

## “Why Isn’t *This* a Complementizer?”

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### 1. Introduction.

The title question lends itself to being interpreted with an implicit “...as opposed to *that*”, and the contrast between *this* and *that* in complementizer-like contexts (and elsewhere) will constitute one strand of this paper.

The implicit “...as opposed to *that*” conveys an assumption that *that* is a complementizer, in some cases. A second strand of this paper will question that assumption, and will argue that the *that* that introduces relative clauses is a relative pronoun, rather than a complementizer.

A third strand will take over from Kayne (2008a) the idea that what we think of as sentential complements (or sentential subjects or topics) are best taken to be relative clause structures, in which case the *that* that introduces sentential complements must also be a relative pronoun, not a complementizer. This will allow reducing the absence of sentential complementizer *this* to the absence of relative pronoun *this*.

### 2. Diachrony.

Roberts & Roussou (2003, 113-120), citing work by Davidson and by Kiparsky, favor an approach to complementizer *that* that has it originating diachronically as a demonstrative,<sup>1</sup> in such a way that:

(1) We say that: the earth is round.

leads to:

(2) We say that the earth is round.

with (1) an instance of parataxis (where *the earth is round* is an independent clause) and (2) an instance of hypotaxis (where *the earth is round* is a clause dependent on *say*).

A problem for this idea is that (1) is if anything less natural than:

(3) We say this: the earth is round.

yet *this* did not provide the source for any complementizer:

(4) \*We say this the earth is round.

The fact that *this* and *that*, though naturally paired as demonstratives, do not both give rise to a complementizer is further illustrated by:

(5) I’m sure that/\*this you’re right.

(6) That/\*This you’re smart is obvious.

(7) It bothers us that/\*this you’re right.

(8) We’ll see to it that/\*this he does the job.

I take the facts in (4)-(8) to indicate that it is unlikely that (1) was a diachronic source for (2). Nor, I will claim, has *that* in (2) and (5)-(8) ceased to be a demonstrative.<sup>2</sup>

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<sup>1</sup> This paper originated as a talk presented (with a different title) at the XVIIIe Conférence internationale de linguistique historique at UQAM, Montreal in August, 2007.

<sup>2</sup> I am using the term ‘demonstrative’ in a way that includes (132)-(135) below, i.e. it does not imply ‘pointing’.

Roberts & Roussou (2003, 111ff.) do take non-relative complementizer *that* and demonstrative *that* to be synchronically related (differing primarily in type of complement), but without the idea that sentential complements are relative clauses and without the idea that complementizer *that* starts out together with the ‘head’ of a relative.

I will have nothing very specific to say concerning the diachronic development of *that* or other complementizers in English or other languages. Rather, I will attempt to show that an understanding of (4)-(8) requires rethinking what we mean by complementizers in (synchronic) syntax. The question is in part that of the relation between demonstrative *that* and relative *that* and the complementizer *that* of sentential complementation.

I will argue that these three instances of *that* are best understood as all being synchronically instances of demonstrative *that*. Relative *that* is an instance of demonstrative *that* occurring as what we call a 'relative pronoun', to a significant extent as in other West Germanic languages. Sentential *that* is arguably a subcase of relative *that*, insofar as all (finite) sentential complements are relative clauses.

The absence of complementizer *this* seen in (4)-(8) will turn out to be a special case of the absence of relative pronoun *this* (in a way compatible with both complementizer *that* and relative pronoun *that* being instances of demonstrative *that*). The idea is that making sense of (4)-(8) is possible only if sentential *that* is reinterpreted as a relative pronoun.

### 3. Sentential *that* and relative *that*.

That sentential *that* is tightly tied to relative *that* is suggested in part by the absence of relative *this*:

(9) the only book that/\*this I was thinking about  
which parallels the facts of (4)-(8).

Similarly, Roberts & Roussou (2003, 112) discuss the fact that the *that* of sentential complementation has no plural counterpart:

(10) We think that/\*those you're all wrong.  
This is also true of relative *that*.

(11) the only books that/\*those I was thinking about

That relative *that* and sentential *that* are the same element is a long-held position, argued for explicitly by Klima (1964), who, more specifically, took relative *that* to itself be a complementizer, rather than a relative pronoun. The reason that Klima, in developing a unified approach to relative *that* and sentential *that*, opted for reducing the former to the latter (rather than the reverse) had to do with the fact that relative *that* differs in some respects from relative *who* (and *which*).

Relative *who* (like relative *which*) can pied-pipe the preposition of which it is the object, unlike relative *that*:

(12) the person to whom we were alluding

(13) the book to which we were alluding

(14) \*the person/book to that we were alluding

Second, relative *who*, but not relative *that* (in standard English), can pied-pipe a larger DP of which it is the possessor:

They (p. 112) take the lack of phonological reduction with demonstrative *that* to come from its deictic/ostensive character, but I find it to be necessarily unreduced even in the non-ostensive:

i) The picture of Mary is sharper than that of John.

ii) John's sister thinks that idiot is a genius.

On the other hand, I allow reduction in:

iii) That's right.

and allow non-reduction in:

iv) That you're right is irrelevant.

Whether the reduction in question is purely phonological or not is a separate question.

- (15) the person whose book we were talking about
- (16) \*the person that's book we were talking about

Third, there is the fact mentioned in (11) that relative *that* shows no number agreement (despite there existing elsewhere a plural form *those* and despite other languages (French, German...) showing number agreement with at least some relative pronouns). Fourth, relative *that* appears to be indifferent to the +/-human status of its antecedent, while *who* and *which* are not.

These differences between relative *that* and relative *who/which* are real. The question is whether they really exclude taking relative *that* to be a relative pronoun in essentially the same sense in which we take *who* and *which* to be relative pronouns. I will now go through these four considerations (beginning with the second), arguing in each case that their weight can be overestimated, i.e. that they are in fact compatible with taking *that* to be a relative pronoun.

4. Relative *that* is less different from other relative pronouns than it seems. Possessors.

An initial reason for wondering about the import of (16) comes from the fact that relative *which* cannot be a possessor, either:

- (17) the book whose first chapter is so well-known
- (18) \*the book which's first chapter is so well-known

Thus the unacceptability of (16) for many/most speakers does not clearly set *that* aside from other relative pronouns.

Furthermore, there are speakers for whom (16) is acceptable, as pointed out by Richard Hudson on LinguistList 11 Sept 91 and 19 Sept 91 (citing van der Auwera and Jespersen). His examples even include one with a plural 'head' (cf. also Herrmann (2005, 54)):

- (19) I'm looking for some pencils that's leads aren't broken.
- and one in which the containing DP is an object:

- (20) This is the pencil that's lead you broke.

Hudson takes these to clearly support a relative pronoun analysis of relative *that*. David Pesetsky (LinguistList 13 Sept 91) pointed out that at most such examples might support that analysis for those who accept (16) (and (19) and (20)).<sup>3</sup> Hudson replied in turn that his point is actually stronger, in that those who accept (16) and (19) and (20) still do not accept (14). Thus if for the speakers in question one grants (on the basis of (16) and (19) and (20)) the relative pronoun status of *that* one is forced to admit that for those speakers (14) is unacceptable even though *that* is a relative pronoun, in which case there must be an independent reason for (14) that might actually hold for all speakers, in which case in turn (14) would no longer constitute support for the analysis of relative *that* as a complementizer.

Where does this leave us? We still have the question why (16) and (19) and (20) are unacceptable to many/most (including myself). The restriction seen in (18) may well be relevant, but there is an even closer one:

- (21) The importance of it is undeniable.
- (22) The importance of that is undeniable.
- (23) Its importance is undeniable.
- (24) \*That's importance is undeniable.

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<sup>3</sup> Cf. also Pesetsky (1998).

Demonstratives accompanied by no overt NP cannot be possessors, as shown also by:<sup>4</sup>

- (25) \*This's importance is undeniable.
- (26) \*Those's importance is undeniable.
- (27) \*These's importance is undeniable.

Therefore even if relative *that* is a demonstrative, as I will pursue below, the unacceptability of (16) and (19) and (20) promises to reduce to the unacceptability of (24)-(27) (and/or to that of (18)) in a way that is compatible with relative *that* being a demonstrative-type relative pronoun, rather than a complementizer.<sup>5</sup>

#### 5. The preposition restriction.

Returning to the preposition restriction exemplified by (14), the question is why it should hold if *that* is a relative pronoun. Those who have taken (14) to argue against a relative pronoun analysis of *that* have implicitly assumed that true relative pronouns would never show such a restriction. But that seems incorrect.

There is a restriction in Dutch concerning relative *d*-pronouns. Dutch relative *d*-pronouns are demonstrative-related relative pronouns, rather than complementizers, insofar as they show some number agreement (when the gender is neuter) with the head of the relative:<sup>6</sup>

- (28) het boek dat ik nu lees ('the book *dat* I now read')
- (29) de boeken die ik nu lees ('the books *die* I now lees')

They are nonetheless prohibited from being the object of a preposition, e.g.:

(30) \*de persoon aan die ik de brief heb gegeven ('the person to *die* I the letter have given') as opposed to:<sup>7</sup>

- (31) de persoon aan wie ik de brief heb gegeven

Dutch contrasts here with German, whose (demonstrative-related) *d*-relative pronouns can readily be objects of a preposition, e.g.:

- (32) der Mann mit dem wir gesprochen haben ('the man with *dem*(dative) we spoken have')

Yet German still has a certain restriction that recalls the Dutch one. This restriction is found in German when an *r*-pronoun (akin to English *where*, *there*, *here*) is to be used as a relative pronoun with a preposition (adposition). In that case, the form of the *r*-type relative pronoun must be *wo(r)*- and cannot be *da(r)*-.

- (33) das, woran ich denke ('that whereof I think')
- (34) \*das, daran ich denke ('that thereof I think')

The generalization that suggests itself on the basis of these facts is:

(35) In (at least) West Germanic, a demonstrative-related relative pronoun can be the object of an adposition only if that *d*-pronoun has morphological Case.

<sup>4</sup> Note the contrast with:

- i) That one's importance is undeniable.

as well as the contrast:

- ii) ?The participants' identity are to remain a secret.
- iii) \*Those's identity are to remain a secret.

On (ii) (which shows that this sort of non-standard plural agreement does not depend on contiguity with the plural antecedent), see den Dikken (2001) and Kayne (1998, note 9).

<sup>5</sup> Still left open is the acceptability, for some, of (16) and (19) and (20). If all such speakers also accept (24), then the problem is essentially solved. If they don't (I don't know the answer), then more needs to be said.

<sup>6</sup> Examples from Donaldson (1997, sect. 8.5.2).

<sup>7</sup> In the context of a preposition, the relative pronoun in Dutch must be of the *w*-type, akin to English *wh*- relative pronouns - for recent discussion, cf. Sportiche (2008).

This is arguably so for relative *d*-pronouns (with the exception of *da(r)*) in German, which has widespread morphological Case (though never with *da(r)*), but not in Dutch, which apart from personal pronouns by and large lacks morphological Case. Since English *that* has no morphological Case, the preposition restriction illustrated in (14) falls under (35), in a way compatible with *that* being a relative pronoun.<sup>8</sup>

6. Sensitivity of *that* to +/-human.

Another consideration that might at first glance appear to weigh against taking *that* to be a relative pronoun is its apparent indifference to the humanness of the 'head' of the relative.<sup>9</sup> In this respect, *that* appears to differ from both *who* and *which*. *Who* is incompatible with an inanimate relative head:

(36) the person/\*house who he was looking at  
and *which* is generally incompatible with a human relative head:<sup>10</sup>

(37) the house/\*person to which I was alluding  
*That*, on the other hand, seems to accommodate all sorts of relative heads:

(38) the person/insect/house that we were looking at  
One might consider this a reason not to take *that* to be a relative pronoun.

For my English, though, (38), while accurate per se, is misleading, in that there exist other contexts in which *that* is not indifferent to the choice of 'head'. In particular, I agree here with the judgments of Kayne (1981, sect. 3.3) concerning a certain kind of cleft sentence:

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

(40) (Have you read this book?) Yes, in fact it was this book that got me interested in linguistics in the first place.

In such cases, *that* is not possible for me if the clefted (subject) constituent is human.

The deviance of (39) with *that* depends on the clefted constituent being the highest subject. A parallel sentence with a clefted object and *that* is appreciably better for me (though not quite perfect):<sup>11</sup>

(41) (Do you know Mary?) Yes, in fact it was Mary who/?that I learned linguistics from in the first place.

This subject/object difference also holds for me in simple relatives with an indefinite pronoun as 'head', especially in 'extraposition' contexts:

<sup>8</sup> Why (35) should hold for relative *d*-pronouns but not for relative *w*-pronouns remains to be understood; the question is especially challenging if *w*-pronouns are accompanied by a silent D.

<sup>9</sup> The term 'head of a relative' is convenient but confusing, since it doesn't match 'head' in the sense of X-bar theory, insofar as what is relativized can readily be phrasal, even in restrictives, e.g.:

- i) the ton of money that they've saved this year
- ii) the picture of you that's over there
- iii) the removal of the evidence that took place last week
- iv) the paper you just published that everybody should read
- v) this going to the movies all the time that you've gotten yourself into the habit of

<sup>10</sup> Though I find somewhat acceptable:

- i) ?There were lots of linguists there, only some of which were known to us.

<sup>11</sup> That *that* is, for at least some speakers, sensitive to the +/- human status of the head of the relative has also been pointed out by Huddleston et al. (2002, 1054), Quirk et al. (1972, 870), and Evans and Evans (1957, 505).

(42) I met somebody last night who/\*?that told me you were back in town.  
 Again, *that* is deviant if it is a (highest) subject that is relativized. The object counterpart is, as with (39) vs. (41), appreciably improved:

(43) I met somebody last night that you've known for a long time.  
 as is the -human counterpart of (42):

(44) I read something last night that would interest even you.  
 A third case in which *that* shows sensitivity to the humanness of the 'head' involves non-restrictives. It is often thought that *that* is excluded from non-restrictives, but for me, while *that* is not perfect (compared to *who* or *which*), it is clearly better than zero:

(45) Your last paper, \*(?that) I've been meaning to reread for a while now, is really good.  
 Yet I find the following, with a human 'head', clearly worse than (45) with *that*:

(46) \*Your oldest friend, that I've been meaning to talk to for a while now, is really smart.

In conclusion, *that* is sometimes sensitive to the +/- human status of the head of the relative, even if less systematically than with *who* or *which*. The fact that *that* does not differ sharply from *who* and *which* in this respect increases the plausibility of the claim that *that* is always a relative pronoun.<sup>12</sup>

The fact that relative *that* is incompatible in a certain range of contexts with a human antecedent/head is not entirely surprising, if relative *that* is demonstrative *that* followed by a silent N/NP (silent by virtue of movement, if the raising/promotion approach to relatives is correct). This is so, since ordinary demonstrative *that*, while indifferent to the humanness of an overt associated N(P):

(47) that house/insect/person  
 is quite sensitive to humanness when that N(P) is silent, even in simple non-relative contexts:

(48) That's too expensive.  
 (49) \*That thinks too much.<sup>13</sup>

The idea, then, is that the requirement that relative *that* in some contexts not have a human antecedent/head is related to the deviance of (49), and that this relation supports taking relative *that* to be a relative pronoun.

I note in passing that instances of relative *that* that are possible for me only with -human, i.e. those instances of relative *that* that are most clearly relative pronouns, as in (40), (44) and (45), still have no counterpart with *this*:<sup>14</sup>

(50) (Have you read this book?) Yes, in fact it was this book that/\*this got me interested in linguistics in the first place.

(51) I read something last night that/\*this would interest even you.  
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<sup>12</sup> It remains to be understood why (38) with *person* is acceptable to me. Of potential interest is the fact that all three contexts in which *that* requires for me a non-human 'head' are also contexts in which zero is excluded for me (independently of humanness). Thus alongside (45):

i) Have you read this book? Yes, in fact it was this book \*(that) got me interested in linguistics in the first place.

and in the indefinite extraposition case:

ii) I read something last night \*(that) would interest even you.

<sup>13</sup> With stress on *that* and a pejorative interpretation, this example may be possible with reference to a human, probably with a silent THING associated with *that*.

<sup>14</sup> With intonation held constant. Possible, but not as a relative clause structure, is:

i) I read something last night. This would interest even you.

Similarly, with stress on *this* and *and* added:

ii) ?Your last paper, and this I've been meaning to reread for a while now, is really good.

(52) Your last paper, ?that/\*this I've been meaning to reread for a while now, is really good.

This *that*/\**this* contrast that holds for relative pronouns resembles the *that*/\**this* contrast that holds for what we think of as sentential complementizers. The relative pronoun contrast is more basic than and in fact underlies the other, if this paper is on the right track.

7. The impossibility of agreement with English relative *that*.

Those instances of relative *that* that are possible only with -human, i.e. those instances of relative *that* that are most clearly relative pronouns, as in (40), (44) and (45), still do not allow agreement with the head of the relative:

(53) (Have you read these books?) Yes, in fact it was these books that/\*those got me interested in linguistics in the first place.

(54) I read some things last night that/\*those would interest even you.<sup>15</sup>

(55) Your last few papers, ?that/\*those I've been meaning to reread for a while now, are really good.

The question is why relative pronoun *that* would not have a plural counterpart, contrary to Dutch in (28)/(29) and to German, which also shows number agreement with the head of the relative:

(56) das Buch, das ich gelesen habe ('the book that I read have')

(57) die Bücher, die ich gelesen habe ('the books that(plural) I read have')

A possible but not entirely satisfactory answer might be that *that* in this respect is 'simply' like *who*, which shows no number (or gender) agreement. Nor does *which*, of course, though in the case of *which* there is no number agreement elsewhere (*which book?*, *which books?*), contrary to *that book* vs. *those books*. But since ordinary demonstrative *that* does agree in number in English, we are obliged to ask, if relative *that* is indeed a relative pronoun related to demonstratives, why exactly relative *that* does not agree, too?

Here it becomes important to say a bit more precisely what one means by 'relative pronoun'. As in Kayne (1994) for the case of *which* (and *who*), I take 'relative pronouns' to be determiners<sup>16</sup> whose NP has raised to become the 'head' of the relative, in the general context of the raising approach to relatives first developed at length in Vergnaud (1974; 1985). Thus in:

(58) the book to which I was alluding  
*which* is immediately followed by a trace/copy of *book*. In French (or Italian) relatives close to (58), one does see agreement:

(59) les livres avec lesquels... (Fr.: 'the books with the(pl.)which(pl.)...')

where, as with *which*, there is a trace/copy of *livres* following *quels*.  
Taking *that* to be a relative pronoun, then, amounts to taking it to be a (demonstrative) determiner whose NP has raised past it, i.e. in:

(60) the linguists that she talks to

*that* is followed by the trace/copy of *linguists* (the trace/copy following *to* is omitted):

<sup>15</sup> Again, with a different, non-relative clause, structure, the following is possible:

i) I read some things last night. Those would interest even you.

and similarly for the next text example:

ii) Your last few papers, and those I've been meaning to reread for a while now, are really good.

Also possible is, as a case of apposition, with a relative inside the appositive:

iii) Your last few papers, those that I've been meaning to reread for a while now, are really good.

<sup>16</sup> Which may be phrasal - cf. Leu (2008b).

(61) the linguists<sub>i</sub> that t<sub>i</sub> she talks to  
 Yet *that* shows no number agreement.

The fact that relative pronoun *that* shows no number agreement with the head of the relative in English (as opposed to Dutch and German) is plausibly related to the fact that English differs from other Germanic languages in having no DP-internal number agreement apart from demonstratives:

- (62) the(\*s) books
- (63) interesting(\*s) books

The fact that demonstratives are anomalous within English in this respect, i.e. that they alone show DP-internal number agreement, recalls a parallel fact in Hungarian discussed by Szabolcsi (1994, 184-5). What Hungarian adds to the discussion rests on the fact that its agreeing demonstratives are visibly pre-D, i.e. they visibly precede the definite article (the plural morpheme here is *-(e)k*):<sup>17</sup>

(64) ezeket a könyveket ('these(acc.) the books(acc.)')

Within a Hungarian DP, the definite article itself does not agree, nor does any element between the definite article and the noun.

The fact that the single case of DP-internal number agreement in Hungarian is visibly pre-D suggests taking English agreeing demonstratives to be pre-D also, as in:

(65) those D books

with a silent D - cf. Leu (2007).<sup>18</sup> This in turn leads to the following proposal:

(66) English plural -s (like Hungarian number morphology) can be prenominal only if it is also pre-D.

In consequence of (66),<sup>19</sup> examples (62)-(63) are excluded because the first -s there is prenominal but not pre-D (assuming that adjectives in English can never be pre-D). The plural -s of *those* in (65) is allowed precisely because it is pre-D. (Why English plural -s and Hungarian number morphology (and Hungarian Case morphology) should have the property expressed in (66) remains to be elucidated.)

We are now in a position to propose an account for the absence of number agreement illustrated by:<sup>20</sup>

(67) \*the only books those you should read

Given (61), the question is why (67) couldn't arise from a structure containing (65), with a pre-D *those* (trace/copy in object position again omitted), as in:

(68) \*the only books<sub>i</sub> those D t<sub>i</sub> you should read

A plausible answer is that the raising of the NP *books* shown in (68) must target Spec,D,<sup>21</sup> that pre-D demonstratives themselves occupy Spec,D, and that in essence the presence of pre-D

<sup>17</sup> Example from É Kiss (2002, 164).

<sup>18</sup> In Greek, too, one sees demonstratives followed by an overt D - for recent discussion, v. Grohmann & Panagiotidis (2004). (66) could be reformulated if *these/those* turned out to have a silent plural morpheme (i.e. if their -s- is part of the plural stem - cf. Halle and Marantz (1993, 132) on *geese* and Leu (2008b)).

<sup>19</sup> The converse of (66) would not hold, given:

- i) all/\*alls the books
- ii) half/\*halves the books

<sup>20</sup> I am assuming that the widespread presence in non-standard English of:

- i) them guys

instead of *those guys* is not paralleled by any instance of relative pronoun *them*:

- ii) \*the only guys them she ever talks to

<sup>21</sup> It may be that the raising of the 'head' of the relative has it passing through Spec,D on its way to some higher position - cf. Bianchi (1999).



*those* in (68) interferes with the raising required to yield a relative clause structure, which therefore makes (68) impossible.<sup>22</sup>

The fact that counterparts of (67) are possible in German (and Dutch), as illustrated in German by (57), repeated here:

(69) die Bücher, die ich gelesen habe ('the books that(plural) I read have')  
 in which the second *die* is an agreeing plural demonstrative relative pronoun, suggests that a plural demonstrative in German (and Dutch) need not be pre-D. Put another way, relative *die* in (69) is post-D.<sup>23</sup>

(70) die Bücher<sub>i</sub> D die t<sub>i</sub> ...  
 in which case the NP *Bücher* can arguably move into/through Spec,D without hindrance.

The reason that German and Dutch allow a post-D plural demonstrative as in (70), while English does not (if English allowed (70), it would allow (67)), must in turn reflect the fact that (66) does not hold of German or Dutch, both of which visibly allow DP-internal number (plural) agreement with post-D adjectives, in a way that is impossible in English (and Hungarian), e.g. in German:

- (71) das andere Buch ('the other book')
- (72) die anderen Bücher ('the other(plural) books')

The fact that English does not allow a post-D plural demonstrative does not imply that English allows no post-D demonstrative. English might still allow a non-agreeing post-D demonstrative that would be the source of English relative (non-agreeing) *that*.

8. The impossibility of agreement with Romance relative *che/que*.

Given the discussion of (67)-(70), the structure associated with the well-formed:

(73) the books that you should read  
 must not be:

(74) \*the books<sub>i</sub> that D t<sub>i</sub> you should read  
 in which pre-D *that* would interfere with the raising of *books*,<sup>24</sup> but rather:

(75) the books<sub>i</sub> D that t<sub>i</sub> you should read  
 in which demonstrative *that* is post-D, parallel to (70).

The absence of number agreement between *books* and *that* in (73)/(75) can be taken to follow automatically from the general absence of post-D number agreement in English. An obvious question then arises from the impossibility of:

<sup>22</sup> This is most straightforward if there are no multiple specifiers, at least not with D. Another possibility is that pre-D *those* acts as an intervener.

The contrast between (68) and:

i) We prefer those.  
 implies, in a way relevant to Kayne (2006), that the silent NP associated with *those* in (i) not need to raise to Spec,D. Probably important here is the availability in some English of:

ii) We prefer those ones.

<sup>23</sup> In non-relative contexts (with NP-ellipsis) one finds a visible post-D agreeing demonstrative in the Dutch/Flemish dialect spoken by Jeroen van Craenenbroeck (p.c.):

i) den daunen ('the that(masc.)')

In Greek, one can have:

ii) ta nea afta fenomena ('the new these phenomena')  
 with the demonstrative visibly between adjective and noun - v. Grohmann and Panagiotidis (2004).

<sup>24</sup> *That* could be pre-D, parallel to (65), in contexts where raising to Spec,D is not at issue, e.g. in:

i) That book is interesting.

(76) \*You should read that books.  
 (which is possible, though, in the dialect studied by Adger and Smith (2005)). I return to (76) below.

Romance relatives raise closely related questions, insofar as they are frequently introduced by a non-agreeing *che/que*, despite Romance languages having widespread pronominal post-D number agreement. This is particularly striking in a language like Italian, with rich number morphology and yet non-agreeing relative *che*:

(77) l'altro libro che Gianni ha letto ('the other book that G has read')

(78) gli altri libri che Gianni ha letto ('the(pl.) other(pl.) books that ...')

In (78), both the definite article and the pronominal *altri* show plural morphology in agreement with plural *libri*, yet *che* does not. In this respect, relative *che* differs sharply from relative *il quale*:

(79) l'altro libro del quale Gianni ha parlato ('the other book of-the which G has spoken')

(80) gli altri libri dei quali Gianni ha parlato ('the(pl.) other(pl.) books of-the(pl.) which(pl.)...')

as well as from accusative pronominal object clitics:

(81) Quel libro, lo leggo volentieri. ('that book, it I-read gladly')

(82) Quei libri, li leggo volentieri. ('those books, them I-read gladly')

The distinction here between singular object clitic *lo* and plural object clitic *li* parallels that between singular *l'* and plural *gli* in (77) vs. (78), whereas relative *che* appears in the same form whether its antecedent is singular or plural.

As in Italian, French pronominal object clitics show a number distinction (and, in the singular accusative, a gender distinction). Again as in Italian, French relative *que* shows, in contrast, no distinction in number or gender.<sup>25</sup>

Italian relative *che* (like French *que*) is not related to a demonstrative, but rather to the interrogative wh-word (*che* in Italian, *que* in French) corresponding to English *what*. In the spirit of the earlier discussion of English *that*, we would expect, despite this difference, that neither *che* nor *que* is a complementizer,<sup>26</sup> even though complementizer status (as opposed to relative pronoun/determiner status) might appear to provide an account of non-agreement.

The claim that complementizer status is not at the heart of *che* not agreeing is supported by:<sup>27</sup>

(83) Che libro/libri hai letto? ('what book/books have-you read')

(84) Che bel libro/bei libri! ('what beautiful book/beautiful books')

In (83) *che* is an interrogative determiner that fails to agree (and cannot agree) with the following noun. In (84) *che* is an exclamative determiner, again with no agreement. In the first

<sup>25</sup> In both French and Italian there is an overt dative-accusative Case distinction within the set of third person pronominal object clitics, but there is no comparable dative-accusative distinction for French relative *que*, nor for Italian *che* - unless Italian *cui* (or even French relative *qui*) is a dative/possessive/oblique form of *che/que*, as in (93)/(100) below.

<sup>26</sup> Contrary to Kayne (1976) for French *que* and to Cinque (1982) for *che*, but in partial agreement with Sportiche (2008), who takes French *que* to be a weak form of both *quoi* and *qui*. From the perspective of this paper, the relation between French relative *que* and *quoi* or especially *qui* is necessarily more complex, given the discussion beginning at (88). For relevant work on French interrogative *que/quoi*, see Poletto and Pollock (2004) and Munaro and Pollock (2005).

<sup>27</sup> French does not allow *que* (or *quoi*) either as an exclamative determiner or as an interrogative determiner with an overt following NP (setting aside cases with the preposition *de*), for reasons that need to be elucidated.

case, there is, as in (78) vs. (80), a sharp contrast with (interrogative) *quale*, which necessarily shows agreement, contrary to *che*:

(85) *Quale libro/quali libri hai letto?* ('which(sg.) book/which(pl.) books have-you read)  
 Relative to Italian determiners that can occur both with a singular count noun and a plural, *quale* is typical; such determiners typically agree, in Italian. *Che* as a determiner is atypical, perhaps unique. The question is why.

The answer, I think, is to be found in Leu's (2008a, note 15) suggestion, building on Heim (1987), that English interrogatives like:<sup>28</sup>

(86) What books are you reading?  
 are to be analyzed as parallel to German interrogatives of the *was...für* type:

(87) *Was für Bücher liest du?* ('what for books read you')  
 Leu's analysis of such German(ic) interrogatives rests in part on his postulating in (87) the presence of a silent counterpart (represented as SORT) of the noun *sort*. *Was* in (87) is a kind of (genitive) modifier of this SORT, rather than of the lexical noun *Bücher*. In this way, Leu accounts for why *was* does not agree in phi-features or in Case with *Bücher*. (A close relation between *was* and SORT is seen visibly in English *You bought books of what sort?*)

Let us now take Italian to be like German, so that the non-agreeing character of *che* in (83) (and, less directly, (84)) exactly matches the non-agreeing character of *was* in (87). In Italian, too, agreement fails to take place because *che* in (83) is not a modifier of *libri* (but rather of SORT).<sup>29</sup>

Returning to relatives, the key proposal is to take Italian relative *che*, too, to be associated with a structure of the type found in (87), in which case a relative like:

(88) *i libri che Gianni ha letto* ('the books *che* G has read')  
 must be thought of (abstracting away from the question of *für*) as:

(89) *i libri<sub>i</sub> che SORT t<sub>i</sub> G ha letto*  
 or, more exactly:

(90) *i libri<sub>i</sub> [ [che SORT] t<sub>i</sub> ]<sub>i</sub> G ha letto t<sub>j</sub>*  
 in which *che* is a modifier of silent SORT and not a modifier of (the trace of) *libri*, with which it therefore is not expected to agree in number (or gender).

The agreeing interrogative *quale* ('which') of (85) has an agreeing counterpart in relatives, as we saw in (80). This relative *quale* contrasts sharply with another Italian relative element, *cui*. Although *cui* is like *quale* in being compatible with both human and non-human antecedents, it differs from it in that *cui* shows no number agreement:

(91) *il libro di cui Gianni ha parlato* ('the book of *cui* G has spoken')  
 (92) *i libri di cui Gianni ha parlato* ('the books of *cui*...')

This suggests taking *cui* to be closely related to *che*, which also shows no number agreement, as discussed earlier starting at (78). A way to express this relation would be to attribute to (92) an analysis modeled on (90), namely:

(93) *i libri<sub>i</sub> di [ [ch(e) SORT] t<sub>i</sub> -ui ] G ha parlato t*  
 in which *-ui* is an oblique Case morpheme stranded by the raising of *libri*. (The *ch-* of *che* is the same consonant /k/ as the *c-* of *cui*.)

<sup>28</sup> On the interpretation of these, see Heim (1987) and Leu (2008a; 2008b).

<sup>29</sup> *Quali* in (85) is, then, not a modifier of SORT. It must also be the case that *che* cannot raise high and agree in the manner of *tropp-* in:

i) *troppi pochi libri*

For discussion, cf. Kayne (2002, sect. 1.8) and Corver (2007).

The genitive relation that Leu (2008a) suggests between *was* and SORT may underlie the (probable) absence of agreement between *was* and SORT.

The lack of number agreement with *cui* is now seen to depend in part on *che* not being a direct modifier of *libri* and in part on the fact that the number morpheme *-i* associated with *libr-* must be raised along with *libr-*. Taking *-ui* to be oblique provides a way of accounting for the fact that *cui* is not possible if what is relativized is a subject or a direct object,<sup>30</sup> as opposed to a prepositional object or a prepositionless oblique. The latter is found in:

(94) *la persona cui Gianni ha dato un libro* ('the person *cui* G has given a book')

The contrast with subject and direct object relativization is illustrated by:

(95) \**la persona cui G ha visto* ('the person *cui* G has seen')

(96) \**la persona cui ha parlato di noi* ('the person *cui* has spoken of us')

Although French lacks an exact counterpart of (94),<sup>31</sup> it has a contrast between prepositional object relativization with *qui* (limited to human) and direct object relativization:

(97) *la personne avec qui Jean a parlé* ('the person with *qui* J has spoken')

(98) \**la personne qui Jean a vue* ('the person *qui* J has seen')

In addition, this *qui* shows no number agreement (contrasting with French relative *lequel* ('the which')):

(99) *les personnes avec qui Jean a parlé* ('the persons with *qui*...')

suggesting, parallel to (93):

(100) *les personnes<sub>i</sub> avec [ [qu(e) SORT] t<sub>i</sub> -i ] J a parlé t*

in which the consonant /k/ of *que* (which like Italian *che* is a modifier of SORT and consequently does not agree in number with *personnes*) is followed by an oblique *-i* (thereby accounting for (98)).<sup>32</sup>

## 9. More on non-agreement with *that*

Returning to English relative *that*, the question is now whether it is appropriate to take its non-agreeing character to have the same kind of source as non-agreement with German *was* and Italian *che*, i.e. whether or not take relative *that* to cooccur as a modifier of silent SORT in the manner of relative *che* in (90) and (by extension) interrogative *what* in (86), as in:

(101) *what SORT...books...*

Given certain differences between *what* and demonstratives in English (and German and Italian), I tentatively take the answer to be negative, i.e. neither simple demonstratives such as in *that book*, nor relative demonstrative pronouns as in (73), repeated here:

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<sup>30</sup> There is also a restriction with Italian relative *il quale* ('the which') that makes subject and direct object relativization deviant, but the restriction is in certain respects less systematic than with *cui* - v. Cinque (1982; 2006). On the other hand, *il quale* is not possible in (94).

<sup>31</sup> Perhaps related to the fact that French lacks a counterpart of the weak pronoun *loro* that is discussed by Cardinaletti (1991) and Cardinaletti and Starke (1999).

<sup>32</sup> (100) leaves open, however, the status of French interrogative *qui*, which is not limited to obliques, and of French relative subject *qui*. For recent discussion, cf. Sportiche (2008) and Koopman and Sportiche (2008).

Italian relative *cui* (like French relative *dont*) cannot be used in interrogatives (or free relatives). This seems to correlate with a pied-piping difference between *cui/dont* and *qui* (cf. Kayne (1976) and Cinque (1982; 2006)), with *cui/dont* recalling Webelhuth (1992) on non-English Germanic:

i) *la fille avec la mère de qui Jean a parlé* ('the girl with the mother of *qui*/whom J has spoken')

ii) \**la fille avec la mère dont Jean a parlé*

iii) \**la ragazza con la madre di cui Gianni ha parlato* (Ital.: same)

The exact reason for this correlation needs to be worked out.

(102) the books that you should read  
 occur with SORT.

One relevant difference within German is that alongside the *was für* construction of (87), there is no exactly parallel demonstrative *\*das für*.<sup>33</sup>

(103) *\*Ich lese das für ein Buch* ('I read that for a book')

A second (cross-language) difference is that the sensitivity of *that* to +/- human discussed above starting at (39) is not found at all with Italian relative *che* (or with French relative *que*) as far as I know.<sup>34</sup> A third, within English, is seen in:

(104) Which (books) are still on the table?

(105) Those (books) are still on the table.

(106) What \*(books) are still on the table?

where *which* is like *those*, both differing sharply from *what*. Conversely, we have:

(107) Which one is still on the table?

(108) That one is still on the table.

(109) ?What one is still on the table?

where *what* again differs from *that* (and from *which*). Finally, there is the basic fact that relative *that* has, in standard English, no counterpart with *what*.<sup>35</sup>

(110) the book that/\*what you should read

Thus it may well be that although SORT is licensed in the context of *che* and *what*, as in (90) and (101), it is not licensed by *that*.

If so, there must be at least one other factor that accounts for the ability of *that* to cooccur with a plural relative head. Recall that in the discussion around example (65), reproduced here:

(111) those D books

I took agreeing *those* to necessarily occupy Spec,D. This was partially inspired by the facts of Hungarian, in which agreeing demonstratives visibly precede the definite article. Relevant now is the fact mentioned earlier that in Hungarian those elements that occur between the definite article and the noun do not agree, which ties in with the proposal made earlier in (75), repeated here:

(112) the books<sub>i</sub> D that <sub>t<sub>i</sub></sub> you should read

that relative *that* in English is post-D. In other words, the primary claim of this section is that relative *that*, despite being a demonstrative, fails to agree in number with the relative head because relative *that* originates as a post-D, not as a pre-D, demonstrative.

As discussed earlier, the lack of post-D demonstrative agreement in English can be related to the absence in English of post-D adjective agreement (just as it is in Hungarian). A question arises of course as to the status of:

(113) *\*that books*

in which non-agreement is impossible in standard English.<sup>36</sup> If the following:

(114) D that book(s)

is available as the source of relative *that*, in the way indicated in (112), why can it not also yield (113), i.e. why does:

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<sup>33</sup> Thomas Leu (p.c.).

<sup>34</sup> French relative *quoi* (like German relative *was*) is limited in the range of relative heads it is compatible with, but the restriction in question is much more severe than with English *that*.

<sup>35</sup> As opposed to certain English dialects (cf. Herrmann (2005)), for reasons that need to be elucidated, along with the fact that those dialects consistently lack a sentential complementizer use of *what*, according to Berizzi (2007).

<sup>36</sup> The Buckie dialect studied by Adger and Smith (2005, 169) allows such non-agreement.

(115) D that books  
yield a well-formed output only when *books* is moved by relativization?

We can draw the correct distinction if the following holds:<sup>37</sup>

(116) Silent definite D in English requires that some XP move to its Spec.  
In (113), *books* has not moved into Spec,D, so there is a violation of (116). (In *that book*, *that* must occupy Spec,D, parallel to (111).) (112), though, does not violate (116), since in (112) Spec,D has been moved into by *books*.

#### 10. Non-agreement with French demonstrative *ce*

The lack of number agreement that holds for demonstrative relative *that* in English has a counterpart in French in a particular case of demonstrative *ce* that does not involve relativization. French *ce* normally agrees in number:

(117) *ce* livre ('that/this book')

(118) *ces* livres ('those/these books')

However, when *ce* is followed by a pronoun rather than by a lexical noun, it does not agree. This happens in the closest French counterpart to English *the one(s)...*, which instead of *one(s)* uses a pronominal form (*lui/elle/eux/elles*) and instead of the definite article uses *ce* (with the two written as one word):<sup>38</sup>

(119) *celui* que tu vois ('ce him that you see')

(120) *celle* que tu vois ('ce her that you see')

(121) *ceux* que tu vois ('ce them(masc.) that you see')

(122) *celles* que tu vois ('ce them(fem.) that you see')

The decomposition of these into *ce*+pronoun goes back to Gross (1968, 51) and seems correct both on grounds of form and of interpretation.

It is striking that *ce* in (119)-(122) shows no agreement in number (or gender), despite French having appreciably more DP-internal agreement than English. If *ce* were to agree in (120)-(122), we would have the impossible:

(123) \**cette*elle..., \**cese*ux..., \**ces*elles...

where *cette* is the normal feminine singular and *ces*, as in (118) the normal plural form of *ce*. The following show that in the presence of a lexical noun *ce* must agree :

(124) *cette*/\**ce* femme ('ce woman')

(125) *ces*/\**ce* livres ('ce books')

The fact that *ce* fails to agree in (120)-(122), by providing an example of a non-agreeing demonstrative in a language in which demonstratives otherwise agree, indirectly supports taking English relative *that* to be a non-agreeing demonstrative, as in (112).

It may be that a still tighter link can be drawn, if we ask why *ce* fails to agree precisely in those cases in which it is followed by a pronominal, as in (120)-(122). The answer requires us to (briefly) look in more detail at the feminine singular form *cette* of (124), the *-t-* of which has a counterpart in the masculine singular when the following word begins with a vowel:<sup>39</sup>

(126) *cet* ami ('ce friend')

<sup>37</sup> Cf. Leu 2007; 2008b; also, more indirectly, Kayne (2008b).

<sup>38</sup> In these forms, the *-e* of *ce* drops obligatorily if the pronoun begins with a vowel. On the fact that *celui*, etc. cannot stand alone, cf. ?*That's not the you/him \*(that we remember)*, with English *the* matching French *ce*.

<sup>39</sup> The double *-tt-* of *cette* is just orthographic.

Against the background of French morphophonology, it is plausible that this *-t-* is present with all the forms of *ce*, i.e. that (117) and (118) are really:<sup>40</sup>

- (127) *ce T livre*
- (128) *ce T es livres*

where T represents a silent *-t-* (and where the *-e* of *ce* is unpronounced if followed by a pronounced vowel, as in (128)).

Consider the possibility that this *t/T* is a D, in which case *ce* in (124)-(128) is plausibly in Spec,*t/T*. Since there is no *t* in any of (120)-(122),<sup>41</sup> and therefore arguably no T in (119), *ce* in (119)-(122) need not be in Spec,D. Assume it is not, and more specifically, that it is below D. Then the *ce* of (119)-(122) strongly matches the *that* of (112) - both are instances of non-agreeing post-D demonstratives.

That *ce* in (119)-(122) is post-D is supported by the non-standard French that allows the following (cf. Bauche (1927, 101) and Grevisse (1993, §672)):<sup>42</sup>

- (129) *les ceux que...*
- (130) *la celle que...*

In conclusion to this section, then, French *ce* provides indirect support for the idea that English relative *that* is a non-agreeing (post-D) demonstrative.

#### 11. The absence of relative *this*.

*This* and *that* appear to have parallel status in cases like:

- (131) This book is better than that book.

Yet *that* can be 'neutral' in a way that *this* cannot be:<sup>43</sup>

- (132) He's not all that/\*this smart.
- (133) ?Only those/\*these people who have any money can see the film.
- (134) those/\*these of us who are linguists
- (135) the destruction of the bridge and that/\*this of the car

<sup>40</sup> In (127), the non-pronunciation of *t/T* is induced by the following consonant - cf. Schane (1968), Tranel (1981).

In (128), the non-pronunciation of *t/T* recalls possessive *mes, tes, ses*, which lack (overtly) the *-on/-ien* that is pronounced in the masculine singular and (in the presence of a following vowel) in the feminine singular - for discussion, see Kayne (2008c).

The (initial) *-e-* of *cet/cette* is phonologically distinct from that of *ce*, in a way that may be phonologically predictable.

The *-e* of *ce* is pronounced in:

- i) *ce à quoi elle pense* ('that to what she thinks')

perhaps due to the presence of a silent noun following it.

<sup>41</sup> It may be that *-t-/T* is incompatible with the pronominal status of *lui/elle/eux/elles*, though more needs to be said here.

<sup>42</sup> If *t/T* is a D, the expectation is that no variety of French will allow:

- i) \**la cette femme*
- ii) \**les ces femmes*

As far as I know, this is correct.

The cooccurrence of the definite article (*les, la*) in these popular French forms with the pronominals *eux* and *elle* indicates recursion of a kind that bears on (i)/(ii) and on Postal (1966).

<sup>43</sup> Cf. expletive *there* vs. the absence of expletive *here* - Kayne (2004; to appear).

which leads to the following proposal:<sup>44</sup>

(136) Demonstrative *this* is necessarily accompanied by a first person element akin to *I/me*; in contrast, demonstrative *that* is not necessarily accompanied by such an element. The idea is then that this person element is incompatible (for reasons to be worked out) with (132)-(135).

With this as background, consider the question of the absence of relative *this/these*. By previous reasoning, plural *these* must be pre-D, in which case relative *these*, as in:

(137) \*the books these we were reading  
is straightforwardly excluded parallel to (67), by virtue of pre-D *these* in Spec,D interfering with the raising of *books*.

What, though, of?:

(138) \*the book(s) this we were reading  
If *this* is pre-D, then the problem is immediately solved, as with (137). But what if *this* were post-D, parallel to (112)/(115)? The proposal that comes to mind is:

(139) The person element accompanying *this* (or *these*) must occupy (or be contained in) Spec,D.

This means that even if *this* itself is below D, there will still necessarily be a person element in Spec,D that will block the raising of *book(s)* in (138), thereby preventing *this* from being a relative pronoun.

The contrast with relative *that* follows now from the fact that demonstrative *that* does not necessarily occur with a person element, as was stated in (136). In fact such a person element must not be present with relative *that*, which we now see to pattern in this respect with the (non-relative) instances of demonstrative *that* given in (132)-(135).

## 12. *The fact that/\*this...*

We normally think that only one of the following contains a relative clause:

(140) the fact that you mentioned

(141) the fact that you're here

Yet neither allows *this*:

(142) \*the fact this you mentioned

(143) \*the fact this you're here

(142) fits directly into the preceding discussion, whereby *this* is prevented from being a relative pronoun as a function of its obligatorily cooccurring with a person element in Spec,D.

If (141) contains a relative clause, too, rather than a sentential complement,<sup>45</sup> then (143) will fit directly into the preceding discussion. *This* will be excluded in (143) by virtue of being excluded as a relative pronoun.

An apparent problem with taking (141) to contain a relative clause lies in the contrast:

(144) the fact which I mentioned

(145) \*the fact which you're here

But the unacceptability of (145) is surprising, on a relative clause analysis, only if clear cases of relative clauses (with inanimate heads) always allow *which*. That is not the case, however, as shown by relatives with *way* as the head:

(146) the way in which they solved it

<sup>44</sup> Cf. Ferrari (2005) on feminine vs. masculine gender. A proposal of the text sort (as in Rooryck (2003)) might be extendable to the *come/go* asymmetries discussed in Nakatani (2008).

<sup>45</sup> For related discussion, see Kayne (2008a). Partially similar proposals can be found in Aboh (2005) and Arsenijević (2007).



(147) the way that they solved it

The first of these corresponds straightforwardly to sentences like *They solved it in a certain way*, etc. The second does, too, with the twist that the preposition *in* is not visible.

This lack of visible preposition is not specific to relatives:

(148) They solved it this way.

What is notable is that in relatives containing both *way* and *which*, *in* cannot be omitted (cf. Cinque (1988, 464) on Italian; also Herrmann (2005, 88ff.) on the different case of English non-restrictives):

(149) \*the way which they solved it

The same holds with other prepositions, in certain cases:<sup>46</sup>

(150) the day on which they saw him for the first time

(151) the day that they saw him for the first time

(152) \*the day which they saw him for the first time

Returning to *fact*, the claim is that (141) involves a silent P and therefore that (145) is excluded for the same reason as (149) and (152). Since these two are part of a clear relative clause paradigm, (145) can be excluded even if (141) is a relative clause structure.

The silent P of (141) has a visible counterpart *in* in:

(153) You're here in fact/You're in fact here/In fact you're here

In other words, *the fact that you're here* is a relativization based on an embedded sentence like (153).<sup>47</sup>

The absence (vs. (146), (150)) of:

(154) \*the fact in which you're here

is probably related to the extra restrictions on determiners that hold with *in fact*.

(155) In what/which way did you solve it this time?

(156) \*In what/which fact are you here this time?

Also:<sup>48</sup>

<sup>46</sup> Interrogative *which* allows omission of the preposition:

(i) Which way did they solve it this time?

(ii) (?)Which day did he leave for Paris?

(though not with *reason*).

Interrogative and relative *which* act alike insofar as:

(iii) \*Which (one) did they solve it this time?

(iv) \*Which (one) did he leave for Paris?

are displaying the same restriction as (149) and (152). That the absent preposition is important is shown by the increased acceptability of:

(v) ??In which did they solve it this time?

(vi) ??On which did he leave for Paris?

In (146), *way* has raised into Spec,*in*. Similarly, silent WAY may be raising to Spec,*in* in (v) (cf. Kayne (2006)). It may be that it is this raising of *way*/WAY to Spec,P (stranding *which*) that is incompatible with the licensing of a silent P (perhaps because a silent P requires its Spec to be filled by its entire argument). (The difference between *which* and *that* here may be related to preposition-stranding.)

<sup>47</sup> This has the advantage of allowing a link between:

i) \*the facts that you're here and that he's not

ii) \*In facts, you're here.

though Italian *infatti*, which seems to contain a plural *fatti*, will need to be integrated.

<sup>48</sup> In the presence of *that*, *fact* must raise, given:

i) \*In that fact, John is here.

ii) the fact that John is here

(157) In (\*the,\*a) fact, you're right.

One might think that a relative clause analysis of (141) would have difficulty with the contrast between (141) and (140) concerning the replacement of *fact* by *one*:

(158) the one that you mentioned

(159) \*the one that you're here

But the same holds for the clear relative clause cases (also with a silent P and with *that*) of (147) (with *way*) and (151) (with *day*):

(160) We admire the way/\*one that they solved it

(161) We weren't there the day/\*one that they solved it

This common restriction on (159)-(161), which is arguably inherited, within the raising perspective on relatives, from a restriction found in non-relative instances of a silent P, e.g.:

(162) They solved it that day and we would have solved it that day/\*one, too.

seems compatible with a relative clause status for (141).

Luigi Rizzi (p.c.) has called my attention to an apparent problem (in Italian, here transposed to French) having to do with the possible appearance of subjunctive in:

(163) Le fait que Jean soit là nous inquiète. ('the fact that J is(subjunc.) there us bothers') as opposed to the ordinary relative:

(164) \*Le livre que Jean ait acheté lui a coûté cher. ('the book that J has(subjunc.) bought to-him has cost dear')

A solution that comes to mind is to take the subjunctive in (163) to be akin to that found with ordinary relatives preceded by *seul* ('sole/only'), as in:<sup>49</sup>

(165) Le seul livre que Jean ait acheté hier se trouve sur la table. ('the sole book that J has(subjunc.) bought...')

by attributing to (163) a structure like:

(166) le SEUL fait que...

with a silent SEUL that would license the embedded subjunctive.<sup>50</sup>

### 13. Factives.

An idea that goes back to Kiparsky and Kiparsky (1970) is that factive sentences like:

(167) We're sorry that you're here.

have a deleted or silent FACT. If so, and if the preceding section is on the right track, then factives, too, must involve relative clause structures (based on 'IN FACT'). This provides an immediate account of:

(168) \*We're sorry this you're here.

in terms of the inability of *this* to serve as a relative pronoun, for the reasons discussed earlier around (136).

That factives are relative clause structures is supported by the observation in Roberts and Roussou (2003, 120) to the effect that in Modern Greek the relative clause marker *pou* is also used with factives.

### 14. Non-factives.

The Kiparsky and Kiparsky proposal is similar to Rosenbaum's (1967) earlier one that sentential complements and sentential subjects are in general accompanied by *it*,<sup>51</sup> which

<sup>49</sup> Another possible solution is suggested in Kayne (2008a).

<sup>50</sup> Relevant here may be:

i) \*the other fact that John is here

ii) the other fact that John mentioned

<sup>51</sup> In which case, sentential 'extraposition' becomes a subcase of relative clause extraposition.

sometimes appears overtly and is sometimes deleted.<sup>52</sup> This similarity to Kiparsky and Kiparsky is especially clear if *it* is a noun. It will also hold if *it* is a determiner (as in Postal (1966)) accompanied by a silent noun.

Assume, then, that sentential complements and sentential subjects are always accompanied by a ‘head’ noun, even if they are not factive. Then a natural extension of the previous discussion is that even these non-factive embedded sentences are relative clause structures (and the *that* that introduces them is a relative pronoun). Either *it* will be raised from within the relative in a way largely parallel to what happens with overt *fact* (and *way*, *day*), or a silent noun will be so raised.<sup>53</sup>

A relative clause analysis of all embedded finite sentences accounts directly for:

(169) We insist that/\*this you be back by noon.

as a subcase of the fact that *this* cannot be a relative pronoun:

(170) the book that/\*this you’re reading

for which I proposed an account in sect. 11.<sup>54</sup> Without such an account, the impossibility of *this* in (169) would be difficult to understand. (Recall in particular that the Davidson/Kiparsky/Roberts and Roussou view of the origin of complementizer *that* mentioned in section 2 cannot account for the contrast in (169).<sup>55</sup>)

The claim that English sentential *that* is a relative pronoun must be taken to extend to (non-prepositional) finite complementizers in other languages (for example, to Italian *che*, to French *que*, to German *dass*, to Russian *што*, etc.) There is relevance to questions of Case. Complementizers normally do not show Case, e.g. in German or Russian, where they might have been expected to. From the current perspective, this reduces to the fact that relative pronouns normally do not show Case determined in the matrix.<sup>56</sup>

As is well-known, finite complementizers cannot be stranded by (topicalization-like) IP-movement:<sup>57</sup>

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<sup>52</sup> Case-wise, (i), with silent IT, is akin to (ii):

- i) I’m sure that things will work out.
- ii) That I’m sure.

as opposed to:

- iii) \*I’m sure that.

<sup>53</sup> Parallel to (166), there will be a silent SEUL associated with (at least some) preverbal subjunctive clauses.

<sup>54</sup> The sensitivity of Greek *pou* to factivity remains to be elucidated.

<sup>55</sup> From the present perspective, *that* is not a Force<sup>0</sup> in Rizzi’s (1997) sense, nor the head of a CP phase in Chomsky’s (2001) sense. The bearing that a Rosenbaum-type/relative clause analysis of sentential complementation might have on Chomsky’s choice of CP as a phase needs to be looked into.

<sup>56</sup> The question of Case attraction and its interaction with complementizers needs to be looked into further.

If sentential complements are relative clauses, extraction phenomena must be sensitive to some combination of (at least):

- a) ‘extraposition’ - cf. Taraldsen (1981)
- b) what type of phrase was wh-moved (argument or adjunct) and what exact type of argument or adjunct
- c) whether the ‘head’ of the relative is overt
- d) what determiner precedes the ‘head’

<sup>57</sup> This contrasts with:

- i) They predicted that John would have to resign, and resign he’ll have to.
- For discussion, see Kayne (2003, sect. 4.5).

(171) He's sure that he's right.

(172) \*He's right he's sure that.

If *that* is properly understood to be a relative pronoun, this reduces to the fact that relative pronouns cannot be stranded by IP-movement:<sup>58</sup>

(173) We like the people who you invited.

(174) \*You invited we like the people who.

Nor can relative pronouns be stranded under sluicing:

(175) \*We like the students who you invited, but we don't like the professors who.

(176) \*We liked the first way in which you presented your results but not the second way in which.

(177) \*The stated reason for which they quit is not the same as the real reason for which.<sup>59</sup>

The relative pronoun status of sentential *that* allows relating to the preceding the fact that *that* cannot be stranded under sluicing, either:<sup>60</sup>

(178) \*We suspect that you're right, but we're not sure that.

The relative pronoun status of sentential *that* has the further advantage of allowing one to bring together two generalizations discussed by (Downing and) Keenan.<sup>61</sup>

58 Cf.:

i) We know the reason why you left.

ii) \*You left we know the reason why.

which seems clearly impossible as topicalization of IP. (ii) is to be distinguished from:

iii) You left and we know the reason why.

or:

iv) You left. We know the reason why.

with two sentences.

Since IP-movement cannot strand an interrogative *wh*-word, either:

v) \*They invited we're trying to find out who.

the sluicing facts are more important here.

59 The contrast with:

i) ...the real reason why.

may be attributable to (i) containing a silent FOR:

ii) ...the real reason FOR why.

with the *why*-clause being interrogative.

60 Nor can *if* be:

(i) \*We suspect they're here but we don't really know if.

This may indicate that this *if* involves a relative clause structure, too (just as conditional *if* recalls correlatives of the Hindi type and, more specifically, the phrase *in what case*).

Why *whether* cannot be stranded under sluicing is not clear to me. The contrast between it and *if* with respect to control:

ii) We're trying to figure out whether/\*if to leave.

might suggest that *whether* does not involve a relative clause structure, at least not in the same way. If *if* is not a complementizer, various aspects of Kayne (1991) will need to be rethought. Similarly for the question of the degree of parallelism between DP and CP, if there are no (overt) finite complementizers.

61 On the lack of relative pronouns in prenominal relatives, cf. Downing (1978, 392-4) and Keenan (1985, 149). On the lack of relative and sentential complementizer identity in prenominal relatives, cf. Keenan (1985, 160).

For a proposal on why (179) should hold, see Kayne (1994, chapter 9).

Morphemes that separate prenominal relatives from the following 'head' in languages like Chinese and Korean must not be relative pronouns.

- (179) a. prenominal relatives lack (overt) relative pronouns  
 b. prenominal relatives never display a complementizer that is identical to the normal complementizer of sentential complementation.  
 (179b) now reduces (on the assumption that English *that* is typical of what we have called complementizers) to (179a).

15. Relatives with resumptive pronouns.

In the face of colloquial English relatives like the one in:

(180) There's the guy that we still don't know if he's gonna show up or not.  
 one might be tempted to say that *that* here could not be a relative pronoun because there's already a resumptive pronoun *he* present. However (my) colloquial English also allows:

(181) There's the guy who we still don't know if he's gonna show up or not.  
 with *he* cooccurring with relative pronoun *who*, so there is no bar to taking *that* to be a relative pronoun in (180).

For me, the example with *that* is slightly less natural than the one with *who*, recalling the earlier discussion (starting at (39)) of cases in which relative pronoun *that* favored non-human relative 'heads'.<sup>62</sup> As expected then, the following, with a non-human head, is more fully natural than (180):

(182) There's the book that we still don't know if it's gonna be on the reading list or not.  
 Since relative *which* is in general not very natural (for me) in colloquial English, it is not surprising that it is less good than *that*:

(183) ?There's the book which we still don't know if it's gonna be on the reading list or not.

16. *Which* vs. *that*.

In simple cases with non-human (especially inanimate) heads, both *which* and *that* are possible (with *which* for me being less colloquial):

(184) the book that/which I was reading

With superlatives, however, *which* is degraded:

(185) the longest book that/??which I've ever read  
 though I find the prepositional counterpart better:

(186) ?the softest chair in which I've ever sat

Sharper than (185) is the following, in which there is no overt head noun:

(187) the fastest that/\*which he's ever run

From the present perspective, which takes both relative *that* and relative *which* to be relative pronouns, i.e. determiners, it may be that (187) is traceable back to:

(188) He's never run that fast/at that fast a speed.

vs.:

(189) \*Which fast (a speed) is he running (at) now?

Similarly, perhaps, for the amount relative contrast:<sup>63</sup>

(190) You won't believe the amount of sugar that/??which he puts in his coffee.  
 the restriction on which might have to do with:

(191) What/??which amount of sugar do you usually put in your coffee?

In other words, these differences between relative *that* and relative *which* may be due to the fact that although both are relative pronouns/determiners, they are not the same type of determiner.

<sup>62</sup> Related to that discussion, I find the 'zero' counterpart of resumptive pronoun relatives appreciably less good:

i) \*?There's the guy we still don't know if he's gonna show up or not

<sup>63</sup> Cf. Prinzhorn and Schmitt (2005, note 2) on German.

17. Determiners that cannot serve as relative pronouns.

Wiltschko (1998) proposes that *the* cannot be a relative pronoun because it cannot license a silent NP.<sup>64</sup>

(192) We need that/\*the.

with the contrast in (192) underlying:

(193) the book that/\*the we're reading

This seems plausible for English, and also provides a promising way of interpreting this French contrast:

(194) la chaise sur la\*(quelle) tu étais assis ('the chair on the which you were seated')

French allows *laquelle* ('the which') as a (complex) relative pronoun/determiner, but not *la* by itself. This correlates with *laquelle* being able to appear without an overt noun in interrogatives:

(195) Sur laquelle étais-tu assis? ('on the which were you seated')

whereas *la* cannot appear by itself in argument position:

(196) \*Tu étais assis sur la.

As a direct object, *la* can appear in clitic position:

(197) Tu la vois. ('you her/it see')

yet still not as a relative pronoun:

(198) \*la fille la tu vois ('the girl the you see')

indicating that (Romance) relative pronouns cannot be clitics in the way that Romance personal pronouns can be.

A somewhat different kind of question arises from the fact that no Romance language, as far as I know, has demonstrative-related relative pronouns of the sort found in German, Dutch and (if I'm right about *that*) English. Note that from the perspective of this paper, this generalization incorporates the fact that sentential complementizers related to demonstratives are found widely in Germanic but never, it seems, in Romance. (Why Germanic and Romance differ in this way remains to be figured out.<sup>65</sup>)

There may (or may not) be a link here to a question that arises for French (and Italian). In (194) there is a complex relative pronoun of the form 'definite article + a close French counterpart of *which*'. The definite article cannot be replaced by a demonstrative:<sup>66</sup>

<sup>64</sup> If personal pronouns are determiners, as in Postal (1966) (though (23) vs. (24) needs to be addressed), then questions need to be asked about their absence as relative pronouns - cf. Wiltschko (1998).

Given that demonstratives can occur as relative pronouns, another question that arises is whether any language could have (the equivalent of):

i) \*the book that there we like

alongside:

ii) We like that there book.

and if not, why not. (It might be that *there* would block the raising of *book*, as in the text account of the absence of relative *this*.)

<sup>65</sup> As does why Romanian does not have a relative pronoun of the *che/que* ('what') type. Similarly, we need to ask why colloquial Norwegian has no relative *w*-type pronouns and why no Norwegian (apparently) has any agreeing *d*-type relative pronouns - cf. Taraldsen (1978, 629ff.).

<sup>66</sup> Nor by an indefinite article:

i) \*la chaise sur une quelle tu étais assis ('the chair on a which you were seated')

or by any French counterpart of *some* or *any*. Cf. English:

ii) the only place where/\*somewhere they like to spend the summer

(199) \**la chaise sur cette quelle tu étais assis* ('the chair on that which you were seated')

Other (open) questions of this general type can be asked. Standard English has both interrogative *which* and interrogative *what* as determiners:

(200) Which books/what books are still on the table?

yet only *which* as a relative pronoun:

(201) the books which/\*what are still on the table

In the spirit of Wiltschko's (1998) proposal concerning the absence of relative *the*, there might be a link between (201) and:<sup>67</sup>

(202) Which/\*what are still on the table?

Some dialectal English allows relatives with *as* (in a way that recalls Scandinavian *som/sem/sum*):<sup>68</sup>

(203) the things as I was saying

An extension of the proposals in this paper would take this *as* to originate within a phrase containing the (moved) head of the relative:

(204) ...I was saying things as THAT

where *as* has something in common with *like* and THAT is silent, and similarly for Scandinavian.<sup>69</sup>

#### 18. Doubly-filled Comps.

Non-standard French allows relatives like:

(205) *la fille à qui que tu as parlé* ('the girl to who what you have spoken')

that contain two *wh*-words. Since from the perspective of this paper, there are no finite complementizers distinct from relative pronouns, relatives as in (205) must contain two relative pronouns.

Relatives with two relative pronouns are not unknown:<sup>70</sup>

(206) John Smith, whose children's love for whom is obvious to everybody, is a famous chemist.

but this kind of relative does not seem to match (205) very well.

Cf. Kuroda (1968).

<sup>67</sup> What exactly distinguishes standard English here from the dialectal English that allows relative *what* will need to be determined.

<sup>68</sup> Cf. Herrmann (2005).

<sup>69</sup> Icelandic sometimes has ...*sem að*... in relatives - cf. Thráinsson et al. (2004, 304).

To some extent, my English allows relative *as* with *such*, in particular in sentences like (cf. Evans and Evans (1957, 388)):

i) He's a man such as/\*that we've never seen the likes of.

Patricia Irwin (p.c.) points out:

ii) I don't know as I'd say that.

with a possible link to Legate (2002).

(204) recalls Kayne (2007, note 9) on:

iii) I was like, I'm outta here.

as:

iv) I was GOING SOMETHING like....

arguably with a silent nominal following *like*.

Relevant here is also:

v) Mary ended up winning the contest, as you won't be surprised to learn.

with a negation that contrasts with Rizzi (1990, 15).

<sup>70</sup> Cf. Kayne (1983, sect. 2.3ff.) for more details.

More promising, I suspect, is a link between (205) and relativized clefts of a sort found (a bit marginally) in English:

(207) ?the person to whom it was that we were alluding

*Whom* in this example seems like an ordinary relative pronoun. A corresponding non-relativized example would be:

(208) It was to him that we were alluding.

The *that* of (207) is clearly to be identified with the *that* of (208). By extension, the *que* of (205) is to be identified with the *que* of:

(209) C'est à elle que tu as parlé. ('it is to here what you have spoken')

if we grant that (205) is an instance of a reduced cleft, in which the *c'* ('it') and the *est* ('is') of (209) are unpronounced.<sup>71</sup>

If so, then the question of (205) essentially reduces to the question of the status of the *que* or of the *that* of clefts. The claim that such *que* or *that* are instances of relative pronouns is enhanced by the appearance of *who* in certain English clefts:

(210) It was Mary who gave us the idea.

and by the appearance of (oblique) relative *qui* in certain French clefts:<sup>72</sup>

(211) C'est elle à qui tu as parlé. ('it is her to whom you have spoken')

Given (210) and the entire preceding discussion, there is immediate plausibility to taking the *that* of:

(212) It was her paper that gave us the idea.

to be a relative pronoun, especially since here *that* is for me sensitive to +/-human (as in (39)):

(213) \*?It was Mary that gave us the idea.

The greatest challenge appears to come from cases in which *that* is possible, but not *who*:

(214) It was to her that/\*who we were alluding.

and similarly for *that* vs. *which* in:

(215) It was to her paper that/\*which we were alluding.

These might seem to support the idea that at least these clefts do not involve relative clause structures at all, in which case the presence of *that* might be thought surprising. Other examples of this sort are:

(216) It was on that very day that/\*which we met you for the first time.

(217) It was in that very way that/\*which we were able to solve the problem.

The force of this challenge is reduced, I think, by the observation that parallel contrasts exist in clear relative clause contexts, as seen earlier starting at (149), e.g.:

(218) It rained the very day that/\*which we were supposed to go to the movies.

(219) The precise way that/\*which they solved the problem is hard for us to understand.

In these two examples, the relative is (overtly) missing a preposition whose reinstatement makes *which* possible:

(220) It rained the very day on which we were supposed to go to the movies.

(221) The precise way in which they solved the problem is hard for us to understand.

If I am right to think that the facts of (214)-(217) represent the same phenomenon as those of (218)/(219), then, since (218)/(219) clearly contain relative clauses, it is straightforward to claim that the clefts of (214)-(217) contain relative clauses, too, in which case the relative pronoun status of *that* in (214)-(217) is enhanced.

<sup>71</sup> Taking (205) to be a reduced cleft accounts for the relative order of the two wh-phrases:

i) \*la fille que à qui tu as parlé ('the girl what to who you have spoken')

The order in (i) is available in some languages (v. Szabolcsi (1994, 217)) in (embedded) interrogatives; such cases must not involve a reduced cleft analysis.

<sup>72</sup> Cf. Grevisse (1993, sect. 447, 3<sup>o</sup>).



More specifically, since (218)/(219) involve a silent preposition, it is natural to think that (214)-(217) do, too, which amounts to saying that (214) contains two instance of *to* (one of which is silent), and similarly for the other examples. The conclusion that a kind of preposition doubling is at issue in such examples is supported by the existence in some English of:<sup>73</sup>

(222) It was to her that we were alluding to.

Similarly, some French allows (with pied-piping rather than stranding) sentences like:<sup>74</sup>

(223) C'est à elle à qui nous faisons allusion. ('it is to her to whom we were-making allusion')

with the same preposition appearing twice.

I conclude that the *that* and *que* of clefts are relative pronouns and hence that the 'extra' *que* of the 'doubly-filled Comp' example (205) is also a relative pronoun.<sup>75</sup>

In addition to relatives, interrogatives can also show 'doubly-filled Comps', as again in non-standard French:

(224) A qui que tu as parlé? ('to whom what you have spoken')

I take the preceding discussion to carry over directly, and conclude that the *que* of such interrogatives is a relative pronoun associated with a reduced cleft structure. Baltin (2006) discusses the fact that sluicing can never strand the complementizer in a doubly-filled Comp structure. This now becomes the fact that sluicing can never strand a relative pronoun, as seen in (175)-(177).

## 19. Conclusion.

One answer to the title question was given in section 11. *This* is not a complementizer in part because, unlike *that*, it is necessarily associated with a person element. The rest of the paper develops a second, more general answer. *This* is not a complementizer and *that* isn't, either. The *that* that introduces sentential complements is really a relative pronoun, and sentential complements are really relative clauses,<sup>76</sup> in a way that partially recalls Rosenbaum (1967). The *that* of classic relative clauses is a relative pronoun, too, as are comparable elements in other languages. By extension, no determiner-like element that introduces a

<sup>73</sup> Obviously more needs to be said about derivations involving preposition-doubling, and the arguably related multiple spelling out of Case in languages like Russian.

<sup>74</sup> Cf. Grevisse (1993, sect. 447, 3<sup>o</sup>).

<sup>75</sup> Similarly for the *wo* ('where') of Southern German relatives like (from Bayer (1983, 213)):

i) der Hund der wo gestern d'Katz bissn hod ('the dog that where yesterday the-cat bit has') as well as for cases (p. 215) in which *wo* appears alone. A plausible conjecture is:

ii) A general use of *wo/where* in relatives is found only in those Germanic languages that have a productive use of *wovon, whereof*, etc.

This relative *wo*, which may be accompanied by a silent P (in which case the expectation arises, thinking of (34), that there will be no parallel relative *da* ('there'),) should be integrated with Kayne (2007; to appear).

Complementizer doubling of the sort discussed recently by Mascarenhas (2007) must now be interpreted as relative pronoun doubling, linking to the interrogative wh-phrase doubling found in some Germanic.

<sup>76</sup> Cf. Collins (2006) and Kayne (2008a) for the claim that derived nominals are relative clauses, too.

On the misleading appearance of what look like sentential complements, see also Polinsky (2008).

On the absence of complements to nouns in Malayalam, see Jayaseelan (1988).

clause is ever a complementizer in the standard sense of the term.<sup>77</sup> If sentential complements are relatives, Wh-movement is even more pervasive in syntax than Chomsky (1977) thought.

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<sup>77</sup> This is in turn probably to be related to determiners' being nominal and to Kayne's (2008a) proposal that nouns can never have complements (cf. Hale and Keyser (2002, 250)).

Manzini (2008) also takes such elements not to be complementizers in the classic sense of the term, but in quite a different way from the text proposal.

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