

Are There Adjectives in Hocąk (Winnebago)?

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1. Introduction¹

The examination of adjectives in Hocąk presented in this article is part of a larger project of the investigation of the grammar of Hocąk (Winnebago). This project includes, among other things, the determination of the parts-of-speech system in Hocąk (cf. Helmbrecht 2002a, 2002b, 2003, and in prep.). The object language is Hocąk, a Siouan language of the Mississippi Valley branch closely related to Chiwere, Dakota, and Dhegiha still spoken in Wisconsin (USA). As is true for most of the North American Indian languages, Hocąk is a seriously endangered language with no more than approximately 200 fluent speakers left. The linguistic and anthropological literature traditionally used the name Winnebago in order to refer to the Hocąk tribe and their language. This name is of Algonquian origin. The self-denomination, however, is Hocąk and this name will be used throughout this study.

The goal of the present paper is to find answers to the following questions: is there a separate word class of adjectives in Hocąk besides nouns and verbs? If yes, what are the morphosyntactic properties and characteristics of adjectives in Hocąk? If no, what are the strategies and linguistic means in Hocąk to express property concepts and the categories often associated with adjectives such as comparative and superlative? In general, what are the Hocąk equivalents of noun modification?

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1.1 Typological and Theoretical Background

The distinction between nouns and verbs seems to be a universal one. However, there are specific studies dealing with this question showing that there are languages such as Salish languages, Iroquoian languages, and others, in which such a distinction cannot be found or is hard to discover (cf. Kuipers 1968, Kinkade 1983, Sasse 1991, and van Eijk & Hess 1986, see Jacobsen 1979 on Makah [Wakashan] for a different view). These studies led to a questioning of the universality of the noun/verb distinction.

Such a controversy did not arise with regard to adjectives. It is a widely held view within the functional-typological paradigm that adjectives² are not a formally distinguished class of words cross-linguistically. Therefore, many researchers in this paradigm considered adjectives not as a universal syntactic category. Dixon (1977) in his seminal study on adjectives distinguished three types of languages with respect to adjectives as a morphosyntactically identifiable word class. First, there are languages that have an open class of adjectives such as English, German and other European languages. Second, there are languages that have a closed class of adjectives such as Swahili (Bantu), Hua (Papua New Guinea), and many others. Third, there are languages that have no adjectives at all. It is one of the fascinating and surprising findings of Dixon's study that, if languages have a closed class of adjectives, i.e. approximately up to 50 lexical items, then these adjectives always designate property concepts of the following semantic domains: Dimension ('big' versus 'small'), Age ('old' versus 'young'), Value ('good' versus 'bad') and Color ('black', 'white', 'blue', 'green', etc.).

If languages, however, do not have adjectives as a proper word class (or have only a few of them), they have to express property concepts by words of the other major word classes, i.e. either by nouns or by verbs or by both. The question that was tackled by different authors was whether there are semantic parameters that determine which property concepts are subsumed under the

2 The present investigation is inspired by the core assumptions of the functional-typological approach to language. One of the reasons to adopt this general view on language with regard to parts of speech is that the generative paradigm does not have to say much about syntactic categories. The most important syntactic categories were derived from a cross-classification of two features, +/-N and +/-V, generating four important word classes. These classes were taken to be a priori universal without any empirical justification. Only recently, there was an attempt to fill this gap (cf. Baker 2003).

class of nouns and which ones under the class of verbs in a language without adjectives. Dixon proposed in the same study (Dixon 1977) that there is a tendency to express physical properties such as 'hard' by means of verbs in these languages, and human propensities such as 'happy' by nouns.

Wierzbicka (1986) proposed that the choice between nouns and verbs is dependent on the function of these word classes. Adjectival concepts are expressed by nouns, if they are used to categorize individuals (that is the basic functions of nouns) by means of permanent human properties. Adjectival concepts are expressed by verbs, if they are used to describe (that is the basic function of verbs) temporary states. The English expression *being drunk* would represent the verbal strategy according to Wierzbicka, the expression *drunkard* the nominal strategy. The latter expression categorizes an individual according to a permanent property.

Another but comparable semantic parameter is Givón's (1984) hypothesis of time-stability as a word class distinguishing semantic parameter. Nouns designate prototypically time-stable, not changing *THING* concepts. Verbs designate prototypically changing, dynamic *EVENT* concepts. Adjectives are somewhat in between (cf. Givón 1984: 51ff). More permanent, time-stable properties are hypothesized to be classified as nouns in languages without adjectives. Less time-stable, changing and temporary properties are rather classified as verbs. A solid empirical prove for all three hypotheses (Dixon, Wierzbicka, and Givón) just mentioned is lacking though.

The observation that languages without adjectives may express property concepts systematically or dominantly with nouns or with verbs led Schachter (1985: 15ff) to the typological distinction between adjectival-noun languages and adjectival-verb languages. Adjectival-noun languages use abstract nouns designating properties in possessive constructions such as in English *a person of kindness*, or in appositive constructions such as *a person, a madman* in order to express the modification of a noun. Schachter discusses examples from Quechua as a representative of this type (cf. Schachter 1985: 17f). Adjectival-verb languages use relative clauses such as English *a man who is mad* in order to express a modification of a noun without attributive adjective. The close relationship and similarity between predication and modification is the basis for this strategy. According to Schachter, Mandarin Chinese is a clear example of this type (cf. Schachter 1985: 18). Unfortunately, these two types of languages that lack adjectives are described only very briefly in Schachter's article. It might be expected that it is not always clear how to categorize a

specific language according to these two types. Schachter acknowledges this problem with regard to Mojave (Yuman) which cannot be classified hundred percent as an adjectival-verb language, because there is at least one distributional feature that distinguishes intransitive verbs and putative adjectives. It will be shown later in §3 that Hocak could be considered a good candidate for being an adjectival-verb language. It is one of the goals of the present paper to provide some detailed information on the properties of an adjectival-verb language with Hocak serving as an example.

The theoretical perspectives on the nature of adjectives just summarized do not deviate significantly from the view of traditional grammar. Adjectives are defined as a class of words that designate property concepts and that are used to modify nouns as attributes in the noun phrase. This view also was integrated in the prototype approach of word classes (cf. Croft 1984, 1991: Chap. 3/4, 2001: Chap. 2). Croft claimed that the major lexical classes are prototype concepts, which are universal. Prototypical adjectives are defined as a class of words in a specific language that grammaticalized the combination of semantic and pragmatic functions typical for adjectives. The semantic function is to designate property concepts that are gradable, static, persistent and time-stable to some degree. Prototypical adjectives are also semantically monovalent, i.e. they have only one inherent argument slot (cf. Croft 1991: 65). The prototypical pragmatic function of adjectives is to modify nouns that are used to introduce new discourse referents. As attributes, they add further information of the referent of the noun that may be needed by the hearer for its correct identification. Evidence for this theory was sought in markedness relations found with regard to property words used in constructions with less prototypical functions for adjectives. If adjectives are used in constructions designed for predication and reference, respectively, they usually need some morphological indication (e.g. derivation) that they are used in a different function than the one they are specified for. The empirical foundation of Croft's prototype approach to parts of speech is the typological markedness theory originally developed by Greenberg (1966) and further refined and adapted by Croft (1991). For this approach, it is no a principal problem that there are languages that do not exhibit formal distinctions between adjectives and, for instance, verbs as long as all other languages show the predicted markedness relations with regard to property words. This is different in Baker's approach (Baker 2003: Chap. 4). He claims that the major lexical classes are universal and that formal distinctions are to be found with regard to adjectives in all

languages. The present investigation of adjectives in Hocak will reveal that this claim is problematic. There are no inflectional/ derivational or syntactical distinctions between intransitive inactive verbs and property words (hypothetical adjectives) that would allow posing two separate classes of words in Hocak. It will be shown that properties designating words are rather to be considered as a subclass of intransitive inactive verbs.

1.2 Methodological Remarks

The typological studies mentioned so far do not explicitly spell out how to recognize adjectives as a separate word class in a specific language. This serious draw back also holds in part for the prototype approach presented in Croft (1984, 1991, 2001). This, however, does not make these studies useless for the present investigation. The theoretical definition of adjectives as manifested in the studies cited will provide the methodological basis for the search for adjectives in Hocak. The notion of an adjective prototype allows finding the words that are hypothetical adjectives. However, only the examination of their morphosyntactic properties in the specific language can be the basis for their analysis of a separate word class vis-à-vis the other word classes. Part of this principle direction of research is to check whether the object language shows any morphological operations that are indicative for adjectives in languages that have adjectives as a proper class of words. Such morphological operations include category establishing morphology and category changing morphology (cf. Sasse 1995). Category establishing morphology with regard to adjectives are all kinds of agreement relations between the adjective and the noun it modifies. Since gradability is a unique semantic specification of adjectives, it does not come as surprise that comparison (comparative, superlative, elative) is central as category-establishing morphology. The most important category establishing morphology for adjectives is summarized in Figure 1.

Figure 1: Category Establishing Morphology of Adjectives

- Grammatical agreement with the modified noun in number, gender/ class, case (e.g. the Russian adjective, or in Latin)
- Comparison: positive, comparative, and superlative, or elative (e.g. in German, French, English and Modern Arabic).

Languages with a separate class of adjectives usually have category changing (derivational) morphology that involves adjectives either on the source side or on the target side of the derivation. Such category changing morphology is therefore indicative for the existence of a syntactic category. Some of these category-changing derivations are summarized in Figure 2 for English.

Figure 2: Category Changing Morphology Involving Adjectives

- Derivation of adjectives from abstract nouns (e.g. Engl. *beauty* → *beautiful*)
- Derivation of adjectives from verbs (e.g. Engl. *to agree* → *agreeable*)
- Derivation of nouns designating individuals from adjectives (e.g. German *der Schwarze* ‘the black one’)
- Derivation of manner adverbs from adjectives (e.g. Engl. *furious* → *furiously*)
- Derivation of factitive verbs from adjectives (e.g. Engl. *short* → *to shorten*)
- Derivation of inceptive verbs from adjectives (e.g. Engl. *it darkens* i.e. ‘it becomes dark’)
- Derivation of abstract nouns from adjectives (e.g. Engl. *ugly* → *ugliness*).

A third domain of possible formal distinctions between adjectives and other parts of speech is their syntactic distribution. Since adjectives are prototypically noun-modifying expressions, the unmarked syntactic position of the adjective is close to head noun within the noun phrase. If putative adjectives are used in other syntactic positions that are associated with other functions than modification, they need to be morphologically modified. This modification signals that the words in question are used in other functions/ syntactic positions for which they are not designed. If, for instance, adjectives are used as clausal predicates, they often need an auxiliary. Cf. the English example in (1a). In English, adjectives cannot be used as predicates without a modification, i.e. without the verbalization of the adjective.

- (1) a. The boy *is* tall.
 b. The *little ones* visited the zoo.

A similar observation can be made with regard to adjectives as heads of a NP, i.e. in a referential function. In (1b), the adjective cannot be used as the head

of a NP except in combination with a pronominal element *one*. This modification is necessary in English in order to use an adjective referentially.

Adjectives used as attributes of nouns are not the only means to express the modification of nouns. Other means include nominal compounds, genitive constructions, participle constructions and relative clauses (cf. Figure 3). These means do occur in languages with adjectives (as the examples in Figure 3 suggest), but they may be the only means in languages that do not have adjectives as a proper word class.

Figure 3: Other Constructions that Are Used to Express Nominal Modification

- Nominal compounds; e.g. Engl. *beauty queen, beauty shop/salon*, etc.
- Genitive constructions; e.g. Engl. *the brightness of the sun*, etc.
- Participle constructions; e.g. Engl. *the broken bottle*, etc.
- Relative clauses; e.g. Engl. *the man who is tall*, etc.

It will turn out in §2 that Hocak lacks adjectives as a separate word class. It will be shown that at least some of these constructions play a role in the expression of modification in Hocak (cf. §3).

1.3 The Data

The data for the present study are taken from different published and unpublished sources. Textual sources are the Hocak mythological stories (*waiqa*) recorded and published by Radin (1949), Danker (1985), and autobiographical notes by Josephine White Eagle (1988). Data were also taken from lexical studies such as White Eagle (1988), and Zeps (1996), and from my own notes collected during various fieldtrips to Wisconsin.

2. Evidence against Adjectives as a Separate Word Class in Hocak

2.1 *No Category Establishing Morphology with Respect to Adjectives in Hocak*

Gender, number, and case are potential agreement categories between nouns and their modifying adjectives (cf. Figure 1). Hocak has no morphological case marking of nouns and hence no case agreement between putative adjectives and head noun. The same holds for gender. There is no classification of nouns with regard to gender or noun class. Therefore, there is no agreement between putative adjectives and nouns with regard to gender categories.

Plurality of the noun phrase may be marked optionally on the head noun itself using a suffix *-wi/-wi* that is formally identical with the plural marker on verbs. Much more common than this NP-internal plural marking is the usage of third person plural markers on the verb cross-referencing the subject and object NP in the clause. This NP-external plural marking is employed, if the NP is definite.

If there is no pronominal marker on the verb, the semantic role of the subject NP and object NP has to be inferred from word order. If one or more of the core participants are speech act participants, word order is irrelevant for the interpretation of the semantic role of the NP. Then we have grammatical marking of the semantic function of the verbal complement(s) on the verb by means of different applicatives and different series of pronominal affixes. Hocak is a verb-final (SOV) language. The complement NPs usually precede the verbal predicate.

- (2) ciisgára waacána³
 /cii-sгаа-ra wa- haacá- na/
 [house-white-DEF]_{NP} 3PL.OBJ-1SG.A.saw-DECL
 'I saw the white houses.'

3 The following abbreviations are used: PN = proper name, NP = noun phrase, N_i = noun, lower case indices indicate co-reference, DECL = declarative, DET = determiner, DEF = definite article, INDEF = indefinite article, 1./2./3. = first, second, and third person, U = undergoer, A = actor, SBJ = subject, OBJ = direct object, RC = relative clause, HN = head noun, ARG = argument slot of a predicate, PROG = progressive aspect, HS = hearsay,

Example (2) illustrates a Hocak clause with a noun phrase containing a potential adjective. There is no agreement between the adjective and the head noun. The position of the adjective *sgaa* 'white' is always between noun and determiner (definite or indefinite article). The plurality of the undergoer NP is marked on the verb by means of a 3PL.OBJ prefix *wa-* 'them'. The clause literally translates as 'I saw them, the white house(s)'. The following examples (3a-b) illustrate that potential adjectives such as *sgaa* 'white' or *zii* 'brown, yellow' can be used as clausal predicates without any morphological modification.

(3) a. *waamínaḱjañe ziiṅ*

/*waamínaḱ= jañe Ø- zii- na/*
 chair this 3SG.SBJ- brown- DECL
 'This chair is brown.'

b. *naḱ'ápnaagre ziiirénaḱ*

/*naḱ-'áp= naagre zii- iré- na/*
 tree-leaves- these yellow-3.PL.SBJ-DECL
 'These leaves are yellow.'

No auxiliary is necessary to use the putative adjective *zii* 'brown' as a clausal predicate as it is the case in the English translation. If the lexical NP is marked plural, the putative adjective receives the third person plural pronominal suffix. This holds for all words designating properties. They are not distinct from intransitive inactive verbs in Hocak. This holds for tense and aspect marking as well. Hocak has a very simple tense system. There is only a basic split between future and non-future. The future is marked by a special suffix that may express modal meanings such as desiderative as well. Non-future is unmarked and covers present and past tense values depending on the discourse context. Putative adjectives are not restricted with regard to tense, aspect, and mood markers except these co-occurrences produce pragmatically unacceptable utterances.

Hocak has a basic split between active intransitive and inactive intransitive verbs. The former class includes verbs designating an activity usually performed by an animate or human being. The latter class includes all verbs

DIM = diminutive, VAGUE = vagueness, INTS = Intensifier, EXCL = exclamation, COND = conditional, SG = singular, PL = plural, INCH = inchoative, COLL = collective, REFL.POSS = reflexive possessive, DEM = demonstrative pronoun, PROX = proximal, ADV = adverb, EMPH = emphasis.

designating uncontrolled processes and states. The verbs are formally distinct, because they are personally inflected by different series of personal prefixes. Active intransitive verbs are inflected by the actor series of pronominal affixes. Inactive intransitive verbs are inflected by the undergoer series of pronominal affixes. The actor and the undergoer series of personal prefixes are distinct except for the third person. The 3SG actor and 3SG undergoer is always zero (=3SG.SUBJ). The 3PL actor and undergoer suffix for intransitive verbs is the suffix *-ire* (=3PL.SBJ). The active/ inactive distinction is neutralized in the third person. Therefore, third person pronominal affixes are glossed as subject and object. For transitive verbs, the suffix *-ire* indicates the 3PL.SBJ. In addition, there is a special form *wa-* (=3PL.OBJ) indicating the direct object. An intransitive verb of the inactive intransitive class is *kooré* 'to be surprised'. It is used in a strict parallel fashion as the potential adjective in (3). Compare the example in (4).

- (4) Johnga kooréena
 /John-ga Ø- kooré- na/
 John-PN 3SG.OBJ- be.surprised- DECL
 'John is surprised.'

Putative adjectives as predicates are personally inflected like inactive intransitive verbs in Hocak. This is illustrated with the examples in (5a-b) and (6a-b) with words designating properties such as 'big' and 'fast'. Restrictions with regard to person marking of putative adjectives do occur only with property words that designate a property that cannot pragmatically be attributed to a human being.

- (5) a. hixetéena
 /hɨ- xeté- na/
 1SG.U- big- DECL
 'I am a big person'
- b. nijxetéena
 /nɨ- xeté- na/
 2SG.U- big- DECL
 'You are a big person'

- (6) a. *h̥sagréna*
 /h̥- sagré- na/
 1SG.U- fast- DECL
 'I am fast'
- b. *n̥sagréna*
 /h̥- sagré- na/
 2SG.U- fast- DECL
 'You are fast'

Putative adjectives in Hocak are not distinguished from inactive intransitive verbs by means of other morphological properties such as special stem formation processes or special reduplication processes as they can be found, for instance, in Yukatekan Maya (cf. Lois & Vapnarsky this volume).

The examples (3) through (6) illustrate that hypothetical adjectives can function as clausal predicates without any morphological derivation or additional indication. There is a strong parallelism between intransitive inactive verbs and putative adjectives in Hocak. However, although hypothetical adjectives can be used as predicates without auxiliaries or category changing morphology, there is a tendency in discourse to use adjectives as predicates with auxiliaries, even if there is no need to specify a certain aspectual distinction. This is, however, only a tendency and never obligatory. One finds both ways without any obvious reason in texts; cf. (7).

- (7) *žegú coon̥ korohó-gi žeegú aabrá šuuj (h)eré hootá zína*
 /žeegú coon̥ korohó-gi žeegú 'aap-rá šuuj (h)eré hootá zíi- na/
 thus fall prepare-when thus leaves-DEF red be some yellow-DECL
 'In early fall, the leaves are red and some are yellow.'

The predication of the colors of the leaves in fall, red and yellow, is done first in (7) by means of an auxiliary *heré*, then without auxiliary support simply by adding the declarative suffix. It remains to be investigated whether there are text type or genre type dependent patterns or other rules with regard to the usage of auxiliaries with property words in predicative function. For the moment, I can only state that there are instances in texts in which "adjectives" are used as clausal predicates with an auxiliary. If the construction of "adjective plus auxiliary" in predicative function would be a phenomenon with a high frequency in Hocak, this could be evidence for a distributional distinction between adjective and inactive intransitive verbs in Hocak.

It is important to note here that nouns, on the other hand, obligatorily need auxiliary support, if they are used as clausal predicates. This is illustrated in (8) and (9).

- (8) eegí waamínakiža naksana
 /eegí waamínak- iža nək- sana
 this.here chair- INDEF be(sitting)- DECL
 ‘This here is a chair.’

- (9) şuxkétera wanojge xeteiža hereéna
 /şuxkéte- ra wanojge xete- iža here- na/
 horse- DEF animal big- INDEF be- DECL
 ‘The horse is a big animal.’

Hocak has various different auxiliaries – the three positional auxiliaries *nək* ‘to be (in a sitting position)’, *jee* ‘to be (in a standing position)’, and *ak/ək* ‘to be (in a lying position)’, and *wa’u*, *heré*, *nihé* – that can be used for predicate nominals. The difference between putative adjectives and nouns in predicative function in Hocak is evidence that putative adjectives are much closer to verbs than to nouns. This result will be supported by the other properties of property words in Hocak that will be presented in the following paragraphs.

The other type of category-establishing morphology for adjectives is comparison (cf. Figure 1). Grammatical categories of the adjective such as positive, comparative and superlative reflect the fact that properties are gradable. Hence, they are closely connected to the syntactic category adjective. With regard to Hocak, there is no morphological category of positive, comparative and/ or superlative. The linguistic means to express the gradation of properties in Hocak will be discussed in more detail in section §4 below.

It can be concluded that – with regard to inflection – hypothetical adjectives in Hocak do not show any category-establishing morphology that is typical for adjectives cross-linguistically. The inflectional behavior in predicate function is strictly parallel to the one of intransitive inactive verbs in Hocak.

2.2 No Category Changing Morphology with Respect to Adjectives in Hocak

If a language has derivational morphology that changes the word class of a word, this is direct evidence that the target as well as the source category is a distinct syntactic category in this language. In Hocak, no derivational morphology can be found that involves the adjective category no matter on which side of the derivation. For instance, there is no derivation of adjectives from abstract nouns of the type *beauty* → *beautiful*. Similarly, there is no derivation of adjectives from verbs (which is not surprising, if adjectives are verbs in Hocak) of the type *to agree* → *agreeable*. Factitive verbs of the type *short* → *to shorten* are formed in Hocak with the help of the causative auxiliary *hii* 'to make, to cause'. Cf. the examples in (10a–c).

- (10) a. *sará* 'to be oily' *saráhii* 'to oil'
 b. *sgaǰaré* 'to be molten' *sgaǰaré hii* 'to melt'
 c. *sgeé* 'to be clean' *sgeé hii* 'to clean'

The same causative auxiliary verb =*hii* is used for the causativisation/ transitivity of intransitive inactive verbs and for property words. No difference can be observed with regard to both derivations.

Inceptive/ inchoative verbs are formed in Hocak with the auxiliary verb *raahé* 'become'. This auxiliary can also be used as a full verb with the meaning 'to be on the way coming'. In this case, it is used like other motion verbs. The examples in (11a–c) illustrate the auxiliary usage of *raahé* as an inceptive/ inchoative derivational means.

- (11) a. *hokawás* 'to be dark' *hokawás raahé* 'becoming dark'
 b. *šuuuc* 'to be red' *šuuuc raahé* 'becoming red'
 c. *xeté* 'to be big' *xeté raahé* 'becoming big'

The analytic verb complexes in (10a–c) and (11a–c) are not derivations of verbs from adjectives, but rather combinations of verbs. Both parts of the complex predicates can be used as verbs independently. The causative verb can be combined with an intransitive or transitive verb including putative adjectives to form a causative construction. In this case, the causative auxiliary bears the pronominal affixes and the verbal categories. In (11a–c), the verb *raahé* is used as a verbal auxiliary in an analytical construction to express inchoative aspect. It bears the pronominal inflection and the verbal categories.

There is no derivational morphology, which derives abstract nouns from adjectives of the type *ugly* → *ugliness*. These results lead to the conclusion that from a morphological point of view, there is no evidence for a category adjective in Hocąk. Putative adjectives are indistinguishable from inactive intransitive verbs in Hocąk.

2.3 No Distributional Distinctions between Adjectives and Verbs in Hocąk

Another possibility to discover a distinct formal property for property words in Hocąk could be the syntactic position in the noun phrase. Consider the basic structure of the NP in Hocąk in Figure 4. The NP with a noun as head contains optionally an “adjective”, a quantifier, and a determiner. A determiner can be a definite/ indefinite article, or an attributive demonstrative pronoun. The order of these elements is rigidly fixed with the exception of the quantifier. This element may appear on the left or the right side of the DET element.

Figure 4: The structure of the NP in Hocąk

[Noun – “Adjective” – (Quantifier) – DET – (Quantifier)]_{NP}

The position of the putative adjective in Figure 4 could be interpreted as a structural property of proper adjectives that does not hold for intransitive verbs or for transitive verbs. This is, however, not possible. The special position of the putative adjective in Figure 4 cannot be taken as a syntactic diagnostics for a category adjective. The same position can be filled with intransitive and transitive verbs. In these cases, the whole expression has then to be interpreted (translated) as a relative clause. Compare the examples in (12) and (13).

- (12) waní tuujáa=naǵgre
 /waní tuuc= háa= naǵgre/
 [meat]_{HN} [be.cooked= 1SG.A.cause= DEM.PROX.PL]_{RC}
 [[N]_{HN} – [(U)_i-A-Verb – DET]_{RC}]_{NP}
 ‘the meats (that) I am cooking’

- (13) *haastik cii naqké=eja wapehíra wawitu'ina*
 [haastik] [cii naqké= eja wa- pehí- ra]
 [blueberry]_{HN} [house back.part= there 3PL.OBJ- 1SG.A.pick-DEF]_{RC}
 wa- witu'j- na
 3PL.OBJ-sell- DECL

[[N]_{HN} - [LOC-ADJUNCT U_i-A_j-Verb - DET]_{RC}]_{NP} U_i-A_j-Verb

'I sold the blueberries that I picked behind the house'

The expression in (12) represents a simple relative clause (RC) in Hocak. The head noun (HN) is *waní* 'meat' followed by the RC *tuujáa naqgre* 'that I am cooking'. The RC contains a transitive predicate – a combination of an intransitive inactive verb *tuuc* plus the causative verb =*hii* – and is delimited by the demonstrative pronoun *naqgre* 'these'. The demonstrative pronoun indicates that the HN has to be interpreted as plural. Interestingly, this demonstrative pronoun also indicates progressive aspect of the RC. The verbal complex of the RC does not indicate the plurality of the head noun. Informationally, a 3PL.OBJ *wa-* cross-referencing the HN would be redundant and is therefore lacking. However, this pronominal affix is by no means forbidden or blocked and can appear optionally. Compare the example in (13), in which the transitive verb of the RC has a 3PL.OBJ *wa-*. In this case, however, this prefix is the only indication of the plurality of the HN. The verb of the RC in (12) occupies the same syntactic slot as the putative adjective in (2). Both differ only with respect to the pronominal inflection.

The expression in (13) is a more expanded RC than the one in (12). The head noun *haastik* 'blueberries' is followed by the RC containing a transitive verb *wapehíra* 'I picked them' and a local adjunct *cii naqké=eja* 'behind the house'. The verb of the RC is inflected like a regular main clause verb cross-referencing the actor (first person) and the undergoer (third person plural referring to the head noun 'blueberries'). The local adjunct *cii naqké=eja* 'behind the house' is optional and can be dropped. In this case, the verb of the RC is in the same structural position as a putative modifying adjective, and indeed, it can be replaced by such adjectives without any morphological modification. Intransitive verbs, i.e. intransitive active and inactive verbs, may appear in the same position, too. The structures of the RCs in (12) and (13) are parallel to the structure of the noun phrase in (2). The examples given are intended to illustrate that there is a continuous transition from NP to RC, or in other words,

that there is no principal constructional difference between NPs and RCs in Hocak. The only difference is that the verbs in the RCs in (12) and (13) are transitive with their own complements. The “adjective” in (2) is an intransitive inactive verb having only one argument slot, namely for the HN.

3. Hocak as an Adjectival-verb Language

The last section has shown that there is no separate class of adjectives in Hocak. Instead, adjectives have to be considered as intransitive inactive verbs, or at least as a subclass of it. The reason for this classification is that putative adjectives – i.e. property designating words – do not show any morphological or syntactic differences compared to inactive intransitive verbs. The goal of the present section is to show that Hocak is an adjectival-verb language in the sense of Schachter (1985). An adjectival-verb language is a language that subsumes adjectives under one class of intransitive verbs. On the other hand, an adjectival-noun language is a language that subsumes adjectives under one class of nouns.

The prototypical function of adjectives is to designate properties and to attribute them to nouns. Adjectives are hence prototypically concept-modifying expressions. Languages that do not have a grammaticalized class of adjectives have to use alternative means to fulfill the same function. This implies that words of the other major word classes (nouns or verbs) have to be utilized for this function in the syntagmatic constructions associated with these word classes. This holds for Hocak as well. Such alternative constructions were summarized already in Figure 3 above. All of them except participle constructions (there are no participles in Hocak) play a role in Hocak grammar. Note that these constructional possibilities are available also in languages that do have a separate class of adjectives. There are four different constructions expressing a relation of modification in Hocak:

1. Nominal compounds (cf. Figure 5 and example (14)),
2. “Genitive” constructions (cf. Figure 6 and example (15)),
3. Noun-verb compounds (cf. Figure 7 and example (16)),
4. Relative clauses (cf. Figure 8 and example (18)).

Nominal compounds in Hocąk consist of a modifying noun followed by a noun modified. There is no linking element between the two nouns. Structurally, it is a juxtaposition of two nouns on the word level (morphological level) that can be distinguished from “genitive” constructions (see below) in Hocąk with regard to phonological and morpho-phonological properties. Both compound nouns constitute a word unit with regard to stress patterns and frequently exhibit morphophonemic processes. “Genitive” constructions, on the other hand, are combinations on the phrase level. They allow a separate determination of both juxtaposed NPs. The structure of noun-noun compounds in Hocąk is given in Figure 5. The general pattern is illustrated in (14).

Figure 5: Noun-noun Compounds in Hocąk

[*Noun*₁ – *Noun*₂]
 modifying – modified

- (14) *nąą* - *há*
 tree₁-skin₂
 ‘birch’

One of the peculiarities of the *Noun*₁ position in the construction in Figure 5 is that it is the most reliable diagnostics for nouns in Hocąk. Hocąk has a weak noun-verb distinction. The problem is to identify nouns. Criteria for the identification of nouns in Hocąk are a) nominal compounding (*N*₁ position), b) the prototypical nominal semantics, and c) negative morphological evidence (cf. Helmbrecht 2002a). Only “real nouns” are allowed in the *Noun*₁ position in Figure 5. Putative adjectives and intransitive inactive verbs must not occur there. If there were abstract nouns in Hocąk such as ‘bigness’, ‘happiness’, or the like, they should be licensed to occur in this structural position. There are, however, no such abstract nouns designating properties, and hence, there are no expressions like ‘the bigness of the house’. If such abstract nouns would exist, they should be able to occur in this slot. This fact is negative evidence for the classification of Hocąk as an adjectival-noun language. In addition, it is further positive evidence that adjectives and intransitive verbs lack significant grammatical differences. Property concepts are expressed by means of verbs, i.e. inactive intransitive verbs to be precise, and not by nouns.

A structurally similar construction in Hocąk is the “genitive” construction. The term “genitive” is, however, misleading. Hocąk has no morphological

case marking in general and no genitive case marker in particular. What is at issue here is simply juxtaposition (again without any linking element) on the phrase level that is comparable to genitive constructions in more familiar European languages with regard to its functions. For instance, like genitive constructions in European languages, the Hocak "genitive" construction is used to express possessive relations, part-whole relations, and some others. It is structurally similar to the noun-noun compounds in that the modifying constituent precedes the modified constituent. Often, both constructions are difficult to distinguish. The main difference between noun-noun compounds and "genitive" constructions in Hocak is that the constituents of the latter may be determined independently. The structure of the "genitive" construction in Hocak is given in Figure 6 with an illustrating example in (15).

Figure 6: "Genitive" Constructions in Hocak

$[NP_1$	–	$NP_2]$
modifying	–	modified
possessor	–	possessum
part	–	whole
etc.		

(15) waḷaṭirecoora hogisrá
 /waḷaṭire- coo- ra hogis- rá/
 car- blue- DEF wheel- DEF
 'the wheel(s) of the blue car'

There is no possibility for putative adjectives (i.e. inactive intransitive verbs) to occur in the first slot of this construction. Again, this demonstrates that putative adjectives are not nominal expressions translatable as *thick-ness*, *dark-ness*, etc. Again, this is negative evidence for the categorization of Hocak as an adjectival-noun language, and positive evidence for the non-distinctiveness of "adjectives" and intransitive verbs in Hocak.

The next construction type for the expression of modification of nominal concepts on the word level are noun-verb compounds. The structure of these constructions is given in Figure 7 together with an illustrating example in (16).

Figure 7: Noun-Verb compounds in Hocak

[Noun – Verb_{INTR.INACT}]
 modified – modifying

(16) a. šuukxéte

/šuk- xéte/

dog- big

'horse'

b. caasép

/caa- séep/

deer- black

'moose'

The examples in (16a–b) are more or less lexicalized noun-verb compounds. The creation of expressions according to this structural pattern is very productive in Hocak. It is used for the creation of complex terms to designate entities for which no simple words are available in the lexicon.

The modifying second position in this construction is open to putative adjectives as well as to intransitive and transitive verbs. An illustrating example with a transitive verb is given in (17). The verb *rutí* is a transitive verb meaning 'to pull something' which appears without any morphological modification in this second modifying slot. As the literal translation suggests, this construction could be better understood as a short relative clause. Structurally, there is no difference to hypothetical adjectives in this position modifying a noun. This is further evidence that adjectives are basically verbs in Hocak.

(17) caawáru_{tí}

/caa- wá- Ø- ruti/

deer- 3PL.OBJ- 3SG.A- pull

'reindeer' (literally: '(the) deer that pulls them/sth.')

The last but not less important construction for the modification of nouns is the relative clause (cf. Figure 8) showing some remarkable similarities with noun-verb compound (cf. Figure 7) and the regular noun phrase (cf. Figure 4) in Hocak.

Figure 8: The Structure of the Relative Clause in Hocak

*Noun*_{HEAD} – [*ARG*₁+*(ARG*₂)*+Predicate + DET*]_{DEPENDENT}
 modified – modifying

- (18) *nəə* 'eja *nəəzija* *paacgışšana*
 /*nəə* 'eja *nəəzi-* *je-* *ra* *paacgış-* *šana*/
 [tree]_{HN} [there stand- be(standing)- DEF]_{RC} 1SG.A.cut- DECL
 'I cut the tree that was standing over there.'

The canonical RC in Hocak consists of a HN plus the dependent and modifying RC itself. The HN is not part of the RC. Relative clauses are hence externally headed. There are no relative pronouns in Hocak. The RC consists of the predicate (a verb or verbal complex) and a determiner delimiting the right edge of the constituent. The determiner can be a definite article or a demonstrative pronoun. The predicate may be a transitive or intransitive verb (or a nominal predicate with an auxiliary) plus its nominal or pronominal complements. The verb in the RC is inflected like the verb in the main clause. In example (18), the predicate of the RC is a verbal complex *nəəzije* consisting of an intransitive active verb *nəəzi* 'to stand' and the auxiliary verb *je* 'to be (in a standing position)' indicating progressive aspect. The definite article *-ra* delimits the right edge of the RC. The predicate in (18) can be replaced by any semantically appropriate inactive or active intransitive and transitive verb. Even properties designating words – the hypothetical adjectives – may occur in the position of *nəəzi* 'to stand' without any grammatical modification. The only restrictions are of a semantic nature. For instance, a color term in this position would not make much sense pragmatically. This is additional evidence that the hypothetical adjectives are categorized as verbs in Hocak.

4. Gradation of Properties in Hocak

The discussion of adjectives as a separate class of words in Hocak brought the following results. Words that designate prototypical adjectival concepts are categorized in Hocak as intransitive inactive verbs. From a morphological point of view, there is no category establishing or category changing morphology that indicates a separate class of adjectives. Property designating words may appear in noun-verb compounds, in ordinary noun phrases, and in relative clauses in the same position as other verbs may do. The syntactic distribution is not indicative either. The structural parallelism between noun phrase and relative clause makes it impossible to take the position after the head noun of a NP as a formal diagnostics of adjectives in Hocak.

The question arises: how does a language that has no separate class of adjectives and therefore no morphologically marked category of comparative and superlative express these categories, or more generally, how is gradation of properties expressed in an adjectival-verb language such as Hocak. This question was not answered and not even posed in Schachter's article on parts of speech systems. Therefore, the present section deals with the gradation of property concepts in Hocak.

4.1 Intensification

There is a very frequent suffix *-xji* 'very' in Hocak, which is generally used as an intensifier. The intensifier is also used to grade words that express adjectival concepts in adverbial function such as 'good' in (19), and 'strong, powerful' in (20). It also intensifies property words that are used as modifiers for nouns as in (21).

- (19) žegų 'uŋak'u pıxji xetekaragiže.
 /žegų 'u- ŋak- 'u pıj- xji xete- kara- gi- že/
 thus she.do-PROG- while good- INTS big- REFL.POSS- cause-HS
 While she was doing it so, she raised her own(her child) *very well*.
 (Text source: Radin 1949: 77).

- (20) kora! mašja-xji wəkgipinikšgūŋi
 /kora! mašja-xji wəkgipinik-šgūŋi/
 EXCL strong- INTS man like- DIM-VAGUE(=idiomatically for 'to fall in love')
 She fell in love (with the young man) *very strong*.
 (Text source: Radin 1949: 77).
- (21) žeeğú ną taawúz-xji wa'ujeegi žeeğú sàará-xji žeeğú
 /žeeğú ną taawúz-xji wa'ujeegi žeeğú sàará-xji žeeğú/
 thus tree dry- INTS to.be- is(standing)-COND thus bare-INTS thus
 Yet, it was a *very dry tree*, and *very bare*
 (Text source: Danker 1985: 113).

An important feature of this general intensifier is that it appears frequently with verbs and with nouns. Its distribution is not restricted to any word class. Neither *-xji* nor any other particle or suffix with the same or similar function is restricted to property words. If this were the case, i.e. if *-xji* would occur only with property words, one could make an argument out of this fact for a special adjective construction.

4.2 Comparative

The comparative is a grammatical category that expresses that some entity X has more of a property than entity Y. This is shown in Figure 9 with an expression in English as illustrating example.

Figure 9: Structure of Comparative Expressions in English

[X is Adjective-*er* than Y]

[X is fast-*er* than Y]

Hocak has no grammatical category of comparative, which is unusual only from a European perspective⁴. These grammatical categories are not so widespread cross-linguistically as one may think of. Hocak speakers have to use

⁴ Lois correctly pointed out to me that the pure absence of a category comparative/ superlative couldn't be criterial for the non-existence of a separate class of adjectives. However, if Hocak had such categories, this would be strong evidence that the preceding analysis would be wrong. The absence of these categories in Hocak fits in the overall picture that was drawn with regard to word classes in Hocak and supports the claims argued for.

alternative means to express something like 'X is bigger than Y'. There are at least three alternative ways to express comparative meanings in Hocak. They are briefly discussed in the subsequent sections.

4.2.1 Lexical Strategy

Hocak has a number of relational nouns – in particular kinship terms – that have an inherent comparative meaning, cf. the examples in (22a–d). Similar word pairs and lexical oppositions exist for 'sister' and 'aunt'.

- (22) a. *hicitó* 'female's older brother'
 b. *hijí* 'boy's older brother'
 c. *hisúk* 'older brother'
 d. *hinuğás* 'father's older brother (= uncle)'
- (23) a. *hinú* 'first daughter'
 b. *wihá* 'second daughter'
 c. *haksigá* 'third daughter'
 d. *hinaké* 'fourth daughter'

The terms for the first, second etc. daughters and sons are used in texts and conversations as equivalents for the expression 'older daughter', 'younger daughter', or 'older son' and 'younger son', although it is not a comparison. In addition, these terms are used like proper names in Hocak.

There is at least one verb (a transitive verb) *haiwíc* 'to be taller than' with an inherent comparative meaning, cf. (24).

- (24) *Peterga Billga haiwícšana*
 /Peter-ga Bill-ga haiwíc- šana/
 Peter-PN Bill-PN taller.than- DECL
 'Peter is taller than Bill'

Another verb of this type would be *waakini* 'to become worse'. The lexical strategy to express comparative meaning is, however, marginal in Hocak. The instances of lexical opposition in Hocak mentioned in this section are almost exhaustive.

4.2.2 Periphrastic Expressions

More important than lexical strategies to express comparative meanings in Hocak are periphrastic expressions. There are several periphrastic strategies. The most frequent one is the usage of the verb *hijaíra* 'more (in comparison), increase (as verb)'. Cf. the example in (25).

- (25) peexnaáka, (peex-) coóra hijaiíra xeteéna
 /peex-naáka, (peex-) coó ra hijaiíra xeteé- na/
 bottle-those (bottle-) blue- DEF more big- DECL
 'Of those bottles, the blue one is bigger.'

Another strategy is to express explicitly the comparison with a verb *hirakísanik* 'to compare' and then to predicate the property to the element that has more of it. Cf. the example in (26).

- (26) hūcra šukjakra hirakísanik hūcra 'e wamašcāna
 /hūc-ra šukjāk-ra hirakísanik hūc-ra 'ee wamašcā-na/
 bear-DEF wolf- DEF compared bear-DEF HE.EMPH strong-DECL
 'The bear is bigger than the wolf' (lit. 'The bear compared to the wolf, the bear, HE is the strong one.')

The second part of the sentence in (26) is a canonical focus construction in Hocak. The 'bear'-NP in the second part of the sentence is anaphorically resumed by means of the free third person pronoun 'ee. This construction expresses contrastive focus in Hocak. It is used here to indicate comparison.

4.2.3 Context-based Pragmatic Inference of a Comparative Meaning

In most cases, however, the comparative meaning has to be inferred pragmatically from the wider discourse context. This holds for the type of narrations and mythological texts examined here. Cf. (27) for an example.

- (27) éegi áašgara hígišge žigé žeeḡ šjúuj(x)či(h)aareže
 /éegi áašga- ra hí- gi- šge žigé žeeḡ šjúuc-xji-(h)aare-že/
 and close- DEF arrive.going-COND-also again thus warm-INTS-INCH-HS
 žigé taakác wa'unakše
 /žigé taakác wa'ų- naḡ- še/
 again hot be- PROG-HS

'And the *closer* he got the *warmer* he started to get, because it was so hot' (Danker 1985: 228).

The gradation of *áašga* 'close' in (27) can be inferred from the context of arriving at a certain point⁵. This movement is a gradual process. The comparative meaning of *šjúuc xji* 'warmer' to be translated literally as 'very warm' can be inferred from the context of getting closer to the sun that is hot. The wider context is the following. The trickster (a person of semi-divine origin, often the main character in Hocak narrations) captured the sun with a rope and has now the task to untie and liberate the sun, so that it can continue its daily routine in the sky. The inference is supported by the intensifier *-xji* that is added to *šjúuc* 'warm'. However, real comparative meanings are generally rare in Hocak texts. Often they can be found only in the corresponding English translations – the translation then reflects the inferences of the hearer explicitly.

4.3 Superlative

What holds for the category comparative is also true for the superlative. The superlative as a grammatical category is not as widespread as one may expect from a European perspective either. It is definitely not a grammatical category in Hocak. In addition, it is very difficult to find superlative meanings like the one presented in Figure 10 in Hocak texts.

Figure 10: The Structure of the Superlative Expressions in English

[X is the Adjective-est of all Y]

[X is the tall-est of all Y]

It seems to be the case that the superlative is not a necessary category to be expressed. In Hocak texts, the property word is usually marked with the intensifier *xji* 'very' or with *-tek* 'strong'. Superlative meanings almost always have

5 The occurrence of the definite article *-ra* with *áašga* 'to be close' is not fully clear to me. The definite article is used to indicate subordination in general and complementation in particular. It is presumably this function, which is realized here. The matrix verb *hii* 'to arrive' is employed as a phrasal verb with a subordinate verb designating the result of this process, namely 'being close'.

to be inferred from the context. I found only one example in the available text sources, in which the superlative meaning is more or less explicitly expressed by periphrastic means; cf. (28).

- (28) wʌk hakɨnɨpra waihakra 'ee hereéna,
 /wʌk ha- kɨnɨp-ra wa- Ø- hihak-ra 'ee hereé-na/
 male COLL-sibling-DEF 3PL.OBJ- 3SG.A-on.top-DEF he.EMPH be- DECL
 'Of the male siblings, HE (my younger brother) was on top of them,
 Adam Little Bear Jr., raašrá 'Aahú Ru'agá higaíreena
 /Adam Little Bear Jr., raaš-rá 'Aahú Ru'a- gá higa-íree-na/
 Adam Little Bear Jr., name-DEF Wing Raising- PN call-they-DECL
 Adam Little Bear Jr. he was called Raising Wings.'

My younger brother, Adam Little Bear Jr., whose name was Raising Wings, is the youngest in the family (cf. White Eagle 1988: v)

The term for 'younger brother' *hisuk* is only mentioned in the subsequent context of the text. The superlative meaning is expressed by the phrase 'on top of sth.' which means on top of the age hierarchy of the male siblings. Another strategy speakers of Hocak employ in order to express superlative meanings is the usage of the focus construction already mentioned above with regard to comparison. In (29), the contrastive focus expressed by the independent third person pronouns 'ee leads to the inference that there are no other tall men in the town which is equivalent to saying John is the tallest man in town.

- (29) ciinák=eja Johngá 'ee wʌkseréc jeena
 /ciinák= eja John-gá 'ee wʌk-seréc jee- na/
 town= there John-PN he.EMPH man-long POS.VERT- DECL
 'John is the tallest man in town.' (lit. In the town, John, HE is the/a long man.)

5. Conclusions

Hocak is an adjectival-verb language. Adjectives are categorized as inactive intransitive verbs in Hocak. Evidence for this result can be found in the morphology and syntax of the property words. There is no adjective category

establishing morphology (such as adjective – noun agreement, and positive, comparative, and superlative as grammatical categories), nor is there any derivational morphology that involves the change of the syntactic category of words either from adjectives as source or to adjectives as target. Modification – the prototypical function of adjectives – is expressed by either by modifying intransitive verbs in the NP or by alternative constructions in Hocak involving nouns and verbs and the constructions associated with these major word classes (“genitive” constructions, predications, compounds).

Gradation of properties is expressed in many European languages by the grammatical categories comparative and superlative. Since these categories are not available in Hocak, speakers have to use alternative means, usually weakly grammaticalized periphrastic constructions (contrastive focus constructions) or they leave it completely to pragmatic inferences on the hearers’ side.

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