

Linguistic Typology: Relative Clauses

Relative clauses are subordinate propositions which provide more detailed information about a constituent of the superordinate clause.

Example:

(1) *the man who helped me*

The relative clause *who helped me* provides more information about *the man*. *Who* refers to *the man* and is the head of the relative clause.

Relative clause strategies

There are three main ways of dealing with the head of the relative clause:

- Obliteration / gapping: the head is not expressed at all:

(2) *the man (that) I saw*

In the relative clause the non-expressed head is in object function. *That* is a subordinator.

- Relative pronouns: these indicate that the clause is a relative clause and in addition provide information about the syntactic function of the head of the relative clause:

(3) *the man whose book I bought*

Whose indicates that the head is a possessor.

- Pronoun retention: often in combination with a subordinator:

(4) *the man that I got this book from him*

This is subliterate in English, but well attested. In some languages this is the main relativization strategy:

(5) *hā-’ish ’asher nāthan dāwīdh has-sēfer lō*

the-man SUBORD give-3SG.PAST David the-book to.him

‘the man David gave the book to’

These strategies differ in their explicitness. Obliteration / gapping is least explicit because the head is not expressed, which means that its syntactic function must be extrapolated from what is missing. In addition, the subordinator is not obligatory in English.

Relative pronouns are more explicit. They show two things at the same time: firstly, that the clause is a subordinate one, and secondly, what the syntactic function of the head is.

Pronoun retention is the most explicit strategy. The subordinator marks the clause as subordinate. The head is expressed by a non-relative pronoun that marks the function of the head. The syntax (word order etc) of the relative clause does not differ from that of a main clause.

Restrictions on relativization

In many languages, there are severe restrictions on what syntactic functions the head of a relative clause can fulfil. For instance, *the man whose book I like* is impossible in many languages. Such restrictions are not random, but follow Keenan and Comrie's Accessibility Hierarchy:

subject > direct object > indirect object > oblique > genitive > object of comparison.

This hierarchy means that a language which can have relative clauses with the head in indirect object function can also have relative clauses in which the head is direct object or subject; but a language which can have relative clauses in which the head can be in subject function cannot necessarily have heads in direct object function.

Now recall that many languages can assign subject to all sorts of semantic macro-roles:

Language	Agent	Patient	Recipient	Beneficiary	Instrument	Location	Time
Dutch	yes	yes	no	no	no	no	no
English	yes	yes	yes	no	no	no	no
Sundanese	yes	yes	yes	yes	no	no	no
Maranao	yes	yes	yes	yes	yes	no	no
Malagasy	yes	yes	yes	yes	yes	yes	no
Cebuano	yes	yes	yes	yes	yes	yes	yes

Note: Dutch and English are West Germanic languages; the other languages are Austronesian.

In Dutch and English, heads of relative clauses can fulfil practically every function on the Accessibility Hierarchy. This is necessary because subject assignment is fairly restricted, and if heads could not fulfil so many functions Dutch and English could not express certain things in relative clauses. In Austronesian languages, heads can have far fewer functions, but the various voices allow subject assignment to more macro-roles than in English. This ensures that everything can be expressed in relative clauses.

Compare Indonesian (Bahasa Indonesia, Austronesian): relative clauses are introduced by the subordinator *yang*, and the head of the relative clause is gapped; its function must be that of the subject or genitive attribute of the subject:

- (6) *Dia menulis buku [yang tebal] itu.*
 he ACT.write book REL thick DEF
 'He is writing a book that is thick.'

- (7) **Gaji [yang sutradara menerima] itu tidak banyak.*
 salary REL producer ACT.get DEF NEG much
 *‘The salary that a producer gets is not high.’
- (8) *Gaji [yang di-terima sutradara] itu tidak banyak.*
 salary REL PASS-get producer DEF NEG much
 ‘The salary that is received by a producer is not high.’

Ex. 6 shows a relative clause whose head is in subject function. Ex. 7 is ungrammatical because the head is in object function. Ex. 8 is the grammatical equivalent of Ex. 8: the verb is passivized.

English and Latin examples of relativization along the Accessibility Hierarchy:

- Head = subject:
 - (9) *the man who read this book*
 - (10) *uir qui hunc librum legit: qui = nominative*
- Head = direct object:
 - (11) *the man who(m) you saw yesterday*
 - (12) *uir quem heri uidisti: quem = accusative*
- Head = indirect object:
 - (13) *the man whom you gave the money*
 - (14) *uir cui pecuniam soluisti: cui = dative*
- Head = oblique (here: prepositional object):
 - (15) *the place which you went away from*
 - (16) *locus a quo abiisti: quo = ablative*
- Head = genitive:
 - (17) *the man whose book I found*
 - (18) *uir cuius librum inueni: cuius = genitive*
- Head = standard of comparison:
 - (19) (?) *a man than whom Scaliger knew no greater or more learned*
 - (20) *uir quo Scaliger nesciuit maiorem aut eruditioem, quo = ablative*

Ex. 19 is not acceptable to every speaker. The alternative is to mark the standard of comparison as oblique, which gives a more acceptable result:

- (21) *a man compared to whom Scaliger did not know ...*

Relative clause strategies and accessibility

The most explicit relativization strategy involves resumptive pronouns; the least explicit strategy is gapping; and relative pronouns are somewhere in between.

If a language has more than one relativization strategy, the least explicit will be used for heads of relative clauses which are easily accessible (subject, object), and the most explicit will be used for heads which are not easily accessible (standard of comparison).

English relative pronouns can be used anywhere on the hierarchy, but gapping is more restricted:

- Subject:

(22) **I liked the man helped me.*

According to the hierarchy, this ought to be possible; it is ungrammatical because English needs an overt subject, while gapping would get rid of it.

- Direct object:

(23) *I like the man I met yesterday.*

- Indirect object:

(24) *I like the man you gave the book.*

- Oblique (prepositional object):

(25) *I like the book I looked at.*

Gapping in English is impossible if the head of the relative clause is in genitive function, or if it is the standard of comparison.

Above we saw that Hebrew introduces relative clauses with a general subordinator *'asher*. We also saw a resumptive pronoun. Resumptive pronouns are in fact unnecessary (though they do occur) if the head is subject or direct object:

(26) *hā- 'ishshā 'asher nāthattā 'immadhī* (Genesis 3. 12)
the-woman SUBORD place.2SG.PAST with.me
'the woman whom you put beside me'

In less accessible functions, resumptive pronouns are obligatory:

(27) *hā- 'ish 'asher dāwīdh gādhōl mimmennū*
the-man SUBORD David big from.him
'the man than whom David is bigger'

Here the head of the relative clause is the standard of comparison.

Now compare Farsi (Modern Persian, Indo-European): relative clauses are introduced by the subordinator *ke*. If the head of the relative clause is in subject function, it is gapped. If it is in object function, there may be gapping or a

resumptive pronoun. If the head is in any other function (all along the hierarchy are possible), a resumptive pronoun is obligatory:

- (28) *Ketab-i [ke ruye miz bud] kojā ast*
 book-IND SUB on table was where is
 ‘Where is the book that was on the table?’
- (29) *Vazir-i [ke har ādam az u bozorg-tar
 ast] hamishe xejālat mi-kesh-ad.*
 minister-IND SUB every human than him big-COMP
 is always shame IMPF-bear-3SG
 ‘The minister, compared to whom everyone is taller, is always embarrassed.’

Note that what I mark as IND is a marker for indefinite specific entities. Ex. 28 shows the obligatory gapping of subject pronouns in relative clauses. Ex. 29 shows an obligatory resumptive pronoun — the head of the relative clause is the standard of comparison.

Finite / non-finite and the accessibility hierarchy

So far we have only looked at finite relative clauses. But there are also non-finite ones, often involving participles:

- (30) *The tree, which had been knocked down by the wind, had to be replaced.*
- (31) *The tree, knocked down by the wind, had to be replaced.*

Participial relative clauses normally involve gapping. The gapped element is normally the subject of the participle. All languages have fewer voice distinctions among participles than among finite forms, so the finite relative clauses can be used for larger stretches down the accessibility hierarchy.

Compare German finite relative clauses:

- (32) *der Mann, der liest*
 the.NOM.MASC man RELPR.NOM.MASC read.3SG
 ‘the man who is reading’
- (33) *der Mann, den du siehst*
 the.NOM.MASC man RELPR.ACC.MASC you.NOM see.3SG
 ‘the man whom you can see’
- (34) *der Mann, dem du hilfst*
 the.NOM.MASC man RELPR.DAT.MASC you.NOM help.3SG
 ‘the man whom you are helping’
- (35) *der Mann, dessen Kind schnarcht*
 the.NOM.MASC man RELPR.GEN.MASC child snore-3SG
 ‘the man whose child snores’

Exx. 32 and 33 show the relative pronoun in subject and direct object functions (nominative and accusative). Ex. 34 contains a relative pronoun in the dative

(*help* takes the dative in German and cannot be passivized). Ex. 35 contains a relative pronoun in the genitive; this is a possessor.

Non-finite relative clauses contain participles and have gapped heads in subject function. There are active and passive participles, the latter of which allow objects to become subjects and thus make them relativizable:

(36) *der* *lesende* *Mann*
the.NOM.MASC reading-PART man
'the reading man'

(37) *der* *von dir* *gesehene* *Mann*
the.NOM.MASC from you.DAT seen.PASS.PART man
'the man seen by you'

Ex. 36 contains a present active participle whose subject is the agent. Ex. 37 contains a past passive participle. The subject is the patient; passivization is the only way of turning a patient object into a subject and thus into the head of a relative clause.

Some word order patterns: finite vs. non-finite relative clauses

The German examples show non-finite pre-head relative clauses and finite post-head relative clauses. This is a common pattern across languages. We find the following patterns in languages which have both finite and non-finite relative clauses:

- a) finite and non-finite clauses follow their heads
- b) both types precede their heads
- c) non-finite precedes, finite follows
- d) if there is flexibility concerning one type of relative clauses, it is always such that the finite clauses consistently follow their heads while the non-finite ones can precede or follow, or such that the non-finite clauses consistently precede their heads while the finite ones precede or follow.

The following patterns do not occur:

- a) finite clauses precede their heads, non-finite ones follow their heads
- b) if there is flexibility concerning one type of relative clauses, it is such that finite clauses consistently precede their heads while non-finite ones can precede or follow, or it is such that non-finite clauses consistently follow their heads while finite ones precede or follow.

Reason: finite clauses are intrinsically heavier (e.g. because of subordinators, relative pronouns, more tense markers). All things being equal, the heavier a constituent is, the more likely it is to follow its head.

More word order patterns: S, O, and V

If the basic constituent order is VSO or SVO, relative clauses practically always follow their heads. If the order is SOV, some languages have preceding relative clauses, others have following relative clauses.

Why? VSO and SVO both have the order head – dependent, and noun – relative clause is in harmony with this. This in itself would not be a sufficient reason for the consistency with which relative clauses follow. There must be a second reason, and it seems to be the fact that relative clauses are inherently heavy constituents.

SOV has the order dependent – head, and relative clause – noun is in harmony with this. However, because relative clauses are so heavy, there is a cross-linguistic tendency for them to follow their heads. Thus, there are two conflicting principles here.