# Finite clausal "complements" of nouns as (non-restrictive) reduced relative clauses

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- 1. Introduction: the apparent clausal complements of Ns are NOT real complements.
- Stowell (1981): the relation between the *that*-clause and the N is one of adjunction rather than one of th-role assignment; where the adjunct CP is actually in apposition to the N.
  - (1) a the idea that he may stay on for another mandate b the news that Sinatra was leaving New York c the claim that parallel galaxies exist.
- Grimshaw (1990: 74ff): the *that*-clauses in cases such as (1) is an instantiation of a modification relation. <sup>1</sup>
  - (2) Their conclusion/belief/hypothesis/proposal was that there is no relevant data
- Kayne (2008, 2010b): the "clausal complement" of *fact* as in *the fact that you are here* are relative clauses; a consequence of the general proposal that Ns do not project.
- Aboh (2005): nominal "complements" are hidden relatives (in Gbe, Romance and Germanic) of the expletive "factive" type (the fact that John came worried me) or of the "referential" type (the rumor that Jacques Chirac likes beer).
- Arsenjević (2009): nominal F(inite)C(omplement)C(lauses) are special in that they contain a ForceP as their relativization site.
  - (3) a  $[_{DP}$  The  $[_{CP}$  claim $_i$   $[_{CP}$  [C' that  $[_{ForceP}$   $t_i$   $[_{IP}$  John kissed Mary ]]] raising analysis of RC b  $[_{DP}$  the  $[_{NP}$  claim $[_{CP}$  elaim $_i$  [C' that  $[_{ForceP}$   $t_i$   $[_{IP}$  John kissed Mary]]] matching analysis of RC
- Haegeman (2010): clausal "complements" of nouns are relative clauses (relative adjuncts) which relativize an event argument merged within IP:
  - (4) a The claim that Sonia had bought a lottery ticket (from Nichols 2003, ex. (29e))
     b [DP the claim<sub>i</sub> [CP Ø<sub>i</sub> [that [P Sonia [t<sub>i</sub> [had bought a lottery ticket]]]]] (Haegeman 2010, (29f))

While retaining the idea of a *hidden relative clause* structure, our analysis capitalizes on the predicative (specificational) relation that underlies clausal "complements" of N. Cf. (5) (and also (2) above):

<sup>&</sup>lt;sup>1</sup> Grimshaw (1990: 74 ff.) also discusses other arguments in favor of the non-existence of *that*-clause complements of nouns, such as the following: a) they do not combine with modifiers like *constant* or *frequent* (cf. (ia-b) because they behave like result nominals, or simple event nominals; b) plural heads are possible but not perfect because "the clause specifies content and it is not possible to give just one content for a plural head" (p. 76); b) they are compatible with modifiers uniquely associated with result nominals, cf. (ii); c) no event control is possible, so the purpose clause in (iii) is unambiguously associated with the lower clause:

<sup>(</sup>i) a \*Their frequent/constant announcement that they were the greatest eventually became tiresome.

b ?Their frequent/constant announcements that they were the greatest eventually became tiresome.

<sup>(</sup>ii) Yesterday's statements that the president intends to retire in December will not pass muster.

<sup>(</sup>iii) Their statement that the president intends to retire in order to mislead the public was absurd.

(5) The claim was that Sonia had bought a lottery ticket.

### 2. Differences between (restrictive) relative clauses and apparent clausal "complements" of Ns.

# 2.1 Stacking

The first difference, noted in the literature, is that unlike restrictive relative clause modifiers, which can stack, clausal "complements" of Ns cannot (Moulton 2009,29). Cf. (6a) with (6b), perhaps possible as asyndetic coordination different from (6c):

- (6) a. The rumor that Fred made that Jill believed that Bill spread to his friends... (Moulton's 2009 (21b)) RC
  - b. \*The rumor that Fred was happy, that he was in Paris, that he could see ghosts (Moulton's 2009 (21a)) NCC<sup>2</sup>
  - c. The only article that he wrote that he doesn't like.. (≠ the only article that he wrote and that he doesn't like)

The same is apparently the case in Mandarin:

(7)a. nei ben [ta ding de] [wo bu xihuan de] shu

RC (Mandarin, Yip 2009, 46, ex. (3))

DEM CL he order DE I NEG like DE book

'That book that he ordered that I don't like'

b. nei ben [wo bu xihuan de] [ta ding de] shu

DEM CL I NEG like DE he order DE book

'That book that I don't like that he ordered'

(8) \*[Zhangsan da Lisi de] [Lisi shoushang de] xiaoxi Nominal "complement" (Mandarin, Yip 2009, 47, ex, (6))

Zhangsan hit Lisi DE Lisi hurt de news

"The news that Zhangsan hit Lisi, that Lisi got hurt"

# 2.2. The nature of the subordinator

While there are languages like Italian, French, English, Serbo-Croatian that use the same subordinator for both relatives and clausal "complements" of Ns (*che/que/that/što*, cf. e.g. Arsenjević 2009, Kayne 2010b, Sportiche 2008), other languages distinguish the two types by choosing a different subordinator for each.

In Bulgarian the finite complementizer  $\check{c}e$  'that', which is used to introduce clausal "complements" of Ns and (declarative) complements of Vs, (9)a-b, never introduces a relative clause, (10):

(9)a. mălvata **če** sa arestuvali ministăr-predsedatelja bărzo se raznese.

rumour-the that are-3pl arrested the prime minister quickly spread

'the rumor that they have arrested the prime minister quickly spread'

However, this is only possible if the N is plural, which allows for a distributive interpretation, i.e. (i) is not proper stacking. In relative clauses, on the other hand, stacking the second relative clause modifies the intersection of the Head and the first relative clause. See (6c).

<sup>&</sup>lt;sup>2</sup> In Bulgarian, it is apparently possible to have more than one content *that*-clause, as we see from (i):

<sup>(</sup>i) Sluxovete, če Ivan e izbjagal, če šte se ženi za švedka, če skoro šte ima dete ot neja, ...

rumors-the that Ivan has escaped, that will be marrying a Swede, that will have a child from her ...

b. Mălvi se **če** sa arestuvali ministăr-predsedatelja

it is rumored that are-3pl arrested prime minster-the

'The rumor goes that they have arrested the prime minister'

(10) mălvata **kojato/deto/\*če** bărzo se raznese po vsički novinarski agencii,... <sup>3</sup>

rumor-the which/that-rel/\*that quickly spread through all news agencies

'the rumor which quickly spread in all news agencies..'

In Brazilian Portuguese too apparent clausal complements to Ns differ from restrictive relatives in that they require the preposition *de*, which is impossible with restrictive relatives. Examples from Aquiles Tescari Neto (pc):

(11)a. os rumores <sup>??/</sup>\*(de) que a Sônia tinha comprado um bilhete da loteria

the rumors that Sonia had bought a lottery ticket

'The rumors that Sonia had bought a lottery ticket'

b. Os rumores eram <sup>??/</sup>\*(de) que a Sônia tinha comprador um bilhete da loteria.

the.PL rumors were that Sônia has bought a lottery ticket

'The rumors were that Sonia had bought a lottery ticket'.

c. os rumores(\*de) que o Fred fez

'the rumors that Fred made'

A similar problem may arise in English and Italian, as neither *whether* nor *se* 'if' can introduce relative clauses in these languages:

(12) a. the question [CP whether intelligent life exists elsewhere in the universe] is legitimate

b. la domanda [ $_{\text{CP}}$  se esista una vita intelligente altrove nell'universo] è legittima

'the question whether intelligent life exists elsewhere in the universe is legitimate'

(13) a. \*the question [CP whether we raised t]

b. \*la domanda [CP se avremo mai posto t]

the question if we-were to have ever posed

# 2.3 Fronting.

In Bulgarian, a constituent belonging to the relative CP can be fronted and intervene between the Head N and the relative clause, but no constituent of the clausal "complement" of Ns can likewise be fronted and intervene between the N and its clausal "complement":

regret-1sg that is happened thus

<sup>&</sup>lt;sup>3</sup> It is curious that even the clausal "complement" of the nominal counterparts of factive verbs that take a complement introduced by *deto* is necessarily introduced by *če*. See the contrast between (i)a and b:

<sup>(</sup>i)a. Săžaljavam deto e stanalo taka

<sup>&#</sup>x27;I regret that it happened so'

b. săžalenieto če/\*deto e stanalo taka regret-the that has happened thus

<sup>&#</sup>x27;the regret that it happened so'

(14)a. Novinata [s Ivan]<sub>i</sub> kojato čuxme t<sub>i</sub>,...

news-the with Ivan that we heard..

'The news that we heard together with Ivan..'

b. \*?Novinata [za Ivan], če šte se ženi Maria t, ...

news-the for Ivan that will marry Maria ..

'The news that Maria is going to marry Ivan..'

(Cf. Novinata če Maria šte se ženi za Ivan. 'the news that Maria is going to marry Ivan..')

# 2.4 Ordering options with respect to N. The natural order between clausal "complements" of Ns and restrictive relatives is that the former must follow the latter

This generalization seems to hold across a number of languages: Bulgarian, English, German, Greek, Italian, Thai,...

- (15) a. Novinata kojato izleze če šte može da se xodi bez napravlenie pri specialist (Bulgarian) news-the that came out that will be-possible to go without a medical form a specialist 'the news that came out that it will be possible to visit a specialist without a medical form'
  - b. \*?Novinata če šte može da se xodi pri specialist bez napravlenie kojato izleze
     news-the that will be-possible to go to specialist without a medical form which came out
- (16) a. I don't believe the rumor that I heard this morning that he'll move (English Jenks 2011,14) b. ??I don't believe the rumor that he'll move that I heard this morning

Greek, from Marika Lekakou, pc.

- (17) a Den pistevo ti fimi pu akusa simera to proi oti tha metakomisi (restrictive > "complement" of N) neg believe-1sg the rumour that-rel heard.1sg today the morning that fut move.3sg
  'I don't believe the rumor that I heard this morning that he'll move.'
  - b \*Den pistevo ti fimi oti tha metakomisi pu akusa simera to proi. (Noun complement > restrictive) neg believe.1sg the rumour that fut move.3sg that.rel heard.1sg today the morning
    'I don't believe the rumor that he'll move that I heard this morning.'

Thai (Jenks 2011, ex. (28)a-b).

- (18) a. chẳn mày ch<del>ậu</del>ə [NP khàaw-l<del>uu</del> [RC **th**îi chẳn dây-yin \_\_ muuə chaaw-níi [NCC **thîi** wâa khẳw cà yáay bâan 1Sg NEG believe rumor **thîi** 1SG hear ec time-morning-this thîi COMP 3 PROSP move house 'I don't believe the rumor that I heard this morning that he'll move.'
  - b. \* mày ch<del>âu</del>ə [NP khàaw-lʉu [NCC th**îi** wâa khăw cà yáay bâan [RC th**îi** chăn dây-yin \_\_ mʉuə chaaw-níi

    1Sg NEG believe rumor th**îi** COMP 3 PROSP move house th**îi** 1SG hear ec time-morning-this

    'I don't believe the rumor that he'll move that I heard this morning'

German (Haider 1997, 134, examples (44a,b))

(19) a. Es fiel letzte Woche einem Grammatiker auf, der das untersuchte, dass dieser Satz grammatisch ist It struck a grammarian last month [who analyzed it] [that this clause is grammatical] b. \*Es fiel letzte Woche einem Grammatiker auf, dass dieser Satz grammatisch ist, der das untersuchte It struck a grammarian last month [that this clause is grammatical] [who analyzed it]

Italian

(20) a. L'idea che è trapelata che Gianni possa essere arrestato

the idea that has spread that Gianni could be arrested

b. \*?L'idea che Gianni possa essere arrestato che è trapelata

the idea that Gianni could be arrested that has spread

If clausal "complements" to Ns were ordinary restrictive relative clauses, it would not be clear why *restrictive relative* clauses should precede N-"complement" clauses.

- **2.5** Only clausal "complements" of Ns can be predicated of the Head N (see the contrasts between (21)b c in English, (22)b-c in Bulgarian and (23)b-c in Italian):
- (21) a. The story that Fred didn't report his income..
  - b. The story is that Fred didn't report his income (Moulton 2009,21)
  - c. \*The idea is that Fred mentioned..
    - Cf. The idea that Fred mentioned..
- (22)a. Idejata če neutrinite se dvižat po-bărzo ot svetlinata...

idea-the that neutrins refl move-3pl faster than light-the..

'the idea that neutrins move faster than light'

b. Idejata e če neutrinite se dvižat po-bărzo ot svetlinata idea-the is that neutrins refl move faster than light-the

'The idea is that neutrins move faster than light'

c. \*Idejata e če mi kazaxa

idea-the is that me-dat told-3pl

\*'The idea is that they told me'

(23)a. L'idea che i neutrini si muovessero più velocemente della luce..

the idea that the neutrins refl move-subj more fast than-the light..

'the idea that neutrins move faster than light'

- b. L'idea è che i neutrini si muovessero più velocemente della luce the idea is that the neutrins move-subj more fast than-the light 'the idea is that neutrins move faster than light'
- c. \*L'idea è che mi hanno comunicato
   the idea is that they communicated to me

We will take this last property of nominal "complements" of Ns as crucial for the understanding of their syntax.

# 3. Towards an analysis of finite clausal "complements" of Ns

The predication structure seen in (21)b-(22)b-(23)b opens up the possibility that the CP predicate may enter a relative clause as a predicate (an unavoidable possibility, in fact).

- (24)a. The story which is that Fred didn't report his income..
  - b. idejata [CP kojato e CP če neutrinite se dvižat po-bărzo ot svetlinata]].. idea-the which is that neutrins-the refl move faster than light-the..
  - c. L'idea [ $_{CP}$  che è [ $_{CP}$  che i neutrini si muovessero più velocemente della luce.. the idea which is that the neutrins refl move-subj more fast than-the light.. 'the idea which is that neutrins move faster than light'..

This, in turn, makes it possible to view the clausal "complements" of the N in (21)a-(22)a-(23)a as reduced variants of them, with the CP in the predicate position of a reduced relative clause:

- (25) a. the story [CP which is [CP that Fred didn't report his income]]..
  - b. idejata [CP kojato e [CP če neutrinite se dvižat po-bărzo ot svetlinata]].. idea-the which is that neutrins move faster than light..
  - c. l'idea [ $_{CP}$  ehe è [ $_{CP}$  che i neutrini si muovessero più velocemente della luce]].. the idea which is that neutrins move faster than light..

#### 3.1 Consequences of the analysis:

- a) it unifies the apparent status of clausal "complement" of the CP following a N with the property that that clausal "complement" can be predicated of the N.
- **b**) it accounts for the fact that clausal "complements" of Ns are not introduced by relative pronouns/complementizers, as the CPs in questions are run-of-the-mill finite declarative (or interrogative) clauses in predicate position.
- c) it accounts for the contrast in (14); namely, the fact that a constituent from the relative CP, but no constituent from the CP "complement" of the N can be fronted to a position between the CP and the N in Bulgarian.
- (26) [DP ženata[ForceP [TopicP naj-složnite pesni [FinP kojato/deto [IP peeše (Rudin 1986, 127, ex (10a))] woman-the most complex songs who/that sang 'the woman who/that sang the most complex songs'
- (27) The CP hierarchy: SubordinatorP ForceP TopicP FocusP FinP (Rizzi 1997)
- (28)a. Tvărdenieto na Prezidenta e [[če [ot Rusija] $_{i}$  [ njama da dojde pomošt  $t_{i}$ ]] claim-the of President-the is that from Russia will-not to come help 'The President's claim is that from Russia help is not going to come'
  - b. \*Tvărdenieto na Prezidenta e [[ot Rusija] $_i$  [če njama da dojde pomošt  $t_i$ ]] claim-the of President-the is from Russia that will-not to come help

The reason plausibly is that the complementizer  $\check{c}e$  'that' which introduces a predicative CP has to raise to a C higher than Spec, Topic (say, Force in Rizzi's 1997 Split-CP analysis):<sup>4</sup>

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(29) [ForceP če 'that' [TopicP [RelCP kojato/deto 'which'/'that'[ .... ]]]
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The ungrammaticality of (28)b is, under the present analysis, at the basis of the ungrammaticality of (14)b above, repeated here:

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(14b) *?Novinata [za Ivan]<sub>i</sub> če šte se ženi Maria t<sub>i</sub>
news-the for Ivan that will marry Maria
'The news that Maria is going to marry Ivan..'
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Movement of [za Ivan] to the Topic position of the reduced relative clause ((30a)) would involve extraction from the predicate CP, which is not allowed; we take this to mean that the  $\check{c}e$ -clause is an island, as (30b) shows:

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(30) a. *?Novinata [TopicP za Ivan] (kojato e) [ForceP če šte se ženi Maria ti]]]
news-the for Ivan which is that will marry Maria
'The news that Maria is going to marry Ivan.'
b. *Ivan, s kogotoi istinata e [če az govorix ti],...
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Ivan, with whom the truth is that I spoke,...

**d)** The more abstract structure in (25), which underlies the simple N + clausal "complement" may also account for the possibility of adverbs occurring outside the CP "complement", between it and the N (see (31a)-(32a)). No room for such adverbs is instead available for ordinary relative clauses (cf. (31b)-(32b)):

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(31)a. Nadeždata [CP (kojato) togava (beše) [CP če edin den toj možeše da stane president... Bulgarian the hope which then was that one day he could become president... 'the hope then that one day he could become president'
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<sup>&</sup>lt;sup>4</sup> The complementizer *da* appears instead to be lower than Spec, Topic. See (i), which together with (28) gives the overall order in (ii):

<sup>(</sup>i)a. Nadeždata na vsički e [ [Topic ot Rusija] i [Focus skoro] [da dojde pomošt ti]]

hope-the of all is from Russia DA come salvation-the 'Everybody's hope is that from Russia should soon come help'

b. \*Nadeždata na vsički e [ [da [ot Rusija]<sub>i</sub> [skoro] dojde pomošt t<sub>i</sub>]]

hope-the of all is DA from Russia soon come help

<sup>(</sup>ii) (predicative) če TopicP/FocusP da

The same appears to be true of the če that introduces the CP complement of factive verbs (see (iii)), while that introducing the CP complement of bridge verbs can target either the lower or the higher C indifferently (see (iv)):

<sup>(</sup>iii)a. \*Săžaljavam ot Rusija če ne e došla pomošt

regret-1sg from Russia that not has come help

b. Săžaljavam če ot Rusija ne e došla pomošt

regret-1sg that from Russia not has come help 'I regret that help has not come from Russia'

<sup>(</sup>iv)a. Mislja/kazvam ot Rusija] če šte dojde pomošt

I-think/say from Russia that will come help 'I think that from Russia help will come soon'

b. Mislja/kazvam če ot Rusija šte dojde pomošt I-think/say that from Russia will come help

- b. \*Nadeždata togava, [kojato edin den toj možeše da sbădne (RC) the hope then that one day he could realize..
- (32)a. La conclusione [CP (che) forse (era) [CP che lui non fosse adatto al compito]].. Italian the conclusion which perhaps was that he not is-subj suitable for the task..

  'The conclusion perhaps that he would not be fit for the task'
  - b. \*La conclusione forse [CP che lui ha raggiunto].. (RC) the conclusion perhaps that he reached..

## 3.2 Properties of clausal "complements" of Ns that follow from their nature as reduced non-restrictive RCs:

- a) the ordering constraint, illustrated in (15)-(20), follows naturally from the non-restrictive nature of the clausal "complement". As numerous authors have noted for various languages, a non-restrictive relative typically follows any restrictive relative when occurring after the same NP. See again (15a) repeated here as (33):<sup>5</sup>
- (33) Novinata kojato izleze če šte može da se xodi bez napravlenie pri specialist news-the that came out that will be-possible to go without a medical form to a specialist 'the news which came out that it will be possible to visit a specialist without a medical form'
- (34) a. The contestant who won first prize, who is the judge's brother-in-law, sang dreadfully (McCawley (1988: 419)
  - a'. \*The contestant, who is the judge's brother-in-law, who won first prize sang dreadfully
  - b. The man that came to dinner, who was drunk, fainted. (Jackendoff 1977:171)
  - b' \*The man, who was drunk, that came to dinner fainted
- **b)** impossibility of *stacking*; non-restrictives do not allow stacking (cf. Jackendoff 1977, Smits 1988, Platzack 1997, Alexiadou et al. 2000)):<sup>6</sup>
- (35)a.\*The rumor that Fred was happy, that he was in Paris, that he could see ghosts
  - b. \*Sam Bronowski, who took the qualifying exam, who failed it, wants to retake it. (McCawley 1988, 419)
- c) Extraposition: clausal "complements" of Ns cannot be extraposed (cf. (36a)), again in line with non-restrictives (pace de Vries 2006), cf. the contrast in (37a), from Bulgarian, and in (37b), from English:<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> Conversely, non-restrictives precede restrictives in head-final languages (cf. Cinque 2008,116 and fn.25).

<sup>&</sup>lt;sup>6</sup> It is occasionally claimed that also non-restrictives allow stacking (Lehmann 1984:197ff, Grosu and Landman 1998, de Vries 2002, 197, Kempson 2003, and Potts 2005, contra McCawley 1998). However, the examples adduced as evidence for that (see, for example, (i)) appear to be cases of asyndetic coordination rather than "stacking" proper:

<sup>(</sup>i) The sole, which I caught yesterday, which was caught in Scotland, was delicious. (Kempson 2003, cited in Potts 2005:101) As opposed to stacked restrictive relatives (whose semantics is not equivalent to a coordination of the two relatives. See (6)c), here the two relative clauses can be coordinated salva veritate.

<sup>&</sup>lt;sup>7</sup> The same contrast is found in German - cf. Haider 1997, 134 – here, too, restrictives preceding a nominal *that*-complement can be extraposed, while the *that*-complement cannot, sharing the behavior of a non-restrictive.

De Vries (2002, 190) however notes that non-restrictive relative clauses in Dutch can be extraposed.

<sup>(</sup>i)a. Ik heb Joop gezien, [die twee zesters heeft].

<sup>&#</sup>x27;I have seen Joop, who has two sisters.'

b. Ritzen kwam op bezoek, [van wie laatst een schaamteloos boek over ministerschap has verschenen]. Ritzen came on visit by whom lately a shameless book on ministership is appeared

<sup>&#</sup>x27;Ritzen came on a visit, by whom a shameless book on ministership has been published recently.'

- (36) a. \*Novinata e neverojatna, če Ivan e arestuvan.
  - b. Novinata če Ivan e arestuvan e neverojatna.
     news-the that Ivan is arrested is unbelievable 'The news that Ivan is arrested is unbelievable'
- (37) a \*Maria toku-što pristigna, kojato ti iskaše da vidiš Cf. Maria, kojato ti iskaše da vidiš, toku-što pristigna Maria who you wanted to meet just arrived
  - b \*Marcia has just arrived, who you wanted to meet Cf. Marcia, who you wanted to meet, has just arrived

# 3.3 Differentiating finite clausal "complements" of Ns qua reduced non-restrictive relatives from appositions The term "apposition" covers a number of distinct phenomena, as McCawley (1998<sup>2</sup>), Acuña-Fariña (2000), De Vries (2002), Heringa (2011) have shown. Here, we follow (pace Acuña-Fariña 1999) Burton-Roberts (1975) and McCawley (1998<sup>2</sup>) in reserving the term "apposition" for those structures which can be introduced by *namely*.

# Relevant properties of appositions

- i) Cannot be paraphrased with who/which is.
- (38) a. A recent winner of the IL state lottery, Albert Swanson, has announced that he plans to move to Bermuda. (McCawley 1998: 467)
- b ?? A recent winner of the IL state lottery, who is Albert Swanson, has announced his plans to move to Bermuda (Acuña-Fariña 2000:7).
  - ii) Can appear extraposed
- (39) a Trima duši, a imenno Ivan, Petăr i Stojan, prisăstvaxa na săbranieto (adapted from McCawley 1998,468). Three persons, Smith, John and Peterson, attended the meeting.
  - b Trima duši prisastvaxa na sabranieto -- Ivan, Petar i Stojan (adapted from McCawley 1998,468). Three persons attended the meeting: Smith, Jones, and Peterson.
  - iii) Can appear after the apposition marker namely
- (40) The recent winner of the IL state lottery, namely Albert Swanson, has announced that he plans to move to Bermuda

If true/identificational (*namely*) appositions do not allow for a substitution with a non-restrictive copular clause, and allow for extraposition, then the nominal "complements" we are talking about do not belong to this class. If so, we can account for Kayne's (2008,fn.32) observation that "clausal complements" of Ns cannot be introduced by *namely*.

- (41) \*Idejata, a imenno če zemjata e krăgla, ...
  idea-the, namely that the earth is flat, ...
  \*'The idea, namely that the earth is flat...'
  - 4. The nature of the predication relation underlying clausal "complements" of Ns.

The predication relation which we have argued underlies the finite "clausal" complement of Ns, repeated here as (42)

- (42)a. The claim that Fred didn't report his income.
  - b. The claim is that Fred didn't report his income (adapted on Moulton 2009,21)

appears not to be a canonical predication but an inverse one (in the sense of Moro 1997 and den Dikken 2006). "Whereas the two NPs in a predicational copular structure can be used in the same order in a small clause complement without *be* for a verb like *consider*, this is impossible for the two NPs in a [specificational] copular clause" (Heringa 2011,88, after Moro 2000).

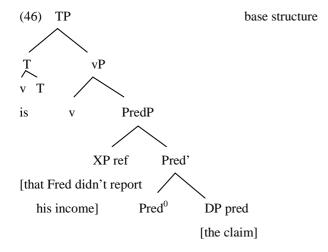
- (43) a. We consider the best candidate \*(to be) Brian (Den Dikken (153b), p. 244)

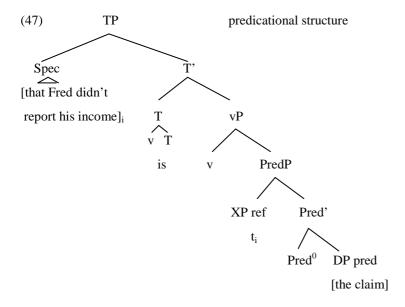
  [the best candidate] (predicate) is [Brian] (subject)

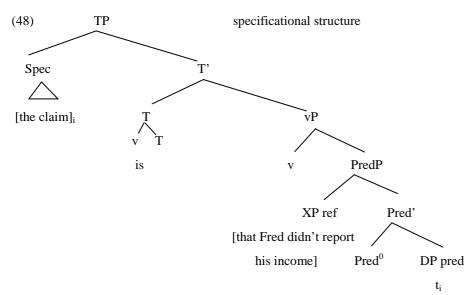
  (vs. We consider Brian (to be) the best candidate)
  - b. I consider the claim \*(to be) that Fred didn't report his income.[The claim] (predicate) is [that Fred didn't report his income] (subject)
- (44) a [[CP That Fred didn't report his income] Pred° [DP the/their claim]]

In the course of the derivation, the predicate nominal inverts with its CP subject via Predicate inversion, deriving (44b):

- (44) b. [DP the/their claim] is [CP that Fred didn't report his income]
- (45)a. [[CP] That Fred didn't report his income ] was [t Pred° [DP] the/their claim]] predicational b. [[DP] the/their claim] was [CP] that Fred didn't report his income] Pred° t]] specificational







Derivation of the specificational structure (stages represented informally):

a. is [that Fred didn't report his income] [the claim] = base structure

b. [the claim] is [that Fred didn't report his income] = specificational predication (predicate inversion)

c. [the claim]<sub>i</sub> which t<sub>i</sub> is [that Fred didn't report his income] = relativization of the external Head

d. [the claim] which is/PRO ØCopula [that Fred didn't report his income] = relative clause reduction

This may account for the fact (cf. Bošković and Lasnik 2003,534f, Kayne 2010,178) that the complementizer introducing the clausal "complement" of the N cannot easily delete (as opposed to that introducing the clausal complement of bridge verbs like *believe*):

(49) a. The belief ??(that) he is a spy is certainly false

b. They believe (that) he is a spy

For us, the marginality of (49a) without that (the belief he is a spy) is to be assimilated to that of

(50) \*?the belief is he is a spy

which underlies (49a), ultimately, possibly related to the nonommissibility of the complementizer *that* in subject position. Cf. (51)

(51) \*(that) he is a spy is well-known

# Refinements and possible further elaborations

- 1) the predicate DP in the specificational predication may actually target a position other than that of subjects, as apparently shown by the following French facts (provided by Marie Christine Jamet, p.c.), which show an expletive subject when the predicate is inverted:
- (52)a. Que Jean soit parti est un problème

that Jean is left is a problem

b. Le problème \*( c') est que Jean soit parti the problem this is that Jean is left

such a position may actually be Spec, Topic, as an instance of predicate topicalization:

- (53)a. That these nouns behave differently is my claim.
  - b. [CP that these nouns behave differently] is [DP my claim]
  - c.  $[T_{DPP}]_{CP}$  that these nouns behave differently  $[DP_i]_{TP}$  ti is  $[DP_i]_{DP}$  my claim
- 2) it may well be that the predication (whether canonical or inverse) involves two DPs, instead of a DP and a CP. See (54) and (55):
- (54)  $[_{DP}$  \*(To)  $[_{CP}$  oti efighe]] ine to provlima. (Roussou 1993: 78)

this that he left is the problem

(55) Tvărdenieto e (tova), če GERB sa izpolzvali parite za podkupi. claim-the is this that GERB have used money-the for bribes 'The claim's that [the party] GERB have used the money for bribes'

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