Complementation vs. Relativisation: A Syntactic Analysis of *That*

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Chapter 1. Introduction

1.1   Research Questions

This thesis will investigate whether the *that* that occurs in English relative clauses is the same

element as the *that* that occurs in English complement clauses. For the rest of this paper, I will

refer to the first type of *that* as 'relative *that*', and to the second type of *that* as 'complement

that'. This study will be carried out within the framework of generative syntax. On the one

hand, several scholars posit that relative and complement clauses indeed contain the same

element. However, there is no consensus on the exact nature of this element. One possibility,

held by De Vries (2002), Roberts and Roussou (2003), Andrews (2007), and Franco (2012), is

that both complement clauses and *that*-relatives, unlike *wh*-relatives, contain a

complementiser rather than a relative pronoun. Alternatively, Kayne (2010) claims that *that* is

a relative pronoun regardless of whether it occurs in a relative or complement clause, and

proposes to treat all complementation as relativisation (p. 190). On the other hand, there are

scholars (van der Auwera, 1985; Hudson, 1990; Sag, 1997; Boef, 2012) that propose to treat

both occurrences of *that* as separate elements. From this viewpoint, *that*-relatives and *wh*-

relatives are usually assumed to contain a relative pronoun, whereas complement clauses

contain a complementiser. However, Van der Auwera (1985) presents an alternative view in

which relative *that* is not a true relative pronoun, but rather a "highly pronominal relativiser"

(p. 170). In other words, this thesis compares the syntactic structure and properties of *that*-

relatives, complement clauses, and *wh*-relatives, in order to determine the syntactic status of

relative and complement *that*. The research questions that I will attempt to answer are the

following: can relative *that* and complement *that* be analysed as the same element? If so, what

is their syntactic status, complementiser, or relative pronoun? If not, can relative *that* be

analysed as a relative pronoun, or is it a highly pronominal relativiser? And what syntactic

category does relative *that* belong to? My hypothesis is that relative *that* is not the same as complementiser *that*, but that it can be analysed as a relative pronoun like *who* or *which*. I base this hypothesis on the idea that *that*-relatives and *wh*-relatives have the same basic syntactic structure. I will analyse the arguments presented in the literature in order to discover which analysis of complement *that* and relative *that* best suits their syntactic behaviour. I will first provide a short introduction to the two approaches previously discussed, introducing their main arguments and the syntactic structures that illustrate their viewpoints. In Section 1.2. I will introduce the analysis of relative *that* and complement *that* as the same element, discussing both the complementiser and the relative pronoun analysis. In Section 1.3. I will introduce the analysis of relative *that* and complement *that* as separate elements, discussing the relative pronoun analysis of relative *that* held by Hudson (1990), Sag (1997), and Boef (2012), as well as Van der Auwera's (1985) alternative analysis.

1.2. Relative *that* and complement *that* as the same element

As mentioned in the previous section, the scholars in favour of the hypothesis that *that*-relatives and complement clauses contain the same element can be divided into two groups: those that analyse both elements as a complementiser, and those that analyse both elements as a relative pronoun.

One of the main arguments brought forward by those scholars who argue that relative and complement *that* are both complementisers, is the fact that *that*-relatives, unlike *wh*-relatives, do not allow pied-piping (Andrews, 2007, p. 218).

(1)   a. the man **with whom** I was speaking
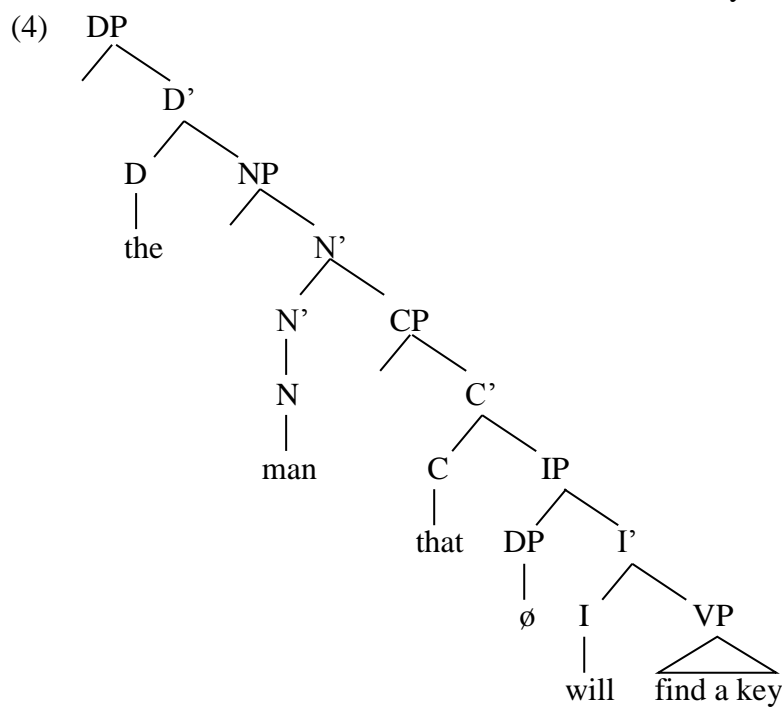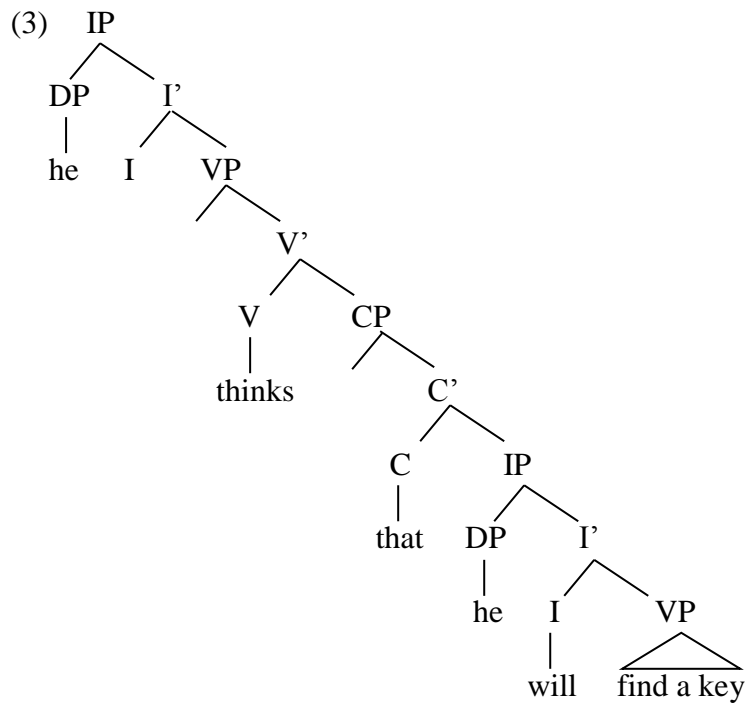   b. *the man **with that** I was speaking

Heck (2008) defines pied-piping as a construction in which the constituent that undergoes *wh*-movement is not itself a *wh*-phrase, but rather contains one (p. 3). Example (1a) illustrates this type of construction: the entire prepositional phrase *with whom* is moved rather than just the

wh-phrase. Example (1b) illustrates that *that*-relatives do not allow a preposition to be moved along with *that*, but that the preposition has to be stranded in its original position. The examples in (2) illustrate this construction for both *wh*-relatives and *that*-relatives.

(2) a. the man whom I was speaking **with**
     b. the man that I was speaking **with**

A possible interpretation of the fact that (2b) is perfectly fine whereas (1b) is ungrammatical, is that relative *that*, unlike relative pronouns such as *which* and *who*, does not undergo *wh*-movement, but is base generated as a complementiser just like complement *that*. However, it is important to note that this argument is more an argument against analysing relative *that* as a relative pronoun, rather than an argument in favour of analysing it as a complementiser. Nevertheless, by making a relative pronoun analysis less plausible, it does support an analysis of relative *that* as a complementiser

Turning to the syntactic structure of a *that*-relative, analysing relative *that* as a complementiser means that it occupies the head position within the CP. The examples below illustrate the standard syntactic structure of a complement clause (3), and that of a relative clause according to those who analyse relative *that* as a complementiser (4). Both examples provided use the standard X-bar structure.

(3) IP

```
        IP
       /  \
     DP    I'
      |   /  \
     he  I    VP
            \
             V'
            /  \
           V    CP
           |   /  \
        thinks    C'
                 /  \
                C    IP
                |   /  \
              that DP   I'
                   |   /  \
                  he  I    VP
                      |   /\
                    will find a key
```

(4) DP

```
        DP
       /  \
      D'
     / \
    D   NP
    |  /  \
   the    N'
         /  \
        N'   CP
        |   /  \
        N  C'
        |  / \
       N  C   IP
       |  |  /  \
      man that DP  I'
              |  /  \
              ø I    VP
                |   /\
              will find a key
```

The structures above are basically the same, both the complement clause and the relative clause being analysed as a CP with *that* in the C position. However, there are some small differences: firstly, in (3), the complement clause is the complement of the verb *thinks*, whereas in (4), the relative clause is an adjunct to the noun *man*; secondly, in (3), the complement clause has an overt subject *he* in Spec-IP, whereas the relative clause in (4) has a gap in subject position, which semantically corresponds to *the man*.

Kayne (2010) proposes that complement clauses and relative clauses indeed contain the same element, but analyses both instances of *that* as a relative pronoun rather than a complementiser. Kayne (2010) bases this hypothesis on the fact that demonstrative *this*, the proximal counterpart of demonstrative *that*, cannot occur in complement clauses or relative clauses (pp. 216-217).

(5)   *He thinks **this** he will find a key.
(6)   *the man **this** will find a key

Kayne (2010) proposes that *this* is "necessarily accompanied by a first person element", which prevents it from occurring in 'neutral' contexts (p. 211).

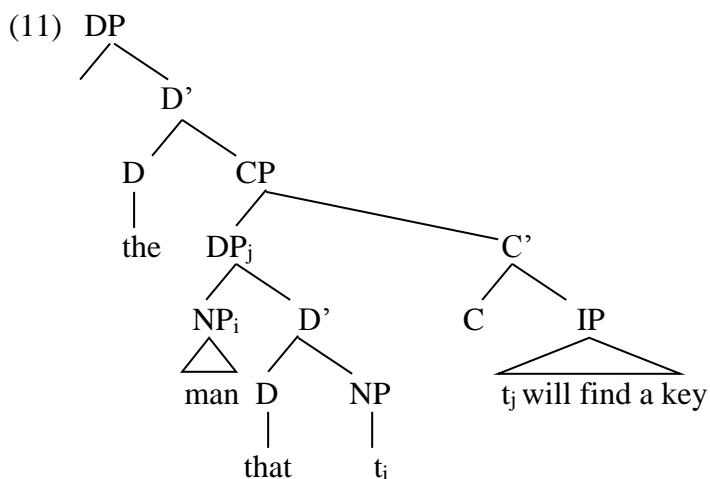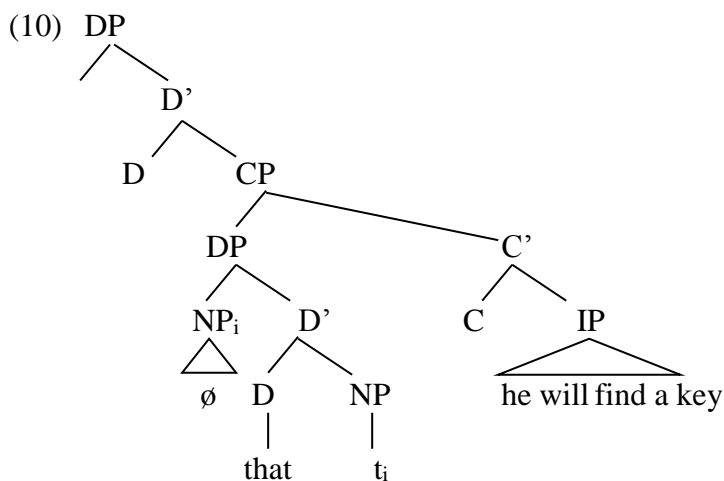(7)   The destruction of the bridge and that/*this of the car

In other words, *that* is neutral, meaning that is not specifically marked as distal, whereas *this* is marked as proximal, and *that* only receives its distal meaning in contrast with *this*. This contrast explains what happens in examples such as (7): *this* always expresses proximity to the speaker due to the "first person element" that accompanies it, and therefore cannot occur in neutral contexts, whereas *that* itself is neutral, and therefore does not pose a problem. Kayne (2010) argues that a conflict ensues in (6) because both the person element accompanying *this* and the noun *man* target the same position (p. 212). Kayne (2010) explains the ungrammaticality of (5) by proposing that all complement clauses, similarly to factives, contain a null 'head' noun (p. 216).

(8)   the **fact** that the man will find a key
(9)   the **fact** that you told me about

Example (8) is traditionally analysed as a noun with a complement clause, whereas (9) is considered a noun with a relative clause. Nevertheless, Kayne (2010) proposes to treat both (8) and (9) as relative structures (p. 213). In other words, following Kayne's (2010) analysis, all complement clauses contain a null 'head' noun, corresponding to *fact*, and they can all be analysed as relative clauses. This hypothesis explains why (5) is ungrammatical: the first

person element accompanying *this* is targeting the same position as the null 'head' noun. In other words, the absence of *this* in relative clauses and complement clauses supports the hypothesis that complement clauses involve relativisation.

As to the syntactic structure of a *that*-relative, Kayne's (2010) analysis is essentially an extension of his (1994) raising analysis of *wh*-relatives to *that*-relatives and subsequently to all subordinate clauses, analysing both relative *that* and complement *that* as a determiner with a raised NP (p. 200). In other words, *that* occupies the head position of the DP rather than that of the CP. The examples below illustrate the syntactic structure of a complement clause (10) and a relative clause (11) according to Kayne's analysis.

(10) DP
D'
D   CP
      DP   C'
   NP_i D'   C   IP
   ø   D   NP   he will find a key
        that t_i

(11) DP
D'
D   CP
the DP_j C'
      NP_i D'   C   IP
      man   D   NP t_j will find a key
            that t_i

The structures in (10) and (11) look highly similar, both the complement clause and the relative clauses are CPs functioning as the complement of the higher D, with a DP in Spec-CP, and *that* as the head of that DP. However, similarly to the previous analysis, they show

some significant differences: firstly, in (10) the higher D is empty, whereas in (11) it is occupied by the definite article *the*; secondly, in (10) the NP that is moved in front of *that* is covert, whereas in (11) the overt NP *man* is in Spec-DP; finally, in (10) the lower DP containing *that* appears to be base generated in Spec-CP, whereas in (11), this DP is moved from the subject position inside the IP to Spec-CP.

In other words, when analysing relative and complement *that* as the same element, one has to decide the nature of that particular element. Two options are illustrated above, namely analysing both instances of *that* as complementisers, based on pied-piping phenomena, or as a relative pronoun, based on the non-existence of *this* as a relative pronoun or complementiser.

1.3. Relative *that* and complement *that* as separate elements

Analysing the two instances of *that* as different elements basically boils down to accepting the traditional analysis of complement *that* as a complementiser, and adopting a different analysis for relative *that*. The analysis of relative *that* that has the strongest support from the academic literature is that of *that* as a relative pronoun, a position held by Hudson (1990), Sag (1997), and Boef (2012). However, an alternative approach is presented by Van der Auwera (1985), who proposes that relative *that* has stranded somewhere during its transition from a complementiser to a relative pronoun.

An important argument used by scholars who claim that relative *that* is a relative pronoun is that relative clauses are apparently unaffected by the *that*-trace effect found in complement clauses (Sag, 1997, p. 562).

(12)   the man$_i$ that I thought **(*that)** t$_i$ found a key
(13)   the man$_i$ **that** t$_i$ found a key

Kandybowicz (2006) defines the *that*-trace effect as a "subject-non-subject" asymmetry, preventing English subjects from being "long extracted across overt complementizers" (p. 220). In other words, English does not allow a subject trace to follow an overt

complementiser, as (12) illustrates. The example below illustrates that an object trace does not

pose any problems

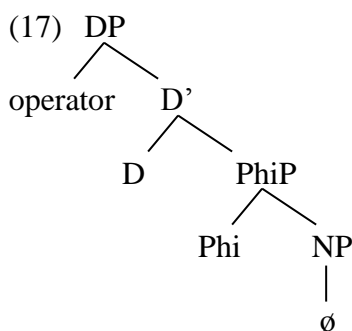(14)   the key$_i$ that I thought **(that)** the man found t$_i$

However, Kandybowicz (2006) states that the exact opposite can be observed in English

relative clauses: they only allow extraction of a subject if there is an overt complementiser (p.

220).

(15)   the man$_i$ ***(that)** t$_i$ found a key
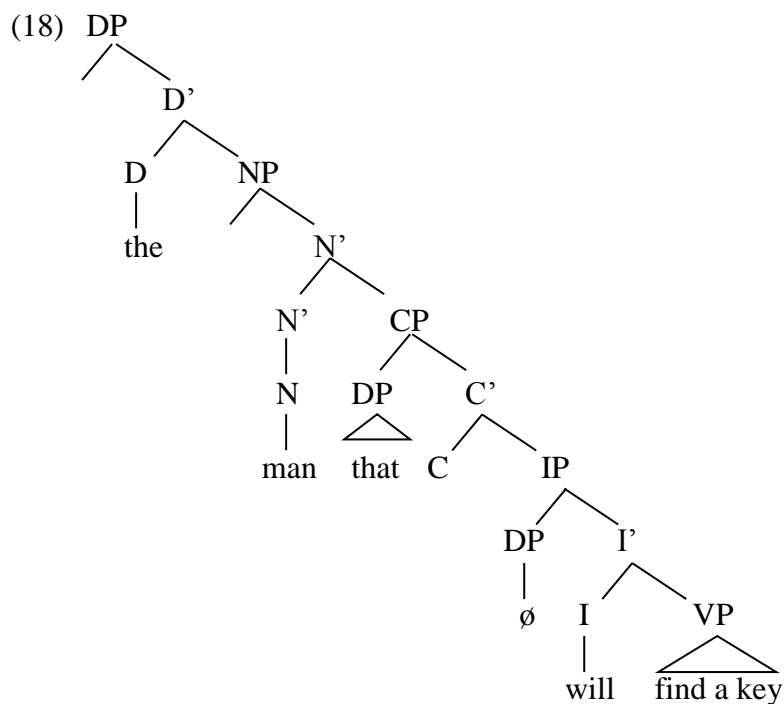(16)   the key$_i$ **(that)** the man found t$_i$

The examples above illustrate that relative clauses are not only unaffected by the *that*-trace

effect as illustrated by (12), but a similar context has the complete opposite result: relative

that must be overt when followed by a subject trace (15), while complement *that* must be

elided when followed by a subject trace (12). However, it must be noted that the *that*-trace

effect is mostly an argument against analysing relative *that* as a complementiser, rather than

an argument in favour of analysing it as a relative pronoun. Nevertheless, it works essentially

the same way as the pied piping argument, supporting an analysis of relative *that* as a relative

pronoun by making a complementiser analysis less plausible.

The syntactic structure of a *that*-relative containing a relative pronoun might look like

the one in (11) as proposed by Kayne (2010), but this is not the only possibility. Boef (2012)

proposes that relative pronouns are phrases rather than heads, analysing them as DPs (p. 44).

(17)   DP
         /\
    operator   D'
              /\
            D   PhiP
                /\
              Phi   NP
                     |
                     ∅

As illustrated above, Boef (2012) proposes that relative pronouns have two layers, the DP

layer, expressing (in)definiteness, and the PhiP layer, expressing phi-features, and that the

operator in Spec-DP is "the driving force behind movement to the left periphery" (p. 46). The structure of the entire relative clause will then be a synthesis of the structures in (4) and (11).

(18)

```
        DP
       /
      D'
     /  \
    D    NP
    |    /  \
   the      N'
          /    \
        N'      CP
        |      /  \
        N     DP   C'
        |     /\  /  \
       man  that C    IP
                     /  \
                   DP    I'
                   |    /  \
                   ø   I    VP
                       |    /\
                     will  find a key
```

The structure above is almost the same as the one in (4), except for the position and category of relative *that*. Similarly to Kayne's (2010) analysis illustrated by (11), relative *that* appears in Spec-CP. However, the noun *man* is not raised past *that* in this analysis, which would not be possible because Spec-DP is already occupied by an operator in (17). According to the hypothesis that relative and complement *that* are not the same element, the syntactic structure of a complement clause is likely to be identical to that illustrated in (3).

Van der Auwera (1985) proposes an alternative analysis of relative *that* that can be considered an intermediate approach between the complementiser and the relative pronoun hypothesis. He claims that relative *that* originated historically as a subordinator, but underwent a process of pronominalisation (p. 175). However, Van der Auwera (1985) argues that this process was never completed on the basis of the fact that relative *that*, unlike other relative pronouns, cannot appear in the pied piping construction, see (1b) (p. 173). If the category change had been completed, relative *that* would be expected to behave like other

relative pronouns. As a result, relative *that* ought to be analysed as a highly pronominal relativiser, rather than a true relative pronoun. In other words, the fact that relative *that* is not allowed in a pied piping construction supports Van der Auwera's (1985) analysis.

The interesting question is then what the syntactic structure of a relative clause looks like when relative *that* is not a complementiser nor a relative pronoun, but rather something in between. Given the fact that Van der Auwera (1985) considers relative *that* a relativiser rather than a mere subordinator, we can assume that the structure is closer to that in (18) than that in (4), meaning that relative *that* will likely appear in Spec-CP rather than C. The internal structure of relative *that* is more problematic. A possibility is that the syntactic structure of relative *that* is essentially the same as that in (17), but that the operator in Spec-DP is either absent or partially non-functional, resulting in the ungrammaticality of (1b). Furthermore, it is possible that relative *that* also lacks the PhiP layer, because it does not express phi features such as number or gender.

(19) a. the **man** that is walking there
      b. the **men** that are walking there
(20) a. the **woman** that is walking there
      b. the **women** that are walking there

The examples above illustrate how relative *that* does not take number or gender inflections regardless of whether the relativised constituent is masculine singular (19a), masculine plural (19b), feminine singular (20a), or feminine plural (20b). However, it is important to note that essentially the same applies to the relative pronouns *who* and *which*.

(21) a. the **man** who is walking there
      b. the **men** who are walking there
(22) a. the **woman** who is walking there
      b. the **women** who are walking there
(23) a. the **dog** which is walking there
      b. the **dogs** which are walking there

In other words, it is possible that all English relative pronouns lack the PhiP layer, and therefore do not have the syntactic structure illustrated in (17), but rather something like (24).

(24) DP
```
(24)   DP
      /  \
 operator  D'
          /  \
        D     NP
              |
              ø
```
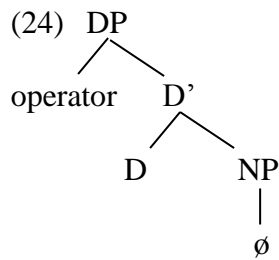
The syntactic structure of relative *that* would likely look highly similar to (24), but must either lack the operator altogether or have a different kind of operator, in order to account for the fact that relative *that* does not appear in the pied piping construction. It is likely that relative *that* does have some form of operator, because otherwise it would not be able to undergo *wh*-movement at all, which is typically assumed to be a characteristic of relative *that* as a relativiser.

1.4.   Summary

In other words, I will investigate whether relative *that* and complement *that* can be considered the same element or not, what syntactic category they belong to, and what this means for both their place inside a syntactic structure and their own internal structure. In Chapter 2. I will critically evaluate the arguments in favour of and against analysing both instances of *that* as the same elements, as well as the two positions regarding the nature of *that*. In Chapter 3. I will critically evaluate the arguments in favour of and against analysing relative *that* as a relative pronoun and complement *that* as a complementiser, as well as Van der Auwera's (1985) alternative approach. In Chapter 4. I will compare all positions regarding the nature of relative and complement *that* in order to provide a satisfactory answer to the research questions posed in Section 1.1.

Chapter 2. Relative *that* and complement *that* as the same element

2.1   Introduction

In this chapter, I will discuss the hypothesis that *that* in a relative clause and *that* in a complement clause are the same element. I will critically evaluate the arguments in favour of and against this hypothesis as provided in the literature, in order to find out whether it is tenable. As stated in Chapter 1., the hypothesis allows different interpretations of the syntactic status of *that*. On the one hand, there are scholars who propose to extend the traditional analysis of *that* in a complement clause to relative *that*, treating both as a complementiser (De Vries, 2002; Roberts & Roussou, 2003; Andrews, 2007; Franco, 2012). On the other hand, Kayne (2010) proposes the exact opposite: he analyses relative *that* as a relative pronoun, and extends this analysis to complement *that*, assuming a relative structure for all subordinate clauses. I will evaluate these two positions separately in order to decide which of the two is more accurate. In Section 2.2. I will discuss the complementiser analysis held by De Vries (2002), Roberts and Roussou (2003), Andrews (2007), and Franco (2012), and I will discuss Kayne's (2010) relativisation analysis in Section 2.3.

2.2   Relative *that* and complement *that* are both complementisers

An analysis of both instances of *that* as complementisers requires two lines of argumentation. Firstly, it is necessary to show that relative *that*, like complement *that*, functions as a subordinator rather than a relativiser. Secondly, relative *that* must occupy the same syntactic position as complement *that*, namely the head of CP. De Vries (2002), Roberts and Roussou (2003), and Franco (2012) all provide arguments supporting their claim that relative *that* and complement *that* can both be analysed as a complementiser. In Section 1.2.1, I will evaluate their arguments and provide possible counterarguments in order to put their position into

perspective. Van der Auwera (1985) and Sag (1997) both argue that relative *that* is not a complementiser. In Section 1.2.2., I will evaluate the arguments that they provide in order to shed light on the syntactic status of relative *that*.

2.2.1.   Arguments in favour of the complementiser analysis

The argumentation of De Vries (2002) relies on the idea that relative elements can have three possible functions: subordination, attribution, and gap construction (p. 155). Subordination is fairly straightforward, this function refers to the fact that relative clauses are always subordinate clauses rather than matrix clauses (De Vries, 2002, p. 155).

(1)   a. *That is walking there.
       b. I see the man that is walking there.

The examples in (1) shows that a relative clause cannot form a sentence on its own; it requires a head noun, *man*, to form a nominal constituent, which can then be inserted inside a matrix clause (1b). The subordination function is syntactically marked by the location of the relative element "at the border of the subordinate sentence" (De Vries, 2002, p. 157). Example (1b) illustrates this: *that* is at the very beginning of the subordinate clause *that is walking there*. Attribution refers to the relationship between the relative clause and the relativised noun, to which the relative clause is "attributed" (De Vries, 2002, p. 155). The attribution function is syntactically marked by "person, number, gender, and class" agreement with the relativised constituent (De Vries, 2002, p. 157).

(2)   a. der   Mann,   **der**   dort   lauft
          the.NOM.S.M   man   who.NOM.S.M   there   walks
          'the man who is walking there'
       b. die   Frau,   **die**   dort   lauft
          the.NOM.S.F   woman   who.NOM.S.F   there   walks
          'the woman who is walking there'
       c. die   Männer, **die**   dort   laufen
          the.NOM.PL   man.PL   who.NOM.PL   there   walk
          'the men who are walking there'

The German examples above illustrate the type of agreement that marks the attribution function: in (2a), the relative pronoun *der* agrees in number and gender with the relativised noun *Mann*, which is singular masculine; in (2b), *die* agrees with *Frau*, which is singular feminine, and in (2c), *die* agrees in number with *Männer*, which is plural. Note, however, that in the English translations the relative pronoun, *who*, does not show agreement with the relativised noun, because *who* does not inflect for number or gender. The third function, "Gap construction", refers to the relationship between the relativised constituent and the relative element that represents it inside the relative clause (De Vries, 2002, p. 155). In (3), the relativised constituent is *the man*, and the relative element is *whom*. This function is syntactically marked by "subordinate clause Case" (De Vries, 2002, p. 157).

(3)   the man **whom** I see
(4)   the man **whose** key I found

The examples above illustrate how the relative pronoun *who* shows Case agreement with the relativised constituent. In example (3), *whom* has accusative Case because the relativised constituent *the man* originates as the object of the verb *see* inside the relative clause. In example (4), *whose* has genitive Case because *the man* was originally part of the possessive construction *the man's key*. De Vries (2002) posits that all three functions must be (at least covertly) present in a relative clause, and that complementisers only fulfil the subordination function, whereas relative pronouns fulfil the attribution and gap construction functions (p. 161). This analysis therefore requires empty elements to fulfil the missing functions. De Vries' (2002) analysis of relative *that* as a complementiser is based on the assumption that relative *that* only fulfils the subordination function (p. 157). Considering the fact that *that* in a complement clause is basically a subordinator, narrowing down the function of relative *that* to subordination means that both instances of *that* have the same function. This is strong argument in favour of maintaining the same syntactic analysis for both relative and complement *that*. However, a downside of this argument is that it rests entirely on the premise

that subordination is the only function of relative *that*. As for the attribution function, it is true that relative *that* does not agree in number or gender with the nominalised constituent.

(5) a. the **man** that is walking there
     b. the **woman** that is walking there
     c. the **men** that are walking there

The examples above illustrate that relative *that* remains the same regardless of whether it is attributed to a singular masculine (5a), singular feminine (5b), or plural constituent. However, the English translations in (2) already showed that the relative pronoun *who* also does not inflect for number and gender. In other words, if the lack of number and gender agreement on *who* does not disqualify it as a relative pronoun, then the same should apply to *that*. It is therefore not entirely clear why De Vries (2002) considers relative *who* but not relative *that* to fulfil the attribution function. The third function, gap construction, provides stronger support for the complementiser analysis. Compare the following examples to those in (3) and (4)

(6) the man **that** I see
(7) *the man **that's** key I found

These examples illustrate why De Vries (2002) assumes the gap construction function to be absent in relative *that*. Example (6) illustrates that, contrary to relative *who* (3), relative *that* does not show accusative Case when the relativised constituent originates as the object of the verb. Example (7) illustrates that relative *that* cannot inflect for genitive Case either. The grammatical counterpart of (7) is example (4). However, linguistic evidence shows that Scots does have a separate genitive form for *that* (Van der Auwera, 1985, p. 155, ex. 20).

(8) the dog **that's** leg has been broken

Example (8) shows that in at least one English dialect, relative *that* can receive Case marking and should therefore be a relative pronoun rather than a complementiser. However, dialectal evidence such as that in (8) does not strongly contradict De Vries' argumentation, because it only provides insight into the syntax of Scots *that*. A possible interpretation is that relative *that* is a relative pronoun in Scots, but not in Standard English. In other words, De Vries

(2002) argues that relative *that* is a complementiser, just like complement *that*, rather than a relative pronoun because it lacks the two functions that relative pronouns fulfil in a relative clause, attribution and gap construction. However, it is unclear why relative *that* is claimed to lack the attribution function because a typical relative pronoun such as *who* also does not show number and gender agreement.

Roberts and Roussou (2003) argue that there is one lexical item *that* which can be analysed in two ways: they propose one analysis for demonstrative *that* (9), and another for complementiser *that* (10, 11), which according to them occurs in both complement and relative clauses (p. 111).

(9)   I see **that** man.
(10)   I think **that** I see the man.
(11)   the man **that** I see

Roberts and Roussou (2003) argue in favour of the idea that each instance of *that* in (1)-(3) is a version of the same lexical item by explaining the phonological, morphological, syntactic, and semantic differences between *that* in (9) and *that* in (10, 11) (pp. 111-114). In other words, they claim that relative *that* and complement *that* can both be analysed as a complementiser, but do not explicitly argue in favour of this position. Nevertheless, the shared properties of relative *that* and complement *that*, as opposed to the demonstrative, can be taken as arguments in favour of a parallel analysis. Firstly, both relative *that* and complement *that* can be phonologically reduced to [ðət], whereas the demonstrative cannot (Roberts & Roussou, 2003, p. 111). The fact that relative *that* shares this phonological property with complement *that* rather than with the demonstrative pronoun appears to support the hypothesis that relative *that* is a complementiser rather than a pronoun. However, a similar phonological contrast can be found in pronouns: *wh*-words that occur in relative clauses receive weaker stress than those that occur in interrogative clauses (Van der Auwera, 1985, p. 159)

(12)   the man **who** is walking there
(13)   **Who** is walking there?

On the basis of the phonological contrast between *who* in (12) and in (13), and *that* in (9) and

in (11), Van der Auwera (1985) concluded that English relative elements are simply

"inherently weakly stressed" (p. 159). In other words, the phonological reduction of relative

that does distinguish it from demonstrative *that*, but does not strongly support an analysis of

relative *that* as a complementiser rather than a relative pronoun. Moreover, relative *that* and

complement *that* are not entirely the same when it comes to their phonological properties:

complement *that* allows contrastive stress, whereas relative *that* does not (Van der Auwera,

1985, p. 159, ex. 31, 32)

(14)   I know **that** you mentioned the man, not **when**.
(15)   ?I know the man **that** you mentioned, not **whom**.

The construction in (14) contrasts the complementiser *that* with the *wh*-word *when* in terms of

meaning. The speaker is expressing the fact that he knows about the mentioning, but not when

it took place. However, the construction in (15) is only grammatical when interpreted as

"metalinguistic stress", emphasising a specific word that the speaker used instead of another,

rather than contrasting the meaning of *that* and *whom* (Van der Auwera, 1985, p. 159). Note

that the same applies to the relative pronoun *who*.

(16)   ?I know the man **whom** you mentioned, not **that**.

The contrast between (14) and (15, 16) poses a problem for the hypothesis that relative *that* is

a complementiser just like complement *that* rather than a relative pronoun such as *who*.

Secondly, unlike demonstrative *that*, neither relative *that* nor complement *that* has a plural or

proximal form (Roberts & Roussou, 2003, p. 111).

(17)   a. the people **that/*this** I saw
       b. *the people **those/these** I saw
(18)   a. I think **that/*this** I saw the people.
       b. *I think **those/these** I saw the people.

Roberts and Roussou (2003) explain the absence of number on relative and complement *that* by assuming that number corresponds to a NumP in the syntactic structure, which is assumed to be non-existent in the CP domain (p. 112). However, the absence of number inflections on relative *that* does not strongly support a parallel between *that*-relatives and complement clauses, because, as we have seen in the previous paragraph, relative pronouns also do not show number inflections. Thirdly, relative *that* and complement *that* share two important syntactic features: they take the same complement, an IP, and they can be omitted in certain contexts (Roberts & Roussou, 2003, p. 111).

(19)   the people$_i$ (that) [IP I saw t$_i$]
(20)   I think (that) [IP I saw the people]

These two syntactic properties distinguish relative *that* and complement *that* from demonstrative *that*, which takes an NP complement and cannot be omitted without either making the sentence ungrammatical (21a), or drastically changing the meaning of the DP (21b).

(21)   a. ***(That)** [NP man] is walking there.
       b. **(Those)** [NP men] are walking there.

The fact that relative *that* and complement *that* both take an IP complement and can be omitted supports the hypothesis that both are complementisers. However, the conditions specifying whether *that* can be omitted are different depending on whether it occurs in a relative or in a complement clause (Van der Auwera, 1985, p. 160).

(22)   the people$_i$ ***(that)** [IP t$_i$ saw me]
(23)   a. I think **(that)** [IP the people saw me].
       b. I think **(that)** [IP I saw the people].

The examples above illustrate that relative *that* can only be omitted if the constituent heading the relative is not the covert subject of the relative IP, see (9), whereas complement *that* allows deletion regardless of whether the subject of the matrix clause is also the subject of the

complement clause (23). Moreover, the *that*-trace effect results in obligatory deletion of complement *that* in contexts similar to that in (22).

(24)   the people$_i$ that I think **(*that)** [IP t$_i$ saw me]

Van der Auwera (1985) states that in terms of deletion, relative *that* is actually more compatible with relative pronouns than with complement *that* (p. 160).

(25)   the people$_i$ ***(who)** [IP t$_i$ saw me]

Example (25) illustrates that the relative pronoun *who* also does not allow deletion when the relativised constituent is the covert subject of the relative clause. I will discuss the *that*-trace effect in greater detail in Section 2.2.2. Due to the fact that relative *that* and relative *who* have the same deletion conditions, there is no way to tell whether an empty relative element corresponds to a *wh*-word or relative *that* (Van der Auwera, 1985, p. 160).

(26)   the people **(that/whom)** I saw

In other words, the deletion properties of relative *that* and complement *that* do not strongly support an analysis of both elements as a complementiser rather than a relative pronoun. Finally, Roberts and Roussou (2003) state that complementiser *that* is often said to be "void of semantic content", whereas demonstrative *that* conveys distance (p. 111). However, they argue that complementiser *that* does have semantic content, providing argumentation from Rizzi (1997) that both instances of *that* have a characteristic +declarative feature specification (p. 114). In other words, Roberts and Roussou (2003) argue that demonstrative *that* and complementiser *that*, including both relative and complement *that*, are essentially two realisations of the same lexical item on the basis of phonological, morphological, syntactic, and semantic evidence. However, they do not explicitly support their decision to analyse both complement and relative *that* as complementisers. The linguistic properties that they discuss also do not strongly support their assumption because of phonological and syntactic contrasts between relative and complement *that*, and strong parallels with relative pronouns.

Franco (2012) also defends the hypothesis that relative clauses and complement clauses both contain a complementiser and assumes that a process of nominalisation lies under the surface of a subordinate construction (p. 587). According to his theory, the example in (20) would have the following underlying construction.

(27) I have the **thought** that I saw the people.

Franco (2012) proposes that all subordinate clauses have to be licensed by a "light noun" or pronoun, which can be left unprononounced, such as in (20) (pp. 585-586). The idea that relative clauses and complement clauses have the same underlying structure supports the hypothesis that relative *that* and complement *that* can be analysed in the same way. Franco (2012) provides both synchronic and diachronic evidence in order to substantiate his analysis. His analysis is partially based on work by Manzini and Savoia (2003), who proposed that complementisers in Romance languages are "essentially nominal" because of the fact that Italian *che* can be both a *wh*-word (28) and a complementiser (29) (Franco, 2012 p. 584, ex. 24ab).

(28) **Che** giocattolo vuoi per Natale? (Italian)
what toy want.2SG for Christmas
'What toy do you want for Christmas?'

(29) So **che** vuoi dormire. (Italian)
know.1SG that want.2SG sleep
'I know you want to sleep.'

However, a problem with this type of evidence is that you first have to show that both instances of *che* in the examples above are the same element. Manzini and Savoia (2003) claim that the assumption that there are two separate elements in (28) and (29) is untenable because the occurrence of one word as both a *wh*-word and a complementiser is "a systematic phenomenon in Romance languages" (p. 88). Franco (2012) provides further synchronic evidence from Polish, which allows overt light nouns in relative clauses (30), clausal subjects (31a), and complement clauses (31b) (pp. 587-588, ex. 29b, 30ad).

(30)   dam   ci   **coś**,   co   ci   pomoże   (Polish)
         give-1SG   you   something   what   you   help
         'I will give you something that will help you.'

(31)   a. **to**   że   Maria   się   spóźniła   (Polish)
           this.NOM   that   Mary.NOM   self   late.3.SG.F.PAST
           zaskoczyło   Piotra
           surprised.3.SG.N   Peter.ACC
           'That Mary was late surprised Peter.'

         b. Piotr   wiedział   **(to)**   że   Maria   się   (Polish)
           Peter.NOM   knew.3.SG.M   (this.ACC)   that   Mary.NOM   self
           spóźni
           late.3.SG.FUT
           'Peter knew that Mary is going to be late.'

It is important to note that in Polish clausal subject such as (31a), both the light noun *to* 'this' and the complementiser *że* 'that' are obligatory, whereas in complement clauses such as (31b), the light noun is optional (Franco, 2012, p. 588). Franco (2012) also supports his theory with diachronic evidence from Old Italian, which allows complement clauses to be headed by the light noun *cosa* 'thing', accompanied by the complementiser *che* (p. 588-589, ex. 31a).

(32)   dà   per   consiglio   **cosa**   che   le   cose   grandi   (Old Italian)
         give.3SG   for   advice   thing   that   the   things   big
         si   debbian   seguitare.
         CL.IMP   must-3PL.SBJ   continue
         '(he) advises that big things must go on.'

Franco (2012) argues that the constructions found in Polish and Old Italian are also still present under the surface of English relative and complement clauses: every subordinate clause has to be licensed by a (possibly covert) light noun and must be marked by a complementiser (p. 586). In other words, rather than assuming that relative *that* is a relative pronoun with nominal features, Franco (2012) posits that the nominal features are present in an additional layer above relative *that*, containing the light noun.

     In conclusion, De Vries (2002), Roberts and Roussou (2003), and Franco (2012) provide different arguments in favour of analysing both relative *that* and complement *that* as a complementiser. De Vries (2002) argues that relative *that* only functions as a subordinator,

whereas relative pronouns fulfil the attribution and gap construction functions. However, the number and gender inflections that are supposed to mark the attribution function are not only absent on relative *that*, but also on English relative pronouns. Roberts and Roussou (2003) provide several linguistic properties that distinguish relative and complement *that* from demonstrative *that*, but fail to address some important contrasts between relative *that* and complement *that*, which appear to indicate a stronger link between relative *that* and relative pronouns. Franco (2012) proposes an analysis in which a subordinate clause contains a (possibly covert) light noun as well as a complementiser on the basis of synchronic and diachronic evidence.

2.2.2. Arguments against the complementiser analysis

Van der Auwera (1985) proposes that if relative *that* is the same element as the one that occurs in complement clauses, it cannot be responsible for expressing relativeness in relative clauses (p. 170). As a consequence, there must be an empty relativiser, corresponding to a *wh*-word, in a *that*-relative. This type of analysis is applied by many proponents of the claim that relative *that* is a complementiser rather than a relative pronoun. However, according to Van der Auwera (1985), it raises some important issues. Firstly, if *that* does not express relativeness, the proposed empty relativiser ought to be sufficient on its own (p. 170).

(33)   the man$_i$ ø I am speaking to t$_i$
(34)   *the man$_i$ ø t$_i$ is speaking to me

Example (34) illustrates the restriction of relative clauses that we have seen before, namely that relative clauses in which the relativised constituent is also the subject of the relative clause require an overt relativiser. *The man is speaking to me* is technically grammatically correct, but does not express relativeness. Van der Auwera (1985) claims that relative *that* must express relativeness because adding it to an example such as (34) allows a relative interpretation (p. 170). However, another possible interpretation, related to De Vries' (2002)

argumentation, is that an overt subordinator is required in (34). This also makes sense, because *the man is speaking to me* differs from *the man that is speaking to me* because it lacks both relativeness and subordination. In other words, the ungrammaticality of (34) does not necessarily mean that relative *that* expresses relativeness, and therefore does not rule out an analysis of relative *that* as a complementiser. Nevertheless, Van der Auwera (1985) argues that relative *that* expresses relativeness even in constructions such as (33), in which the relativised constituent is not the subject of the relative clause (p. 170). The first evidence that he provides is the fact that relative *that* can be "substituted by" a *wh*-word without problems in both types of construction (pp. 170-171).

(35) the man **that/whom** I am speaking to
(36) the man **that/who** is speaking to me

However, it is not completely clear whether a *wh*-word really replaces relative *that* in examples such as (35) and (36). If you assume that an empty relative operator is present in a *that*-relative, a more logical analysis is that a *wh*-word substitutes the empty operator rather than relative *that*, which is just deleted. Furthermore, relative *that* cannot occur alongside an overt *wh*-word (Van der Auwera, 1985, p. 171).

(37) a. *the man **who that** I am speaking to
      b. *the man **that who** I am speaking to

If the empty relativiser that occurs in a *that*-relative corresponds to a *wh*-word, the examples in (37) would be expected to be grammatically correct. Their ungrammaticality can be accounted for if relative *that* does express relativeness, which would make the *wh*-words in (37) redundant. Chomsky and Lasnik (1977) formulated the Doubly Filled Comp Filter in order to account for the ungrammaticality of (37a) and (37b): this filter states that an overt *wh*-phrase cannot occur alongside an overt complementiser and vice versa. In other words, this filter can explain why examples such as (37a) and (37b) are ungrammatical without having to assume that relative *that* expresses relativeness.

Sag (1997) presents the *that*-trace effect as a critical problem for the analysis of relative *that* as a complementiser (p. 462). In order to further investigate the *that*-trace effect, I have repeated the relevant examples.

(38)   the man$_i$ that I thought **(*that)** t$_i$ found a key
(39)   the man$_i$ ***(that)** t$_i$ found a key

The problem is that complement *that* cannot be overt if it is followed by a subject trace as a result of movement across the clause boundary (38), whereas relative *that* has to be overt if it is followed by a subject trace (39). In other words, the *that*-trace effect illustrated by the example in (38) is not only absent in a relative clause, but a similar construction has the exact opposite result. This syntactic contrast is a strong argument against analysing both instances of *that* as a complementiser. However, it was stated in Chapter 1. that Kandybowicz (2006) defines the *that*-trace effect as a restriction preventing long extraction of subjects across an overt complementiser (p. 220). Following this definition, it makes sense that examples such as (39) do not adhere to the *that*-trace effect, because the movement of the relativised constituent *the man* out of the subject position of the relative clause does not qualify as long extraction. However, it is not entirely clear why the *that*-trace effect only affects these particular contexts. Furthermore, the lack of long extraction in examples such as (39) might explain why relative *that*, as opposed to complement *that* in (38), is allowed to be overt, but it does not explain why relative *that* cannot be deleted.

2.3.   Relative *that* and complement *that* are both relative pronouns

Kayne (2010) argues that all subordination ought to be analysed as relativisation, and that therefore, both relative *that* and complement *that* are relative pronouns. Kayne's (2010) proposal is actually an adaptation of his (1994) raising analysis, in which he proposed two different analyses for *that*-relatives and *wh*-relatives. In his original analysis, relative *that* was analysed as a complementiser rather than a relative pronoun. In other words, Kayne (1994)

defended the same position as De Vries (2002), Roberts and Roussou (2003), Andrews (2007), and Franco (2012). In his new proposal, he first extends the analysis that he proposed for *wh*-relatives to *that*-relatives, and further to all subordinate clauses. In Section 2.3.1., I will evaluate the arguments that Kayne (2010) provides in favour of his claim and provide some counterarguments. In Section 2.3.2., I will discuss the arguments against Kayne's hypothesis. I will evaluate both the counterarguments that Kayne (2010) presents himself, as well as how he proposes to deal with these, and I will also evaluate the counterarguments provided by Franco (2012) and Boef (2012), who both argue that Kayne's (2010) analysis is untenable.

2.3.1.   Arguments in favour of the relative pronoun analysis

As was stated in Chapter 1., Kayne's (2010) main argument revolves around the absence of *this* in both complement and relative clauses.

(40)   *He thinks **this** he will find a key.
(41)   *the man **this** will find a key

Kayne (2010) proposes that unlike its distal counterpart, *this* has an obligatory "first person element", which prevents it from occurring in 'neutral' contexts such as (42) (p. 211).

(42)   the destruction of the bridge and **that**/***this** of the car

In other words, *this* is specifically marked as proximal by this element, whereas *that* is neutral, only receiving its distal interpretation when contrasted with *this*. Kayne (2010) accounts for the ungrammaticality in (41) by proposing that the "first person element" in *this* occupies Spec-DP, which, in his analysis of relative clauses, is already occupied by the noun *man* (p. 212).

(43) DP
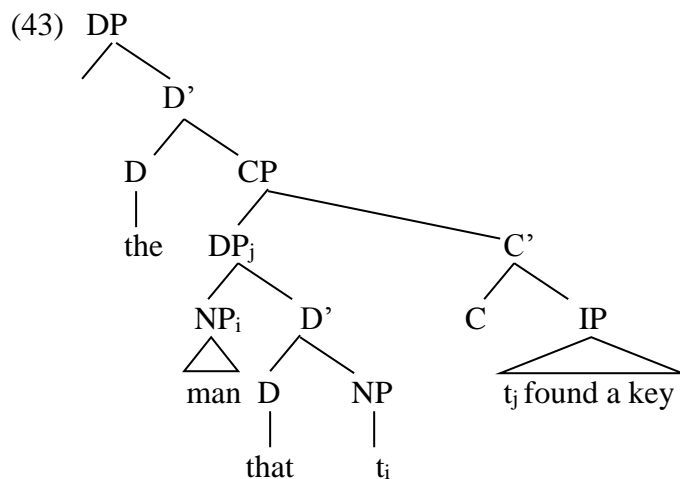
The tree structure in (43) illustrates Kayne's argument: *this* cannot occur in a relative clause because Spec-DP is already occupied by the raised noun *man*. Kayne (2010) then extends his analysis to complement clauses in order to account for the ungrammaticality of (40) (p. 213). He first turns to factives, which show the same contrast (Kayne, 2010, p. 213).

(44) the fact that/*this you told me about
(45) the fact that/*this the man will find a key

That you told me about in (44) is traditionally accepted as a relative clause, whereas *that the man will find a key* in (45) is generally analysed as a clausal complement. Kayne (2010) states that his analysis of relative clauses provides a proper explanation for the absence of *this* in (44), and that extending this analysis to examples such as (45) explains why *this* is not allowed in these constructions either (p. 213). However, a problem with Kayne's hypothesis is that in examples such as (44), *that* can be substituted by *which*, whereas this is not possible in examples such as (45) (Kayne, 2010, p. 213).

(46) the fact **which** you told me about
(47) *the fact **which** the man will find a key

Nevertheless, Kayne (2010) argues that (47) is ungrammatical because of a silent preposition in (45), similarly to the examples below (p. 213)

(48) a. the day **that** he found the key
      b. the day **on which** he found the key
      c. *the day **which** he found the key

This hypothesis is substantiated by specific contexts in which the assumed preposition is overtly present (Kayne, 2010, p. 213)

(49)   He **in fact** found the key.

In other words, the hypothesis that examples like (45) contain a silent preposition just like (48a) provides a plausible explanation for the ungrammaticality of (47) and therefore supports the proposal that (44) and (45) can both be analysed as relative clauses. Going back to the original examples, (40) and (41), Kayne (2010) extends his analysis of (45) to all subordinate clauses by assuming that all subordinate clauses contain a null 'head' noun, which he refers to as "FACT" (p. 216). Applying the same argumentation to all subordinate clauses, it logically follows that all subordinate clauses can be analysed as relative structures and that both relative *that* and complement *that* can be analysed as a relative pronoun.

Furthermore, Kayne (2010) provides several theoretical advantages of analysing both instances of *that* as a relative pronoun, besides accounting for the absence of *this* in both relative and complement clauses. Firstly, complement *that* (50), relative *that* (51a), and *who* (51b) do not allow topicalisation of the complement IP (Kayne, 2010, pp. 217-218).

(50)   ***The man found the key** I think that.
(51)   a. ***Found a key** I see the man that.
       b. ***Found a key** I see the man who.

Kayne (2010) argues that analysing both instances of *that* as relative pronoun allows for a simple explanation of all three of the examples above: relative pronouns do not allow stranding by IP-movement (p. 217). Secondly, complement *that*, relative *that*, and relative *who* do not allow stranding "under sluicing".

(52)   *I think that the man found the key, but I'm not sure **that**.
(53)   a. *I see the man that found the key, but I don't see the woman **that**.
       b. *I see the man that found the key, but I don't see the woman **who**.

Toosarvandani (2008) defines sluicing as an "elliptical construction in which" a constituent question is deleted and the interrogative element is left stranded (p. 677).

(54)   A man found a key. Guess **who (found a key)**?

Kayne (2010) argues that the ungrammaticality of (52) and (53ab) can also be easily accounted for when accepting the hypothesis that complement *that* is a relative pronoun. However, a more logical explanation would be that relative *that*, complement *that*, and relative *who* are not interrogative elements, and therefore do not qualify for sluicing under Toosarvandani's (2008) definition of the term. In other words, the ungrammaticality of (52) and (53ab) can be accounted for without assuming the same syntactical analysis for complement *that*, relative *that*, and relative *who*. Thirdly, Kayne (2010) states that his proposal allows two cross-linguistic generalisations presented by Keenan (1985) to be merged into one generalisation (p. 219). The first generalisation is that prenominal relatives do not have overt relative pronouns (Keenan, 1985, p. 160). I have provided an example of a prenominal relative in Mandarin Chinese (Comrie, 2008, p. 724, ex. 2).

(55)   Zhāngsān   māi-de   qìchē
       Zhangsan   buy-REL   car
       'the car that Zhangsan bought'

The relative clause *Zhāngsān māi-de* 'that Zhangsan bought' in (55) precedes the noun *qìchē* 'car', and a relative particle *de* is attached to the verb *māi* 'buy'. The second generalisation is that a typical complementiser does not occur in a prenominal relative (Keenan, 1985, p. 160). Kayne (2010) argues that, if you assume that *that* is the typical 'complementiser' of English clausal complements, then his proposal to treat both instances of *that* as relative pronouns makes the second generalisation redundant, because it can be reduced to the first one (p. 219). These three arguments emphasise the theoretical advantages of Kayne's hypothesis, resulting in a more economical theory. However, I do not consider these advantages strong evidence in favour of Kayne's analysis. Some of the shared characteristics that he presents can be accounted for in other ways and although economy is important to contemporary generative

linguistics, the fact that Kayne's analysis allows the merging of two generalisations does not make it drastically more economical than other theories.

2.3.2.   Arguments against the relative pronoun analysis

The counterarguments that Kayne (2010) himself presents are based on syntactic differences between relative *that* and *who* or *which* (p. 192), some of which have already been previously discussed. Firstly, the fact that relative *that* does not allow pied-piping poses a problem for the hypothesis that relative *that* is a relative pronoun like *who* or *which* (Kayne, 2010, p. 193). I have repeated the relevant examples.

(56)   a. the man **with whom** I was speaking
         b. *the man **with that** I was speaking

Pied-piping can be defined as a construction in which a constituent containing a *wh*-phrase is moved. In (56a), this constituent is *with whom*. A possible explanation of the ungrammaticality of (56b) is that *that* is not a *wh*-phrase, and therefore *with that* cannot undergo this type of movement. The fact that *that* is not a *wh*-phrase does not necessarily prevent it from being a relative pronoun. Secondly, unlike *who*, relative *that* does not occur in possessive constructions (Kayne, 2010, p. 193).

(57)   *the person **that's** key he found

As was previously noted, the possessive form *that's* is actually grammatically correct in the Scots dialect. Furthermore, Kayne (2010) points out that neither relative *which* nor demonstrative *that* have their own possessive form (pp. 193-194).

(58)   the dog whose/***which's** collar I found
(59)   a. that dog's collar
         b. ***that's** collar

Example (58) shows that relative *which* uses the genitive form of *who* in the possessive, rather than *which's*. This property of *which* decreases the significance of ungrammatical examples such as (57) as evidence against analysing *that* as a relative pronoun. Moreover, example (59)

shows that even demonstrative *that* does not have its own possessive form, and can only occur in possessive constructions when accompanied by a noun. Kayne (2010) argues that relative *that* is in fact a demonstrative pronoun such as the one in (59ab), which accounts for the ungrammaticality of (57) because demonstrative *that* does not have its own genitive form. Thirdly, unlike *who* or *which*, *that* is said to be unaffected by the human/non-human status of the relativised noun (Kayne, 2010, p. 193).

(60) a. the man **who**/that is walking there
      b. the dog **which**/that is walking there

Kayne (2010) provides the following examples in order to counter this assumption (p. 197, ex. 39-44).

(61) a. It was Mary who/*?**that** got me interested in linguistics.
      b. It was Mary who/?**that** I learned linguistics from.
      c. It was this book **that** got me interested in linguistics.
(62) a. I met somebody last night who/***that** told me that you were back in town.
      b. I met somebody last night **that** you've known for a long time
      c. I read something last night **that** would interest even you.
(63) a. your oldest friend, who/***that** I've been meaning to talk to,
      b. your last paper, ?**that** I've been meaning to reread,

Kayne (2010) argues that in a relative cleft structure such as those in (61), *that* is definitely ungrammatical if the relativised constituent is human and functions as the subject of the relative clause (61a), whereas it is significantly less problematic if this constituent functions as the object (61b), and perfectly grammatical if it is non-human (61c) (p. 197). A similar explanation applies to the examples in (62): relative *that* is blocked if the human indefinite pronoun *somebody* functions as the subject of the relative clause (62a). For the examples in (63), Kayne (2010) argues against the traditional assumption that *that* does not occur in non-restrictive relatives, and instead argues that although *who* and *which* are preferred in this construction, *that* is acceptable with a non-human antecedent (63b) (p. 197). In other words, the examples in (61)-(63) provide evidence against the assumption that *that* is indifferent to the human/non-human contrast. However, it is important to note that the judgments in (61)-

(63) are Kayne's own, and might therefore not be completely representative. Nevertheless, Van der Auwera (1985) presented objective corpus evidence showing a significant preference for non-human antecedents in *that*-relatives (p. 153). Furthermore, the possessive relative pronoun *whose* also does not show gender agreement (Van der Auwera, 1985, p. 153).

(64)   a. The man whose book I found
        b. The dog whose collar I found

The examples above show that *whose* can refer to both human (64a) and non-human (64b) entities the same way that *that* can in (60). In other words, even if relative *that* is indifferent to the human/non-human distinction, this property ought not to disqualify it as a relative pronoun.

Franco (2012) provides counterevidence from several languages against Kayne's (2010) proposal that all subordinate clauses ought to be analysed as relative clauses, and that complement *that* and relative *that* are both relative pronouns (p. 567). Firstly, he states that there are languages in which relative clauses contain both a relative pronoun and a complementiser (p. 567). Synchronic evidence from two West Iranian languages, Persian and Zazaki, confirms his argument (Franco, 2012, pp. 576-578, ex. 13c, 14a).

(65)   cîrok-**a**   **ku**   wî   ji   min   re   got   (Persian)
        story-EZ.F   COMP   3SG.OBL   ADP   1SG.OBL   ADP   say.3SG.PST
        'the story that he told me'
(66)   o   camêrd-**o-k**   pi   ci   merdo   nino   (Zazaki)
        that   man-DEM.MASC.SG-COMP   father   his   died   not-comes
        'the man whose father died is not coming.'

The Persian example in (65) contains a so-called "Ezafe morpheme" *a*, developed from a demonstrative pronoun, linking the noun *cîrok* 'story' to the relative clause, as well as a complementiser *ku* (Franco, 2012, pp. 577-578). In the Zazaki example in (66), the complementiser *−k* is suffixed to the distal demonstrative pronoun *o*, which is attached to the relativised noun (Franco, 2012, p. 578). Franco (2012) also provides diachronic evidence

from three older languages, Akkadian, Sogdian, and Old Icelandic (pp. 568-575, ex. 3, 9a, 11a).

(67) awīl-um   **ša**   ana   bull-îm   illik-**u**   (Akkadian)
     man-NOM   REL   to   extinguish.INF-GEN   he.went-SUB
     'the man that went to extinguish it'

(68) ōnō   martī   wiru   kunāt   **ke**-**ti**-šī   (Sogdian)
     that   man   husband   make.SUBJ.3SG   REL-COMP-her
     xwati   rēžāt
     herself   please.SUBJ.3SG
     'she shalt make that man her husband who might be pleasing to her.'

(69) ok   blótaðe   hrafna   þriá   **þá**   (Old Icelandic)
     and   worshipped   ravens   three.ACC.M.PL   those.ACC.M.PL
     es   hánom   skylldo   leið   visa.
     REL   him   should   way   show
     'and he worshipped three ravens, those that should show him the way.'

In the Akkadian example in (67), the relative pronoun *ša* occurs alongside a subordinate marker *–u* on the verb *illik* 'he went' (Franco, 2012, pp. 569-570). Similarly, the Sogdian example in (68) contains both the relative pronoun *–ke* and the complementiser *–ti* (Franco, 2012, pp. 573-574). Finally, the Old Icelandic example in (69) contains a relative particle *es* as well as an inflected demonstrative pronoun *þá* (Franco, 2012, p. 575). Franco (2012) argues that the Old Icelandic evidence is the most crucial, because Kayne (2010) bases his argumentation on English, which is also a Germanic languages (p. 575). The fact that these languages allow complementisers to occur alongside pronominal elements in relative clauses is a strong argument against analysing all complementisers as relative pronouns. Secondly, there are languages in which the prototypical complementiser is "not determiner-like" (Franco, 2012, pp. 567-568). Franco (2012) presents synchronic evidence from Tukang Besi, Saramaccan, and African American English (pp. 580-584, ex. 17a, 22a, 23).

(70) no-'ita-'e   **kua**   no-kanalako   te   osimpu.   (Tukang Besi)
     3R-see-3OBJ   COMP   3R-steal   CORE   young.coconut
     'she saw that he had stolen the coconut.'

(71) I   taki   **tàa**   **fu**   a   naki   di   daga.   (Saramaccan)
     you   said   that(DECL)   fu   he   hits   DET   dog
     'you told/asked him to hit the dog.'

(72)   They told me **say** they couldn't get it.   (African American English)

In the Tukang Besi example in (70), the complement clause is introduced by the complementiser *kua*, which is "derived from a quotative verb" rather than a pronoun (Franco, 2012, p. 580). The Saramaccan complement clause in (71) contains two complementisers, *tàa*, an equivalent to the verb 'to say', and the particle *fu*, which is derived from English *for* (Franco, 2012, p. 583). Example (72) illustrates how African American English allows the verb *say* to be used as a complementiser as well, in a way similar to *kua* and *tàa*. Franco (2012) also presents more diachronic evidence from Akkadian (p. 580, ex. 18).

(73)   **kīma**   še'-am   lā   imur-**u**   atta   (Akkadian)
       COMP   barley-ACC NEG:DEP   3SG.received-COMP 2M.SG-NOM
       tīde
       2M.SG-know
       'You know that he didn't receive the barley.'

Example (73) shows that Akkadian also allows double complementisers: the verb is marked by the same subordinate marker *-u* that we saw in (67), and the complement clause is introduced by an additional complementiser *kīma*, which consists of a preposition *kī-* and an "emphatic particle" *–ma*. In other words, the fact that none of the complementisers in (70)-(73) are of pronominal origin contradicts the hypothesis that all complementisers are actually relative pronouns. However, the linguistic evidence that Franco (2012) presents only contradicts a universal analysis of subordination as relativisation, and does not provide strong evidence against analysing relative *that* and complement *that* as relative pronouns in English.

Boef (2012) also provides arguments against Kayne's proposal to analyse all subordination as relativisation, emphasising some problematic contrasts between complement clauses and relative clauses. Firstly, as mentioned in Chapter 1., complement clauses are complements whereas relative clauses are adjuncts, which causes some interesting contrasts in their syntactic behaviour.

(74)   *Which claim that he found a key was he referring to?

(75)   Which claim that you told me about was he referring to?

The examples above illustrate that complement clauses do not allow an interrogative construction in which the head noun is questioned (74), whereas this is completely unproblematic for traditional relative clauses (75) (Boef, 2012, p. 203). An additional contrast surfaces in languages such as Dutch (Boef, 2012, pp. 203-204, ex. 339ab, 340ab).

(76) a. Jan   heeft   beweerd   **dat zij   zou   komen**.
         Jan   has   claimed   that she   would   come
     b. *Jan   heeft   **dat zij   zou   komen** beweerd
         Jan   has   that she   would   come   claimed
         'Jan claimed that she would come.'
(77) a. Zij   heeft   de   bewering **die Jan deed** gehoord.
         she   has   the   claim   that Jan   did   heard
     b. Zij   heeft   de   bewering gehoord   **die Jan deed**.
         she   has   the   claim   heard   that Jan   did
         'She has heard the claim that Jan made.'

The examples above illustrate how Dutch complement clauses (76) have to undergo extraposition, whereas Dutch relative clauses (77) can either extrapose or remain in their original position (Boef, 2012, p. 203). Secondly, Boef (2012) presents several syntactic differences between factive and non-factive predicates (p. 204).

(78)   a. I regret **having** found the key.
       b. *I believe **having** found the key.
(79)   a. I regret **it** that I have found the key.
       b. *I believe **it** that I have found the key

The examples in (78) illustrate that factive predicates (78a) allow a gerund object whereas non-factive predicates (78b) do not. The examples in (79) illustrate how factive predicates (79a) allow a construction where the pronoun *it* occurs between the verb and the following clause, whereas this construction is ungrammatical for non-factives (79b). Thirdly, Boef (2012) argues that Doubly Filled Comp phenomena pose a problem for Kayne's hypothesis (p. 205). Note that Boef (2012) is referring to examples of languages such as Dutch and French, in which the Doubly Filled Comp Filter introduced in Section 2.2.2. does not prevent

the co-occurrence of a relative pronoun and a complementiser. Other examples of this type of construction are (65-69) presented by Franco (2012). Boef (2012) argues that following Kayne's (2010) analysis, these constructions would have to contain two relative pronouns (p. 205). Finally, Boef (2012) states that complement *that* traditionally occupies the C position on the basis of evidence from V2 languages (p. 194).

(80) a. Ik denk   dat ik de   man zie
          I think   that I the   man see
      b. *Ik denk   dat ik **zie** de   man
          I   think   that I see   the   man
      'I think that I see the man'

The examples in (80) illustrate how a V2 language like Dutch does not allow the V2 word order in a complement clause (80b), but has OV word order instead (80a). Boef (2012) provides an explanation for the restriction illustrated by (80b): in a sentence with V2 word order, the verb (*zie*) moves from the V into the C position, but in (80b) this movement is blocked because the C position is already occupied by the complementiser (*dat*) (p. 194). In other words, the word order patterns of V2 languages such as Dutch provide strong evidence that complement *that* occupies the C position and is therefore a complementiser rather than a relative pronoun.

2.4. Summary

In this chapter, I have discussed the hypothesis that relative *that* and complement *that* are the same element, as well as two possible analyses of these elements. On the one hand, the analysis of both instances of *that* as a complementiser is supported by their syntactic function (De Vries, 2002), linguistic contrasts with demonstrative *that* (Roberts & Roussou, 2003), and the assumption of a light noun containing nominal features (Franco, 2012). Nevertheless, counterarguments can be found in the relativeness of relative *that* and the *that*-trace effect. On the other hand, the main advantage of analysing both instances of *that* as relative pronouns is

that it accounts for the absence of *this* as a relative pronoun, and allows a more economical theory. However, there are several arguments against this analysis, including linguistic contrasts between relative *that* and *who* and *which*, synchronic and diachronic evidence from several languages, and contrasts in syntactic behaviour. On the basis of the arguments and counterarguments presented, I conclude that the analysis of relative *that* and complement *that* as the same element is tenable. However, I claim that if they are the same element, they must be both complementisers rather than relative pronouns, because the theoretical advantages of Kayne's analysis do not outweigh the problems discussed in Section 2.3.2.

Chapter 3. Relative *that* and complement *that* as separate elements

3.1   Introduction

In this chapter, I will discuss the hypothesis that relative *that* and complement *that* are not the same element. I will critically evaluate the arguments in favour of this analysis that are provided in the literature, in order to investigate whether this hypothesis is tenable, and whether it can be considered superior to the one discussed in Chapter 2. or vice versa. Assuming that relative *that* and complement *that* are two different elements basically boils down to an analysis that combines the two positions discussed in Chapter 2., namely an analysis in which complement *that* is a complementiser, whereas relative *that* is a relative pronoun. Hudson (1990), Sag (1997), and Boef (2012) all defend this analysis. Van der Auwera (1985) proposes a slightly different analysis, in which relative *that* is not a relative pronoun, but only a "highly pronominal" relativiser. In Section 3.2. I will evaluate the arguments in favour of and against analysing complement *that* as a complementiser and relative *that* as a relative pronoun. In Section 3.3. I will discuss Van der Auwera's (1985) analysis.

3.2   Relative *that* is a relative pronoun and complement *that* is a complementiser

In order to defend an analysis of relative *that* as a relative pronoun and complement *that* as a complementiser, two lines of argumentation are required. Firstly, it is necessary to show that the former functions as a relativiser, whereas the latter only functions as a subordinator. Secondly, relative *that* must be pronominal, syntactically behaving like a D or a DP. Hudson (1990) provides arguments supporting this position. Boef (2012) mainly discusses Dutch relative pronouns and though she considers English *that* to be a relative pronoun, she does not explicitly in favour of this assumption. As stated in Section 2.3.2., she does provide

arguments in favour of analysing complement *that* as a complementiser. In Section 3.2.1. I will evaluate Hudson's (1990) arguments and provide possible counterarguments in order to put this position into perspective. I will also provide some additional arguments of my own as well as some that have been previously discussed, and I will briefly discuss the analysis that Boef (2012) proposes for relative *that* and complement *that*. In Section 3.2.2. I will evaluate the arguments against analysing relative *that* as a relative pronoun and complement *that* as a complementiser. Most of the arguments against this analysis focus on the analysis of relative *that* as a relative pronoun. Van der Auwera (1985) argues that relative *that* is a "highly pronominal" relativiser, whereas De Vries (2002) and Andrews (2007) both argue that relative *that* is a complementiser. I will critically evaluate their arguments in order to clarify the syntactic status of *that*.

3.2.1.   Arguments in favour of the relative pronoun/complementiser analysis

Hudson (1990) argues that relative *that* ought to be analysed as a relative pronoun on the basis of co-ordination evidence (p. 396).

(1)   a. the man **who I am speaking to** and **that found a key**
       b. the man **that I am speaking to** and **who found a key**

The examples in (1) show that *that*-relatives and *wh*-relatives can be co-ordinated freely. It is generally accepted that a co-ordination construction requires a parallel syntactic structure. In other words, the grammaticality of the examples in (1) appears to suggest that *that*-relatives and *wh*-relatives share the same syntactic structure, and that therefore relative *that* should be analysed in the same way as relative *who*. A possible counterargument is that it is not necessarily the two relative clauses that are being co-ordinated in (1ab).

(2)   a. the man **[who I am speaking to]** and **[that found a key]**
       b. the man **[that I am speaking to]** and **[who found a key]**
(3)   a. [the man who I am speaking to] and [(**the man**) that found a key]
       b. [the man that I am speaking to] and [(**the man**) who found a key]

The examples in (2) illustrate the analysis of (1ab) that Hudson (1990) presumes, in which the *wh*-relative and the *that*-relative are being co-ordinated. The examples in (3) illustrate an alternative analysis of (1ab) in which two DPs are co-ordinated, but in the second DP *the man* is omitted. A semantic problem with the analysis illustrated by (3) is that these can be interpreted as two different people: one man that is being spoken to and another that has found a key. However, the original examples in (1) are definitely referring to one and the same person, who is both being spoken to and has found a key. In other words, it is unlikely that (3ab) provides the right analysis of (1ab), and we can assume that the examples in (1) indeed contain a co-ordination construction of two relatives. However, the fact that *that*-relatives and *wh*-relatives have the same underlying structure does not necessarily mean that relative *that* is a relative pronoun. Another plausible analysis is that *that*-relatives and *wh*-relatives can both be analysed as CPs, but that *that*-relatives have an overt complementiser, whereas *wh*-relatives have an overt relative pronoun in Spec-CP. In other words, the grammaticality of (1a) and (1b) does not strongly support the analysis of relative *that* as a relative pronoun because co-ordination only requires both relatives to be CPs. Hudson (1990) points out that zero relatives cannot freely coordinate with *that*-relatives or *wh*-relatives (p. 396).

(4)   a. *the man **I am speaking to** and **that found a key**
        b. *the man **I am speaking to** and **who found a key**

Given the discussion above, this would imply that relatives without an overt relative pronoun (or complementiser) have a different syntactic structure than *that*-relatives or *wh*-relatives. However, it is traditionally assumed that the syntactic structure of zero relatives is the same as that of a *that*-relatives or *wh*-relatives except for the lack of relative *that*, *which*, or *who*. A plausible explanation is that the syntax of a relative clause becomes restricted when it does not contain an overt relative pronoun (or complementiser). We have already seen that such relative clauses are only allowed when the subject of the relative clause is overt.

(5)   a. the man$_i$ ø **I** saw t$_i$
        b. *the man$_i$ ø **t$_i$** saw me
(6)   a. the man$_i$ ø **I** am speaking to t$_i$
        b. *the man$_i$ ø **t$_i$** is speaking to me

The examples above show that zero relatives are completely unproblematic when the relativised constituent originates as the object of the relative clause (5a), or as the complement of a preposition (6a). However, when the relativised constituent originates as the subject of the relative clause (5b, 6b), there must be an overt relative pronoun (or complementiser). Sag (1997) notes two other restrictions that apply to zero relatives. Firstly, unlike *that*-relatives, they typically do not allow extraposition (Sag, 1997, p. 465, ex. 76ab).

(7)   a. A letter was received **that** Jones would be upset by.
        b. ?A letter was received Jones would be upset by.

Although the example in (7b) is not strictly ungrammatical, a *that*-relative (7a) is strongly preferred in such a construction. Secondly, unlike *that*-relatives and *wh*-relatives, zero relatives are restricted to the first position in case of relative clause "stacking" (Sag, 1997, p. 465, ex. 79c, 80cd).

(8)   a. the book [**that** I like] [**which** everyone else in the class hates]
        b. the book [**which** I like] [**that** everyone else in the class hates]
        c. the book [I like] [**which** everyone else in the class hates]
        d. *the book [**that** I like] [everyone else in the class hates]

There may be a pragmatic explanation for the ungrammaticality of (8d): without an overt relative pronoun (or complementiser), the second relative clause may not be immediately identified as a relative clause, whereas the other examples are all unproblematic. In other words, it is possible that relative clauses that are stacked upon existing relative clauses have to be marked as a relative clause by an overt relative pronoun (or complementiser) to accommodate processing. The examples in (4-8) show that zero relatives display several syntactic restrictions. The fact that all these restrictions can be solved by adding relative *that*, *which*, or *who*, supports the hypothesis that relative *that* is a relative pronoun too. In other

words, an analysis of relative *that* as a relative pronoun allows for a simple explanation of the restrictions illustrated by examples (5-8): only relative clauses with an overt relative pronoun allow co-ordination, trace subjects, extraposition, and stacking.

I will present additional arguments in favour of this position, related to syntactic parallels between *that*-relatives and *wh*-relatives, and contrasts between *that*-relatives and complement clauses. Firstly, relative clauses always appear inside a DP and require a relativised constituent, whereas complement clauses do not.

(9)   **the man** that found a key
(10)   that the man found a key

In (9), the relative clause *that found a key* is attributed to *the man*, and is therefore part of the DP *the man that found a key*, whereas in (10) the DP *the man* simply appears inside the complement clause *that the man found a key*. A related contrast is that relative clauses always have a missing constituent, a gap, whereas complement clauses do not. In (9), there is a subject gap between *that* and *found*. Secondly, relative clauses are traditionally analysed as adjuncts while complement clauses are, obviously, complements. The examples below illustrate some syntactic properties that reveal the difference.

(11)   a. the man [that/who I like]
       b. the man [that/who I like] [**that/who was late**]
       c. the man [**that/who was late**] [that/who I like]
(12)   a. I think [that I like the man]
       b. *I think [that I like the man] [**that the man was late**]
(13)   a. I think [**that I like the man**] [that/who was late]
       b. *I think [that/who was late] [**that I like the man**]

The examples in (11) illustrate that *that*-relatives and *wh*-relatives can be stacked onto each other (11b) and that these stacked relatives can occur in any order (11c), which are both characteristics typical of adjuncts. Example (12b) illustrates that unlike relative clauses, complement clauses cannot be stacked. The examples in (13) contain both a complement clause *that I like the man* and a relative clause *that/who was late*, and illustrate how the

complement clause must always directly follow the verb (13a) and that the two cannot be switched (13b). In other words, the examples above show that the syntactic behaviour of relative clauses and complement clauses indicates their basic role in the matrix clause. The fact that *that*-relatives and *wh*-relatives both function as adjuncts, whereas complement clauses function as complements supports an analysis of relative *that* as a relative pronoun rather than a complementiser. It is important to note that complement *that* is not restricted to complement clauses.

(14) **That I like the man**, is obvious.

The subordinate clause *that I like the man* in (14) functions as a clausal subject rather than a complement clause. In contrast, relative clauses cannot function as a subject on their own.

(15) ***That was late**, is obvious
(16) **The man that was late**, has found a key.

The examples above illustrate that a relative clause cannot be a subject (15), but that it must be part of a DP subject (16). A possible counterargument can be found in free relatives, which appear to function as a subject perfectly fine without a noun head.

(17) **Whoever was late**, has found a key.

A possible explanation of the grammaticality of (17) is that *whoever* essentially corresponds to *the man* in (16), allowing free relatives such as (17) to appear in subject position. Finally, it was already stated in the previous chapter that relative *that* can apparently elide under the same circumstances as the relative pronouns *who* and *which*.

(18) a. the man **that/who/ø** I see
      b. the dog **that/which/ø** I see
(19) a. the man **that/who/*ø** is walking there
      b. the dog **that/which/*ø** is waking there

The examples above illustrate that a relative clause with an overt subject (18) can either contain relative *that*, *who*, or *which*, or no relative element at all, whereas a relative clause without an overt subject has to contain either relative *that*, or a *wh*-word. A possible

explanation of this linguistic phenomenon is that relative *that* is a relative pronoun just like *who* or *which* and essentially fulfils the role of subject in examples such as (19ab). This explanation makes sense because English typically requires its clauses to have a subject. Similarly, it can then be assumed that in examples such as (18ab), relative *that* fulfils the role of direct object. A consequence of the fact that relative *that*, *who*, and *which* can elide in the same linguistic environments is that it is impossible to tell what element was deleted in a zero relative.
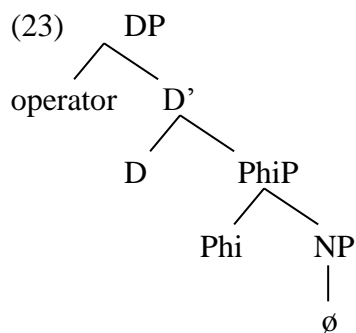
(20) a. the man ø I see
      b. the dog ø I see

The examples above can either be derived from a *that*-relative or a *wh*-relative because there is no way to tell what the elided element corresponds to. The fact that relative *that* displays the same deletion conditions as the relative pronouns *who* or *which*, and that the empty element in a zero relative can correspond to either relative *that* or a *wh*-word, provide strong evidence in favour of analysing relative *that* as a relative pronoun. It is important to note that complement *that* has completely different deletion conditions due to the *that*-trace effect.

(21) the people that I think **that/ø** I saw
(22) the people that I think ***that/ø** saw me

As example (22) illustrates, complement *that* is obligatorily deleted when followed by a covert subject due to relativisation, which is the exact opposite of the situation in (19ab). Note that complement *that* (18) has the same flexibility as relative *that* (21) when it comes to relativised objects. In other words, the *that*-trace effect appears to suggest that relative *that* is not a complementiser because complement *that* cannot be overt in a context in which relative *that* has to be overt.

Boef (2012) assumes that there are two separate lexical entries for relative *that* and complement *that*, although they are "diachronically related" (p. 178). On the one hand, Boef

(2012) argues that relative *that* is a relative pronoun in the form of a DP, which has the following structure.

(23)

```
        DP
       /  \
operator   D'
          /  \
         D    PhiP
             /   \
           Phi    NP
                   |
                   ø
```

The example above illustrates that according to Boef (2012), relative pronouns are DPs with an operator in Spec-DP, and an additional layer of phi-features. Boef (2012) argues that personal pronouns, unlike relative pronouns, only have a PhiP layer (p. 179). This explains why personal pronouns cannot appear as relative pronouns, because they lack the operator in Spec-DP.

(24)   *the man he will find a key

This lack of structure of personal pronouns can be supported by comparing them to demonstrative pronouns: the demonstrative pronoun *th-at* can be argued to have a more complex structure than, for instance, the personal pronoun *it* (Boef, 2012, p. 179). On the other hand, Boef (2012) analyses complement *that* as a complementiser on the basis of linguistic evidence from V2 languages, such as Dutch (pp. 193-194). I have repeated the relevant examples from Section 2.3.2.

(25) a. Ik denk   dat ik de   man zie
          I think   that I the   man see
     b. *Ik   denk   dat ik **zie** de   man
        I   think   that I see   the   man
     'I think that I see the man'

In V2 languages, the main verb always occurs in the second position of a main clause because it moves from the V position into the C position. However, this movement is impossible in complement clauses (25b) because the C position is already occupied by *dat*. In other words,

the fact that V2 word order does not appear in subordinate clauses supports the hypothesis that complement *that* is a complementiser. However, it must be noted that although the examples in (25) provide strong evidence that Dutch *dat* is a complementiser, it does not necessarily prove anything about the syntactic status of English *that*.

3.2.2.   Arguments against the relative pronoun/complementiser analysis

Van der Auwera (1985) presents various arguments used by scholars who oppose the analysis of relative *that* as a relative pronoun, and rebuts most of them, although he himself does not conclude that relative *that* is a true relative pronoun. Firstly, relative *that*, unlike other relative pronouns, is traditionally considered to not occur in non-restrictive relatives (Van der Auwera, 1985, p. 155).

> (26)   a. the man who/that found a key opened the door.
>   b. the man, who/**that** found a key, opened the door.

The examples above illustrate this linguistic phenomenon: the relative pronoun *who* can occur in both restrictive (26a) and non-restrictive (26b) relative clauses, whereas relative *that* only occurs in restrictive relative clauses (26a). As previously stated, Kayne (2010) argues that relative *that* can occur in non-restrictive relative clauses if the relativised constituent is non-human (p. 197). I have repeated the relevant examples.

> (27)   a. It was Mary who/*?**that** got me interested in linguistics.
>   b. It was Mary who/?**that** I learned linguistics from.
>   c. It was this book **that** got me interested in linguistics.
> (28)   a. I met somebody last night who/***that** told me that you were back in town.
>   b. I met somebody last night **that** you've known for a long time
>   c. I read something last night **that** would interest even you.
> (29)   a. your oldest friend, who/***that** I've been meaning to talk to,
>   b. your last paper, ?**that** I've been meaning to reread,

Van der Auwera (1985) argues that non-restrictive relative clauses require "morphological explicitness" because they are more independent than restrictive relative clauses, which explains the strong tendency to use the more explicit forms *who* or *which* over relative *that* (p.

155). In other words, relative *that* is not necessarily blocked in non-restrictive relative clauses, but a strong preference for *who* of *which* can definitely be observed. Moreover, even if relative *that* does not occur in contexts such as (26b), this does not prove that it is not a relative pronoun. Secondly, relative *that* cannot be followed by a reflexive pronoun (Van der Auwera, 1985, p. 156).

(30)   the man who/**that** himself found a key

The example in (30) illustrates that relative *that* cannot be followed by the reflexive pronoun *himself*, whereas this is no problem for *who*. Van der Auwera (1985) accounts for the contrast in (30) by assuming that *who* pairs better with reflexive pronouns such as *himself* or *herself* because they are all marked as human (p. 156). Furthermore, relative *that* can occur alongside reflexive pronouns perfectly fine when they do not follow *that* directly (Van der Auwera, 1985, p. 156).

(31)   the man who/that has found the key **himself**

In other words, relative *that* is less restricted than initially thought, and the ungrammaticality of (30) can be explained by the human/non-human contrast. Thirdly, in some contexts, relative *that* substitutes a combination of a preposition and *which*, rather than just *which* (Van der Auwera, 1985, p. 157).

(32)   a. the day **that** he found a key
      b. the day **on which** he found a key
(33)   a. the way **that** he found a key
      b. the way **in which** he found a key

The substitution pattern illustrated in (32) and (33) appears to contradict the analysis of relative *that* as a relative pronoun, because it replaces more than just the relative pronoun. Van der Auwera (1985) argues that there may be two different types of relative *that*, one that corresponds to a relative pronoun, and the one in (32a) and (33a), which appears to be adverbial rather than pronominal (p. 157). Finally, relative *that* does not occur in infinitival relatives (Van der Auwera, 1985, p. 166).

(34)   the box in which/**that** to store the keys

The example above shows that the relative pronoun *which* allows an infinitival relative clauses, whereas relative *that* does not. However, Van der Auwera (1985) provides two counterarguments. Firstly, relative pronouns are restricted when it comes to infinitival relative clauses (Van der Auwera, 1985, p. 166)

(35)   *a man who to find a key
(36)   *a key which to find

The examples above show that the relative pronouns *who* and *which* do not allow the relative clause to be infinitival if the relative pronoun functions as the subject (35) or object (36) of the relative clause. In other words, if the ungrammaticality of (35) and (36) does not disqualify *who* and *which* as relative pronouns, then the ungrammaticality of (34) ought not to disqualify *that* as a relative pronoun. Secondly, infinitival relative clauses only occur with prepositional objects, and do not allow preposition stranding (Van der Auwera, 1985, p. 166).

(37)   *the box which to store the keys **in**

Example (37) illustrates that the preposition *in* cannot strand in its original position, but has to move along with the relative pronoun, see (34). This movement is commonly referred to as pied piping, and is also not allowed in any *that*-relative.

(38)   the box in which/**that** I store the keys

Example (38) illustrates that even finite *that*-relatives do not allow pied piping movement. In other words, the ungrammaticality of (34) is due to relative *that* not allowing pied piping, rather than relative *that* not allowing an infinitival structure. In will discuss pied piping in greater detail in the next paragraph.

Andrews (2007) states it is "generally assumed" that relative *that* is not a relative pronoun because *that*-relatives do not allow pied piping, see (34) (p. 218). Heck (2008) characterises pied piping as a construction in which a constituent that is not marked by a *wh*-feature undergoes *wh*-movement, which is triggered by *wh*-marked constituent inside the

moved constituent (p. 3). The fact that *that*-relatives do not allow pied piping might be accounted for by the fact that relative *that*, unlike relative *who* or *which*, is not marked by a *wh*-feature. The question is then whether the lack of a *wh*-feature would disqualify relative *that* as a relative pronoun. Assuming that there is no *wh*-feature on relative *that* means that relative *that* cannot undergo any type of *wh*-movement, which poses a problem for an analysis of relative *that* as a relative pronoun.

(39)   the box **that** I store the keys in

Example (39) illustrates that *that*-relatives do allow preposition stranding. When analysing relative *that* as a relative pronoun, it must be assumed that it originates as the complement of the preposition *in* before moving to the front of the clause, leaving the preposition behind. However, if relative *that* does not have a *wh*-feature, it cannot undergo this type of movement. Going back to Boef's (2012) analysis of relative pronouns, the lacking *wh*-feature would likely correspond to the operator in Spec-DP, which is a crucial feature of a relative pronoun. In other words, if relative *that* does not allow pied-piping because it lacks an operator, it cannot be a relative pronoun. In other words, the fact that relative *that* does not occur in the pied piping construction poses a problem for the relative pronoun analysis. Sag (1997) states that the lack of pied piping is "the only real obstacle" for such an analysis, and provides the counterargument that *who* also does not allow pied piping (p. 463).

(40)   *the man with **who** I am speaking

Nevertheless, a problem with this argument is that *who* is only disallowed because it requires a different Case assignment when appearing as the complement of a preposition, resulting in *whom* rather than who.

(41)   the man with **whom** I am speaking

In other words, *whom* is simply an inflected form of *who*, and therefore the ungrammaticality of (41) does not technically contradict the argument as provided by Andrews (2007).

However, even with *wh*-words, not all contexts allow both the pied piping and the preposition stranding construction. Firstly, as mentioned in the previous paragraph, infinitival relatives only allow the pied piping construction (Van der Auwera, 1985, p. 152).

(42) a. the box **in which** to store the keys
      b. *the box **which** to store the keys **in**

Secondly, free relatives only allow preposition stranding (Van der Auwera, 1985, p. 152).

(43) a. **whomever** I was speaking **with**
      b. ***with whomever** I was speaking

Finally, the Dutch relative pronouns *die* and *dat* allow neither construction (Van der Auwera, 1985, p. 152, ex. 10ce, 11ce).

(44) a. *De   man aan   die   ik het   boek gaf liep   weg.
         the   man to   whom   I the   book gave walked away
         'the man to whom I gace the book walked away.'
      b. *De   man die   ik het boek aan gaf liep   weg.
         the   man whom I the   book to   gave walked away
         'The man whom I gave the book to walked away.'
(45) a. *Het boek in dat   ik de   foto   vond   was uitverkocht
         the   book in which I the   picture found   was sold.out
         'The book in which I found the picture was sold out.'
      b. *Het boek   dat   ik de   foto   in vond   was uitverkocht
         the   book   which   I the   picture in found   was sold.out
         'The book which I found the picture in was sold out.'

Van der Auwera states that in the pied piping construction, Dutch has to use *aan wie*, *waaraan* or *waarin*, and in the preposition stranding construction, Dutch is restricted to *waar* (pp. 152-153, ex. 10d,f, 11d,f).

(46) a. De   man aan   wie/waaraan   ik het   boek gaf liep   weg.
         the   man to   whom/whereto I the   book gave walked away
         'The man to whom I have the book walked away.'
      b. De   man waar   ik het   boek aan gaf liep   weg.
         the   man where I the   book to   gave walked away
         'the man whom I gave the book to walked away.'
(47) a. Het   boek waarin ik de   foto   vond   was uitverkocht
         the   book wherein I the   picture found   was sold.out
         'The book in which I found the picture was sold out.'

     b. Het   boek   waar   ik de   foto   in vond   was uitverkocht
       the   book   where I the   picture in found   was sold.out
      'The book which I found the picture in was sold out.'

In other words, if Dutch *die* and *dat* are generally considered relative pronouns despite appearing in neither the pied piping construction, nor the preposition stranding construction, then the fact that relative *that* does not allow pied piping movement ought not to disqualify it as a relative pronoun. Nevertheless, linguistic evidence from another languages such as Dutch does not necessarily contradict Andrews' (2007) argument about English *that*, because languages do not always display the same syntactic properties. For instance, Boef (2012) accounts for the contrast between (44a) and (45a), and (46a) by assuming that only pronouns that are specified as human can appear as the complement of a preposition: only *wie* fits this criterion, which explains why (44a) and (45a) are not grammatical, whereas (46a) is (p. 182). However, the same criterion does not hold for English: both *who* and *which* are allowed in the pied piping construction, even though *which* is not specified as human.

3.3. Relative *that* is a highly pronominal relativiser

Van der Auwera (1985) claims that relative *that* is neither a relative pronoun nor a complementiser, but instead takes an intermediate position: relative *that* is not merely a subordinator, but a relativiser that is only "highly pronominal", unlike relative pronouns, which are fully pronominal (pp. 170-171). The idea that relative *that* is not fully pronominal derives from the fact that *that*-relatives do not allow the pied piping construction.

(48)   the man with whom/***that** I am speaking

Van der Auwera (1985) argues that the ungrammaticality of (48) does not mean that relative *that* cannot be the complement of a preposition (p. 172)

(49)   the man **that** I am speaking with
(50)   the man **that** is walking there
(51)   the man **that** I see

Example (49) is the grammatical counterpart of (48), in which the preposition *with* is left stranded in its original position. Van der Auwera (1985) claims that in (49), *that* can still be considered the complement of *with* despite their separation, on the basis of the idea that relative *that* functions as the subject of *walking* in (50) and the object of *see* in (51) (p. 172). In other words, relative *that* can be the complement of a preposition, but it cannot directly follow it. However, scholars defending a complementiser analysis of relative *that* would argue that *that* does not originate as the subject in (50), or as the object in (51), but that it is simply base generated in C. In other words, Van der Auwera's (1985) argumentation requires additional linguistic evidence, showing that relative *that* indeed fulfils these syntactic roles. Van der Auwera (1985) argues that relative *that* historically developed from a subordinator into a relativiser, but that the process of becoming a pronoun was never completed (p. 175). In other words, relative *that* is likely historically derived from complement *that*, and became more like a relative pronoun over time, but never truly became a pronoun. A plausible ancestor of Modern English relative *that* is Middle English *þat*, a subordinator derived from the Old English relative particle *þe* and the subordinator *þæt* (Van der Auwera, 1985, p. 172). If relative *that* was historically derived from a subordinator and is now assumed to be a relativiser, then a category change must have occurred. Van der Auwera (1985) presents three arguments in favour of this claim. Firstly, he presents corpus evidence that Modern English relative *that* has a significant preference for non-human antecedents, whereas in Middle English and Early Modern English, relative *that* did not display such a preference (p. 173). Assuming that sensitivity to the human/non-human contrast is a typically nominal feature, this evidence shows that relative *that* became increasingly more nominal. Secondly, Van der Auwera (1985) presents relative clause constructions which contain a "non-relative pronoun coreferential with the relativised constituent" (pp. 155-156, ex. 23)

(52)   That's the problem **that** I asked you to find out from Fred about **it**.

Van der Auwera (1985) states that examples such as (52) are problematic for an analysis of relative *that* as a relative pronoun because they would be "doubly pronominal" (p. 156). Nevertheless, the fact that constructions such as (52) have become rare in Modern English indicates that relative *that* has become more pronominal than it used to be (Van der Auwera, 1985, pp. 173-174). However, the type of construction in (52) is also possible with the relative pronouns *which* and *who* (Van der Auwera, 1985, p. 156, ex. 24-25).

(53) I have to type the footnotes and the bibliography **which** I don't know how long **they**'re going to be.

(54) the fellow **who** you don't know **his** name

The examples above are problematic for Van der Auwera's (1985) argumentation, even though they are also uncommon in Modern English. He argues that relative *that* used to be allowed in this construction because it was essentially non-pronominal, and that the construction in (52) became increasingly rare because relative *that* became more pronominal. However, applying the same reasoning to (53) and (54) would result in the conclusion that *who* and *which* have also become significantly more pronominal in Modern English than they were in earlier stages of the language. Nevertheless, it is generally assumed that *who* and *which* have a pronominal origin. Following this assumption, constructions such as (53) and (54) are definitely "doubly pronominal", but this did not prevent them from being used in earlier stages of the language. In other words, linking the rarity of constructions such as (52), (53), and (54) to the increasing pronominality of relative *that* only makes sense if one also assumes *who* and *which* to have become more pronominal, which is not a very appealing hypothesis. Finally, Van der Auwera (1985) claims that the *wh*-word + *þat* pattern became redundant in the fifteenth century after being in regular use for only a century due to the increasing pronominality of *þat* (p. 174). This observation can indeed be explained by the category change that Van der Auwera (1985) proposes: in its original function of subordinator, *þat* would occupy the C position, whereas the *wh*-word occupies the specifier

position of CP; after becoming increasingly more pronominal, and therefore more like the pronominal *wh*-words, *þat* would start to occupy the same position, namely Spec-CP, and therefore prevent both an overt *wh*-word and overt *þat*. Nevertheless, Van der Auwera (1985) presents a construction used by some English speakers, which appears to contain both a *wh*-word and relative *that* (p. 174, ex. 73).

(55) I yielded to **whatever** arguments **that** were given.

Van der Auwera (1985) accounts for examples such as (46) by assuming an underlying construction such as the one in (56), which allows both *whatever* and *that* to be pronominal (p. 175).

(56) I yielded to whatever arguments **there were** that were given.

In example (56), there are essentially two relative clauses modifying *arguments*, and *whatever* and *that* each have their own position inside their own clause. In other words, if constructions such as (55) are indeed shortened versions of (56), the co-occurrence of *whatever* and *that* does not pose any problems. Although Van der Auwera (1985) presents evidence in favour of a category change for relative *that*, the crucial detail of his analysis is that this category change has not been completed. He assumes that relative *that* has become "highly" but not fully pronominal. Van der Auwera (1985) states that a category change can only be considered completed if it has taken place "in all environments", which he claims is not the case because relative *that*, unlike relative pronouns *who* or *which*, does not occur in the pied piping construction (p. 173). He reasons as follows: if relative *that* were fully pronominal, it would receive "analogical pressure" from other relative pronouns to appear in this construction; the fact that relative *that* does not appear in pied piping constructions therefore indicates that the process of pronominalisation is not yet complete (Van der Auwera, 1985, p. 173). The apparent stagnation of this process can be explained by a special use of relative

that, in which it appears to replace a preposition and a *wh*-word rather than just a *wh*-word. I have repeated the relevant examples.

(57) a. the day **that** he found a key
      b. the day **on which** he found a key

(58) a. the way **that** he found a key
      b. the way **in which** he found a key

Van der Auwera (1985) argues that the type of relative *that* illustrated by (57a) and (58a) counteracts "the analogical pressure" that relative *that* receives from other relative pronouns in two ways (p. 175). Firstly, the relative *that* that appears in (57a) and (58a) appears to be adverbial rather than pronominal and therefore it could be slowing down the pronominalisation process of non-adverbial *that* (Van der Auwera, 1985, p. 175). Secondly, Van der Auwera (1985) posits that the pied piping construction would "disturb an otherwise exceptionless regularity" because both adverbial and pronominal relative *that* are always clause-initial (p. 175). It makes sense that such a strong regularity is not easily broken. In other words, adverbial relative *that* appears to effectively block the pronominalisation process of non-adverbial relative *that*, causing it to remain highly pronominal.

3.4   Summary

In this chapter, I have evaluated the hypothesis that relative *that* is a relative pronoun whereas complement *that* is a complementiser, as well as an intermediate position held by Van der Auwera (1985), analysing relative *that* as a highly pronominal relativiser rather than a true relative pronoun. On the one hand, the analysis of relative *that* as a relative pronoun is supported by co-ordination evidence (Hudson 1990) and other syntactic features, such as adjunct status and deletion conditions. However, arguments against this hypothesis include the fact that relative *that*, unlike other pronouns cannot occur in a non-restrictive or infinitival relative, and that it cannot directly precede a reflexive pronoun, whereas it does have a special adverbial use in which it can replace both a preposition and a *wh*-word (Van der Auwera,

1985). Nevertheless, these counterarguments can be rebutted by the observation that non-restrictives only show a strong preference for *who* or *which*, the fact that infinitival relatives only allow the pied piping construction, the fact that relative *that* can indirectly precede a reflexive pronoun, and the assumption of two types of relative *that*, one pronominal, and one adverbial (van der Auwera, 1985). The main argument against analysing relative *that* as a relative pronoun is the fact that it does not occur in the pied piping construction (Van der Auwera, 1985; Andrews, 1997; Roberts and Roussou, 2003). However, there are several other constructions in English that are restricted to either the pied piping construction or preposition stranding (Van der Auwera, 1985). On the other hand, Van der Auwera (1985) proposes an alternative analysis that combines the complementiser and relative pronoun analysis: relative *that* developed from a subordinator into a highly pronominal relativiser through a process of pronominalisation, which has not been completed due to the existence of the adverbial use of relative *that*. On the basis of the arguments and counterarguments presented, I argue that the analysis of relative *that* as a relative pronoun and complement *that* as a complementiser is tenable. However, the intermediate position that Van der Auwera (1985) presents is also very appealing, because it effectively counters the pied piping argument, while still maintaining the position of relative *that* as a relativiser rather than a mere subordinator. The crucial question then is which of these positions is more accurate. The outcome of this question will likely depend on how much weight one wishes to attribute to the pied piping argument: is it strong enough to rule out an analysis of relative *that* as a true relative pronoun?

Chapter 4. Conclusion

The purpose of this study was to find out whether relative *that* and complement *that* can be analysed as the same element, and to discover the most accurate syntactic analysis of each of these elements. In Chapter 2. I discussed two very different analyses of relative *that* and complement *that* as the same element, namely either as complementisers (De Vries, 2002; Roberts & Roussou, 2002; Franco, 2012) or as relative pronouns (Kayne, 2010). Both positions basically boil down to an extension of the analysis of the one to the other: the complementiser analysis extends the traditional analysis of complement *that* to relative *that*, based on parallels between complement clauses and *that*-relatives, whereas the relative pronoun analysis extends the analysis of relative clauses to all subordinate clauses. I have come to the conclusion that if relative *that* and complement *that* are to be analysed as the same element, they must both be complementisers rather than relative pronouns. This conclusion is based on the fact that the only serious issue with the complementiser analysis is the *that*-trace effect, which reveals contrasting deletion conditions for complement clauses on the one hand and relative clauses on the other. I have repeated the relevant examples.

(1)   a. the man$_i$ that I thought **(*that)** t$_i$ found a key
      b. the key$_i$ that I thought **(that)** the man found t$_i$
(2)   a. the man$_i$ ***(that)** t$_i$ found a key
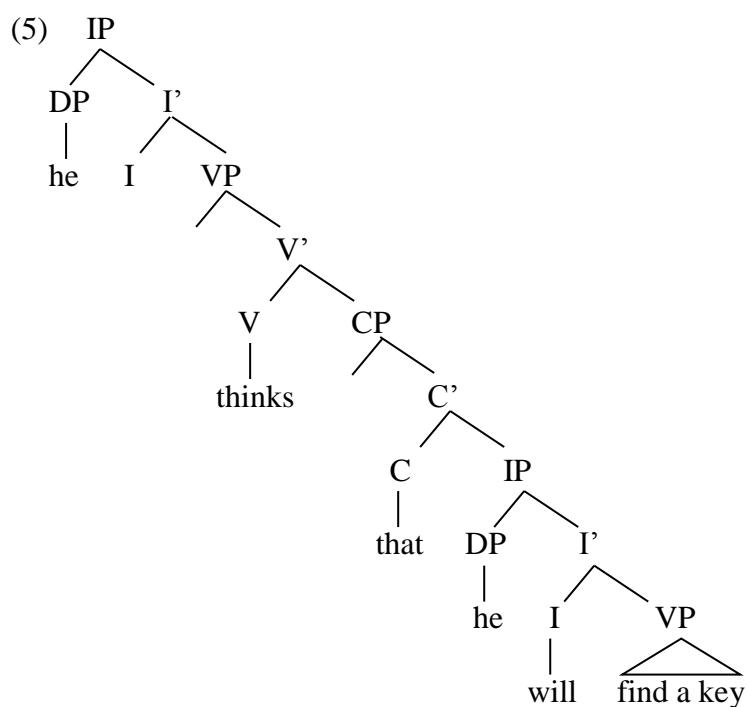   b. the key$_i$ **(that)** the man found t$_i$

The examples in (1) illustrate the *that*-trace effect on complement clauses: when complement *that* is followed by a subject trace (1a), it must be deleted, whereas it can be either overt or covert if followed by an object trace (1b). The examples in (2) illustrate that when relative *that* is followed by a subject trace, it must be overt, whereas it displays the same flexibility as complement *that* when followed by an object trace. In other words, relative *that* is not only unaffected by the *that*-trace effect, but a similar environment has the complete opposite effect. Although this can be considered a significant problem for the complementiser analysis, it

appears to be the only one strong enough to possibly renounce the analysis. In contrast, the alternative analysis presented by Kayne (2010), which analyses both instances of *that* as a relative pronoun, equating all subordination to relativisation, faces many more problems, which appear to outweigh the advantages. For instance, Franco (2012) presents linguistic evidence from languages that allow complementisers to appear alongside pronouns in relative clauses. Furthermore, Boef (2012) provides evidence from V2 languages in favour of analysing complement *that* as a complementiser. In other words, although Kayne's (2012) analysis is able to account for certain syntactic phenomena, I do not consider it to be tenable. In Chapter 3. I evaluated two analyses that treat relative *that* and complement *that* as separate elements, both analysing complement *that* as a complementiser, and relative *that* as either a true relative pronoun (Hudson, 1990; Sag, 1997; Boef, 2012), or a highly pronominal relativiser (Van der Auwera, 1985). The first analysis can be described as a synthesis of the two analyses discussed in Chapter 2., analysing each instance of *that* as its own element, a complementiser and a relative pronoun, without extending the analyses. The alternative analysis that Van der Auwera (1985) presents is an intermediate position between the complementiser analysis of Chapter 2. and the complementiser/relative pronoun analysis of Chapter 3., analysing relative *that* as an element derived from a complementiser, but which never fully became a relative pronoun, ending up somewhere in the middle of an incomplete linguistic process as a highly pronominal relativiser. My hypothesis was that the position held by Hudson (1990), Sag (1997), and Boef (2012) is most accurate, because in my opinion it makes more sense to analyse a *that*-relative in the same way as a *wh*-relative rather than a complement clause. I concluded that both analyses discussed in Chapter 3. are tenable because the only real problem for the complementiser/relative pronoun analysis is the pied piping construction, a problem that Van der Auwera's (1985) alternative position steers clear of entirely. I have repeated the relevant examples.
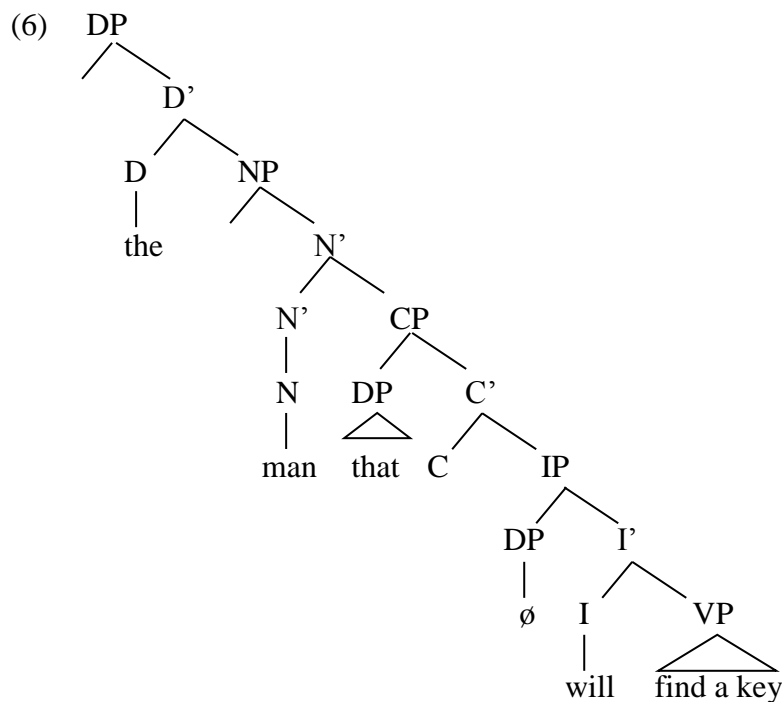
(3)   a. the man **with whom** I was speaking
       b. *the man **with that** I was speaking
(4)   a. the man whom I was speaking **with**
       b. the man that I was speaking **with**

The examples in (3) illustrate the pied piping construction, in which a preposition moves along with a *wh*-word. Crucially, this construction is not allowed for *that*-relatives (3b), which only allow the preposition stranding construction illustrated by the examples in (4). The fact that (3b) is ungrammatical is often taken to be an argument against analysing relative *that* as a relative pronoun, because it implies that relative *that* does not have an operator in Spec-DP, therefore not allowing it to undergo *wh*-movement. In contrast, the ungrammaticality of (3b) does not pose a problem for Van der Auwera's (1985) analysis, because he argues that relative *that* is not a true relative pronoun. In fact, Van der Auwera (1985) uses the pied piping construction as evidence in favour of his assumption that the pronominalisation process of relative *that* has not been completed. The question that now has to be answered is which counterargument is stronger. Should relative *that* be disqualified as a complementiser because it is unaffected by the *that*-trace effect, and therefore be analysed as a relative pronoun? Or should it be disqualified as a relative pronoun because it cannot occur in the pied piping construction, and therefore be considered a complementiser? Or should it not be considered a relative pronoun nor a complementiser on the basis of these two arguments, but rather as a highly pronominal relativiser, stuck in transition from the one to the other? I argue that the intermediate position presented by Van der Auwera (1985) is most appealing due to the fact that it is able to account for both counterarguments: on the one hand, relative *that* is unaffected by the *that*-trace effect and displays highly contrastive deletion conditions because it is not a complementiser anymore; on the other hand, relative *that* is unable to appear in the pied piping construction because its transition into a relative pronoun has not be completed. The other two positions appear inferior to this analysis because they can only account for one of these phenomena. The complementiser analysis can only partially account for the

differences in deletion conditions of relative and complement *that*: relative *that* does not

obligatorily delete when followed by a subject trace because there is no long extraction, but

the fact that relative *that* is obligatorily overt in this context cannot be accounted for within a

complementiser analysis. Similarly, the relative pronoun analysis cannot account for the fact

that relative *that* cannot occur in the pied piping construction: if relative *that* is a relative

pronoun such as *which* or *who*, it must have an operator in Spec-DP that allows it to undergo

wh-movement, and should also allow it to undergo pied piping movement. In other words, the

analysis of complement *that* as a complementiser and relative *that* as a highly pronominal

relativiser most accurately reflects the syntactic properties of complement clauses and *that*-

relatives. Following this analysis, the syntactic structure of a complement clause will look as

in example (3) from Chapter 1.

(5)

```
            IP
          /    \
        DP      I'
        |      /  \
        he    I    VP
                  /  \
                 V'
               /   \
              V     CP
              |    /  \
           thinks     C'
                     /  \
                    C    IP
                    |   /  \
                  that DP    I'
                       |    /  \
                       he  I    VP
                           |   /‾‾‾‾\
                          will find a key
```

The structure in (5) illustrates that complement *that*, being a complementiser, appears in the

head position of CP. In contrast, the syntactic structure of a *that*-relative will likely look

highly similar to a *wh*-relative. I have repeated example (18) from Chapter 1. for convenient

reference.

(6)

```
            DP
           /  \
            D'
          /    \
        D      NP
        |     /  \
       the    N'
             /   \
           N'    CP
           |    /  \
           N   DP   C'
           |   /\  /  \
          man that C   IP
               C  /  \
                 DP    I'
                 |    /  \
                 ø   I    VP
                     |   /\
                    will find a key
```

The structure above illustrates that relative *that*, as a highly pronominal relativiser, will likely appear as a DP in Spec-CP, similarly to the relative pronouns, *who* or *which*. Going back to the discussion in Section 1.3., relative *that* must have an operator in Spec-DP that does not function entirely the same as the one in *who* or *which*, in order to account for the absence of relative *that* in the pied piping construction. It is important to note that I am not excluding the possibility of relative *that* being a complementiser or a relative pronoun. As stated in Section 2.4. and 3.4., I consider both these analyses tenable despite the mentioned counterarguments. However, on the basis of these counterarguments, I argue that the analysis of relative *that* as a highly pronominal relativiser is more appealing than the other two analyses. Going back to the research questions presented in Chapter 1., I come to the following conclusions: firstly, relative *that* and complement *that* ought not to be analysed as the same element on the basis of the *that*-trace effect; secondly, relative *that* ought not to be analysed as a true relative pronoun, but rather a highly pronominal relativiser; finally, the syntactic category of relative *that* is likely similar to that of a relative pronoun, namely a DP, see (6).

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