation, incorporation, and syntactic constructions*. Paris, France: Université Sorbonne Nouvelle Paris 3 dissertation.

Quintero, Carolyn. 2004. *Osage grammar*. Lincoln, NE: University of Nebraska Press.

Rankin, Robert L. 1977. From verb, to auxiliary, to noun classifer and definite article: Grammaticalization of the Siouan verbs sit, stand, lie. In Robert L. Brown, Kathleen Houlihan, Larry G. Hutchinson & Andrew MacLeish (eds.), *Proceedings of the 1976 Mid-America Linguistics Conference*, 273–283. Minneapolis, MN: University of Minnesota Linguistics Department.

Rosen, Bryan. 2015. *The syntax of adjectives in Hocąk*. Madison, WI: University of Wisconsin dissertation.

Rosen, Bryan. 2016. On the structure and constituency of Hocąk resultatives. In Catherine Rudin & Binah T. Gordon (eds.), *Advances in the study of Siouan languages and linguistics*, 313–337. Berlin, Germany: Language Science Press.

Rudin, Catherine. 1998. Clauses and other DPs in Omaha-Ponca. Paper presented at annual meeting of the Society for the Study of Indigenous Languages of the Americas. New York, NY.

Saunsoci, Alice & Ardis Eschenberg. 2016. *500 verbs in UmoNhoN (Omaha): Doing thigns the Omaha way*. Scotts Valley, CA: CreateSpace.

Sonnenhauser, Barbara & Paul Widmer. 2019. Prefixal articles across domains: Syntactic licensing in Albanian. *Folia Linguistica* 53(1). 25–49.

Ullrich, Jan. 2018. *Modification, secondary predication and multi-verb constructions in Lakota*. Düsseldorf, Germany: Heinrich Heine Universität Düsseldorf dissertation.

Ullrich, Jan & Ben Black Bear, Jr. 2018. *Lakota grammar handbook*. Bloomington, IN: Lakota Language Consortium 2nd edn.

Umóⁿhoⁿ Language and Culture Center & Omaha Language Instruction Team. 2018. *Umóⁿhoⁿ íyetʰe, umóⁿhoⁿ úshkoⁿ-tʰe: The Omaha language and the Omaha way*. Lincoln, NE: University of Nebraska Press/Umoⁿhoⁿ Language and Culture Center.

# Property words in Hoocąk and Crow: A contrastive morphosyntactic study on parts of speech in Siouan

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**Abstract:** Adjectives in Siouan languages do not have any adjective-like inflection found in European languages. There is no grammatical agreement with the head noun of a NP in number, gender, and case. Likewise, there are no derivational processes that derive adjectives from other word classes, or to derive words of other word classes from adjectives. In addition, Siouan adjectives lack a grammaticalized category of comparison. There are no morphological and constructional means to express comparative and superlative. On the other hand, Siouan adjectives inflect like intransitive inactive/ stative verbs, if used as predicates in intransitive clauses. This fact has led most researchers to claim that there is no distinct class of adjectives in Siouan languages (cf. for instance Boas & Swanton 1911; Rood & Taylor 1996; and Helmbrecht 2006, among many others). Adjectives, or better property words, were analyzed as a subcategory of verbs. However, the data available for some Siouan languages shows that this general picture needs some refinement. Property words behave differently across Siouan languages, and language internally compared to other intransitive verbs. This paper presents a contrastive study of the morphosyntactic behavior of property words in Crow and Hoocąk showing that property words in Crow cannot occur as nominal modifiers/attributes within a NP. They can be used as nominal modifiers only as (intransitive) predicates of a relative clause. Hoocąk is different. Property words can occur as nominal modifiers, but lose all their verbal inflection in this function. Only stative, properties denoting words may occur in this syntactic position. Dynamic intransitive verbs can only occur as nominal modifiers if they are the predicate of a relative clause. Despite this particular behavior of property words, it will be concluded they do not constitute a separate word class ("adjective") in Hoocąk. These results will be discussed and evaluated in the light of previous research on the theory and typology of adjectives in the literature (see for instance Dixon 1977, 2010; Schachter & Shopen 2007; Croft 1991, 2001).

## 1. Introduction

### 1.1. Adjectives in Siouan

It has been claimed in the literature that there are no adjectives in Siouan languages. In fact, the common opinion shared by almost all Siouanists is that there is no proper word class adjective

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and that words that designate states, qualities and/or properties belong to the class of intransitive inactive/ stative verbs. The following authors claim explicitly in their grammatical description that adjectives (property words) are intransitive inactive/stative verbs: for Crow (cf. Graczyk 2007:5), for Mandan (cf. Kennard 1936:8; Mixco 1997:20), for Lakota (cf. Boas & Swanton 1911; Rood & Taylor 1996:458; Ingham 2003:82ff; Ullrich 2018:243), for Hoocąk (cf. Helmbrecht 2006), for Ofo (cf. Rankin 2005), and for Tutelo (cf. Oliverio 1996).

Other authors do not mention adjectives at all in their grammatical descriptions thus implying that there is no separate class of adjectives. This holds for Hidatsa (cf. Park (2012)), for Lakota (cf. Boas & Deloria 1941), and for Biloxi (cf. Einaudi 1976:138ff).

Another group of authors do mention adjectives in their publications, but underline the fact that they are rather a subcategory of stative verbs, see for instance for Lakota (Buechel 1939:94f, 182f, 219f, 320f), for Osage (Quintero 2004:397ff), and for Quapaw (Rankin 2005).

The main reasons for these judgements (if reasons are given at all) are:

  i.  property words in Siouan languages do not show any inflectional morphology that is typical of adjectives such as agreement in gender/ class, number, and case, if they modify a noun in an NP;

 ii.  there are no word class changing derivations that involve a separate class adjective, such as e.g. derivations of adjectives from nouns, or derivations of nouns from adjectives, which are well-known from European languages;

iii.  property words do not have any class specific grammatical categories such as comparative and superlative;

 iv.  all property words are inflected like intransitive inactive/ stative verbs, if used as clausal predicates.

There is just one author who explicitly claims the existence of a separate word class "adjective" in Hoocąk (cf. Rosen 2015). In his dissertation, explicit reference is made to claims on the universality of adjectives in the theoretical literature, in particular to the generative approach. Generativists always postulated the universality of parts of speech without any justification. Baker (2003), however, is an exception. He presents morphosyntactic arguments for these claims. Rosen applied some of the criteria for adjectivehood on elicited Hoocąk data arguing that there are adjectives in Hoocąk. The entire argumentation is very theory-driven, though.

## 1.2.    Theoretical accounts of adjectives

Functional-typological approaches to language consider parts of speech as language-specific syntactic categories. The main question to answer in this research paradigm is and was: How do empirical facts of word classification in individual languages fit into traditional terms and concepts such as "adjective"? And secondly, what is universal about the traditional word classes?

I would like to briefly summarize two important approaches to these questions (Dixon 1977, 2010, and Croft 1991, 2001). These approaches are also the theoretical background for my contrastive study of property words in Crow and Hoocąk.

In his seminal cross-linguistic study on adjectives, Dixon (1977) claimed that this word class is by no means universal. He demonstrated that languages that do not have adjectives as a

proper word class subsume the expression of property concepts under the verb class or the noun class. In addition, he showed that there are languages with closed classes of adjectives, and that the members of these closed classes of adjectives denote concepts according to a semantic hierarchy DIMENSION<AGE<VALUE<COLOR and so forth. The most typical adjectives are the ones that express dimensions, less typical adjectives express age, value color and so on. If a language has only a few adjectives, they probably express concepts of the left most part of the hierarchy. However, in his most recent publication on this topic, Dixon (2010) revised this position from (1977) claiming that adjectives are a universal class of words and that they can be identified in each language by even slight morphosyntactic differences they show with regard to the other lexical word classes as nouns and verbs. He offers a very detailed catalogue of criteria, grammatical categories and syntactic constructions, to look at in order to identify adjectives in an individual language (cf. Dixon 2010:104ff). In addition, he presents a semantic classification of the most typical adjectives, see (1) for some examples enlarging the semantic classification from (1977).

(1)  a. **Dimension**: big, small, long, tall, short, wide, deep, ...
     b. **Age**: new, young, old, ....
     c. **Value**: good, bad, odd, strange, ...
     d. **Color**: black, white, red, ...
     e. **Others** such as: Physical Property/Human Propensity/Speed/etc.
        (cf. Dixon 2010:73)

In addition, Dixon proposed a fourfold typology distinguishing languages that treat adjectives like verbs, or like nouns, or with similarities to both, or separate them clearly from nouns and verbs.

(2)  a. Adjectives similar to verbs (e.g. Chinese, etc.);
     b. Adjectives similar to nouns (e.g. Latin, etc.);
     c. Adjectives show verbal and nominal properties (e.g. Berber, etc.);
     d. Adjectives are clearly separated morphosyntactically from nouns and verbs (e.g. English, etc.); (cf. Dixon 2010:67).

Hoocąk and the other Siouan languages would fall into type (2a). in Dixon's typology. In languages of this type adjectives are similar to verbs, in fact, the majority of Siouanists claim that adjectives are identical to verbs. A major problem for Dixon's revised approach (2010) is that he cannot cope with the facts in Siouan. In his typology, it is presupposed that adjectives are always distinguishable from other word classes, which is not the case in Crow and in Hoocąk, as will be shown later.

Croft (1991, 2001), on the other hand, claims that nouns, verbs, and adjectives are not universal categories of language, and are not even syntactic categories of a specific language, but functional prototypes and as such, they are language universals (cf. Croft 2001:63f). The functional prototype "adjective" is defined as the modification of properties to an entity (Croft 2001:87). Adjectives are relational and designate states that are permanent and gradable (cf. Croft 2001:87). The theory of parts of speech as functional prototypes is bound to the theory of typological markedness. The prediction is that words in a language are structurally and behaviorally unmarked the more they correspond semantically and distributionally to one of these three prototypes (noun, verb adjective as prototypes). For example, property words in English are grammatically unmarked, if they are used as modifiers of a noun in a noun phrase. However, if they are used to refer to some abstract

object (e.g., 'big-ness') they have to be nominalized and are hence more marked. Likewise, if property words are used to predicate a state, they require a copula (e.g., 'X is big'). Again, in this function, the property word is grammatically more marked (copula), because it deviates from the adjectival prototype. Parts of speech of a specific language can therefore be seen as grammaticalizations of the respective prototypes, but in each language in different ways. Markedness theory allows us to compare and measure these different ways (more marked/less marked). Like Dixon, Croft (2001:99) proposes a semantic hierarchy of property concepts that looks quite similar to the one proposed in Dixon (1977). The fact that property words may be used and inflected like intransitive verbs as predicates and, in addition, may be used as nominal modifiers in a NP in Siouan languages without any morphological derivation does not pose a problem for Croft's theory. A problem for this theory of parts of speech would be the case that property words in Siouan would be more marked (e.g., by certain derivations) as modifiers for nouns than as predicates.

Both theories on parts of speech try to describe and to explain the cross-linguistic variation of language specific parts of speech classifications. Both theories make empirically testable claims. And both theories depend on the detailed theory-neutral morphosyntactic description of word classes in the languages.[1]

## 1.3.    Methodological remarks

In order to identify a proper class of adjectives in a specific language, words semantically designating properties should fulfill one or more of the following grammatical criteria.

With regard to inflection, property words should show some kind of agreement with the head noun of a NP. Cross-linguistically, adjectives often agree in gender, number, and case with its head noun. In addition, adjectives should show class-specific morphological or constructional categories of comparison (comparative, superlative, elative, etc.). However, not all languages that have adjectives have grammaticalized categories of comparison.

With regard to word formation, adjectives should play a role in word class changing derivations. Cross-linguistically, adjectives often may be derived from nouns or verbs, or nouns and verbs may be derived from adjectives.

With regard to the pragmatic function of adjectives, or more precisely adjectives as part of a propositional act, it holds that adjectives should be able to appear as modifiers of a noun/ nominal without any derivation or any additional constructional material, because this is the prototypical function of adjectives.

It has been already said in the introduction that property words in Siouan do not show class-specific inflection (agreement, comparison) or derivation (derivations between the other different lexical classes and adjectives). Therefore, I will focus my study on the prototypical function of adjectives as modifiers of nouns in NPs. The following questions will be investigated in both Siouan languages, Crow (Missouri Valley Siouan) and Hoocąk (Mississippi Valley Siouan): do all property words are inflected as inactive/ stative verbs as predicates of an intransitive clause in the same way? Do property words need derivations or auxiliaries as predicates? Do all property words occur as modifiers of nouns within a NP in the same way? Do property words need derivations or other constructional support to be able to occur in this function?

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[1] See, for instance, Sasse (1995) for an outline of the methods to identify lexical parts of speech in an individual language.

# 2. Crow

## 2.1. Property words as clausal predicates

According to Graczyk (2007:5, and p.c.), property words in Crow are intransitive stative verbs. They are formally distinguished from active intransitive verbs by a different set of pronominal affixes. They can be used as clausal predicates like any other intransitive (stative) verb; cf. the examples in (3a–3b).

(3) Crow (Graczyk 2007:179)[2]

    a. ***da**-lée-k*
       2A-go-DECL
       'you went'

    b. *dii-háchka-k*
       2B-tall-DECL
       'you are tall'

The first example (3a) is an intransitive clause with an active verb. It is personally inflected with a pronominal affix of the actor paradigm. The second example (HelmbrechtEx3b) contains a property word that is inflected like any other intransitive inactive/stative verb in Crow with a pronominal affix of the undergoer paradigm, here glossed as 2B. This marking pattern of intransitive subjects is common Siouan.

Among the inactive/stative verbs in Crow, there is a group of verbs that do not take animate arguments, i.e. they are not inflected for first and second persons and not for animate third persons (cf. Graczyk 2007:186). Unfortunately, the morphosyntactic properties of this subgroup of stative verbs is not specified further in the grammar. It seems that there is an animacy based split of suppletive stems that can be found also in other Siouan languages (e.g. in Hoocąk). This animacy split does not directly touch upon the question of the syntactic category of property words, though.[3]

## 2.2. Property words as nominal modifiers

Property words that are used to modify a noun are expressed obligatorily as predicates of (attributive) relative clauses in Crow. Relative clause in Crow are head internal. The general structure of a relative clause is as given in (4).

(4)   [head noun-**DET-REL**-VERB-**DET**] main verb

The head noun, i.e., the nominal that is modified by a relative clause, is structurally part of the relative clause. The head noun is always marked by a determiner. The predicate of the relative clause is prefixed with a relativizer, and the entire relative clause ends with a determiner, often a definite article. Compare (5) for an illustration.

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[2] All examples are glossed as in the sources; a complete list of abbreviations is given in §5 at the end.

[3] I am not aware of any research on this animacy split in the lexicon of Siouan; it would be a valuable comparative study.

(5)   Crow (Graczyk 2007:254)
*hileen [bacheé-o-m Jesus ak-áxp-ak    ilía-sh]   kan daá-u-lak*
these   man-PL-**DET**  Jesus **REL**-be.with-SS speak-**DET** then go-PL-COND
'when these men who were speaking with Jesus were leaving'

The head noun in (5) is marked with the indefinite specific marker -*m* (glossed as DET),[4] or alternatively with -*dak* (DET) in elevated discourse. In addition, there is a relativizer that is usually prefixed to the verb of the relative clause; here *ak-* (REL) indicates that the subject of the relative clause is relativized and that the subject is animate. The determiner (DET) at the end of the relative clause indicates that the referent of the complex NP is definite (uniquely identifiable), or indefinite. If there is no determiner, the NP may be generic.

   Inactive/stative verbs modifying a noun have to be expressed as the verb of a relative clause. This is illustrated in the subsequent examples.

(6)   Crow (Graczyk 2007:264)
*[[bacheé-m dahíssa-m] dáashe   Awachíilipi-sh   huu-m]   Chíisapua-sh*
man-**DET**    wealthy-**DET** his.name Ground.Bull-DET say.PL-**DET** Twines.His.Tail-DET
*báaht-ak*
insult-SS
'**a wealthy man** named Ground Bull insulted Twines His Tail'

(7)   Crow (Graczyk 2007:266)
*d-íilapxe    [bishéechiili-m iláp-kaashe-sh] balee-lappeé-hche-m*
2POSS-father cow-**DET**     fat-AUG-**DET**  1B.PL-kill-CAUS-DS
'your father had us kill the **really fat cow**'

(8)   Crow (Graczyk 2007:266)
*baa-waa-l-ilíshe      éehk [[bía-axu-o-m    xiip-ák   xawíi-m] iilía-lee-sh]*
INDEF-stem-2A-care.about those woman-body-PL-**DET** wrinkled-SS bad-**DET**  use-2A-**DET**
*koó-k*
COP-DECL
'all you care about are those **wrinkled and bad women's bodies** that you use'

All expressions in square brackets are analyzed as noun plus relative clause in Graczyk's grammar. So, the expression 'a wealthy man' in (6) with a property word 'wealthy' could be literally translated as '(the) man (who) is wealthy'. The same holds for the expression 'the really fat cow' in (7) that could be translated literally as '(the) cow that is really fat'. Note that the head noun in both NPs is marked by the indefinite specific determiner -*m*, although both are different with regard to definiteness. The 'wealthy man' is indefinite, the 'fat cow' is definite. Thus, the definiteness value is marked at the end of the relative clause, the indefinite marking of the head noun is just a grammatical marker of the relative clause construction.

   Strong evidence that the inactive/ stative verbs are indeed verbs of a relative clause is provided in the last example (8). The two conjoined property words are linked by means of a Same Subject marker -*ak* (SS). The Same Subject vs. Different Subject markers are only used to link clauses, never to coordinate words and phrases. Thus, the inactive/stative verbs are indeed predicates of a relative clause, and not modifiers. However, note that in all three examples, there is no

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[4]In Lakota, the head noun of a relative clause is also marked indefinite; see Van Valin (1977:47) and Williamson (1984:171).

relativizer at all in the stative verbs that modify the noun. So, there is a difference between relative clauses with active verbs and with stative verb (although, Graczyk has examples with *ak-* REL plus statives verbs in his grammar; cf. 2007:254). But not all stative verbs are property words.

A particularity with regard to marking appears with numerals. Numerals are often classified as adjectives cross-linguistically. In Crow, they are inflected like inactive/ stative verbs (with slightly different forms than other stative verbs). However, they do not require the head noun to be marked by *-m* (DET), the grammatical marker for relativized nouns.

(9)　Crow (Graczyk 2007:266)
　　*[iichíile-∅ dúupa-m aw-íaschilee-sh] xusshi-kaás-uu-k*
　　horse-∅　　two-**DET** 1A-buy-**DET**　　swift-AUG-PL-DECL
　　'the two horses I bought are good runners'

Numerals are thus the least marked adnominal modifiers in Crow. This is, from a theoretical perspective, a very unexpected fact.

# 3.　Hoocąk

## 3.1.　Property words as clausal predicates

All property words in Hoocąk may be used as clausal predicates in the same way as other intransitive inactive verbs. They may be inflected for person/number of the subject (intransitive argument S), and they all may take additional auxiliaries (positional auxiliaries and others) like any other verb in this clausal function. Only nominal predicates take a special auxiliary/copula.

As already mentioned above, there seems to be an animacy split among the property words such that a group of them may not take pronominal affixes of the first and second person and only animate third persons.

There is no indication that property words as clausal predicates might be adjectives or a proper syntactic category distinct from intransitive verbs. They do not require auxiliary support nor any additional verbalization operations.

## 3.2.　Property words as nominal modifiers

Property words as nominal modifiers appear directly after the head noun N-ADJ-(DET) followed by a determiner. The latter may also be lacking, cf. (10).[5]

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[5]All examples are taken form the DOBES Hoocąk text corpus stored in the digital archive of the Max Planck Institute for Psycholinguistics. See the website of the DOBES funding initiative of the Volkswagen Foundation (http://dobes.mpi.nl). The glossed texts and audio and video files of the Hoocąk documentation project are stored in the digital archive of the Max-Planck-Institute for Psycholinguistics called "The Language Archive"; the corresponding URL is: http://dobes.mpi.nl/projects/hocank. All materials therein are freely accessible for scientific and educational purposes. The website of the DOBES project "Documentation of the Hoocąk Language" led by Johannes Helmbrecht and Christian Lehmann at the University of Erfurt, Germany can be found under the following URL: http://www2.uni-erfurt.de/sprachwissenschaft/Vgl_SW/Hocank/index_frames.html.

(10)   BOF004
*Heesge      hąįnįga          hegų       waruc hija  kereireanąga*
heesge       hąįnį=ga         hegų        waruc hija  kere-ire='anąga
that's.why morning=CONT that.way food    there put.upright-SBJ.3PL=and

*hįgikereireanąga,*                         *'eegi    'ųųxįnį  'ųųxįnį   seep      nįge*
hį-gi-kere-ire-'anąga                       'eegi     'ųųxįnį  **'ųųxįnį  seep**     nįge
1E.U-APPL.BEN-put.upright-SBJ.3PL=and and.then charcoal **charcoal be.black** somewhere

*waasge hikįjąįja        wat'ųųpre.*
waasge hikiją hija       **wa**-t'ųųp-ire
dish       on.side there **OBJ.3PL**-put.down-SBJ.3PL
'That's why, in the mornings, they put some food out there by me, and they put a piece of
**black coal** next to the dish.'

The modified noun in (10) is a mass noun with a color word. There is no definite and no indefinite
article. This renders the NP indefinite and unspecific. The NP is cross-referenced on the main
verb with the object third plural prefix *wa-* (OBJ.3PL) that may also be used impersonally indexing
indefinite masses ('stuff'). The property word *seep* 'be.black' is not inflected at all.

The next text example (11) contains a NP with a property word 'be.brave' and an indef-
inite article marking the referent as indefinite and specific. The modified noun is semantically
human/animate and a count noun.

(11)   BOF034
*Wąąk wašoše   hižą   'eeja huhera          hegų      šųųk hamįnąkga.*
**wąąk wašoše   hižą**   'eeja huhe=ra          hegų      šųųk_hamįnąk=ga
**man  be.brave INDEF** there be.coming.here=DEF that.way ride_sit.on(SBJ.3SG)=CONT
'A brave man came here riding a horse.'

The NP in (12) is indefinite too, but the head noun is semantically inanimate/abstract and a count
noun. The property word 'be.good' is not inflected at all.

(12)   CAW069
*'eesge woorak te'e woorak pįįžą          hereną*
'eesge woorak te'e **woorak pįį=ižą**          here=ną
thus     story    this **story    good=INDEF** be=DECL
'that's why this story is **a good story**.'

The NP in the following example (13) contains an animate count noun modified by the
property word 'be.fast'. The entire NP is definite (definite article *=ra*). The referent of the NP
*šųųkxetesaagre=ra* 'the fast horses' is plural, but this is not marked on the noun, but indexed on the
main verb with the object third plural marker *wa-*. This examples clearly shows that the modifying
property word is not inflected for plural. If it were the predicate of a relative clause, it should be
inflected for plural (SBJ.3PL *-ire*).

(13)   CCL0009
*'eegi   hinųbahą       harairegi                  haijąga      'eeja šųųkxete*
'eegi    hi-nųųp-ahą     ha-ree-ire=gi               haiją=ga      'eeja **šųųkxete**
and.then ORD-two-times COLL-go.there-SBJ.3PL=TOP defeat=CONT there **horse**

     *saagrera     wii'ų̨įňe*
     **saagre=ra   wa**-hi-'ų̨ų̨-ire
     **be.fast**=**DEF OBJ.3PL**-APPL.INST-do/make-SBJ.3PL
     'when they go the second time, and then, there they would use *the fast horses*.'

**Relative clauses** are structurally very similar to NPs in Hoocąk, sometimes indistinguishable from a NP; they have the following structure:

(14)    [head noun/nominal=  (**DET**)]  [(**REL/ADV**)  (NP)  verb:INFL=  (**DET**)  ]<sub>Relative clause</sub>
       [head noun         (∅)    ∅       ∅      verb-∅=   (**DET**)  ]<sub>Relative clause</sub>

The determiner (**DET**) after the head noun/nominal of the relative clause is not obligatory; if it is nothing/ zero, the NP may be interpreted as indefinite. However, the definite and indefinite article may occur, too, as well as an adnominal demonstrative. The relative clause itself usually follows the head noun/nominal, but the head noun may also be internal to the relative clause (there are some examples of this type in the text corpus). The relative clause almost always ends with a determiner (**DET**), either a definite article, or an adnominal demonstrative. Sometimes an interrogative pronoun such as *jaagu* 'what', *hacįįja* 'where', *jaasge* 'how', and so on, serves as a relativizer introducing the relative clause found, in particular, in headless relative clauses. If the verb of the relative clause is a transitive verb, there may be (optionally) a lexically NP that refers to one of the arguments of the verb; usually there are no lexical NPs in a relative clause.

     The NP, on the other hand, is distinguished from a relative clause by the following formal properties:

   i.  the NP has no determiner (**DET**) after the head noun preceding the property word;

   ii.  there is no (attributive) prepositional phrase modifying the head noun;

   iii.  the property word is never personally inflected, if used as an attributive modifier;

Compare the two elicited examples that illustrate the slight structural difference between NP and relative clause in Hoocąk.

(15)   PM (XVI:1ff)

    a. *cii   skaara    waacáaną*
      [**cii    skaa=ra**]  wa-haca=ną
      **house white**=**DEF** OBJ.3PL-see.1E.A=DECL
      'I see the white houses'

    b. *cii   skáirera         waacáaną*
      [**cii    skaa-ire=ra**]     wa-haca=ną
      **house white-SBJ.3PL**=**DEF** OBJ.3PL-see.1E.A=DECL
      'I see the white houses that were white'

The modifying property word in (15a) is not inflected and does not agree with the head noun wrt number. It cannot be separated by a determiner from the head noun. On the other hand, the property word in (15b) is the verb of a relative clause. It is marked pronominally like any other verbal

predicate indexing the intransitive argument (S) of the clause. The property word in this construction may be separated from the head noun by a determiner. The relative clause is almost always marked by a definite article.

Thus, the following conclusions can be drawn for Hoocąk. Property words that appear as modifiers immediately after the head noun of a NP are never inflected (person/ number), and they are never separated from the head noun by a DET. All words in the Hoocąk corpus that fulfill these structural properties are semantically stative designating qualities, and all belong to the class of inactive intransitive verbs. Intransitive inactive verbs that are dynamic may not fill this position, i.e. may not modify a head noun (except in a relative clause). So, we have a kind of sub-class of intransitive inactive verbs, negatively defined from a morphological point of view, and distributionally defined by a certain slot in a certain syntactic construction (NP).

# 4.   Conclusions

If property words were adjectives, i.e. a separate class of words distinct from verbs, then one would expect that they behave differently as clausal predicates. They should be either verbalized by derivational means, or by taking an auxiliary. If property words were adjectives, then one furthermore would expect that they occur as adnominal modifiers without any derivation, i.e. this should be the unmarked structural and functional position of property words. On the other hand, if the property words are verbs (no matter which subclass), they should occur in this position/function only after a word class changing derivation, or as predicate of a relative clause.

The latter is the case in Crow. Property words may appear as modifiers of a head noun only as predicates of a relative clause (attributive clause). Thus, one has to conclude that property words remain intransitive stative verbs in Crow, perhaps as a subclass of intransitive stative verbs, although there are slight differences with regard to the marking of the respective relative clauses. Hoocąk is different. Property words may occur as modifiers of a head noun, but they lose all their verbal inflection in this construction. No word class changing derivation is involved here. And, in addition, all property words are inflected as intransitive inactive verbs, when used as clausal predicates. Thus, one has to conclude that property words are a subclass of intransitive inactive verbs in Hoocąk.

From a theoretical point of view, one could say that property words in both languages have a special morphosyntactic behavior that would not contradict the prototype theory of parts of speech (Croft 1991, 2001). They are less unmarked as modifiers of a noun. This holds for Hoocąk, but also for Crow, although less clearly. The relative clauses in Crow seem to be less marked than the regular ones with dynamic active verbs.

However, the proposed prototypical semantics of adjectives cannot be confirmed by the facts from Crow. It has never been proposed that cardinal numbers are the most prototypical meanings of adjectives. Cardinal numbers appear as adjectives only in languages with large open class inventories of adjectives.

The facts in Hoocąk and Crow definitely contradict the claims by Dixon (2010) that adjectives are a universal class of words. Even if property words behave somewhat differently than other intransitive inactive/stative verbs, they cannot be classified as a proper class of adjectives. In both languages, they never lose their verbal properties.

# 5.   Abbreviations

| | |
|---|---|
| 1, 2, 3 | =first, second, third person |
| A | =actor; agent |
| APPL.BEN | =benefactive applicative prefix |
| APPL.INST | =instrumental applicative |
| AUG | =augmentative |
| B | =intransitive pronominal prefix of the undergoer paradigm |
| CAUS | =causative |
| COLL | =collective marker |
| COND | =conditional |
| CONT | =continuative |
| COP | =copula |
| DECL | =declarative |
| DEF | =definite |
| DET | =determiner |
| DS | =different subject |
| E | =exclusive |
| I | =inclusive |
| INDEF | =indefinite article |
| OBJ | =object |
| ORD | =ordinal number |
| PL | =pl |
| POSS | =possessive |
| REL | =relativizer |
| SBJ | =subject |
| SG | =singular |
| TOP | =topic |
| U | =undergoer; patient |

# References

Baker, Mark C. 2003. *Lexical categories: Verbs, nouns, and adjectives*. Cambridge, UK: University of Cambridge Press.

Boas, Franz & Ella Deloria. 1941. *Dakota grammar*. Washington, DC: Government Printing Office.

Boas, Franz & John Swanton. 1911. Siouan (Dakota). In Franz Boas (ed.), *Handbook of American Indian languages*, vol. 1, 875–965. Washington, DC: Government Printing Office.

Buechel, Eugene. 1939. *A grammar of Lakota: The language of the Teton Sioux Indians*. Saint Francis, SD: Rosebud Educational Society.

Croft, William. 1991. *Syntactic categories and grammatical relations: The cognitive organization of information*. Chicago, IL: University of Chicago Press.

Croft, William. 2001. *Radical Construction Grammar: Syntactic theory in typological perspective*. Oxford, UK: Oxford University Press.

Dixon, Robert Malcom Ward. 1977. Where have all the adjectives gone? *Studies in Language* 1(1). 19–80.

Dixon, Robert Malcom Ward. 2010. The adjective class. In Robert Malcom Ward Dixon (ed.), *Basic linguistic theory*, vol. 2, 62–108. Oxford, UK: Oxford University Press.

Einaudi, Paula Ferris. 1976. *A grammar of Biloxi*. New York, NY: Gardland Publishing.

Graczyk, Randolph. 2007. *A grammar of Crow*. Lincoln, NE: University of Nebraska Press.

Helmbrecht, Johannes. 2006. Are there adjectives in Hoocąk (Winnebago)? In Ximena Lois & Valentina Vapnarsky (eds.), *Lexical categories and root classes in Amerindian languages*, 289–319. Bern, Switzerland: Peter Lang.

Ingham, Bruce. 2003. *Lakota*. Munich, Germany: Lincom Europa.

Kennard, Edward. 1936. Mandan grammar. *International Journal of American Linguistics* 9(1). 1–43.

Mixco, Mauricio. 1997. *Mandan*. Munich, Germany: Lincom Europa.

Oliverio, Giulia R. M. 1996. *A grammar and dictionary of Tutelo*. Lawrence, KS: University of Kansas dissertation.

Park, Indrek. 2012. *A grammar of Hidatsa*. Bloomington, IN: Indiana University dissertation.

Quintero, Carolyn. 2004. *Osage grammar*. Lincoln, NE: University of Nebraska Press.

Rankin, Robert L. 2005. Quapaw. In Heather Hardy & Janine Scancarelli (eds.), *Native languages of the Southeastern United States*, 454–498. Lincoln, NE: University of Nebraska Press.

Rood, David & Allan R. Taylor. 1996. Sketch of Lakota, a Siouan language. In Ives Goddard (ed.), *Handbook of North American Indians*, vol. 17, 440–482. Washington, DC: Smithsonian Institution.

Rosen, Bryan. 2015. *The syntax of adjectives in Hocąk*. Madison, WI: University of Wisconsin dissertation.

Sasse, Hans-Jürgen. 1995. Syntactic categories and subcategories. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternfeld & Theo Vennemann (eds.), *Syntax*, vol. 2, 646–686. Berlin, Germany: Mouton de Gruyter.

Schachter, Paul & Timothy Shopen. 2007. Parts-of-speech systems. In Timothy Shopen (ed.), *Language typology and syntactic description. Volume I: Clause structure*, 1–60. Cambridge, UK: Cambridge University Press 2nd edn.

Ullrich, Jan. 2018. *Modification, secondary predication and multi-verb constructions in Lakota*. Düsseldorf, Germany: Heinrich Heine Universität Düsseldorf dissertation.

Van Valin, Robert D., Jr. 1977. *Aspects of Lakhota syntax: A study of Lakhota (Teton Dakota) syntax and its implications for Universal Grammar*. Berkeley, CA: University of California, Berkeley dissertation.

Williamson, Janis Shirley. 1984. *Studies in Lakhota grammar*. San Diego, CA: University of California, San Diego dissertation.

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