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# Relative clauses in Omaha-Ponca (Umo<sup>n</sup>ho<sup>n</sup>)\*

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**Abstract:** Relative clauses in Omaha-Ponca (Umo<sup>n</sup>ho<sup>n</sup>) are internally headed. They are identical in form to non-relative clauses except for the presence of a clause-final article which serves to nominalize (or relativize) the clause. The head of the relative clause can have any function and can be any type of nominal (noun, pronominal, or null). The clause-final article also has other functions, so the distinction between relative clauses and other types of clauses or nominal phrases is not always sharp.

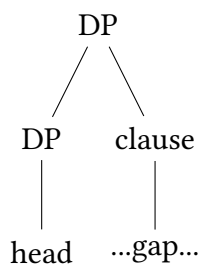
**Keywords:** relative clause, internally headed relative clause, definite article, relativizer

## 1. Introduction

Relative clauses (RCs) in Umo<sup>n</sup>ho<sup>n</sup> are internally headed; that is, the head noun is part of the clause, occupying the same syntactic position it would hold in a “normal”, non-relative clause, instead of being a sister to a clause which contains a coreferential gap. Compare the externally headed relative clause in (1) with the internally headed one in (2). The rough tree diagrams below each example correspond to the two types. (Throughout the paper the head noun of each RC is underlined, the associated article is double-underlined, and the verb stem is boldfaced.)

- (1) Externally headed relative clause (English)

[DP [DP the book] [CP (that/which) I **read** \_\_\_ ] ]



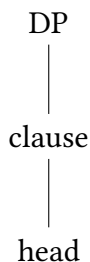
- (2) Internally-headed relative clause (Umo<sup>n</sup>ho<sup>n</sup>)

[DP [CP tanúka **thizé** ithá=i k<sup>h</sup>e ] ]  
 meat get promise.PX ART.HORIZ

‘the meat that he promised to get’

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\*Sincere thanks to Johannes Helmbrecht for comments on an earlier version of this article.



Internally headed relative clauses (IHRCs) are found in most if not all Siouan languages, as documented in a number of works: Lakhota (Williamson 1987, Ullrich & Black Bear 2016, Ullrich 2018), Osage (Quintero 2004), Hoocak (Helmbrecht in progress), Hidatsa (Boyle 2016) and Crow (Graczyk 1991). Not all scholars agree that all RCs in Siouan languages are IHRCs, but IHRCs are certainly the norm for Siouan languages. Umo<sup>n</sup>ho<sup>n</sup> is thus typical of Siouan languages in having IHRCs. Umo<sup>n</sup>ho<sup>n</sup>, along with at least some other Dhegiha languages, differs from other branches of Siouan in the specifics of the construction, including especially the fact that there is no dedicated relativizer morpheme in the language: instead RCs are simply nominalized clauses marked (usually) with one of the many definite articles.

In this paper we will first demonstrate, in section 2, that Umo<sup>n</sup>ho<sup>n</sup> relative clauses are in fact internally headed. This section also covers the characteristic features of IHRCs in this language and crosslinguistically, including the fact that the head is always indefinite: the accompanying article is associated with the entire IHRC, not the head. Section 3 digs deeper into the range of different types of IHRCs in Umo<sup>n</sup>ho<sup>n</sup>, showing that (1) RC heads can be any nominal function, that is, any type of argument or adjunct; (2) RC heads can also be any nominal form: overt noun, null or pronominal; and (3) the typical relativizing article can be absent. In section 4 we briefly mention some issues for future research.

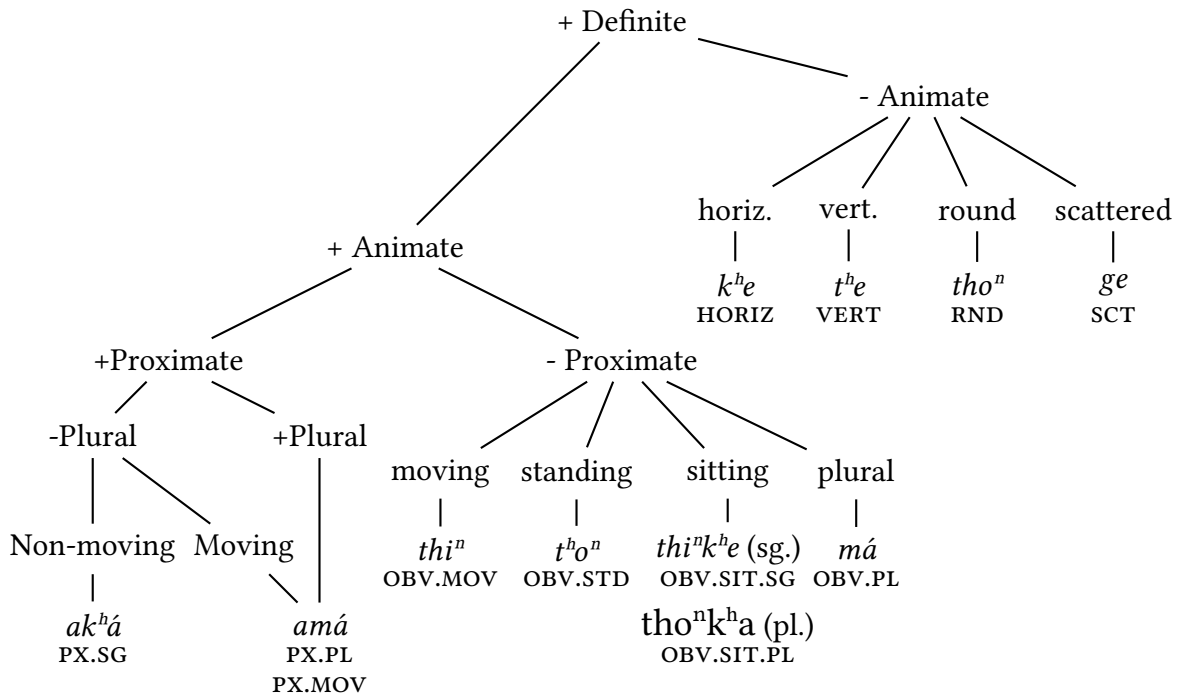
## 2. Characteristics of RCs in Umo<sup>n</sup>ho<sup>n</sup>

Umo<sup>n</sup>ho<sup>n</sup> IHRCs have been described by Koontz (1984), Rudin (1991), Rudin & Shea (2005), as well as Marsault (2021), which is the source of much of this paper. In the earliest of these, Koontz (1984:171) writes: “the technique for forming relative clauses involves substituting for the head [noun] in the matrix clause the entire modifying clause, with its own version of the head [noun] intact”. This corresponds to the definition of internally headed relative clauses that we find in Creissels (2006:244), for example. Later works have all agreed with this basic description. Reduced to its simplest form, an Umo<sup>n</sup>ho<sup>n</sup> RC is as in (3) - a complete clause, normally followed by one of the group of words usually called articles. The article acts as a nominalizer, turning the CP (complementizer phrase) into a DP. It functions in a similar way to relativizers in other languages. We will sometimes refer to this item as a “relativizer” for convenience.

- (3) [[clause] article ]

The status of the articles, their meaning, usage, and whether in fact they are articles or some other type of particle, is a complex and much-discussed topic in Dhegiha languages. (See for instance Eschenberg 2005.) A discussion of the article system would take us too far afield here. For purposes of this paper just notice in Figure 8 that the articles carry information not only of definiteness, but also animacy, position, obviation, and other features.

Figure 8: The article system of Umó<sup>n</sup>ho<sup>n</sup>  
(adapted from Koontz 1984 and Eschenberg 2005)



Looking in more detail at the Umo<sup>n</sup>ho<sup>n</sup> relative clause given in (2) and repeated in its full-sentence context in (4a), we see that the RC (bracketed) serves as the object of the main verb, *thizé* ‘get’. The head noun, *tanúka* ‘meat’ is in the position it would normally occupy if “he promised he would get meat” was an independent clause. The only difference in form from the corresponding independent clause in (4b) is that the noun cannot be followed directly by an article; instead, an article, *k<sup>h</sup>e* in this case, marks the end of the clause. The demonstrative phrase *thé k<sup>h</sup>e* ‘this thing’ is an appositive; appositive phrases commonly occur with both IHRCs and other types of nominals in Umo<sup>n</sup>ho<sup>n</sup>.

- (4) a. *Thé k<sup>h</sup>e* {*tanúka thizé ithá-i k<sup>h</sup>e*} *thizá=i t<sup>h</sup>e*.  
 this ART.HORIZ {meat he.gets.it he.promised-PX ART.HORIZ} he.got-it=PX EVID  
 ‘He got the (piece of) meat (that) he promised he would get.’ (More literally: ‘He got this thing, the meat he promised he would get.’) (Rudin et al. 1989-1992 / speaker : Mary Clay)
- b. *Tanúka k<sup>h</sup>e thizé ithá-i*.  
 meat ART.HORIZ he.gets.it he.promised-PX  
 ‘He promised to get the (piece of) meat.’ (constructed example)

The clause-initial position of the head might be taken to suggest that it is separate from the clause, i.e. that this is actually an externally-headed RC like the English example in (1). There are two reasons to believe that this is incorrect and that Umo<sup>n</sup>ho<sup>n</sup> RCs are in fact internally headed. The first of these is that initial position is not absolute. Although the head noun almost always appears at the beginning of the RC, it can be preceded by another element. Rudin (1991) pro-

vides example (5) from elicitation (Rudin et al. 1989-92); both sentences in (5) were provided as a translation of “The boy wants the man who lives here to leave”. Clifford Wolfe proposed (5a) first, and then (5b) when asked to repeat. In (5a), the head noun is preceded by the adverbial adjunct *théthudi* ‘here’, and we see once again that the RC has the same structure as an independent clause, with considerable word-order freedom.

- (5) a. *Núzhi<sup>n</sup>ga ak<sup>h</sup>a* {*théthudi níkashi<sup>n</sup>ga gthí<sup>n</sup> thi<sup>n</sup>k<sup>h</sup>e*} *thé gi-gó<sup>n</sup>tha*.  
 boy ART.PX {here person sit ART.OBV} go POSS-want
- b. *Núzhi<sup>n</sup>ga ak<sup>h</sup>á* {*níkashi<sup>n</sup>ga théthudi gthí<sup>n</sup> thi<sup>n</sup>k<sup>h</sup>e*} *éshti thé gi-gó<sup>n</sup>tha*.  
 boy ART.PX {person here sit ART.OBV} too go POSS-want  
 ‘The boy wants {the man who lives here} to leave.’ (Rudin et al. 1989-92:Tape 3, 35’26 / Clifford Wolfe)

The second argument is that head nouns are never followed by articles, as noted by both Koontz (1984) and Rudin (1991). It is a well known characteristic of IHRCs across languages that they always have a morphologically indefinite head (see for instance Williamson 1987, Platero 1974). This “Indefiniteness Restriction” has been attributed to compositional semantic effects which are beyond the scope of this paper; for our purposes the point is just that a restriction to indefinite heads in Umo<sup>n</sup>ho<sup>n</sup> RCs is expected if they are IHRCs but would be unexpected for external-headed relatives. Since all articles in Umo<sup>n</sup>ho<sup>n</sup> are definite, the head of an IHRC cannot be determined by any article. Instead, the RC as a whole is almost always determined by a single article, which functions as a clause nominalizer, marking the clause as a DP. In (6), the head noun *wa’ú* ‘woman’ has no article, and the whole clause is at the same time both relativized and determined (marked as definite) by the article *ak<sup>h</sup>á*.

- (6) {*wa’ú* Ø *dúda a-i ak<sup>h</sup>á*} *í-ko<sup>n</sup> wiwíta*.  
 {woman here come-PX ART.PX} POSS:3-grandmother POSS:1SG  
 ‘The woman who’s coming over here’ is my grandmother.’ (Rudin et al. 1989-92:Tape 17 / Clifford Wolfe)

In a simple sentence the noun *wa’ú* would be expected to have the article, as in (7), where the DP *wa’ú ak<sup>h</sup>á* ‘the woman’ is the subject of the sentence. Compare (6), where the notation ‘Ø’ indicates that no article is possible in that position.

- (7) *Wa’ú ak<sup>h</sup>á dúda a-i*  
 woman ART.PX here come-PX  
 ‘The woman is coming over here’ (constructed example).

The articles used as relativizers mark the role of the RC in the matrix clause, not that of the head noun in the relative clause. For instance, the choice of proximate versus obviative article depends on the function of the RC within the matrix clause, not the function of the head noun within the RC. So, in (8), where the head noun is the subject of the predicate inside the RC, but the RC itself is the object in the matrix clause, the relativizer is an obviative article, generally used for object rather than subject.

- (8) Relative clause as object of matrix clause

*shó<sup>n</sup> wabá<sup>g</sup>theze uxthé-xchi thé, {wabáxu théthu thi<sup>n</sup>k<sup>h</sup>é}, éskana tha-’í*  
 and letter soon-INTENS go {writer here ART:OBV} OPT A2-give  
*gthí-tha-the ko<sup>n</sup>bthégo<sup>n</sup>.*  
 arrive.back-A2-CAUS A1SG.hope

‘I hope that, as this letter goes very soon, you will give one and send it to {the writer who is here}.’ (Dorsey 1890:509.2-3 / Dúba-mo<sup>n</sup>thi<sup>n</sup>)

### 3. Diversity of RCs: range of functions and structures

#### 3.1. Relativized arguments and adjuncts

All types of arguments can be relativized in Umo<sup>n</sup>ho<sup>n</sup>. Example (5) above illustrates the relativization of the subject of an intransitive active verb. (To repeat, the relativized syntactic role is visible within the RC: ‘the man lives here’. It must not be mistaken for the syntactic role of the RC in the matrix clause.) Other relativized syntactic roles are exemplified below. In each case, the RC is between brackets, the head noun is single-underlined and the verb stem is boldfaced, as usual. (Note that in (9), *théthu* ‘here’ is not a verb stem, but it is used predicatively. It corresponds to an intransitive stative construction.)

- (9) Relativization of the subject of a stative predicate

*shó<sup>n</sup> wabá<sup>g</sup>theze uxthé-xchi thé, {wabáxu **théthu** thi<sup>n</sup>k<sup>h</sup>é}, éskana tha-’í*  
 and letter soon-INTENS go {writer here ART:OBV} OPT A2-give  
*gthí-tha-the ko<sup>n</sup>bthégo<sup>n</sup>.*  
 arrive.back-A2-CAUS A1SG.hope

‘I hope that, as this letter goes very soon, you will give one and send it to {the writer who is here}.’ (Dorsey 1890:509.2-3 / Dúba-mo<sup>n</sup>thi<sup>n</sup>)

Since property words are verbs in this language, any noun modified by a property stative verb is a RC in Umo<sup>n</sup>ho<sup>n</sup>. This is the analysis followed by Koontz (1984: 175), who illustrates it with (10), another example of relativization of the subject of a stative predicate.

- (10) {Mó<sup>n</sup>ze ná-zhide thé-k<sup>h</sup>e} *ú t<sup>h</sup>e í-pistásta ki (...)*  
 {iron INS:TEMP-red DEM-ART.HORIZ} wound ART.VERT AP-A1SG.press.down when  
 ‘When I press {these heated irons} repeatedly against the wounds, (...)’ (Dorsey 1890:231.19 / Páthi<sup>n</sup>-no<sup>n</sup>pázi)  
*Literally:* When I press against the wounds those {irons which are heated by fire}, (...).

In a transitive clause, either the subject or the object can be relativized, as shown in (11) and (12) respectively:

- (11) Relativization of the subject of a transitive verb

“...” *á-biamá {níashi<sup>n</sup>ga shínudo<sup>n</sup> **thixé** **ahí** ak<sup>h</sup>á.}*  
 ... say-REPORT {person dog pursue arrive ART:PX}

‘said {the men who had pursued the dog and arrived at the Orphan’s}.’ (Dorsey 1890:113.4 / Frank La Flesche)

- (12) Relativization of the object of a transitive verb

{*Waxí<sup>n</sup>ha gthí-tha-the thó<sup>n</sup>*} *bthíze*.  
 {paper arrive.back-A2-CAUS ART.RND } A1SG.take

‘I have received {the letter which you sent home}.’ (Dorsey 1890:511.1 / Ishtáthabi)

Example (13) shows the relativization of the theme of ‘*í* ‘to give x to y’. Example (14) shows the relativization of the recipient of the same verb, but the RC is in apposition to the noun phrase headed by *mí<sup>n</sup>zhi<sup>n</sup>ga* ‘girl’; note that the appositive phrases, *mí<sup>n</sup>zhi<sup>n</sup>ga thi<sup>n</sup>k<sup>h</sup>é* ‘the girl’ and *úwi a-’i thi<sup>n</sup>k<sup>h</sup>é* ‘(the one) I gave the earrings to,’ have the same final article. The RC here is a headless relative clause; that is, its head is null as indicated by “Ø”.

- (13) Relativization of the theme in a ditransitive clause

{*shó<sup>n</sup>ge shéna o<sup>n</sup>-thá-’i tho<sup>n</sup>k<sup>h</sup>á*} *t’a=i*  
 {horse no.longer P1SG-A2-give ART.OBV.PL } die=PL

‘{The horses which you gave me} have died.’ (Dorsey 1890:480.2 / Pí-zi-thí<sup>n</sup>ge)

- (14) Relativization of the recipient in a ditransitive clause

*Mí<sup>n</sup>zhi<sup>n</sup>ga thi<sup>n</sup>k<sup>h</sup>é tó<sup>n</sup>be*, {Ø *úwi a-’i thi<sup>n</sup>k<sup>h</sup>e*.}  
 girl ART.OBV A1SG.see { earring A1SG-give ART.OBV }  
 OBJ SBJ+VERB APP = RC

‘I saw the girl, {(the one) I gave the earrings to.}’ (Rudin et al. 1989-92:Tape 17 / Mary Clay)

Example (15) illustrates the relativization of an applicative object indicating a location (inessive locative ‘in’, introduced by the applicative prefix *u-*). The applicative verb is *utí* ‘to camp in x’.

- (15) Relativization of an applicative object

*Gó<sup>n</sup>* {*wach<sup>h</sup>ishka zhi<sup>n</sup>ga o<sup>n</sup>g-ú-ti=i k<sup>h</sup>e*} *híde-ata shó<sup>n</sup>ge ma*  
 and {stream small A1PL-AP:INESS-camp=PL ART.HORIZ} base-ALL horse OBV.PL  
*thé-o<sup>n</sup>-wo<sup>n</sup>-tha-í*.  
 go-A1PL-O3PL-CAUS=PL

‘We sent the horses towards the mouth of {the small stream by which we camped}.’ (Dorsey 1890:438.3 / Páthi<sup>n</sup>-no<sup>n</sup>pázhi)

Adjuncts of time and place can also be relativized, as shown in (16) and (17).

- (16) Relativization of an adjunct of time

*ki* {*ó<sup>n</sup>ba wi-tó<sup>n</sup>be t<sup>h</sup>e*} *ét<sup>h</sup>o<sup>n</sup>do<sup>n</sup> wa-shtó<sup>n</sup>be tat<sup>h</sup>é ebthégo<sup>n</sup>*.  
 and {day A1SG/P2.see ART.VERT} by.that.time ANTIP-A2.see IRR A1SG.think

‘I think that you shall see it by {the day that I see you}.’ (Dorsey 1890:741.7 / Fred Merrick)

Example (17) shows a RC corresponding to an adjunct of place. We assume that the RC is headless, and precedes the phrase *pamú ámusta* ‘right above the descent of the hill,’ and that both together form the adjunct. The literal translation would be: “When he goes, where they surrounded the herd, on the hill on top of it, I will lie looking at you.” The RC can be recognized from the article that nominalizes it.

(17) Relativization of an adjunct of place

*thé t<sup>h</sup>e* {∅ *wá-na~náse* *tho<sup>n</sup>*} *pamú ámusta wi-tó<sup>n</sup>be*  
 go when { ANTIP-REDUP~surround ART.RND } downhill top A1SG/P2-A1SG.see  
*a-zhó<sup>n</sup> tá mi<sup>n</sup>k<sup>h</sup>e, á=biamá.*  
 A1SG-lie IRR 1SG.AUX say=PX.REPORT

‘When he goes, I will lie looking at you, right above the descent of the hill {where they have surrounded the herd from time to time}.’ (Dorsey 1890:45.10 / Nudó<sup>n</sup>-axa)

### 3.2. Headless relative clauses

In Umo<sup>n</sup>ho<sup>n</sup>, numerous RCs lack an overt head noun, as already noted for (14) and (17). Another example is (18). The absence of a head noun is highlighted by “∅”. This kind of RC is very common in Umo<sup>n</sup>ho<sup>n</sup>.

(18) {∅ *wa-mó<sup>n</sup>tho<sup>n</sup>=no<sup>n</sup> thi<sup>n</sup>k<sup>h</sup>e*} *ibaho<sup>n</sup>*  
 { ANTIP-steal=HAB ART:OBV } know

‘They know {the one who steals}.’ (Rudin et al. 1989-92:Tape 3 / Mary Clay)

Note that when the head noun is null, it sometimes implicitly is taken to refer to a specific entity, as in (18), or it can be non-specific, and refer to any entity that would match the description of the RC. In the latter case, the head noun can be expressed by a generic term like *i<sup>n</sup>dádo<sup>n</sup>* ‘what’ in (19), with the same semantic result. These headless RCs, or RCs with generic heads, correspond to free relative clauses in English (Rudin 1991; see also Creissels 2006:208).

(19) {*I<sup>n</sup>dádo<sup>n</sup>* *i<sup>n</sup>-wí<sup>n</sup>-go<sup>n</sup>za=i* *t<sup>h</sup>e*} *gáxe go<sup>n</sup>tha=bazhi=no<sup>n</sup>.*  
 {what A1PL-D3PL-show=PL ART.VERT } make want=PL.NEG=HAB

‘They don’t want to do {what we teach them}.’ (Rudin et al. 1989-92:Tape 15 / Bertha Wolfe)

The fact that the relativizers and definite determiners are the same set of morphemes (the “articles”), and the head noun is regularly missing, explains why in many contexts nouns are difficult to distinguish from verbs and relative clauses can be confused with simple DPs, especially when the supposedly relativized verb takes the ambiguous prefix *wa-* (which has both antipassive and nominalizing functions), as in (17) and (18). The RC *wa-mó<sup>n</sup>tho<sup>n</sup>=no<sup>n</sup> thi<sup>n</sup>k<sup>h</sup>e* ‘the one who steals’ could alternatively be analyzed as a noun phrase ‘the thief’.



### 3.3. Some RC lack a nominalizing/relativizing article

Umo<sup>n</sup>ho<sup>n</sup> relative clauses can also lack a relativizer/nominalizer (article), though this occurs infrequently. This is the case in (20) for the relativization of an applicative object (an instrument), and probably in (21) for an object.

- (20) {*edádo<sup>n</sup> í-shko<sup>n</sup>~shko<sup>n</sup> Ø*} *thi<sup>n</sup>gé*.  
 {what AP:INS-REDUP~act (ART)} lack  
 ‘He has nothing {by means of which he can act often} (?)’<sup>1</sup>. (Dorsey 1891:75.4 / To<sup>n</sup>wo<sup>n</sup>-gaxe-zhi<sup>n</sup>ga)

- (21) *shé-ama* {*níkashi<sup>n</sup>ga a-wá-to<sup>n</sup>be Ø*} *úzhawa XXX*  
 that-PX.PL {person A1SG-O3PL-A1SG.see (ART)} enjoy  
 ‘These people I see are having a good time’ (Rudin et al. 1989-92:Tape 19 / Coolidge Stabler; transcribed with Octa Keen)  
 (The end of the sentence is inaudible. The RC seems to be an apposition to *shé-ama* ‘these ones’ and would be expected to end with the same article. The translation is mine (Marsault). Octa gave a word-for-word translation.)

Example (22) shows two relative clauses, the first lacking an article, and the second lacking a head-noun (another good example of the tricky noun-verb distinction).

- (22) {*shó<sup>n</sup>ge wa-’í<sup>n</sup>-k<sup>h</sup>ithé Ø*} *wé<sup>n</sup>bthi<sup>n</sup>=hno<sup>n</sup>=mó<sup>n</sup>* {*Ø wa-náse*  
 {horse ANTIP-carry-DAT.CAUS ART} D3PL.have=HAB=1SG.AUX { ANTIP-surround  
*amá* }.  
 ART:PX.PL }

‘But I used to take care of {the packhorses} for {those who surrounded the herd}.’ (Dorsey 1890:466.2 / Frank La Flesche)

The reason why some RCs lack an article remains to be understood. Non-clausal DPs also lack an article in some cases, for instance when the referent is easily accessible or when it is indefinite or generic (see Gordon 2016; Marsault 2021:§8.4). Inasmuch as RCs externally act as DPs, it seems logical that they are subject to the same kind of article deletion. This topic requires further investigation.

At the typological level, Rudin (1991) notes that internally-headed relative clauses are a feature that often appears cross-linguistically with other types of nominalized clauses (see Culy 1990). Creissels (2006:246) provides a list of features often found in languages that have IHRCs, among which are the clause-final position of the verb, that the relativizer is typically positioned at the right edge of the clause, and that it is not uncommon to find constructions without any relativizer (which supports our point here).

## 4. Conclusion: theoretical issues, open questions

Within Umo<sup>n</sup>ho<sup>n</sup>, the most interesting issue raised by IHRCs is how they contribute to an understanding of the articles. As mentioned earlier, the Dhegiha article system is unusual in encoding

<sup>1</sup>The question mark in parentheses is in Dorsey’s original translation.

a number of semantic features which are not typical of definite articles across languages, such as position, animacy, and obviation. Furthermore, this group of words has functions other than the typical article function of nominal determiner; all (or nearly all) of the “articles” also function as clause-final markers of some sort too: complementizer, evidential, or various types of auxiliaries (Eschenberg 2005). In the case of the IHRC, the article seems almost balanced between clausal and nominal functions; it is clause-final, but it also marks the end of a DP and functions as a nominalizing element.

Widening the focus beyond Umo<sup>n</sup>ho<sup>n</sup> and Siouan, IHRCs are cross-linguistically rare (occurring in less than 3 percent of Dryer’s 2013 sample of 824 languages), and although they are found in a number of language families, they are still quite under-studied. In addition to Siouan languages, IHRCs have been described in Quechua (Cole 1987, Hastings 2004), Navajo (Basilico 1996, Willie 1989), Korean (Chung & Kim 2003), at least one Tai language (Moroney 2017), several African languages (Culy 1990), and have been noted to occur in various others.

A number of formal syntactic issues raised by IHRCs remain open. Deeper study of IHRCs in Umo<sup>n</sup>ho<sup>n</sup> and other Siouan languages could contribute to the general linguistic conversation over these issues. Rudin (1991) listed several questions, at least two of which remain unanswered: (a) Is there an external (empty) head N or NP (at any level)? (b) Is there movement of the head N or NP or an abstract wh- element to some position such as Spec or Comp? (at LF)? Even asking these questions obviously depends on a particular theoretical framework (and may be of little interest to most Siouanists). We will not go into the arguments here except to note that, while some works (e.g. Moroney 2017) have suggested both answers may be “yes”, the issue is far from settled.

## Abbreviations

1 first person; 2 second person; 3 third person; A agent; ALL allative; ANTIP antipassive; AP applicative; APP appositive; ART article; AUX auxiliary; CAUS causative; CP complementizer phrase; D dative (pronominal); DAT dative; DP determiner phrase; EVID evidential; HAB habitual; HORIZ horizontal; INESS inessive; INS instrument; INTENS intensifier; IRR irrealis; MOV moving; NEG negative; O object; OPT optative; OBV obviative; P patient; PL plural; POSS possessive; PX proximate; REDUP reduplication; REPORT reportative; RND round; SBJ subject; SCT scattered; SG singular; SIT sitting; STD standing; TEMP temperature; VERT vertical.

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