Head-internal relative clauses in Tłı̜cho̜ Yatıì*

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It is typologically unusual for languages to have both internally headed relative clauses and post-nominal externally headed relative clauses. When languages do contain both internally headed and externally headed relative clauses, it is most often the case that the externally headed relatives are pre-nominal, and do not employ wh-pronouns. Tłı̜cho̜ Yatıì, a Dene language of Northern Canada, appears at first to go against this trend, making use of internally headed relatives and what looks like post-nominal externally headed relatives with wh-words. I argue that these latter constructions are in fact internally headed relatives which have the internal head being modified by a wh-word based on evidence from scope and distribution of these wh-words in relative clauses. Instead of marking subordination or participating in gap-construction, wh-words in relative clauses simply indicate an indefinite number of the head noun.

1 Introduction

There are a great number of available strategies, cross-linguistically, when it comes to the construction of the relative clause, and these include multiple syntactic and semantic sub-classes with no one-to-one correspondence between them (Grosu, 2012). A unified view of the myriad relative clause variants is possible via consideration of the following overarching characteristics:

(1)  a. Relativization exhibits a subordinate clause.
    b. Relative clauses have a (typically nominal) pivot that plays a semantic role in the subordinate and matrix clause.
       i. The pivot may be realized as two distinct tokens in the matrix and subordinate clause.
       ii. Each pivot token may be either realized or null.
       iii. Each realized pivot token may be either lexical or phrasal. (Grosu, 2012: 1)

The focus of this paper will be on the relativization strategies available in Tłı̜cho̜ Yatıì, a Northeastern Dene language of the Northwest Territories, Canada. Internally headed relative clauses (IHRCs) like the ones found in Tłı̜cho̜ Yatıì contrast with the externally headed relative clauses (EHRC) that are seen in languages like English; the realized pivot token that is the semantic ‘head’ in IHRCs is internal to the subordinate clause rather than the matrix clause. Contrastive examples can be seen in (2) below:

(2)  a. Ts’èzø̜  wenį̌ hbeàawōa ts’ò̜ tì̜ lì̌ nỳàa k’èè legeèhtła
    [Ts’èzø̜  wenį̌ hbeàawōa ts’ò̜ tì̜ h nỳàa] k’èè legeèhtła
    Old.woman 3.tepee to  path 3.extends.C along 3dS.Pf.leave¹

    ‘They started out along [the path which extends to Old Woman’s tepee].’ (Saxon, 2000: 95)

*I am grateful to an anonymous consultant for sharing their knowledge of Tłı̜cho̜ Yatıì with me (credited as ANON).

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In (2a) and (2b) the pivot is **bolded** and the subordinate relative clause is bracketed. As the example in (2a) demonstrates, the semantic ‘head’ \( tqh \) in the Tłı̜cho̜ Yatì IHRC is situated internally to the subordinate relative clause. Conversely, the English phrasal pivot *my younger brother* is external to the subordinated CP. Due to the fact that the semantic head in its base position in the embedded relative clause, IHRCs like the one seen in (2a) appear very similar in form to regular clausal complements. These constructions are by far the predominant method of relativization in Tłı̜cho̜ Yatì, but Saxon (2000) also notes at least one possible counterexample to this, seen in (12) below:

(3) *Ts’èko ʔamèe ʔelà nàelı xa dìì-lee sìı hazhọ̀ ńgà nìgohwho*

| Ts’èko, [ʔamèe, ʔelà nàelı xa dìì-lee] | sìı hazhọ̀ ńgà nìgohwho |
| woman who boat 3.sews impossible-Neg C Foc all DA.beside 3S.arrive(pl) |

The women who can sew canoes all rush to it’ (Saxon, 2000: 104)

The presence of a *wh*-pronoun here that is co-indexed with an utterance-initial head noun suggests that this is an EHRC, due to its similarity in form to EHRCs in other languages that make use of *wh*-pronouns. The main goals of this paper are to set out some new and interesting data on IHRCs in Tłı̜cho̜ Yatì, and to provide evidence that, despite any surface similarity, these apparent EHRCs are in fact IHRCs, and therefore that IHRCs are the only relativization strategy available in this language. I will instead suggest that ambiguous examples like the one seen in (12) are a case of the head noun being modified by an indefinite *wh*-pronoun in-situ.

Section 2 below will provide some background on relative clauses generally, with a focus on IHRCs. Section 3 will follow and provide an overview of IHRCs in Tłı̜cho̜ Yatì. The problem of apparently externally headed relative clauses will be addressed in section 4. Concluding remarks will be given in section 5.

2 Relativization and IHRCs

A significant portion of previous research on IHRCs has attempted to uncover a set of necessary and sufficient conditions for IHRCs to occur in a language, but this appears to remain an open-ended question at present. Kuroda (1992) linked the occurrence of IHRCs to SOV word order, but this did not prove to be as robust of an association as initially thought (Grosu, 2012; Hiraiwa, 2008). Watanabe (2004) proposed that IHRCs occurred in languages with *wh*-in-situ or focus in-situ, and linked it to the status of indefinites and the determiner system of a language, but this likewise failed to account for the full range of languages where IHRCs are reported (Grosu, 2012; Hiraiwa, 2009). Therefore it does not appear that any one typological property has been firmly established as being sufficient to license the existence of IHRCs in a language. In an effort to reconcile this with the existence of properties very frequently associated with them (word order, *wh*-in-situ, etc), and to capture some further distinctions, the typology of IHRCs has been roughly split into two general subgroups; IHRCs that are sensitive to islands and IHRCs that are not. Lakhota is taken to be the canonical case of island-insensitive IHRCs, while Japanese and Navajo provide examples of island-sensitive IHRCs:

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2 It is necessary to clarify what is meant by the term ‘head’ here; the head referred to in relative clauses is a semantic head that has been relativized, and has nothing to do with that constituent’s syntactic status as an X\(^0\) or an XP, as the relativized head can be either (Basilico, 1996: 499).
(4) a. Lakhota:

\[[[\text{Wichota} \ \text{wowapi wa } \emptyset\text{-yawa pi} \ \text{cha} \ \text{ob} \ \w̃\text{uglaka pi} \ \text{ki}] \ \text{he} \ \text{L.A.} \ \text{Times} \ \emptyset\text{-e} \ \text{many,people} \ \text{paper} \ \text{a read pl} \ \text{Ind} \ \text{with we-speaking pl} \ \text{the that} \ \text{L.A.} \ \text{Times} \ \text{be} \]

‘The newspaper that we talk to many people who read (it) is the L.A. Times’
(Williamson, 1987: 177)

b. Japanese:

*[[John-ga MIT-no \ gakusei-ga \ subarashi\(\text{r}g\)-\(\text{r}o\) kaita no]-o \ posuto-doku-toshite \ 
John-nom MIT-gen student-nom \ excellent \ paper-acc \ wrote \ C-acc \ post-doc-as \ 
saiyoshite-ite \(\text{no}\)-no \ shuppan-ga \ \text{okureta}.

adopted-had \ C-gen \ publish-nom \ was-delayed

‘Publication of an excellent paper which John had hired as a post-doc an MIT student who wrote (it) was delayed.’ (Watanabe, 2004: 64)

c. Navajo:

*[[Hastıın \ léécha\'í \ dog bıshexash-é̜e̜ 3:perf:3:bit-rel \ gun 3:perf:3:pick up \ rel \ imp:3:bark

man \ dog \ 3:perf:3:bit-rel \ gun \ 3:perf:3:pick up \ rel \ imp:3:bark

‘The dog that the man who was bitten by picked up the gun is barking.’ (Platero, 1974: 220)

The difference between island-sensitive and island-insensitive IHRCs has been proposed by some to be a difference between unselective binding and operator movement (see especially Watanabe (2004)). If movement of a null \(wh\)-operator or covert movement of the head noun is responsible for the formation of IHRCs, then these IHRCs will be sensitive to islands, as movement is subject to the Complex Noun Phrase Constraint (CNPC), which prohibits movement out of structures dominated by an NP. If unselective binding is responsible for IHRC formation, then the CNPC will not apply, and the IHRCs will be island-insensitive. In these cases, the nominalizer/determiner morpheme that occurs with IHRC acts as an unselective binder in the sense of Pesetsky (1987), and binds the internal head of an island-insensitive IHRC. This was based on the observation that the heads of IHRCs in Lakhota are strictly indefinite and that, since indefinites have no real quantificational force (Heim, 1982), they avoid existential closure by virtue of the quantificational force of the relativizer, which, as an unselective binder, can establish a binding relationship with a free variable at any distance (and is therefore island-insensitive). This binding relationship cannot be established with a definite, which has its own quantificational force. This is not to say that no covert movement occurs in IHRCs that employ unselective binding – Williamson (1987) argues that the internal head moves up covertly to account for scope facts.\(^3\)

The movement vs. binding analyses are a subset of approaches towards IHRCs involving some covert movement of the internal head to an external position have been taken in the past (Basilico, 1996; Bonneau, 1992; Erlewine & Gould, 2014; Williamson, 1987), while others hold that the internal head remains in-situ at LF (Grosu, 2012; Shimoyama, 1999). Part of the attractiveness of proposals that involve movement to an external position is that it allows IHRCs to be unified with their externally headed counterparts. The extent of the unity such theories can provide relies, of course, on an analysis of EHRCs that have the semantic head of the relative clause originating internally and moving to an external position over the course of the derivation. The raising-based account of EHRCs was perhaps most notably espoused by Kayne (1994), based on the work of Vergnaud (1974), and later taken up by Bianchi (1999), de Vries (2002), Bhatt (2002) and others. I will not go into great detail about this approach and its variations here, but the main thrust is that the semantic head of EHRCs is proposed to originate within the relative clause itself, in the place where

\(^3\)The necessity is contested in Grosu (2012) based on differing grammaticality judgments of the Lakhota data.
a gap would typically appear. The relative pronoun is a determiner that selects this in-situ head and triggers the \textit{wh}-movement, that causes the head and relative pronoun to be fronted. The head of the relative clause then raises above the \textit{wh}-word (reasons for this vary) to occupy a relative CP-external position.

3 \textit{Tl'ı̨cho Yatìi} Relative Clauses

The suffix which accompanies IHRCs in \textit{Tl'ı̨cho Yatìi} is realized as a single moraic duplicate of a stem-final vowel:

\begin{equation}
\text{(5) a. CV} + \mu = \text{CVV}
\end{equation}

\begin{equation}
\text{b. [Ts'ezo̜o} \ \text{wenì̜hbeawòa} \ \text{ts'ò̜ tìlì} \ \text{niʔaa]} \ \k'e \ \text{legeèhtla}
\end{equation}

\begin{equation}
\text{Old.woman} \ 3.\text{tepee} \ \text{to} \ 3.\text{extends.C} \ \text{along} \ 3dS.\text{Pf.} \ \text{leave}
\end{equation}

\begin{equation}
\text{‘They started out along [the path which extends to Old Woman’s tepee].’ (Saxon, 2000: 95)}
\end{equation}

\begin{equation}
\text{c. [we-t’à} \ \text{go-kwi-ghà} \ \k’enaʔetse-e] \ \ \text{datle-è}
\end{equation}

\begin{equation}
3_{3} \text{.with} \ \text{uh} \ \text{-head-hair} \ \text{be.washed-} \ \text{NMLZ} \ \text{soap,-PNS}
\end{equation}

\begin{equation}
\text{‘shampoo’ (lit. ‘soap [with which one’s hair is washed]’) (Saxon & Wilhelm, 2016: 9)}
\end{equation}

In her overview of the head-internal relative clause construction, Saxon (2000) takes the relativization morpheme to be a complementizer (i.e. in C) in \textit{Tl’ı̨cho Yatìi}. In reference to the IHRC’s nominal interpretation, Saxon (2000) says the following, "concerning its role in relative clauses, I adopt the suggestion of Jacobson (1995) and Srivastav (1991) that the relative clause interpretations of these CP constituents follows from a semantic type-shifting process...whereby the basic predicative value of CPs can be reinterpreted with the meaning typical of a noun phrase” (Saxon, 2000: 16). I will not be following this here, but will be referring to relativization in \textit{Tl’ı̨cho Yatìi} as a case of clause-level nominalization. This is in part due to the nominal distributions of IHRCs, and in part due to Wilhelm (2014), which investigates the IHRC construction in Dene Suline, a closely related language that behaves very similarly to \textit{Tl’ı̨cho Yatìi} with respect to relativization. She proposes that the process undergone by IHRCs is true nominalization, that it occurs in place of modification (i.e. of adjectives and relative clauses), and that this is facilitated by the fact that all nouns in the language are type \langle e \rangle. The fact that all nouns are of type \langle e \rangle causes a type mismatch to exist between a noun and a potential modifier of type \langle e, t \rangle, which blocks the use of predicate modification. This suggests that clause-level nominalization may be crucial to the formation of IHRCs. Wilhelm (2014) also appeals to distributional evidence to support her assertion that IHRCs are clause level nominalizations. She states that "the reason to treat these full clauses (with or without overt -i) as nominalizations is that they have the same distributions as noun phrases...” and later “...nominalizations can be the object of a postposition. This is a place where only noun phrases occur, not verbs or clauses” (Wilhelm, 2014: 57-58).

It might appear on the surface as though the nominalization suffix is attaching to the phrase-final verb. However, this is a symptom of the SOV word order – it is clear from the translations that the nominalizer has scope over whatever is to the left of the relativized verb (i.e. whatever is within the same clause), and the nominalization morpheme may also attach to right periphery particles in place of the verb when those particles are present phrase-finally:

\begin{equation}
\text{(6) a. do lahoet’ì-lee}
\end{equation}

\begin{equation}
\text{[do} \ \text{lahoet’ì-lee]}
\end{equation}

\begin{equation}
\text{person} \ 3.\text{behave-} \ \text{NEG.NMLZ}^{4}
\end{equation}

\begin{equation}
\text{‘unpredictable person; bad/shameless person; wrongdoer’ (TCSA 2007)}
\end{equation}
b. ʔedı̜ k’eet’į ha-lee sii nàdeehʔì̜ ha dehwho

[ʔedı̜ k’eet’į  ha-lee]  sii nàdeehʔì ha dehwho
where 3s.look around Fut-Neg.C  Foc 1sS.hide  Fut 1sS.want

‘I wanted to hide [where she was not going to look]’ (Saxon, 2000: 102)

The examples above show the nominalizer occurring on the negation particle -le, which is thought to reside in a functional projection above the verb phrase (and above the future functional particle ha, as seen in (6b)) and below CP (Welch, 2015).

IHRCs are a productive source of new words in the language, and this can be seen in the examples in (7a) and (7b) below. The shift in meaning undergone by IHRCs as they are lexicalized into words is very similar to certain nominalizations in English, such as ‘organization’ from ‘organize,’ where the nominal meaning is somewhat idiomatic and abstracted away from the meaning of its verbal root:

(7)  

a. tch’aádiì

ti-ch’a-à-di-i
path-beside-ADV-(3.sg)lives-NMLZ

‘animal’ (TCSA 2007)

b. enhtl’eet’aa

enhtl’e-e-t’a-a
paper-IPV.3SBJ-fly-NMLZ

‘airplane’ (TCSA 2007)

The nominalization morpheme seen on IHRC also occurs on a construction which Saxon (2000) terms ‘nominalized complement clauses.’ These constructions appear to be indistinguishable from IHRCs on the surface, and receive and eventive/factive interpretation which contrasts with the nominal/modificational interpretation of IHRCs. (8) below provides contrasting examples of the two constructions:

(8)  

a. Amìì sets’o̜ elà deʔìi sìi, eyaelı̜ welè!

[amìì se-ts’o̜  elà de-∅-ʔi-i]  sìi, eya-∅-lï welè
who 1sg-belonging.to boat THM-IPFV.3.SBJ-steal.IPFW-NMLZ  FOC sick-IPFV.3.SBJ-COP.IPFW JUSS

‘[Whoever steals my boat], let him be sick!’ (Welch, 2015: 270)

b. [Dìı ?elà holèe]  ts’o̜ ʔohk’c ʔasj’i weghò  haahdî ha dahwho...?
this boat 3.be.built.C regarding YNQ 3.about 2pS.say Fut 2pS.want

‘Regarding [the building of this boat], do you want to talk about it?’ (Saxon, 2000: 97)

8a is an IHRC headed by the indefinite pronoun amìì, ‘whoever,’ and 8b is a nominalized complement clause which references the event of boat building, and has no nominal head. In regards to the semantic role of the IHRC suffix, Saxon (2000) takes its function be one of an unselective binder, as espoused by Basílico (1996). When it binds the event argument, an eventive interpretation is seen, as in (8b), and when it binds one of the argument variables, a relative clause interpretation is produced. As noted in section (2) above, this is

4Glosses of examplestaken from the Tłı̨chǫ Yatıì Online Multimedia Dictionary (TCSA 2007b) were done by myself, and are not included in the dictionary – all errors are my own.
the analysis proposed for island-insensitive IHRCs. Although Saxon (2000) does not report any instances of subjacency violations in Tłı̨cho Yatıì IHRCs, she adopts the unselective binding approach based on the fact that IHRCs in this language can stack with restrictive/intersective import, a quality which Basilico (1996) suggests is only found in languages with island-insensitive IHRCs. An example of this is given below:

(9) Niwàego̜o [[ts’iwàʔoò nechàa] wezu nàdets’eeʔì̜] gha nezì̜i \[wet’sò further spruce.bough 3.be.big\] 3.under 4.hide \[for 3.good\] like 3.looks \[3.to deeh…\] 1s.Pf.leave 

‘I went a little further to [[[a big white spruce bough] which looked like] it was good for] hiding under.’ (Saxon, 2000: 99)

New evidence suggests that the intuition of Saxon (2000) is correct, and that Tłı̨cho Yatıì IHRCs are island-insensitive. Compare the grammatical example given below to the Lakhota example given in 4a:

(10) [[Godı enı̜htł’è do lọ k’eyagehtı] xè gots’ì̜]ı̜dee \[newspaper \[person many \[THM.IPV.3PL.SBJ.read.NMLZ \[with 3PL.OBJ.1PL.SBJ.PFV.talk.NMLZ \[The Yellowknifer \[hoṭ’e.\] Yellowknifer IPFV.3SBJ.be \[\] ‘The paper that we talked to many people who read (it) is The Yellowknifer’ (ANON 2016)

The innermost relative clause is headed by Godi enı̜htł’è, ‘newspaper,’ which also plays a role in the matrix clause. The intermediary IHRC, however, is headed by do lọ – in island-sensitive languages this would constitute a subjacency violation, as demonstrated by the need for an additional resumptive pronoun to be added in the English translation.

The biggest obstacle to the application of previously proposes unselective binding analysis to Tłı̨cho Yatıì is the fact that Tłı̨cho has no overt system of definiteness (taken to be crucial by Watanabe (2004)) and no detectable definiteness effects, as NPs with strong quantifiers such as ‘all’ and pronouns can head a relative clause, which is against the predictions of Williamson (1987), who originally proposed unselective binding to account for island-insensitive IHRCs in Lakhota. Despite this apparent availability of definite relative head nouns, Saxon (2000) is not unoptimistic that Tłı̨cho Yatıì IHRC might be reconciled with an indefiniteness-dependent analysis. I will not take up this question in detail here, but will adopt the unselective binding hypothesis for the time being.

As mentioned in section 1, Saxon (2000) reports that there are very few instances of relative clauses that appear to be clearly externally headed but there do appear to be at least some unambiguous cases, as exemplified by (??) below (repeated from (12) in section 1):

(11) Ts’èko ʔamèe ʔelà nåelì xa dìi-lee sìì hazho̜ò̜ gıgà nìgohwho \[Ts’èko, [ʔamèe, ʔelà nåelì xa dìi-lee]] sìì hazho̜ò̜ gıgà nìgohwho \[woman who boat 3.sews impossible-Neg.C Foc all DA.beside 3S.arrive(pl) \[The women who can sew canoes all rush to it’ (Saxon, 2000: 104)

It appears that the semantic head of the relative clause, ts’èko, cannot be internal here, as the internal subject position is occupied by the relative pronoun ʔamèe, with which it is co-indexed.

4 “Externally Headed” Relative Clauses

The example of the unambiguous externally headed relative given in section 3 (repeated below) looks strikingly similar to the structure of English EHRCs:
(12) *Ts’èko ʔamèe ʔelà nàeli xa dii-lee sìi hazhoò gígà nìgohwho*

[Ts’èko, [ʔamèe, ʔelà nàeli xa dii-lee]] sìi hazhoò gígà nìgohwho
woman who boat 3.sews impossible-Neg.C Foc all DA.beside 3S.arrive(pl)

The women who can sew canoes all rush to it’  

(Saxon, 2000: 104)

However, there are two things that are notable here, and which seem to go against what might be predicted about IHRCs in a SOV language. Firstly, the apparent external head is preceding the relative clause, and this is unexpected in a head-final language. Japanese, for instance, has both IHRCs and EHRCs, and the semantic head of EHRCs follows the relative clause (Shimoyama, 1999). An example of this can be seen in (13a). The second unusual aspect of Tłı̜cho̜ Yatıì EHRCs is that the nominalizer morpheme is still obligatory. Once more, this does not appear to be the case in languages like Japanese, as seen in the contrast between (13a) and (13b), only the latter of which contains the nominalizer -no:

(13)  a. Japanese EHRC:

| Yoko-wa | [Taro-ga sara-no ue-ni oita] keeki-0 tabeta |
| Yoko-top | Taro-nom plate-gen on-loc put cake-acc ate |

‘Yoko ate a piece of cake which Taro put on a plate.’ (Shimoyama, 1999: 2)

b. Japanese IHRC:

| Yoko-wa | [Taro-ga sara-no ue-ni keeki-o oita] -no-0 tabeta |
| Yoko-top | Taro-nom plate-gen on-loc cake-acc put nmlz-acc ate |

‘Yoko at a piece of cake which Taro put on a plate.’ (Shimoyama, 1999: 2)

The fact that the head occurs on the left of the relative clause is unexpected for a head-final language under any analysis of EHRCs that takes the external NP to be a genuine argument of the matrix clause – regardless of whether it raises to that position or is generated there. If *ts’èko* is an external head to which the relative clause is an argument of, it would be anticipated that the relative clause would precede it. This is less problematic for analysis of EHRCs that have the head raising from its internal position to Spec CP (Kayne, 1994). If *ts’èko* and ʔamèe are generated internally as part of a DP, and separated when *ts’èko* raises above ʔamèe, then this derives the correct word order. There are a few potential obstacles here for raising analyses which hold that the relative pronoun is a determiner with the head noun as its complement, and that *wh*-movement triggers movement of the whole DP to a higher position in the clause: firstly, *wh*-movement in Tłı̜cho̜ Yatıì is optional (Ackroyd, 1982), and if this is the driving force behind head raising in relative clauses (as claimed in the promotion theory espoused by Bhatt (2002); de Vries (2002); Kayne (1994), among others), you might expect to find cases where an in-situ head *ts’èko ʔamèe* occurs. It is unclear at this point whether such a construction would be grammatical, and further research is needed to be certain.

The second problem is that adopting the idea that the relative pronoun and the head of the relative clause are components of a single DP somewhat obviates the need to analyze this construction as being externally headed at all. Under this analysis, the head and the relative pronoun are not in competition to fill the same argument position. This is especially true since the example given in (??) involves a subject head, and so it is unclear whether this constituent has really been moved out of its base position to begin with. If the head raises above the relative pronoun prior to any *wh*-movement, as is suggested by de Vries (2002), then the structure of the so-called EHRC may actually be as follows:

5 de Vries (2002) also reports that the occurrence of prenominal relative clauses in a language generally correlates with SOV word order.
The bracketing in (14) also shows that no raising of the head NP to Spec DP is actually needed to derive the correct word order, due to the head (and therefore \( \am\), in D) being final.\(^6\)

If the semantic analysis of IHRCs adopted here is on the right track, the fact that the nominalization morpheme is still present on the “externally headed relative clause” indicates that unselective binding may still be occurring. The fact that the unselective binder is still required here supports the idea that the head may still be internal, and therefore may require binding, which would be redundant if the relative clause concerned were externally headed and making use of the relativization strategy seen in English. Saxon (2000) notes that \( wh\)-phrases can occur as the heads of IHRCs in Tłı̜cho Yatıì, and that they are interpreted as indefinite pronouns when they do (also see 8a):

(15) [done si \( \text{siayù t'à \am \hotele} \) si hazo\( \text{hazòò \all nıgıı̂dè}\)]

‘What people survived with, it isn’t the case that we have looked at all [of] it’ (Saxon, 2000: 102).

It may then be the case that relative clauses such as the one seen in (12) are something akin to the interpretation of ‘what women can sew canoes all rush to it’ rather than ‘the women who can sew canoes all rush to it.’ This is a highly speculative, however, and more data is needed to falsify or confirm such a hypothesis. That being said, some new evidence might provide some support:

(16) a. [Tséko \( \text{sìlà \am \xà\di\i\i\i\i\i\c} \) si hazo\( \text{hazòò \notı̂dè}\)

‘The five women who can sew canoes all arrived’ (ANON 2016)

i. True or False: Many women know how to sew canoes and five of them arrived
ii. True or False: Five women know how to sew canoes and five of them arrived

b. [Tséko \( \text{sìlà \am \xà\di\i\i\i\i\i\c} \) si hazo\( \text{hazòò \notı̂dè}\)

‘The five women who can sew canoes all arrived’ (ANON 2016)

i. True or False: Many women know how to sew canoes and five of them arrived
ii. True or False: Five women know how to sew canoes and five of them arrived

c. [Tséko \( \text{\xà\di\i\i\i\i\c} \) si hazo\( \text{hazòò \notı̂dè}\)

‘The five women who can sew canoes all arrived’ (ANON 2016)

i. True or False: Many women know how to sew canoes and five of them arrived
ii. True or False: Five women know how to sew canoes and five of them arrived

When a native speaker was asked to judge both the grammaticality and possible interpretation of the examples in 16 above, there were some surprising results. Firstly, the combination of the relative pronoun and a numeral modifier of the noun in (16a) caused the sentence to become degraded in comparison to its relative pronoun-less counterpart in (16b).\(^7\) The addition of the pronoun in (16a) also does not correlate with a

\(^6\)The one obstacle for this is that demonstrative pronouns precede the noun in Tłı̜cho Yatıì, and you might expect them to occur in the same configuration as a relative pronoun, as they are typically thought to reside in D. However, quantifiers in Tłı̜cho Yatıì follow the noun (Ackroyd, 1982), and the headedness of the language might predict that determiners would as well, given the structure typically proposed for DPs, where the NP is a complement of D.

\(^7\)This example was ranked 3 on a scale of 5, where 5 was totally ungrammatical and 1 was perfectly grammatical.
difference in the scope of the quantifier phrase that is the head. In both (16a) and (16b), the IHRCs are maximalizing (in the sense of Grosu and Landman (1998)) and are incompatible with an interpretation where more than five women know how to sew canoes. This is not so when the numeral is modifying the whole IHRC, as in (16c) - when the modifier has scope over the whole clause, both interpretations are possible. Differences between EHRCs and IHRCs in regards to quantifier scope of the head have been noted for Japanese by a number of authors (Erlewine and Gould (2014); Shimoyama (1999); etc.) and it might be expected that such a distinction would be present in Tłı̨cho Yatì as well if there were true EHRCs.

The fact that (16a) is ungrammatical might be expected if the relative pronoun is acting as an indefinite modifier of the noun. It may be the case that the use of the relative pronoun denotes an indefinite number of the head noun, and that this is in conflict with the use of a numeral modifier, which provides specific number. The examples in (17) below may also support this analysis:

(17) a. Context: There is a party and all the boys left that party early, before it started to get fun, because they thought it was boring, so only the girls had fun.

ii. [Dożì hazô party ts’ò wegeèdèe] sii gtl’axôo sigoat’ì boys all party since 3OBJ.3PL.SBJ.leave.NMLZ FOC 3PL.after THM.A.PFV.3SBJ.be.fun ‘All the boys who left the party early missed the fun’ (Lit. All the boys who left the party, after them, it was fun).

b. Context: There is a party and some of the boys leave it early, before it started to get fun, because they think that it’s boring, so only the girls and the boys who remained had fun.

ii. [Eyì dożì amìi wegeèdèe] sii gtl’axôo sigoat’ì those boys who 3OBJ.3PL.SBJ.leave.NMLZ FOC 3PL.after THM.A.PFV.3SBJ.be.fun ‘All the boys who left the party early missed the fun’ (Lit. These boys who left it, after them, it was fun).

iii. [Eyì dożì mò̜hda eyì wegeèdèe] sii gtl’axôo sigoat’ì those boys some there 3OBJ.3PL.SBJ.leave.NMLZ FOC 3PL.after THM.A.PFV.3SBJ.be.fun ‘All the boys who left the party early missed the fun’ (Lit. Those few boys who left there, after them, it was fun).

The use of the relative pronoun amìi in 17b-ii contrasts with the hazô (‘all’) in (17a-ii), and seems to suggest an indefinite subset of the boys present in the context of the sentence left the party. (17b-iii) is also an acceptable translation for All the boys who left the party early missed the fun given the context in (17b-i) and makes use of the quantifier mò̜hda, meaning ‘some/few,’ to similar effect.

The data presented above supports the idea that even seemingly unambiguous EHRCs such as the one seen in (12) may be internally headed, with the relative pronoun modifying the head noun as an indefinite. This suggests that it may very well be the case that Tłı̨cho Yatì lacks EHRCs altogether.

5 Conclusion

The unusual word order found in Tłı̨cho Yatì with respect to supposedly external heads and presence of the nominalization morpheme on relative clauses that could be analyzed as EHRCs suggest that these constructions may in fact be IHRCs. Scope facts with regards to the interpretation of a modified head occurring with a wh-pronoun also suggest this, as there is no difference in possible interpretations between the supposedly external and canonically internal head. The fact that the simultaneous occurrence of a numeral modifier and a wh-pronoun in the same relative clause causes the sentence to become degraded supports the notion that wh-pronouns in this context are behaving as indefinite modifiers, denoting an undetermined quantity of
the head noun. This is further capitulated by the contrast seen between examples 17a-ii and 17b-ii, where the wh-pronoun signals that the quantity of the head noun is a subset of eligible referents in the context. If these constructions can easily be analyzed as IHRCs, then this indicates that the inclusion of EHRCs as an available relativization strategy in Tłı̜cho Yatıì is unnecessary, and that IHRCs may therefore be the only variety of relative clause available in the language.

References


