122-123. Relativization Strategies

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1. Introduction

A **relative clause** is a clause narrowing the potential reference of a referring expression by restricting the reference to those referents of which a particular proposition is true. Thus, along with the main clause *I teach the girl...*, the English sentence in (1) contains a relative clause, *who just greeted us*, which narrows the potential reference of the referring expression, *the girl* — called the head noun — to only referents of which the proposition *(the girl) just greeted us* is true.

(1) I teach the girl who just greeted us.

The relative clause and its head noun form the **relative construction**. For the present maps, we have not taken into account relative clauses which have no head noun (like English what you don't know). Languages use different strategies to encode the relative construction; we will refer to these as **relativizing strategies**.

There are different perspectives from which relativizing strategies can be studied. Thus, from the point of view of the linear order of the head noun and the relative clause, we can distinguish prenominal, postnominal, and circumnominal embedded relative clauses as well as preposed, postposed, and adjoined relative clauses (Lehmann 1984; and see chapter 90). Another possible perspective involves the global cognitive mechanisms underlying relativizing strategies on a language-universal level; from this perspective we can distinguish two global strategies, combining and inserting (Kibrik 1992).

For the purposes of the present study, we classify our sample languages according to the mechanisms by which the language in guestion expresses the syntactic-semantic role of the head noun in the relative clause, whereby we consider only formally expressed morphosyntactic means. In (1), for instance, the head noun serves as subject of the relative clause, and this is marked in English by use of the nominative relative pronoun who.

Languages may employ different morphosyntactic (as well as suprasegmental) means, that is, different relativizing strategies, for different syntactic-semantic roles of the head noun. In the English sentence in (1), the head noun has the subject role, and it is relativized by means of a relative pronoun. If the same head noun, *the girl,* has the role of the object, one of the ways in which it may be relativized is by not using any morphosyntactic (and/or suprasegmental) element at all, i.e. by means of a "gap" (see §2 below), as in (2):

(2) the girl we saw yesterday

This latter possibility does not exist when the role of the head is subject; hence (3) is ungrammatical in (standard) English.

(3) *The girl [just greeted us] is a student of mine.

Since many languages use different strategies for relativizing on different roles, we distinguish between **relativization on subjects** and **relativization on obliques**. Map 122 shows what strategies the languages of the world use to relativize on the subject.

For Map 123, we take into consideration the relativizing strategies the languages of the world employ with obliques, whereby we take the instrumental to be the prototypical case of obliques. In languages where we have no ready access to information about relativization on instrumentals, we consider other, comparable constructions: the comitative, the indirect object, the benefactive, the locative, etc. but *not* the possessive or the temporal.

Note that the head noun may have different roles in the main clause and in the relative clause. Thus in the English sentence in (4), the head noun *the girl* functions as the object of the main clause, and the subject of the relative clause.

(4) I like the girl who greeted us yesterday.

For the purposes of both Map 122 and Map 123, the role relevant to our classification is the one the head noun has **within** the relative clause. Accordingly, the example in (4) is an example of relativizing on the subject, since the head noun *the girl* functions as the subject of the relative clause.

The present classification is based on the assumption that *all* natural languages can relativize on subjects; hence, we are including multi-purpose clauses like those in the Diyari (Pama-Nyungan; South Australia) example (5) which have several other functions apart from the function of relativization. Diyari has no specific subordination construction whose sole, or even prototypical, function is to encode a relative clause. It uses, instead, a general, unified modifying construction which -depending on context - may be interpreted as either a subordinate temporal, conditional or relative clause, as in (5).

(5) Diyari (Austin 1981: 209)

tanali nina wala nanka-na talara 3PL.ERG 3sg.m.acc nest-abs make-REL.SS rain mada kuda-na wala-ni ηari-yi stone-ABS put-PART go.down-pres nest-Loc 'If/when/after they make/made the nest, they put the rain stone in it.'

'Having made the nest, they put the rain stone in it.'

'They who make/made the nest put the rain stone in it.'

'They put the rain stone in the nest they make/made.'

Instead of regarding languages such as Diyari as irrelevant to relativizing strategies, in the present classification we treat them as languages using a gap in relativizing on the subject role.

2. Defining the values

2. 1. Map 122: Relativization on subjects. Relativizing strategies with subjects:

@	1.	Relative pronoun		12
@	2.	Non-reduction		24
@	3.	Pronoun-retention		5
@	4.	Gap		125
			total	166

The first strategy has come to be called the **relative pronoun strategy**: the position relativized is indicated inside the relative clause by means of a clause-initial pronominal element, and this pronominal element is case-marked (by case or by an adposition) to indicate the role of the head noun within the relative clause. The German example in (6) illustrates the relative pronoun strategy with subjects.

(6) German

Der Mann,	[der	mich	begrüßt	hat],
man.NOM	REL.NOM	me	greet.PTCP	has
war	ein	Deutscher		
be.3sg.pst	one	German		

^{&#}x27;The man who greeted me was a German.'

Note that the mere presence of a pronoun that is restricted to relative clauses, and is thus in some intuitive sense a relative *pronoun*, is not sufficient to define an instance of the pronoun *strategy* (Comrie 1998: 61–62). Such a relative pronoun can be case–marked, for instance, not to indicate its role in the relative

clause, but rather to agree in case with the head noun in the main clause. Thus in the Modern Standard Arabic sentence in (7), the relative pronoun is nominative, like the head noun, whereas the position relativized in the relative clause is direct object (which would require the accusative case in Arabic); such instances do not satisfy our definition of the relative pronoun strategy.

(7) Modern Standard Arabic (Comrie 1998: 62)

'al-yulaam-aani l-musiiqiyy-aani llað-aani
the-boy-du.nom the-musical-du.nom Rel-du.nom
'the two boy musicians (whom Cyrano sent...)'

The second major relativizing strategy identifiable in our language sample is the **non-reduction strategy**: the head noun appears as a full-fledged noun phrase within the relative clause. Comrie (1989) and Comrie (1998) distinguish two subtypes of this strategy, which we have also been able to identify in our sample languages. The first subtype involves **correlative clauses**, where the head noun appears as a full-fledged noun phrase in the relative clause and is taken up again by a pronominal or a non-pronominal element in the main clause; this subtype is exemplified by the Pirahã (Mura; Brazil) sentence in (8).

(8) Pirahã (Everett 1986: 276)

boitóhoi bog-ái-hiab-i-s-aoaxái
boat come-ATELIC-NEG-EPENTH-?-INTER
boitó báosa xig-i-sai (híx)
boat barge bring-EPENTH-NMLZ (COMP/INTER)
'Might it be that the boat (which) tows barges is not coming?'

The second subtype of the non-reduction strategy, **internally** headed relative clauses, covers cases where the head is represented by a full noun phrase inside the relative clause, and

has no explicit representation in the main clause, as exemplified by the Maricopa (Yuman; Arizona) sentence in (9).

(9) Maricopa (Gordon 1986: 255)

aany=lyvii=m 'iipaa ny-kw-tshqam-sh shmaa-m
yesterday man 1-REL-slap.DIST-SUBJ sleep-REAL
'The man who beat me yesterday is asleep.'

In addition to the above two subtypes of the non-reduction strategy distinguished in Comrie (1989; 1998), in the present classification the non-reduction strategy covers one more subtype that we have termed elsewhere (see Kuteva and Comrie, forthcoming) the paratactic relative clause (cf. English *That man* just passed by us, he introduced me to the Chancellor of the *University yesterday*). This subtype the has following characteristics: the "relative" clause contains the full-fledged head and is the same as an unmarked simple (declarative) clause; the relative and main clauses are only very loosely joined together. The Amele (Trans-New Guinea; Papua New Guinea) sentence in (10) illustrates this subtype of the non-reduction relativizing strategy.

(10) Amele (John Roberts, p.c.)

mel mala heje on ((mel) boy chicken illicit take.3sg.subj-rem.pst boy eu) busali nu-i-a that run.away go-3sg.subj-tod.pst 'The boy that stole the chicken ran away.'

In (10), *mel* 'boy' is the "relativized" noun in the "relative" clause. This nominal can be optionally referred to in the following "main" clause either by the demonstrative *eu* 'that' or, if clarification is needed, by *mel eu* 'boy that'. What links the two clauses is the rising intonation at the end of the first clause. This indicates that it is not a final clause and is in either a subordinate or coordinate

relationship with the following clause. The difference between correlatives and paratactic relatives is that whereas in correlatives, the relative clause usually contains some element (e.g. an interrogative) which would not be present in the corresponding simple declarative sentence, paratactic relatives contain no such element.

The third major relativizing strategy with subjects is the **pronoun-retention strategy.** In languages employing this strategy, the position relativized is explicitly indicated by means of a resumptive personal pronoun, as in the case of the Babungo (Bantu; Cameroon) example in (11).

(11) Babungo (Schaub 1985: 34)

mà yè wá ntia fán nwá si sàn ghô I see.PFV person that who he PST2 beat.PFV you 'I have seen the man who has beaten you.'

Note that we define the pronoun retention strategy as one where a pronoun or pronominal marker referring to the head of a relative clause is obligatory in the relative clause but is not obligatory in the corresponding simple declarative clause. Thus example (11) is considered pronoun-retention because it obligatorily includes the pronoun glossed 'he', although such a pronoun does not occur in the simple sentences in (12).

(12) Babungo (Schaub 1985: 23)

- a. Làmbí 'sáŋ ŋwớ Lambi beat.IMPF him 'Lambi beat him.'
- b. Làmbí sáŋ 'ŋwð Lambi beat.PFV him 'Lambi has beaten him.'

Note also that, in contrast to Babungo, there exist languages where a pronominal subject marker is obligatorily attached to the

verb both in the relative clause and in the corresponding simple declarative clause, as in Maybrat (West Papuan; Papua, Indonesia), for instance:

(13) Maybrat (Philomena Dol, p.c.)

- a. fai m-ait awiah woman 3.UNMARKED-eat taro 'The woman eats taro.'
- b. fai ro m-ait awiah woman REL 3.UNMARKED-eat taro 'the woman who eats taro'

In our classification, such languages are not treated as cases of the pronoun retention strategy.

Finally, the fourth major relativizing strategy with subjects identifiable across languages is the **gap strategy**. This strategy involves cases where there is no overt case-marked reference to the head noun within the relative clause:

(14) Turkish (Comrie 1998: 82)

[kitab-ı al-an] öğrenci book-ACC buy-PTCP student 'the student who bought the book'

Note that for present purposes the gap strategy unites a number of possibilities that would need to be kept apart for other purposes. In some languages, the gapped clause construction may be only one manifestation of a single formal means for marking not only what translates English relative clauses but also a number of other clause types, e.g. the Fact-S construction (as in "The fact that he doesn't know me..."), etc., where there is no gap. More precisely, this construction can be regarded as a *general noun-modifying clause construction*, as the following examples from Karachay-Balkar (Turkic; northern Caucasus) demonstrate:

- (15) Karachay-Balkar (Comrie 1998: 81)
 - a. [kitab-i al-yan] oquwču book-ACC buy-PTCP student 'the student who bought the book'
 - b. [oquwču al-yan] kitap student buy-PTCP book 'the book that the student bought'
 - c. [prezident kel-gän] hapar
 president come-PTCP news
 'the news that the president has come'
 - d. [et biš-gän] iyis
 meat cook-PTCP smell
 'the smell of meat cooking'

By contrast, there are languages with a gap strategy where different constructions must be used depending on the position relativized, on whether a Fact-S construction is involved, etc., cf. (16a) vs. (16b-c):

- (16) Turkish (Comrie 1998: 82)
 - a. [kitab-ı al-an] öğrenci book-ACC buy-PTCP student 'the student who bought the book'
 - b. [öğrenci-nin al-dığ-ı] kitap student-GEN buy-NMLZ-3SG book 'the book which the student bought'
 - c. [cumhurbaşkanı-nın gel-diğ-i] haber-i president-GEN come-NMLZ-3SG news-3SG 'the news that the president has come'

The general noun-modifying construction may involve a participial marker (as in Karachay-Balkar), a general subordinator (as in Warndarang (Maran; Northern Territory, Australia)), a multifunctional complementizer (as in Chalcatongo Mixtec (Oto-

Manguean; Mexico)), or even a finite clause with no overt subordinator (as in Japanese). In a number of cases, however, there is a gap strategy specific to relativization, as in Maale (Omotic; Ethiopia), exemplified in (17).

(17) Maale (Amha 2001: 160)

7ííní [[ziginó mukk-é] 7atsi]
3SG.M.NOM yesterday come-PFV.REL person.M.ABS
zag-é-ne
see-PFV-AFF.DECL

'He saw the man who came yesterday.'

Here the relative clause precedes the head noun and it contains no pronominal element co-referential to the relativized noun. The relative clause in Maale can be regarded as a specifically relative construction because it differs from other subordinate clauses in having no affix indicating the dependent status of the clause. And it also differs from independent sentences: whereas independent sentences are characterized by clause-final illocutionary force morphemes which classify the utterance as an assertion, interrogation, manipulative, etc., as in (18), the (restrictive) relative clause ends in one of the aspect/polarity suffixes $-\acute{e}-$, $-\acute{a}-$, $-uw\acute{a}-$, or $-ib\acute{a}-$, as in (17), and cannot be marked by the illocutionary force morphemes so that it cannot form a complete utterance on its own.

(18) Maale (Amha 2001: 160)

7atsí ziginó mukk-é-ne person.M.NOM yesterday come-PFV-AFF.DECL 'The man came yesterday.'

2.2. Map 123: Relativization on obliques.

@	1.	Relative pronoun strategy		13
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@	2.	Nonreduction strategy		14
@	3.	Pronoun retention strategy		20
@	4.	Gap strategy		55
@	5.	Not possible		10
			total 1	12

We distinguish five major groups of languages here. First, there are a number of languages that relativize upon obliques by employing the **relative pronoun strategy**, as exemplified in the Russian sentence in (19).

(19) Russian

Ja poterjal nož, kotorym
I lose.PST knife.ACC which.INSTR
ja narezal xleb.
I cut.PST bread

'I lost the knife with which I cut the bread.'

Second, a number of languages use a **non-reduction strategy** for relativizing on obliques, where the head noun appears as a full-fledged noun phrase within the relative clause, with the same three major subtypes, (a) correlative, (b) internally headed relative clause, and (c) paratactic clauses, as with relativization on subjects. The sentences in (20), (21) and (22) illustrate these three subtypes, respectively.

(20) Hindi (Comrie 1998: 62)

Maim jis ādmī bāt kar rahā se I.DIR which.sg.obl man talk do PROG.SG.M to thā kal bhārat jāegā. vah be.IMPF.SG.M that.DIR.SG tomorrow India qo.FUT.M.SG 'The man [to whom I was talking] will go to India tomorrow.'

(lit. 'Which man I was talking with, he will go to India tomorrow')

- (21) Maricopa (Gordon 1986: 261)
 - Bonnie va-s-ii uuyem-sh havshuu-k Bonnie house-DEM-at go.NOM-SUBJ blue-REAL 'The house Bonnie went to is blue.'
- (22) Gooniyandi (Bunaban; Australia; McGregor 1990: 438)

 ginharndi yoowooloo jijaggiddaa-nhi

 you.know man we.are.speaking-of.him

 wambiggoowaari

 he.is.going.inside

 'The man who we're talking about is going inside.'

The third major relativizing strategy with obliques is the **pronoun-retention strategy**. This strategy is exemplified in the sentence in (23) from Persian.

(23) Persian (Comrie 1998: 63)

mardhâi [ke ketâbhâ-râ be ânhâ dâde bud-id]

men that books-ACC to them given were-2sG

'the men that you had given the books to'

(lit. 'the men that you had given the books to them')

The fourth group of languages employ the **gap strategy**, as exemplified in the Korean sentence in (24).

(24) Korean (Comrie 1989: 151)

[Hyənsik-i kɨ kä-lɨl ttäli-n] maktäki

Hyensik-NOM the dog-ACC beat-REL stick

'the stick with which Hyensik beat the dog'

The fifth value represented on Map 123 is **non-relativizable**, and it stands for those languages where obliques cannot be relativized upon directly. In such languages, the translation equivalent of relativizing upon an oblique in other

languages is typically expressed by advancing the noun phrase in question to a position that can be relativized upon, e.g. by the use of applicative and/or passive constructions (for details, see Comrie 1989: 156ff.).

Note that the assignment of a particular feature value to a particular language does not mean that this feature value is the only one that has been attested in that particular language. It only means that this particular feature value is considered to be the most frequent, or the canonical one in non-marked contexts.

3. Geographical distribution

Map 122 shows the following areal-typological configurations with respect to relativizing on subjects. In Europe, the relative pronoun strategy predominates (see also Lehmann 1984: 109; Comrie 1998: 6; Haspelmath 2001: 1496–1497). Note that this strategy stands out as being typically European since it is not found in Indo-European languages spoken outside Europe, and is exceptional more generally outside Europe.

In East Asia and Southeast Asia, the gap strategy is the most frequent one (see also Comrie 1998: 78).

The non-reduction relativizing strategy is most frequently employed in the languages of the Americas.

Map 123 reveals distinct areal-typological patterns, too. The gap strategy is the dominant relativizing strategy for obliques in Southeast Asia, the Pacific area, and Australia.

The relative pronoun strategy is characteristic of relativizing on obliques in Europe.

The most frequent relativizing strategy with obliques in the languages of Africa is pronoun-retention.

4. Theoretical issues

According to the Accessibility Hierarchy of Relativization (subject > direct object > indirect object > possessor) proposed in

Keenan and Comrie (1977), it is easier to relativize on subjects than it is to relativize on any of the other positions, easier to relativize on direct objects than indirect objects, etc. One of the generalizations that has been made regarding the accessibility hierarchy is that the pronoun retention strategy is preferred at the lower end of the hierarchy. This finds substantial confirmation in the present study, in that several languages use pronoun retention for relativizing upon obliques but not for relativizing upon subjects. In fact, few languages use pronoun-retention to relativize upon subjects, though Babungo illustrates precisely this possibility, as in (11), repeated as (25):

(25) Babungo (Schaub 1985: 34)

mà yè wá ntá fán nwá si sàn ghô I see.PFV person that who he PST2 beat.PFV you 'I have seen the man who has beaten you.'

Note that to relativize upon direct objects, Babungo uses either a gap or pronoun-retention, with the gap being obligatory with a few verbs in the perfective aspect, as in (26); in this Babungo provides an exception to the accessibility hierarchy generalization on the distribution of pronoun retention.

(26) Babungo (Schaub 1985: 34)

a. optional gap strategy

mà yè wěembwā fán tǐi I see.PFV child who father wī sá sǎn (nwà) his PST2 beat.PFV (him)

'I have seen a child whom his father had beaten.'

b. obligatory gap strategy

mà yè nkáw nkáa fán Làmbí kà I see.PFV chair that which Lambi give.PFV 'I have seen the chair which Lambi gave.'