"On Complementizers and Relative Pronouns in Germanic vs. Romance"

Richard S. Kayne New York University

October, 2019

Abstract:

Many Germanic languages have a finite-clause complementizer that resembles a demonstrative, e.g. English *that*, Dutch *dat*, German *dass*. No Romance language does. The traditional view of complementizers as simplex projecting heads that take IP or some comparable category as complement has no way of accounting for this difference between Germanic and Romance. In this talk, I will attempt to make progress toward an account, in part by reinterpreting finite-clause complementizers as relative pronouns.

1. Introduction.

It is not logically necessary that there be any parameter that neatly cuts between Romance and Germanic, in the sense of having one value in every Germanic language or dialect and the opposite value in every Romance language or dialect. On the other hand, we might expect there to be some such cases if syntactic change is (sufficiently) conservative.¹

In the area of complementizers, there does seem to be a consistent difference between the two families (although not all the Germanic languages act the same), in the following sense. Various Germanic languages have complementizers that look like demonstratives, e.g. English *that*, Dutch *dat*, German *dass*. What is striking is that (1) holds, as far as I know:

(1) Romance languages never have a complementizer that looks like a demonstrative.

For example, French has:

- (2) Jean sait que Marie est intelligente. ('J knows what M is intelligent') with complementizer *que*, which is identical in form to interrogative *que*, a close counterpart of English *what*. French does not allow:
- (3) *Jean sait ce Marie est intelligente. in which *que* would have been replaced with demonstrative *ce*. Thus (3) contrasts sharply with English:
 - (4) John knows that Mary is intelligent.

As far as I know, no Romance language or dialect allows an exact counterpart of (3).

In this paper, I will try to make progress toward understanding (1), i.e. toward understanding this contrast between Romance and Germanic. I will at the same time bring in the question of relative pronouns in Germanic vs. Romance, insofar as there is a similarity between (1) and (5):

(5) Romance never allows a demonstrative as a relative pronoun.

¹Cf. Crisma and Longobardi (2009).

Some Germanic languages do have relative pronouns that look like demonstratives. This is particularly clear for German. A German example would be:

- (6) der Mann, mit dem wir gesprochen haben ('the man with that we spoken have') in which *dem* is the (dative Case-marked, masculine, singular, object of preposition) relative pronoun. This relative pronoun *dem* is in German clearly related to demonstrative *dem*, which can be seen, for example, in:
- (7) Mit dem Mann haben wir nicht gesprochen. ('with that man have we not spoken') No Romance language or dialect has an exact counterpart of (6), or of any other Germanic relative clause in which the relative pronoun has the form of a demonstrative, to the best of my knowledge.

One question is to what extent (5) and (1) allow for a common account. My answer in what follows will be that (5) and (1) are essentially a single fact, given that (finite clause) complementizers are themselves relative pronouns. Relative pronouns in turn are to be thought of as stranded determiners, i.e. as determiners that, in the general case, have lost their associated NP, either by movement, as in the raising analysis of relative clauses, or by deletion, as in the matching analysis. (The choice between these two approaches to relative clauses may or may not be important for the present paper; I will develop my proposal in terms of the raising approach.)

The specific proposal that I will make concerning (5) (and hence (1)) will be formulated in terms of the idea that stranding a determiner in relative clauses is subject to a restriction with the effect that stranding a demonstrative determiner in relatives in a Romance language is prohibited. In contrast, (some) Germanic languages do allow the stranding of a demonstrative. (Relative clauses in both Germanic and Romance often show the stranding of a wh-determiner such as English *which*.)

A determiner-stranding interpretation of (5) will straightforwardly carry over to (1) if finite clause complementizers are relative pronouns, i.e. if all embedded finite clauses are relative clauses.² On the other hand, if finite clause complementizers were, as usually assumed, simplex heads taking IP (or some comparable phrase) as a complement, it would be difficult to see how (1) could be accounted for.

In effect, then, this paper argues that recourse to comparative syntax considerations provides us with an important clue to the true status of finite clause complementizers.³

2. English relative clause that

The that that introduces some English relative clauses, as in:

(8) the book that we were discussing differs sharply from German (6) insofar as English relative *that* shows no Case marking, no gender agreement, no number agreement, and cannot be the object of a preposition. Despite these properties, I take English *that* to be a relative pronoun.⁴ This claim was spelled out in Kayne (2010). Some of the main points discussed there are as follows.

One is that the following contrast:

(9) the person whose book we were talking about

I will address below the question of say-like complementizers.

³Beyond the scope of this paper is the question whether the proposals made here do or do not carry over to complementizers introducing non-finite clauses, or to *if*.

⁴In agreement with Evans and Evans (1957, 505-506).

²Embedded V-2 clauses in German may not fall under this statement.

- (10) *the person that's book we were talking about is perfectly compatible with relative clause *that* being a relative pronoun, given that counterparts of (10) with relative pronoun *which* are also impossible:
 - (11) *the book which's first chapter is too long

Moreover, while (10) is impossible for me,⁵ it is accepted by some speakers, as pointed out by Richard Hudson on LinguistList September 11, 1991, and September 19, 1991 (citing van der Auwera and Jespersen). His examples even include one with a plural 'head' (cf. also Seppänen (1999) and Herrmann (2005, 54)):

- (12) I'm looking for some pencils that's leads aren't broken. and one in which the containing DP is an object:
 - (13) This is the pencil that's lead you broke.

Hudson takes these to support a relative pronoun analysis of relative *that*, and I agree (though what parameter(s) might distinguish the English of those who accept relative *that's book* needs to be elucidated).

A second point concerns the lack of agreement with *that*. We would not expect to find gender agreement, since English has none in general (apart from the *he/she/it* distinction). We might have expected to find number agreement with the head of the relative (*no books*, in (14)), but we don't:

(14) There are no books here that/*those are worth discussing. The account for this fact proposed in Kayne (2010) related it to the fact that English differs from German in having no DP-internal number agreement apart from demonstratives, to the idea that English plural -s (like Hungarian number morphology) can be prenominal only if it is also pre-D, and to the idea that the presence of a pre-D those would interfere with the raising required to yield a relative clause structure.⁶

A third point has to do with the fact that, while both *who* and *which* are sensitive to the humanness of their antecedent, *that* seems at first glance not to be:

- (15) the person/house that we were looking at However, in non-restrictive relatives, there is a clear contrast for many speakers between the fairly acceptable:⁷
- (16) ?Mary Smith's last paper, that I've been meaning to reread for a while now, is really good.

and the unacceptable:

(17) *Mary Smith's youngest son, that I've been meaning to talk to for a while now, is really smart.

⁵In a way that is perhaps related to:

- (i) its importance vs.
- (ii) *that's importance

⁶For additional details, see Kayne (2010, sect. 7).

⁷In contrast, 'zero' non-restrictives are not at all acceptable, as Evans and Evans (1957, 506) had noted. For example:

i) *Mary Smith's last paper, I've been meaning to reread for a while now, is really good.

Gary Thoms (p.c.) tells me that non-restrictive relative *that* with a human antecedent in accepted fairly widely in Scotland. What the key parameter(s) might be remains to be discovered.

In restrictive relatives, judgments are more complex. Evans and Evans (1957, 505) note that "many people prefer *who* to *that* when the reference is to a person". Quirk et al. (1972, 870) say that "when the antecedent is personal and the pronoun is the subject of the relative clause, *who* is favored irrespective of the style and occasion". Huddleston et al. (2002, 1054) have "With personal antecedents, there is a preference for *who* when the relativized element is subject". These preferences for *who* over *that* surely fit more readily into a view that has *that* as a relative pronoun than they would into the view that *that* is a complementizer.

In addition to the unacceptability of (17), my own English also has, outside of non-restrictives, some sharp instances (rather than just preferences) in which *that* is unacceptable with a human antecedent, in particular when the relative gap is a subject gap, as noted in Quirk et al.'s and Huddleston et al.'s formulations.

One was mentioned in Kayne (1981, sect. 3.3). In a certain kind of cleft sentence, in particular if the gap is in subject position, *that* with a proper name human antecedent is hardly acceptable:

(18) (Do you know Mary Smith?) Yes, in fact it was Mary Smith who/*that got me interested in linguistics in the first place.

The contrast with a non-human antecedent is clear for me:

(19) (Have you read *Syntactic Structures*?) Yes, in fact it was *Syntactic Structures* that got me interested in linguistics in the first place.

The contrast between (18) and (19) is paralleled, in my English, by similar facts concerning certain relative clause extraposition/stacking examples:

- (20) There's something that's in the kitchen that will be of interest to you.
- (21) *There's someone that's in the kitchen that will be of interest to you.
- 3. On the sensitivity of relative pronoun *that* to +/-human

As for the question why relative pronoun *that* should tilt toward non-human antecedents, rather than toward human ones,⁸ there is a plausible link, that will need to be developed in further work, to the basic fact that bare argument *that* cannot have a human antecedent:⁹

⁸Left open here is the question why German (apparently) shows no tilt in either direction.

⁹Note the contrast between singular *that* and plural *those*:

- i) We're planning to invite those who qualify.
- VS.
- ii) *We're planning to invite that who qualifies.

On why sentences like (iii) are possible:

- iii) That's her brother.
- see Kayne and Pollock (2010).

Tim Stowell (p.c.) and Paloma Jeretič (p.c.) have asked if there isn't a difference between demonstrative *that* and relative *that* (from the present perspective the latter is an instance of the former) with respect to phonological reduction, insofar as relative *that* can readily be reduced, as opposed to demonstrative *that*. In my English, demonstrative *that* can sometimes be reduced if bare. (The phonological reduction in question may have a morphosyntactic component, thinking of Leu's (2007; 2015) decompositional analysis of demonstratives.)

- (22) We're planning to read that.
- (23) *We're planning to invite that.

On the other hand, when associated with an overt N, *that* is indifferent to human vs. non-human, as shown by *that book* and *that linguist*. Similarly, when associated with *one*:¹⁰

- (24) This book is even more interesting than that one.
- (25) This linguist is even more intelligent than that one.

The relative pronoun facts in (16)-(21) do not exactly match either (22)/(23) or (24)-(25), in the sense that relative pronoun *that* is, as shown, too, by (15), not consistently anti-human, contrary to (23). Nor is relative pronoun *that* consistently indifferent to human vs. non-human, contrary to (24)-(25), as shown by the facts of (16)-(21) themselves.

I take *that* in (22) to be accompanied by a silent THING (silent elements will be written in capitals):¹¹

(26) ...to read that THING

The deviance of (23) then indicates both that THING is not possible there (due to the choice of verb) and that *that* cannot be accompanied by silent PERSON.¹²

The contrast found in non-restrictives between (16) and (17) can now be interpreted as follows. In (16), *that* is accompanied by THING:

- (27) ?Mary Smith's last paper, that THING I've...
- (17) is now unavailable in part because THING would clash with the human antecedent and in part because 'that PERSON' is never unavailable:
 - (28) *Mary Smith's youngest son, that THING/PERSON I've...

The obligatory presence, from this perspective, of THING in (27) may appear to clash with the proposal made in Kayne (1994, 112), in part on the basis of reconstruction facts such as:

- (29) These pictures of himself, which (Mary thinks that) John would be flattered to receive from us, are really quite awful.
- to the effect that the raising analysis of relatives should be taken to extend to non-restrictives. The solution may lie in taking a fuller representation of (27) to be:
- (30) ?Mary Smith's last paper, that <PAPER> THING I've... which combines the raising idea with the presence of THING.

Let me repeat the other instances of +/-human restrictions on relative *that* that hold in my English:

- (31) (Do you know Mary Smith?) *Yes, in fact it was Mary Smith that got me interested in linguistics in the first place.
 - (32) *There's someone that's in the kitchen that will be of interest to you.

¹¹The presence of THING is likely to be supported by Besnier's (2000, 421) observation that Tuvaluan 'bare' *that* is excluded as the object of P, if that fact is reducible to a P-stranding violation. On THING, cf. also Cinque (2008a, 18) on 'what THING', etc. in headless relatives.

¹²With stress on *that* and a pejorative interpretation, *...to invite that* seems possible with reference to a human, with THING then actually associated with *that*, parallel to the pejorative:

i) We're planning to invite that thing

¹⁰On the non-nominal status of *one*, see Kayne (2017).

The unacceptability of these in my English can now be understood parallel to the unacceptability of (17)/(28) if we extend the proposal given in (27) vs. (28), namely by saying that (in my English) relatives of the sort exemplified in (31)-(32) require (independently of the raising vs. matching question) a silent noun of the THING/PERSON sort.

However, since PERSON itself is, as seen above, not available with *that*, (31)-(32) are not possible. Put another way, we have the following contrast:

- (33) Yes, in fact it was Syntactic Structures that THING got me interested...
- (34) *Yes, in fact it was Mary Smith that THING/PERSON got me interested... (From the raising perspective, (33) would contain in addition a silent copy of *Syntactic Structures*, as in '...that <Syntactic Structures> THING...'.)

In all the well-formed examples containg relative *that* in this section, from (27) through (33), relative *that* is a demonstrative determiner accompanied by a silent N(P) of one sort or another. I note in passing the fact that relative *that* cannot be accompanied by a pronounced N(P):¹³

(35) *War and Peace*, ?which/*that famous novel I've been meaning to reread for years now, is over 1000 pages long. In non-restrictives, *which*, in a certain register, is possible in (35), but *that* is not.¹⁴

The restrictions discussed in this section that hold in my English concerning relative *that* with a human antecedent do not hold in:

- (36) Someone that I talked to yesterday called us this morning. which is acceptable to me. Thus it must be that a silent noun of the THING/PERSON sort is not needed in (36), while it is needed in (31)-(32). In fact, *that* in restrictive relatives with a human antecedent is in general acceptable to me (as opposed to non-restrictive (17)¹⁵) if the gap is in (prepositional) object position, as it is in (36). In particular, the object gap counterparts of (31)-(32) themselves are acceptable to me:
- (37) (Do you know Mary Smith?) Yes, in fact it was Mary Smith that I got my first linguistics lesson from.
 - (38) There's someone that I saw in the kitchen that you should meet.

The subject gap vs. object gap contrast illustrated by (31)-(32) vs. (37)-(38), and already noted, in effect, by both Quirk et al. (1972, 870) and Huddleston et al. (2002, 1054), is of a familiar (ECP) type. It does not, however, hold for me in the simplest case, i.e. although I don't accept (31)-(32), with a human antecedent for *that*, I do pretty much accept:

- (39) Someone that wants to talk to you is waiting outside. and even more clearly:
 - (40) The student that wants to talk to you is waiting outside.

i) I need a book *which/**that to read tonight.

as well as to *whichever* vs. *thatever and (cf. Lin (1996)) to interrogatives.

¹⁴Of importance is the fact that this contrast seems to hold for relative pronouns in German, too. (Why exactly German relative *der* and Engish relative *that* would show this restriction remains to be elucidated.)

¹⁵On non-restrictives, one will ultimately need to take into account Cinque's (2008b) arguments for there being two different subtypes.

¹³Possibly there is a link here to:

Possibly, the contrast that holds for me between (31)-(32) and (39)/(40) is to be thought of in terms of some notion of 'extraposition', as follows. If a subject gap in a relative clause is not maximally local to the head of the relative, then in my English relative pronoun *that* must (for reasons to be elucidated) be accompanied by THING, with the result that the head of relative cannot be +human.

4. Why does the learner of English choose the relative pronoun analysis?

The key facts in (16)-(17) and (31)-(32) that support taking relative *that* to be a relative pronoun rather than a complementizer, whereby *that* is in certain cases, in some English, incompatible with a +human antecedent, are negative facts not found in the primary data to which the learner of English is exposed. How then does the learner choose the relative pronoun option for *that*, rather than the complementizer option?

The simplest answer would be that the language faculty does not make the complementizer option available. As for why that might be, let me pursue the proposal made in Kayne (2008), to the effect that there are basically only two types of lexical category, the projecting type, which corresponds to the traditional notion of verb, and the non-projecting type, which corresponds to the traditional notion of noun. From that perspective, there cannot be any third type of lexical category that would be on the same plane as noun and verb.

Other potential categories such as complementizer, adposition, determiner, numeral, adjective, etc. must have a different status. Only the followings three possibilities are available:

- (41) a. subtype of verb
 - b. subtype of noun
 - c. complex

Most of what we call determiners are complex, as shown by Leu (2015). What we call adpositions are sometimes complex, as is almost certainly the case for English *before*, *beyond*, *behind*, *below*, *between*, analyzed as *be-+fore/yond/hind/low/tween*. On the other hand, prepositions like *to*, *at*, *by* will likely fall under either (41a) or (41b). Similarly, prepositional compementizers like French *de* and English *for* will likely fall under either (41a) or (41b). ¹⁶

As for English *that*, the proposal in Kayne (2010) is that all instances of *that* reduce to demonstrative *that*,¹⁷ which, following Leu (2007; 2015), is complex. Hence relative clause *that* is complex, and cannot be a complementizer in the usual sense of the term, which takes complementizers to be simplex projecting heads whose complement is IP or some comparable category.¹⁸

¹⁶This statement leaves open the question whether *de* and/or *for* are accompanied by silent material. For a suggestion that complementizer *for* is actually 'WHAT for A NOUN', see Kayne (2014, (108)).

¹⁷Cf. the anti-homophony principle/heuristic of Kayne (2019a); also Postma's (1993) Naturalness Condition.

¹⁸Manzini (2014) also takes complementizers in the classic sense of the term not to exist, though in a different way. (Pesetsky and Torrego's (2001, 371; 2004, 499) idea that *that* is T moved to C seems to be closer to the traditional view than Manzini's is.) On the misleading appearance of what look like sentential complements, see also Caponigro and Polinsky (2008). On the absence of complements to nouns in

The question remains as to why exactly the learner of English could not have taken relative clause *that* to be a complementizer. Put more generally, will the learner of any language ever take an element introducing an embbeded sentence to be a complementizer, in the standard sense of the term? Given (41), the answer is a qualified no, as follows.

Since complementizers are supposed to be simplex, (41c) must be set aside, leaving only (41a) or (41b). But (41b) must be set aside, too, if Kayne (2008) was correct to take nouns never to project or to take a complement, ¹⁹ given that complementizers are meant to project a CP and to have an IP complement.

That leaves (41a) as the only option. In effect, (41) says that to be a complementizer you must be verbal. Although that surely is not the case of *that* (as desired), (41a) does allow for (and only for) the *say*-type complementizers that have been attested in various languages.²⁰

5. If *that* is never a complementizer...

What is that in ordinary instances of sentential embedding such as?:

(42) We think that all is well.

Kayne (2008; 2010) argued that in all such cases *that* is, as before, a relative pronoun, and that all sentential embedding (at least of the finite type) is mediated by a relative clause structure. This position has an important point in common with Rosenbaum (1967) and with Kiparsky and Kiparsky (1970), who took all or some sentential embedding to be mediated by what we would now call a DP (with *it* present, in Rosenbaum's work, and *fact*, in Kiparsky and Kiparsky's).

The relative clause variant of this general idea that I subsequently proposed takes both of the following to contain relative clauses:

- (43) the fact that you mentioned to me
- (44) the fact that you are here

with the difference being that the first, in a familiar way, is related to:

- (45) You mentioned a fact to me.
- whereas the second, in a less familiar way, is related to:²¹
 - (46) You are here in fact.

In both, *fact* becomes the head of the relative. (In the same spirit, (42) will involve the relativization of an unpronounced noun having something in common with *fact*.)

As in the previous section, we can ask why the language faculty would have chosen this route. Again, the answer has to do with the non-projecting status of N,²² given

Malayalam, see Jayaseelan (1988). Left open in this paper is the question of 'doubly-filled Comps', as well as the question of the best way to integrate the text proposals with Rizzi (1997).

¹⁹Ghomeshi (1996, 63) takes this position for Persian. Partially similar proposals can be found in Aboh (2005) and Arsenijević (2009).

²⁰See in particular the analysis of Koopman and Sportiche (1989) on Abe.

²¹For further details, see Kayne (2008; 2010) on *fact* and on *way*; relevant in turn is Moltmann (to appear) on *case*.

²²The German counterpart of *fact*, *Tatsache* ('deed thing', looks complex. If so, then it, too, cannot have a complement IP, though for a partially different reason.

which, (44) cannot have *fact* taking *that you are here* as its complement. That leaves the relative clause option.²³

In addition to being related to the work by Rosenbaum and by Kiparsky and Kiparsky, the postion I am taking is related to the idea that arguments must be DPs, as in Abney (1987) and Longobardi (1994, 620), among others, with which my relative clause proposal is clearly compatible, and which has the welcome consequence that IP cannot function as an argument.²⁴

Relevant here is the question whether these ideas can be extended to embedded interrogatives. Of interest is Amaechi & Georgi's (2019, 4) point that "Igbo does not have embedded questions; syntactically, this content is expressed by a relative clause", which leads to the possibility that in this area of syntax Igbo is more transparent than English, and to the possible conclusion that embedded interrogatives are consistently to be analyzed as relative clause embeddings, which English does (only) sometimes display, as in:

- (47) Now we know the time at which the crime took place. which seems extremely close in interpretation to:
 - (48) Now we know when the crime took place.

6. Germanic vs. Romance

English relative *that*, like German relative *dem* in (6), looks like a demonstrative, ²⁵ much as relative *which* in English looks like the determiner *which* seen in:

- (49) Which book should I read first? In the spirit of Postal (1966) on personal pronouns, Kayne (1994, sect. 8.2) took relative pronouns to be determiners that in the general case are 'missing' their associated NP. From the raising perspective on relativization, we have:
- (50) the book which <book> I read first in which which has 'lost' its associated NP to movement (up to the position of the relative 'head'). Similarly, for relative that we now have:
- (51) the book that <book> I read first in which *that* is a demonstrative determiner that has lost its associated NP to movement.

As noted earlier, no Romance language has relative pronouns (stranded determiners) that look like simple demonstratives. English has relatives like:

(52) the book that I read first

Yet not a single Romance language (as far as I know) has relatives with a counterpart of *that* as relative pronoun, e.g. in French:²⁶

²³Whatever silent heads there are in the relative clause cannot be nominal, either. ²⁴Kayne (1982) had suggested that arguments must be nominal. IP can apparently not merge directly with determiners, either, suggesting that what merges with a determiner counts as an argument, as in Larson (1991) and Larson and LaTerza (2017). ²⁵Cf. Pearce (2015, 70) on Unua.

²⁶Whether the more complex French *ce que* ('that what') is ever a relative pronoun in the text sense needs further work. For possible Italian (dialect) counterparts to *ce que*, see Poletto & Sanfelici (2018); and for North(-West) Italian dialects, Munaro (2000). Also needing to be thought about here is Spanish relative *la que* et al., as well as French *laquelle* ('the which'); the *wo* relative pronoun found in some Germanic may necessarily be accompanied by a silent P (as in *whereby*, *whereof*), and similarly for

(53) le livre que/*ce/*ça/*cela je lisais ('the book what/that/that/that I read') The next question, then, is what underlies (53).

7. A digression on German.

German *d*-words in relatives (as in (6) above) look like demonstratives, but also look like definite articles. I have been taking them to be demonstratives, and not to be pure definite articles, for the following reasons. First, Thomas Leu (p.c.) tells me that in Swiss German there is a distinction in dative masc. and neuter contexts between:

- (54) uf em baerg ('on the mountain') with definite article *em*, and:
- (55) uf dem baerg ('on that mountain') with demonstrative *dem*; and that in relatives one gets the demonstrative:
- (56) dr ma bi dem wo du gschaffet hesch ('the man by *dem* where you worked have' = 'the man at whose place you worked')

Second, German preposition+article contraction,²⁷ which does not carry over to preposition+demonstrative,²⁸ does not carry over to preposition+relative-d-word, either.²⁹

Third, Günther Grewendorf (p.c.) tells me that definite article *das* in German can reduce to 's, but that that cannot happen with demonstrative *das*, nor with relative pronoun *das*.

Fourth, Wiltschko (1998) noted the absence of relative the in English:30

- (57) the book that/*the we were discussing
- to which can be added the fact that Romance languages, while having relative *laquelle* (French), *la quale* (Italian 'the which'), etc., never have a bare definite article as a relative pronoun:
- (58) la fille à la*(quelle) je parlais ('the girl to the (which) I spoke') A generalization of Wiltschko's point is:
 - (59) A 'bare' definite article is never a possible relative pronoun.

Greek *pou* (cf. Roberts and Roussou (2003, 120)) and for French *le jour où...* ('the day where').

²⁷Cf. van Riemsdijk (1998), whose approach may extend to the comparable French phenomenon seen in:

- i) Elle achète des livres. ('she buys of-the books')
- ii) *Elle achète de les livres. ('she buys of the books')

more adequately than Embick's (2010, 88ff.), which overlooks:

- iii) Elle a promis de les relire. ('she has promised de them reread')
- iv) *Elle a promis des relire.

which are relevant on the assumption that Postal (1966) was correct to assimilate (French third person accusative clitic) pronouns to definite articles.

²⁸As discussed for Swiss German by Leu (2007, 148).

²⁹As noted by Schwarz (2009, 22), whose distinction between weak and (closer-to-demonstrative) strong definite articles will need to be integrated.

³⁰It remains to be understood why Romance languages have object clitics that look like definite articles, but apparently no object clitics that look like demonstratives.

(This requires that the definite articles of the Hebrew participial relatives discussed by Siloni (1995) not be relative pronouns; they may be outside the relative clause entirely.) Wiltschko suggests that *the* is impossible in (57) for the same reason as in:

(60) We were discussing that/*the.

This may well be on the right track (though Romance accusative object clitics raise questions).

8. Back to Germanic vs. Romance.

Let us now return to (53), i.e. to the question why Romance does not allow standalone relative pronouns of the demonstrative sort. Using English and French as exemplars of Germanic and Romance, we have the contrast:

- (61) the book that you like
- (62) *le livre ce vous aimez

In the spirit of Wiltschko's proposal for (57)/(60), it is plausible to think that the particular case of (62) is related to:

(63) *Vous aimez ce. ('you like that')

French *ce*, even though demonstrative, cannot (with one major, principled exception) occur alone in argument position.³¹

French has a second demonstrative, that contrasts in this respect with ce:

(64) Vous aimez ça. ('you like that')

Yet *ça* cannot be a relative pronoun, either:

(65) *le livre ça vous aimez ('the book that you like')

The impossibility of (65) may be related to: 32

(66) *Vous aimez ça livre.

with *ça* unable to be followed by an overt noun, much as with a third French demonstrative, *cela*, also translatable as *that*:

- (67) Vous aimez cela.
- (68) *Vous aimez cela livre.

which is likewise impossible as a relative pronoun:

(69) *le livre cela vous aimez

Since *cela* is almost certainly to be analyzed as *ce+là*, where the second element is the one seen in:

(70) ce livre-là ('that book there')

the impossibility of (68) is almost certainly reducible to that of:

(71) *ce là livre

which Bernstein (1997) took to reflect the obligatorines of the movement of *livre* past *là* that produces (70) starting from an initial structure that looks more like (71).³³

We can now plausibly reduce (69) to (68). Let us assume in particular that the obligatory NP-raising past *là* seen in French in (70) vs. (71) is incompatible (perhaps for reasons of the 'improper movement' sort, or of the 'freezing' sort) with subsequent NP-

³¹For details, see Kayne and Pollock (2010).

³²English *who* needs to be brought into this picture.

³³Why standard English rejects *(*)that there book* (possible in non-standard English) remains to be elucidated.

raising of the sort that creates the 'head' of a relative.³⁴ Put another way, to derive (69),³⁵ we would have to have reached, at an earlier stage in the derivation:

(72) [ce livre là] vous aimez <ce livre là> via movement of *ce livre là* from object position to a pre-subject position. Then, to reach (69), we would have to raise *livre* (just as *book* is raised in the derivation of (61), as indicated in (51)). Arguably, then, the prior raising of *livre* past *là*, the result of which is built into (72), blocks that further raising step of *livre* past *ce*.

The question now is whether this discussion of French will extend to Romance languages in general. It will, if in all Romance languages demonstratives corresponding to French *ce/ça/cela* obligatorily cooccur with a (sometimes silent) counterpart of the French reinforcer *-là* that obligatorily induces NP-movement of the sort that is incompatible with further movement of the 'relative head'-raising sort.³⁶

The reason that English, German and Dutch do allow demonstrative-based relative pronouns must now be related to their not having obligatory DP-internal NP-movement past a reinforcer.

9. Some other languages.

Slavic languages seem not to have an exact counterpart of English relative *that* or of the parallel German or Dutch relative pronouns. Therefore either Slavic has obligatory NP-movement in the presence of demonstrative reinforcers, as in Romance; or else Slavic demonstratives themselves must be blocking the 'head'-raising type of movement, for reasons to be determined.

Scandinavian languages are distinct from English/Dutch/German when it comes to relative pronouns. Norwegian locative *der*, as mentioned by Taraldsen (1978, 637), would seem to be an example of a demonstrative-related relative pronoun. But non-locative relative *d*-pronouns seem not to be found in Scandinavian. If so, the question is why.³⁷ In the spirit of the earlier discussion of the relevance of reinforcer *-là* in Romance, a possibility that comes to mind is that this difference between Scandinavian

Scandinavian also lacks sentential complementizers of the *d*-pronoun sort found in English, Dutch and German. The Scandinavian complementizers *at/att/adh* may be related to demonstratives, but even if they are they lack the initial *d*- (in a way that perhaps has no counterpart in Slavic). Thus it might be that the obligatoriness of the post-N definite article, which is the source of the absence of *d*-type relative pronouns, does not affect *d*-less demonstratives, in which case such *d*-less demonstratives would be allowed to appear as complementizers (= relative pronouns) with sentential complements (as well as in some relative clauses).

³⁴The informal term NP here includes cases in which all that is moved is N.

 $^{^{35}}$ As far as I can see, the lack of accent in *cela* vs. in *ce livre-là* is purely orthographic.

³⁶Since various Romance languages have relative pronouns of the *(the+)which*-sort, there must not be any comparable obligatory NP-movement in the presence of *(the+)which*.

³⁷The usual Scandinavian relative clause 'introducer' is *som/sem*, which recalls English dialectal relative *as* (cf. Herrmann (2005, 25)). It may be that *som/sem/as* correspond to pieces of a larger DP (of the *such as* type) much of which is unpronounced.

and West Germanic should be attributed to the presence in Scandinavian, but not in West Germanic, of postnominal definite articles.³⁸

Assume that in the presence of a demonstrative a postnominal definite article is obligatory in Scandinavian, even if sometimes silent. Then it might be that the postnominal definite article associated with the demonstrative that is trying to be a relative pronoun obligatorily induces NP-movement, again of the sort that interferes with relative 'head'-raising.³⁹

The relevance of postnominal definite articles might in turn extend to Slavic, thinking of Bulgarian (and of Pesetsky's (2013) proposal that Russian nominative morphemes are really Ds), though questions arise concerning the (non-)cooccurrence of postnominal definite articles with wh-words.

An indirectly related question is why many languages have no relative pronouns at all. There are two subcases. First, as discussed by Downing (1978, 392-394) and Keenan (1985, 149), relative pronouns are not found in languages whose relatives are prenominal; a proposal to account for this was made in Kayne (1994, sect. 8.3). The second subcase, closer to the concerns of the present paper, involves languages whose relatives are postnominal, yet systematically lack relative pronouns (and relative 'complementizers'). An example is Igbo, according to Amaechi and Georgi (2019, 12).

From the current perspective, one might look for potentially relevant differences between determiners in Igbo and similar languages, on the one hand, and determiners in those languages that do have relative pronouns, on the other. A second possibility would be to look for evidence that relative clauses in Igbo and similar languages are actually prenominal at some key stage in the derivation (which would allow relating Igbo to the languages discussed by Downing and by Keenan), in a way that does not hold of languages with relative pronouns.⁴⁰

10. Back to complementizers.

The absence of demonstrative-like relative pronouns in Romance and Slavic has a parallel in both Romance and Slavic (as far as I know) when it comes to what we call sentential complementizers of the sort found in English and French in:

- (73) We think that you're intelligent.
- (74) Nous pensons que/*ce/*ça/*cela vous êtes intelligent. ('we think what/that/that/that you are intelligent')

English *that* is demonstrative-related, while French *que* is akin to English *what*, i.e. *que* is a wh-word. The generalization is:

(75) Romance never allows a demonstrative as a sentential complementizer (and similarly for Slavic).

³⁸Which also play a key role in Kayne's (2018) cross-linguistic proposal concerning pronominal possessives.

³⁹A separate higher demonstrative might have its own associated definite article in cases corresponding to English:

(i) That book that you were reading looked really interesting. But it is only the lower *that* is relevant to the text discussion.

⁴⁰This might or might not fit in with Cinque's (to appear) idea that all relatives originate prenominally.

Just as in the case of relative pronouns, Dutch and German pattern with English in having *dat* and *dass* as demonstrative-related sentential complementizers.

The fact that (75) holds and distinguishes Romance (and Slavic) from (part of) Germanic supports the proposal in Kayne (2008; 2010) that sentential complements are a subtype of relative clause, and that sentential complementizers of the *that* and *que* sort are relative pronouns.⁴¹ If (finite clause) complementizers were simplex heads (in the way they are usually thought of), there would be no possibility (that I can see) of finding an account of (75). Whereas the present proposal reduces (75) to the parallel facts concerning more obvious examples of relative pronouns.

References:

- Abney, S. (1987) The English noun phrase in its sentential aspect. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, Mass.
- Aboh, E. (2005) "Deriving Relative and Factive constructions in Kwa," in L. Brugè, G. Giusti, N. Munaro, W. Schweikert, and G. Turano (eds.) Contributions to the thirtieth Incontro di Grammatica Generativa, Libreria Editrice Cafoscarina, Venezia, 265-285.
- Amaechi, M. and D. Georgi (2019) "Quirks of subject (non-)extraction in Igbo," *Glossa*, 4(1): 69. 1–36.
- Arsenijević, B. (2009) "Clausal complementation as relativization," Lingua, 119, 39-50.
- Bernstein, J. (1997) "Demonstratives and reinforcers in Romance and Germanic languages," *Lingua*, 102, 87-113.
- Besnier, N. (2000) *Tuvaluan. A Polynesian Language of the Central Pacific,* Routledge, London.
- Caponigro, I. and M. Polinsky (2008) "Almost Everything is Relative in the Caucasus," SALT 18.
- Cinque, G. (2008a) "More on the Indefinite Character of the Head of Restrictive Relatives," *Rivista di Grammatica Generativa*, 33, 3-24.
- Cinque, G. (2008b) "Two types of nonrestrictive relatives," in O. Bonami and P. Cabredo Hofherr (eds.) *Emprical Issues in Syntax and Semantics*, 7, 99-137, CNRS, Paris.
- Cinque, G. (to appear) *The Syntax of Relative Clauses. A Unified Analysis*, Cambridge University Press, Cambridge, UK.
- Crisma, P. and G. Longobardi (2009) "Change, Relatedness and Inertia in Historical Syntax," in P. Crisma and G. Longobardi (eds.) *Historical Syntax and Linguistic Theory*, Oxford University Press, Oxford, 1-13.
- Downing, B.T. (1978) "Some Universals of Relative Clause Structure," in J.H. Greenberg (ed.) *Universals of Human Language. vol. 4. Syntax*, Stanford University Press, Stanford, 375-418.
- Embick, D. (2010) *Localism versus Globalism in Morphology and Phonology*, The MIT Press, Cambridge, Mass.
- Evans, B. and C. Evans (1957) *A Dictionary of Contemporary American Usage*, Random House, New York.

⁴¹Although I am taking *that*- and *que*-type complementizers to be relative pronouns, I have not claimed that cross-linguistically every element that introduces an embedded finite clause is a relative pronoun; cf. the earlier point about *say* at the end of section 4.

- Ghomeshi, J. (1996) *Projection and Inflection: A Study of Persian Phrase Structure*, Doctoral dissertation, University of Toronto (*Toronto Working Papers in Linguistics*).
- Herrmann, T. (2005) "Relative clauses in English dialects of the British Isles," in B. Kortmann, T. Herrmann, L. Pietsch and S. Wagner (eds.) *A Comparative Grammar of British English Dialects. Agreement, Gender, Relative Clauses*, Mouton de Gruyter, Berlin, 21-123.
- Huddleston, R., G.K. Pullum and P. Peterson (2002) "Relative Constructions and Unbounded Dependencies," in R. Huddleston and G.K. Pullum (eds.) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge, United Kingdom, 1031-1096.
- Jayaseelan, K.A. (1988) "Complex predicates and theta theory," in W. Wilkins (ed.) *Thematic Relations (Syntax and Semantics 21)*, Academic Press, New York, 91-111.
- Kayne, R.S. (1981) "ECP extensions," Linguistic Inquiry, 12, 93-133.
- Kayne, R.S. (1982) "Predicates and Arguments, Verbs and Nouns," paper presented at the GLOW Conference, *GLOW Newsletter*, 8, 24..
- Kayne, R.S. (1994) The Antisymmetry of Syntax, The MIT Press, Cambridge, Mass.
- Kayne, R.S. (2008) "Antisymmetry and the Lexicon," *Linguistic Variation Yearbook*, 8, 1-31 (also to appear in A.M. di Sciullo and C. Boeckx (eds.) *The Biolinguistic Enterprise: New Perspectives on the Evolution and Nature of the Human Language Faculty*, Oxford University Press, London).
- Kayne, R.S. (2010) "Why Isn't *This* a Complementizer?", in R.S. Kayne, *Comparisons and Contrasts*, Oxford University Press, New York.
- Kayne, R.S. (2014) "Comparative Syntax and English *Is To*", *Linguistic Analysis*, 39, 35-82 (reprinted in Kayne (2019b)).
- Kayne, R.S. (2017) "English *One* and *Ones* as Complex Determiners" in G. Sengupta, S. Sircar, M.G. Raman and R. Balusu (eds.) *Perspectives on the Architecture and Acquisition of Syntax. Essays in Honor of R. Amritavalli*, Springer Nature, Singapore, 77-114 (reprinted in Kayne (2019b)).
- Kayne, R.S. (2018) "Toward an Understanding of Apparent Suppletion in Romance Pronominal Possessives", *Probus*, 30, 251-276.
- Kayne, R.S. (2019a) "The Unicity of *There* and the Definiteness Effect", in E. Gonçalves (ed.) *Existential Constructions in Focus*, Editora da Universidade Federal da Bahia, Brazil (reprinted in Kayne (2019b)).
- Kayne, R.S. (2019b) Questions of Syntax, Oxford University Press, New York.
- Kayne, R.S. and J.-Y. Pollock (2010) "Notes on French and English Demonstratives," in J.-W. Zwart and M. de Vries (eds.) *Structure Preserved: Studies in Syntax for Jan Koster*, John Benjamins, Amsterdam, 215-228.
- Keenan, E.L. (1985) "Relative Clauses," in T. Shopen (ed.) Language Typology and Syntactic Description. Volume II. Complex constructions, Cambridge University Press, Cambridge, 141-170.
- Kiparsky, P. and C. Kiparsky (1970) "Fact," in M. Bierwisch and K.E. Heidolph (eds.) *Progress in Linguistics*, Mouton, The Hague, 143-173.
- Koopman, H. and D. Sportiche (1989) "Pronouns, Logical Variables and Logophoricity in Abe," *Linguistic Inquiry*, 20, 555-589.
- Larson, R.K. (1991) "The Projection of DP (and DegP)", in Larson (2014).
- Larson, R.K. (2014) On Shell Structure, Routledge, New York.

- Larson, R. (2017) "Revisiting Article-S," Revista Linguística, 13, 51-87.
- Leu, T. (2007) "These HERE demonstratives," in T. Scheffler, J. Tauberer, A. Eilam and L. Mayol (eds.) *Proceedings of the 30th Annual Penn Linguistics Colloquium*, *Penn Working Papers in Linguistics vol. 13.1*, 141-154.
- Leu, T. (2015) The Architecture of Determiners, Oxford University Press, New York.
- Lin, J.-W. (1996) *Polarity Licensing and Wh-phrase Quantification in Chinese*, PhD dissertation, University of Massachussets, Amherst.
- Longobardi, G. (1994) "Reference and proper names," Linguistic Inquiry 25, 609-665.
- Manzini, M.R. (2014) "The Romance *k*-Complementizers," in P. Svenonius (ed.) *Functional Structure from Top to Toe*, Oxford University Press, 148-187.
- Moltmann, F. (to appear) "Situations, Alternatives, and the Semantics of 'Cases'," Linguistics and Philosophy.
- Munaro, N. (2000) "Free Relatives as Defective *Wh*-elements: Evidence from the North-Western Italian Dialects," *University of Venice WPL*, 10, 89-120.
- Pearce, E. (2015) A Grammar of Unua, De Gruyter Mouton, Boston.
- Pesetsky, D. (2013) Russian Case Morphology and the Syntactic Categories, The MIT Press, Cambridge, Mass.
- Pesetsky, D. and E. Torrego (2001) "T-to-C Movement: Causes and Consequences," in M. Kenstowicz (ed.) *Ken Hale. A Life in Language*, The MIT Press, Cambridge, Mass., 355-426.
- Pesetsky, D. and E. Torrego (2004) "Tense, Case, and the Nature of Syntactic Categories," in J. Guéron and J. Lecarme, *The Syntax of Time*, The MIT Press, Cambridge, Mass., 495-537.
- Poletto, C. and E. Sanfelici (2018) "On demonstratives as relative pronouns: New insight from Italian varieties," Goethe Universität, Frankfurt am Main, University of Padua (ResearchGate 327141086).
- Postal, P.M. (1966) "On So-Called 'Pronouns' in English," in F.P. Dineen, edl, *Report of the Seventeenth Annual Roundtable Meeting on Linguistics and Language Studies*, Georgetown University Press, Washington, D.C., 177-206 (reprinted in Reibel, D.A. and S.A. Schane, eds., *Modern Studies in English* (1969), Prentice-Hall, Englewood Cliffs, New Jersey).
- Postma, G. (1993) "The Syntax of the Morphological Defectivity of BE," HIL Manuscripts, 3, 31-67.
- Quirk, R., S. Greenbaum, G. Leech and J. Svartvik (1972) *A Grammar of Contemporary English*, Longman, London.
- Rizzi, L. (1997) "The fine structure of the left periphery," in L. Haegeman (ed.) *Elements of Grammar. Handbook of Generative Syntax*, Kluwer, Dordrecht, 281-337.
- Roberts, I. and A. Roussou (2003) Syntactic Change. A Minimalist Approach to Grammaticalization, Cambridge University Press, Cambridge, UK.
- Rosenbaum, P.S. (1967) The Grammar of English Predicate Complement Constructions, The MIT Press, Cambridge, Mass.
- Schwarz, F. (2009) *Two Types of Definites in Natural Language*, Doctoral dissertation, University of Massachusetts, Amherst.
- Seppänen, J. (1999) "Dialectal variation in English relativisation", *Lingua*, 109, 15-34.
- Siloni, T. (1995) "Participial Relatives and Complementizer D: a Case Study in Hebrew and French," *Natural Language and Linguistic Theory*, 13, 445-487.

- Taraldsen, K.T. (1978) "The Scope of *Wh* Movement in Norwegian," *Linguistic Inquiry*, 9, 624-640.
- van Riemsdijk, H. (1998) "Head Movement and Adjacency," *Natural Language and Linguistic Theory*, 16, 633-678.
- Wiltschko, M. (1998) "On the internal and external syntax and semantics of (relative) pronouns," *Journal of Comparative Germanic Linguistics* 2, 143-181.