

On the double-headed analysis of “Headless” relative clauses*

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1. Introduction. A particular challenge for the generalized double-headed analysis of relative clauses (RCs) proposed in Cinque (2003,2008)¹ is posed by “Headless” (or Free) RCs, especially under the analysis which takes the *wh*-pronoun to be in the Spec,CP of the RC, the so-called ‘COMP analysis’ convincingly argued for in Groos and Riemsdijk (1981), Hirschbühler and Rivero (1983), Harbert (1983), Borsley (1984), Grosu (1986/87,1994,2003a,b), Kayne (1994), Pittner (1995), Grosu and Landman (1998), Benincà (2007, 2012), Gračanin-Yüksek (2008), and others.²

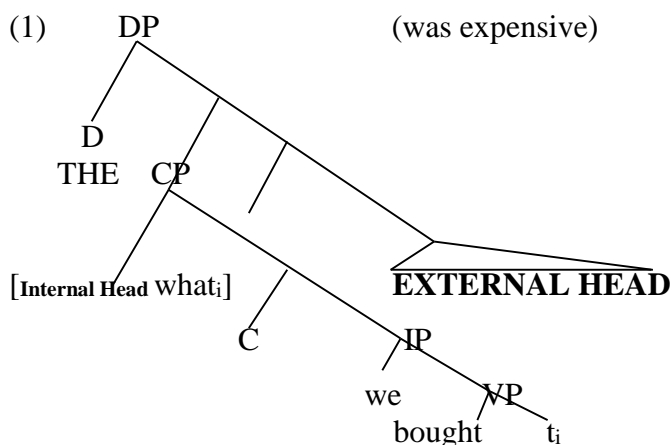
In following this analysis, which takes the CP containing the *wh*-pronoun to be embedded in a larger DP structure, I specifically suggested in Cinque (2003) that such a structure is a full DP with the RC CP merged in a specifier that modifies a portion of the nominal extended projection which constitutes the external Head ‘matching’ the internal one, as in every other RC type. Cf. (1):³

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¹ What is proposed there is that the different types of RCs attested in the languages of the world (externally headed post-nominal, externally headed pre-nominal, internally headed, double-headed, headless (or ‘free’), correlative, and adjoined – cf. Dryer 2005) can all be derived from a single, *double-headed*, universal structure via different, independently justified, syntactic operations (movement and deletion), under both a “Raising” and a “Matching” derivation. See Cinque (in preparation) for refinements and more detailed discussion. Under the assumption argued for there that RCs are merged pre-nominally (arguably like every other modifier and head of the extended projection of a lexical category – Cinque 2009) also the “Matching” derivation is fully compatible with Antisymmetry (Kayne 1994).

² The alternative ‘Head analysis’ which takes the *wh*-phrase to be outside of the RC CP, in the external Head position (Bresnan and Grimshaw 1978, Larson 1987,1998, Bury 2003, Citko 2002, 2008,2009, among others), cannot account for the extraposition facts of German (and Dutch) “Headless” RCs pointed out in Groos and Riemsdijk (1981), for the Case mismatches in certain languages (Pittner 1991,1995, Grosu 1994), nor for the Croatian reconstruction and clitic facts discussed in Gračanin-Yüksek (2008). It also cannot easily account for such cases as (i) in English, where the “NP_{matrix} is coreferential with *whoever*, but *whoever* is embedded in the larger NP *whoever’s woods*: [*Whoever’s woods are these*] is a good judge of real estate” (Andrews 2007,214). As Andrews points out, such sentences are less problematic if the phrase is preposed within the RC than it would be if it were in the external Head position (also see fn.30 below). For additional arguments against the ‘Head analysis’ see Borsley (1984), Grosu (1994, Study I, Chapter 4) and Jacobson (1995), among others. The obligatory presence of an overt antecedent in German when the extraposed “Headless” RC is part of a PP (*Der Reporter hat sich auf *(das) gestürzt [was man ihm zeigte]* ‘The reporter jumped on what one showed to him’ – Haider 1988,120) may suggest that a silent DP is not sufficient to avoid a violation of the ban on preposition stranding.

³ Capitals indicate silent elements.



If so, the question arises as to the nature of the external Head in “Headless” RCs.⁴

2. Languages lacking “Headless” RCs. A first step toward answering the question of the nature of the external Head in (1) is the observation that in many languages the ‘construction’ isn’t Headless at all. In structures corresponding to the “Headless” RCs of English or Italian several languages display an overt Head taking the form of one of the functional/light nouns/classifiers ‘thing’, ‘person’, ‘place’, ‘time’, etc. This is the case of the Gbe languages (see (2) from Gungbe (Enoch Aboh, p.c.), (3) from Gengbe, and, for Fongbe, Lefebvre and Brousseau 2002,164)⁵; this is also the case of many languages of the Nilo-Saharan family⁶; and the same is true of several Papuan

⁴ In the case of ‘-ever’ “Headless” RCs, which occur either as arguments (as in *I’ll do [whatever you do]*) or as clausal adjuncts (as in *I won’t change my mind, [whatever you do]*) only in the former does the question arise. As shown in Izvorski (2000), where they are dubbed ‘Free adjunct free RCs’, the latter are just CPs with no external Head. Setting these CP adjuncts aside, the bare CP analysis of all “Headless” RCs suggested in Áfarli (1994), Rooryck (1994), Vogel (2001) and others does not seem tenable. Their DP nature is clearly indicated by a number of properties, which make them differ from both Free adjunct free RCs, and indirect questions, pointing to a [DP [CP ...]] structure: e.g., same distribution as DPs (Grosu 1994,3f) and strong island sensitivity (Alexiadou and Varlokosta 1996,§6, Branchini 2014,77f). For further properties distinguishing standard “Headless” RCs from Free adjunct free RCs see section 6 below and for differences between them and indirect questions Rizzi (1982,75f,note32), Daskalaki (2005), Benincà (2010, 2012) and Bertollo and Cavallo (2012,§4).

⁵ Enoch Aboh, p.c., conjectures that this may be a larger Kwa characteristic, pointing out the case of Akan. See Saah (2010,§5.5), where examples like the following are reported:

(i)a. Nea [ɔ-kó nsú] na ɔ-bɔ ahiná.
 person (that) 3SG-go water FM 3SG-break.PRES pot
 “He who fetches water breaks the pot.”

To judge from Soubrier (2013,§15.5.2) for Ikposso and Obeng (2008,Chapter 12) for Efutu, indeed this property is shared by other Kwa languages.

⁶ See Hutchison (1976) for Kanuri: “In this sort of [“Headless”] construction, relative clauses headed by the following set of nouns are used: *kam* ‘person’ (who), *awo* ‘thing’ (what), *sa* ‘time’ (when), *na* ‘place’ (where), *dalil* ‘reason’ (why),

languages (see, e.g., (4) from Makasae, and Berry and Berry 1990,157ff for Abun, and Davies 1989,§1.1.2.3.6 for Kobon); of the Niger-Congo languages Obolo ((5)) and Mambay (to judge from Anonby 2011,§10.2.2.3), of the Austronesian language Rapanui⁷, and of Somali (Cushitic)⁸:

(2) Nú dĕ à ná mì w`ε nă yí (Gungbe – Enoch Aboh, p.c.)
 thing REL 2SG give 1SG FOC 1SG.FUT take
 ‘I will take whatever you give me.’

(3) Ame-ke gbe dzi be ye la ple gbɔ, yi-na asi ya me (Gengbe - Huttar, Aboh and Ameka 2013,118)
 person-REL ever desire that 3SG FUT buy goat go-CNT market that in
 ‘Whoever wants to buy goats comes to this market.’

(4) Anu wa’a ana gi seluku ma rau ena ere bada na’u baunu (Makasae – Correia 2011,157)
 person REL people other MRK good see DEM friend MRK many
 ‘Whoever treats others well will have many friends’

(5) Mkpó géèlék (èyí) ifùk (bé) (Ek(-mé)) ikâamá (Obolo – Faraclas 1984,45)
 thing all (Rel) 3PSCPread (Rel) 3PS.NEG.like
 ‘Whatever she read, he didn’t like’

The cases so far are all examples from languages with externally Headed **post**-nominal RCs.

“Headless” RCs with functional/light Heads are also attested in languages with externally Headed **pre**-nominal RCs (see (6), from Afar - Cushitic), in languages with Internally Headed RCs (see (7), from Lakhota – Siouan), and in languages with double-headed RCs (see (8) from the Tibeto-

futu/delfu ‘way’ (how).” (p.90f). For Lango, Noonan (1992), giving examples like (i), explicitly states: “there are no ‘headless’ relatives in Lango. [...] In Lango an overt noun must be present” (p.220).

(i) mārô gîn àmê cāmô
 3s.like.hab thing rel+part 3s.eat.hab
 ‘He likes what he eats’

Also see Walters (2015,§8.2.3.1) on Dazaga, Christiansen-Bolli (2010,§4.5) on Tadaksahak, and Heath (1999,§8.3) on Koyra Chinii.

⁷ Du Feu (1996) states that in Rapanui “Headless relatives are not found. Instead a dummy head is used: *me’e* ‘thing or person’, *hora* ‘time’, *kona* ‘place’, *ana* ‘action’”(p.47).

⁸ See Lecarme (2008,§2.4), especially fn.23.

Burman language Ronghong Qiang - Huang 2008 - and (9) from the Chadic language Mina - Frajzyngier and Johnston 2005).

(6) a'nu ge'd-a-kke 'isin t-amaa'too-n-u 'ma-dud-d-a-n (Afar - Bliese 1981,29)⁹
 I go-impf-place you you-come-pl-juss neg-able-you-impf-pl
 'Where I am going you are not able to come'

(7) [[Mary [taku] kaǵe] ki] ophewathu (Lakhota – Williamson 1989,188,note 4)¹⁰
 Mary something make the I.buy
 'I bought what Mary made'

(8)a. [[**zəp** iətəimaqa zawa tshu-tshu]_{RC(-tə)} **zəp** tha-kua]_{NP} (Ronghong Qiang - Huang 2008,761)
 [[**place** usually rock drop-REDUP(-GEN)] **place** that-CL]
 '(the place) where rockslides often occur'
 b. [[**mi** qa nə-xe^l-m]_{RC} **mi**]_{NP-le:} kə-ji (Ronghong Qiang - Huang 2008,762)
 [[**person** 1SG DIR-scold-NOM] **person**]-DEF:CL GO-CSM
 '(the person) who scolded me has gone'

(9) [skən [nəm dzán skən syi]] há diyà gáy kà (Mina - Frajzyngier and Johnston 2005,433)¹¹
 [thing [1DU find thing COM]] 2sg put spoil POS
 'The thing we found, you are ruining it'

3. The double-headed structure of “Headless” RCs. I take such functional nouns to also be present, if unpronounced, in the “Headless” RCs of English (and English-type languages), as shown

⁹ Functional nouns include 'place', 'time', 'reason', 'something', 'amount', 'manner' (Bliese 1981,Chapter 2).

¹⁰ Lakhota may in fact also drop the indefinite pronoun. Compare (10) with (i)

(i) [[Mary [e] kaǵe] ki] ophewathu (Lakhota – Williamson 1989,189note4)
 Mary make the I.buy
 'I bought what Mary made'

For other such cases, see Culy (1990,249f).

¹¹ Frajzyngier and Johnston (2005) explicitly say that “[t]he relativized object may be coded twice, once at the beginning of the clause as the head of the relative clause, and the second time after the verb, in the position of object.” (p.432f). Mina has also externally headed pre- and post-nominal RCs.

in (10).¹² In English each *wh*-pronoun is associated with a specific functional noun: *what* with THING (or AMOUNT, or KIND), *who* with PERSON, *where* with PLACE (Kayne 2004), etc.¹³

- (10)a. (We gave him) [DP THE [CP what THING_i [C [we bought t_i]]] (SUCH) THING]
 b. (He weighs) [DP THE [CP what AMOUNT_i [C [you weigh t_i]]] (SUCH) AMOUNT]
 c. (I hate) [DP THE [CP who(ever) PERSON_i [C [t_i does that to me]]] (SUCH) PERSON]¹⁴
 d. (This is) [DP THE [CP where PLACE_i [C [they slept P t_i]]] THERE PLACE]¹⁵
 e. (He was born) [DP THE [CP when TIME_i [C [I was born P t_i]]] THEN TIME]

¹² Even though the argument may be more suggestive than conclusive, as Andrew Radford (p.c.) points out (in that one could argue that languages lacking free relatives will resort to headed relative structures, as semantically rather than syntactically equivalent), and even though a single-headed analysis with “Raising” in a [DP D° [CP]] structure is conceivable for the examples from (2) to (9), as well as for (10), I will sketch here what a double-headed analysis with “Raising” would look like for them.

¹³ Possibly all NPs are *always* merged as modifiers of one such (silent) functional/light noun, whether the NP contains a proper name or a common noun: [John [PERSON]], [dog [ANIMAL]], [table [THING]], etc. – cf. Kayne’s (2007 Appendix) theoretical arguments. This is rendered additionally plausible by the existence of languages where some such functional/light nouns/classifiers are actually pronounced (see, e.g., (i), from the Australian language Yidjip):

(i) bama:l yabuŋgu miŋa gangu:l wawa:l (Dixon 1977,480)

person-erg girl-erg animal-abs wallaby-abs see.past

Lit. ‘the person girl saw the animal wallaby’ (‘the girl saw the wallaby’)

¹⁴ Bare *who* “Headless” RCs are generally quite marginal, if possible at all. Richard Kayne, p.c., tells me that for him the otherwise impossible **I’ll invite who you want me to invite* improves if *exactly* is added (*?I’ll invite exactly who you want me to invite*). The normal way is to use a ‘light-headed’ RCs: *he who...* For recent discussion see Patterson and Caponigro (2016). In certain languages the ‘functional’ noun PERSON associated with the interrogative pronoun ‘who’ is actually pronounced. See the case of the Western Malayo-Polynesian language Bih:

(i) Sei mnuih hiar lăm nei? (Nguyen 2013, §6.2.1.1)

who person cry LOC PROX

‘Who has cried in here?’

¹⁵ See again Bih for the pronunciation of the ‘generic/functional’ noun PLACE:

(i) ti anôk ǒng dôk? (Nguyen 2013, §6.2.1.5)

where place you stay

‘Where are you?’

For arguments that *where*, *when*, *how* are necessarily merged with a silent preposition stranded by *wh*-movement, see Caponigro and Pearl (2008,2009). They assume that preposition stranding may be possible with silent prepositions even in languages like Italian that do not allow it with overt (non-axial) prepositions. This may be confirmed by sluicing cases such as *Stava parlando con qualcuno. Non so chi/con chi* ‘He was talking with someone. I don’t know who/with whom’.

f. (This is) [_{DP}THE [_{CP} how MANNER_i [C [we would like him to behave P t_i]] (SUCH) MANNER]

The structures in (10) represent the double-headed structure of Merge of “Headless” RCs in English. Within the (pre-nominal) RC the internal Head moves to Spec,CP, licensing the non-pronunciation of the external Head in what amounts to a ‘Raising’ derivation, the external Head remaining in situ.¹⁶ The overt part (*what*, etc.) of the Head (*what* THING, etc.) is a *wh*-proform (also used in interrogatives and other constructions – see Caponigro 2003, Chapter 3 for the specific semantic contribution compatible with all of its uses) which does not need a c-commanding antecedent in contrast with relative *wh*-proforms.

In certain languages, the silent determiner of (10) is pronounced, as in Yucatec Maya (cf. (11), from Gutiérrez-Bravo 2013, 29):¹⁷

¹⁶ In the ‘Matching’ derivation of post-nominal externally Headed RCs, the external Head raises to a position to the left of (above) the RC CP (a consequence of the general head-initial word order property that raises constituents containing the lexical NP to the left (above) its modifiers), licensing the total (*that* relatives) or partial (*wh*-relatives) non-pronunciation of the internal Head. There is some similarity here with “VP-Deletion”, except that one of the two Heads has in most languages to be silent. In some the two Heads can however be both pronounced. See Cinque (2011). See section 4 below for possible evidence, from Polish and Croatian, that a “Matching” derivation is needed (in addition to a “Raising” one). ‘Raising’ derivations in RCs are typical of amount/maximalizing RCs (for the maximalizing nature of “Headless” RCs, see Carlson 1977, Grosu 1994, §3.2, Grosu and Landman 1998, Caponigro 2003). The non-existence of non-restrictive uses of “Headless” RCs (Emonds 1979, 232, Kayne 1994, 114) is taken here to be related to their maximalizing (hence “Raising”) nature and to the exclusively “Matching” nature of non-restrictive RCs (Cinque in preparation).

¹⁷ Also see Chomsky (2013, 46) on the presence in Spanish and French “Headless” RCs of a determiner possibly reduced in English (*ce que*.. ‘what..’; *ce à quoi*.. ‘to what..’). Nakamura (2009, 342) cites one example from English (cf. (i) below) in which an overt determiner co-occurs with Free relative *what*, but Andrew Radford, p.c., and other speakers find it completely unacceptable:

(i) Florence Griffith-Joyner’s death is a stark warning of **the what** drugs do (The Observer, Sep 27, 1998).

In other languages the determiner is present while both the external and the internal Heads can be silent, as in the Lakota example (i) of fn.10. In still others the determiner and the two Heads can all be silent. See (ii)a. and b. from Sinhala (Indo-Aryan) and Turkish Sign Language, respectively (in (ii)b. capitals stand for the corresponding signs):

(ii)a. [redi hodənə] Nuwanwə taraha æwisuwə (Walker 2005, 170)

clothes wash-PRES-REL Nuwan-ACC anger induce-PST

‘The one washing the clothes made Nuwan angry.’

b. [ENGLISH KNOW] PRIZE WIN (Branchini 2014, 166)

‘the one who knows English won the prize’

Also see de Vries (2002, Chapter 2, §6.3).

- (11) [le [ba'ax k-in tsikbal-t-ik-Ø te'ex]-a'
det what HAB-ERG-1SG chat-TRNS-IND-ABS.3SG 2PL-CL
 'This (thing) which I'm telling you about'

I take the structures in (10) to underlie both *definite* "Headless" RCs (*Il mese prossimo sposerò proprio chi(*-unique) mi hai presentato l'anno scorso* 'Next month I will marry precisely who(*-ever) you introduced to me last year', '..the very person who..'; *Sarà ammesso alla festa solo chi(*-unique) porterà una bottiglia di vino* 'Only he who brings a bottle of wine will be admitted to the party'; *I left when Daniel arrived* '.. at the very time that..')¹⁸ and *universal/free choice* "Headless" RCs (*I see him when(ever) I can* '..every time I can') (Dayal 1997, von Stechow 2000, Caponigro 2003, Riemsdijk 2005, §5.2).¹⁹

For a discussion of the interpretational possibilities of bare and '-ever' "Headless" RCs, see Larson (1987), Jacobson (1995), Grosu (1994, 1996), Dayal (1997), Pancheva Izvorski (2000), von Stechow (2000), Caponigro (2003), Tredinnick (2005) and references cited there.

As to Modal Existential *wh* Constructions like (12) (Grosu 1994, 2004)

- (12)a. Maria are [cu cine să voteze] (Grosu 1994, 138)
 Maria has with whom SUBJ vote
 'Maria has (someone) for whom to vote'
- b. Ima koj kâde da me zavede (Pancheva Izvorski 2000, 41)
 have.3sg who where Part_{subj} me take.3sg
 'I have someone to take me somewhere'
- c. Non ha con chi parlare (Caponigro 2003, Chapter 3)
 not he.has with whom to talk

¹⁸ A 'definite' *what* as the associate of a *there* existential construction in English is in general impossible: **There is what you ordered on the desk* (Wilder 1999, 686). When possible (*There is what you need: wine in the cellar and food in the fridge*) it may be compatible with Kayne's (2016) analysis if the definite determiner is actually embedded within the associate, as in some of the cases that he discusses (*There is [THE what KIND] THING(S) you need*).

¹⁹ That the definite reading is made impossible by the presence of '-ever' is pointed out in Dayal (1997), who gives contrasts like the following (also see Jacobson 1995, Caponigro 2003, 112 and Tredinnick 2005, 2):

- (i) What(*ever) Mary bought was Barriers. (Dayal 1997, 103)
 (ii) What(*ever) Mary is cooking, namely ratatouille, uses onions. (Dayal 1997, 109)

For the possibility that the apparent universal/free choice reading of *wh*- and *wh*-'ever' reduces to a maximal (plural) definite reading, see Jacobson (1995, §5).

‘He doesn’t have anyone to talk to’

they differ from standard “Headless” RCs in several respects. They are not maximalizing, they do not require category and Case matching, they disallow complex *wh*-‘ever’ phrases, they allow multiple *wh*-fronting in languages which allow it in questions²⁰, and they are not strong islands. See Izvorski (1998), Pancheva Izvorski (2000, Chapter 2) and Grosu (1994, Study I, Chapter 5; 2004), where they are in fact analyzed as bare CPs (even if there is possibly a silent object, *THING*, *PERSON*, etc., of ‘have’, ‘there is’). Also see Šimík (2011).²¹

As for the ‘identifier’ of the particular functional noun postulated in (10)/(11)/(12), I follow Grosu (1986/87, 47) in taking the *wh*-phrase of the “Headless” RC to be “the only reasonable candidate for the role of formal identifier [of the external Head]”.²²

4. The phrasal nature and the position of the *wh*- in “Headless” RCs. The present analysis, which takes the *wh*- to be a phrase in the Spec of the RC CP, is not compatible with Donati’s (2006), Donati and Cecchetto’s (2011), Cecchetto and Donati’s (2015, Chapter 3) proposal (see fn.3

²⁰ For multiple *wh*-pronouns also in the standard “Headless” RCs of Bulgarian, which has no special ‘-ever’ *wh*-forms, see Dimova (2014) and references cited there.

²¹ The conclusion that they are distinct from standard “Headless” RCs may find some support from Italian, at least that spoken in the Northeast of Italy, where *che cosa* ‘what thing’, or *che* ‘what’, or *cosa* ‘thing’, have interrogative but no standard “Headless” RC usages (Cinque 1988, 497; Benincà and Cinque 2010, §4.5; Bertollo and Cavallo 2012, §3, Cecchetto and Donati 2015, 48f). The reason is that in such irrealis/existential “Headless” RCs, *cosa* sounds possible (just as in *wh*-interrogatives):

(i)a. Finalmente avrei cosa fare

Lit.: At last I would have what to do

b. Per noi, adesso, ci sarebbe cosa dire

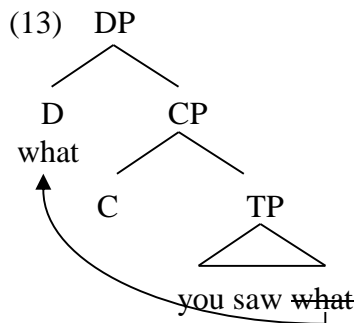
Lit.: For us now there would be what to say

(in other regional varieties of Italian *cosa*, or *che* can apparently be used in standard “Headless” RCs as well (cf. Caponigro 2003, 26 and Manzini 2010, 171).

There is another indication that they may be just CPs. As noted in Rizzi (1982, 75f, note 32) embedded interrogative CPs but no standard “Headless” RCs (which are DPs) permit Gapping. Interestingly, Modal Existential *wh* Constructions, like embedded interrogative CPs allow Gapping: *C’è chi preferisce la pasta e chi il riso*, lit. ‘there is who prefers pasta and who rice’.

²² Also see van Riemsdijk’s (2005, 363) and Assmann (2013).

of their 2011 article for precedents of this idea) that “Headless” RCs only involve a bare (X-bar) head which raises and projects, as a determiner, to DP:²³



For one thing, as already mentioned, some languages provide direct evidence that the *wh*-phrase in “Headless” RCs is within the RC CP, not outside. In particular, a structure like (13) would lead one to expect that the corresponding German *wh*-free relative pronouns could not extrapose together with the rest of the “Headless” RC, contrary to fact.²⁴ Secondly there are two constructions which appear to front to Spec,CP complex *wh*-phrases; the ‘paucal’ relatives in sentences like (14), and the *wh*-‘ever’ relatives in sentences like (15):²⁵

(14)a. **What beer** we found was flat (Andrews 1975,75)

b. Fred hid **what (few) weapons** were on the table (Andrews 1975,76)

c. We gave him **what little money** we had (Kayne 1994,154note13)

²³ In their system if C rather than the raised *wh*- projects the result is a standard interrogative CP rather than a “Headless” RC, which leaves to be seen how best to capture Benincà’s (2007,2012) finding that despite the morphological similarity of the *wh*-forms in the two constructions, the target of the *wh*- in (Italian) “Headless” RCs is higher (above Topics) than that of the *wh*- in interrogatives (below Topics).

²⁴ Cable (2005 and 2010,§6.3) acknowledges that this is a serious challenge for the Move-and-Project analysis though he also advances some speculations on how it could be resolved.

²⁵ The discussion in Andrews (1975,§1.1.2.2) provides evidence that what he calls ‘paucal’ (free) relatives cannot be taken to be *wh*-‘ever’ relatives with a silent ‘-ever’. Apart from their special meaning of insufficiency, ‘paucal’ (free) relatives, as opposed to *wh*-‘ever’ phrases, can only be used with mass or plural nouns (**Fred hid what weapon was on the table* vs. *Fred hid whatever weapon was on the table*). Also, they are compatible with paucal modifiers like *few* and *little*, but not with multal or numeral quantifiers (**I saw what many/three people arrived early*), while exactly the opposite holds for *wh*-‘ever’ phrases (**I greeted whatever few people came to the door* vs. *I hid the coats of whatever three people he brought*). Should they co-occur with a different (‘paucal’) silent element (possibly LITTLE/FEW), this would likely be within CP, like ‘-ever’, given the German extraposition facts to be mentioned below concerning the German *w- immer auch* phrases (the analogues of *wh-ever* phrases in English), which necessarily extrapose with the rest of the “Headless” RC.

b. [I]t begins to fit with **what little** we know about evolutionary history (Chomsky 2015,74)²⁶

(15)a. I shall visit **whatever town** you will visit (Donati and Cecchetto 2011,552)

b. I'll read **whatever book(s)** he tells me to read (Jacobson 1995,451)

Donati and Cecchetto (2011) may be right in suggesting that in some languages (some) *wh*-‘ever’ phrases can also be Heads of Headed RCs (see the Italian *–unqu*e case in (16)a, from Battye 1989,230, where such sentences are dubbed ‘pseudo-free relatives’, and the English ‘-ever’ case in (16)b, from Chierchia and Caponigro 2013,7):²⁷

(16)a. Chiunque a cui tu avessi parlato ti avrebbe dato la stessa risposta

‘Whoever to whom you had spoken would have given you the same reply’

b. John would read whichever book that he happened to put his hands on

There are however indications that the same does not hold for other languages and possibly for other *wh*- forms in English (for some speakers). Citko (2008,930ff) points out three phenomena with respect to which RCs with *wh*-‘ever’ phrases pattern with standard “Headless” RCs (with bare *wh*-words in COMP) rather than with Headed RCs. They are: incompatibility of most forms with

²⁶ Which we take to be: ... *with* [THE [*what little* AMOUNT (THAT) *we know* ...] (SUCH) AMOUNT]. In the next page, the following variant is used: ... *with the little that we know* (i.e.,...*with* [*the* [(WHAT) *little* AMOUNT *that we know*] (SUCH) AMOUNT]. For the degraded status of overt *that* if *what* is also overt see footnotes 28 and 30.

²⁷ The contrast between (16)a, grammatical with a slight pause between *chiunque* and *a cui*, and its English translation, ungrammatical, is to be related to the possibility of using *chiunque*, but not *whoever*, as an indefinite pronoun (= *anyone*). See *Parlerebbe con chiunque* ‘He would speak with anyone (lit. whoever)’ - Cecchetto and Donati 2011 Appendix vs. **He would speak with who(m)ever*. For the special status of *–unqu*e “Headless” RCs in Italian and their Romanian analogues, see Caponigro and Fălăuș (2016).

(16)a-b should be kept distinct from the apparently similar cases found in ‘doubly-filled COMP’ languages like Middle English (Benincà 2007,§5.2) and Paduan (Benincà 2012,36f), where both the *wh*-phrase and the ‘complementizer’ are within the (split) CP. Indeed it remains to be seen whether (16)b isn’t also a case of a doubly filled COMP if the same speakers who accept it also accept *that* with an interrogative *wh*-phrase, as Andrew Radford does (see fn. 30 below).

overt ‘complementizers’ in English (cf. (17))²⁸, strict Case matching in Polish (cf. (18))²⁹, and RC extraposition in German (cf. (19)).

(17)a. We’ll hire whichever man (*that) you recommended to us (Citko 2009,931)³⁰

b. I’ll read whatever book (??that/which) you’ll read (Jacobson 1995,461)

(18)a. Zatrudnimy [któregokolwiek studenta nam polecisz t_{ACC}]_{ACC} (Citko 2008,931)

Hire.1PL whichever.ACC student.ACC us recommend.2SG

‘We’ll hire whichever student you recommend to us’

b. *Zatrudnimy [któremukolwiek studentowi ufamy t_{DAT}]_{ACC} (Citko 2008,931)

hire.1PL whichever.DAT student.DAT trust.1PL

‘We’ll hire whichever student we trust’

c. *Zatrudnimy [któregokolwiek studenta [ufamy t_{DAT}]]_{ACC}³¹

hire.1PL whichever.ACC student.ACC trust.1PL

‘We’ll hire whichever student we trust’

²⁸ On the general inability of bare *wh*-‘ever’ phrases to be ordinary arguments in Head position in English, see Jacobson (1995,460). Also see Groat’s (2012) example *I’d like to meet whoever’s books (*that) sell over a million copies*. For such cases Groat assumes that it is the *wh*- at the edge that enters into an agree relation with the external antecedent.

One can get even deeper embedding:

(i) *[[Whoever’s father’s family] has a lot of money] will get rich*.

The problematic status for the Head analysis of these examples (and that in fn.2 above) is also pointed out in Jacobson (1995,462). The relation between *whoever* and the external silent antecedent in (i) appears to be the same as that holding between *whose* and the overt antecedent in cases like *The boy [[whose father’s family] has a lot of money] will get rich*. Also see Citko (2009,61f).

²⁹ *Wh-kolwiek* (*wh*-‘ever’) RCs require Case matching, like simple “Headless” RCs, and unlike Headed RCs.

³⁰ The same is true of ‘paucal’ “Headless” RCs. See (i), from Andrews (1975,78),

(i) I drank what beer (*that) was on the table/we found.

though he finds the ungrammaticality of (i) less severe than that with ordinary free relatives with *that* (**I ate what that he brought*). Andrew Radford, p.c., who generally accepts both *wh*-‘ever’ and paucal *wh*- followed by a nominal to co-occur with *that* (see exercise 7.4 of Radford 2016), still finds a difference between *What little beer that was left, he drank* (perfect) and the much worse *What (little) that was left, he drank*. The fact that he has a similar contrast in *wh*-interrogatives (*I wonder what *(kind of celebration) that he has in mind*) may suggest that even in the Free RC construction the *wh*-‘ever’ or paucal phrase and *that* are for him both in CP.

³¹ Which should be good, given the well-formedness of

(i) Zatrudnimy [tego człowieka_{ACC} [któremu ufamy t_{DAT}]]_{ACC} (Citko 2008,931)

hire.1PL this.ACC man.ACC whom.DAT trust.1PL

‘We’ll hire the man that we trust.’

(19)a. Der Hans hat zurückgegeben [**welches Geld auch immer** er gestohlen hat]

The Hans has returned which money even ever he stolen has

‘Hans has returned whatever money he has stolen’

b. *Der Hans hat **welches Geld auch immer** zurückgegeben [er gestohlen hat]³²

The Hans has which money even ever returned he stolen has

Borsley (1984,11f) discusses another case from Polish which suggests that *wh*-‘ever’ phrases, like bare *wh*-pronouns, and unlike the Head of Headed RCs, are located in Spec,CP.

The possessive anaphor *swój* must occur in the same local domain (IP/CP) as its antecedent. When inside the *wh*-phrase of an embedded interrogative it can only be bound (under reconstruction) by an antecedent inside the embedded interrogative (cf. (20)a.), and cannot be bound by an antecedent in the matrix clause (cf. (20)b.). When inside the Head of a Headed RC *swój* must instead be bound from an antecedent located in the matrix clause (cf. (21)a.), not by one located in the relative clause (cf. (21)b.):³³

(20)a. Jan zapytał [[którą ze swoich piosenek]_k pro_i lubisz t_k]

John asked which from self.poss songs you.like

‘John asked which of your songs you liked’

b. *Jan_i zapytał [[którą ze swoich piosenek]_k lubisz t_k]

John asked which from self.poss songs you.like

‘John asked which of his songs you liked’

(21)a. Jan_i zaśpiewa [[każda ze swoich piosenek] jaką_k wybierzesz t_k]

John will.sing each from self.poss songs which you.will.choose

‘John will sing each from his songs that you choose’

b. *Jan zaśpiewa [[każda ze swoich piosenek]_k, jaką ty_i wybierzesz t_k]

John will.sing each from self.poss songs which you.will.choose

³² Also see the following, provided by Henk van Riemsdijk, p.c.:

(i)a. [[Wessen Buch auch immer] von Reich Ranicki gelobt wurde] hat sich immer sehr gut verkauft

whose book even ever by Reich Ranicki praised was has REFL always very well sold

‘Whoever’s book was praised by Reich Ranicki always sold very well’

b. **[Wessen Buch auch immer] hat sich immer sehr gut verkauft, von Reich Ranicki gelobt wurde

³³ This appears to show that the RC Head cannot reconstruct inside the RC pointing to the presence of a “Matching”, rather than a “Raising”, derivation in (21).

‘John will sing each from his songs that you choose’

Crucially, when *swój* is contained inside the *wh*‘-ever’ phrase of a “Headless” RC, it **cannot** be bound by an antecedent in the matrix clause (cf. (22)a.); it can only be bound by one within the RC (under reconstruction) (cf. (22)b.), as when it is contained within a *wh*-phrase in the Spec,CP of an embedded interrogative clause (cf. (20) above).

(22)a. *Jan_i zaśpiewa [[którákolwiek ze swoich_i piosenek]_k pro_i wybierzesz t_k]

John will.sing whichever from self.poss songs (you) will.choose

‘John will sing whichever of his songs you choose’

b. Jan zaśpiewa [[którákolwiek ze swoich_i piosenek]_k pro_i wybierzesz t_k]

John will.sing whichever from self.poss songs (you) will.choose

‘John will sing whichever of your songs you choose’

This clearly suggests that *wh*‘-ever’ phrases (in Polish) are in the COMP of the “Headless” RC, not in an external Head position.³⁴

The same pattern is displayed by the Croatian possessive anaphor *svoj* (Gračanin-Yüksek 2008). When *svoj* is within the *wh*-phrase of an embedded *wh*-question it can only be bound by an antecedent within the embedded *wh*-question (under *total* reconstruction), not by one in the matrix clause:

(23) Ivan_k ne zna koje je svoje_{j/*i/*k} slike Vid_i mislio da je Dan_j poslao na natječaj

Ivan not know which Aux self’s pictures Vid thought that Aux Dan sent on contest

‘Ivan_k doesn’t know which pictures of himself_{j/*i/*k} Vid_i thought Dan_j sent to the contest’

³⁴ For Citko (2009, §3.3) ‘however many’ *wh*-phrases in Polish free relatives also allow for non-reconstructed interpretations. Adam Szczegielniak informs me that for certain speakers *swój* can also function as a pronominal, so that for them no comparable clear contrasts should be expected to exist. Nonetheless he himself finds the contrast between a headless RC ((i)a) and a headed one ((i)b) striking:

(i)a. Jan_n zaśpiewa [[którákolwiek ze swoich_{i/*n} piosenek]_k pro_i wybierzesz t_k]

John will.sing whichever from self.poss songs (you) will.choose

‘John will sing whichever of your songs you choose’

b. Jan_n zaśpiewa [którákolwiek ze swoich_{i/*n} piosenek] [[którák pro_i wybierzesz t_k]

John will.sing whichever from your songs which (you) will.choose

‘John will sing whichever of your songs which you choose’

The opposite holds in Headed RCs. *Svoj* can only be bound by an antecedent in the matrix clause, not by one within the RC. See (24):³⁵

- (24) Vid_i će negraditi ono svoje_{i/*j} dijete koje Dan_j preporučī
 Vid will reward that self's child which Dan recommends
 'Vid_i will reward the one of his_{i/*j} children that Dan_j recommends'

Wh-‘ever’ phrases of “Headless” RCs behave like *wh*-phrases in *wh*-questions. The possessive anaphor *svoj* contained within them can only be bound (under total reconstruction) by an antecedent within the RC, not by one in the matrix clause (thus pointing to their location in the Spec,CP of the “Headless” RC):³⁶

- (25) Vid_i će negraditi koje god svoje_{j/*i} dijete Dan_j preporučī
 Vid will reward which ever self's child Dan recommends
 'Vid_i will reward whichever of his_{j/*i} children Dan_j recommends'

Other languages show that even *Definite* “Headless” RCs (those that plausibly do not involve a silent ‘-ever’, as seen above) can be introduced by complex *wh*-expression *who/what/which* + NP. One such case is provided by Chuj (a Mayan language from Guatemala) (see (26), from Kotek and Erlewine (2015,§5.2.3), who explicitly say that they “may include overt nominal domains.” (p.34)³⁷

³⁵ “[R]econstruction of the head NP into the relative clause is impossible. The head NP and the matrix subject seem to belong to the same clause.” (Gračanin-Yüksek 2008,281) (which, as noted, points to a “Matching” rather than “Raising” derivation). The only exception is “H[eaded] R[elative]s denoting degrees” (Gračanin-Yüksek 2008,fn.8) (which since Carlson 1977 are taken to involve a “Raising” derivation).

³⁶ The clitic second syntax of Croatian also shows conclusively that they cannot have raised out of Spec,CP (Gračanin-Yüksek 2008,§3), and that “move-and-project analyses [...] cannot be the right account of Croatian FRs” (Gračanin-Yüksek 2008,fn.22).

³⁷ Another appears to be Melchor Ocampo Mixtec (Caponigro, Torrence and Cisneros 2013,§4.3 and §5.6). Cecchetto and Donati (2015,51) point out that there appear to be no “Headless” RCs with in-situ *wh*-pronouns (cf. also Kayne 1994,158note30) and that this follows from the need for the free relative CP to project into a DP via raising of the *wh*-pronoun/determiner (a case in point could be French: *[*Tu as rencontré qui*] *est malade* ‘who you have met is sick’ vs. *Tu as rencontré qui?* ‘Who have you met?’). In the present context this might instead be related to the non existence in French (and languages like French) of in-situ relative *wh*-pronouns (whatever the principle is that forces their movement). The ban on in-situ “Headless” *wh*-phrases may not be completely general if the correlative structures of Burushaski (isolate) ((ii)a.) and Konḡa (South-Central Dravidian) ((ii)b.) (and other Dravidian languages) are left dislocated “Headless” RCs with in-situ *wh*-pronouns:

- (26)a. Ix-Ø-w-ilelta [FR **mach** (**winh unin**) ix-Ø-ulek'-i].
 PRFV-B3-A1S-meet who (CL.MASC boy) PRFV-B3-come-ITV
 'I met (the boy) who came.'
- b. Ko-gana [FR **tas** (**libro-al**) ix-Ø-s-man waj Xun].
 A1P-like what book-NML PRFV-B3-A3-buy CL.NAME Juan
 'We like the book that Juan bought.'

Thus, a raising and projection of the *wh*-form in "Headless" RCs does not seem viable.

5. The lack of "Headless" reduced RCs. "Headless" reduced RCs appear not to be possible. See (27), explicitly noted in Jacobson (1995,460) (and confirmed by other speakers):

- (27)a. *What(ever) lurking outside my windows scares me.³⁸
 b. *What(ever) displayed in this windows will be sold by midnight.
 c. *Whatever house cheaper than mine will sell quicker.

The pattern follows if no Case is assigned to Spec,IP as a consequence of the lack of finite Tense within the reduced RC (cf. Kayne 1994,§8.4), and if there is no other way of assigning Case to the *wh*-phrase from the outside.³⁹

-
- (ii)a. šon gukúr biťáne bésan sénuma ke ité sahíi maními (Yoshioka 2012,199)
 Shon-Gukur shaman.ERG what.indef.sg.abs say-adjvlz=Q LINK that.abs correct become.NPRS.3rdsg
 'What Shon Gukur had said turned out to be true'
- b. maa kiidu inika manadoo daani peru veRtu (Lakshmi Bai 1985,185)
 our in.hands what to.be its name tell
 'Tell us the name of what we have in our hands'

³⁸ The ungrammaticality of (27)a should be contrasted with the grammaticality of *Anything lurking outside my windows scares me* (Andrew Radford, p.c.).

³⁹ On the IP nature of reduced RCs see Cinque (2010,§4.2 and §5.1), where evidence from Fanselow (1986) is cited for the presence of a PRO subject with both present and past participles (pace Siloni 1995). The fact that "Headless" reduced RCs appear not to be possible even where no Case licensing is plausibly at issue (cf. (i)), may suggest that they contain no CP capable of hosting a *wh*-phrase:

- (i)a. *Il lavoro sarà recensito dove pubblicato.
 the paper will be reviewed where published
- b. *Quando addormentata Gianna si mise a russare.
 when fallen asleep, Gianna started snoring

The same seems true for Italian:

- (28) *Chi invitato alla festa dovrà portare una bottiglia
who invited to the party will have to bring a bottle.

Apparent exceptions, like (29), can be accounted for if, as suggested in Donati and Cecchetto (2011, Appendix), *qualunque cosa* and *chiunque* can be external Heads, which receive Case in the matrix clause (see (30), where they stand by themselves):

- (29)a Qualunque cosa persa da uno di voi non verrà ricomprata
whatever thing lost by one of you will not be bought again
b. ?Chiunque sorpreso a rubare verrà multato
whoever caught stealing will be fined

- (30)a. Farei qualunque cosa per aiutarti
I would do whatever thing to help you
'I would do anything to help you'
b. Parlerebbe con chiunque
(S)he would talk with whoever
'(S)he would talk with anyone'

For the same reasons we take *newspapers* in (31)a-b to be an external Head, assigned Case in the matrix clause. If it could receive, in Spec,CP (or Spec,IP), the Case assigned by the matrix Tense to the matrix DP containing the CP (IP), we would expect the “Headless” RCs in (27) and (28) to also be possible, contrary to fact.⁴⁰

(vs. Appena addormentata,... ‘Once fallen asleep,..’, where *appena* is an AdvP plausibly in IP).

The absence of a CP in reduced RCs should also account for the impossibility of **the book which recently sent...* (cf. Kayne 1994,98). Also see Siloni (1995) for the different structure to be attributed to present and past participle reduced RCs in French and Italian, IP and ParticipialIP, respectively. If she is right that these categories are contained within an extra DP layer, no ‘government’ issues should arise for the presence of a PRO.

⁴⁰ By the same reasoning, differently from Cinque (2010,56), the Head *headway* of a reduced RC like *The headway made so far is not negligible* must be an external Head (the coindexed PRO within the reduced RC perhaps satisfying the idiom requirements). See Cinque (in preparation) and references cited there for the doubtful diagnostic nature of idiom chunks for “Raising”.

- (31)a. The [newspapers [recently arrived]] were eagerly read by everyone
 b. The [[recently arrived] newspapers] were eagerly read by everyone

6. Wh-‘ever’ in argument and in adjunct clausal position. As mentioned in fn.4, there are reasons to distinguish argument ‘Headless’ RCs from Free adjunct free RCs (Izvorski, 2000, Riemsdijk 2005, §5.1, Rawlins 2008), which are close in meaning to *no matter* clausal adjuncts (even if the two may share a common semantics at a more abstract level – cf. Hirsch to appear). As noted in Riemsdijk (2005, §5.1) argument “Headless” RCs (as opposed to Free adjunct Free RCs) do not yield natural paraphrases with *no matter* concessive clauses (cf. *This dog attacks whoever/?*no matter who crosses its path.*).⁴¹ Free adjunct Free RCs also differ from standard argument “Headless” RCs in requiring ‘-ever’ (*Co*(kolwiek) się stanie, jedziemy jutro do Paryża/What*(ever) happens, we are going to Paris tomorrow* - Citko 2010, 238).⁴² Here are listed a few additional phenomena which show that *wh*-‘ever’ phrases in argument and adjunct positions behave differently.

6.1 Although *–unque wh*-phrases in Italian “Headless” RCs may (also) be external heads followed by a relative pronoun, as seen in (16) above, they cannot be followed by a relative pronoun in Free adjunct free RCs. This is expected if these are bare CPs, with no external Head:

- (27) *Qualunque cosa di cui lui si vanta, noi non ci lasceremo impressionare

Whatever thing of which he may boast, we won’t let ourselves be impressed

(vs. *Di qualunque cosa lui si vanta, noi non ci lasceremo impressionare* ‘Of whatever thing he may boast, we won’t let ourselves be impressed’)

6.2 To judge from German, Free adjunct free RCs also appear to occupy positions different from the positions occupied by arguments, where standard “Headless” RCs are internally merged. While the latter, as DPs, target ordinary DP positions, argument or topic and focus positions in the left periphery, counting as occupiers of the first position and yielding V2 (cf. (28)), Free adjunct free

⁴¹ He also notes that there is no standard argument “Headless” RC that corresponds to *no matter whether* Free Adjunct Free RCs (such as *No matter whether Carl talks or not, he will be convicted*). Andrew Radford, p.c., however, finds *This dog attacks no matter who crosses its path* grammatical.

⁴² Among the “Headless” *wh*-phrases of Italian *quant-* ‘what, who.pl’ cannot take the ‘-ever’ suffix *–unque* (cf. Donati and Cecchetto 2011, 552) and, as opposed to those that do, they cannot be used in Free adjunct Free RCs (**Quanto succederà, noi ce ne andremo* ‘What will happen, we will leave’).

RCs occupy an adverbial position higher than topics and foci, forcing the finite verb to be in third position (cf.(29)), like other ‘conditionals of irrelevance’ ((30)):⁴³

(28) Wen auch immer du einlädst, wird Maria gut erhalten

Who also ever you invite, will Maria welcome

(29)a. Wen auch immer du einlädst, Maria wird nicht kommen (d’Avis 2004,141)

Who also ever you invite, Maria will not come

b. *Wen auch immer du einlädst, wird Maria nicht kommen (d’Avis 2004,148)

(30) Ob es regnet oder nicht, wir gehen spazieren (d’Avis 2004,141)

Whether it rains or not, we go for a walk

6.3 In Appalachian English (AppE) the ‘-ever’ of Standard American English (SAE) precedes the *wh*-phrase (see Johnson 2015), rather than following it:⁴⁴

(31) a. You should return ever-what you have finished reading to the library. (AppE)

b. You should return what-ever you have finished reading to the library. (SAE)

This ordering is however banned in Free adjunct free RCs. Cf. (32):

(32) *You will win the competition, ever-who judges the final round.

7. (Morphological) Case (mis)match in “Headless” RCs.

The (morphological) Case matching requirement holding of “Headless” RCs has been the object of intensive research, which has come to distinguish essentially three types of languages: 1) fully matching languages (like Polish, English, Italian, etc. – Grosu 1994, Citko 2000) where the Case of

⁴³ I thank Roland Hinterhölzl for discussing this point with me.

⁴⁴ We may take Standard English *wh-ever* phrases to be complex phrases derived by raising of the *wh*- part, from a structure essentially like the Appalachian English *ever-wh* (which possibly is itself complex: AT *ever(y) TIME wh-*) across *-ever*. Thinking of Kayne’s (1994) analyses of *'s* and *-ever*, *Whoever's pictures* would be derivable from [*ever* [*who* [*'s* [*pictures* with *who* raising above *-ever*. *Whosever pictures*, in those variants that prefer it to *whoever's pictures*, could be derived from the same structure with *pictures* raising above *who* [*'s* before the merger of *-ever* followed by remnant movement of *who* [*'s* above *-ever*. Thanks to Richard Kayne for relevant discussion.

the *wh*-phrase in Spec,CP and the Case assigned to the external DP have to exactly match⁴⁵, 2) nonmatching languages where case conflicts between the internal and external Case are resolved in favor of the internal Case (certain varieties of German - Pittner 1991,1995, sometime referred to as German B - Vogel 2001), and 3) nonmatching languages where case conflicts are resolved in favor of the external Case (like Classical Greek, Gothic, etc. – Harbert 1983). See the discussion and references in the above works as well the general discussions in Grosu (1994) and Riemsdijk (2005), Daskalaki (2011).

Here I won't add to these discussions except for a proposal meant to derive, in addition to the matching ones, the generalization holding of the *nonmatching* type 2) (where the Case conflict is resolved in favor of the internal Case).⁴⁶ The nonmatching type 2) appears to obey the following generalization: when different from the Case assigned externally, the *wh*-phrase can bear the Case assigned within the relative clause (as expected if it is in Spec,CP) *provided that such Case is lower in the Case hierarchy (NOM > ACC > GEN > DAT > OBL) than the Case assigned externally* (cf. Pittner 1995,211).⁴⁷ (33) and (34) provide some illustrative examples from German B:

- (33)a. Sie lädt ein→Acc[FR wemDat sie zu Dank verpflichtet ist] (Pittner 1995,208) (ACC [FRDAT])
 she invites to.whom she to thanks obliged is
 'She invites who she is obliged to'
- b. Jeder muss tun, wofür er bestimmt ist (Pittner 1995,208) (ACC [FRBENEF])
 everybody must do what-for(PP) he destined is
 'Everybody must do what he is destined for'
- c. [FR WenAcc MariaNom mag→Acc]Nom wird eingeladen (Vogel 2001,903) (NOM [FRACC])
 who.acc Maria likes is invited
 'Who Maria likes gets invited.'

⁴⁵ Andrew Radford (2016,468), however, reports cases of non-matching like (i) even in English:

(i) [Whoever you elect] will serve a four-year term.

⁴⁶ For type 3), and its complexities, see Harbert (1983) and especially Grosu (1994, Study I, Chapter 4) in terms of Case Attraction, which in some languages also holds of the corresponding Headed RCs.

⁴⁷ The generalization appears to hold independently of the differences which may exist among the selective nonmatching languages with respect to which structural positions admit nonmatching: left dislocated positions (in German but not French – Harbert 1983,§4), subject positions, if distinct from clitic left dislocated positions in null subject languages (Spanish and Catalan – Hirschbühler and Rivero 1982, - but not Italian).

This recalls the possibility of Inverse Case Attraction in Headed RCs in left dislocated and subject positions in certain languages (Farsi varieties and Albanian dialects), analysed as "Raising" relatives in Cinque (2007,99ff) and references cited there.

- (34)a. *Er zerstört_{→Acc} [_{FR} wer_{Nom} ihm begegnet] (Vogel 2001,904) (ACC [_{FR}NOM])
 he destroys who him meets
 ‘He destroys he who meets him’
- b. *Ich vertraue_{→Dat} [_{FR} wen_{Acc} ich einlade] (Vogel 2003,283) (DAT [_{FR}ACC])
 I trust who I invite
 ‘I trust whom I invite’

In a double-headed configuration like, say, $V_{\text{matrix}} [\text{DP } D [\text{CP } [\text{XP } \textit{what} \text{ THING}]_i V_{\text{embedded}} t_i] (\text{SUCH}) \text{ THING}]$, the matrix V assigns Case to DP (which percolates to the external Head (SUCH) THING). The internal Head, [*what* THING] instead receives Case from the embedded V. Such double-headed configuration allows one to derive the full matching case and the nonmatching case where the Case conflict is resolved in favor of the internal Case without having to resort to non-local relations spanning over two maximal projections, DP and CP.

The parametric variation between fully matching languages like English (but see fn.43), Polish, or Italian and nonmatching languages like German B appears to be expressible in terms of Caha’s (2009, §1.6) Universal (Case) Containment (35), which is motivated by Case syncretism and other generalizations:

(35) Universal (Case) Containment

- a. In the Case sequence, the marking of Cases on the right can morphologically contain Cases on the left, but not the other way round.
- b. The Case sequence: NOM – ACC – GEN – DAT – INS – COM

Each Case in the sequence contains the Cases to its left though not those to its right, NOM being the poorest, for ex.: [_{AccP} ACC [_{NomP} NOM]].

In fully matching languages the raised internal Head licenses the non-pronunciation of the external Head, which it c-commands (under Kayne’s 1994 definition), only if the category and (morphological) Case of the two Heads are identical. In German B type languages, the licensing is less strict. For the non-pronunciation of the external Head it is enough (for identification) that the internal Head, which c-commands it, has a Case which contains the Case of the external Head.⁴⁸

⁴⁸ (33)a-c are thus fine as DAT/BENEf contains ACC (and NOM) and ACC contains NOM. If the opposite is the case (34)a-b, an ungrammatical result obtains, presumably for lack of Case recoverability. See Assmann (2013) for a similar

8. By way of conclusion. Evidence was reviewed above that renders it at least plausible to conceive of a double-headed analysis even for “Headless” RCs, where the external Head of the bare *wh*-forms (*what*, *who*, etc.), or, for that matter, complex *wh*-‘ever’ forms, is one of the functional/light nouns/classifiers THING, AMOUNT, PERSON, PLACE, TIME, etc., also silently present with the *wh*-forms (*what* THING, *whatever book* THING) raised to the Spec,CP of the RC.

References

- Alexiadou, Artemis and Spyridoula Varlokosta. 1996. The Syntactic and Semantic Properties of Free Relatives in Modern Greek. *ZAS Papers in Linguistics* 5.1-31
- Andrews, Avery Delano III. 1975. *Studies in the Syntax of Relative and Comparative Clauses*. Ph.D. Dissertation, MIT.
- Andrews, Avery Delano III. 2007. Relative Clauses. In T.Shopen, ed., *Language Typology and Syntactic Description. Volume II: Complex Constructions* (Second Edition). 206-236. Cambridge: Cambridge University Press.
- Anonby, Erik J. 2011. *A Grammar of Mambay: an Adamawa language of Chad and Cameroon*. Köln: Köppe.
- Assmann, Anke. 2013. Three Stages in the Derivation of Free Relatives. In F.Heck & A.Assmann, eds, *Rule Interaction in Grammar* (Linguistische Arbeitsberichte 90). 203–245. Universität Leipzig, Leipzig. http://www.uni-leipzig.de/~asw/lab/lab90/LAB90_07_anke.pdf
- Battye, Adrian. 1989. Free relatives, pseudo-free relatives, and the syntax of CP in Italian. *Rivista di Linguistica* 1.219–250 <http://linguistica.sns.it/RdL/1.2/Battye.pdf>
- Benincà, Paola. 2007. Headless Relative clauses in Old Italian and some related issues. Handout of a paper presented at the Université de Paris VIII, 13.12.2007.
- Benincà, Paola. 2010. Headless Relatives in Some Old Italian Varieties. In R.D’Alessandro, A. Ledgeway and I.Roberts, eds., *Syntactic Variation. The Dialects of Italy*. 55-70. Cambridge: Cambridge University Press.

treatment in terms of Case features containment, though she takes Nominative to be “richer” than Accusative, which is richer than lower Cases.

Within analyses which do not assume an external Head (as in [_{DP} D [_{CP}]]) it is not clear why in the selective nonmatching cases it is enough for the Case of the *wh*-phrase (say, DAT) to contain the Case of D (say, NOM), but not viceversa (why couldn’t the Case of D contain the Case of the *wh*-, with D DAT and the *wh*- NOM?).

- Benincà, Paola. 2012. Lexical Complementizers and Headless Relatives. In L.Brugè et al., eds., *Functional Heads. The Cartography of Syntactic Structures, Vol. 7*. 29-41. New York: Oxford University Press.
- Benincà, Paola and Guglielmo Cinque. 2010. La frase relativa. In G.Salvi and L.Renzi, eds., *Grammatica dell'italiano antico*. Vol. I. 469-507. Bologna: Il Mulino.
- Bertollo, Sabrina and Guido Cavallo. 2012. The syntax of Italian free relative clauses: an analysis. *Generative Grammar in Geneva* 8.59-76
http://www.unige.ch/lettres/linge/syntaxe/journal/Volume8/4_Bertollo-Cavallo_2012.pdf
- Bliese, Loren F. 1981. *A Generative Grammar of Afar*. Dallas: Summer Institute of Linguistics and Arlington: The University of Texas. <http://www.sil.org/resources/archives/8559>
- Borsley, Robert D. 1984. Free relatives in Polish and English. In J.Fisiak, ed., *Contrastive Linguistics. Prospects and Problems*. 1-18. Berlin: Mouton Publishers.
- Branchini, Chiara. 2014. *On Relativization and Clefting. An Analysis of Italian Sign Language*. Berlin: Mouton de Gruyter and Preston: Ishara Press.
- Bresnan, Joan and Jane Grimshaw. 1978. The Syntax of Free Relatives in English. *Linguistic Inquiry* 9.331-391
- Bury, Dirk. 2003. *Phrase structure and derived heads*. Ph.D. Dissertation, University College, London. https://www.phon.ucl.ac.uk/home/deleted_22_09_10/dirk/PSderivedheads.pdf
- Cable, Seth. 2005. Free Relatives in Lingít and Haida: Evidence that the Mover Projects. Unpublished ms., MIT, Cambridge, Mass.
<http://people.umass.edu/scable/papers/Tlingit-Haida-Free-Relatives.pdf>
- Cable, Seth. 2010. *The Grammar of Q. Q-Particles, Wh-Movement, and Pied Piping*. New York: Oxford University Press.
- Caponigro, Ivano. 2003. *Free not to ask*. Ph.D. dissertation, University of California, Los Angeles. http://idiom.ucsd.edu/~ivano/Papers/2003_dissertation_revised_2015-8-13.pdf
- Caponigro, Ivan and Anamaria Fălăuș. 2016. Free Choice Free Relative Clauses in Italian and Romanian. Ms., University of California at San Diego.
http://idiom.ucsd.edu/~ivano/Papers/2016_CaponigroFalaus_FreeChoiceFreeRelative.pdf
- Caponigro, Ivano and Lisa Pearl. 2008. Silent Prepositions: Evidence from free relatives. In A.Asbury et al., eds., *Syntax and Semantics of Spatial P*. 365-385. Amsterdam: Benjamins.
http://idiom.ucsd.edu/~ivano/Papers/2008_Silent%20Ps_volume.pdf
- Caponigro, Ivano and Lisa Pearl. 2009. The nominal nature of *where*, *when*, and *how*: Evidence from free relatives. *Linguistic Inquiry* 40.155-164
http://idiom.ucsd.edu/~ivano/Papers/2009_LI%20squib.pdf

- Caponigro, Ivano, Harold Torrence and Carlos Cisneros. 2013. Free Relative Clauses in Two Mixtec Languages. *International Journal of American Linguistics* 79.61-96
http://idiom.ucsd.edu/~ivano/Papers/2012_MixtecFRs.pdf
- Cecchetto, Carlo and Caterina Donati. 2015. *(Re)labeling*. Cambridge, Mass.: MIT Press.
- Chierchia, Gennaro and Ivano Caponigro. 2013. Questions on questions and free relatives. Handout of a paper presented at *Sinn und Bedeutung*, Vitoria, Basque Country.
<http://scholar.harvard.edu/chierchia/publications/demo-presentation-handout>
- Chomsky, Noam. 2013. Problems of projection. *Lingua* 130.33-49
- Chomsky, Noam. 2015. A Discussion with Naoki Fukui and Mihoko Zushi (March 4, 2014). In N.Fukui, ed., *Noam Chomsky. The Sophia Lectures*.71-97 (*Sophia Linguistica. Working Papers in Linguistics* 64). Tokyo: Sophia University.
- Christiansen-Bolli, Regula. 2010. *A grammar of Tadaksahak: a Berberised Songhay language (Mali)*. Köln: Köppe.
- Cinque, Guglielmo. 1988. La frase relativa. In L.Renzi, ed., *La Grande Grammatica di Consultazione*. Vol.I. 443-503. Bologna: Il Mulino.
- Cinque, Guglielmo. 2003. The prenominal origin of relative clauses. Paper presented at the NYU Workshop on Antisymmetry and Remnant Movement, Oct. 31- Nov.1 2003.
- Cinque, Guglielmo. 2007. A Note on Linguistic Theory and Typology. *Linguistic Typology* 11. 93-106 (also in G.C. *Typological Studies. Word Order and Relative Clauses*. London: Routledge, 2013). <http://lear.unive.it/jspui/handle/11707/123>
- Cinque, Guglielmo. 2008. More on the indefinite character of the Head of restrictive relatives. In P.Benincà, F.Damonte and N.Penello (eds.), *Selected Proceedings of the 34th Incontro di Grammatica Generativa*, Unipress,Padova, (Special issue of the *Rivista di Grammatica Generativa*, vol. 33, 3-24) (also in G.C. *Typological Studies. Word Order and Relative Clauses*. London: Routledge, 2013). <http://lear.unive.it/jspui/handle/11707/133>
- Cinque, Guglielmo. 2009. The Fundamental Left-Right Asymmetry of Natural Languages. In S.Scalise, E.Magni, A.Bisetto, eds., *Universals of Language Today*. 165-184. Dordrecht: Springer. (also in G.C. *Typological Studies. Word Order and Relative Clauses*. London: Routledge, 2013). <http://lear.unive.it/jspui/handle/11707/99>
- Cinque, Guglielmo. 2011. On double-headed relative clauses. *Linguística. Revista de Estudos Linguísticos da Universidade do Porto* 6.67-9
<file:///C:/Users/utente/Downloads/DoubleHeadedRCs.pdf>
- Cinque, Guglielmo. 2014. Extraction from DP in Italian revisited. In E.O.Aboh, M.T.Guasti and I.Roberts, eds., *Locality*. 86-103. New York: Oxford University Press.

<http://lear.unive.it/jspui/bitstream/11707/155/2/Extraction.from.DP.Cinque.pdf>

Cinque, Guglielmo. In preparation. *The Syntax of Relative Clauses. A Unified Analysis*.

Citko, Barbara. 2000. *Parallel Merge and the Syntax of Free Relatives*. Ph.D. Dissertation, State University of New York at Stony Brook.

Citko, Barbara. 2002. (Anti)reconstruction effects in free relatives: A new argument against the Comp account. *Linguistic Inquiry* 33.507-511

Citko, Barbara. 2004. On headed, headless, and light-headed relatives. *Natural Language and Linguistic Theory* 22.95-126.

Citko, Barbara. 2008. Missing labels. *Lingua* 118. 907-944

Citko, Barbara. 2009. What don't *wh*-questions, free relatives, and correlatives have in common? In A.Lipták, ed., *Correlatives Cross-linguistically*. 49-79. Amsterdam: Benjamins.

Citko, Barbara. 2010. On the distribution of *–kolwiek* 'ever' in Polish Free Relatives. *Journal of Slavic Linguistics* 18.221-258

Citko, Barbara. 2011. *Symmetry in syntax: merge, move and labels*. Cambridge: Cambridge University Press.

Correia, A.J.G. 2011. *Describing Makasae: A Trans-New Guinea Language of East Timor*. Ph.D. Dissertation, University of Western Sydney.

<http://researchdirect.uws.edu.au/islandora/object/uws%3A12813/datastream/PDF/view>

Culy, Christopher Douglas. 1990. *The Syntax and Semantics of Internally Headed Relative Clauses*. Ph.D. Dissertation, Stanford University.

Daskalaki, Evangelia. 2005. The external category of free relatives: Evidence from Modern Greek. *Cambridge Occasional Papers in Linguistics* 2.87-107

Davies, John. 1989. *Kobon*. London: Routledge.

d'Avis, Franz Josef. 2004. In front of the prefield – inside or outside the clause? In H.Lohenstein and S.Trissler, eds., *The Syntax and Semantics of the Left Periphery*. 139-177. Berlin: Mouton de Gruyter.

Dayal, Veneeta. 1997. Free relatives and *ever*: Identity and free choice readings. In *Proceedings of Semantics and Linguistic Theory* 7.99–116. Ithaca, NY: CLC Publications, Cornell University.

Dimova, Elena. 2014. A New Look at Multiple Free Relatives: Evidence from Bulgarian. Paper given at the 9th Slavic Linguistics Society Annual Conference, University of Washington, Seattle, September 19-21, 2014

https://www.academia.edu/8671059/A_New_Look_at_Multiple_Free_Relatives_Evidence_from_Bulgarian

Dixon, R.M.W. 1977. *A Grammar of Yidjñ*. Cambridge: Cambridge University Press.

- Donati, Caterina. 2006. On *wh*-movement. In L.Cheng and N.Corver, eds., *Wh-movement: Moving on*. 21-46. Cambridge, Mass.: MIT Press.
- http://www.uniurb.it/lingue/docenti/donati/pubblicazioni/On_Wh_Head_Movement.pdf
- Donati, Caterina and Carlo Cecchetto. 2011. Relabeling Heads: A Unified Account for Relativization Structures. *Linguistic Inquiry* 42.519–560
- Dryer, Matthew. 2005. Order of Relative Clause and Noun. WALSONline
<http://wals.info/chapter/90>
- Emonds, Joseph. 1979. Appositive Relatives Have No Properties. *Linguistic Inquiry* 10.211-243
- Faraclas, Nicholas. 1984. *A Grammar of Obolo*. Bloomington: Indiana University Linguistics Club.
- Fintel, Kai von. 2000. Whatever. *Proceedings of SALT 10*. 27-39. Ithaca, NY: CLC Publications, Cornell University.
- Frajzyngier, Zygmunt and Eric Johnston (with Adrian Edwards). 2005. *A Grammar of Mina*. Berlin: Mouton De Gruyter.
- Gračanin-Yüksek, Martina. 2008. Free Relatives in Croatian: An Argument for the Comp Account. *Linguistic Inquiry* 39.275-294 http://users.metu.edu.tr/martina/FR_revision_after_adjudication.pdf
- Groat, Eric. 2012. Headhunting at the Edge of the C: A Probe-Goal Analysis for Free Relative Clauses. Oberseminar, Universität Frankfurt.
- Grosu, Alexander. 1986/87. Pied Piping and the Matching Parameter. *The Linguistic Review* 6.41-58
- Grosu, Alexander. 1994. *Three Studies in Locality and Case*. London: Routledge.
- Grosu, Alexander. 1995. Free Relatives with “Missing Prepositions” in Rumanian and Universal Grammar. In G.Cinque and Giuliana Giusti, eds., *Advances in Roumanian Linguistics*. 127-160. Amsterdam: Benjamins.
- Grosu, Alexander. 1996. The proper analysis of 'missing-P' free relative constructions. *Linguistic Inquiry* 27.257-293
- Grosu, Alexander. 2003a. 'Transparent' free relatives as a special instance of 'standard' free relatives. In M.Coene, Y.D'Hulst and L.Tasmovski, eds., *The structure of DPs*. Amsterdam: Elsevier North-Holland.
- Grosu, Alexander. 2003b. A unified theory of 'standard' and 'transparent' free relatives. *Natural Language and Linguistic Theory* 21.247-331
- Grosu, Alexander. 2004. The syntax-semantics of modal existential *wh* constructions. In O.M.Tomić, ed., *Balkan Syntax and Semantics*. 405–438. Amsterdam: Benjamins.
- Grosu, Alexander and Fred Landman. 1998. Strange Relatives of the Third Kind. *Natural Language Semantics* 6.125-170

- Gutiérrez-Bravo, Rodrigo. 2013. Free relative clauses in Yucatec Maya. *Sprachtypologie und Universalien Forschung/Language Typology and Universals* 66.22–39.
- Haider, Hubert. 1988. Matching Projections. In A.Cardinaletti, G.Cinque and G.Giusti, eds., *Constituent Structure. Papers from the 1987 Glow Conference*. 101-121. Dordrecht: Foris.
- Harbert, Wayne. 1983. On the nature of the matching parameter. *The Linguistic Review* 2.237–284
- Heath, Jeffrey. 1999. *A Grammar of Koyra Chiini: The Songhay of Timbuktu*. Berlin: Mouton de Gruyter.
- Hirsch, Aron. To appear. A compositional semantics for *wh-ever* free relatives. In *Proceedings of Sinn und Bedeutung* 20.
- Hirschbühler, Paul and Maria Luisa Rivero. 1983. Remarks on Free Relatives and Matching Phenomena. *Linguistic Inquiry* 14.505-519
<http://aix1.uottawa.ca/~romlab/pubs/RiveroHirschbuler.1983.pdf>
- Huang, Chenglong. 2008. Relativization in Qiang. *Language and Linguistics* 9.735-768
<http://www.ling.sinica.edu.tw/eip/FILES/journal/2008.10.29.71052186.9706762.pdf>
- Hutchison, John Priestley. 1976. *Aspects of Kanuri Syntax*. Ph.D. Dissertation, Indiana University.
- Huttar, George L, Enoch O. Aboh, and Felix K. Ameka. 2013. Relative clauses in Suriname creoles and Gbe languages. *Lingua* 129.96-123
- Izvorski, Roumyana. 1995. (Non-)Matching Effects in Free Relatives and pro-Drop. In M. Przewdziecki and L. Whaley, eds., *Proceedings of ESCOL* 12. 89-102 (Cornell University).
- Izvorski, Roumyana. 1998. Non-indicative *wh*-complements of existential/possessive predicates. *Proceedings of the 28th Meeting of the North East Linguistics Society*. 159-173. University of Massachusetts, Amherst.
- Izvorski, Roumyana. 2000. Free adjunct free relatives. In R.Billerey and B.Lillehaugen, eds., *Proceedings of the 19th West Coast Conference in Formal Linguistics (WCCFL 19)*. 232-245. Somerville, MA: Cascadilla Press.
- Jacobson, Pauline. 1995. On the Quantificational Force of English Free Relatives. In E.Bach, E.Jelinek, A.Kratzer and B.H.Partee, eds., *Quantification in Natural Language*. 451-486. Dordrecht: Kluwer.
- Johnson, Greg. 2015. The Morphosyntax of *Whatever* in Free Relatives: Variation and optionality in Appalachian English. Handout of LSA talk. Ms., Graduate Center, CUNY.
<https://www.msu.edu/~john2517/ew-lsa-hndout1.pdf>
- Kayne, Richard S. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.

- Kayne, Richard S. 2004. Here and There. In C. Leclère, E. Laporte, M. Piot & M. Silberztein, eds., *Syntax, Lexis and Lexicon-Grammar. Papers in Honour of Maurice Gross*. 253-273. Amsterdam: Benjamins (reprinted in Kayne 2005).
- Kayne, Richard S. 2005. *Movement and Silence*. New York: Oxford University Press.
- Kayne, Richard S. 2007. On the Syntax of Quantity in English. In J. Bayer, T. Bhattacharya and M.T. Hany Babu, eds., *Linguistic Theory and South Asian Languages: Essays in honour of K. A. Jayaseelan*. 73–105. Amsterdam: Benjamins (also in Kayne 2005).
- Kayne, Richard S. 2016. The Unicity of *There* and the Definiteness Effect. Ms. NYU.
<http://linguistics.as.nyu.edu/docs/IO/2652/Kayne0116UnicityofThere.pdf>
- Kotek, Hadas and Michael Yoshitaka Erlewine. 2015. Non-interrogative *wh*-constructions in Chuj. Paper presented at *21st Workshop on Structure and Constituency in Languages of the Americas* (WSCLA 2016), Université du Québec à Montréal (UQAM), Montréal, Canada, April 1-3, 2016.
<http://hkotek.com/Kotek-ChujPaper.pdf>
- Lakshmi Bai, B. 1985. Some Notes on Correlative Constructions in Dravidian. In V.Z. Acson and R.L. Leed, eds., *For Gordon H. Fairbanks*. 181-190. Honolulu: University of Hawai‘i Press.
- Larson, Richard. 1987. Missing prepositions and the analysis of English free relative clauses. *Linguistic Inquiry* 18:239–266.
- Larson, Richard. 1998. Free relative clauses and missing Ps: Reply to Grosu. Unpublished ms., State University of New York at Stony Brook.
- Lefebvre, Claire and Anne-Marie Brousseau. 2002. *A Grammar of Fongbe*. Berlin: Mouton de Gruyter.
- Manzini, M. Rita. 2010. The Structure and Interpretation of (Romance) Complementizers. In E.P. Panagiotidis, ed., *The Complementizer Phase. Subjects and Operators*. 167-199. Oxford: Oxford University Press.
- Nakamura, Taichi. 2009. Headed Relative Free Relatives, and Determiner Headed Free Relatives. *English Linguistics* 26.329-355
- Nguyen, Tam Thi Minh. 2013. *A Grammar of Bih*. Ph.D. Dissertation, University of Oregon.
<https://scholarsbank.uoregon.edu/xmlui/handle/1794/12996>
- Obeng, Samuel Gyasi. 2008. *Efutu Grammar*. München: Lincom Europa.
- Pancheva Izvorski, Roumyana. 2000. *Free relatives and related matters*. Ph.D. Dissertation, University of Pennsylvania. <http://repository.upenn.edu/dissertations/AAI9965537>
- Patterson, Gary and Ivano Caponigro. 2016. The puzzling degraded status of *who* free relative clauses in English. *English Language and Linguistics* 20.341-352
http://idiom.ucsd.edu/~ivano/Papers/2015_PattersonCaponigro.pdf

- Pittner, Karin. 1991. Freie Relativsätze und die Kasus-hierarchie. In E.Feldbusch, R.Pogarell and C.Weiss, eds., *Neue Fragen der Linguistik*. 341-347. Tübingen: Niemeyer.
- Pittner, Karin. 1995. The Case of German relatives. *The Linguistic Review* 12.197-231
- Radford, Andrew. 2016. *Analysing English Sentences. 2nd Edition*. Cambridge: Cambridge University Press.
- Rawlins, Kyle. 2008. *(Un)conditionals: An investigation in the syntax and semantics of conditional structures*. Ph.D. Dissertation, University of California, Santa Cruz.
- Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris.
- Saah, Kofi K. 2010. Relative Clauses in Akan. In E.O.Aboh and J.Essegbey, eds., *Topics in Kwa Syntax*. 91-107. Dordrecht: Springer.
- Siloni, Tal. 1995. On Participial Relatives and Complementizer D^o: A Case Study in Hebrew and French. *Natural Language and Linguistic Theory* 13.445-487
<http://link.springer.com/article/10.1007%2FBF00992738#page-1>
- Šimík, Radek. 2011. Modal existential *wh*-constructions. Ph.D. Dissertation, Rijksuniversiteit Groningen. http://www.lotpublications.nl/Documents/269_fulltext.pdf
- Smits, R.J.C., 1989. *Eurogrammar. The Relative and Cleft Constructions of the Germanic and Romance Languages*. Dordrecht: Foris.
- Soubrier, Aude. 2013. *L'ikposso uwi. Phonologie, grammaire, textes, lexique*. Thèse de doctorat, Université Lumière Lyon 2.
http://theses.univ-lyon2.fr/documents/lyon2/2013/soubrier_a#p=0&a=top
- Sportiche, Dominique. 2015. Relative Clauses are Matchless. Ms., UCLA.
- Tredinnick, Victoria A. 2005. *On the Semantics of Free Relatives with –ever*. Ph.D. Dissertation, University of Pennsylvania.
- van Riemsdijk, Henk. 2005. Free relatives: A syntactic case study. In M.Everaert and H.van Riemsdijk, eds., *The Blackwell Companion to Syntax*. Oxford: Blackwell.
- Vogel, Ralf. 2001. Case Conflict in German Free-Relative Constructions: An Optimality-Theoretic Treatment. In G. Müller and W.Sternefeld, eds., *Competition in Syntax*. 341-375. Berlin: Mouton de Gruyter.
- Vogel, Ralf. 2002. Free Relative Constructions in OT-Syntax. In G.Fanselow and C.Féry, eds., *Resolving Conflicts in Grammars: Optimality Theory in Syntax, Morphology, and Phonology*. 119-162. Hamburg: Buske.
- Vogel, Ralf. 2003. Surface Matters. Case Conflict in Free Relative Constructions and Case Theory. In E.Brandner and H.Zinsmeister, eds., *New Perspectives on Case Theory*. 269-299. Stanford,CA: CSLI Publications.

- Vries, Mark de. 2002. *The Syntax of Relativization*. Ph.D. Dissertation, University of Amsterdam.
<http://www.let.rug.nl/dvries/pdf/proefschrift-mdevries.pdf>
- Walker, Benjamin R. 2005. Relative Clauses in Sinhala. *Santa Barbara Papers in Linguistics* 17.163-171
http://www.linguistics.ucsb.edu/sites/secure.lsit.ucsb.edu.ling.d7/files/sitefiles/research/papers/17/Walker_vol17.pdf
- Walters, Josiah Keith. 2015. *A Grammar Sketch of Dazaga*. M.A. Thesis, Graduate Institute of Applied Linguistics. http://www.gial.edu/documents/Theses/Walters_Josiah-thesis.pdf
- Wilder, Chris. 1999. Transparent Free Relatives. In Shahin, K.N., S. Blake & E.-S. Kim, eds., *Proceedings of the Seventeenth West Coast Conference on Formal Linguistics*. 685-699.
- Yoshioka, Noboru. 2012. *A Reference Grammar of Eastern Burushaski*. Ph.D. Dissertation, Tokyo University of Foreign Studies. <http://repository.tufs.ac.jp/handle/10108/72148>