

The syntax of relative clauses

1: Basics

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About myself

- currently: syntax and morphology at the University of Leipzig
- PhD: Leiden University
- MA: University of Zurich
- in between: Konstanz, Zurich

- research interests:
 - A'-movement, relative clauses, resumption, locality, copy theory
 - complex predicates, verb clusters
 - syntax semantics interface: reconstruction, scope, binding
 - coordination, ATB-movement, ellipsis
 - syntactic microvariation, dialect syntax
 - OT vs. MP (derivation vs. representation)
 - rules vs. constructions (also: abstract vs. surface-oriented)
 - morphology-syntax interface, esp. case, agreement, syncretisms

IGRA

- a new graduate programme in linguistics at the University of Leipzig: Interaction of grammatical building blocks
- IGRA studies how grammatical building blocks in phonology, morphology and syntax interact and thereby restrict the distribution of linguistic expressions.
- Types of interactions:
 - ① excitatory sequential interaction of building blocks: Feeding, Counter-Bleeding
 - ② inhibitory sequential interaction of building blocks: Bleeding, Counter-Feeding
 - ③ inhibitory simultaneous interaction of building blocks: competition (disjunctive blocking, conflict)
 - ④ excitatory simultaneous interaction of building blocks: cooperation
- We will admit four doctoral students in April 2015; positions will be advertised on LinguistList.

Goals

- understand why RCs pose interesting challenges for formal syntax
- get an overview of the various analyses of RCs in the history of Generative Grammar
- become familiar with different types of RCs: head-internal RCs, appositive RCs, correlatives, free relatives
- learn to assess the relevance of reconstruction as a diagnostic
- become familiar with the properties of resumption
- understand why certain phenomena in RCs may provide an argument for top-down derivation
- learn what makes a good syntactic argument

Why relative clauses?

- (1) a. I saw the woman Peter kissed.
 b. \approx I saw x =woman such that Peter kissed x .
- Somehow, *the woman* is related to both *saw* and *kissed*
 - Movement?
 - Theta-criterion
 - Case filter/Activity Condition
 - Scope
- (2) I saw every woman Peter kissed. \nrightarrow Peter kissed every woman
- \rightarrow The relationship is obviously more complex
- the precise link between the two positions/functions is the central challenge posed by relative clauses

Outline

- 1 Why relative clauses?
- 2 Definition
- 3 Parameters of variation
 - Relationship head noun – RC
 - Marking the function of the HN in the RC
 - Which functions in the RC can be relativized?
 - Form of the RC
- 4 Schedule
- 5 References

Definition

- definition 1 (naïve):

relative clause = a clause which modifies a noun (= head noun)

(3) I heard the claim that John was asleep.

- definition 2 (Andrews 2007: 206):

relative clause = a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the RC

- what about appositive RCs (non-intersective)?

- (4)
- a. The Japanese [who are industrious] now outcompete Europe.
 - b. The Japanese, [who are industrious], now outcompete Europe.

Definition

- what about head-internal relative clauses (no obvious subordination)?

(5) [Nuna bestya-ta ranti-shqa-n] alli bestya-m ka-rqo-n.
 man horse-ACC buy-PFV-3 good horse-EVD be-PST-3
 'The horse that the man bought was a good horse.' *Ancash Quechua*

→ crucial parts (de Vries 2002: 14):

- RCs are subordinated
- RCs are clausal modifiers of NPs (intersective and non-intersective)
- An RC is connected to surrounding material by a *pivot* constituent, i.e. a constituent shared semantically by matrix clause and RC
- The theta-role and the syntactic role which the pivot plays in the RC are in principle independent of its roles outside the relative (but see attraction and matching)

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Parameters of variation

- the structural relationship between the head noun and the RC
 - the marking of the function of the head noun inside the RC
 - the functions which the relativized NP can have inside the RC
 - form of the RC (particles, finiteness, reduction, nominalization)
- the parameters are not fully independent

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The relationship head noun – RC

- Is the RC integrated into the main clause or is it at the periphery?
- Does the RC precede or follow the head noun?
 - ① Embedded RCs: Together with the head noun, the RC occupies a regular slot in the main clause (argument/adjunct)
 - ② Adjoined RCs: RC occurs at the periphery of the main clause
 - ③ Free RCs: no obvious head noun

Embedded RCs

- Externally headed relative clauses

- the RC is a subordinate clause to the head noun
- RC and HN form a constituent: can be moved together

- (6) a. I saw [the man who Mary likes] in the park. →
 b. [The man who Mary likes] was seen in the park.

- prenominal vs. post-nominal relative clauses

- English, German: RC follows head noun
- Turkish and many others: RC precedes HN:

- (7) [oğl-u mekteb-e gid-en] adam
 son-3s.POS school-DAT go-SUB.REL man
 ‘the man whose son goes to school’

Turkish

Embedded RCs

- Prenominal RCs
 - are often nominalized, usually lack relative pronouns
 - frequently found in head-final languages (e.g. Japanese, Turkish)
 - Position of the RC
 - Despite their similar function, RCs and adjectives often occupy different structural positions, e.g., English
 - the more nominal/reduced an RC is the more it behaves like an adjective, compare the prenominal participial clauses in German whose external syntax is that of an adjective:
- (8) ein [seine Frau verehr-end-er] Direktor (cf. ein alt-er D.)
 a his wife adore-PRT-M.NOM director (a old-M.NOM D.)
 'a director adoring his wife' *German*

Embedded RCs

- Variation in the position of the determiner (de Vries 2002: 63):
 - D + N + RC: (Englisch, German etc.)
 - N + D + RC: (Urhobo [Kwa, Nigeria], Albanian)
 - N + RC + D: (Yoruba [Kwa, Nigeria], Indonesian)
 - D + RC + N: (German: participial RCs, Tigre, Yurok)
 - RC + D + N: (Korean, Abkhaz)
 - RC + N + D: (Basque, Ijo)

Embedded RCs

- Head-internal relative clauses

- no visible external head noun, instead, the HN surfaces inside the RC, usually in the position corresponding to its function
- Bambara (Mande, Niger-Congo): The head of the RC is marked by the postposition *min* (Keenan 1985)

(9) a. n ye so ye
 I PST house see
 'I saw the house.'

b. tyə be [n ye **so min** ye] dyo
 man PRS I PST house REL see build
 'the man builds the house that I saw.'

Bambara

- Ancash Quechua: no special marking

(10) [Nuna **bestya-ta** ranti-shqa-n] alli bestya-m ka-rqo-n.
 man horse-ACC buy-PFV-3 good horse-EVD be-PST-3
 'The horse that the man bought was a good horse.' *Ancash Quechua*

Embedded RCs

- head-internal RCs are often ambiguous (Comrie 1981: 139):

(11) [Kan kwitsa-man kwintu-ta willa-shka]-ka llapa sumaj-mi
 you girl-to story-ACC tell-NOM-TOP very pretty-VAL
 ‘The girl to whom you told the story is very pretty.’ or
 ‘The story that you told to the girl is very pretty.’ *Imbabura Q.*

- embedded head-internal RCs are called *circumnominal*
- they usually have the distribution of NPs, thus bear case, occur with D:

(12) [[PeemE thep khii-pa] the] nee yin.
 Peem.ERG book.ABS carry.PRT the.ABS I.GEN be
 ‘The book Peem carried is mine.’ *Tibetan Keenan (1985)*

Adjoined RCs

- RC is adjoined to the main clause, occurs in a peripheral position
- adjoined RCs can be internally or externally headed
 - extraposed RCs in English:

(13) I met the man yesterday [who Claudia wants to marry].

- head-internal version (Hale 1976: 79):

(14) [Nyuntulu-rlu kutja-npa **wawirri** pantu-rnu] ngatjulu-rlu
 you-ERG rel-2S kangaroo spear-PST I-ERG
 kapi-rna purra-mi.
 FUT-1S cook-NPST
 'I will cook the kangaroo that you speared.'

Warlpiri

Adjoined RCs

- correlatives: left-dislocated RC with a resuming element in the main clause (demonstrative etc.)

(15) [CORCP ... Rel-XP_i ...] [TP ... Dem-XP_i ...]

(16) [[jo CD]_i sale-par hai]_i Maya [us CD-ko]_i khari:d-egi:
 Rel CD sale-on be.PRS Maya.F DEM CD-ACC buy-FUT.F
 ‘Maya will buy the CD that is on sale.’
 (Lit. ‘[Which CD is on sale], Maya will buy that CD.’)

Hindi

- the head noun can occur in the main clause, in the RC or in both:

(17) a. [CORCP ... Rel-**XP**_i ...] [TP ... Dem-**XP**_i ...]
 b. [CORCP ... Rel ...] [TP ... Dem-**XP**_i ...]
 c. [CORCP ... Rel-**XP**_i ...] [TP ... Dem_i ...]

Adjoined RCs

- Multi-headed correlatives

- (18) [jis-ne_i jo_j kar-na: cha:h-a]_{i/j} [us-ne_i vo_j ki-ya:]
 Rel-ERG REL do-GER want-PFV Dem-ERG Dem do-PFV
 ‘For x, y s.t. x wanted to do y, x did y.’
 (Lit. ‘Who wanted to do what, he/she did that.’)

Hindi

- extraposed appositive RCs with internal heads (Bhatt 2005, see also Serbo-Croatian, Keenan 1985: 153):

- (19) I read the New Yorker yesterday, [**which magazine** is one of the finest in the country].

Overview: HN and RC

- cross-classification (Lehmann 1986: 666)

head \ RC	<i>adjoined</i>	<i>embedded</i>
<i>head-internal</i>	preposed	circumnominal
<i>head-external</i>	postposed	adnominal (pre-/post-)

- Languages often have several types:
 - German, English: adnominal (post-), postposed (= extraposed)
 - Warlpiri: preposed, postposed
 - Hindi: preposed (corr), postposed, adnominal (post-)
 - Turkish: adnominal (pre-), postposed

Free relatives

- have the distribution of an NP/PP, but there is no visible nominal/prepositional layer:

- (20)
- I like what you say.
 - We should talk to whom/whoever he talks.

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Relative pronouns

- occur in the left periphery of the RC (→ movement)
- encode the function in varying degrees of explicitness:

(21) This is the man whom I met.

DO

- differ in form from the *wh*-pronouns in many languages (unlike English)
- pronoun or complementizer? – pied-piping:

(22) the man with whom/*with that I spoke

- do not occur in prenominal and circumnominal RCs

Resumption

- a regular personal pronoun occupies the position corresponding to the function of the HN:

(23) ha-ʔiš še raʔiti ʔoto
 the-man that saw.1s him
 ‘the man that I saw’

Hebrew Shlonsky (1992)

- very flexible strategy, found with practically all grammatical functions
- hardly occur in prenominal RCs (because they are often nominalized), but see Mandarin
- do not occur in circumnominal RCs, see de Vries (2002: 38)

Other Strategies

- deletion/gap-strategy

(24) the man [I saw ___]

- Does not work for all functions:

(25) *the man [I saw ___'s sister] (= whose sister I saw)

- Doubling: HN inside and outside the RC (rare), Keenan (1985: 152)

(26) [PeemE **coqtsee** waa-la kurka thii-pe] **coqtse**
 Peem.ERG table.GEN under-DAT cross.ABS write-PART table
 the na noo-qi yin
 the.ABS I.ABS buy-PRS be
 'I will buy the table under which Peem made a cross.' *Tibetan*

Other Strategies

- Turkish: Type of participle indicates grammatical relation:

- (27)
- | | | | |
|----|---------------------------------|-------|--------|
| a. | [mekteb-e gid- en] | oğlan | |
| | school-DAT go-SUB.REL | boy | |
| | ‘the boy who goes to school’ | | SU |
| b. | [Halil-in öldür- düğ -ü] | adam | |
| | Halil-GEN kill-NOM-3s.POS | man | |
| | ‘the man who Halil killed’ | | non-SU |

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Accessibility of functions

- Main-clause function of the pivot is unrestricted, but the roles inside the RC are often restricted:
- Noun Phrase Accessibility Hierarchy (Keenan and Comrie 1977)

(28) SU \succ DO \succ IO \succ GEN \succ OCOMP

- The higher the function, the more likely it is that it can be relativized
- different strategies cover different parts of the hierarchy
- in some languages, only very few functions can be relativized:
 - only SU: Malagasy, Dyirbal, Tagalog → other functions must first be promoted to SU
 - only SU+DO: Luganda (Bantu) → obliques must be promoted

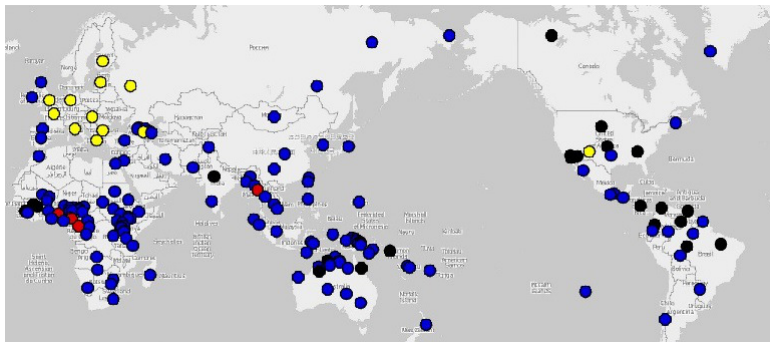
Accessibility of functions

- Distribution of relativization strategies according to WALS (Comrie and Kuteva 2005):

strategy \ function	SU	INST
relative pronoun	12	13
head-internal	24	14
resumption	5	20
gap	125	55
impossible	0	10

Accessibility of functions

- Geographical distribution of relativization strategies: SU

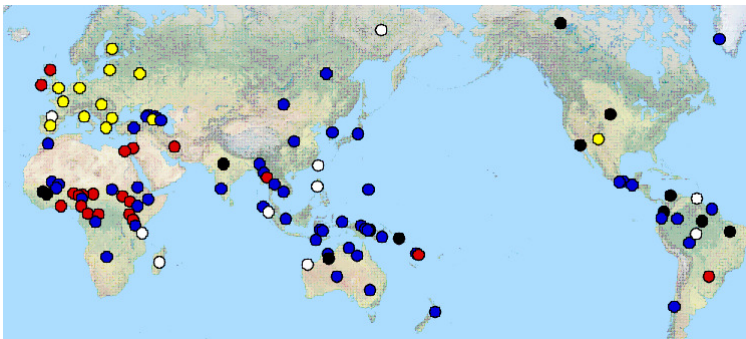


WALS 122A

- yellow: relative pronoun
- black: head-internal
- red: resumption
- blue: gap

Accessibility of functions

- Geographical distribution of relativization strategies: INST



WALS 123

- yellow: relative pronoun
- black: head-internal
- red: resumption
- blue: gap

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Relativization markers

- particles (in C?) indicating the clause type (see also *de* in Mandarin)

(29) s Chuchichäschtlī, **won** i ___ i de Ikea kchauft han
 the kitchen cupboard C I in the Ikea bought have.1s
 'the kitchen cupboard I bought at Ikea' *Swiss German*

- as suffixes (Keenan and Comrie 1977:22)

(30) [emakume-a-ri liburu-a eman dio-**n**] gizon-a
 woman-DEF-DAT book-DEF give AUX-REL man-DEF
 'The man who gave the book to the woman' *Basque*

- sometimes these particles agree with the HN:

(31) ki-tabu a-li-**cho**-ki-soma Ali
 7-book 1-PST-REL7-OM7-read Ali
 'the book which Ali read' *Swahili*

- marker indicates strategy: *aL* = gap; *aN* = resumption (McCloskey 1990:205)

(32) a. an fear **a** bhuail tú ___ b. an fear **ar** bhuail tú é
 the man aL struck you the man aN struck you him
 'the man that you struck' 'the man that you struck' *Irish*

Reduction/nominalization

- Prenominal RCs are frequently nominalized: participles, subjects in genitive (Andrews 2007:232):

(33) kore wa [ano hito ga/no kai-ta] hon desu
 this TOP that person NOM/GEN write-PST book is
 ‘This is the book which that person wrote.’ *Japanese*

- no reduction with correlatives or extraposed RCs:

(34) a. People [reported to be absent] will be fined.
 b. *People will be fined [reported to be absent].

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Schedule (tentative)

- 1: Intro: Definition, parameters of variation
- 2: Analyses of RCs in the history of Generative Grammar (part 1)

(35)	a.	[_{DP} D [_{NP} [_{NP} N] [_{CP} Op ₁ ... V ___ ₁]]]	HEA
	b.	[_{DP} D [_{CP} [_{DP} N ₂ [_{D'} Op ___ ₂]] ₁ ... V ___ ₁]]	HRA
	c.	[_{DP} D [_{NP} [_{NP} N] [_{CP} [_{DP} Op NP ₁ ... V ___ ₁]]]	MA

- Where is the RC attached? N or D?
- Is the RC a complement or an adjunct?
- Internal structure of RCs: movement, left-periphery
- Relationship between HN and the operator
- Head-Raising: various implementations; arguments and problems
- 3: Analyses of RCs in the history of Generative Grammar (part 2)
 - Head-Raising: more implementations and problems
 - Matching Analysis
 - The relevance of reconstruction

Schedule (tentative)

- 4: Correlatives (case study by Bhatt 2003)
 - How is the CorCP connected to the demonstrative?
 - Reconstruction
 - Economy condition on Merge
- 5: Appositive RCs (case study by de Vries 2006)
 - Analyses of appositive RCs
 - A coordination analyses
 - ARC as false free relatives
- 6: Head-internal RCs
 - Is there also an external head?
 - Is there LF-movement?
- 7: Free RCs
 - Category of the FRC
 - Internal structure: position of the pronoun, is there a D-head?
 - Matching + Attraction

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