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UNUSUAL PROPERTIES OF APPLICATIVE CONSTRUCTIONS IN UMÓⁿHOⁿ

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1 Introductionⁱ

Applicative constructions can be defined as constructions where an overt marker promotes an adjunct or peripheral argument to core-object function (Peterson 2007:1). Example (1) illustrates an applicative construction in Shuswap (ISO 639: shs), whereby a beneficiary is added as an object of the verb ‘make’. This addition is achieved using the applicative suffix *-x* (called a redirective applicative in Salishan literature).ⁱⁱ

(1) Benefactive applicative in Shuswap (Salish, British Columbia)

m-kúl-n-s	γ	mim̓x
PERF-make-TR-3SBJ	det	basket

‘She made the basket.’

m-kúl-x-t-s	{γ	núx ^w ən ^w x ^w }	tə	mim̓x
PERF-make-AP-TR-3SBJ	det	woman	obl	basket

‘She made a basket for the woman.’

(Gerdtts & Kiyosawa 2007:178)

The “applied” phrase (or clause) is that introduced by the applicative affix, for instance γ $n\acute{u}x^{\acute{w}}\acute{e}n\acute{x}^{\acute{w}}$ ‘the woman’ in (1b). Throughout this paper, applied phrases are bracketed in the examples. Following Peterson (2007), I oppose the applied argument to the “base object”, which is not introduced by the applicative marker. The base object is γ $mim^{\acute{x}}$ ‘the basket’ in (1a), and it becomes $t\acute{e}$ $mim^{\acute{x}}$ ‘a basket’ in (1b).

Applicatives are a widespread feature in world languages, existing in 45% of the WALs’s review of 183 languages (83 languages out of 183; Polinsky 2013), with several regional clusters. Mithun (2017:249) notes that these constructions exist in a majority of North American languages, and indeed, Polinsky’s survey reports that 18 out of 25 languages are reported to have applicative constructions in the US, Canada, and Greenland.

Taking a descriptive and typological perspective, the present article describes three applicative construction of Umóⁿhoⁿ (Omaha; ISO 639: oma), a Siouan language of North America, and pays special attention to applied constituents seldom described in the literature: postpositional phrases (PPs) and clauses (CLs) instead of NPs. Indeed, although the syntactic, semantic, and pragmatic functions of the applicative constructions across languages are very well described and discussed (among others: Dixon & Aikhenvald 2000; Mithun 2001; Creissels 2006b; Peterson 2007; Valenzuela 2010; Polinsky 2013), there is very little discussion on the diverse syntactic constituents introduced by the applicative morpheme (but see Harford 1993; Pacchiarotti 2020). In typological works and in language-specific descriptions, the applied arguments exemplified are almost always noun phrases (NPs), and they are often contrasted with peripheral objects as prepositional or postpositional phrases (PPs) in non-applied clauses. As I will show in 5 and 6, this division between applied object (i.e., core argument) NPs on the one side and peripheral complement PPs on the other does not always work.

After a general presentation of Umóⁿhoⁿ and its applicative constructions in 2, and a presentation of the primary sources and dataset used for my research in 3, I focus on three applicative markers that typically introduce inanimate entities, and I describe their semantic and syntactic properties (4). In 5 I present the applied constituents attested in these constructions, with particular attention to postpositional phrases (5.3) and clauses (5.4). The discussion in 6 includes a review of the

motive applicative constructions (‘because of’) in other Siouan languages (6.1), and a cross-linguistic perspective on applied clauses (6.2). I conclude in 7.

2 Umóⁿhoⁿ and its applicative prefixes

Umóⁿhoⁿ, the autonym for “Omaha” in English,ⁱⁱⁱ is a Native American language traditionally spoken by the eponymous Tribe in the current state of Nebraska (US), and member of the Siouan language family. Like many languages of Native North America (cf. Mithun 2015, 2017), the Siouan languages are head-marking and display several characteristics of polysynthesis, such as the encoding of two arguments on the verb – in (2a)–, the zero-marking of 3sg arguments – illustrated with ‘Ø’ in (2b)–, and the presence of a series of instrumental prefixes (see Mithun 2015; Rankin, n.d.) – like *noⁿ*- ‘by standing, running, dancing, kicking’ and *ná-* ‘by extreme temperature’, in (2b) and (2c) respectively. They are SOV languages. (Umóⁿhoⁿ is a flexible SOV language.)^{iv}

(2)

a.

Wáxe–ma oⁿ–wóⁿ–baaza=í.
 white–DEF:OBV.PL A1PL–O3PL–scare.off=PL
 ‘We scared off the white men.’

(Dorsey 1890:436, line 21 / Páthiⁿ-noⁿpázhi)

b.

Shíngazhiⁿga thiⁿk^he Ø–tha–nóⁿ–shabe te.
 child def:obv.sg P3SG–A2–INS:foot–dark irr
 ‘You might shade the child.’

(OLIT-UNL 2018:560)

c.

níⁿkashiⁿga áhigi ná–thi–t’é ta=í, á=biamá.
 person many INS:temp–P2–die irr=pl say=PL.REPORT
 ‘Many of you will be scalded to death.’

(Dorsey 1890:264, line 14 / Te-úkoⁿha)

Siouan languages have a lexically-determined split intransitivity system, also called “active” or “agentive” case system (Mithun 1991). Consequently, the personal markers on the verb are labeled A for ‘agentive’ and P for ‘patientive’. Intransitive verbs are “active” when they encode their subject with A, and “stative” when they encode their subject with P, as in (2c). Nevertheless, in Umóⁿhoⁿ a couple of grammatical markers follow an accusative pattern. The verbal prefix *wa-* encodes third person plural animate objects of transitive verbs (glossed O3PL), as in (2a) where it is realized *woⁿ-* due to vowel assimilation. It is the only prefix that encodes 3rd person arguments. Inside the Mississippi Valley branch of the Siouan languages (see taxonomy in Parks & Rankin 2001; Rankin 2010; Kasak 2019), the group of five Dhegiha languages to which Umóⁿhoⁿ belongs have a series of definite “articles” with very specific semantics. For instance, *-ma* in (2a) encodes animate obviative plural entities, and *think^he* in (2b) encodes animate obviative singular sitting entities. The articles mainly act as determiners, but they have several other functions (see Rankin 1990; Eschenberg 2005).

Siouan languages have up to five applicative markers dedicated to various semantic roles (surveyed in Helmbrecht 2006). Umóⁿhoⁿ has all five of them,^v presented in Table 1 with a label for each applicative prefix. We can divide these markers into two sets:

- The dative and benefactive-possessive prefixes always introduce animate arguments, have similar semantics and trigger similar morphophonological changes on the verb prefix sequence (Marsault 2021).^{vi} They are very probably etymologically related.
- The locative and instrumental prefixes *á-*, *u-*, and *í-* typically introduce inanimate arguments. They share similarities in their morphophonological behavior (Marsault 2021:183–5), and all of them have a locative meaning (although the prefix *í-* has several meanings, and mostly acts as an instrumental applicative).

Applicative systems with multiple markers are less frequent than those with a unique marker, but they are attested in a diversity of regions (Peterson 2007:43). In several respects, the Umóⁿhoⁿ applicative system follows widespread cross-linguistic features. The dative marker introduces the most widely attested applicative construction: the benefactive applicative (Peterson 2007). As almost all the benefactive applicative constructions throughout the world, the Umóⁿhoⁿ one is an “obligatory applicative construction” (Peterson 2007), because it is the only means to express a beneficiary or a maleficiary. The polysemy of the Umóⁿhoⁿ dative prefix – introducing

beneficiaries, maleficiaries, and recipients – is very common too (Peterson 2007; Zúñiga & Kittilä 2010).

By contrast, the “benefactive-possessive” marker is typologically very uncommon, and is only attested in a handful of languages of the Mississippi Valley Branch of Siouan. It introduces a beneficiary which is also the owner of the base object, as exemplified in (3). Such a very specific semantic role is not reported in any work on applicative constructions that I have read (outside of Siouan).

(3) Verbs *noⁿzhú* ‘to thresh {x}’ vs. *íginoⁿzhu* ‘to thresh {y’s cereals} for {y}’

a. Non-applicative construction

Wa-wásni ⁿ de	tó ⁿ gat ^h o ⁿ	wamúske	k ^h e	no ⁿ zhú	thi’a=í
P1PL-be.late	irr.1pl	wheat	def:horiz	thresh	fail=PL

‘We shall delay, as they have not finished threshing the wheat.’

(Dorsey 1890:663, line 5 / Lion)

b. Benefactive-possessive applicative construction

Wamúske	i ⁿ thí ⁿ -no ⁿ zhu=bázhi	káshi	tait ^h é (...).
wheat	B1SG-thresh=PX.NEG	long.time	PX.IRR

‘My wheat will not be threshed for a long time (...)’

Literally: ‘They will not thresh my wheat (for me) before a long time.’

(Dorsey 1890:671, line 6 / Lion)

Another typologically salient feature is the distinction between three types of locations, called here, following the Hungarian grammar’s cases (Rounds 2001:93), “inessive”, “superessive” and “adessive”. I have not been able to find a similar semantic distinction of applicative markers outside of the Siouan family. A distinction between the directional and the source is sometimes reported, like in Nez Perce (Sahaptian; Deal 2010:83–4) with *-aapii* ‘away from’ and *-uu* ‘towards’, but this corresponds to a different, less uncommon type of semantic distinction.

Most of the Umóⁿhoⁿ applicative constructions are either obligatory, either strongly preferred, as I will show in 4.3 for the locative and instrumental prefixes. Consequently, the Umóⁿhoⁿ applicative operation does not aim at backgrounding or foregrounding an argument by

reorganizing core and peripheral syntactic roles, as it is the case in other languages such as Hakha Lai (Peterson, 2007). Instead, it actually increases the number of participants involved in the predicate. Due to their semantic and syntactic features, the applicative prefixes are derivational rather than inflectional markers.^{vii}

3 Presentation of the data

Umóⁿhoⁿ is a language in a critical state, since to my knowledge all the remaining speakers are over 70 and English-dominant. Nonetheless, a considerable amount of textual data is available, ranging from glossed texts and dictionary from the 1890s (Dorsey, 1890, 1891, n.d.) to contemporary learning materials (OLCDP 2002; Saunsoci & Eschenberg 2016; ULCC & OLIT 2018)^{viii}, through valuable second-hand fieldwork recordings and transcriptions (Rudin et al. 1989–92). The present research is based on all of these resources (plus one example from Eschenberg 2005), from which I have gathered a dataset of 130 examples of locative and instrumental applicative constructions with 79 different verbs. (Most of the examples are from Dorsey’s (1890, 1891) texts.)

The dataset is restricted to verbs where the applicative prefix clearly adds an argument to the valency, by contrast with verbs where it has lost its applicative function (several examples of the latter type will be given in §4.4). As a result, each verb included in the dataset is matched with a non-applied counterpart attested in texts or dictionaries.^{ix}

The appendix attached to the present paper^x presents each of the examples of the dataset with its reference. In all the examples provided in the appendix and throughout this paper, the free translations are those from the original references (unless otherwise specified). The word segmentation and the gloss are mine, and I have bracketed the applied phrase or clause whenever it is present. (For the sake of clarity, the gloss is sometimes simplified in the appendix.) In the appendix, separate columns also show the prefix used, the applied verb and its non-applied counterpart, the class each verb belongs to, and the formal expression or referential status of the applied argument.

The descriptions of applicative constructions in **4** and **5** are built on the analysis of the dataset, except for **4.4** which describes the lexicalization process of the locative and instrumental prefixes. In **5.5** I present the quantified results of the survey on the types of applied constituents.

4 The locative and instrumental applicative constructions

4.1 Meanings

The Umóⁿhoⁿ locative applicative markers distinguish three types of locations: the inessive ‘in’ for *u-*, the superessive ‘on’ for *á-*, and the adessive ‘against, by’ for *í-*. They sometimes introduce goals instead of stative locations, in which case they correspond to the illative ‘into’ for *u-* and the sublative ‘onto’ for *á-*. (To the best of my knowledge, there is no word to designate ‘towards/ until being against’, which seems to be the meaning of the locative object in (7).) Table 2 displays numerous verbs derived with the locative-instrumental prefixes, in contrast with their non-derived bases, with ‘{x}’ and ‘{y}’ signaling the expected complements of each verb.

The locative meanings of these prefixes are illustrated in (4) through (7). The valency change from a non-applied clause and an applied clause can be observed in (4). The intransitive verb *noⁿzhiⁿ* ‘to stand’ in (4a) is added a locative object by means of the applicative prefix *u-*. This results in *u-noⁿzhiⁿ* ‘to stand in {x}’, exemplified in (4b). The applied verb in (4b) is transitive and takes the NP *tizhébe etá t^{he}* as a locative object.

(4) Inessive locative meaning of *u-*

a. Non-applied clause

Xthíazhi noⁿzhiⁿ=i=ga
quiet stand=PX=IMP.M
‘Stand ye still.’

(Dorsey 1890:23, line 19 / Frank La Flesche)

b. Applied clause

{Tizhébe	etá	t ^{he} } _{NP}	u-no ⁿ zhi ⁿ	égo ⁿ , ...
door	POSS.3	DEF:VERT	AP:INESS-stand	as

‘As he stood in his door, ...’

(Dorsey 1890:148, line 5–6 / Nudóⁿ-Axa)

(5) Illative locative meaning of *u-* ('into')

Wák^hi^ha=biamá. {tí k^he}_{NP} ú-gi-páazá=biamá.

O3PL.attack=PL.REPORT house DEF:HORIZ AP:INESS.O3PL-POSS-scare=PL.REPORT

'They fought them, scaring them back into their lodges.'^{xi}

(Dorsey 1890:412, line 2 / Óⁿp^hoⁿ-Toⁿga)

(6) Superessive meaning of *á-* ('on')

Ki zhoⁿthínoⁿge- 'óⁿsagi {mazhóⁿ thoⁿ}_{NP} á-noⁿga=i.

and wagon-swift land DEF:RND AP:SUPRESS-run=PL

'And the swift wagons run on the land.'

(Dorsey 1891:103, line 1 / Tenuga-zi; my translation)

(7) Adessive meaning of *í-* ('by', 'against')

Sni<thi>t'e! {Péde}_{NP} í-shkoⁿ=ga!

<P2>cold fire AP:AD-move=IMP.M

'You are cold! Draw near the fire!'

(Dorsey, n.d.)

The adessive meaning is but one of the meanings of the prefix *í-*, which is polysemic. The most frequent meaning of this prefix is the instrumental, as typified in (8).

(8) Instrumental meaning of *í-* ('with')

{Moⁿ nóⁿba}_{NP} í-'u=biamá Moⁿch^hú.

arrow two AP:INS-wound=PX.REPORT Grizzly.Bear

'He wounded the Grizzly Bear with two arrows.'

(Dorsey 1890:46, line 8 / Nudóⁿ-axa)

Additionally, the prefix *í-* sometimes introduces a motive, as it is the case in (9). (Note that there are two NPs that can qualify as the applied object, the demonstrative pronoun being an apposition.) In his review of applicative prefixes in Siouan languages, Helmbrecht (2006:19) considers the meaning 'because of' a metaphorical extension of the instrumental meaning.

(9) Motive meaning of *í-* (‘because of’, ‘on account of’)

{Niníba háshi thi t^hóⁿ}_{NP} {é}_{NP} í-noⁿshtóⁿ=biamá.
 pipe later arrive DEF:OBV.STD that AP:MOT–stop=PX.REPORT
 ‘They stopped, owing to the act of him who came afterwards with the pipe.’

(Dorsey 1890:400, line 6 / Óⁿp^hoⁿ-Toⁿga)

The prefix *í-* is also attested with a few other meanings. In (10), it introduces the topic talked about. Note that the base verb *uk^hié* ‘to talk to {x}’ already contains the prefix *u-*, which is demotivated here. Morphologically, the only possible combinations of applicative prefixes are *í-* with *á-* or *í-* with *u-*, resulting in the surface forms *ithá-* and *uthú-*, respectively. Thus, *í-* is the only available applicative prefix for *uk^hié*.

(10) a. Non-applied clause

Ki wa’ú thiⁿ uk^hía=biamá shínudoⁿ ak^há.
 and woman OBV.MOV talk.to=PX.REPORT dog PX.SG
 ‘The dog talked with the woman.’

(Dorsey 1890:169, line 14 / Joseph La Flesche)

b. Applied clause

Shé–thiⁿ ithádithaí {bthúga}_{NP} uth–ú<a>k^hié bthíshtoⁿ.
 this–OBV.SG agent all AP–<A1SG>talk.to A1SG.finish
 ‘We have already spoken to the agent who has gone to you’

Literally: ‘I have finished telling all of it to the agent.’

(Dorsey 1890:717, line 5 / Toⁿwoⁿ-gaxe-zhiⁿga)

4.2 Properties of the base object and the applied object

In the applicative constructions of Umóⁿhoⁿ, the applied argument acquires the same properties as the object of a non-applied transitive verb. When the base verb is already transitive, the resulting construction resembles the double-object constructions described in Haspelmath

(2013), because the properties listed from (A) to (D), are shared by both the base object and the applied object.

(A) Indexation as P or O. The applied object is indexed on the verb as P or O whenever a person marker is available. In a trivalent construction, either the base object or the applied object is indexed on the verb, as illustrated in (11) and (12), respectively.

(11) Base object indexed on the verb (underlyingly, with *wa-* O3PL)^{xii}

{Ní k^hé-ta}_{PP} ú-baazá=biamá.

water DEF:HORIZ-ALL AP:INESS.O3PL-scare=PL.REPORT

‘They scared them into the water.’

(Dorsey 1890:412, line 5 / Óⁿp^hoⁿ-Toⁿga)

(12) Applied object indexed on the verb (with *wa-* P1PL)

{Díxe}_{NP} wá-tha-óⁿhne ta=í.

smallpox P1PL.AP:SUPESS-A2-A2.abandon IRR=PL

‘You will give us the small-pox.’

(Dorsey 1890:399, line 5 / Óⁿp^hoⁿ-Toⁿga)

Note that there is no example of both objects indexed at the same time on the verb. In all the examples attested, at least one of these objects is 3rd person inanimate or 3rd person singular, and therefore is zero-marked. Given this situation, it is not clear if both could be encoded on the verb in the adequate context (for instance, if we found a form such as “he pressed me against them”, or “he pressed me against you”). My intuition is that it would be possible, in the same way as double object marking on the verb “to give” is possible when needed (Marsault 2021:227).^{xiii}

(B) Constituent order: preverbal objects. As mentioned in 2, Umóⁿhoⁿ has a flexible SOV order. When both the base and applied objects are realized as preverbal NPs, the preferred order seems to be <base obj. – applied obj.>, as illustrated in (13), but the reverse order also occurs, as in (14). Additionally, any of them can be realized as bare nouns – often in the immediate preverb position, as shown in (13) and (14).

(13) Base object – applied object – verb

Nóⁿzhiⁿshchéxchi wíⁿ {wat^hé}_{NP} í–gaxthí amá ikóⁿ thiⁿk^hé.
barely one skirt AP:INS–kill EVID grandmother DEF:OBV.SG

‘The old woman barely killed one by hitting it with her skirt.’

(Dorsey 1890:578, line 11 / George Miller)

(14) Applied object – base object – verb

{Waiíⁿ thoⁿ}_{NP} iⁿgthé u–gí–noⁿ–skábe thóⁿ amá.
robe RND faeces AP:INESS–POSS–INS:feet–sticky PAST? EVID

‘He soiled the robe with the faeces on his feet.’

(Dorsey 1890:39, line 12 / Nudóⁿ-axa)

(C) Constituent order: postverbal objects. Any of the base or the applied object can be realized post-verbally, as shown in (15) and (16).

(15) Base object in a post-verbal position

{Moⁿ nóⁿba}_{NP} í–’u=biamá Moⁿch^hú.
arrow two AP:INS–wound=PX.REPORT Grizzly.Bear

‘He wounded the Grizzly Bear with two arrows.’

(Dorsey 1890:46, line 8 / Nudóⁿ-axa)

(16) Applied object in a post-verbal position

Góⁿki nú ak^há thizá=bi egóⁿ, í–soⁿ–ki–thá=biamá
and man PX.SG take=PX as ap:INS–white—REFL–CAUS=PX.REPORT
ha {wasésoⁿ thoⁿ}_{NP,...}
DECL.M white.clay RND

‘The husband took [the white clay], and with it he whitened his whole body...’

Literally: ‘And the man having taken it, he made himself white with it, the white clay.’

(Dorsey 1890:619, line 7–8 / Frank La Flesche)

(D) P Foregrounding (passive interpretation). There is no overtly encoded construction in Umóⁿhoⁿ that removes A from the clause. Clauses with transitive verbs and an unknown or generic A are equivalent to impersonal constructions (A backgrounding). But in some of these A-backgrounded examples, the remaining argument – P – is co-referent with A from the preceding clause. In such cases, P appears to be foregrounded in what is functionally similar to a passive construction. Such P foregrounding can apply to either the base object, as in (17), or the applied object, as in (18). In (17) the subject is recoverable from previous sentences, and in (18) it is completely unknown.

(17) Foregrounding of the base object

a.

Thíxthe égih ithá=biamá,
cane headlong have.gone=PL.REPORT

Literally: ‘They_i went into the canes’

b.

ú–baaze.

O3PL.AP:INESS–scare.off

Literally: ‘they_i were scared into them’ or ‘they scared them_i into them’

Original translation of (a) and (b): ‘They were scared into the canes.’

(Dorsey 1890:403, line 9 / Óⁿp^hoⁿ-Toⁿga)

(18) Foregrounding of the applied object

a.

Íⁿch^hoⁿ óⁿba–waxúbe t^hédi gthéba–xti ní that^hóⁿ=i,
now day–mysterious when ten–INTENS water drink=PL

Literally: ‘During this week just ten_i have drunk water’

b.

{nashkí}_{NP} á-gaxtóⁿ=i.

head AP:SUP_{ESS}-pour=PL

Literally: ‘they_i have been poured (water) on the head’ or ‘they have poured (water) on their_i heads

Original translation of (a) and (b): ‘During this present week just ten have been baptized, and they have partaken of the Lord’s supper (?).’

(Dorsey 1891:66, line 4–5 / Óⁿp^hoⁿ-Toⁿga)

Despite the similar syntactic features of the base objects and the applied objects, in three-place applied clauses a few morpho-syntactic operations are only available for the applied object. They are listed from (E) to (G).

(E) Relativization. Only the applied object is found as the head noun of a relative clause (RC), as in (19).

(19)

{{Tanúka}_{NP} í-thi-k^hu}_{RC} hébe íⁿthahniⁿ shkí te,

meat AP:INS-D2-invite part A2/D1SG.have A2.come.back IRR

á=biamá.

say=PX.REPORT

‘You will please bring back for me a piece of the fresh meat of which you are invited to partake.’

(Dorsey 1890:294, line 7 / Shoⁿge-ska)

(F) Noun incorporation. Only the applied object is attested incorporated to the verb, as illustrated in (20). Note that the applied verb *ugthóⁿ* ‘to put {round object} in {y}’ is based on the bound positional root *gthóⁿ* (for round objects); thus, this verb has no non-applied counterpart, and it is not included in the dataset.

(20)

Gónki tá hébe thizá-bi egón,

and dried.meat piece take=PX as

i-ú-gthoⁿ-wá-k^hithá=biamá

mouth-AP:INESS-put-O3PL-CAUS=PX.REPORT

‘Taking pieces of dried buffalo meat, the woman made them put them in their mouths.’

(Dorsey 1890:393, line 12 / Joseph La Flesche)

(G) Nominalization. Trivalent applied verbs are often nominalized with the prefix *wa-*, and the resulting noun invariably refers to the applied object, as illustrated in (21). The three transitive verbs *that^he* ‘to eat {x}’, *baxú* ‘to write {x}’, and *xé* ‘to bury {x}’ are derived with a combination of the nominalizer *wa-* and locative-instrumental prefixes (*wa-* combines with *á-*, *í-*, *u-* to produce the surface forms *wá-*, *wé-*, and *ú-*, respectively).^{xiv}

(21)

wá-that^he

wé-baxu

ú-xe

NMLZ.AP:SUPESS-eat

NMLZ.AP:INS-write

NMLZ.AP:INESS-bury

‘table’

‘pencil, ink pen’

‘cellar, grave’

(Sanchez et al. in progress)

In summary, the examples of this section show that the applied argument acquires almost all the properties of the verb object. When a transitive verb takes an applicative prefix, it becomes a trivalent verb in a double object construction. The base object is not backgrounded into a peripheral function. A few operations, however, are only available to the applied object in the trivalent applied clause.

4.3 Obligatory vs. non-obligatory applicative constructions

In some languages, applicative constructions introduce an object which could otherwise be expressed as a peripheral argument. By contrast, some applicative constructions are “obligatory” because the use of the applicative marker is the only means of expressing at all a specific semantic role.

There are few postpositions in Umóⁿhoⁿ, some of which are illustrated in Table 3. All postpositions express locations or time, and consequently there is no means to introduce an instrument as a peripheral argument in a non-applied construction (there is no postposition meaning “with”). In contrast with Hoocąk (Helmbrecht 2021:306), the verb ’ín ‘to use {x}’ is not attested as a means of introducing an instrument, either. Therefore, the instrumental applicative construction is an obligatory one in Umóⁿhoⁿ.^{xv}

Locations, by contrast, can be expressed as peripheral complements in non-applied clauses, as we see in (22) through (24). PPs are bracketed in these examples.

(22) PP introduced by *móⁿt^he* ‘inside’ as a peripheral complement

Wa’ú dúba wat^hóⁿzi {tóⁿde móⁿt^he}_{PP} xa=í, tóⁿwoⁿ thóⁿ-di.
 woman some corn ground inside bury=PL village DEF:RND-LOC

‘Some of the women had buried corn in the ground at the village.’

(Dorsey 1890:452, line 4 / Kaxé-thoⁿba)

(23) PP introduced by *gahá* ‘on top’ as a peripheral complement

Sadégthe t^he ána=bi egóⁿ {gahá}_{PP} zhóⁿ=biamá
 scaffold DEF:VERT climb=PX as on.top lie=PX.REPORT

‘He climbed the scaffold and lay on it.’

(Dorsey 1890:619, line 10 / Frank La Flesche)

It seems that some verbs are never derived with the locative or instrumental applicative prefixes, even when there is no morphological or valency restriction against this derivation. For instance, *xé* ‘to bury {x}’ in (22) is attested with none of them, so the peripheral PP seems to be the only option to add a location to it.

When the applied verb exists, it seems to be more frequently used than the non-applied verb with a peripheral complement. Example (24) is the non-applied variant of (25): the verb *gthíⁿ* takes a locative peripheral complement in (24), while in (25) it is derived with the prefix *u-* and takes a locative applied object (a core argument of the verb).

(24)

Gthíⁿ=biamá Wahóⁿthishíge ak^há {uthóⁿda thóⁿ-di}_{PP}.
 sit=PX.REPORT Orphan DEF:PX.SG middle DEF:RND-LOC
 ‘The Orphan sat in the very middle (surrounded by the people).’

(Dorsey 1890:601, line 16 / George Miller)

(25)

Ki Kíxaxáchoⁿ ak^há {Xithá áhiⁿ k^higthé hiⁿ shkúbe thoⁿ}_{NP}
 and Wren DEF:PX.SG Eagle wing beneath feather deep DEF:RND
 u-gthíⁿ=biamá.
 AP:INESS-sit=PX.REPORT

‘But the Wren got under the thick feathers of the Eagle and sat there as the Eagle flew.’

(Dorsey 1890:581, line 1 / Frank La Flesche)

All the examples up to this point illustrate a correspondence between the object position and the NP, and between the peripheral complement position and the PP. I will show in 5.3 that there is not such a clearcut division between the syntactic functions of NPs and PPs.

Motives or reasons often correspond to a State of Affairs (SoA) to be expressed in a clause rather than a stable entity to be expressed in a noun. In Umóⁿhoⁿ, motives are often expressed in periphrastic, multiclausal constructions. As a result, the motive applicative is not an obligatory applicative.

In non-applied, multi-clausal constructions, the motive is a semantically dependant SoA (and clause) corresponding to the circumstances under which the main SoA takes place. This corresponds to the adverbial relation of subordination (Cristofaro 2003; Thompson et al. 2007), and the motive corresponds to the adverbial clause. (Here, I use subordination as a functional notion, following Cristofaro 2003.)

I follow Hopper & Traugott’s (1993) distinction between three types of clause-combining constructions: parataxis, with relative syntactic independence; hypotaxis, where a clause is dependent on the other but not embedded in it; and complementation^{xvi}, where a clause is dependent on and embedded into the matrix clause. In Umóⁿhoⁿ, the motive –or reason– can be expressed with the first two constructions (when the main clause is non-applied).

Hypotactic constructions are frequently used to express the reason relation, for instance with the conjunction *égoⁿ* ‘as’ introducing the adverbial clause, in (26). In the following examples, the clauses are delineated with square brackets.

(26) Reason relation explicitly expressed with the conjunction *égoⁿ* ‘as’ (hypotaxis)

Na! [tadé–sage, ugáhanapazé–xti égoⁿ,] [kú–a–he héga–mázhi
 why! wind–strong be.dark–INTENS as (1)–A1SG–fear(2) little–1SG.NEG
 égoⁿ,] [nóⁿzhiⁿshké–xchi a–t^{hí} ha,] á–biamá.
 as hardly–INTENS A1SG–come DECL.M say=PX.REPORT

‘Why! As there is a high wind, and it is very dark, I was very much afraid, so I have barely come, said he.’

(Dorsey 1890:364, line 6 / Joseph La Flesche)

The reason relation can also be expressed with paratactic constructions, often with a discourse marker such as *ádoⁿ* ‘therefore’ in (27). It is also possible to find two paratactic clauses where the reason relation is implicit, as in (28).

(27) Reason relation explicitly expressed with a discourse marker (parataxis)

[Ki ithádi ak^{há} wáthahóⁿ=biamá níashiⁿga bthúga;]
 and father DEF:SG.PX O3PL.pray=PX.REPORT people all
 [ádoⁿ há thoⁿ ’í=i=biamá.]
 therefore skin DEF:RND give=PL=PL.REPORT

‘And her father petitioned to all the people; therefore the skin was given to him.’

(Dorsey 1890:288, line 4–5 / Nudóⁿ-axa)

(28) Reason relation implicitly expressed (parataxis)

[Móⁿzeská shti oⁿ–thíza=bázhi,] [wa–wáxpani héga=bázhi.]
 money too A1PL–take=PL.NEG P1PL–be.poor little=PL.NEG

‘And, moreover, we have not received money; we are very poor.’

(Dorsey 1890:669, line 4 / Moⁿch^{hú}-Noⁿba)

4.4 Lexicalization process

Lexicalization can be defined as a reduction process whereby “morphological and syntactic constructions lose their internal compositionality and become lexical units no matter, whether they can be segmented formally into smaller sub-units or not” (Helmbrecht 2008:135). As Helmbrecht shows, the Siouan locative and instrumental prefixes have undergone a general process of lexicalization, leading to the complete loss of their applicative function in several languages of the family. In Umóⁿhoⁿ, the lexicalization process is visible through the numerous verbs where the prefixes are semantically demotivated, with various degrees of demotivation. Note that however lexicalized the locative and instrumental prefixes are, they are always recognizable by the very specific morphophonological changes they create.^{xvii}

In Umóⁿhoⁿ, these prefixes often combine with non-autonomous bases, and the resulting verbs’ meaning and valency more or less conform to the applicative constructions described in 4.1 and 4.2. For instance, the verb *ít^hín* ‘to strike {x} with {y}’ has an instrument object introduced by the prefix *í-*, but the base verb is *ut^hín* ‘to strike {x}’ and not **t^hín*. Similarly, *ágaxade* ‘to cover {x}’ and *upé* ‘to enter in {x}’ have objects that conform with the semantic roles usually introduced by *á-* and *u-*, respectively, but the non-applied counterparts of these verbs do not exist. (There are no verbs †*gaxade* ‘to cover’ or †*pé* ‘to enter’.)

Other verbs can be used with or without their object, such as *u’óⁿsi* which sometimes corresponds to “to jump”, and sometimes to “to jump in {x}”. (The root **’oⁿsi* is not autonomous.) Many other verbs with *á-* and *u-* prefixes take no object at all, but have a meaning which somehow relates to the locative meaning of the prefixes. For example, the verb *ágasta* ‘to pile up; to be piled up’ (OLIT-UNL 2018:528) implies a vertical orientation, while *unásude* ‘{ground} to be burnt bare’ (Dorsey 1890) refers to the places of the ground that are burnt. Finally, many verbs with locative or instrumental prefixes have completely opaque meanings (absolutely not decomposable). Among them, we can cite *íkithe* ‘to wake up’, *ákipa* ‘to meet {x}’, *uné* ‘to seek {x}’.

5 Applied syntactic constituents

Zero-anaphora is very common in Umóⁿhoⁿ, so applied clauses often have no overt applied object when it is retrievable from the context. I include a couple of examples of empty applied objects in 5.1. When they are overtly expressed, the applied arguments often are noun phrases, as

described in 5.2, but also postpositional phrases and clauses. The latter scenarios are described in detail in 5.3 and 5.4, respectively. I conclude this section with quantified results of my survey of the 130 examples in the dataset, in 5.5.

5.1 Empty constituents (Ø)

The applied object can be left empty, as we see in (29) and (30). Both examples illustrate the motive applicative *í-* referring to a state of affairs (SoA) outside the clause, and will be relevant for the discussion in 5.4.

(29)

[{Ø} tháthuha ith-á-t'e]
 A.OBJ nearly AP:MOT-A1SG-die
 'I have already died from it.'

(Dorsey 1890:504, line 11 / Wazhíⁿa-gahíge)

(30)

[Shóⁿge amá ázhi oⁿwóⁿthibthóⁿi égoⁿ,] [{Ø} í-oⁿha=í.]
 horse PX.PL different P1SG.smell as A.OBJ AP:MOT-flee=PL
 'As the horses perceived that I had a different odor, they fled.'

(Dorsey 1890:442, line 10 / Páthiⁿ-noⁿpázhi)

In (30) we see a hypotactic construction where the adverbial clause is introduced by *égoⁿ* 'as' (see 4.3), and is referred back through zero-anaphora by means of the applicative prefix in the main clause. Thus, the semantic link between the two clauses is doubly expressed.

5.2 Noun phrases (NPs)

As shown in all the examples of applicative constructions heretofore, applied arguments generally are noun phrases (NPs). NPs do not necessarily involve a head noun and a determiner, since they can be formed by bare nouns, demonstrative pronouns,^{xviii} or relative clauses. Relative clauses are introduced by a definite article which nominalizes them, and they are internally headed (Rudin 1991; Marsault & Rudin 2022). Example (31) exemplifies a headless relative clause as an applied object, together with an appositive demonstrative pronoun.

(31)

{Niníba háshi t^{hi} t^{hó}n}_{RC/NP} {é}_{NP} í-noⁿshtóⁿ=biamá.
pipe later arrive DEF:OBV.STD that AP:MOT-stop=PX.REPORT
'They stopped, owing to the act of him who came afterwards with the pipe.'

(Dorsey 1890:400, line 6 / Óⁿp^hoⁿ-Toⁿga)

5.3 Postpositional phrases (PPs)

Some applied phrases expressing locations are introduced with the postpositions *-(a)di* 'in, at' and *-(a)ta* 'to, towards'. Examples (32) and (33) show two clauses with the verb *ubáaze* 'to scare {x} into {y}' (and the possessive equivalent: *ugípaaze* 'to scare {one's relative} into {y}'),^{xix} with the applied argument realized as an NP and a PP, respectively. Example (33) shows an applied PP introduced by *-(a)ta*.

(32)

Wák^hi^hta=biamá. {tí k^he}_{NP} ú-gi-páazá=biamá.
O3PL.attack=PL.REPORT house DEF:HORIZ O3PL.AP:INESS-POSS-scare=PL.REPORT
'They fought them, scaring them back into their lodges.'^{xx}

(Dorsey 1890:412, line 2 / Óⁿp^hoⁿ-Toⁿga)

(33)

{Ní k^hé-ta}_{PP} ú-baazá=biamá.
water DEF:HORIZ-ALL AP:INESS.O3PL-scare=PL.REPORT
'They scared them into the water.'

(Dorsey 1890:412, line 5 / Óⁿp^hoⁿ-Toⁿga)

Examples (34) and (35) show the same contrast with the applied verb *utí* 'to camp in {x}', 'to pitch the tent in {x}'. Example (35) shows an applied PP introduced by *-(a)di*.

(34)

Tí amá {xthab}_{NP} ú-ti=biamá.
lodge DEF:PX.PL tree AP:INESS.O3PL–camp=PX.REPOR

‘The lodges camped among the trees.’

(Dorsey 1890:263, line 8 / Te-úko^hha)

(35)

{wach^híshka k^hé-di}_{PP} shi oⁿg-ú-ti=i
stream DEF:HORIZ-LOC again A1PL-AP:INESS–camp=PL

‘we pitched the tents by a stream’

(Dorsey 1890:437, line 11 / Páthiⁿ-noⁿpázhi)

As the pairs (32)–(33) and (34)–(35) show, the presence of a postposition on the applied phrase is not lexically determined by the verb. The postposition *-(a)ta* is not necessary to introduce the allative meaning, either: the allative is included in the lexical meaning of the verb *ubáaze*, since it is understood even in (32) where no postposition is used. I have not been able to find a semantic difference between (32) and (33), nor between (34) and (35). Observe that (32) and (33) are two utterances from the same speaker, Óⁿp^hoⁿ-Toⁿga, given in the same story. Helmbrecht notes that the same variation exists with the Hoocåk applicative constructions, where the locative marker *=regi* facultatively appears in the applied phrase (Johannes Helmbrecht, p.c.).

Note also that the applied phrases in all these examples represent inanimate third persons, and as such they are not supposed to be encoded on the verb with any person prefix. In (32) and (33), the prefix *wa-* O3PL (which has undergone a fusion with *u-*, resulting in stressed *ú-*) refers to the third person plural animate base object “them” (the base verb is *báaze* ‘to scare off {x}’). But example (34) is a counterexample of this rule, since the verb also encodes a O3PL person while the applied object is inanimate (it may be personified).

The question whether the applied PPs should be considered objects or peripheral complements remains open, due to the scarcity of examples and the impossibility to perform syntactic tests. But the applied PP always corresponds to an argument included in the lexical semantics of the verb. By contrast, the PP complement of the non-applied verb *tí* ‘to camp’ is not included in its

lexical semantics, and clearly corresponds to a peripheral argument (or possibly an adjunct),^{xxi} as exemplified in (36). (This example involves a demonstrative apposition, which is very frequent in Umóⁿhoⁿ.)

(36)

egithe	{thik ^h íma	duáthisho ⁿ	ugáxthi	k ^h é-ta _{PP}	{é-di _{PP} }	tí=i
finally	Tekamah	this.side	timber.point	DEF:HORIZ-LOC	that-LOC	camp=PL
	t ^h e	ha	Umó ⁿ ho ⁿ	amá.		
	EVID	DECL.M	Umó ⁿ ho ⁿ	DEF:PX.PL		

‘At length the Omahas camped at the point of timber this side of Tekamah.’

(Dorsey 1890:415, line 5–6 / Kaxé-thoⁿba)

All the applied PPs attested in the dataset are introduced by either *-(a)ta* or *-(a)di*. These morphemes are considered postpositions (Koontz 1984:211, OLIT-UNL 2018:383), although they are bound morphemes and not independent postpositions such as those illustrated in Table 3 (4.3).

We could posit an implicational rule such that if the locative phrase is not applied, i.e., not licensed by an applicative marker, then it has to appear with locative postposition, otherwise it may appear with or without the post-position *-(a)di* or *-(a)ta*.^{xxii} Thus, the two bound postpositions form a special sub-set of postpositions, the only ones allowed on applied phrases.

5.4 Clauses (CLs)

When the prefix *í-* introduces a motive, the applied object can take the form of an NP or of a clause (CL). Both cases are illustrated with the applied verb *íkuhe*, derived from the intransitive and discontinuous verb *kú_he* ‘to feel insecure’; ‘to be apprehensive’. In (37), the cause of apprehension is a person, thus the applied object is an NP. In this context, *íkuhe* is translated “to be apprehensive on account of {x}”.

(37)

Shóⁿ {Wégitheshtóⁿ}_{NP} í-kuhe=hnóⁿ=biamá.

yet Beggar AP:MOT=fear=HAB=PX.REPORT

‘They were always apprehensive on account of The Beggar.’

(Dorsey 1890:335, line 3 / Óⁿp^hoⁿ-Toⁿga)

Sometimes, however, the motive is a State of Affairs (SoA), in which case the applied object is expressed as a clause, as shown in (38). The applied complement clause is delineated with curly brackets (as other applied constituents). I consider that the applied clause is a complement clause here, for reasons I explain below. In this section, the clauses headed by applied verbs are delineated with square brackets for a better illustration of the complementation structure.

(38)

[Ki {Póⁿka-ta né}_{CL} í-wi-kuhé.]

and Paⁿka-ALL A2.go AP:MOT-A1SG:P2=fear

‘I am apprehensive about your going to the Ponkas.’

(Dorsey 1890:651, line 6 / Mashtiⁿ-’oⁿsa)

In (38) the applied verb is inflected with the portemanteau prefix *wi-* (A1SG:P2). The second person P cannot be interpreted as an argument of *íkuhe*, however. We cannot interpret it as a stimulus, because the speaker in (38) is not afraid of his interlocutor. Rather, he is apprehensive at the prospect for his interlocutor to visit the Poncas. We cannot interpret the second person as a kind of recipient or beneficiary either (someone we worry about), because this semantic role is introduced by the dative prefix *gí-* (cf. 2). Thus, the second person encoded on the applied verb is an instance of raising from subject (agent) of the complement clause to object of the matrix clause. Noonan (2007:79) notes that argument raising is evident whenever “the putatively raised form is *semantically* an argument of the complement clause but *syntactically* a part of the matrix clause” (his emphasis), which is the case here.

In (38), moreover, the irrealis marker *te* is missing in the complement clause. This suggests that there are some restrictions in the inflectional morphology allowed on the complement verb (despite the first appearance of a fully inflected verb).

Example (39) shows a similar pattern. This time the complement clause takes a third person plural generic subject. Since it is 3rd person, this subject is not overtly encoded on the complement verb (there is no available person marker), but it is encoded as an object on the main clause by means of the prefix *wa-* O3PL. Here again, the irrealis marker is missing in the complement clause.

(39)

Waxchá zhíⁿga hégazhi éta bthé, [ki {moⁿthóⁿ}_{CL}
vegetable small a.lot towards? A1SG.go and steal
 we-á-kuhe.]
 O3PL.AP:MOT-A1SG-fear

‘I am progressing with the raising of many small vegetables, and I fear lest they should be stolen [from me].’

(Dorsey 1890:645, line 10 / Maxpíya-xága)

Two more examples of *ikuhe* with applied complement clauses are reproduced in (40) and (41). Here, the argument raising is not visible due to morphological restrictions. In (40) for instance, the subject of the complement clause is 3SG, and there is no marker for 3SG objects.

(40)

[{Óⁿ-gi-nóⁿge}_{CL} ith-á-kuhé goⁿ] a-óⁿhe ha.
AP:SUP.ESS.P1SG-POSS-run AP:MOT-A1SG-fear as A1SG-flee DECL.M

‘I fled as I feared that he would run over me.’

(Dorsey 1890:64, line 2 / Páthiⁿ-noⁿpázhi)

(41)

[{Shóⁿge tha-gí-na t^hóⁿ pási íⁿ-texi}_{CL}
horse A2-POSS-ask.for DEF:OBV.STD A1SG.drive D1SG-difficult
 ith-á-kuhé ha.]_{CL}
 AP:MOT-A1SG-fear DECL.M

‘It is difficult for me to drive along [the horse which you asked for], and I am apprehensive on this account.’

(Dorsey 1890:755, line 4 / Waxpesha)^{xxiii}

Note that when the argument raising is not visible, two analyses are possible concerning the type of clause combining, as shown in (42) (see 4.3). The placement of curly and square brackets in (40) and (41) illustrates the first analysis, but the translation provided by Dorsey for (41) favors the second one.

(42) Two possible analyses of clause combining

- (1) Complementation. One clause is embedded in the other, and corresponds to the applied object;
- (2) Parataxis. The clauses are paratactic, and the second one has an empty applied object referring by zero-anaphora to the preceding clause.

The verb *íkuhe* is the only one attested in examples with argument raising. Another verb derived with *í-* shows a construction that lends itself to the two possible analyses in (42). It is the verb *nóⁿde ígipiazhi* ‘to be sad because of {x}’, in (43). By contrast with the examples of *íkuhe*, subject-to-object raising does not occur here, although there is no morphological restriction against it. It could be the case that the verb *nóⁿde ígipiazhi* takes complement clauses of a different type from *íkuhe*, with no possibility of argument raising (analysis 1). Or it could be the case that there is no complementation here (analysis 2). Dorsey’s translation favors the first analysis.

(43) a. Analysis 1: Complementation

[{Nínkashínga	ut ^h ónahá-xti	mo ⁿ nín}] _{CL}	nó ⁿ de	i ⁿ thín-pi=mázhi],...
person	solitary-INTENS	A2.walk	heart	AP:MOT.D1SG-good=1SG.NEG

b. Analysis 2: Parataxis

[Nínkashínga	ut ^h ónahá-xti	mo ⁿ nín]	[{Ø}	nó ⁿ de	i ⁿ thín-pi=mázhi],...
person	solitary-INTENS	A2.walk	A.OBJ	heart	AP:MOT.D1SG-good=1SG.NEG

‘My heart is made sad by your leading such a solitary life.’

(Dorsey 1890:651, line 3 / Mashtiⁿ-’oⁿsa)

5.5 Quantified results of the survey

Table 4 shows the repartition of the types of applied objects found in the dataset. The syntactic constituents expressing the applied object are in majority NPs, in accordance with what is typically expected of an applicative construction. Examples where the object is not overtly expressed are also frequent, in which case it is definite and generally expressed in the preceding clauses. The applied object can also be morphologically encoded: 1st and 2nd persons are indexed on the verb as P, and nouns referring to the applied object can be incorporated to the verb. (As shown in 4.2, these two possibilities show that the applied object acquires the morpho-syntactic properties as the base object.) Applied CLs and PPs are of the rarest type.

6 Discussion

In this section, I will discuss other motive (or purpose) constructions with *í-* and its cognates in other Siouan languages (6.1), and more generally applied clauses in a typological perspective (6.2).

6.1 Comparative perspective: the motive applicative in Siouan

The use of the morpheme *í-* to introduce a motive is attested in various Siouan languages, at least in the Mississippi Valley and Missouri Valley branches. Helmbrecht (2006) reports the meaning ‘because of’ in Hidatsa (ISO 639: hid; reported in Boyle 2007:117), Lakhota (ISO 639: lkt; Ingham 2003:27), and Osage (ISO 639: osa; Quintero 2004). It is also attested in Apsaalooke (ISO 639: cro), which shows very enlightening examples concerning the diachronic evolution of this morpheme.

In (44), the morpheme *ii* in Apsaalooke (cognate to Umó^hoⁿ *í-*) cannot be analyzed as an applicative proclitic or prefix since it is not adjacent to the verb. It is syntactically similar to a conjunction such as *égoⁿ* ‘as’ in Umó^hoⁿ, and therefore acts as a conjunction – or a postposition.^{xxiv} Since numerous applicative affixes are known to be grammaticalized from adpositions (see Craig & Hale 1988; Peterson 2007), (44) probably shows some earlier stage of grammaticalization of *ii* into an applicative prefix. This also suggests that the widespread semantic extension of a locative into a cause (see Heine & Kuteva 2002:200) took place early in Proto-Siouan, before its grammaticalization into an applicative marker.

(44) Apsaalooke (also “Crow”; Siouan > Missouri Valley)

{baa-waaláaxe íí}_{CL} baapí-m ichuuké JR-sh isshiiá datchuuchí-k
 INDEF-crazy INS day-DEF his.younger.brother JR-DEF his.hair cut-DECL
 ‘because he was crazy, one day he cut his brother JR’s hair’

(Graczyk 2007:348–9, citing Hinne Káal 6)

Graczyk (2007:348) observes as follows: “Reason clauses may also be formed with the instrumental marker *ii*, which like *aa* may be a proclitic.” The gloss of *ii* as INS in (44) is from Graczyk. Despite describing *ii* as a proclitic, Graczyk himself provides the clause bracketing reproduced in (44) through (46), which implies that *ii* is phonologically dependent on the following word, but syntactically heading the dependent clause.

Example (45) involves a verb incorporating the base object and having a nominalized clause as the applied motive. Graczyk (2007) analyses *ii* in this sentence as heading the nominalized clause, as represented in (45a) (his bracketing). However, it is possible to analyse it as an instrumental applicative, too, as I propose in (45b). The alternative analysis makes sense since the clause is nominalized. The sentence starts with a demonstrative pronoun which can be an apposition.

(45) Apsaalooke

a. Graczyk’s analysis

[{hinne({})_{NP?} ({}baa-m baatcháachi-m día-sh íí}_{NP/RC} ishuú-hil-uu-k]
 this INDEF-DEF outstanding-DEF do-DEF INS his.song-make-PL-DECL

b. Alternative analysis: motive applicative construction

{hinne({})_{NP?} ({}baa-m baatcháachi-m día-sh}_{NP/RC} ii=ishuú-hil-uu-k
 this INDEF-DEF outstanding-DEF do-DEF AP:INS=his.song-make-PL-DECL

‘because of this outstanding thing that he did they made a song for him’

(Graczyk 2007:349, citing Lk AB 47)

Example (46a) is a third example where Graczyk analyzes *ii* as heading a clause. Here again, an alternative analysis of the sentence as an example of motive applicative construction is possible.

Since the applied clause is not nominalized, (46b) is very similar to the Umóⁿhoⁿ constructions shown in 5.4 (Applied clauses).

(46) Apsaalooke

a. Graczyk’s analysis

{bii–píisshe da–luú–o íí}CL dii–waatcheesh–kaáss–aa–(a)k

P1–after A2–come.PL–PL INS P2–pitiful–AUG–CAUS

b. Alternative analysis: motive applicative construction

[{bii–píisshe da–luú–o}CL íí=dii–waatcheesh–kaáss–aa–(a)k]

P1–after A2–come.PL–PL AP:INS=P2–pitiful–AUG–CAUS–SS

‘because you are my followers, they will really persecute you.’

(Graczyk 2007:349, citing Lk 21.12)

In Osage, a language closely related to Umóⁿhoⁿ, Quintero provides an example with *íhpiiži* ‘to be sick with {x}’, reproduced in (47). She explicitly states that “the cause of illness can be expressed by an overt constituent, such as [a] subordinate clause” (Quintero 2004:227). This example too is very similar to the examples of Umóⁿhoⁿ applied complement clauses.

(47) Osage (Siouan > Mississippi Valley > Dhegiha)

/brée brúucʔake ɤhpíiži ɤhé/

[{a–Wa–ǵee Wa–ǵuucʔake}CL i–ɤ–hpíiži ɤǵihé]

PREV–A1SG–go A1SG–unable AP:INS–P1SG–troubled 1SG.CONT

‘I’m sick about not being able to go.’

(Quintero 2004:227)

In another subgroup of the Mississippi Valley branch, Lakhota shows constructions where the prefix *í-* has a motive applicative function, but where the motive clause does not seem to be embedded as it does in Umóⁿhoⁿ, Osage, and maybe Apsaalooke. Examples in (48) through (50) show motive applicative constructions on psychological verbs.

Examples (48) and (49) illustrate paratactic and hypotactic clause linking, respectively. Thus, the applied object is not overtly expressed in the applied clauses. In each case, a conjunction

specifies the semantic relation of the clauses, in addition to the applicative prefix, which is redundant.

(48) Lakhota (Siouan > Mississippi Valley > Dakotan > Sioux)

[Na<wá>h'uŋ] na [{} i-čháŋte-ma-wašte.]
<A1SG>hear and A.OBJ AP-heart-P1SG-good
'I heard it and I was glad about it.'

(Ullrich & Black Bear 2016:439, 594)

(49) Lakhota

[Ohíye šni čha] [{} áta i-čháŋzeka o-máni.]
win NEG because A.OBJ entirely AP-be.angry AP-walk
'He didn't win, so he walked about all angry.'

(Ullrich & Black Bear 2016:439, 594)

In (50) on the other hand, the motive clause is nominalized with the definite article *kiŋ* and embedded in the matrix clause. Its nominalization makes it different from the Umóⁿhoⁿ examples.

(50) Lakhota

[{Tak-éhe kiŋ}]_{NP} i-čháŋte-ičča-pi.]
what-A2SG.say DEF AP-heart-be.bad-PL
'They are sad about what you said.'

(Ullrich & Black Bear 2016:439, 594)

In the same subgroup of languages, example (51) from Nakoda (ISO 639: asb) shows a construction where the argument introduced by the cognate applicative *i-* ~ *ĩ-* expresses some kind of reason or cause (Cumberland 2005:224). The verb *ĩstústa* 'to be tired of {x}' in (51) is derived from *stustÉ* 'to be tired'.^{xxv} Example (51) shows the verb *ĩstústa* with a demonstrative pronoun as an applied object. This pronoun refers back to the event expressed in the immediately preceding clause. It is possible to analyze the bracketed clause as embedded if the demonstrative pronoun *né* is considered an apposition.

(51) Nakoda (also “Assiniboine”; Siouan > Mississippi Valley > Dakotan)

“{Né miní ejé’ena wa-yáḱ wa-’u}CL {né}NP i-má-stustac”.
this water only A1SG-see A1SG-stay this AP-P1SG-be.tired
‘I am tired of only seeing this water.’

(AISRI 2008:32 / Estelle Blackbird)

6.2 Cross-linguistic perspective of applied CLs

Applied clauses are not discussed in typological surveys of applicative constructions such as Peterson (2007) and Polinsky (2013). They are not reported either in Dixon & Aikhenvald (2000); Mithun (2001); Creissels (2006b); Valenzuela (2010). Nevertheless, they are regularly attested, as illustrated in (52) through (55). Note that Watters (1988) for Tepehua (ISO 639: tpt) and Creissels (2004) for Tswana (ISO 639: tsn) make no comment on this peculiar syntactic construction, and only discuss the animacy status and the semantic role of the applied object, respectively.

(52) Tepehua (Totonacan, Mexico)

k-ḱi:-wiḱ {ka-ḱin-a: ki-laqaḥ}CL
1SG.SBJ-AP-sit IRR-arrive.here-FUT 1.POSS-kinsman
‘I’m sitting because my brother will arrive.’

(Watters 1988:160; my bracketing)

(53) Tswana (Southern Bantu, Botswana)

lᵊ-siá lᵊ-líl-él-á {χᵊ-áḱà}CL
C11-baby 3.SBJ:C11-cry-AP-FV INF-suck
‘The baby is crying because he wants to suck.’

(Creissels 2004:8, cited in Pacchiarotti 2020:119; my bracketing)

By contrast, Harford (1993) explicitly mentions and discusses the presence of applied clauses in Shona (ISO 639: sna), and gives multiple examples with both infinitive and finite clauses, as in (54). (See discussion below on the status of the applied clause in the verb argument structure.)

(54) Shona (Southern Bantu, Zimbabwe)

Baba	v-aká-úráy-ír-á	nyoká	{nokuti	y-aká-ngá
C1A.Father	C2A-PAST-kill-AP-IND	C9-snake	because	C9-PAST-be
	y-aká-pínd-á	mu-mbá}		
	C9-PAST-enter-IND	C8.in-house		

‘Father killed the snake because it had entered the house.’

(Harford 1993:106)^{xxvi}

Thus far, all the examples of applied clauses involve motives. Dependent clauses expressing motives are generally considered to enter in an adverbial relation with the main clause, since they typically introduce circumstantial information which is not included in the main verb valency. As noted by Cristofaro (2003:156), “in adverbial relations, (...) neither of the linked SoAs [States of Affairs] involves reference to the other.” This contrasts with complement relations, where “the main predicate has a crucial role in defining the semantic features of the linked SoAs. This is a result of the fact that the main SoA (...) involves obligatory reference to another SoA, and defines the semantic features of this SoA.”

Thus, the motive applied clauses illustrate a change in the status of the dependent clause: from an adverbial clause in the non-applicative construction, to a complement clause in the applicative construction. They introduce circumstantial information which is included in the verb valency. (This phenomenon also applies to purpose clauses, as reported in Harford 1993.)

Example (55) shows another instance of an applied clause in an unrelated language, Japhug (ISO 639: jya). It is strikingly similar to the Umóⁿhoⁿ examples since it involves a predicate of fear. As in Umóⁿhoⁿ, the applied object can be a noun phrase or a complement clause (Jacques 2021a specifies that NPs are much more frequent), and in the later case the subject of the complement may be co-referent with the subject of the matrix clause, or not.^{xxvii} Predicates of fear are among those that typically take complement clauses (Noonan 2007), and the motive of fear is sometimes equivalent to a stimulus.

(55) Japhug (Gyalrongic, China)

nɯ kɯ, {qaliəʁ cho pɲɤrgɣt ju-ɣi-nɯ}CL nɯra pɲɣ-nɯɣ-mu
DEM ERG eagle COMMIT vulture IPFV-come-PL DEM:PL IFR:IPFV-AP-be.afraid
'He feared that eagles or vultures would come.'

(Jacques 2021a)

In her discussion on the definition of applicative constructions, Pacchiarotti (2020:58) explicitly mentions the possibility for the applied phrase to be a clause, either “infinitive *complement*” and “clausal *adjunct*” (my emphasis), following the labels of the Bantu grammars she perused. These labels bring the question whether or not applied clauses should be considered objects (i.e., not adjuncts). In Umó^ho, I assume that they are, and that what would be an adverbial clause in a non-applied sentence becomes a complement clause (i.e., a verb argument) in the applicative construction. This analysis is supported by (a) the absence of conjunction such as *égo* to specify the link between the dependent SoA and the main one; (b) the fact that, consequently, the semantic role of motive (or stimulus) is specified in the applied verb, and the presence of such a role is expected in its meaning; and (c) the argument raising into the matrix clause, observed in a couple of examples.

Applied clauses seem to be cross-linguistically infrequent, since examples of them are seldom provided in grammars. “Circumstantial applicative constructions”, typically introducing motives, are reported in 8 or 9 of the 50 language sample in Peterson (2007:247–8), and out of the sources cited for those languages, only Watters (1988) gives an example of an applied clause. Mchombo (2004:88) explicitly writes that the applied object introducing a purpose or reason in Chichewa (Bantu) is an NP, suggesting that other syntactic constituents are not admitted, and the other sources do not cite enough examples to draw any conclusion.^{xxviii} However, the lack of interest up to present for the different kinds of applied constituents may result in the under-description of such constructions when they exist. As an example, the applied complement clauses of Japhug are not reported in Jacques’s (2021b) 1,500 pages grammar, while a few examples are available in his corpus, as he shows in a later note (Jacques 2021a).

As many languages allow either NPs or CLs as objects of the same verb (e.g. verbs meaning “to want”), the existence of applied clauses does not challenge the common definitions of applicative constructions, but nevertheless deserves a better description.^{xxix}

7 Conclusion

This paper brings attention to an aspect of applicative constructions under represented in the literature: the diverse kinds of applied syntactic constituents. I show that the applied phrases of Umóⁿhoⁿ applicative constructions are not only noun phrases (NPs), although this is the most frequent case, but also postpositional phrases (PPs) and clauses (CLs), the latter being only attested in the motive applicative construction. Applied PPs and CLs are attested in unrelated languages (e.g., for PPs, Bowden 2001; Valenzuela 2010; Pacchiarotti 2020), and it is likely that they exist in more languages than what is reported in the present descriptions. Indeed, the nature of applied constituents being seldom discussed in the literature, we can suspect that a number of attested cases are not reported in grammars due to a lack of awareness of this issue.

All the examples of applied clauses found within and outside Siouan concern motive or purpose clauses, that are usually adverbial clauses. Applied clauses are likely restricted to what Peterson (2007) calls “circumstantial applicative constructions”, i.e., applicative constructions introducing such circumstantial roles such as motive and purpose.

In Umóⁿhoⁿ, several criteria lead me to consider that the applied clauses are embedded in the main clause (in other terms, that they are complement clauses, and not adverbial clauses), as I argue in 5.4 and 6.2. Examples from other Siouan languages show diverse applied constructions involving motive clauses. The clause is sometimes nominalized. When not nominalized, it can nonetheless be embedded, or not, and the distinction between an embedded and unembedded clause is not always straightforward.

In conclusion, a more systematic survey of applied clauses and applied PPs cross-linguistically is necessary to assert how frequent they are, whether or not they are restricted to some semantic roles, and how well are they integrated into the applied verb’s argument structure: are the clauses embedded or not? Are the PPs objects or peripheral complements?

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Tables

Table 1: Overview of Umóⁿhoⁿ applicative prefixes with examples of each Prefix label and gloss

Applied verb Base verb

Prefix label and gloss		Applied verb	Base verb
<i>gí-</i>			
DAT	dative	<i>gí</i> <i>baxu</i> ‘to write {x} to {y}’ <i>gí</i> <i>’ín</i> ‘to carry {x} for {y}’ <i>gí</i> <i>moⁿthoⁿ</i> ‘to steal {x} from {y}’	<i>baxú</i> ‘to write {x}’ <i>’ín</i> ‘to carry {x}’ <i>moⁿthóⁿ</i> ‘to steal {x}’
<i>ígi-</i>			
BEN	benefactive- possessive	<i>ígi</i> <i>’ín</i> ‘to carry {y’s thing} for {y}’	<i>’ín</i> ‘to carry {x}’
<i>í-</i>			
INS	instrumental	<i>í</i> <i>bat^he</i> ‘to sew {x} with {y}’	<i>bat^hé</i> ‘to sew {x}’
AD	adessive	<i>í</i> <i>gthiⁿ</i> ‘to sit by {x}’	<i>gthiⁿ</i> ‘to sit’
MOT	motive	<i>í</i> <i>noⁿshtoⁿ</i> ‘to stop because of {x}’	<i>noⁿshtóⁿ</i> ‘to stop’
<i>á-</i>			
SUPESS	superessive (‘on’)	<i>á</i> <i>gthiⁿ</i> ‘to sit on {x}’; ‘to ride {x}’	<i>gthiⁿ</i> ‘to sit’
<i>u-</i>			
INESS	inessive (‘in’)	<i>u</i> <i>bé^hoⁿ</i> ‘to wrap {x} in {y}’	<i>bé^hoⁿ</i> ‘to fold up {x}’

Table 2: Example of verbs derived with locative and instrumental applicative

prefixes				
	Base verb		Applied verb	Meaning
	<i>báaze</i>	‘to scare off {x}’	<i>úbáaze</i>	‘to scare off {x} <u>into</u> {y}’ illative
	<i>bat^hé</i>	‘to sew {x}’	<i>íbat^he</i>	‘to sew {x} <u>with</u> {y}’ instrumental
	<i>bét^hoⁿ</i>	‘to fold up {x}’	<i>úbét^hoⁿ</i>	‘to wrap {x} <u>inside</u> {y}’ inessive
	<i>bibtháska</i>	‘to press flat {x}’	<i>íbibthaska</i>	‘to press flat {x} <u>with</u> {y}’ instrumental
	<i>bistá</i>	‘to press down {x}’	<i>íbista</i>	‘to press {x} <u>against</u> {y}’ adessive
	<i>gthíⁿ</i>	‘to sit’	<i>ágthiⁿ</i>	‘to sit <u>on</u> {x}’ superessive
	<i>gthíⁿ</i>	‘to sit’	<i>ígthiⁿ</i>	‘to sit <u>by/near</u> {x}’ adessive
	<i>gthíⁿ</i>	‘to sit’	<i>úgthíⁿ</i>	‘to sit <u>in</u> {x}’ inessive
	<i>hithá</i>	‘to bathe’	<i>íhitha</i>	‘to bathe <u>by means of</u> {x}’ instrumental
	<i>kúhe</i>	‘to be apprehensive’	<i>íkuhe</i>	‘to be apprehensive <u>on</u> account of {x}’ motive
	<i>nóⁿge</i>	‘to run’	<i>ánoⁿge</i>	‘to run <u>on</u> {x}’ superessive
	<i>noⁿshtóⁿ</i>	‘to stop’	<i>ínoⁿshtoⁿ</i>	‘to stop <u>because of</u> {x}’ motive
	<i>noⁿzhíⁿ</i>	‘to rain’	<i>ánoⁿzhiⁿ</i>	‘to rain <u>on</u> {x}’ superessive
	<i>noⁿzhíⁿ</i>	‘to stand’	<i>ínoⁿzhiⁿ</i>	‘to stand <u>at</u> {x}’ adessive
	<i>noⁿzhíⁿ</i>	‘to stand’	<i>únóⁿzhiⁿ</i>	‘to stand <u>in</u> {x}’ inessive
	<i>shkóⁿ</i>	‘to move’	<i>íshkoⁿ</i>	‘to move <u>near/to</u> {x}’ adessive + movement
	<i>thizé</i>	‘to take {x}’	<i>íthizé</i>	‘to take {x} <u>with</u> {y}’ instrumental
	<i>tí</i>	‘to camp’	<i>útí</i>	‘to camp <u>in</u> {x}’ inessive
	<i>’ú</i>	‘to wound {x}’	<i>í’u</i>	‘to wound {x} <u>with</u> {y}’ instrumental

Table 3: Some Umóⁿhoⁿ postpositions

<i>ámusta</i>	above	<i>etát^hoⁿ</i>	from
<i>móⁿt^he</i>	inside	<i>égaxe</i>	around
<i>-(a)di</i>	at, in	<i>ágaha</i>	on top of
<i>-(a)ta</i>	to, towards	<i>gazóⁿ</i>	among

Table 4: Applied phrase/argument in 130 examples (see appendix)

Expressed as a syntactic constituent	87
as NP	72
as PP (with <i>-(a)ta</i> or <i>-(a)di</i>)	8
as CL	5
unsure	2
Morphologically encoded	13
Not overtly expressed in the clause	30
Total	130

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- ii Abbreviations and symbols used in this paper and in the appendix are the following: {x}, {y}, {(text)} verb complements; (1)...(2) first and second part of a discontinuous stem; 1,2,3 1st, 2nd, 3rd person; A agentive person marker; A.OBJ applied object; AD adessive; ALL allative; AP applicative; AUG augmentative; B benefactive person marker; BEN benefactive; C1, C3, C9, C11 lexical class 1, 3, 9, 11; CL clause; COMIT comitative; CONT continuous; D dative person marker; DECL declarative; DEF definite; DET determiner; DEM demonstrative; ERG ergative; EVID evidential; F feminine; FUT future; FV final vowel; HAB habitual; HORIZ horizontal; IFR inferential; IMP imperative; IND indicative; INDEF indefinite; INESS inessive; INF infinitive; INS instrumental; INTENS intensifier; IPFV imperfective; IRR irrealis; LOC locative; M masculine; MOT motive; NEG negation; NMLZ nominalizer; NP Noun phrase; O object; object marker (only for O3PL); OBL oblique; OBV obviative; P patientive person marker; PAST past marker; PERF perfective; PL plural; POSS possessive; PP postpositional phrase; PREV preverb; PX proximate; RC relative clause; REPORT reportative; RND round; S subject; SBJ subject; SG singular; SoA State of Affairs; SS same subject; STD standing; SUPRESS superessive; TEMP extreme temperature; TR transitive; V verb; VERT vertical; WALS The World Atlas of Language Structures.
- iii The Umó^hoⁿ Tribe is very close to another Tribe that speaks the same language with some variants: the Paⁿka (“Ponca” in English). As a result, their language is sometimes called “Omaha-Ponca” in the literature.
- iv The basic SOV order was reconstructed in Proto-Siouan (Rankin et al. 1998). Umó^hoⁿ and at least a few other Siouan languages regularly have post-verbal arguments. The post-verbal position is often used for non-contrastive entities at the center of attention (Gordon 2007, 2016).

- v The complex prefix *ithá-*, which corresponds to the association of *í-* with *á-*, with the appearance of an epenthetic *-th-* (/ð/), may be considered a sixth applicative marker. See Marsault (2021:340).
- vi The term “dative” is generally used to refer to the overt marking of arguments which are not perceived as direct objects, such as goals, recipients, experiencers, beneficiaries, maleficiaries, etc. The locus of the dative marking, however, varies depending on the language typological features. In the Greco-Latin grammatical tradition, the dative is a nominal case, and it remains used in this way in the description of languages which have declensions; typically, the dependent marking languages. Conversely, in head marking languages, the term “dative” regularly designates a verbal affix, encoding on the verb a goal, recipient, experiencer, etc. This is the case in Siouan languages, but also in West-Caucasian languages (among others), where the term “dative” is also used in reference to an applicative prefix (e.g., Arkadiev & Testelets 2019).
- vii Applicative prefixes are considered derivational prefixes first because, as just mentioned, they actually modify the number of participants involved in the predicate. Secondly, all the affixes but the benefactive-possessive show some degree of demotivation in particular lexical units, as will be shown in 4.4 for the locative and instrumental prefixes. The lack of semantic compositionality is specific to derivation (among others, see Haspelmath & Sims 2010 [2002], 90).
- viii I know that many more materials, both oral and written, are gathered by community culture and language centers, and are meant to be used for community-driven documentation projects.
- ix A detailed semantic study of verbs containing locative and instrumental prefixes is necessary to better demarcate the applicative constructions from non-applicative derivations, in which the prefixes show various degrees of semantic demotivation. (A rough outline of such a study is exposed in Marsault (2021:364–70).) Meanwhile, some verbs with a locative/instrumental prefix and a counterpart without it were excluded from the dataset because the valency-increasing value of the prefix was not clear. One of them is the verb *ubásno*, attested in a sentence with the meaning ‘to plug {x} in’ (Saunsoci & Eschenberg 2016:152). It is derived from the verb *basno*, defined as ‘to push a stick through {meat} to roast’ (Dorsey, n.d.). Other verbs were excluded from the dataset since, despite apparently having an applied object, they had no non-applied counterpart (see several examples in 4.4). Nevertheless, four verbs were included in the dataset despite not having an attested non-applied counterpart. This is because their presumed non-applied counterpart matches common derivational rules of Umó^hoⁿ. For instance, many transitive Umó^hoⁿ verbs are composed of an instrumental prefix (see Mithun 2015) like *bi-* ‘by pressing’ or *ba-* ‘by pushing’ and an unattested root. Thus, **baxón* ‘to push {x}’ and **bit^hoⁿ* ‘to press {x}’ are semantically compositional

and are transitive as predicted, so the applied verbs *ubáxoⁿ* and *ubít^hoⁿ* are included in the dataset.

- x The appendix is downloadable at the following link: **includelink**.
- xi The plurality of the applied object in (5) is understood from the article *k^he* for horizontal entities, which suggests a line of teepees.
- xii The underlying sequence *wa-u-* reduces to stressed *ú-*.
- xiii The impossibility for a language to index two objects on the verb does not prevent it from being analyzed as having a double-object construction, anyway. This is the case, for instance, of of Jamul Tiipai (Miller 2001), a Cochimi-Yuman language of north-western Mexico classified as having double-object constructions in Haspelmath (2013). Miller (2001:204) clearly states that only one object of ditransitive verbs is indexed at a time, but this can be either the patient or the goal/source. An animacy hierarchy determines which object is indexed.
- xiv The prefix *wa-* has several functions, among which antipassive and nominalizer, which are difficult to distinguish in some contexts. Here, *wa-* could be analyzed as an antipassive marker deleting the reference to a specific base object, leaving the applied object alone. Note that however we analyze *wa-* here, these examples illustrate a prevalence of the applied object on the base object.
- xv A single example in the available corpora corresponds to a possible periphrastic expression of the instrument, but its structure is somewhat obscure. In Dorsey (1890:507, line 7), the sequence *noⁿbé tóⁿ* ‘have hands’ seems to be used as an expression of the instrument; the translation of the sentence is “He went home after telling us to work the land with our hands”.
- xvi Hopper & Traugott use the term “subordination” for the third case, in accordance with its traditional definition on the grounds of morphosyntactic criteria (Cristofaro 2003:1).
- xvii Because they share common morphological features and have similar semantics, the prefixes *á-*, *í-*, *u-* and their cognates in other Siouan languages are often referred to as a single group. They are commonly called “locatives” (e.g. Rankin et al. 1998), a term which unfortunately excludes the instrumental function of *í-*. They are called “oblique prefixes” in Koontz’s works (e.g. Koontz 2001), a term used in Marsault (2021) as well. Other Siouanists have called them “adverbials” or “preverbs”, as reported in Helmbrecht (2006).
- xviii The exact categorization of demonstratives is not clear yet, since they can be used alone or combined with nouns and/or definite articles. The unit *é* ‘that’ illustrated in (31) is never used in combination with a noun or a definite article though, which suggests that it is functionally

equivalent to an NP.

- xix In *ugípaaze*, the possessive prefix *gi(g)-* provokes the devoicing of the following /b/.
- xx The plurality of the applied object in (32) is understood from the article *k^he* for horizontal entities, which suggests a line of teepees.
- xxi The distinction between a “peripheral argument” included in the verb valency frame, and an adjunct which is not, is often tricky. For instance, what is the status of “on the sofa” in “She is sitting on the sofa”? This question is not addressed here, but see Haspelmath & Hartmann (2015), which discuss this particular example; Chomsky (1965:101); Creissels (2006a); and Dugas (2001) about French, among many others.
- xxii I am thankful to Johannes Helmbrecht for formulating this rule.
- xxiii In (41), the consonant *th* ([ð]) is epenthetic in the sequence *ithá-*.
- xxiv See Huddleston & Pullum (2002:1011–14) for a discussion on the distinction between prepositions and subordinating conjunctions in English.
- xxv The capital A signals that the final vowel undergoes Ablaut: it changes to /e/ in some contexts.
- xxvi The author specifies that Baba ‘Father’ “belong[s] to the singular 1a class but control[s] concords in the plural 2a class to indicate respect.” (p. 94)
- xxvii Guillaume Jacques (p.c.) believes that the simplest and commonest way to express a motive of fear in a clause in Japhug is the paratactic construction with no overt subordination link, such as “he came, and I am afraid”. (See §4.3, and especially (28).)
- xxviii Among the sources cited by Peterson for the languages he reports to have ‘circumstantial’ applicatives, the following have been checked: Mchombo (2004) for Chichewa, Gerds (1988) for Halkomelem, Blake (1979) for Kalkatungu, Lamoureaux (2004) for Maasai, Watters (1988) for Tepehua, Donohue (1999) for Tukang Besi, Fortescue (1984) for West Greenlandic, and Engel & Allhiser de Engel (1987) for Zoque (for which no motive applicative was found). Swift (1988) for Caquinte could not be checked.
- xxix See Pacchiarotti (2020:§2.4) for a presentation and comparison of definitions of applicative constructions by eight scholars.

Unusual properties of applicative constructions in Umóⁿhoⁿ

Appendix: Dataset

The applicative constructions are numbered from n°1 to n°130; they are ordered by the alphabetical order of the base verbs (penultimate column), in order to compare the different applied verbs derived from the same base (for instance, *íbet^hoⁿ* and *ubét^hoⁿ*).

The table is divided in three vertical parts:

- (1) line number; applicative prefix; applied verb and its category;
- (2) example sentence with its gloss, free translation and source; syntactic constituent forming the applicative object; comments;
- (3) corresponding base verb and its category.

The verb categories are the following, in alphabetical order: bi-s (bivalent stative); dtr (ditransitive – trivalent); imp (impersonal); intr-a (intransitive active); intr-s (intransitive stative); tr (transitive).

The examples are provided in the fifth column (the first column of the second part). The glosses are sometimes simplified for ease of exposition; especially the definite articles which are simply glossed “the” (plus one grammatical feature when it is relevant in the example). For a comprehensive description of definite articles in Umóⁿhoⁿ and their semantic content, see Eschenberg (2005) and Marsault (2021:§2.4.3). The free translations of the examples are from the original sources unless specified.

Comments are signaled by *** in the relevant cell, and are listed below with the line number.

- l. 4-5, *ugípaaze*. In this verb, the possessive prefix *gi(g)-* provokes the devoicing of the following /b/.
- l. 12, *ibaxap^hi*. The example is taken from a narrative with a personified awl. “Him” in Dorsey’s free translation refers to the awl.
- l. 43, *ígaxe*. This example has a generic third person plural subject. It is translated by Dorsey as a passive construction in English. (See §4.2 of the paper for a presentation of clauses interpreted as passive.)
- l. 99, *pedíshkóⁿ*. The base verb *shkóⁿ* means “to move” or “to act” and is an active verb. Why the applied verb becomes stative and takes the meaning “to be warmed by the fire” remains unclear to present. Note that in this example, the incorporated applied argument, *péde* “fire” can be interpreted both as an instrument and as an adessive location.
- l. 103, *ít’e*. The word *waxpáni* is usually found in a predicative function (as a verb). In this example however, it is considered a noun due to the lack of person marker. Compare with l. 101.
- l. 105, *íthize*. Note the unusual place of the accent, which is expected on the prefix.
- l. 113-116, *uthúhe*. The base verb *uhé* means ‘to follow {a trail}’, with an object which is always inanimate. By contrast, *uthúhe* has an animate object. It can be defined as ‘to follow {someone} in {a trail}’, ‘to follow {x’s trail}’, even maybe ‘to follow {a trail} on account of {a person}’ (= his/her trail). I consider that the animate object is the applied object.
- l. 117, *uthúhoⁿ*. The word *égoⁿ* has several functions. In this example, it acts as a stative verb modifying the noun, meaning “be like, similar to, a sort of”.
- l. 119, *uthúk^hie*. The presence of the prefix *wa-* on this verb is unexplained, since it is neither a O3PL marker nor an antipassive marker. It could mark some sort of aspect. (See Marsault 2021:393 ff.)

Abbreviations used in this appendix

{x}, {y}, {(text)} verb complements; 1,2,3 1st, 2nd, 3rd person; A agentive person marker; AD adessive; ALL allative; ANTIP antipassive; AP applicative; B benefactive person marker; bi-s bivalent stative; Cat. category; CL clause; COMP complementizer; D dative person marker; DECL declarative; DEF definite; DEM demonstrative; dtr ditransitive; EVID evidential; F feminine; HAB habitual; HORIZ horizontal; IMP imperative; imp impersonal; INESS inessive; INS instrumental; INTENS intensifier; intr-a intransitive active verb; intr-s intransitive stative verb; IRR irrealis; LOC locative; M masculine; MOT motive; Nb number; MORPH morphologically encoded; NEG negation; NP Noun phrase; O object marker (only for O3PL); OBV obviative; P patientive person marker; PAST past marker; Pf prefix; PL plural; POSS possessive; PP postpositional phrase; PX proximate; Q question; REDUP reduplication; REPORT reportative; SG singular; SUPRESS superessive; tr transitive; VOC vocative.

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Nb	Pf	Verb	Cat.	Example	Applied argument	Comment	Base verb ↓	Cat.
1	í-	ithábagtha to draw back because of {x} tr		{ushko ⁿ wi ⁿ } ith-ashpagtha ego ⁿ , {deed one} AP:MOT-A2.draw.back as <i>because you are ashamed on account of an act (which you have done).</i> (Dorsey n.d.)	NP		ábagthá to hesitate or draw back	intr-a
2	í-	ithágaxade to cover {x} with {y} dtr		Wahí ge {waiíⁿ} ith-ágaxade ihéo ⁿ thá-a bone the.PL {robe} AP:INS-cover P1SG.lay.down-IMP.F <i>Lay down my bones, and cover them with a robe.</i> (Dorsey 1890: 278.16)	NP		ágaxade to cover {x}	tr
3	u-	ubáaze to scare {x} into {y} dtr		Thíxthe égih ithá-biamá, [ú-baaze] canes headlong depart-REPORT, [AP:INESS-scare] <i>They were scared into the canes</i> (Dorsey 1890: 403.9)	∅	Introduced in the preceding clause	báaze to scare off {x}	tr
4	u-	ugípaaze *** to scare {x} into {x's own place} dtr		{tíi thoⁿ-tá} shi ú-gí-paazá-biamá. {village the-ALL} again AP:INESS.O3PL-POSS-scare-REPORT <i>The Omahas scared them again into their village.</i> (Dorsey 1890: 403.10)	PP	PP introduced by -ta	báaze to scare off {x}	tr
5	u-	ugípaaze *** to scare {x} into {x's own place} dtr		{Moⁿshóⁿde} u-gí-paazá-biamá {den} AP:INESS.O3PL-POSS-scare-REPORT <i>They scared him into his burrow.</i> (Dorsey 1890: 36.10)	NP		báaze to scare off {x}	tr
6	u-	ubáaze to scare {x} into {y} dtr		{Ní k^he-ta} ú-baazá-biamá. {water the-ALL} AP:INESS.O3PL-scare-REPORT <i>They scared them into the water.</i> (Dorsey 1890: 412.5)	PP	PP introduced by -ta	báaze to scare off {x}	tr
7	í-	íbashethoⁿ to pay {a debt} with {x} dtr		{wagáxe the} {é dúba} í-shpashéthoⁿ-i {debt the} {DEM some} AP:INS-A2.pay-PX <i>whether you will cancel part of the debt with (this work on) them</i> (Dorsey 1890: 656.2)	∅	Previously introduced in the story	bashéthoⁿ to pay {a debt}	tr
8	á-	ábasoⁿde to push {x} on {y} dtr		{tóⁿde} á-basóⁿda-bi kí {ground} AP:SUPRESS-push-PX when Literally: <i>when he pressed him on the ground</i> (Dorsey 1890: 584.11)	NP		basóⁿde moⁿthiⁿ to walk through a thicket, shaking a bush once by pushing against it	intr-a
9	u-	ubádoⁿdoⁿ to thrust {x} one after another against/in(?) {y} dtr		shóⁿxti síhi k^he {kéha} u-bádoⁿdóⁿ-biamá. at.once feet the {turtle.shell} AP:INESS-thrust.REDUP-REPORT <i>When he had swallowed it, immediately he took the feet and thrust them (in their places) against the turtle-shell.</i> Dorsey (1890, 63.1 / Páthi ⁿ -no ⁿ pázhi)	NP		badóⁿ to push {x}	tr
10	u-	ugípadóⁿ to thrust {x} back into {(x's y)} dtr		wahí ge {é-di} u-gí-padóⁿ-bi óⁿ, ... bone the.PL {DEM-LOC} AP:INESS-POSS-push.back-PX having ... <i>he pushed the bones back into their former places ...</i> Dorsey (1890, 564.17-8)	PP	PP introduced by -dí	badóⁿ to push {x}	tr
11	í-	íbat^he to sew {x} with {y} dtr		í-bathá-biamá. AP:INS-sew-REPORT <i>She sewed them with it.</i> (Dorsey 1890: 262.8)	∅	Previously introduced in the story	bat^he to sew {x}	tr
12	í-	íbaxap^hi to pierce {x} with {y} dtr		Noⁿbéhi the í-baxap^hi-biamá. finger the AP:INS-pierce-REPORT <i>She pierced the fingers with him. ***</i> (Dorsey 1890: 262.9)	∅	Previously introduced in the story	baxap^hi to pierce {x} (by pushing)	tr
13	á-	ábaxu to write {x} on {y} dtr		{Wagthábaze} á-paxu thé-k^he {paper} AP:SUPRESS-A1SG.write DEM-the <i>what I've written down on this paper for me</i> (OLIT-UNL 2018: 579)	NP	(Relative Clause)	baxú to write {x}	tr
14	u-	ubáxoⁿ to push {x} in/through {y} dtr		{tethéze pasí thoⁿ} móⁿde k^he u-báxoⁿ {buffalo.tongue tip the} bow the AP:INESS-push <i>used to thrust one end of their bows through the tips of the buffalo tongues</i> (Dorsey 1890: 469.5)	NP		*baxóⁿ expected : to push {x}	tr
15	u-	ubáxoⁿ to push {x} in/through {y} dtr		{moⁿshóⁿde} u-báxoⁿ {den} AP:INESS-push Dictionary definition: <i>to push a stick, etc, into a cave or den</i> (Dorsey n.d.)	NP		*baxóⁿ expected : to push {x}	tr

16	á-	ábazu to point at {x}	tr	[á-bazu] í-gaxe-hnó ⁿ -biamá. AP:SUPRESS-point AP:INS-make-HAB-REPORT <i>he used to point at it, and thus obtain it by means of the iron.</i> (Dorsey 1890: 347.20)	∅	Introduced in the preceding clause	bazú to point (with finger) (?) (OLIT-UNL 2018)	intr-a (?)
17	á-	ábazu to point at {x}	tr	{Wazhínga zhi ⁿ áxchi thi ⁿ k ^h é-di} á-bazú-biamá. {bird very.small the-ALL} AP:SUPRESS-point-REPORT ... pointing at a very small bird that was sitting. (Dorsey 1890: 109.2)	PP	PP introduced by -di	bazú to point (with finger) (?) (OLIT-UNL 2018)	intr-a (?)
18	í-	íbet ^h o ⁿ to go around {x}	tr	{[The-k ^h e] {wathíza k ^h e} íbet ^h o ⁿ athái t ^h e]} í-bet ^h o ⁿ athái. {DEM-the} {washing the} AP:AD-fold go-PX EVID] AP:AD-roll.up go-PX <i>He went around the washing. He went around it.</i> (Rudin et al. 1989-92: Ghost Story / Mary Clay)	NP	Presence of an apposition	bét ^h o ⁿ to roll up {x}	tr
19	í-	íbet ^h o ⁿ to go around {x}	tr	The-k ^h e wathíza k ^h e íbet ^h o ⁿ athái t ^h e [-íbet ^h o ⁿ athái]. DEM-the washing the AP:AD-fold go-PX EVID [AP:AD-roll go-PX] <i>He went around the washing. He went around it.</i> (Rudin et al. 1989-92: Ghost Story / Mary Clay)	∅	Introduced in the preceding clause	bét ^h o ⁿ to roll up {x}	tr
20	í-	íbet ^h o ⁿ to go around {x}	tr	í-bet ^h o ⁿ agthá-biamá. AP:AD-roll go.back-REPORT <i>He passed around (avoided her) and went homeward.</i> (Dorsey 1890: 21.6)	∅	Previously introduced in the story	bét ^h o ⁿ to roll up {x}	tr
21	ithá-	ithábet ^h o ⁿ to wrap {x} around {y}	dtr	ásku {no ⁿ bé} ithá-bet ^h o ⁿ thó ⁿ -biamá. scalp.lock {hand} AP:AROUND-roll.up.REDUP-REPORT <i>he wrapped his elder brother's scalplock round and round his hand.</i> (Dorsey 1890: 210.6)	NP		bét ^h o ⁿ to roll up {x}	tr
22	ithá-	ithábet ^h o ⁿ to wrap {x} around {y}	dtr	{tehúxthabe} ithá-bet ^h o ⁿ (Relative Clause) {fat.on.stomach} AP:AROUND-roll.up <i>the fat wrapped around the stomach</i> (Dorsey 1890: 62.7)	NP		bét ^h o ⁿ to roll up {x}	tr
23	u-	ubét ^h o ⁿ to wrap {x} in {x}	dtr	Shíngazhínga k ^h e u-bet ^h o ⁿ -a child the AP:INESS-roll.up-IMP.F <i>Wrap the baby (in a blanket).</i> (Eschenberg 2005: 53 / M.W. Cayou)	∅	Implicit (not previously introduced)	bét ^h o ⁿ to roll up {x}	tr
24	u-	ubét ^h o ⁿ to wrap {x} in {x}	dtr	shíé k ^h e {wai ⁿ } u-shpét ^h o ⁿ tat ^h e baby the {blanket} AP:INESS-A2.roll.up IRR <i>you should wrap the baby in a blanket.</i> (OLIT-UNL 2018: 18.4)	NP		bét ^h o ⁿ to roll up {x}	tr
25	u-	ubét ^h o ⁿ to wrap {x} in {x}	dtr	áma k ^h e {hahí ⁿ o ⁿ } u-bét ^h o ⁿ -bi egó ⁿ , one(contrastive) the {skin.with.hair} AP:INESS-roll.up-REPORT as <i>Having wrapped one in a skin with the hair on</i> (Dorsey 1890: 208.1)	NP		bét ^h o ⁿ to roll up {x}	tr
26	í-	íbibtháska to flatten {x} with {y}	dtr	Wamóske thó ⁿ {no ⁿ bé t ^h é} í-pibthaska támi ⁿ k ^h e. dough the {hand the} AP:INS-A1SG.flatten IRR.1SG <i>I will press the dough with my hand until it is flat.</i> (OLCDP 2002: 1.25)	NP		bibtháska to flatten {x} by pressing	tr
27	í-	íbika to rub {x} on/with {y}	dtr	{Mo ⁿ thí ⁿ k} {índé tho ⁿ } í-biká-biamá kéto ⁿ ga ak ^h á. {earth} {face the} AP:INS-wipe-REPORT turtle the <i>He [=the Turtle] rubbed earth on his face.</i> (Dorsey 1890: 257.1)	NP	Unclear which one is the applicative object	biká to wipe {x}	tr
28	í-	íbimo ⁿ to mix {x} with {y}	dtr	{No ⁿ bé wi ⁿ ó-xji} í-pimo ⁿ . {hand one-INTENS} AP:INS-A1SG.knead <i>I mix [it] with one hand.</i> (OLCDP 2002: 1.12)	NP		bimó ⁿ to knead {x}	tr
29	á-	ábisnathe to spread {x} on {y}	dtr	Bawégthi á-shpísnathe te, {wamóske-náxude k ^h e} butter AP:SUPRESS-A2.spread.grease IRR {bread-toasted the} <i>You might butter the toast.</i> (OLIT-UNL 2018: 18.6)	NP		*bisnáthe expected: to put grease on {x} by pressing/rubbing snáthe: to put grease on {x}	tr
30	í-	íbista to press {x} against {y}	dtr	ki {nazhíha} {xáde} í-bistá-xti ak ^h í-biamá. and {hair} {grass} AP:AD-press-INTENS arrive.back-REPORT <i>And she reached home with grass sticking in her hair.</i> (Dorsey 1890: 287.2)	NP	Unclear which one is the applicative object	bistá to press down {x}	tr
31	í-	íbista to press {x} against {y}	dtr	í-bistá-biamá. AP:AD-press-REPORT <i>and [the youth] pressed it against him.</i> (Dorsey 1890: 195.17)	∅	Previously introduced in the story	bistá to press down {x}	tr

32	í-	íbista to press {x} against {y}	dtr	Niníba nákade ki [í-bistá-biamá {i'ngshó' i'nsh'áge áma thi'k'é)]. pipe hot when [AP:AD-press they.say {Thunder old.man other the}] <i>When the pipe was hot, he held it against the other aged Thunder-man.</i> (Dorsey 1890: 195.5)	NP		bistá to press down {x}	tr
33	í-	íbista to press {x} against {y}	dtr	{Mó'ze názhide thé-k'he} {ú the} í-pistásta ki {iron red.hot DEM-the} {wound the} AP:AD-A1SG.press.REDUP when <i>When I press these heated irons repeatedly against the wounds...</i> (Dorsey 1890: 231.19)	NP	Unclear which one is the applicative object	bistá to press down {x}	tr
34	u-	ubíthoⁿ to press down {x} in {y}	dtr	égithe {wamí} u-wí-píthoⁿ té beware {blood} AP:INESS-A1SG/P2-press IRR <i>else I will press you down in the blood</i> (Dorsey 1890: 23.13)	NP		*bíthoⁿ expected: to press {x} áthoⁿ : to tread on {x} linked to the article thoⁿ "standing" ?	tr
35	u-	ubíthoⁿ to press down {x} in {y}	dtr	{wamí} u-bíthoⁿtóⁿ-biamá Mo'ch'ú ak'há {blood} AP:INESS-press.REDUP-REPORT Grizzly.bear the <i>he (Grizzly Bear) pressed him repeatedly in the blood.</i> (Dorsey 1890: 44.9)	NP		*bíthoⁿ expected: to press {x} áthoⁿ : to tread on {x} linked to the article thoⁿ "standing" ?	tr
36	á-	ábize to dry on {x}	tr	wáhaha thé óⁿ-biza ha. clothes the AP:SUPRESS.P1SG-dry DECL.M <i>My clothing has dried on me.</i> (Dorsey n.d.)	MORPH	Indexed on the verb (P1SG)	bíze to dry, to be dry	intr-s
37	í-	ígahi to mix {x} with {y}	dtr	{Wasézhide} í-gahí-i ki {red.clay} AP:AD-stir-PX when <i>These [fat pieces of meat] he mixed with red clay</i> (Dorsey 1890: 270.9)	NP		gahí to stir {x}	tr
38	á-	ágashoⁿ to spill {x} on {y}	dtr	Mo'kó'sabe nákade thé {i'ndádi thi'k'he} á-gashoⁿ ak'há (Relative Clause) coffee hot the {my.father the} AP:SUPRESS-spill the <i>the one who spilled hot coffee on Dad</i> (OLIT-UNL 2018: 18.5)	NP		gashóⁿ to knock {x} out of joint	tr
39	í-	ígaxe to make {x} with {y}; to value {x} as {y}	dtr	á-bazu [í-gaxe-hnó ⁿ -biamá] AP:SUPRESS-point [AP:INS-make-HAB-REPORT] <i>he used to point at it, and thus obtain it by means of the iron.</i> (Dorsey 1890: 347.20)	∅	Previously introduced in the story	gáxe to make {x}	tr
40	í-	ígaxe to make {x} with {y}; to value {x} as {y}	dtr	{Tanúkagaxthíxthi} {waníde} í-páxe támi'k'he. {ground.meat} {gravy} AP:INS-A1SG.make IRR.1SG <i>I will make gravy with hamburger.</i> (OLCDP 2002: 2.1)	NP	Unclear which one is the applicative object	gáxe to make {x}	tr
41	í-	ígaxe to make {x} with {y}; to value {x} as {y}	dtr	tanúka thé {mó'zeska nó'ba} í-gaxe meat the {money two} AP:INS-make <i>fresh venison, which I valued at two dollars</i> (Dorsey 1890: 438.18)	NP		gáxe to make {x}	tr
42	í-	ígaxe to make {x} with {y}; to value {x} as {y}	dtr	{dádoⁿ} ígaxe údoⁿ ha. {what} AP:INS-make good DECL.M <i>It is good for making something (out of it)</i> (Dorsey n.d.)	∅	Previously introduced in the story	gáxe to make {x}	tr
43	í-	ígaxe to make {x} with {y}; to value {x} as {y}	dtr	Níkagahi í-gaxa-i chief AP:INS-make-PL <i>He is made a chief by means of it (?) ***</i> (Dorsey n.d.)	∅	Previously introduced in the story	gáxe to make {x}	tr
44	í-	ígaxixixe to crush {x} many times with {x}	dtr	{mó'zepe} í-gaxixixá-bi egóⁿ {ax} AP:INS-crush.REDUP as <i>And crushing in her head many times with an ax...</i> (Dorsey 1890: 236.10)	NP		gaxixe to crush {x}	tr
45	í-	ígaxthi to kill {x} with {y}	dtr	wíⁿ {wathé} í-gaxthí amá ikóⁿ thi'k'é. one {skirt} AP:INS-kill EVID grandmother the <i>The old woman barely killed one by hitting it with her skirt.</i> (Dorsey 1890: 578.11)	NP		gaxthí to kill {x}	tr
46	á-	ágaxtoⁿ to pour {water} on {y}	dtr	ní á-gaxtoⁿ gthíⁿ-biamá. water AP:SUPRESS-pour sit-REPORT <i>he sat pouring water on them [red hot stones]</i> (Dorsey 1890: 249.16)	∅	Introduced in preceding clause	gaxtóⁿ to pour out {x}	tr
47	í-	ígíkh'u to invite {x} to {y}	dtr	{tanúka} í-thi-k'h'u (Relative Clause) {meat} AP:INS-D2-invite <i>... the fresh meat of which you are invited to partake</i> (Dorsey 1890: 294.7)	NP		gíkh'u to invite {x}	tr

48	u-	uginoⁿskabe to make {x} stick on {one's y} with the feet	dtr	{Waii ⁿ tho ⁿ } i ⁿ gthé u-gí-no ⁿ -skábe tho ⁿ amá. {robe the} feaces AP:INESS-POSS-INS:feet-sticky PAST(?) EVID <i>He soiled the robe with the faeces on his feet.</i> (Dorsey 1890: 39.12)	NP		ginoⁿskabe expected: to make {x} sticky with the feet ? skaskábe : to be sticky	tr
49	í-	ígíóⁿtha to abandon {one's own x} by means of {y}	dtr	izháza gáthiⁿ ith-á-gí-óⁿbtha name this AP:INS-A1SG-POSS-A1sg.abandon <i>I,...) abandon [my name] by means of the offering which I now place on the pile</i> (Dorsey n.d.)	Ø	Implicit ? (isolated example: no context available)	gíóⁿtha to abandon {one's own x}	tr
50	í-	noⁿde ígipiazhi to be sad because of {x}	bi-s	{Ní ⁿ kashi ⁿ ga ut ^h ó ⁿ nahá-xti mo ⁿ ní ⁿ } nó ⁿ de i ⁿ thi ⁿ -pi-mázhi, ... {person solitary-INTENS A2.walk} heart D1SG-good-1SG.NEG <i>My heart is made sad by your leading such a solitary life.</i> (Dorsey 1890: 651.3)	CL? Ø?	(unsure)	noⁿde gípiazhi to be sad (= to be/feel bad at the heart)	intr-s
51	á-	ágthiⁿ to sit on {x}; to mount {x}	tr	{Zhó ⁿ ágasta ágaha the} ágthi ⁿ , i ⁿ gthó ⁿ ge thi ⁿ k ^h e. {wood pile top the} AP:SUPESS-sit cat the <i>The cat sat on top of the pile of wood.</i> (OLIT-UNL 2018: 18.5)	NP		gthiⁿ to sit	intr-a
52	á-	ágthiⁿ to sit on {x}; to mount {x}	tr	Wés'a ak^há {nóⁿka} á-gthiⁿ ithóⁿ-biamá. snake the {back} AP:SUPESS-sit suddenly-REPORT <i>The Snake took hold of him [the turtle].</i> (Dorsey 1890: 282.12)	NP		gthiⁿ to sit	intr-a
53	á-	ágthiⁿ to sit on {x}; to mount {x}	tr	{shó ⁿ ge hí ⁿ ská-xti} á-a-gthi ⁿ {horse hair white-INTENS} AP:SUPESS-A1SG-sit <i>riding a horse with very white hair</i> (Dorsey 1890: 348.1)	NP		gthiⁿ to sit	intr-a
54	á-	ágthiⁿ to sit on {x}; to mount {x}	tr	{Si ⁿ déha-di} á-gthi ⁿ -ga, ehé; {tail-LOC} AP:SUPESS-sit-IMP.M A1SG.say <i>"Sit behind," said I</i> (Dorsey 1890: 374.7)	PP	PP introduced by -dí	gthiⁿ to sit	intr-a
55	á-	ágthiⁿ to sit on {x}; to mount {x}	tr	wihé wíshi'e {umíⁿzhe thoⁿ hébe} á-gthiⁿ te sister my.sister's.husband {rug the part} AP:SUPESS-sit IRR <i>"Sister, let my sister's husband sit on part of the rug."</i> (Dorsey 1890: 594.4)	NP		gthiⁿ to sit	intr-a
56	í-	ígthiⁿ to sit near/by {x}	tr	Eshóⁿxchi í-tha-gthiⁿ ki near-INTENS AP:AD-A2-sit if <i>If you sat very near them, ...</i> (Dorsey 1890: 268.14)	Ø	Previously introduced in the story	gthiⁿ to sit	intr-a
57	í-	ígthiⁿ to sit near/by {x}	tr	níⁿkashiⁿga eshóⁿ wé-gthiⁿ the. people near P1PL.AP:AD-sit COMP Literally: <i>that the people sit near us</i> Original translation: <i>the proximity of these foreigners</i> (Dorsey 1890: 758.18)	MORPH	Indexed on the verb (P1PL)	gthiⁿ to sit	intr-a
58	u-	ugthiⁿ to sit in {x}	tr	{Uxthúxa} u-gthi ⁿ -de ... {hollow} AP:INESS-sit-as <i>As he sits in the hollow</i> (Dorsey 1890: 249.8)	NP		gthiⁿ to sit	intr-a
59	u-	ugthiⁿ to sit in {x}	tr	waníta {ní} u-gthiⁿ amá animal {water} AP:INESS-sit the.PL <i>the quadrupeds that frequent the water</i> (Dorsey 1890: 563.5)	NP	(Relative Clause)	gthiⁿ to sit	intr-a
60	u-	ugthiⁿ to sit in {x}	tr	kíxaxájoⁿ ak^há {Xithá áhiⁿ k^higthé híⁿ shkúbe thoⁿ} u-gthiⁿ-biamá. wren the.PX {eagle wing beneath feather thick the} AP:INESS-sit-PX.REPORT <i>the Wren got under the thick feathers of the Eagle and sat there as the Eagle flew.</i> (Dorsey 1890: 581.1)	NP		gthiⁿ to sit	intr-a
61	u-	ugthiⁿ to sit in {x}	tr	{xáde búta unáshte} o ⁿ g-ú-gthi ⁿ -í. {grass round left.after.a.fire} A1PL.AP:INESS-sit-PL <i>we sat on a round tract of grass which had not been burnt by the prairie fire.</i> (Dorsey 1890: 456.6)	NP	The NP is a relative clause	gthiⁿ to sit	intr-a
62	á-	ágthiⁿk^hithe to sit {x} on {y}	dtr	{í ⁿ behí ⁿ k ^h é-dí} á-gthi ⁿ -k ^h ithá-biamá. {pillow the-LOC} AP:SUPESS-sit-CAUS-PL.REPORT <i>And they seated Ishinik^he on a pillow.</i> (Dorsey 1890: 552.4)	PP	PP introduced by -dí	gthiⁿk^hithe to make {x} sit	tr
63	í-	íhitha to bathe by means of {x}	tr	níⁿkashiⁿga wíⁿ bthúga-xti í-thi-hítha person one all-INTENS AP:INS-P2-bathe <i>by means of you one person may bathe all over</i> (Dorsey 1890: 234.4)	MORPH	Indexed on the verb (P2)	hithá to bathe	intr-a

64	á-	áho ⁿ to become night on {x}	intr-s	égithe sabázi á-thi-ho ⁿ te ha beware suddenly AP:SUPESS-P2-night IRR DECL.M <i>beware lest night come suddenly on thee</i> (Dorsey n.d.)	MORPH	Indexed on the verb (P2)	hó ⁿ night; to be the night	n / imp
65	í-	ího ⁿ bthe to dream about {x}	tr	{piázi hégazi} ith-á-ho ⁿ bthé ha {bad very} AP:INS-A1SG-dream DECL.M <i>I dreamed about something extremely bad</i> (Dorsey 1890: 17.15)	NP	Headless NP	hó ⁿ bthe to have a dream	intr-a
66	í-	ího ⁿ bthe to dream about {x}	tr	{Níkashi ⁿ ga nó ⁿ ba} wé-ho ⁿ btha-i t ^{he} {person two} AP:INS_O3PL-dream-PX EVID <i>He dreamed about two people</i> (Rudin et al. 1989-92: Ghost Story / Mary Clay)	NP		hó ⁿ bthe to have a dream	intr-a
67	í-	í ⁿ to carry {x} by means of {y}	dtr	téthéze pasí tho ⁿ (...), {mó ⁿ de-kó ⁿ } í ⁿ -hnó ⁿ -i. buffalo.tongue tip the {bow-string} AP:INS-carry-HAB-PL (...) <i>the buffalo tongues, and carry them along by means of the bow-strings</i> (Dorsey 1890: 469.5)	NP		í ⁿ to carry {x}	tr
68	í-	ík ^h o ⁿ to ⁿ to tie {x} to/with {y}	dtr	K ^h agé-ha, {sí ⁿ de k ^h e} {no ⁿ bé t ^{he} } í-wi-k ^h o ⁿ tó ⁿ te há, friend-VOC (tail the) {hand the} AP:INS-A1SG/P2-tie IRR DECL.M <i>My friend, I will tie your hands to his tail</i> (Dorsey 1890: 96.4)	NP	Unclear which one is the applicative object	k ^h o ⁿ to ⁿ to tie {x}	tr
69	í-	ík ^h o ⁿ to ⁿ to tie {x} to/with {y}	dtr	í ⁿ e to ⁿ gá-xti tho ⁿ éde [{síko ⁿ } í-k ^h o ⁿ to ⁿ gthí ⁿ -biamá.] stone large-INTENS the but [{ankle} AP:INS-tie sit-PX.REPORT] <i>The stones were very large, but he was tying them to his ankles.</i> (Dorsey 1890: 329.11)	∅	Introduced in the preceding clause	k ^h o ⁿ to ⁿ to tie {x}	tr
70	í-	ík ^h o ⁿ to ⁿ to tie {x} to/with {y}	dtr	{Házi ⁿ ga} wé-k ^h o ⁿ tó ⁿ -i égo ⁿ , {cord} AP:AD_O3PL-tie-PL as <i>They threw lariats over the horses' heads, and tied their lower jaws.</i> (Dorsey 1890: 442.1)	NP		k ^h o ⁿ to ⁿ to tie {x}	tr
71	í-	íkuhe to be apprehensive because of {x}	tr	shó ⁿ {Wégithe-shtó ⁿ } í-kuhe-hnó ⁿ -biamá still {Beggar} AP:MOT-fear-HAB-PX.REPORT <i>(Though they nicknamed him,) they were always apprehensive on account of The Beggar.</i> (Dorsey 1890: 335.3)	NP	The NP is a nominalized verb used as a proper name	kúhe to feel apprehensive	intr-a
72	í-	íkuhe to be apprehensive because of {x}	tr	ki {pó ⁿ kata né} í-wi-kuhé. and {Ponca A2.go} AP:MOT-A1SG/P2-fear <i>I am apprehensive about your going to the Ponkas.</i> (Dorsey 1890: 651.6)	CL		kúhe to feel apprehensive	intr-a
73	í-	íkuhe to be apprehensive because of {x}	tr	{pási í ⁿ -texi} ith-á-kuhé ha {A1SG drive D1SG-difficult} AP:MOT-A1SG-fear DECL.M <i>It is difficult for me to drive it along, and I am apprehensive on this account.</i> (Dorsey 1890: 755.4)	CL		kúhe to feel apprehensive	intr-a
74	í-	íkuhe to be apprehensive because of {x}	tr	{uxpáthe} ith-á-kuhé ha. {lose} AP:MOT-A1SG-fear DECL.M] <i>I feared that it might get lost.</i> (Dorsey 1891: 120.3)	CL		kúhe to feel apprehensive	intr-a
75	í-	íkuhe to be apprehensive because of {x}	tr	gthí-azhi égo ⁿ , [ith-á-kuhé-go ⁿ] arrive.back-NEG as AP:MOT-A1SG-fear-as <i>As no reply has been received (...) I apprehend unseen trouble.</i> (Dorsey 1890: 723.1)	∅	Introduced in the preceding clause	kúhe to feel apprehensive	intr-a
76	í-	íkuhe to be apprehensive because of {x}	tr	Waxhá zhi ⁿ ga hégazi éta bthé, ki {mo ⁿ thó ⁿ } we-á-kuhe vegetable small a.lot unto A1SG.go and {steal} AP:MOT_O3PL-A1SG-fear <i>I am progressing with the raising of many small vegetables, and I fear lest they should be stolen.</i> (Dorsey 1890: 645.10)	CL		kúhe to feel apprehensive	intr-a
77	í-	íkuhe to be apprehensive because of {x}	tr	{ó ⁿ -gi-nó ⁿ ge} ith-á-kuhé go ⁿ a-ó ⁿ he ha {P1SG-POSS-run} AP:MOT-A1SG-fear as A1SG-flee DECL.M <i>I fled as I feared that he would run over me.</i> (Dorsey 1890: 64.2)	CL		kúhe to feel apprehensive	intr-a
78	í-	ho ⁿ -ímo ⁿ thi ⁿ to walk by night	intr-a	Ho ⁿ -ímo ⁿ thi ⁿ édi athá-biamá. night-AP:AD-walk there go-PL.REPORT <i>They went thither by night.</i> (Dorsey 1890: 402.6)	MORPH	Incorporated to the verb	mo ⁿ thi ⁿ to walk	intr-a
79	í-	íniethe (instrument) to hurt {x}	bi-s	{zhó ⁿ zhi ⁿ ga} o ⁿ thó ⁿ niéthe k ^h e {splinter} P1SG.AP:INS-hurt the <i>the splinter which hurt me</i> (Dorsey 1890: 219.9)	NP	(Relative Clause)	niéthe (bodypart) to be hurt	intr-s

80	á-	ánó ^{ng} e to run over {x}	tr	égo ⁿ kíshte á-wi-nó ^{ng} e támi ⁿ k'he ha," like.this even.if AP:SUPESS-A1SG/P2-run IRR.1SG DECL.M "Even if you think so," said the Coyote, "I will run over you". (Dorsey 1890: 566.8)	MORPH	Indexed on the verb (A1SG/P2)	nó ^{ng} e to run	intr-a
81	á-	ánó ^{ng} e to run over {x}	tr	shaó ⁿ amá á-no ^{ng} e no ^t á-biamá {ní ⁿ kashi ⁿ ga k'he}. Dakotas the.PL AP:SUPESS-run INS:feet-die-PX.REPORT {person the.HORIZ} The Dakotas killed the fallen man by riding over him. (Dorsey 1890: 411.6)	NP		nó ^{ng} e to run	intr-a
82	á-	ánó ^{ng} e to run over {x}	tr	zho ⁿ thino ^{ng} e-'ó ⁿ sagi {mazhó ⁿ tho ⁿ } á-no ^{ng} a-i wagon-swift {land the} AP:SUPESS-run-PL Literally: the train(s) run(s) on the land (Dorsey 1891: 103.1)	NP		nó ^{ng} e to run	intr-a
83	í-	íno ^{ng} pe to fear {x} because of {y}	dtr	o ⁿ thó ⁿ -thanó ⁿ pa-bázhí íthanahí ⁿ a. AP:MOT.P1SG-A2-fear-PX.NEG A2.really.be Q Are ye not truly afraid of me on account of what you have done? (Dorsey 1890: 23.9)	Ø	Implicit (not previously introduced)	nó ^{ng} pe to fear {x}	tr
84	í-	íno ^{ng} pe to fear {x} because of {y}	dtr	Waníta dádo ⁿ t'éwathái ésh ⁿ ewó ⁿ í-no ^{ng} pe-hnó ⁿ 'í-biamá. animal what die-O3PL-CAUS despite AP:MOT-fear-HAB give-PL.REPORT No matter what animals they killed, they always gave them to him, being afraid of him (that is, afraid not to give him the game). (Dorsey 1890: 22.1)	Ø	Implicit (not previously introduced)	nó ^{ng} pe to fear {x}	tr
85	í-	íno ^{ng} shtó ⁿ to stop because {of x}	tr	{Niníba háshi t'hi thó ⁿ } {é} í-no ^{ng} shtó ⁿ -biamá. {pipe at.last arrive the.OBV} {DEM} AP:MOT-stop-PL.REPORT They stopped, owing to the act of him who came afterwards with the pipe. (Dorsey 1890: 400.6)	NP	Presence of an apposition	no ^{ng} shtó ⁿ to stop	intr-a
86	í-	íno ^{ng} shtó ⁿ to stop because {of x}	tr	{é} í-no ^{ng} shtó ⁿ shó ⁿ gaxa-i t'he. {DEM} AP:MOT-stop stop-PL EVID Literally: they ceased because of that. Original free translation: The occurrence mentioned having put a stop to the pursuit, the Dakotas ceased fighting (Dorsey 1890: 407.16)	NP		no ^{ng} shtó ⁿ to stop	intr-a
87	á-	ágino ^{ng} zhí ⁿ to mount {one own's x}	tr	{shó ^{ng} e ázhi} á-gi-no ^{ng} zhí ⁿ {horse different} AP:SUPESS-POSS-stand [he] mounted another horse (Dorsey 1890: 411.11)	NP		no ^{ng} zhí ⁿ to stand	intr-a
88	í-	íno ^{ng} zhi ⁿ to stand with/during {x}	tr	{xagé ishtá ⁿ bthi gó ⁿ } í-no ^{ng} zhí ⁿ -biamá. {cry tears as} AP:AD-stand-PX.REPORT said he, standing crying, with tears in his eyes (Dorsey 1890: 213.1)	NP? CL? (unsure)	Unclear whether or not gó ⁿ is a predicate and the head of the bracketed constituent	no ^{ng} zhí ⁿ to stand	intr-a
89	í-	íno ^{ng} zhi ⁿ to stand with/during {x}	tr	{ubáha-ta} í-no ^{ng} zhi ⁿ {side-LOC} AP:AD-stand he stood at one side of (the thicket) (Dorsey 1890: 36.3)	PP	PP introduced by - ta	no ^{ng} zhí ⁿ to stand	intr-a
90	u-	ugíno ^{ng} zhí ⁿ to stand in {one own's clothes}	tr	{wáthaha ázhi} u-gí-no ^{ng} zhí ⁿ -bi-dé {clothes different} AP:INESS-POSS-stand-PX-while... He put on a different suit, ... (Dorsey 1890: 411.11)	NP		no ^{ng} zhí ⁿ to stand	intr-a
91	u-	unó ^{ng} zhi ⁿ to stand in {x}; to replace {x}	tr	{tizhébe etá t'he} u-nó ^{ng} zhi ⁿ égo ⁿ {door POSS.3 the} AP:INESS-stand as As he stood in his door, (Dorsey 1890: 148.5)	NP		no ^{ng} zhí ⁿ to stand	intr-a
92	á-	áno ^{ng} zhí ⁿ to rain on {x}	tr	O ⁿ -no ^{ng} zhi ⁿ ki, ... AP:SUPESS.P1SG-stand when 'When it rained on me, ...' (Saunsoci & Eschenberg 2016: 63)	MORPH	Indexed on the verb (P1SG)	no ^{ng} zhí ⁿ (impersonal) to rain	imp
93	í-	íó ⁿ he to flee because of {x}	tr	shó ^{ng} e amá ázhi o ⁿ wó ⁿ thibthó ⁿ i égo ⁿ , [-o ⁿ ha-]. horse the.PL different P1SG.smell as [AP:MOT-flee-PL] As the horses perceived that I had a different odor, they fled. (Dorsey 1890: 442.10)	Ø	Introduced in the preceding clause	ó ⁿ he to flee	intr-a
94	á-	áo ⁿ tha to infect {y} with {x} (= to leave {a disease} on {y})	dtr	Díxe wá-tha-ó ⁿ hne ta-í. small-pox AP:SUPESS.P1PL-A2-leave IRR-PL You will give us the small-pox (Dorsey 1890: 399.5)	MORPH	Indexed on the verb (P1PL)	o ⁿ tha to abandon {x}	tr

95	u-	íup'a to be bitter in the mouth (with 'mouth' incorporated)	intr-s	that'á-bi ki [í-ú-p'a biamá], chú biamá. eat-PX when [mouth-AP:INESS-bitter PX:REPORT] spit PX.REPORT <i>When he ate them they were bitter in the mouth, and he spit them out.</i> (Dorsey 1890: 71.5 / Hupetho ⁿ)	MORPH	Incorporated to the verb	p'á to be bitter	intr-s
96	í-	íshi to pay {x} with {y}	dtr	{zho'ní-thibébtin} í-wi-shi tá-mi'k'he {candy-twisted} AP:INS-A1SG/P2-pay IRR.1SG Literally : <i>I will pay you with stick candy</i> (Dorsey n.d.)	NP		shí to employ {x} to do {y}	dtr
97	í-	íshiⁿ to become fat by means of {x}	bi-s	{Wamúske naságe} {é} oⁿthóⁿ-shíⁿ ha. {wheat hardened.by.fire} {DEM} AP:INS.P1SG-fat DECL.M <i>It is the crackers which have made me fat.</i> (Dorsey 1890: 570.5)	NP	Presence of an apposition	shíⁿ to be fat	intr-s
98	í-	íshkóⁿ to move by {x}	tr	{Pede} í-shkoⁿ-ga! fire AP:AD-move-IMP.M <i>Draw near the fire!</i> (Dorsey n.d.)	NP		shkóⁿ to move	intr-a
99	í-	pedíshkóⁿ to warm oneself by the fire	intr-s (?)	Wi ped-oⁿthóⁿ-shkoⁿ *** 1SG fire-AP:AD.P1SG-move <i>I am warmed by the fire</i> (Dorsey n.d.)	MORPH	Incorporated to the verb	shkóⁿ to move, to act	intr-a
100	í-	ísoⁿkithe to make oneself white with {x}	tr	í-soⁿ-ki-thá-biamá ha {wasésoⁿ thoⁿ} AP:INS-white-REFL-CAUS-PX.REPORT DECL.M {white.clay the} <i>and with it [the white clay] he whitened his whole body</i> (Dorsey 1890: 619.7)	NP		sóⁿkithe to make oneself white	intr-a
101	í-	ít'e to die from/because of {x}	tr	oⁿ-wóⁿxpani égoⁿ, [tháthuha ith-á-t'e.] P1SG-poor as, nearly AP:MOT-A1SG-die <i>As I am poor, I have almost died from that cause.</i> (Dorsey 1890: 504.11)	∅	Introduced in the preceding clause	t'é to die	intr-a
102	í-	ít'e to die from/because of {x}	tr	íⁿsh'áge ak'á gátatáⁿoⁿ wak'héga a-í t'he shóⁿshoⁿ [í-t'e he]. old.man the.PX from.that.unseen.place sick come-PX EVID continuing AP:MOT-die DECL.F <i>The old man was ill as he came from that land (Indian Territory?),and, as the illness continued, it killed him.</i> (Dorsey 1890: 690.11)	∅	Introduced in the preceding clause	t'é to die	intr-a
103	í-	ít'e to die from/because of {x}	tr	{waxpáni} ith-á-t'e ha {poor} AP:MOT-A1SG-die DECL.M <i>I'm dying from poverty</i> (Dorsey 1891: 79.8)	NP ***	(considered a nominalized verb because there is no person marker)	t'é to die	intr-a
104	u-	ut'é to die from {disease}	tr	{díxe} u-t'á-i {small-pox} AP-die-PL <i>they died from the small-pox</i> (Dorsey 1890: 445, note)	NP		t'é to die	intr-a
105	á-	áthiaze to pull {x} open on {y}	dtr	tí t'he á-thiáza t'he ... tent the AP:SUPESS-pull.open when <i>When they had opened the tent, and had put it over the poles, ...</i> (Dorsey 1890: 428.4)	∅	Implicit, possibly a conventional object	thiáze to pull {x} open	tr
106	á-	áthiaze to pull {x} open on {y}	dtr	tíha thoⁿ á-ziátha-ga! tent.skin the AP:SUPESS-pull.open-IMP.M <i>Open the tent skins (and pull them around in order) to cover the tent poles!</i> (Dorsey n.d.)	∅	Implicit, possibly a conventional object	thiáze to pull {x} open	tr
107	í-	íthize to take {x} with {y}	dtr	{wáku} gashibe i-bthize *** {fork} out AP:INS-A1SG.take <i>with a fork I take it out.</i> (OLCDP 2002: 1.30)	NP		thizé to take {x}	tr
108	u-	utí to pitch the tent in {x}	tr	{wach'ishka zhí'ga} oⁿg-ú-tí-i k'he {stream small} A1PL-AP:INESS-camp-PL the ... of the small stream by which we camped. (Dorsey 1890: 438.3)	NP	Relative clause	tí to camp; to pitch the tent	intr-a
109	u-	utí to pitch the tent in {x}	tr	{wach'ishka k'hé-dí} shí oⁿg-ú-tí-i {stream the-LOC} again A1PL-AP:INESS-camp-PL <i>We pitched the tents by a stream.</i> (Dorsey 1890: 437.11)	PP	PP introduced by -dí	tí to camp; to pitch the tent	intr-a
110	í-	íu to wound {x} with {y}	dtr	{Moⁿ nóⁿba} í-u-biamá Moⁿch'ú. {arrow two} AP:INS-wound-PL.REPORTGrizzly.Bear <i>wounding him (Grizzly Bear) with two arrows</i> (Dorsey 1890: 46.8)	NP		ú to wound {x}	tr

111	í-	uthúbahíⁿ to thrust {x} into {y}	dtr	zhé k^he (...) [ki {mo ⁿ shó ⁿ de t ^h e} uth-úbahíⁿ-biamá.] penis the [and {den the} AP-thrust.through-PX.REPORT] Literally: <i>And he thrust it (his penis) into the den, they say</i> (Dorsey 1890: 549.12)	NP		ubáhiⁿ to stick {x} through	tr
112	í-	uthúbaxoⁿ to push {an instrument} into {y}	dtr	{Móⁿze názhíde-xtí} 'ú t^he uth-ú-wi-páxoⁿ ki. {iron red.hot-INTENS} wound the AP:INS-AP:INESS-A1SG.push when <i>When I thrust a very red-hot iron into your wounds, ...</i> (Dorsey 1890: 232.4)	NP		ubáxoⁿ to push {x} into {y} {x} implicit?	dtr
113	í-	uthúhe *** to follow {someone's trail}; to follow {x} on {a trail}	dtr	Sigthé k^he wi-óⁿg-uha-i, trail the O3PL.AP-A1PL-follow-PL <i>We followed their trail,</i> (Dorsey 1890: 419.14)	MORPH	Indexed on the verb (O3PL)	uhé to follow {a trail}	tr
114	í-	uthúhe *** to follow {someone's trail}; to follow {x} on {a trail}	dtr	sigthé k^he oⁿthóⁿw-oⁿ-tha>hé moⁿhniⁿ te he trail the <P1SG-A2>AP.follow A2.walk IRR DECL.F <i>please continue to follow me</i> (Dorsey 1890: 142.2)	MORPH	Indexed on the verb (P1SG)	uhé to follow {a trail}	tr
115	í-	uthúhe *** to follow {someone's trail}; to follow {x} on {a trail}	dtr	{Wa'ú} uth-ú<tha>he thíⁿ {woman} AP-<A2>follow the.OBV <i>the woman whom you have been following</i> (Dorsey 1890: 194.6)	NP	(Relative Clause)	uhé to follow {a trail}	tr
116	í-	uthúhe *** to follow {someone's trail}; to follow {x} on {a trail}	dtr	{úshkoⁿ thithíai gé} oⁿth-óⁿg-u<thi>hé oⁿ-góⁿtha-i {deed your the.PL} AP-A1PL-<P2>follow A1PL-wish-PL <i>we wish to imitate you in practicing them.</i> (Dorsey 1890: 735.15)	MORPH	Indexed on the verb (P2)	uhé to follow {a trail}	tr
117	í-	uthúhoⁿ to cook {x} with {y}	dtr	shi {te-níxa égoⁿ} uth-úhoⁿ-biamá. *** again {buffalo-paunch similar} AP:INS-cook-PX.REPORT <i>and he cooked a buffalo-paunch with them, (...)</i> (Dorsey 1890: 256.14)	NP		uhóⁿ to cook {x}	tr
118	í-	uthúhoⁿ to cook {x} with {y}	dtr	pédizi i-zíthe, uthúhoⁿ-biamá. coals AP?-yellow-CAUS AP:INS-cook-PX.REPORT <i>They say he cooked it smoking [yellowing] it over coals.</i> (Rudin et al. 1989-92: Monkey / Clifford Wolfe)	Ø	Previously introduced in the story	uhóⁿ to cook {x}	tr
119	í-	uthúk^hie to talk to {x} about {y}	dtr	Sasú ak^há {é t^he} wíuak^hie ha, Frank the.PX {DEM the} ASP(?).AP.A1SG.talk DECL.M *** <i>I spoke to Frank La Flèche about your father's business.</i> (Dorsey 1890: 120.3)	NP		uk^hie to talk to {x}	tr
120	í-	uthúk^hie to talk to {x} about {y}	dtr	shéthiⁿ itháithai {bthúga} uthúak^hie bthishtoⁿ this agent {all} AP.A1SG.talk A1SG.finish <i>We have already spoken to the agent who has gone to you, telling him of all this,</i> (Dorsey 1890: 717.5)	NP		uk^hie to talk to {x}	tr
121	í-	uthúk^hie to talk to {x} about {y}	dtr	[Níⁿkagáhi amá wíuthak^hie] údoⁿ-hnóⁿ-i {chiefs the.PL O3PL.AP.A2.talk good-HAB-PX <i>It is always good for you to consult the chiefs and the young men about your affairs.</i> (Dorsey 1890: 484.2-3)	Ø	Implicit (not previously introduced)	uk^hie to talk to {x}	tr
122	í-	uthúk^hie to talk to {x} about {y}	dtr	(...) éskoⁿ ethégoⁿ égoⁿ, uthúthik^hie góⁿtha-i perhaps think as AP.P2.talk want-PL <i>they think that (...), and so they wish to speak to you about something.</i> (Dorsey 1890: 738.3)	Ø	Implicit (not previously introduced)	uk^hie to talk to {x}	tr
123	í-	uthúk^hie to talk to {x} about {y}	dtr	u<wí>k^hie k^he {fe k^he áhigí-xti théamá} uthúwik^hie shu-thé-a-the <A1SG/P2>talk the {word the many-INTENS these} AP.A1SG/P2.talk DIR-go-A1SG.CAUS <i>And as I talk to you, I send you a great many words when I talk with you about these.</i> (Dorsey 1890: 483.9)	NP		uk^hie to talk to {x}	tr
124	í-	uthúk^hie to talk to {x} about {y}	dtr	ubésniⁿ ée ha, [oⁿthóⁿwok^hie ha]. find.out this DECL.M [AP.P1SG.talk DECL.M] <i>and as he found out about them; he spoke to me on the subject.</i> (Dorsey 1890: 647.2)	Ø	Introduced in the preceding clause	uk^hie to talk to {x}	tr
125	í-	uthúthoⁿ to stuck {x} inside {y}	dtr	{Noⁿbé ak^há eta} uth-úthoⁿ-i t^he. {hand the.PX his} AP-hold-PX EVID <i>'His hand got caught.'</i> (Rudin et al. 1989-92: Monkey / Clifford Wolfe)	Ø	Implicit (understandable in the context)	uthóⁿ to catch/hold {x}	tr
126	í-	uthúthoⁿ to stuck {x} inside {y}	dtr	{Noⁿbé t^he eta} uth-úthoⁿ-i t^he. {hand the his} AP-hold-PX EVID <i>'His hand got stuck there.'</i> (Rudin et al. 1989-92: Monkey / Clifford Wolfe)	Ø	Implicit (understandable in the context)	uthóⁿ to catch/hold {x}	tr

127	í-	wéshi to offer {x} as a reward	tr	{thi-zhó'ge} wé-tha-shí ki, {your-daughter} ANTIP.AP:INS-A2-pay when <i>when you offered your daughter as a reward.</i> (Dorsey 1890: 349.3)	NP		washí to employ {x}; to pay {x}	tr
128	í-	íwazhí'ska to have sense by means of/ bi-s for {x}		{ená-xchi} weá-wazhí'ska o'mó'thi' ha. {alone-INTENS} AP:INS.P1PL-be.wise A1PL-walk DECL.M <i>and we had sense enough for this, if for anything else</i> (Dorsey 1891: 24.15)	NP	(modifier alone)	wazhí'ska to be wise, clever	intr-s
129	í-	ízhahe to gore {x} with {y}	dtr	Umó'ho' ak'há niníba athí' gi t'hó' {mó'dehi} ízhahá-bi... U. the.PX pipe have come the.OBV {spear} AP:INS-gore-PX <i>The Omaha thrust a spear at the one who brought the pipe</i> (Dorsey 1890: 400.3)	NP		zháhe to gore {x}	tr
130	u-	uzhó' to lie in {x}	tr	{Mo'shó'de} uzhó' zhó't'e, aí. {den} AP:INESS-lie asleep say-PX <i>He is lying in a den, sound asleep.</i> (Dorsey 1890: 288.1)	NP		zhó' to lie; to sleep	intr-a