

McCawley (1981) “The syntax and semantics of English Relative Clauses”

Attachment site: N^0 vs. \bar{N}

- (1) Reihenfolge? Annahme: Relativsatz kann nicht “Ausgetauscht” werden mit inneren (Argument/Komplement) PPs:
 - a. The teacher of French who Sam adored ...
 - b. *The teacher who Sam adored of French ...
 - c. The students with good records who they accepted ...
 - d. The students who they accepted with good records ...
 - Aber, “of heights” kann doch extraponiert werden:
 - e. The fear of heights that Myron displayed ... [McCawley (3a)]
 - f. The fear that Myron displayed of heights ... [CT]
- (2) Tilgung (Ellipse)
 - a. Vgl. *do-so* Ellipse; V+Dir.Obj. scheint eine Konstituente zu sein:
 - i. Sam ate the cookies in the kitchen, and Sue did so in the pantry
 - ii. *Sam ate the cookies in the kitchen, and Sue did so the cake in the pantry
 - b. Ähnliches Argument: \emptyset -Ellipsis in DP/NP:
 - i. Tom rooms with two believers in Taoism and 3 believers in Jainism.
 - ii. *Tom rooms with two believers in Taoism and 3 \emptyset in Jainism. [McC (4b)]
 - iii. Tom rooms with two believers in Taoism from Taiwan and 3 \emptyset from India. (\emptyset = “believers in Taoism”) [CT]
 - iv. Restriktiv: Tom has two cats that once belonged to Fred and Sam has one. (Sam hat auch eine von Freds Katzen.) [McC (5a)]¹
 - v. Nicht-restriktiv: Tom has two violins, which once belonged to Heifitz, and Sam has one. (Impliziert nicht, dass Sam eine Heifitz-Geige hat.)² [McC (5b)]
- (3) Zwischen Bemerkung:
 - a. Damals wurde u.a. trinäre Verzweigung in Erwägung gezogen; vgl. McCawleys Struktur (1a)
 - b. Heutzutage hat man im allgemeinen (ausser bei HPSG) binäre Verzweigung; ist es deutlich wie die Beispiele in (2) dies unterstützen?

¹Note mismatch in number!

²Für mich deutlicher mit “both of which...”

- c. Ein anderes Argument³
- i. He showed [the students]_i [each other]_i (in the mirror).
 - ii. * He showed [each other]_i [the students]_i (in the mirror).
- (4) Koordination
- a. Several [linguists who play chess and philosophers who play bridge] were at the party. [McC (6)]
 - b. [_{DP} Several [_{NP} linguists RC₁] and [_{NP} philosophers RC₂]] ... (NP & \bar{N} bei McC)
 - c. Problem: All linguists and many anthropologists [who teach at American universities] ... [McC (7a)]
 - d. *Vgl.* Every girl who Sam saw ... = $\forall x$ [girl(x) & see(Sam, x)]; C-command!
- (5) McCawley: ein Fall von “Right-Node Raising”? (RNR)
- a. *Vgl.* John baked e_i , and Mary ate e_i , [all of the cookies]_i⁴
 - b. [_{DP} [All linguists e_i] and [many anthropologists e_i] [who teach at American universities]_i]
 - c. *Nein*: [[Two linguists e_i and one anthropologist e_i] [who had met at a conference]] were arrested.
 - d. * one anthropologist who had met at a conference...
 - e. *Vgl. auch* ? [(The) two linguists and (the) one anthropologist] arrived [who had met at a conference]

Pseudo-relatives (ℓ Clefts)

- (6) a. Cleft: It was Fred [who I talked to]
vgl. *Fred [who I talked to] is coming to the party. (*als restr. Rel.*)
- b. (Pseudo-cleft: [What I want to do] is (to) leave early.)
- c. Pseudo-relative: There are Americans who like opera.
- (7) Normale Relativsätze nicht trennbar unter Topikalisierung [McC (9–10)]:
- a. [The man who criticized Putin]_i, they arrested e_i . [*Restr. Rel.*]
 - b. * The man they arrested who criticized Putin.
 - c. [Fred, who I like,] no one can stand. [*Non-res. Rel.*]
 - d. * Fred, no one can stand, who I like
 - e. It must have been [_? Fred that I talked to at the meeting] [*Cleft*]
 - f. * [_? Fred that I talked to at the meeting], it must have been
 - g. ? Fred, it must have been, that I talked to at the meeting
 - h. ?? Many Russians who dislike politicians there have always been. [*Pseudo-Rel.*]

³Larson (1988) in LI; original data from Barss & Lasnik

⁴Assuming this is not backward ellipsis...

- i. ? Many Russians there have always been who dislike politicians.
- j. *Vgl.* ✓ Serious problems there have always been. (*ohne Rel.*)
- (8) Sie erlauben Parenthesen⁵
- a. ? He likes smoked fish (as you know), which Mama prepares for him
[*Non-Restr.*]
- b. * He likes the fish (as you know) that they catch here [Restr. Rel.]
- c. It was Bill (as you know) who betrayed us [Cleft]
- d. Sam has a brother (as you know) who lives in Philly [Pseudo-rel.]
- (9) Also, wie man in (8d) sieht, Pseudo-Rel's. sind nicht nur in "There" existentielle Sätzen. Laut McCawley ist (8d) auch eine Sorte existentieller Satz; sie sind auch rechts periphär, und können auch durch Neg. ausgelöst werden:
- a. I never met an American, as Susan knows, who doesn't like baseball.
- b. ? I never met a person, as Susan knows, who won a Nobel prize.
- (10) Sie erlauben CNPC (Complex NP Condition) Verletzungen [McC (14–16)]
- a. * [Which company]_i is Alice dating [_{DP} a man who works for e_i] ?
Relativsatz
- b. ?? [Which company]_i did Fred believe the claim that Sam works for e_i
Komplementsatz (CP)
- c. Violence is something_i that there are [_{DP} many Americans] [_{CP} who condone e_i]
- d. * Violence is something_i that Sam knows [_{DP} an Irishman [_{CP} who condones e_i]]
- e. "Then you look at what happens in languages that you know and [languages]_i that you have a friend who knows e_i " [M's (15a), C. Ferguson]
- (11) Koordination als Indiz für Struktur:
- a. Fred likes both anthropologists and linguists, doesn't he?
- b. * Lincoln opposed slavery and Douglas opposed freeing the slaves, didn't he (??they⁶)
- c. There are many Americans who like opera and (many) Uruguayans who like hockey, aren't there? ~ (21a)
- d. Also: "There are [_{XP?} DP_i YP_i & DP_j YP_j]" (Sind sie doch Konstituenten?)⁷
- (12) Stacked relatives [McC (25–26)]:
- a. Many Americans who want to reinstate the death penalty who wrote in Spiro Agnew for President subscribe to the *Readers Digest*.

⁵Meine Urteile sind hier nicht so stark wie McCawleys -CT

⁶*They* klingt mir nicht so schlecht -CT

⁷Vgl. Larsons Analyse von Doppelobjekt-verben (V DP₁ DP₂)

- b. Many Americans who wrote in Spiro Agnew for President who want to reinstate the death penalty subscribe to the *Readers Digest*. [= (12a)]
- c. There are many Americans who want to reinstate the death penalty who wrote in Spiro Agnew for President.
- d. There are many Americans who wrote in Spiro Agnew for President who want to reinstate the death penalty. [*not* = (12c)]
- e. Frage: Wenn die Daten stimmen, warum sind normale “stacked relatives” nicht hierarchisch interpretiert?
- f. Antwort? Struktur: *copula* [_{XP} [_{DP} ... RC₁] RC₂]
- g. Noch eine Frage: was wäre die Struktur für nicht-copula Pseudo-relative wie (8d) und (9a)?

Nicht restriktive Relativsätze

- (13) Zwei “speech acts” (wie Parenthesen):
 - a. John, who has red hair, left early. (“John ging weg und außerdem...”)
 - b. The man who had red hair left early. (Spezifiziert “welcher Mann”)
- (14) Andere Pragmatik:
 - a. Did you read the report that I left on your desk?
Yes, I read the report (that you left on my desk)
 - b. Did you read Manfred’s report, which I left which I left on your desk?
Yes, I read Manfred’s report, which you left on my desk
- (15) Nicht restriktive Relativsätze können Sätze (bzw. andere XPs) modifizieren
 - a. Fred claims to be seeing angels, which I doubt. (CP/IP)
 - b. Susan is angelic, which Martha isn’t. (AP)
 - c. Sam is in his office, (which is) where the money is. (PP)
 - d. *Vgl. nicht-restr. vs. restr.:*
 - i. Sam is outside of the office, where the money is. (\$ is *outside*)
 - ii. Sam is outside of the office where the money is. (\$ is *inside*)
- (16) Nicht restriktive Relativsätze können ein eigenes N⁰ haben
 - a. Sam plays in the Little League, which organization has been sponsored by the P.T.A. (baseball; parent-teacher-association)
 - b. * Sam plays in a/the club which organization promotes chess.
- (17) Gewisse Quantoren erlauben keine nicht-restriktiven Relativsätze (McC hat “each”)
 - a. Every box that was examined by the staff proved to be defective.
 - b. * Every box, which was examined by the staff, proved to be defective.
 - c. *Vgl.* * Every box was examined by the staff. It proved defective.

- (18) Nicht-restriktiver Rel. ist wie ein Parenthese; nicht echt im Satz:
- Fred bought some market shares that Houghton was offering, and Sam did, too. (muß Houghton Aktien sein)
 - Fred bought five market shares, which Houghton was offering to the public, and Sam did, too. (nicht notwendigerweise Houghton Aktien)
- (19) Wie echte Parenthese, beeinflußt VP-anaphora nicht:
- Jefferson believed, as you may know, that all humans were created equal, but Marx, you'll be surprised to learn, didn't. (\neq as you may know)
 - Sue sent Hilary, who she admires deeply, a fan letter, but Mary didn't. (= 'send H. a fan letter', \neq 'send H, who she admires, a fan letter')
 - Vgl. Sue_i sent the woman she_i admires most a fan letter, and Mary_j did --, too. (-- = < send the woman she_j admires most a fan letter >)
 - NB: Susan_i likes her_i mother and Mary does, too. ("Sloppy" Lesart: Mary_j likes her_j mother)

Restriktive Relativsätze

- (20) Alte "Host-conjunct" Analyse (abgeleitet von 2 Sätzen):
- Sam caught [the fish]_i & Fred ate it/[the fish]_i →
 - Fred ate [the fish]_i [that Sam caught e_i] (vgl. *Hindi co-relatives*)
- (21) Problem: "head" kann nicht referentiell sein:
- Sam is a linguist_i [who_i has a background in mathematics]⁸
 - Vgl.
 - Klaus is a politician. I'm glad I'm not him. (= Klaus)
 - Klaus is a politician. I'm glad I'm not that. (= a politician)
- (22) Die DP "a linguist . . ." in (21a), als Prädikat, präsupponiert Existenz nicht, genau wie "Is John Mary's husband?" eine sinnvoller Frage ist, auch wenn Mary nicht verheiratet ist (der Sprecher weiß dies nicht).
- (23) McCawleys "Predicate-conjunct" Analysis:
- Every book that Hemingway wrote received excellent reviews.
 - Struktur: [every (x) [book(x) & Hemingway wrote (x)]] . . .
 - NB: Man muß seine Knoten-Labels übersetzen: er betrachtet alle Prädikate in (23b) als "S".
 - Löst Problem: "No linguist who teaches in Potsdam was ever in Peru"
 - McC hätte wahrscheinlich als Basis-Struktur etwas wie
 $\neg \exists x$ [_S [_S linguist (x)] & [_S teaches-in-Potsdam (x)]] & [_S ever-in (x, Peru)]
 (ignoring details of tense, adverb, etc.)

⁸Frage 1: Wie sieht so was aus in Hindi? Frage 2: ist dies nicht ein Pseudo-Rel.? . . . a linguist, you might recall, who has a background . . .

- (24) Auch Evidenz von “clause connectors”: *also, nevertheless, either*:
- Mary insults Tom constantly; *nevertheless*, he loves her.
 - Fred is a chess freak who *nevertheless* almost always loses. (Host-conjunct Analyse hatte RC erst.)
- (25) Unsere Aufgabe: können wir dies übersetzen in eine modern(er)e Ableitung?

Aber, “worst case scenario” Fälle:

- (26) Keine Quelle für extraponyierter Relativsatz [McC (48)]
- Normale Extraposition: [A man e_j] left the meeting [who _{i} I didn’t recognize e_i] _{j}
 - A man entered and a woman left [who met in Vienna]
- (27) McC’s Lösung: ein “patch”
- $\forall x$ child(x) & had-flu(x) \Rightarrow every child who had the flu [single variable]
 - $\exists (x, y)$: man(x) & woman(x) & met-in-V($x+y$) & [entered(x) & left(y)]
 - Richtige Semantik, aber *ad hoc* Syntax: neues Element, ein Quantor, der 2 Variablen bindet
- (28) “Antecedent Contained Deletion”: [vgl. McC (50)]
- Fred fired everyone who Susan ordered him to.
 - Struktur*: Fred [_{VP} fired [_{DP_x} everyone [_{CP} who Susan ordered him to < [_{VP_y} fire DP_x] >]]]
 - Problem: Keine Identität zwischen getilgtem Element und anwesendem Element, verursacht “infinite regress”: die Kopie von VP _{y} in der Ellipse enthält DP _{x} , die wieder VP _{y} enthält, usw.
 - Bedeutung: $\forall x$ [Susan ordered Fred to fire $x \rightarrow$ Fred fired x]
 - McCawleys “Host-conjunct” Analyse hat kein Problem, weil er vermutlich eine “Tiefenstruktur” annehmen würde, wo der Quantor alle Variablen bindet [vgl. seine (43b)]:
 - every _{x} Fred (Tense) [_{α} fire x] & Susan ordered him to [_{β} fire x]
 - Abgesehen von Tempus sind α und β identisch.
 - Moderne Vorschläge meistens mit LF-raising von Quantor *every*: bindet zwei Positionen.

Alternative Analyse (Brame, auch Schachter, Vergnaud, Kayne, usw.)

- (29) Das Problem (nochmals):
- The aspersions _{i} that Bill cast e_i on my character were unfounded.
 - * The aspersions were unfounded.
- (30) In Brame’s ursprünglicher Analyse, konnte jede NP (DP) “ge-raised” werden:
- The boy _{i} that e_i bit the dog in the park
 - The dog _{j} that the boy bit e_j in the park

- (31) Weitere Evidenz:
- a. The picture of himself_i that Fred_i saw hanging in the gallery ...
 - b. The [intention [PRO_i to visit Florence]]_j [that Mary_i expressed *e_j*] ...
Struktur: The [_{NP} intention CP₁]_j [_{CP₂} that Mary ... *e_j*]
 - c. Vgl.
 - i. Das Bild von sich, das Fritz in der Gallerie gesehen hat...
 - ii. Die Absicht, nach Venedig zu reisen, die Maria geäußert hat ...
- (32) Welche Idiom(teile) können “geraised” werden? Frei-modifizierbare, d.h. quasi-referentielle, die keinen vorgeschriebenen Determiner haben:
- a. Fred pulled some (a lot of/ a few) strings (to get the job).
 - b. The strings_i that Fred pulled *e_i* got him the job.
 - c. John kicked the/*a/*some bucket yesterday.
 - d. *The bucket_i that John kicked *e_i* made everyone sad.
- (33) Vgl. (meine Beispiele)
- a. The / some strings were pulled by Fred.
 - b. *The / a bucket was kicked by John.
- (34) Mehr als ein NP/DP im Idiom:
- a. There was a fly in the ointment⁹
 - b. There were several flies in the/*some ointment
 - c. the fly that’s in the ointment
 - d. *the ointment that there’s a fly in
- (35) Deutsche Beispiele?
- a. Der alte Streit, den Fritz neulich wieder vom Zaun gebrochen hat, hat mich geärgert.
 - b. Er hat in seinem Vortrag schon ein paar Nägel auf den Kopf getroffen, aber [...]
 - c. Die vielen Nägel, die der Redner während des Vortrags auf den Kopf getroffen hat, haben uns überrascht.
- (36) “McCawley’s Paradox” (von Lloyd Anderson)
- a. Sam pulled the strings_i [that *e_i* got me the job]
 - b. Problem: wo findet Selektion statt?
 - c. Frage: ist die Spur *e_i* in (36a) tatsächlich = *strings*, oder ist der Satz ein restriktiver Relativ, der ein Prädikat modifiziert? – vgl. (15) oben – d.h., “[Sam’s pulling those strings] got me the job”.

⁹“Es ist ein Haar in der Suppe”, “Da ist ein Haken an der Sache”; NL: Er is een kink in de kabel.

Appendix 1: The two-one paradox

- (37) McCawley's solution for (5c): Numerals are not quantifiers but predicates:
e.g.,
- (38) "Two boys left" = $(\exists M [(\forall x (x \in M) \rightarrow \text{boy}(x)) \ \& \ |M| = 2] \ \& \ \forall x (x \in M) \text{ left}(x))$
- (39) Not very satisfactory, need two all-quantifiers ...
- (40) For (5c), repeated here:
[[Two linguists e_i and one anthropologist e_i] [who had met at a conference]]
...
 $(\exists M, N [(\forall x (x \in M) \rightarrow \text{linguist}(x), (\forall y (y \in N \rightarrow \text{anthropologist}(y)))) , |M| = 2, |N| = 1, \ \& \ \forall \langle x, y \rangle , x, y \in M \cup N \rightarrow \text{met}(x, y)])$
- (41) Do we have *syntactic* evidence that the numerals are lower and the RC is still attached under the determiner, yielding the coordinate solution?
[_{ZP} [_{XP} i [_{YP₁} two linguists] and [_{YP₂} one anthropologist]] [_{CP} who $_i$ met at a conference]]
- (42) Yes: "The two linguists and one anthropologist who met ..."
- (43) Note: this of course won't work for the "Vienna case" (26b)

Appendix 2: Right Node Raising

- (44) NB: RNR seems to ignore RC islands, left ATB respects RC islands: (Beispiele von Luis Vicente):
- a. Alice is talking to the man who composed, and Beatrix is having dinner with the the man who performed, a beautiful sonata.
 - b. * [Which sonata] $_i$ is Alice talking to the man who composed and Beatrix having dinner with the pianist who performed e_i