NOUNS AND VERBS IN HOCANK (WINNEBAGO)[1]

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1. Introduction. Hocank is a Siouan language genetically classified, together with Chiwere (Otoe, Missouri, and Iowa), as a member of the Mississippi Valley branch of the Sioux family (see, e.g., Pinnow 1964, Campbell and Mithun 1979, and more recently Goddard 1996). Hocank, traditionally referred to as Winnebago in the linguistic and anthropological literature, is an endangered language spoken by approximately 200 elders in Wisconsin and presumably by a few elders on the reservation in Nebraska. The language itself is poorly documented, but a few studies of the grammar and lexicon do exist. Although no special investigation of the parts-of-speech system of Hocank has been undertaken, all descriptive studies presuppose that there is a more or less clear distinction between nouns and verbs.

There are two grammatical treatments of Hocank available: a short grammatical sketch by Lipkind (1945) and an unpublished Ph.D. dissertation on the accentual system by Susman (1943) which includes a brief description of the grammar.[2] Both grammatical studies are based on the classical distinctions between nouns, verbs, adverbs, pronouns, demonstratives, conjunctions, and interjections, and both agree that Hocank does not have a separate word class for adjectives.

[1] I am grateful to my Hocank friends in Wisconsin, who provided me with great hospitality and all the information on their language to make this study possible. In particular, I would like to mention Phil Mike, who shared with great patience his expertise on the Hocank language with me over many hours. In addition, I am grateful to Gordon Thunder and the people from the Hocank Language Division in Mauston, Wisconsin, who supported me in every respect with their knowledge and with the facilities I was allowed to use. They are responsible for the wonderful time I had with them. I am also grateful to David Rood and two *IJAL* reviewers, who helped me with numerous hints and advice to avoid mistakes and inconsistencies and to improve this paper. Last but not least, I would like to thank the DFG (German Research Foundation) which funded the research on Hocank with two grants.

[2] Actually, there are two other dissertations, both written in the sixties, that deal with the grammar of Hocank. The one by Marino (1968) is a dictionary of Hocank with a brief grammatical description based on notes collected by Paul Radin. The lexical entries taken from the numerous texts published by Radin during the first decades of the twentieth century do not provide any grammatical information. They are simply meaning correspondences between a

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In particular, Susman seems to have no doubts about how to classify word stems with respect to word classes: "The intersection of syntactic and morphological word classes can be made explicit by describing the formation of the types of words which fall into each of the parts of speech. Most words can be unambiguously placed. The relatively few which fall into more than one part of speech will be specified" (1943:111). Two pages later, Susman lists some word stems which seem to be ambiguous with respect to the noun–verb distinction. Unfortunately, most of her examples are irrelevant to the point at issue here. Of all the examples presented by Susman (1943:113), there is only one plain stem, *caak* 'to grind' and 'nut, walnut', which is ambiguous with respect to the noun–verb distinction. This is surprising, because recent lexical studies (White Eagle 1988, Miner 1992, and Zeps 1996) show that these kinds of examples abound in Hocank, as I discuss later.

Also, Susman presents plain stems with a nominal translation, such as *reex* 'bucket', and contrasts them with derivations of the same stem denoting a verbal meaning, e.g., *giréx* 'to hang (of loose things)', ignoring the possibility that derivational prefixes such as *gi-* might be analyzed as purely verbal prefixes. She simply presupposes that there are nominal stems and verbal stems in Hocank. Derivational prefixes such as *gi-* belong to a class of about eight derivational forms, called instrumental prefixes by Siouanists, which do not occur with stems that may be suspected to be nouns.[3]

Susman's main argument for the distinction between noun stems and verb stems, however, is morphological. She argues that there are a few nominal suffixes, such as the intensifier *-xji* and the diminutive *-nįk*, which occur only with nouns. It can be shown, however, that this is not true (see below). The same holds for the determiner *-ra* in Hocank, which is used as a definite article as well as a subordinating particle. Susman's claim that *-ra* is a nominalizer (which is certainly true) and hence occurs only with nominals, i.e.,

Hocank word or expression and the English equivalent. Marino's dictionary of the Radin lexical files is fully integrated into the dictionary compiled by Zeps (1996). The grammatical analysis provided by Marino does not address the question of nouns and verbs which is at issue here in any detail. The noun–verb distinction is simply presupposed. The other dissertation is a detailed treatment of the morphophonetic rules of the verbal morphology (Marten 1964). The question of the noun–verb distinction is out of the scope of this study and is therefore not addressed by the author. The grammatical descriptions of Hocank by Lipkind (1945) and Susman (1943) are still the best grammatical treatments of Hocank available. Therefore, I used them as a starting point for my own investigation.

[3] There are two homophonous verbal prefixes */gi-/* in Hocank which must be kept separate. One is a member of the series of instrumental prefixes, the other is a dative applicative introducing a recipient or benefactive argument to the argument structure of the verbs. Both forms are easy to distinguish on the surface because they occupy different positions in the morphological template of the verb; also, the dative */gi-/* never undergoes morphological changes.

noun stems and nominalized verb stems, is circular and does not help to determine a separate class of nouns in Hocank (Susman 1943:108ff.).

Lipkind's evidence for the assumption of a noun–verb distinction in Hocank is similar to Susman's and raises the same problems. He enumerates a few "nominal" suffixes—such as the determiner *-ra*, the diminutive suffix *-nįk*, the intensifier *-xji*, the deictic particle *-ga*, etc.—which he claims appear only with nouns (Lipkind 1945:49ff.). That this is not the case is shown below. On the other hand, Lipkind is aware that the distinction of the major word classes in Hocank is not as clear-cut as he suggests: "Nominal stems are distinguished from verbal stems although nouns may bear most of the verbal affixes, and many of them with slight modification of form may serve as verbs" (1945:12).

In sum, both authors do not really examine the question of a noun–verb distinction in Hocank. They justify their assumption of different noun and verb word classes with rather limited morphological evidence. From this morphological point of view, the identification of verbs poses no problems in Hocank, but the determination of nouns as a separate class is difficult. Nouns are identified more on notational grounds—probably based on the word class of the corresponding English translation of Hocank terms—than by linguistic analyses. The distinction between verb stems and noun stems is not self-evident in Hocank or in the genetically related language Lakhota, which is probably the best described language of the Siouan family. Boas and Deloria noted this problem in their grammatical description of Lakhota: "The distinction between nouns and neutral verbs is not quite definite. Certain nouns like *Lakota* 'Dakota', *Wichita* 'man' and others may be treated as verbs and take pronominal forms, such as *La-ma-k^{h}óta'* 'I am a Dakota'. On the whole, however, such forms are avoided and we have rather forms like *'Og.lála he-má-c^{h}a'* 'An Oglala I am that kind'" (1941:23).

A grammatical description of Hocank needs to specify how nouns and verbs can be recognized, in particular if these universally important lexical and syntactic categories do not match with corresponding categories in European languages. The answer to this question has consequences for the structure of a grammar of Hocank as well as for the structure of lexical entries in a Hocank dictionary. It is the goal of this paper to show that there is indeed a distinct class of nouns in Hocank which can be identified by certain linguistic procedures. To be more specific, I try to show (*a*) that there is only a weak noun–verb distinction in Hocank and (*b*) why it is difficult to determine nouns and verbs morphosyntactically. This is done in **2**. Then, in **3**, a brief outline is given of the universal typological treatment of the noun–verb distinction, with some methodological consequences for the present investigation (**4**). In **5**, some diagnostic procedures are presented which allow a fairly precise identification of nouns and verbs in Hocank.

Some conclusions for a future description of the grammar and the lexicon of Hocank are drawn in **6**.

2. Problems with the noun–verb distinction in Hocank. Like the grammatical descriptions by Lipkind and Susman, lexical studies presuppose a noun–verb distinction in Hocank, i.e., all lexical entries are classified either as noun, verb, or other part of speech. However, none of the studies—White Eagle (1988), Miner (1992), and Zeps (1996)—makes explicit the criteria used to label the Hocank words as nouns or verbs. It is quite obvious that the words were assigned to syntactic categories on rather intuitive or semantic grounds, or on the basis of the word class of the corresponding English translation. The pairs of Hocank words in (1)–(4) are translated nominally or verbally in English, depending on the grammatical context in which they occur.[4] Consequently, there are two separate entries in the respective dictionaries (see, e.g., Miner 1992 or Zeps 1996), one for the nominal meaning, another for the verbal meaning (the examples in 1–4 are taken from Zeps 1996).

(1*a*) *nį̨į́há* 'breathe, chant' (n.)
(1*b*) *nį̨į́há* 'breathing, breath, throat' (v.)
(2*a*) *honą́k* 'run along' (n.)
(2*b*) *honą́k* 'animal path' (v.)
(3*a*) *horé* 'go down, set (sun)' (v.)
(3*b*) *horé* 'place' (n.)
(4*a*) *cii* 'live' (v.)
(4*b*) *cii* 'house' (n.)

[4] All Hocank data are taken either from the lexical studies cited (White Eagle 1988, Miner 1992, and Zeps 1996) or from my own field notes. The data are given in a slightly modified version of the alphabet officially chosen by the tribe in 1993 as the obligatory means for writing their language. The Hocank alphabet is based on Latin characters which represent the phonemes of Hocank fairly closely. There is a contrast between oral and nasalized vowels; nasalization is indicated by a hook under the corresponding oral vowel. There are three nasalized vowels: /ą/, /ų/, and /į/. Vowel length and primary accent are distinctive in Hocank but are not marked in the official writing system. Long vowels are therefore symbolized here by doubling the character, while primary accent is indicated by an acute diacritic on the accented vowel. The phonetic values of the characters used for the graphical representation of consonants correspond broadly to the one in the IPA charts. However, some deviations exist. There are two palatal affricates (voiced and voiceless) which are represented by a single character, [tʃ] = *c*, [dʒ] = *j*. Further correspondences are: voiceless palatal fricative [ʃ] = *š*, voiced palatal fricative [ʒ] = *ž*, voiceless velar fricative [x] = *x*, voiced velar fricative [ɣ] = *ǧ*. The characters *w* and *y* are glides. An apostrophe (') represents a glottal stop. The symbol *ȓ* represents a morphophonemically nasalized variant of /r/.

The list of plain stems in (1)–(4) with a nominal and a verbal meaning can easily be extended. It is examples like these which first cast some doubts on a clear distinction between nouns and verbs. If all entries in the lexicon were like the ones cited, the labels noun and verb would be meaningless in this language.

The same double categoriality of words can also be observed with respect to derived stems. In Hocank, there are three so-called local prefixes which appear in a certain morphological position with respect to the verbal root, as shown in the simplified morphological template of the verbal prefixes in (5).

(5) Pro_{Subj} > Pro_{Obj} > Loc > $Instr_{long}$ > $Pro_{Subj/Obj}$ > $Instr_{short}$ > Dat/Refl > $Poss_{Obj}$ > ROOT[5]

The local prefixes *ha-* 'on', *ho-* 'in', and *hi-* 'with, by means of' appear in the third morphological slot counting from left to right in (5). These prefixes are analyzed as verbal prefixes by Lipkind and Susman. The term "locative prefix" used by Siouanists is to some extent misleading, because there are many cases where these forms do not add locative meanings to the basic meaning of the verb root. In addition, the third prefix, *hi-*, has an instrumental meaning but no locative meaning at all.

The basic function of the locative prefix *ha-* 'on' can be seen in (6). The meaning of the intransitive verb *mįįnąk* 'sit, relax' is modified by the prefix *ha-* to mean 'sit on'. Interestingly, this prefix not only adds the meaning component 'on' but also an additional argument position which has to be filled.

(6*a*) *mįįnąk* 'sit, relax' (v.)
(6*b*) *ha-mįnąk*
LOC-sit
'sit on (it)' (v.)

A similar derivational process can be observed with respect to the prefix *ho-* 'in, within'. There are many derived stems in the lexicon of Hocank for which one cannot isolate a semantic component 'in', so it can be assumed that these morphological combinations are already fossilized. In addition to its function as a locative prefix, Lipkind claims that the locative prefix *ho-* has a nominalizing function, i.e., it derives nouns from verbs. In (7)–(9), I present just a few examples which show why this cannot be a general rule.

[5] The following abbreviations are used in the template and the grammatical glosses: PRO = bound personal pronoun, SUBJ = subject, OBJ = object, LOC = locative prefix, INSTR = instrumental prefix with a long or short vowel, DAT = dative, REFL = reflexive, POSS = possession of object by subject of the clause, DEF = definite article, DEM = demonstrative pronoun, CAUS = causative clitic/suffix, DECL = declarative, DUB = dubitative, ST = stem, REL = relative pronoun.

(7*a*) *ho-miną́k* 'living room, settlement' (n.)
(7*b*) *ho-miną́k*
LOC-sit
'ride, sit in (vehicle)' (v.)

(8*a*) *ho-nąxgų́* 'notify, send a message, hear or get a message' (v.)
(8*b*) *ho-nąxgų́*
LOC-understand
'understanding' (n.)

(8*c*) *nąąxgų́* 'hear, understand' (v.)

(9*a*) *ho-cí* 'live in' (v.)
(9*b*) *ho-cí*
in-live
'house' (n.)

The derived stems in (7*a*) and (7*b*) and (9*a*) and (9*b*) clearly show the locative function of the prefix *ho-*. The example in (8*a*)–(8*c*), however, has no locative meaning component. The derived stems in (7)–(9) have a nominal and a verbal reading that seems to be independent of the derivational prefix *ho-*.

The third locative prefix, *hi-* 'with, by means of', adds an instrumental meaning to verbs. The function of this prefix can be seen in (10) and (11). It is important to note that these derivations, which are listed as nouns in the dictionary (Zeps 1996), may also be used verbally as predicates of a clause.

(10) *hiraminą́k*
hi-ha-miną́k
with-on-sit
'seat' (n.) (literally: 'by means of which one sits')

(11) *hirominą́k*
hi-ho-miną́k
with-on-sit
'fare' (n.) (literally: 'by means of which one rides [bus]')

The examples in (10) and (11) represent a very productive way in Hocank to derive words designating nominal concepts and to create new words for items newly introduced into the culture. But one must keep in mind that a word such as *hirutí* 'car, vehicle', although it designates a nominal concept, looks more like a verbal derivation meaning something like 'by means of which one pulls'.

Besides the locative prefix *ho-*, there is another prefix, *wa-*, which has, according to Lipkind, a nominalizing function. This prefix appears in the

second morphological position, from left to right, in the morphological template of the Hocank verb in (5) above. Lipkind calls this prefix a "modal prefix," but this is definitely a misnomer. It would be more accurate to describe this prefix as a multifunctional pronominal form. It has at least three functions: (*a*) it may be translated as 'something' etymologically deriving from the indefinite pronoun *waža* 'something', (*b*) it functions as a detransitivizer, and (*c*) it is the third-person plural object pronoun 'them' of transitive verbs.[6] There is also a homophonous instrumental prefix *wa-*, but the two forms can easily be distinguished by (*a*) their morphological position and (*b*) their different morphophonemic behavior.

There are many lexical entries in the dictionary of Hocank that begin with *wa-* and have a "nominal" meaning. Many of them are lexicalized and no longer occur without the *wa-* prefix. Presumably, this fact led Lipkind to the conclusion that *wa-* was a nominalizer. The examples in (12) and (13), however, show that this cannot be a generally productive rule. (12*b*), (12*c*), (13*b*), and (13*c*) all have a nominal and a verbal interpretation obviously independent of the derivation with *wa-*.

(12*a*) *hookų́* 'teach, preach, to give a moral lecture' (v.)
(12*b*) *wa-hokų́* 'minister' or 'preacher' (n.)
(12*c*) *wa-hokų́*
something-preach
'minister' (v.), 'preach' (v.)

(13*a*) *ruúc* 'eat, be cooked' (v.)
(13*b*) *wa-rúc* 'eat (something)' (v.)
(13*c*) *wa-rúc* 'food, corn' (n.)

There is a combination of fusion of the prefix *wa-* plus *hi-*, resulting in *wii-*. This form, which is not mentioned by Lipkind, is used to derive terms designating instruments, as shown in (14). This derivational affix is certainly the best candidate to be considered as a means for noun derivation, because often there are no corresponding verbal meanings in the dictionary. But even this is not a general rule: note (15*a*) and (15*b*), where a verbal meaning corresponds to a nominal meaning.

[6] David Rood has pointed out to me that the *wa-* prefix with the meaning 'something' and with a valency-reducing function is Proto-Siouan. Functions (1) and (2) are most likely functions of the same morpheme and historically connected. In Lakhota, this prefix fills the slot of a transitive object of a verb; it may even be found with intransitive verbs, resulting in words designating nominal concepts and impersonal verbs. In addition, I hypothesize that function (3) of *wa-*, namely, to indicate a 3pl. transitive object could be interpreted as a further step in the grammaticalization of this form; however, I have no evidence for this hypothesis in my Hocank data. Comparative Siouan evidence needs to be adduced, which I leave for future research.

(14*a*) *higihí* 'rake berries' (v.)
(14*b*) *wiigíhi* 'rake' (n.) (*wa-* + *hi-* > *wii-*; literally: 'something used for raking berries')
(15*a*) *wii'ų́* 'use as an instrument' (v.)
(15*b*) *wii'ų́* 'shell, bullet, cartridge' (n.)

The verb *'ų* 'make' itself is used as a derivational affix, mostly for the derivation of terms designating professions. The derivations are verbal in nature; the double categoriality of these derivations is evident particularly in examples (16*d*) and (16*e*).

(16*a*) *mąs'ų́* 'blacksmith' (*mąs* = 'metal', *'ų* = 'make'; literally: 'makes metal')
(16*b*) *cii'ų́* 'carpenter' (*cii* = 'house, live', *'ų* = 'make'; literally: 'makes housing')
(16*c*) *hiť epéres'ų́* 'interpreter' (*hiť e* = 'to speak, language', *peres* = 'to be clear', *'ų* = 'make'; literally: 'makes speaking clear')
(16*d*) *waruc'ų́* 'cook' (v.) (*waruc* = 'eat, food', *'ų* = 'make'; literally: 'makes food')
(16*e*) *waruc'ų́* 'cook' (n.)

An examination of the lexical entries in a dictionary of Hocank shows that many concepts which are typically represented in European languages by two different words—a noun and a separate verb—have only one word in Hocank, which is then interpreted as a noun or as a verb depending on the grammatical context. Many plain stems and many derivations receive their syntactic category only from the syntactic context in which they appear. This is demonstrated in (17*a*) and (17*b*). The word *cii* 'live, house' may appear within a noun phrase with an adjective and an article, as in (17*a*).[7] This noun phrase is a referential expression functioning in (17*a*) as the direct object of the verb *hajá* 'to see'. Noun phrases usually require a noun as their head. Therefore, *cii* can be interpreted here as the head noun of the phrase. In (17*b*), the same word, *cii*, is used as a predicate exhibiting all the morphological features of a verb, such as inflection for person, number, and mode.

[7] Since there is no separate word class for adjectives in Hocank, it would be more accurate to speak of neutral or stative verbs in this case. This, however, renders the interpretation of the expression *cii-ská-ra* 'the white house' as a noun phrase doubtful, and, indeed, the morphosyntactic structure of this referential expression is very similar to the structure of relative clauses in Hocank (see below). The application of this structural interpretation is, however, useful for the exposition of the problematic nature of the noun–verb distinction in Hocank. It shows that it is essential for the grammatical description of Hocank to arrive at a reliable syntactic categorization of the lexical items.

(17*a*) *cii-ská-ra* *haacá-nąą*
house-white-DEF I.see-DECL
'I saw the white house'

(17*b*) *'eja* *ha-cií-nąą*
there I-live-DECL
'I live there'

The overwhelming majority of complex words and expressions designating nominal concepts are derived from "verbal words" by compounding or derivational affixes. Often the semantics of these derivations is quite transparent; note, e.g., the expressions in (10) and (11) above. Therefore, suffixes which are supposedly verbal suffixes also appear quite naturally with nominal derivations. The verbal suffix *-ke* (see Lipkind 1945:39), which functions as a frequentative marker, also appears with nouns or, more accurately, derived words designating a nominal concept, as shown in (18).

(18*a*) *caanįkerešge*
caa-nįk-kereš-ke
deer-DIM-be.spotted-FREQ
'spotted fawn'

(18*b*) *kirikírisge*
kirikíris-ke
be.striped-FREQ
'downy woodpecker'

The frequentative suffix *-ke* often appears with names for animals. The diminutive suffix *-nįk* and the intensifier *-xji*, which are both classified as nominal suffixes, do occur with verbs; see (21) below. On the other hand, verbal prefixes such as the dative applicative, which are not expected to occur with nominal expressions, may be found in these derivations, as shown in (19).

(19*a*) *hicawį́-gi-t'é*
wife-DAT-die
'widower' (literally: 'his wife died and he is affected by that')

(19*b*) *hikąną́-gi-t'é*
husband-DAT-die
'widow' (n.) (literally: 'her husband died and she is affected by that')

From a European point of view, Hocank seems to be a verbal language. The Hocank verb has an elaborate inventory of affixes which include many

of the inflectional and derivational verbal categories found in more familiar European languages. Of the typical morphosyntactic features expected of verbs, the Hocank verb shows the following:

(1) The Hocank verb is personally inflected, at least for speech-act participants. There are two series of pronouns indicating actor and undergoer of the action expressed. Hence transitive verbs have two morphological slots for bound pronouns. Intransitive verbs distinguish between active and inactive speech-act participants. This pronominal marking system has traditionally been called an active marking system (by Sapir 1917, Mithun 1991, and others); more recently, the term split intransitivity has evolved (see Dixon 1979).

(2) There is only a very limited tense system in Hocank, basically a future versus nonfuture system. The future is marked: the forms have strong modal connotations such as desiderative and intentional. There are no past or pluperfect tense markers.

(3) Typical of North American Native languages is the relatively rich system of modal forms and categories. The Hocank verb has suffixes belonging to this class of grammatical categories—such as intentional/desiderative, optative, be able to, may, vagueness/uncertainty, irrealis, declarative, imperative, delayed imperative, etc.

(4) There is no inflectional aspect system in Hocank, but there are many forms that express aspect-like distinctions—such as habitualis, distributive/frequentative, repeatedly, and inchoative.

(5) With respect to voice, there is no real syntactic passive in Hocank. However, the Hocank verb expresses a kind of impersonal passive and has a reflexive/reciprocal prefix plus locative and dative applicatives.

The morphosyntactic features listed so far are, cross-linguistically, good indicators for a category of verb. They are useful morphological features to determine if the syntactic category of a word in Hocank is verbal. Hocank words which exhibit all these characteristics are—from a morphosyntactic point of view—really verbs. The problem in Hocank and other Siouan languages is the determination of nouns. There is no morphology which is in the same way restricted to this class of words as the verbal morphology is. The most important structural features of nouns in European languages are case, gender, plural marking, and declension classes. None of these features can be found for Hocank words designating nominal concepts. Nouns are neither case marked nor subclassified for gender; there is no plural marking on nouns and no declension classes. In addition, there are no derivational processes which are restricted to this class of words in the same way. The majority of verbal affixes also appear with nouns, as observed by Lipkind (1945:12). There is, e.g., an intensifier *-xji*, which is classified as a verbal

affix but occurs also with nouns, as shown in (20). The diminutive suffix *-nįk* is classified as a nominal suffix but also occurs with verbs (21).

(20*a*) *cee* 'cow' (n.)
(20*b*) *cee-**xjí*** (INT) 'buffalo' (n.)

(21) *waagáx* *hajá-**nįk**-ra* *wii-rá-roocą́-jee-regi* *jaagú*
paper see-DIM-DEF sun-DEF-be.straight-stand-when what
ruuc-íre
eat-3.pl.subj
'What do the (little/young) students eat at noon?'

That verbal affixes appear with words designating nominal concepts should not come as a surprise. Many of these expressions are derived from verbs and therefore bear these affixes quite naturally. The expressions *waagáx hajá-nįk-ra* 'little students' and *wii-rá-roocą́-jee-regi* 'at noon' in (21) illustrate the technique of forming nominal expressions in Hocank. Literally, these expressions may be translated, respectively, 'the little ones who see/read paper' and 'when the sun stands straight'.

The syntactic structure of the "nominal" expression 'little students' in (21) parallels precisely the structure of relative clauses and subordinate clauses in Hocank. Relative clauses in Hocank consist of a head noun followed by a predicate plus a determiner. The determiner may be the definite article *-ra* or a demonstrative pronoun. The function of this element is to mark the right border of the relative or subordinate clause and to indicate the subordination by nominalizing the verbal predicate. There is no relative pronoun in Hocank. The structure of the Hocank relative clause is given in (22).

(22) N_{HEAD} [$\emptyset_{REL}$ Predicate-Determiner]

The head noun in this structure may be missing, so that expressions like 'the little students' in (21) have to be translated as 'the little ones who see/read paper'. Further examples illustrating the structural parallelism in Hocank between relative clauses and noun phrases are given in (23) and (24).

(23*a*) *wanį́-ňa* *tuuc* *haá-nąą*
meat-DEF be.cooked I.make-DECL
'I cooked the meat'

(23*b*) *wanį́-ňa* *tuuc* *haá-ra*
meat-DEF be.cooked I.make-DEF
'The meat I cooked'

(24) *Biúga hocirá waagítoǧocšąną*
Biú-ga hoci-rá ho-ha-θ-gi-roǧoc-šąną
Bill-DEM dwell.in-DEF ST-1.Subj-3.Obj-DAT-ST-DECL
'I looked at Bill's house' or 'I looked at the place in which Bill lives'

The difference between the clauses in (23*a*) and (23*b*) is that the first one is a simple statement marked by the declarative suffix on the verbal predicate, while the second one is a relative clause which needs to be embedded in a main or matrix clause; i.e., (23*b*) is not a complete statement. This difference in the syntactic status is marked by the determiner *-ra*, which is used here as a subordinator. Otherwise, both clauses are identical. From a syntactic or structural point of view, there is no difference between the modification of a noun by a word designating properties (which corresponds to the class of adjectives in European languages) or by a relative clause modifying a head noun. European adjectives are mostly neutral or stative verbs in Hocank. The structural similarity of nouns modified by stative verbs or by relative clauses can be observed at the phrase level. However, I do not intend to argue that there is no difference between a noun phrase and a relative clause at other levels either.

This structural parallelism between noun phrase and relative clause can also be observed in *Biúga hocirá* 'Bill's house' or 'the place where Bill lives in' in (24). If the word *hocí* is interpreted as a verb, the whole phrase looks like a relative clause; if, on the other hand, the same word is analyzed as a noun, the whole phrase looks more like a noun phrase. It might be added here that the expression *Biúga hocirá* represents the normal way to form genitive phrases in Hocank or, better, expressions which express part–whole relationships, since there is no genitive case marker in Hocank.[8]

This somewhat lengthy discussion of the problem with noun–verb distinction in Hocank may be summarized as follows. It has been shown that there are significant difficulties in applying traditional criteria to determine nouns in Hocank. Earlier research has classified Hocank words predominantly on intuitive semantic grounds or on the basis of the word class of the English translation. This strategy does not lead to satisfying results, particularly with respect to the double entries in the Hocank dictionary. Furthermore, it is clear that there is no specific inflectional or derivational morphology confined only to Hocank nouns. Some of the derivational affixes seem to derive nouns, but none of these processes can be

[8] Possessive relationships are expressed by different constructions depending on the nature of the possessum; there are different forms for kinship terms, animals, and inanimate objects.

viewed as a purely nominalizing operation. On the syntactic level, uncertainty about the membership of Hocank words in various word classes has the unpleasant consequence that there are no firsthand criteria to be used to distinguish, e.g., between a noun phrase and a relative clause (with or without a head noun). Even if nouns are only a weakly distinguished word class in Hocank, one needs to specify relevant morphosyntactic features which may allow one to identify nouns in the language.

In the following section, I briefly examine current linguistic approaches in order to see if they provide some reliable linguistic criteria and procedures to determine nouns and verbs in Hocank.

3. The noun–verb distinction from a universal perspective. Among the current functional and cognitive frameworks in general linguistics and language typology, four different approaches regarding the universality of the noun–verb distinction may be discerned. The first one is based on the semantics of nouns and verbs in a universal perspective. It is hypothesized that this subclassification of content words in the languages of the world has a semantic foundation. Words which designate time-stable entities, such as human individuals and things (i.e., entities which do not change over time), are preferably subclassified as nouns cross-linguistically. At the other end of the spectrum are verbs. Words which designate actions and processes (i.e., events which imply some change over the time), are preferably subclassified as verbs in the languages of the world (see Givón 1973; 1979:320ff.).

In addition, these semantic criteria for nouns and verbs are hypothesized to represent cognitive notions with a prototype structure. The idea is that the better a content word in a language can be subsumed under one of these prototypes, i.e., the better its semantic matches with the semantic criteria of the respective category prototype, the more relevant morphosyntactic features of the syntactic category in question are present in that word. Or, conversely, a weak noun which is semantically far from the noun prototype shows only a subset of the morphosyntactic features of nouns in a specific language.

However, the above semantic criteria fail to explain the categorization of words in particular languages. Nor do they provide the descriptive linguist with a way to identify nouns and verbs in a specific language (see Sasse 1993*b*:649).[9]

[9] The same holds also for Langacker's approach to nouns and verbs within his framework of cognitive grammar. According to Langacker (1987), there are different ways of conceptualizing underlying nouns and verbs. This abstract theory of the cognitive foundations of the categories noun and verb does not offer specific procedures for identifying nouns and verbs in a particular language.

Discourse-based approaches to the noun–verb distinction assume that the worldwide existence of noun and verb word classes derives from the functional need in discourse to introduce new participants and to report events they are involved in. Hence, the basic or prototypical function of nouns is to introduce participants and "props" (see Hopper and Thompson 1984) and to manipulate them in discourse and, accordingly, the basic or prototypical function of verbs is to report events. These assumptions, which push the basic ideas of syntactic approaches beyond the limits of syntax, are supplemented by the so-called iconicity principle, which states that "the more a form refers to a discrete discourse event, the more distinct will be its linguistic form from neighboring forms, both paradigmatically and syntagmatically" (Hopper and Thompson 1985:151). This means, e.g., that words which do not refer are low in noun categoriality, while prototypical nouns show all morphosyntactic features of nouns within a noun phrase. In their influential and often-cited article, Hopper and Thompson (1984) show that words which designate nominal concepts, but are used in constructions which do not refer, lose the grammatical features of nouns in that particular language.

Incorporated patient nouns, for example, are not used to refer but instead to express an ongoing imperfective generic activity in combination with the incorporating verb. Hence, as the theory predicts, these nouns usually do not have case markers or a modifier or determiner and therefore lack some of the prototypical features of nouns.

Similar observations can be made for nouns in nominal compounds and nouns used as predicate nominals. Both usages are nonreferring. The determining noun in a nominal compound [$N_{determinans}$ + $N_{determinatum}$] modifies the determined noun but does not itself refer to a specific entity—hence it is stripped of certain morphosyntactic possibilities such as being able to have a modifier or a definite article, something prototypical nouns have. Interestingly, it is this type of construction, with the noun functioning as the determining part, which provides the most reliable test for identification of nouns in Hocank. With respect to the determining noun, Hocank runs against the predictions of this theory, as explained below.

Nouns used as predicates normally require some grammatical operations which adapt them to their new function. Predicate nominals need an auxiliary to turn the whole phrase into a predicate expression. Nouns in these constructions usually lack typical nominal features such as classifiers, case particles, indefinite article, and determiners.

Although this discourse-pragmatic approach helps us to understand the general mechanism of how parts-of-speech systems emerge, it does not provide procedures to detect and to determine nouns and verbs in a particular language. The same, of course, holds for cognitive typological approaches

Syntactic category	noun	adjective	verb
Disclosure function	reference	modification	predication
Semantic class	physical object	physical property	physical action

FIG. 1.—Protoypical combinations of category and function (see Croft 1984).

which try to synthesize the semantic- and discourse-based approaches discussed so far. Croft (1984) proposes a prototype analysis of the basic syntactic categories, suggesting that the categories noun, verb, and adjective are associated with semantic and pragmatic functions, as shown in figure 1.

Universal determination of word classes has to begin with a general functional consideration of the kind "why it is useful for languages and their speakers to have lexical categories such as nouns and verbs and others?" The approaches discussed offer some answers from their specific theoretical perspectives. But none of them presents clear discovery procedures for the identification of word classes in a particular language. For this purpose, one must examine the morphosyntactic features of each language. This means that one must study the syntactic structure and the morphology—i.e., category-establishing and category-changing morphology—of a language in order to discern constructions, operations, and morphology restricted to nouns and to verbs. In **4**, I try to draw some conclusions from what has been said about the universal characteristics of nouns and verbs, and propose some more practical procedures to determine the parts-of-speech in Hocank. These procedures are then applied to the Hocank data in **5**.

4. Methodological procedures. The problem in Hocank is how to determine nouns as a separate word class. Therefore, it seems reasonable to start with words that designate prototypical nominal concepts. The semantic criteria for prototypical nouns are [individual persons] or [individual objects] which are [time-stable], [countable], and [manipulatable]. Lexical fields with words that are close to the noun prototype are natural and geographic formations (e.g., mountain, lake, river, valley, rock, etc.); celestial bodies (e.g., sun, moon, stars, etc.); artifacts (e.g., bottle, knife, table, etc.); person names and kinship terms (e.g., man, woman, child, etc. or father, mother, son, daughter, etc.); and names for animals (e.g., bird, cat, dog, horse, etc.).

The morphosyntactic characteristics of these words can then be compared to the morphosyntactic features of words which designate prototypical verbal concepts, i.e., [dynamic events] including [controlled] and [volitional]

[actions] and resulting in [visible effects] (changes) on an object involved. If there is a noun–verb distinction in a particular language, one will find maximal differentiation with respect to the morphology and syntactic behavior among these semantic word classes. If there is no morphology which shows a complementary distribution (i.e., one morphology for one class of words and different morphology for the other class), then one has to look for negative evidence, i.e., for morphology which is not possible with one class of words. This is certainly the case in Hocank. There is a subset of verbal morphology, such as personal inflection, which does not occur with words presumed to be nouns.

The next investigation involves referential expressions versus predicative expressions. According to Hopper and Thompson (1984), phrases and syntactic constructions which are used to introduce new participants into discourse contain words with the highest degree of nominality; i.e., words within a fully referential noun phrase which refer to new and salient discourse participants should exhibit the highest degree of "nouniness."[10] Hypothetical nouns in this position should show all morphological distinctions available for nouns in that particular language. Of course, this poses some problems with respect to Hocank. If there is no specific nominal morphology, how is it possible to identify nouns?

For instance, referential expressions par excellence in a language are proper names, so they should be good indicators of a class of noun words. Proper names in Hocank, however, are easy to identify but look more like relative clauses than nouns. The Hocank proper name of a member of the Bird Clan in (25) is a verbal formation, structurally similar to a Hocank relative clause. Only the demonstrative pronoun *-ga* indicates that it is a proper name.

(25) *Peecta'éhiga*
Peec-ta-'é-hi-ga
fire-blaze.up-CAUS-DEM
'The One Who Sets Fire' (proper name of a member of the Bird Clan)

Proper names in Hocank are not useful expression classes for the determination of nouns and verbs.

[10] That the membership of words in word classes like nouns and verbs is rather a matter of degree than of a clear-cut yes/no answer was observed quite some time ago by Ross (1972; 1973). Terms such as "verbiness" and "nouniness" emphasize the gradations of categorical membership.

Nevertheless, the pragmatic functions of reference and predication may be helpful tools in determining nouns and verbs in a particular language, if one accepts the prototypical correlation between the grammatical category noun and the pragmatic function reference, as specified in figure 1 above. If hypothetical nouns and verbs are inserted into syntactic phrases which require words of the opposite syntactic category—i.e., nouns into verbal phrases used as clausal predicates, and verbs into noun phrases used to refer to some salient discourse participant—then one normally would expect some morphosyntactic adaptation processes. Nouns must be supplemented with auxiliaries, and verbs must be nominalized. In languages with a strong noun–verb distinction, such category-changing operations are obligatory, otherwise ungrammatical expressions would be produced.

In Hocank, one observes an interesting asymmetry with regard to such category-changing morphology. There are ways, morphologically, to nominalize verbs (definite article, demonstrative pronoun, subordinating suffixes) but almost no way to derive verbs from nouns morphologically. This is further indication of the verbal character of words in Hocank. If there are no morphosyntactic adaptation processes in a language of this type, then we must conclude that there are no categorical distinctions between the content word in the lexicon of that language (see Kuipers 1968, Kinkade 1983, and van Eijk and Hess 1986 on the noun–verb distinction in Salish).

5. Diagnostics for the determination of nouns and verbs in Hocank.

5.1. At the lexical-semantic level. There are many monosyllabic and disyllabic words in Hocank representing various semantic fields. They designate entities which can be counted, which may be individuated, which can be physically grasped and may be manipulated. They are, from a semantic point of view, good candidates for nouns; some of these words are given in (26).

(26) *hųųc* 'bear', *šųųk* 'dog', *caa* 'deer', *wakᾴ* 'snake', *nąą* 'tree', *nąąp* 'hand', *haa* 'skin, bark', *hiąc* 'father', *kųnų* 'first son', *wii* 'sun, moon, month', *tee* 'lake', *haas* 'berry, berries', *waac* 'boat', etc.

These words cannot be personally inflected and do not usually occur with aspectual affixes or tense markers. Hence there is some negative morphological evidence that they are nouns. On the other hand, these words do occur with mode suffixes in a predicative function, as shown in (27).

(27*a*) *Tee'e* *šųųk-gúnį*
this dog-DUB
'It might be a dog'

(27*b*) *"belt"* *hišegi* *jaagúišanąˀ?*
"belt" *hiše-gi* *jaagú-hiše-nąˀ?*
belt you.say-if how-you.say-would
'How do you say "belt"?'

(27*c*) *"hipirák"-šąnąˀ*
belt-DECL
'It's "*hipirak*"'

In (27*a*), the hypothetical noun *šųųk* 'dog' appears with a so-called dubitative suffix, perhaps in answer to the question, "Do you hear that noise outside?" In (27*c*), the hypothetical noun *hipirák* 'belt' occurs with the declarative suffix which explicitly marks the predicative function of the expression. It is only with declarative and dubitative suffixes that nouns may occur in a predicative function without auxiliaries. Usually, nouns in Hocank need the support of auxiliaries if they are used as predicate nominals expressing class inclusion, equation, or existence (see below).

As has been argued above, the semantics of words is not a reliable and sufficient condition for their classification as nouns. Additional evidence at the morphosyntactic level is necessary. However, the prototypical semantics of nouns at least facilitates the search for words which show morphosyntactic distinctions typical of nouns, such as no personal inflection and no tense or aspect marking.

5.2. At the morphological level: the derivational prefixes *ho-*, *wa-*, and *wii-*. Numerous derivations with *ho-*, fewer with *wa-*, and nearly all derivations with *wii-* are nominal in the sense that they are not personally inflected and they can be used as predicate nominals only with the help of verbal auxiliaries. There is no way in which words such as those in (28) can be used verbally.

(28*a*) *ho-'o* 'wound' (n.)
(28*b*) *waagáx* 'paper' (n.)
(28*c*) *wiigųs* 'clock' (n.)

As diagnostics, these derivational suffixes are of different value. The most reliable indicator for "nouniness" is the *wii-* prefix; the other two are of limited use. As with the plain stems discussed in **5.1**, there is only negative morphological evidence that these derivations produce nouns.

5.3. Nominal compounds. The structure of the noun phrase in Hocank consists of a head noun and a few optional elements such as a neutral verb (or adjective), a numeral, and some determiners. It can be summarized roughly as in (29).

(29) [N + $VERB_{neutral}$ + NUM + ART/DEMPRO]

The head noun of such a noun phrase can be a plain nominal stem but can also be a complex nominal expression. Nominal compounds consist of a determining noun, sometimes called a determinans, and a determined noun, called a determinatum. The structure of a nominal compound in Hocank is [N_1 + N_2], where N_1 = the determinans and N_2 = the determinatum. There is a rule in Hocank that the determinans always precedes the determinatum. The N_1 position cannot be filled by any other modifier, such as a neutral verb, a numeral, or a definite article. So there are two ways structurally to modify a noun in Hocank: either the head noun is followed by some modifier such as a neutral verb or numeral plus a definite article, or the head noun is preceded by a noun which functions as a determinans.

English, for instance, does not distinguish these types of modification. The determining noun, as well as modifying elements such as a definite article or adjective, precedes the head noun, as in (30).

(30*a*) *the green house*
(30*b*) *the gambling hall*
(30*c*) *the town hall*

(30*a*) and (30*b*) show that modifiers (adjective/participle) precede the noun in English. The same is true for determining nouns, as can be seen in (30*c*). Cross-linguistically, it is not always clear which constituent of a nominal compound represents the determining noun (determinans) and which one the determined (determinatum). But as a rule of thumb, the determinatum is the constituent which designates the entity the whole compound is referring to. In (30*c*), the determinatum is *hall*, because the whole expression *the town hall* refers to a specific building rather than to a town. The noun *town* only modifies the determinatum or head noun *hall* and cannot be individuated independently. In addition, the determinans *town* cannot be referred to by anaphoric devices in the subsequent discourse. The type of nominal compound in (30*c*) is traditionally called endocentric. Following Hopper and Thompson's (1984) theory, this determinans noun should have a lower degree of nominality than the adjacent head noun, and indeed this is the case in English. The determinans *town*, for instance, cannot be plural in this composition.

In Hocank, nominal compounds are a very productive way to form complex expressions, as the examples in (31) show.

(31*a*) *wagáx* 'write' (v.)
(31*b*) *waagáx* 'paper' (n.)

(31*c*) *waagáx* *pąą-ra*
paper bag-the
'the paper bag'

(31*d*) **wagáx pąą-ra* 'bag for writing/printing'
(31*e*) *pąą wagáx-ra* 'who writes/prints a bag'
(31*f*) *pąą waagáx* 'bag paper' (n.)

The noun *waagáx* 'paper' in (31*a*) is probably a lexicalized derivation of the verb *wagáx* 'to write' in (31*b*), perhaps from **wa-ha-gáx*, which means literally 'something to write on', where, according to the morphophonemic rules of Hocank, the */h/* is dropped.[11] The word *waagáx* 'paper' cannot be personally inflected nor does it occur with tense or aspect markers. It can therefore be assumed for the moment that it is a noun. In (31*c*) and (31*f*), the noun *waagáx* 'paper' is used as part of a nominal compound in a different function. In (31*c*), *waagáx* is the determinans for another noun *pąą* 'bag'; in (31*f*), both constituents are reversed which results in a different meaning. It is obvious that the order [$N_{determinans}$ + $N_{determinatum}$] is a structural requirement for nominal compounds. It cannot be changed without a significant change in meaning.

The test case now is to exchange *waagáx* 'paper' and its hypothetical verbal counterpart. This is done in (31*d*) and (31*e*). In (31*e*), the insertion of *wagáx* 'to write' produces a relative clause with an obligatory determining element *-ra* at the end. Without *-ra*, this construction would be ungrammatical. In (31*d*), the hypothetical verb *wagáx* 'to write' is put in determinans position, which results in a totally unacceptable expression. The unacceptability lies in the structure, not in the semantics, of the resulting expression. A 'bag for printing/writing' is certainly something that can be imagined. This structural restriction is, next to negative morphological evidence, the clearest indicator of the "nouniness" of a Hocank word; note the additional examples in (32).

(32*a*) *nįį-péx*
water-bottle
'(a) water bottle'

(32*b*) *pex-nįį* 'bottle water'

(32*c*) *pex nįóžu*
pex *nįį-hožu*
bottle water-put.in
'a bottle of water (literally: '[he] puts water in a bottle')

[11] With respect to etymological origin, this remains a speculation, because there is no independent verb *ha-gáx* attested. Otherwise, this is a valid abstract analysis.

(32*d*) **nį́ǒžu pex* 'a bottle for filling water in it'

In (32*a*) and (32*b*), the words *nįį* 'water' and *pex* 'bottle' are compounded in different ways, resulting in the different meanings one would expect from the Hocank rules for nominal compounds. Since both of these word orders are possible, both words qualify as nouns. However, in (32*c*), the expression 'a bottle of water' is translated into Hocank as *pex nį́ǒžu*, where the second part consists of the noun *nįį* 'water' which seems to be incorporated in the verb *hožu* 'put in'. The whole expression reflects normal SOV word order in Hocank and is therefore better analyzed as a clause than as a nominal compound, although the English translation suggests the latter analysis. That the second part of this construction is not a noun is indicated by the ungrammaticality of (32*d*).

5.4. Predicate nominals. Languages with a clear noun–verb distinction require some sort of category-changing operation if nouns are used as predicates. It is the purpose of these operations to decategorialize the nouns. In German, nouns which are used as nominal predicates are supplemented by an auxiliary *sein* 'be' which is finite and carries all verbal information. The same is true for English *be*. The noun in this function shows only a very limited set of morphosyntactic distinctions typical for nouns. In clauses such as (33), the noun *Lehrer* 'teacher' is of reduced nominal categoriality, e.g., it lacks the case marking prototypical nouns have.

(33) *Wilhelm ist/war Lehrer*
'Bill is/was a teacher'

Usually, different types of clauses with predicate nominals are distinguished. There are clauses which state a class inclusion, an equation, the existence of something, the location of something, and possession. It can be shown that clauses with a predicate nominal in Hocank almost all require some auxiliary support. This provides syntactic evidence that there is a category "noun" in Hocank. Nouns are not designed to be used as predicates—that is the pragmatic and syntactic domain of verbs. If a noun is used as a predicate, it has to be decategorialized as a noun, something which is done most effectively with auxiliaries in many languages (including Hocank). Auxiliaries bear all kinds of verbal information and categories such as person, tense, and mood/aspect. Auxiliaries can be considered as a means of adding this information periphrastically to nouns which cannot bear them because of their categorical status. If the lexical/syntactic category of a word is not clear, the morphosyntactic effect of using it as a predicate allows conclusions to be drawn about the categorial nature of the word.

5.4.1. Class inclusion. Clauses which state that some specific entity (person or object) in the world belongs to a class of things have the general form [X is a Y], where Y is usually a noun used as a predicate. In Hocank, clauses of this form must have an auxiliary, as the examples in (34) and (35) indicate.

(34*a*) *wagigų́s*
wa-gi-gų́s
someone-DAT-teach

'teacher'

(34*b*) *wagigų́s-nạ*
wa-gi-gų́s-nạ
3.plOBJ-DAT-teach-DECL

'he teaches them'

(35*a*) *Bill-ga* *wagigų́s-ižạ* *hereé-nạ*
B.-DEM teacher-INDEF be-DECL

'Bill is a teacher'

(35*b*) *wagigų́s-ižạ* *waa'ų́ajeénạ*
wagigų́s-hiža *wa-ha-'ų́-ha-jeé-nạ*
teacher-INDEF ST-1sgSUBJ-be-1sgSUBJ-be.standing-DECL

'I am a teacher (standing)'

Hocank has a word for 'teacher' (34*a*) which is labeled a noun in the lexicon (see Zeps 1996). However, the same form may be used as an independent transitive verb with a declarative suffix to express a "normal" proposition such as 'he teaches them' (34*b*). This is a complete sentence in Hocank. If Hocank had no noun–verb distinction, one would expect that this word could be used without any adaptation in a referential noun phrase or in a verbal phrase functioning as predicate. But this is not the case in Hocank. To express something like 'Bill is a teacher' or 'I am a teacher' in Hocank one has to use an auxiliary *heré* 'be' or *wa'ų́* 'be', although in both cases *wagigų́s* could be used as a predicate verb 'he teaches them' or 'I teach them'. The distribution of the auxiliaries depends on the person category of the subject. *Heré* 'be' cannot be personally inflected and hence appears only with third person. *Wa'ų́* 'be' can occur with all persons.

5.4.2. Equation. There is a type of clause which expresses that an individual is another specific type or kind of individual [X is the Y], such as 'X is the teacher of the village' or 'X is my brother/father', etc. This type of clause is formed with auxiliaries in Hocank.

Cross-linguistically, kinship terms are almost always a special class of nouns.[12] They certainly belong to the inner core of prototypical nouns because they designate human beings having socially very important, eternal, or at least very long-lasting relationships. In Hocank, sentences like 'Bill is my father' must have an auxiliary verb which is identical to the causative verbal clitic = *hii*; note (36).

(36*a*) *Bill-ga* *hį'ąc* *haá-nąˀ*
B.-DEM father 1.sg.CAUS-DECL

'Bill is my father' (literally: 'I make Bill [my] father')

(36*b*) *hį'ąc* *haá-ra*
father 1.sg.CAUS-DEF

'my father' (literally: 'the one, I make [my] father')

Note here that the same auxiliary/clitic = *hii* is used for possessive phrases with kinship terms too, as in (36*b*). These phrases resemble relative clauses in other languages rather than possessive or genitive phrases, so we have here the same structural ambiguity as in noun phrases (see above). Relevant for the diagnostics of nouns in Hocank is, however, the fact that kinship terms cannot be used as verbal predicates without an auxiliary which carries the person marker and other verbal categories.

5.4.3. Existence and location. Clauses which express the existence of some individual or thing are called existential sentences. They have the general form [there is a X]. Often these types of propositions are impossible to distinguish from expressions which localize some entity in the environment. Such localizations have the general form [X is in a specific place]. Both types have in common that they presuppose the existence of an individual or object.

In Hocank, this type of expression has to be formed with one of the so-called positionals. These are three clitic verbs of being which classify the intransitive subject according to its local position—hence the term. Positions such as standing (vertical), sitting (neutral), and lying (horizontal) are distinguished. In English, sentences like 'there is an apple on the table' (37) or 'the bottle is on the table' (38) are rendered in a similar fashion in Hocank, the only difference being that the Hocank positionals express the existence and the local orientation of the apple or the bottle. The English auxiliary does not have this meaning component.

[12] That there are languages which encode kinship concepts as verbs is demonstrated in Evans (2000).

(37) *kšeížą waarúc hihagéja nąkšąną*
kše-hížą *waarúc* *hihak-éja* *nąk-šąną*
apple-INDEF table top-there be.sitting-DECL
'There is (sitting) an apple on the table'

(38) *peex-rá* *waarúc* *hihag-éja* *jeé-ną*
bottle-DEF table top-there is.standing-DECL
'The bottle is (standing) on the table'

Relevant for the identification of nouns in Hocank is the fact that the local position of an object relative to another object is not expressed by an adpositional phrase (there are no adpositions in Hocank) but by a construction which resembles much more a genitive phrase which is formally simply a juxtaposition of two words in Hocank. Genitive phrases express part–whole relations. Local relations are encoded like part–whole relations in Hocank.

Part–whole relations are expressed by a juxtaposition, with the dependent element preceding the head of the construction. So the English expression *the wheels of the car* would be rendered in Hocank something like *(the) car (the) wheel.* It is the same structure that has already been observed with respect to nominal compounds. There is no morphological genitive case marking in Hocank. The Hocank way to express these relations is by using an English nominal compound, e.g., *car wheel.* I argued above that in a case such as this, the determinans *car* in Hocank must be a noun; other elements are not allowed in this position.

To return to local relations between objects. These relations are expressed in Hocank by a noun + noun construction which is structurally parallel to the nominal compounds discussed above. The prepositional phrase 'on the table' (see 37 and 38) can be translated in Hocank only by a construction such as *waarúc hihak-éja*, which translates literally 'there top of table'. In this case, 'the table' is the determinans of the noun + noun construction and must be a noun. Furthermore, the noun *waarúc hihak-éja* 'table' cannot be used verbally as a predicate of the existential or locational clauses in (37) and (38). The phrases in Hocank which correspond to adpositional phrases in other languages are therefore a reliable way to identify nouns in Hocank.

This discussion of clauses which express the existence and the location of an object has yielded two more diagnostic means to identify nouns in Hocank. First, all clauses of the type 'there is a' or 'this is a X', which state the existence of some object expressed by a noun, require an auxiliary. Second, phrases which locate an object in space are formed like part–whole genitive phrases with a determining noun and a determined noun. The noun designating the location is in a position where only a noun may occur.

6. Conclusions. This investigation of the noun–verb distinction in Hocank has yielded the following results. The semantics of hypothetical noun words alone is not a reliable way to determine their status. However, words that are close to the semantic prototype of nouns are likely to be classified as nouns in Hocank. Evidence of their syntactic category must be found in their morphosyntactic behavior. Semantics cannot offer more than a guideline to determining possible nouns.

There is a distinct class of nouns in Hocank which can be identified by certain morphosyntactic behaviors. From a morphological standpoint, nouns have no noun-specific morphology which can offer positive morphological evidence. So we must turn to negative morphological evidence, e.g., the fact that these words cannot occur with personal inflections or with tense/aspect markers of the verb. In addition, words which begin with derivational prefixes such as *ho-*, *wa-*, and *wii-* are, to varying degrees, likely to fulfill the morphological criteria for nouns.

Strong evidence for the existence of nouns in Hocank comes from certain syntactic constructions in the language. Nominal compounds are formed by the juxtaposition of nouns, following the rule that the first noun functions as determinans and the second one as determinatum. The determinans position can be filled only by nouns. The same syntactic construction appears in "adpositional phrases," so that these expressions can also serve as diagnostic tools for the identification of nouns. Nominal compounds differ from part–whole constructions (genitive phrases) with respect to accent. Nominal compounds follow the accent pattern of words in Hocank; part–whole constructions (genitive phrases) do not.

Further syntactic evidence for the existence of a noun class comes from predicate nominals, i.e., nouns which are used as predicates. In these constructions, nouns have to be adapted to the new function in almost all cases, i.e., they are combined with auxiliary verbs. It is not possible to use nouns as finite (i.e., personally inflected) verbs with tense/aspect suffixes. However, it has been shown that nouns may be used in certain restricted question–answer contexts as predicates with a declarative suffix and a dubitative suffix.

The results of this investigation have consequences for lexical and grammatical descriptions of Hocank. The lexical entries in the already existing studies and dictionaries need to be revised with respect to the parts-of-speech classification. The morphosyntactic procedures applied in this study provide tools to determine the lexical category of a Hocank word. Even if previous linguistic intuition turns out to be right in many cases, the procedures suggested here should place the classification of words in Hocank on a firmer basis.

Any grammatical description of Hocank must recognize that there is a weak distinction between nouns and verbs. This is shown not only by the lack of specific noun morphology and an abundant repertoire of verbal morphology, but also by the structural parallelism of syntactic constructions which are noteworthy because of their obvious differences in languages like English or German. How one analyzes noun phrases and relative clauses, or nominal compounds and genitive phrases, or adpositional phrases in Hocank depends very much on the syntactic categorization of content words in Hocank.

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