Clefts in Scandinavian
An Investigation

Peter Svenonius
University of Tromsø[t]

0. Introduction

Scandinavian languages make extensive use of a cleft construction that is structurally very similar to the one familiar from English. A Norwegian reference grammar (Faarlund et al. 1997:1090-1) cites, among others, the examples in (1) by way of illustration.[1]

(1)　　a.　　Det er berre seg sjølv han vil　snakke om.　　　　　　　　　　(Nor)
　　　　　　　it is only RFX self he will talk　about
　　　　　　　'It is only himself he wants to talk about'

　　　　b.　　Er det på denne måten du　vil vi skal bli　　　venner igjen?
　　　　　　　is it on that　way　you will we shall become friends again
　　　　　　　'Is it in that way you want us to become friends again?'

　　　　c.　　Det er ondskapsfull han er.
　　　　　　　it is malicious　　he is
　　　　　　　'What he is is malicious'

　　　　d.　　Det er liggje i　telt eg ikkje vil ·
　　　　　　　it is lie　in tent I　not　will
　　　　　　　'What I don't want to do is lie in a tent'

　　　　e.　　Meg var det Staten　　som investerte i.
　　　　　　　me was it the.state as　invested in
　　　　　　　'As for me, it was the state that invested in me'

There must be a gap in the embedded clause, though it may be deeply embedded, as shown in (1b), and the embedded clause may be further extracted from, as in (1e). (On the glossing of *som* as 'as,' see §1 below.) The only exception to the requirement for a gap (barring resumptive pronouns) is when the element following the copula includes the main verb of the embedded clause, in which case the verb *gjere* 'do' may be inserted, as in (2a) (cf. (1d)). If there is no auxiliary, then insertion of the appropriate form of *gjere* is obligatory, as shown in (2b-c). The verb following the copula may appear in its interpreted tense or in the infinitive, as indicated in (2b).

(2).　　a.　　Det er liggje i　telt eg ikkje vil　gjere.　　　　　　　　　　(Nor)
　　　　　　　it is lie　in tent I　not　will do
　　　　　　　(same as (1d))

　　　　b.　　Det var stele/stal　han gjorde.
　　　　　　　it was steal/stole he　did
　　　　　　　'What he did was steal'

　　　　c. *　Det var stele/stal　han.
　　　　　　　it　was steal/stole he

---

[1] Norwegian examples are cited in whatever written standard they originally appear in. Those not cited from published works are in the Nynorsk written standard except where indicated otherwise. I gloss the third person reflexive element *seg/sig* as RFX.

The expletive and a copular element are necessary for the cleft construction, though the expletive may be separated from the copular element by a raising verb, as in (3a-b), and the copular element need not be the verb *vere* 'be,' as shown in (3c).

(3) a. Det synes å vere seg sjølv han vil snakke om. (Nor)
it seems to be RFX self he will talk about
'It seems to be himself he wants to talk about'

b. Ho fekk det til å sjå ut til å vere han som tok siste kakestykket
she got it to to look out to to be him as took last the.cake.piece
'She made it appear to be him that took the last piece of cake'

c. Det blir nok eg som får svi.
it becomes surely I as gets sting
'I suppose it will be me that suffers'

In each of the cases shown thus far, the element following the copula (following the subject, in the inverted (1b, e)) is in focus. I will refer to this element as the 'focus,' without meaning to imply that there is any well-defined notion of informational focus consistently associated with the position. For example, the construction is often used with the subject in 'focus' in cases where the subject is not set up against a focus set in Rooth's 1985 sense, but where it is new information, as in the dialogue in (4), from Faarlund 1992:142.

(4) a. Korfor er det så kalt her? (Nor)
why is it so cold here
'Why is it so cold here?'

b. Det er Ola som har opna glaset.
it is Ola as has opened the.window
'Ola has opened the window'

This use is common in spoken language, presumably because there is a constraint against new information in the initial position in a sentence (cf. Faarlund 1992, Svenonius forthcoming). The language of newspapers provides examples where the focus (as I will continue to call it) is not even new information; Venås 1978 records the following example:

(5) Det var like før U Thant skulle begraves forrige torsdag (Nor)
it was just before U Thant should be.buried previous Thursday

at studenter stormet bygningen og tok båren
that students stormed the.building and took the.bier
'Just as U. Thant was about to be buried last Thursday, students stormed the building and siezed the bier'

Here, it seems, the temporal expression is a sort of lead-in, and the potentially new information actually comes in the subordinate clause following the so-called focus (cf. Faarlund et al. 1997:1093 for additional examples and discussion).

In spoken language, clefts are also extremely common in questions, more so than in English. Some examples appear in (6) (cf. Faarlund 1992: 140-1, Faarlund et al. 1997:1091-2).

(6) a. Er det slik du trur eg vil ha det? (Nor)
is it thus you think I will have it
'Is that how you think I want it?'

b. Kvar er det du bur?
where is it you live
'Where is it you live?'

Here my examples have been restricted to Norwegian, but similar facts hold for the other Scandinavian languages. In this paper I examine the structural facts for the construction in four Scandinavian languages, Icelandic, Swedish, Norwegian, and Danish (mention of Faroese is unfortunately limited to this sentence). I do not discuss the informational or semantic characteristics of the construction in any detail, but focus on the syntax.

This is a working paper; the primary goal has thus far been to make sense of the data, and to present it in a coherent fashion. The analysis at this stage is to a certain extent a descriptive restatement of the facts. I suggest specifically that some clefts are derived by movement of the focus out of the embedded clause, while in others, the focus is base-generated and there is only operator movement in the embedded clause. On my analysis, Swedish only has the movement type, while the other languages make use of both types. The differences are located primarily in the inventory of complementizers, and secondarily in the inventory of operators.

The structure of the paper is as follows. In §1 I lay out the basic facts for relative clauses for the four languages, since relative clause structure is obviously relevant to the study of cleft constructions. The data for clefts is presented in §2. In §3 I quickly summarize some background assumptions I am making about predication, and in §4 I briefly discuss some previous analyses of relative clauses and clefts. In §5 I argue that there are two different types of it-clefts, using English for illustration, and in §6 it is shown how the Scandinavian data matches this pattern..

1. Relative Clauses

In this section I describe the basic facts for relative clauses, concentrating on the distribution of the relative elements ('relative pronouns' or 'relative particles,' as they are known in traditional grammar). I begin with a drive-by look at Old Norse to put the modern patterns into perspective. I will not in this paper provide any discussion or analysis of Old Norse cleft constructions.

1.1. RELATIVE CLAUSES IN OLD NORSE

Old Norse had several invariant (noninflecting) particles, including *er*, *en*, and *sem*, and occasionally *að* or *at*, which could introduce relative clauses (cf. Nygaard 1906:256.265, whence the examples in (7) and (8a); Faarlund 1994 for a recent summary in English; recent analyses include Christensen 1995 and Åfarli 1995). Some representative examples are shown in (7).

(7)   a.   Hann tók hest er Gunnarr átti   (ON)
he   took horse REL Gunnar owned
'He took a horse that Gunnar owned'

        b.   eptir því sem Eyvindr segir
after that as Eyvind says
'according to what Eyvind says'

There are also some types in which the element introducing the RC is a pronoun, matching either the modified DP or the gap in case, as in (8a). Another possibility, used only in what Nygaard 1906 calls 'learned style' (which he suggests is affected by Latin and other foreign influences), is to have a wh-expression introducing the relative clause, as seen in (8b), from Heggstad et al. 1975:361.

(8)   a.   Þá kómu hlaupandi dýr   mörg þau skorpiones heita   (ON)
then came running   animals many those scorpions are.called
'Then came running many animals which are called scorpions'

        b.   ...bréf, í hverju sem hann gaf...
letter in which as he gave
'a letter in which he gave...'

In learned style, pied piping is possible with wh-expressions (as in (8b)) and with pronouns, suggesting that they are phrasal. Such pronouns and wh-elements frequently cooccur with a relative particle (*sem* in (8b)). These facts suggest that the particles were complementizers, while the pronominal element occupied SpecCP, like English *which* (on the standard analysis; cf. §4 below); this is the analysis proposed in Åfarli 1995.

1.2. RELATIVE CLAUSES IN MODERN SCANDINAVIAN

In modern Scandinavian, the forms which have become predominant are those with *som/sem* and those with no relative element at all, in Mainland Scandinavian (MS). This is sketched in (9): *sem* is obligatory in Icelandic, but *som* is optional in MS.

(9)	a.	strákurinn *(sem) ég þekki			(Ice)
	b.	pojken	(som) jag känner		(Swe)
	c.	guten	(som) eg kjenner		(Nor)
	d.	drengen	(som) jeg kender		(Dan)
		the.boy	*as*	*I know*	

As with English, a subject gap requires an overt relative element in all of the Scandinavian languages.

(10)	a.	strákurinn *(sem) þekkir mig			(Ice)
	b.	pojken	*(som) känner mej		(Swe)
	c.	guten	*(som) kjenner meg		(Nor)
	d.	drengen	*(som) kender mig		(Dan)
		the.boy	*as*	*knows me*	

Danish has an additional possibility, not realized in the other languages: the locative pronoun *der* 'there' can also appear introducing a relative clause, only if the gap is a subject gap, as shown in (11a-b). The same word is used in expletive constructions, as in (11c), and appears in subordinate wh-questions with subject gaps, as in (11d).

(11)   a.   drengen der   kender mig   (Dan)
              the.boy there knows me

       b. *   drengen der   jeg kender
              the.boy there I   know

       c.   Der kom en dreng.
              there came a boy
              'A boy arrived'

       d.   Hun vidste ikke, hvem der   havde gjort det.
              she knew not   who there had   done it
              'She didn't know who had done it'

The other languages have *der* (*där*, *þar*) only as a relative pronoun and in certain locative expressions; though it can have a relative clause attached to it (as can most pronouns, in Scandinavian; cf. §1.3 below), as shown in (12a), it cannot head a relative, as indicated in (12b).

(12)   a.   Vi fann boka   der (som) du hadde gløymd den.   (Nor)
              we found the.book there as   you had   forgotten it
              'We found the book where you had left it'

       b. *   guten   der kjenner meg
              the.boy there knows me

In the Scandinavian languages other than Danish, *der* (and its cognates) does not appear as an expletive. Compare (11c) with (13).

(13)   a. •   Der kom ein gut.   (Nor)
              there came a boy
              'There, a boy came'

       b.   Det kom ein gut.
              it   came a boy
              'A boy arrived'

Nor can *der* appear in an embedded question. Compare (11d) to (14).

(14) a. * Ho visste ikkje, kven der hadde gjort det.   (Nor)
             she knew not   who there had   done it

      b. . Ho visste ikkje, kven som hadde gjort det.
             she knew not   who as   had   done it
             'She didn't know who had done it'

In some varieties of Danish, *som* and *der* can cooccur, as in (15a), from Vikner 1991:115), and may even appear together with the finite complementizer *at* as in (15b) (op. cit. p. 112).

(15) a.   de lingvister som der vil læse denne bog   (Colloquial Dan)
             the linguists as   there will read this   book
             'the linguists who want to read this book'

      b. ? de lingvister som at der vil læse denne bog
             the linguists as   that there will read this   book
             (same meaning)

I repeat Vikner's judgments. However, see below, where I discuss this phenomena with respect to clefts and explain the label 'Colloquial Dan[ish].' *At* also turns up, at least marginally, in relative clauses without subject gaps, as in (16b), also from Vikner (op. cit. p. 113). The same type is also possible, and also non-standard, in Icelandic, as shown in (16a).[2]

(16) a.   bók sem að þessi málfræðingur vill lesa   (Colloquial Ice)

      b. ? en bog som at denne lingvist   vil læse   (Colloquial Dan)
             a book as that this   linguist   will read
             'a book that this linguist wants to read'

Otherwise, the finite complementizer *at/að* does not appear in relative clauses, in contrast to its counterpart *that* in English (though there are examples from Old Norse, cf. Åfarli 1995; also, Vikner 1991:129 cites dialectal Danish examples, from a paper by Lars Heltoft, in which *at* is the only complementizer).

Thus, *som/sem* is clearly the dominant relative element in modern Scandinavian, with a null option except in Icelandic; the subject oriented element *der* is important in Danish. Other relative elements are rarely used. Wh-elements play a limited role in relative clauses in Scandinavian; they appear to some extent in formal styles, and in possessive constructions as in (17). ((17c) is regarded by many Norwegian speakers as formal, and possessive *hvis* is not used in Nynorsk; the sentence is given in Bokmål.)

(17) a. *? maðurinn hvers konu ég hitti   (Ice)
      b.   mannen   vars fru jag träffade   (Swe)
      c.   mannen   hvis kone jeg traff   (Nor)
      d.   manden   hvis kone jeg traf   (Dan)
              the.man whose wife I   met

Wh-expressions play no role in clefts in Scandinavian, so I will ignore them in what follows.

1.3. RELATIVE CLAUSES WITH PRONOUNS

As mentioned above, relative clauses in Scandinavian appear fairly freely with pronouns, as indicated by the Norwegian examples in (18) (cf. also (7b) above for Old Norse).

(18) a.   Han som sølte ølet   sit der enno.   (Nor)
             he as spilled the.beer sits there still
             'The guy who spilled the beer is still sitting there'

---

[2] It is difficult to know how to interpret the reduced acceptability of such forms, given that speakers are aware that they are prescriptively 'wrong,' but I have marked (16b) with '?' to indicate the contrast with (15a), as does Vikner, and have left (16a) without any mark, to indicate the contrast with a later example in §2.6. below. On the whole the two Icelandic informants who volunteered the construction were happier with it than my two West Jutlandic informants.

b. Ho eg ville ha var utsolgt.
   that I would have was sold.out
   'The one I wanted was sold out'

c. Dei som han åt var fisken og piggsvinet.
   those as he ate were the.fish and the.hedgehog
   'The ones that he ate were the fish and the hedgehog'

d. Det som han åt var krydra.
   that/it as he ate was spiced
   'The one that he ate was spicy'

   or 'What he ate was spicy'

The pronouns in (18a-c) are referentially specific and gender specific; for example, in (18b), *ho* can only be used if there is a salient set of things which are referred to by a feminine noun, for example, books (*bok*, feminine). Similarly, in (18c) a set must be salient, for example a set of animals. The relative clauses that appear with these elements are unexceptional; *som* is obligatory with a subject gap, but optional with other gaps (cf. (18b) vs. (18c-d)). *Det* can also have this specific meaning, as in the first translation for (18d), where the salient set might be of animals (*dyr*, neuter), but it can also be non-specific; hence the second translation for (18d). This use of *det* instantiates the specificational-predicational ambiguity of the English translation (discussed in Akmajian 1970b, Higgins 1973), which comes out more clearly in examples like those in (19).

(19) a. Det Kjersti er er stolt over {seg sjølv/*henne}   (Nor)
        it Kjersti is is proud over RFX self / her
        'What Kjersti is is proud of herself' (specificational)

     b. Det Kjersti er er viktig   for {henne/*seg sjølv}
        it Kjersti is is important for her / RFX self
        'What Kjersti is is important to her' (predicational)

Det can only refer to non-humans, ordinarily; thus (20a) is infelicitous, because only humans normally pay for anything, while (20b) is odd out of context but would be possible in a situation where we weren't sure initially that it was a human we were looking at.

(20) a. * Det som betalte var Håvard.   (Nor)
          that/it as paid was Håvard

     b. Det som vi såg var Håvard.
        it as we saw was Håvard
        'What we saw was Håvard'

Common in many dialects are forms with *den* (the masculine and feminine article/demonstrative/pronoun) as in (21), but this form is prescribed against in the Nynorsk written standard, so the examples are in Bokmål; in Bokmål (as in many dialects), *han* and *ho* are restricted to human referents, so (18b) above would be impossible, referring to a book, and (21b) would be used instead.

(21) a. Den som betalte var Håvard   (Nor)
        that was paid was Håvard
        'The one that paid was Håvard'

     b. Den jeg ville ha   var utsolgt.
        that I would have was sold.out
        'The one I wanted was sold out'

These structures are of obvious interest for an analysis of clefts, since they closely resemble cleft structures. For example, the cleft in (22a) could be derived from the (specificational) relative clause structure in (19a), and (22b) could come from (20b), by relative clause extraposition, as in various analyses of English clefts (e.g. Akmajian 1970a, b; cf. also Thráinsson 1979 for Icelandic).

(22) a.   Det er stolt   over seg sjølv Kjersti er.   (Nor)
             it is proud over RFX self Kjersti is
             'What Kjersti is is proud of herself'

      b.   Det var Håvard som vi såg
             it was Håvard as we saw
             'It was Håvard that we saw'

However, relative clause extraposition in Scandinavian is highly constrained, and such an analysis would have to explain why extraposition is blocked whenever the pronoun is not *det*, as in (23a-b) (from (18a) and (21a)), and whenever the predicate is not specificational, as in (23a, c) (from (18a, d)); (23d) lacks the predicational reading that is natural for (19b), and the pronoun cannot be read as coreferent.

(23) a. *   Han sit der   enno som sølte   ølet
             he sits there still as   spilled the.beer

      b. *   Den var Håvard som betalte.
             that was Håvard as   paid

      c. *   Det var krydra som han åt.
             it was spiced as he ate

      d.   Det er viktig   for henne Kjersti er.
             it is important for her   Kjersti is
             'What Kjersti$_i$ is is important to her$_j$,' (specificational only)

There are clefts with non-specificational foci, as seen in (1-6) above, but these do not have relative clause sources, as seen in (24); (24a) is based on (5), and (24c) is repeated from (1d).

(24) a.   Det var like før   gravferda at   studentane tok båra.   (Nor)
             it was just before the.funeral that the.students took the.bier

      b. *   Det at studentane tok båra   var like før   gravferda.
             it that the.students took the.bier was just before the.funeral

      c.   Det er liggje i telt eg ikkje vil
             it is lie   in tent I not   will

      d. *   Det eg ikkje vil er liggje i telt.
             it I not will is lie   in tent

Thus, even if an extraposition analysis were to be adopted for some clefts, another source would have to be available. In §5 below I will motivate two different sources for cleft 'constructions, one of which is similar in many ways to the extraposition analysis, but does not involve literal extraposition from subject position.

1.4. SUMMARY

To summarize the facts for relative clauses in general, they are usually introduced by *som* (Icelandic *sem*) or by nothing, though this latter option is only available in MS and only possible when the gap is not a subject gap. Prepositions are regularly stranded, and nothing may pied-pipe along with *som*. *Som* does not inflect, and shows no other form of morphological variation.

I have not mentioned non-restrictive relative clauses. They, too, are introduced by *som* (obligatorily), and are otherwise generally similar to their English counterparts, being possible •with names and clauses as well as with ordinary DPs, and being set off intonationally. They are discussed briefly in §5.1, but not with respect to any specifically Scandinavian facts. See Platzack 1997 for discussion and analysis.

2. Clefts

In this section I discuss the pattern for cleft constructions in the four languages, focusing in particular on the distribution of the introducing element (e.g. *som*). As noted in the introduction, I refer to the element after the copula as the 'focus.'

2.1. DP FOCUS

In the examples in (25) it can be seen that the pattern is like that demonstrated above for relative clauses: *sem* appears, obligatorily, in Icelandic, and *som*, optionally, in MS. This is the case generally when the focus is a DP.

(25) a.   Það var Jón sem   ég hitti   í bænum   (Ice)
     b.   Det var Jon (som) jag träffade i staden   (Swe)
     c.   Det var Jon (som) eg traff   i byen   (Nor)
     d.   Det var Jon (som) jeg traf   i byen   (Dan)
          it was Jon as   I met   in town

When the gap is in subject position, *som* becomes obligatory, as with relative clauses.

(26) a.   Það var Jón sem hitti   mig í bænum   (Ice)
     b.   Det var Jon som träffade mej i staden   (Swe)
     c.   Det var Jon som traff   meg i byen   (Nor)
     d.   Det var Jon som traf   mig i byen   (Dan)
          it was Jon as met   me in town

As with relative clauses (cf. (11a) in §1), Danish allows *der* when the gap is a subject gap, but not otherwise (cf. (11b)).

(27) a.   Det var Jon der   traf mig i byen   (Dan)
          it was Jon there met me in town
     b. * Det var Jon der   jeg traf i byen
          it was Jon there I   met in town

For most speakers of MS, the case on the focus must match the case of the gap (some speakers allow a default objective case). This is also possible in Icelandic, but the focus can also appear in nominative case in Icelandic, as discussed in Thráinsson 1979. When this option is employed, the copula agrees with the focus (cf. (28a) below with (25a) above)).

(28) a.   Það voru þeir sem ég hitti   í bænum   (Ice)
     b. * Det var de (som) jag träffade i staden   (Swe)
     c. * Det var dei (som) eg traff   i byen   (Nor)
     d. * Det var de (som) jeg traf   i byen   (Dan)
          it were they as I met   in town
          'It was them that I met in town'

A pronoun is used as the focus in this example because only pronouns show case distinctions in MS, but the same fact can be demonstrated in Icelandic with full DPs.

(29) a.   Það var hestinum   sem hann datt af.   (Ice)
          it was the.horse.DAT as he   fell off
          'It was the horse that he fell off'
     b.   Það var hesturinn   sem hann datt af.
          it was the.horse.NOM as he   fell off
          (same meaning)

In (29a), *hestinum* 'the horse' shows the dative case appropriate for a complement of the preposition *af*. In (29b), however, it shows nominative case, which is ordinarily impossible for the complement of *af*. See Thráinsson 1979:80-82 for examples and discussion. I will return to the significance of these facts below in §6.3.

2.2. PP FOCUS

Additional differences among the various languages appear when the focus is a prepositional phrase. Icelandic and Swedish form clefts with PP foci and *sem/som*, but Norwegian and Danish do not.

(30)	a.	Það var í bænum sem ég hitti Jón	(Ice)
	b.	Det var i staden som jag träffade Jon	(Swe)
	c. *	Det var i byen som eg traff Jon	(Nor)
	d. *	Det var i byen som jeg traf Jon	(Dan)
		it was in town as I met Jon	

In Norwegian and Danish, the complementizer *at* appears in clefts with PP foci. This is shown in (31) (cf. also (5) above). *At* is the usual finite complementizer for embedded declarative clauses, e.g. under such verbs as 'believe' As indicated, the corresponding complementizer *að* is also possible in Icelandic, with PP foci, but this option is not available in Swedish.[3]

(31)	a.	Það var í bænum að ég hitti Jón	(Ice) ·
	b. *	Det var i staden att jag träffade Jon	(Swe)
	c.	Det var i byen at eg traff Jon	(Nor)
	d.	Det var i byen at jeg traf Jon	(Dan)
		it was in town that I met Jon	

This pattern represents a striking contrast with the pattern for relative clauses, where this complementizer is not an option (except in certain cases in varieties of Danish, generally in conjunction with other relative elements; cf. (15b-c) in §1.2).

In the examples of relative clauses in §1.2, the distribution of *som* versus the absence of any relative complementizer was consistent with a deletion rule for *som* by which *som* could be deleted (in MS) when it does not immediately precede a subject gap (as in Taraldsen 1978); the contexts in which a relative complementizer could fail to appear was a subset of the contexts in which *som* could appear. This is, however, not the case for MS clefts. Although *som* is not possible in Danish and Norwegian with PP foci, the null option is. This is indicated in (32).

(32)	a. *	Það var í bænum ég hitti Jón	(Ice)
	b.	Det var i staden jag träffade Jon	(Swe)
	c.	Det var i byen eg traff Jon	(Nor)
	d.	Det var i byen jeg traf Jon	(Dan)
		it was in town I met Jon	

The pattern here is interesting because it shows that the null complementizer (assuming that there is a CP dominating the clause 'I met John') has a wider distribution in Norwegian and Danish than the complementizer *som*. Now, it might be assumed that in addition to a deletion rule affecting *som*, there is a deletion rule affecting *at*. This would mean that (32c-d) could be derived from (31c-d). However, there are further examples, discussed immediately below, which indicate that the null complementizer does in fact have a wider distribution than both *som* and *at*.

2.3. AP FOCUS
Consider the examples in (33), where the focus is a resultative AP (predicative APs in general pattern the same way; cf. (1c) above).

(33)	a. *	Það var rautt hann málaði húsið	(Ice)
	b.	Det var rött han målade huset	(Swe)
	c. ·	Det var raudt han måla huset	(Nor)
	d.	Det var rødt han malede huset	(Dan)
		it was red he painted the.house	

Consistently with the patterns elsewhere, Icelandic disallows the example without a complementizer. MS speakers, on the other hand, accept such examples, at least in an

---

[3] All four Icelandic speakers consulted preferred *sem* to *að* in such sentences, and one regarded sentences like (31a) as marginal.

appropriate context and with contrastive stress on the focused element. However, here *at* (*att*, *að*) is uniformly impossible, and even *som* is degraded in Icelandic, Norwegian, and Danish.

(34) a. ? Það var rautt sem hann málaði húsið (Ice)

b. Det var rött som han målade huset (Swe)

c. ? Det var raudt som han måla huset (Nor)

d. ? Det var rødt som han malede huset (Dan)
    it   was red as   he   painted the.house

As a result, there is no fully grammatical example of a cleft with a focused resultative AP in Icelandic,[4] and Danish and Norwegian prefer the null complementizer to *som*. The same is true for certain other classes of elements, for example VPs (cf. (1d) and (2) above). This means that an optional deletion rule for *som* (or one for *at* as well as *som*) cannot capture the distribution of the null complementizer.

This can also be demonstrated using depictive APs, which provide a different pattern of acceptability. With no complementizer, clefts with a depictive AP focus pattern basically with resultative APs, though they are slightly deviant, at least in Norwegian and Danish (Faarlund et al. 1997:1091 mark similar examples with a question mark; I have indicated their less-than-optimal status here with a question mark in parentheses but will henceforth treat them as acceptable, as the contrast with (37c-d) below was palpable for all informants).

(35) a. * Það er nakinn hann þvær gólfið (Ice)

b. Det er naken han tvättar golvet (Swe)

c. (?) Det er naken han vasker golvet (Nor)

d. (?) Det er nøgen han vasker gulvet (Dan)
    it   is naked he   washes the.floor

With *som*, however, the judgments are quite different from those with resultatives. Only Swedish allows *som* here.

(36) a. *? Það er nakinn sem hann þvær gólfið (Ice)

b. Det er naken som han tvättar golvet (Swe)

c. * Det er naken som han vasker golvet (Nor)

d. * Det er nøgen som han vasker gulvet (Dan)
    it   is naked as   he   washes the.floor

Depictives, in fact, pattern more closely with PPs like 'in town,' shown in (30-32) above, in that the complementizer *at* is preferred to *som* in Norwegian and Danish (though not in Icelandic). However, even with *at* the clefts are marginal.

(37) a. * Það er nakinn að hann þvær gólfið (Ice)

b. * Det er naken att han tvättar golvet (Swe)

c. ? Det er naken at han vasker golvet (Nor)

d. ? Det er nøgen at han vasker gulvet (Dan)
    it   is naked that he   washes the.floor

Thus, again, the null complementizer in Norwegian and Danish has a wider distribution than any overt complementizer.

2.4. THE FEATURES RELEVANT

It is not clear to me as of yet exactly what the characterization of the different classes of focus elements should be. The correct characterization will almost certainly be semantically explicit. However, the superficial pattern is split along lexical category lines, at a first approximation. DPs quite generally take *som* or null, except in Icelandic or when the gap is a subject gap, in which case they quite generally take *som* (*sem*). PPs fairly generally allow *at* or its cognates, except in Swedish; they allow a null complementizer in MS but not in Icelandic. APs are acceptable in MS with no complementizer, but not acceptable in Icelandic

---

[4] Though Thráinsson 1979:77 gives examples with resultative and predicative APs without marking them as degraded.

and not fully acceptable with any overt complementizer in MS except in Swedish, where the complementizer must be *som*. The difference between resultative and depictive APs is that resultative APs are marginally acceptable with *som* in Norwegian and Danish and *sem* in Icelandic, in other words they are marginally like DPs, while depictive APs are marginally acceptable with *at* in Norwegian and Danish, in other words they are marginally like PPs.

To see how lexical category seems to be a relatively accurate way to organize these categories, compare a subject-controlled expression like 'without clothes' in (38), which is semantically similar to the depictive AP 'naked' in (35-37), but has the category PP, like 'in town' from (30-32). More or less as in (35), and exactly as in (32), it is acceptable in MS in a cleft construction with no complementizer, as shown in (38).

(38) a. * Það er án   klæða hann þvær gólfið   (Ice)
      b.   Det er utan   kläder han tvättar golvet   (Swe)
      c.   Det er utan   klede han vasker golvet   (Nor)
      d.   Det er uden   klæder han vasker gulvet   (Dan)
            it   is without clothes he   washes the.floor

It is also fully acceptable with *at* in Norwegian and Swedish, and with *að* in Icelandic, like the PP in (31), but less like the depictive in (37).[5]

(39) a.   Það er án   klæða að hann þvær gólfið   (Ice)
      b. * Det er utan   kläder att han tvättar golvet   (Swe)
      c.   Det er utan   klede at han vasker golvet   (Nor)
      d.   Det er uden   klæder at han vasker gulvet   (Dan)
            it   is without clothes that he   washes the.floor

Finally, with respect to *som/sem*, the PP here is acceptable in Icelandic, as was the case with the PP in (30), in contrast to the example with a depictive in (36).

(40) a.   Það er án   klæða sem hann þvær gólfið   (Ice)
      b.   Det er utan   kläder som han tvättar golvet   (Swe)
      c. * Det er utan   klede som han vasker golvet   (Nor)
      d. * Det er uden   klæder som han vasker gulvet   (Dan)
            it   is without clothes as   he   washes the.floor

In such cases it seems that generalizing over lexical category leads to a good approximation of the facts, though a close examination of the data shows that it is not ultimately adequate. For example, there are subtle differences in acceptability depending on the type of PP in focus. In (30-31), a locative PP was in focus. Comparing the results for directional PPs, presented in compressed form in (41), it may be seen that *at* is slightly worse in Norwegian and Danish, and *að* is significantly worse in Icelandic, while *som* is slightly better in Norwegian (the null complementizer gives the same results as in (32), i.e. good for MS and bad for Icelandic).

(41) a.   Það var til bæjarins sem/*að við fórum   (Ice)
      b.   Det var til staden   som/*att vi åkte   (Swe)
      c.   Det var til byen   ?som/ ?at vi for   (Nor)
      d.   Det var til byen   *som/(?)at vi kørte   (Dan)
            it   was to the.town as / that we drove

In a sense, then, directional PPs are more like DPs than locative PPs are. I will not attempt here to get closer to the heart of the matter, using category membership as a good first approximation, and taking locative PPs to be representative of PPs in general.[6]

---

[5] Judgments varied somewhat with respect to the Icelandic. In particular two informants felt that the contrast between (37a) and (39a) was not so great as I have indicated, and one felt the same way about (36a) and (40a).

[6] With locative PPs pattern for example purpose clauses, which are PPs in Scandinavian (cf. (86b) in §6.3).

2.5. SUMMARY OF §§2.1-2.4

Here I briefly summarize the basic facts language by language. The null complementizer is impossible with a subject gap in all cases.

In Icelandic, *sem* is used with DP and PP; *að* is also possible with PPs. The null complementizer is never possible. Resultative APs are marginal with *sem*, and depictive APs are impossible.

In Swedish, *som* is always possible, and *att* never is. Both resultative and depictive APs are acceptable with *som* and with the null counterpart.

In Norwegian and Danish, *som* and the null complementizer are both possible with DPs; *at* and the null complementizer are both possible with PPs; and the null complementizer is possible with APs. With APs, there is in addition a distinction between resultative APs, which are marginally acceptable with *som*, and depictive APs, which are marginally acceptable with *at*.

2.6. MULTIPLY-FILLED COMP

There is one more set of data which will be relevant, available only from non-standard varieties of Danish and Icelandic. It is possible to find multiple introducing elements in clefts, as with relative clauses (cf. (15) in §1). The distribution of forms is not clear to me, and judgments are delicate, in part because the forms are stigmatized. Recall that in Danish, both *som* 'as' and *der* 'there' are (standardly) possible with subject gaps, as shown in (42).

(42) a.   Det er Henning som ryger   (Dan)
     b.   Det er Henning der ryger
           it is Henning   smokes
           'It's Henning who smokes'

Recall, too, that multiple introducing elements were observed in relative clauses. This is the case in clefts as well. The examples in (43) are from Nølke 1984:100, who suggests that "[w]e may well find" them "in casual speech" (ibid.).

(43) a.   Det er Peter, som   der ryger   (Colloquial Dan)
     b. ?   Det er Peter,   at der ryger
     c.   Det er Peter, som at der ryger
             it   is Peter as   that there smokes

Vikner 1991, as noted in §1.2, discusses relative clauses with multiple introducing elements, and notes that they are reduced in acceptability and that this may be the result of prescriptivism (cf. his pp. 132-3, esp. fn. 15). The reference grammar Allan et al. 1995:204 identifiès the construction as being found (in relative clauses) in "colloquial language and dialects." In my own experience, some informants reject them outright, and there has been a tendency for informants from Western Jutland to accept them, suggesting that the form may be dialectal. An investigation is clearly needed of their distribution. However, in keeping with the observations of Vikner and others, I have simply labelled them as 'Colloquial Danish.'

I have marked (43b) with a question mark to indicate that my own informants were less comfortable with it, but Nølke does not indicate any such difference in relative acceptability among the examples. My findings are generally in line with Vikner's annotations for similar examples with relative clauses.

In addition, Nølke shows examples of *som* cooccurring with *at* when the focus is a non-subject DP, as in (44c) ((44a) is the standard form).

(44) a.   Det er Peter som   hun elsker   (Dan)
     b.   Það er Pétur sem   hún elskar   (Ice)
     c. ?   Det er Peter som at hun elsker   ·   (Colloquial Dan)
     d. ?   Það er Pétur sem að hún elskar   (Colloquial Ice)
             it   is Peter as   that she loves

My own informants were hesitant about such examples (as with similar examples with relative clauses, cf. (16b) in §1.2 above) but on the whole, examples of the type in (44c)

patterned with the examples in (43), and most closely with the type in (43b). As shown, the same finding holds for Icelandic (cf. (16a)).

Such examples are particularly interesting as they suggest that the various relative elements do not occupy the same positions. As Nølke notes, no other orders of the various relative elements are possible (this is also the case for Icelandic). I discuss the implications for these facts in more detail below.

I have not yet encountered any Norwegian or Swedish speakers who accept such forms. However, the construction is also possible in colloquial Icelandic when the focus is a PP (compare (45a) to (30a) and (31a), and (45b) to (39a) and (40a)), and is in fact significantly better than when the focus is a DP, as in (44d).

(45) a. Það var í bænum sem að ég hitti Jón   (Colloquial Ice)
          it   was in town as   that I met John

      b. Það er án   klæða sem að hann þvær gólfið
          it is without clothes as that he   washes the.floor

Such patterns are not possible in Standard Danish, and preliminary investigations suggest that they are also unacceptable in West Jutlandic and colloquial Danish, but I have not been able to make a systematic inquiry.

3. Three types of predicate

As a prelude to discussing the structure of clefts, I discuss here some basic ideas about predicates. A widespread view of predicates is that they basically consist of an XP containing a gap which is assigned a theta-role. This is consistent with the VP-internal subject hypothesis outlined, e.g., in Koopman & Sportiche 1988, which leads to structures like that in (46a), and with the view of phrase structure in Stowell 1981, by which subject positions are available in all lexical XPs, as indicated in (46b-d). These assumptions, coupled with a theory of small clauses which takes them to contain a functional head, as in Bowers 1993 (cf. also Svenonius 1994, 1996), leads to structures like that in (46c). The status of noun phrases is more controversial, but assuming that predicative noun phrases are NPs and not DPs, the structure in (46d), as suggested in Holmberg 1993, is fully parallel to the other structures shown.

(46) a. Lemmings$_i$ [$_{VP}$ t$_i$ hibernate]

      b. The doctor$_i$ was [$_{PP}$ t$_i$ in his office]

      c. They regard him$_i$ as [$_{AP}$ t$_i$ unpredictable]

      d. Anders$_i$ is [$_{NP}$ t$_i$ a professor]

Assume, then, that the bracketed expressions in (46) represent a type of predicate, and call it a type L[exical] predicate. Lexical predicates are XPs which contain a theta-marked trace of the element they predicate over.

However, it does not seem possible to assume that all predicate are type L. Heycock 1991 discusses a number of predicate types in which there does not seem to be a trace of the element predicated over. Consider, for example, the postulated structures in (47).

(47) a. Sea urchin roe is [$_{CP}$ exactly what$_i$ I need t$_i$]

      b. Eels are [$_{AP}$ Op$_i$ hard to catch t$_i$]

The equative construction in (47a) has a CP containing a wh-chain in the predicate position. Assuming that the wh-word started in the empty theta-position, there is no theta-position to serve as the origin of the subject *sea urchin roe*. In (47b-c) are shown the classic construction known as 'tough-movement,' which has been argued to contain a null operator, and which consequently provides no theta-position for the subject (cf. *It is hard to catch eels*, where it can be seen that *hard* is a one-place predicate).

Assume, then, that there is another type of predicate, an XP which contains an operator-variable chain. Call this a type O[perator] predicate.

A third type of predicate, which will not be relevant in the discussion of clefts, is the equative type illustrated in (48a-e).

(48) a. Clark Kent is [$_{DP}$ Superman]

b. That's [$_{DP}$ me]

c. Spot is [$_{DP}$ my dog]

d. That's [$_{SC}$ a load off my mind]

e. For us to give up now would be [$_{CP}$ for Ed to get away with murder]

f. This analysis looks like [$_{CP}$ you've been reading too much Frege]

In such examples I know of no evidence for a gap or an operator. To this type might belong the non-standard type discussed in Heycock 1991 and illustrated in (48f). They may be referred to as type E[quative] (see Chierchia 1985, Heycock 1991, Bowers 1993, Svenonius 1994, and Heycock & Kroch 1997/this volume for discussion of this type).

4. Two analyses of RCs

Modifiers are a sort of predicate, an open expression. Some modifiers are plausibly type L, for example attributive adjectives. Others, given this typology, must be type O, for example relative clauses. Consider the classic analysis of English relative clauses sketched in (49) (based on Chomsky & Lasnik 1977).

(49) a. I saw the man [$_{CP}$ Op$_i$ that you described t$_i$]

b. I saw the man [$_{CP}$ who$_i$ you described t$_i$]

Here the structure for the two relative clauses is the same, with the overt complementizer pairing with the null operator, and the wh-operator cooccurring with a null complementizer. There are also analyses of relative clauses as involving movement of the head out of the relative clause. Schachter 1973, for example, analyzed relative clauses as being L-type predicates (in my terms). Specifically, the relative clause is a phrase of category S, and it modifies a node of category NOM. The NOM head of the noun phrase is empty (marked with the 'dummy symbol' Δ) in the underlying structure, and some NP moves from S into the empty NOM position. An illustration is provided in (50) (cf. Schachter 1973:33).

(50) a. [$_{NP}$ the [$_{NOM}$[$_{NOM}$ Δ   ] [$_{S}$ we made [$_{NP}$headway]]]]

b. [$_{NP}$ the [$_{NOM}$[$_{NOM}$ [$_{NP}$headway]$_i$] [$_{S}$ we made   t$_i$]]]

Notice that the determiner takes a sister of the category NOM, while *make* takes an NP complement. This means that an NP must move into a NOM position. Translated into ᶜontemporary categories (and adding the complementizer), Schachter's structure looks like the one in (51), with CP adjoined to NP, NP a sister of D.

(51) a. [$_{DP}$ the [$_{NP}$ [$_{NP}$ Δ   ] [$_{CP}$ that we made [$_{DP}$headway]]]]

b. [$_{DP}$ the [$_{NP}$[$_{NP}$ [$_{DP}$headway]$_i$] [$_{CP}$ that we made   t$_i$]]]

Here a DP moves into an NP position. This falsely predicts structures like *the some headway that we made*. Compare the very similar structure proposed in Kayne 1994.

(52) a. [$_{DP}$ the [$_{CP}$ [$_{SpecCP}$] [$_{C'}$ that we made [$_{NP}$headway]]]]

b. [$_{DP}$ the [$_{CP}$ [$_{SpecCP}$ [$_{NP}$headway]$_i$] [$_{C'}$ that we made   t$_i$]]]

Here there is no need for 'Δ' because the sister of the definite article is not a nominative category with an adjoined CP, but the CP itself, which has an A-bar specifier position into which some element can move. Kayne suggests furthermore that what moves is not DP but NP, as indicated. However, since *make* ordinarily takes a DP complement, it is still unclear exactly what prevents *the some headway that we made*. Furthermore, Kayne assumes that in clefts (and in wh-relatives),[7] the moved element is in fact a DP. Compare Schachter's cleft structure in (53a) (category labels updated) with Kayne's in (53b).

---

[7] Kayne's structure for a *which* relative starts out as in [i]; from there, the DP *which book* moves to SpecCP, as in [ii]; then the NP *book* moves to SpecDP within SpecCP, as shown in [iii].

(53) a. It isn't [$_{PRED}$ [$_{DP}$ the cough]$_i$] [$_{CP}$ that t$_i$ carries you off]

    b. It's [$_{CP}$ [$_{DP}$ linguistics]$_i$ that we're studying t$_i$]]

In Schachter's structure, the CP is extraposed, and a DP moves out of it into an empty 'Δ' position in the VP, a sister of *be* labeled 'PRED.' In Kayne's analysis, the sister of *be* is not PRED but CP; once again, the 'Δ' position is unnecessary, as a SpecCP position is available. But in both analyses, what moves must be a full DP (or other XP, since various categories can be focused in the cleft construction). On Schachter's analysis, CP is a type L predicate, while on Kayne's analysis, it is C' which is a type L predicate.

There are various issues remaining to be cleared up with respect to the postulated NP movement for relative clauses. Various other problems arise with the movement analysis as well; see for example Borsley 1997 and Platzack 1997 on Kayne's analysis. However, movement analyses have been adopted for Scandinavian in Åfarli 1994 and Christensen 1995. Below I will not treat relative clauses in any detail but will use the classical analysis as a starting point for the investigation of cleft structures. However, I do accrue some evidence supporting a movement-type analysis for some types of cleft constructions.

5. An analysis of clefts

Consider again what I am calling the classical analysis of relative clauses. Here there is a null operator which may appear either with *that* or with a null complementizer, and in addition the possibility of wh-movement exists. Wh-movement always requires a null complementizer. Thus some element in SpecCP binds a trace in either case.

(54) a. the elephant [$_{CP}$ Op$_i$ that t$_i$ escaped from the zoo]

    b. the elephant [$_{CP}$ Op$_i$ ∅ you released t$_i$ from the zoo]

    c. the elephant [$_{CP}$ which$_i$ ∅ t$_i$ escaped from the zoo]

This analysis is adopted, in essence, for Scandinavian in Taraldsen 1978, and more recently in Platzack 1997, with *som* taking the place of *that* in (54a), and with the null variant in (54b) being essentially the same as the Scandinavian null variant. The version in (54c) is assumed for the stylistically formal wh-relatives mentioned at the end of §1.2.

Since clefts are, as Schachter 1973 established, cross-linguistically similar to relative clauses, the obvious starting point for an analysis of clefts is the analysis of relative clauses. This leads to something like (55) (several analyses from the seventies have something like these structures at a stage of the analysis, after extraposition of the clausal element from subject position; cf. §1.3 above).

(55) a. It was an elephant [$_{CP}$ which$_i$ I released t$_i$ from the zoo]

    b. It was the city zoo [$_{CP}$ from which$_i$ I released an elephant t$_i$]

    c. * It was from the city zoo [$_{CP}$ which$_i$ I released an elephant t$_i$]

    d. It was an elephant [$_{CP}$ Op$_i$ that I released t$_i$ from the zoo]

    e. * It was the city zoo [$_{CP}$ from Op$_i$ that I released an elephant t$_i$]

    f. It was from the city zoo [$_{CP}$ Op$_i$ that I released an elephant t$_i$]

The good examples are exactly parallel to the relative clauses. There are two bad examples, (55c) and (55e). (55e) is ruled out because the null operator cannot pied-pipe a preposition. And (55c) is ruled out because *which* is a DP; there is a matching requirement between the element in SpecCP and the element in focus. In (55b), that element is a PP, but in (55c), it is not.

The basic idea is that a relative clause-like CP is predicated over the element which I have been calling the focus. The focus plus CP appears as the complement of the copula, and

---

i. [$_{DP}$ the [$_{CP}$ I read [$_{DP}$ which [$_{NP}$ book]]]]

ii. [$_{DP}$ the [$_{CP}$ [$_{DP}$ which [$_{NP}$ book]]$_j$ I read t$_j$]]

iii. [$_{DP}$ the [$_{CP}$ [$_{DP}$ [$_{NP}$ book]$_i$ which t$_i$]$_j$ I read t$_j$]]

Compare (52), where what moves to SpecCP is NP.

a dummy subject appears. Thus the focus plus CP can be taken to form a small clause, perhaps with a null functional head as is often assumed for small clauses.

In the following subsections I will discuss the structure in (55), which is in some sense the zero assumption, and propose some modifications.

5.1. PROBLEMS WITH AN OPERATOR BASED ACCOUNT

The sketch of an analysis of cleft structure immediately above leaves several things to be explained. The first difference to note between these CPs and relative clauses is the fact that they can predicate over elements other than DP (or NP), as in (55f). Restrictive relative clauses are very much limited to DP modification, while clefts allow a wide variety of categories to be in the focus position. Consider, for example, the examples in (56). (56a-b) are attempts at modifying a PP. (56c) is an attempt at modifying an AP. All are quite ungrammatical.

(56) a. *   We looked under the bed [Op_i that Ed had hid the money t_i]

      b. *   We sent it to the charity [Op_i that Bridget always donates her clothes t_i]

      c. *   The walls were bright green [Op_i that somebody had painted the ceiling t_i]

If the null operator in (55f) can bind a non-DP trace, it is unclear why the examples in (56) are bad. Non-restrictive relatives can appear as clausal modifiers, but they do not seem to be able to modify XPs in a sentence other than DP. Consider examples like those in (57).

(57) a.   We found the money under the bed, which was a terrible place to hide it.

      b.   We found the money under the bed, a terribly ill-conceived hiding place.

      c. *   We found the money under the bed, which Ed had hidden it.

It may seem at first that (57a) has a relative clause modifying a PP. However, note that an appositive DP, as in (57b), is also licit here. In general, the distribution and intonation of non-restrictive relatives suggests that of appositive DPs. I suggest that non-restrictive relatives are really appositive; possibly, there is a null DP head in (57a), so that *which* in (57a) corresponds not to *under the bed* but to a null DP having the same force as *a place* does in (57b). Note that when it is clear that the gap in the relative clause corresponds to a PP, as in (57c), *which* is quite impossible.

However, some varieties of English may allow non-restrictive relative clauses at least over verb phrases. This is suggested by the pair in (58).

(58) a.   If we get the money, which I expect we will, we'll give it to you.

      b. *   If we get the money, something which I expect we will, we'll give it to you.

Whatever the correct analysis of non-restrictive relative clauses, the operator that appears with *that* in restrictive relatives always binds a DP gap, and is therefore unlike the one in (55f). In fact, the problem is more general. Null operator constructions do not typically allow a variety of categories (cf. Browning 1987). Consider the *tough* construction in (59a) or the parasitic gap constructions in (59b-c).

(59) a. *   After lunch is difficult [Op_i to give a talk t_i]

      b. *   In which bed did you hide an egg [Op_i before you slept t_i]?

      c. *   Why did you sell the car [Op_i before you got rid of the motorcycle t_i]?

(59b) cannot be read with a parasitic gap in the *before* clause. This is explained if the null operator which appears in parasitic gap constructions cannot bind a PP trace. If *why* leaves a non-DP trace (plausible, given e.g. that it does not need Case), then this would also explain why (59c) cannot be understood with a parasitic gap in the *before* clause.

Other questions are raised by the structures in (55) as well. For instance, if the copula can appear generally with a small clause complement and a dummy *it* subject, why are other types of predicates not allowed? For instance, small clauses with AP and DP predicates, like those in (60), are legitimate elsewhere, so why can they not appear in the cleft construction?

(60) a. * It was an elephant upset

     b. * It was an elephant my pet

Moreover, if relative clause-type CPs like those in (55) are possible as small clause predicates, why do they not show up more generally in small clause contexts? Assuming that the copula generally takes a small clause, and allows raising of the subject (as in Stowell 1981), then (61a) is a small clause context; and (61b) is another one, on very common assumptions. But the relative clause-type predicate is quite impossible.

(61) a. * An elephant was which you released from the zoo

     b. * I consider the elephant that you released from the zoo

I have now raised three questions regarding the analysis sketched in (55). First, there is the question regarding non-DP null operators. Second, there is the question regarding the distribution of the postulated CP predicate. Third, there is the question regarding the distribution of predicates in the cleft construction. I will now deal with these three questions in turn.

5.2. AN ARGUMENT FOR MOVEMENT

First, with respect to the nature of the null operator, it is perhaps an overstatement to claim that null operators only bind DP traces. There are many examples in the literature of null operators which have been postulated to bind categories other than DP. For example, yes-no questions are commonly assumed to involve a null operator which presumably binds something corresponding to the polarity of the sentence. Constructions such as comparative deletion construction (*Olaf was quicker than we were*) have been taken to contain a null operator (binding an AP trace in that case). It has been proposed, for example in Aoun & Li 1993 for Chinese, that languages without overt wh-movement have null operator movement instead. Such a null operator must bind non-DP categories in examples like that in (62) (from Aoun & Li).

(62)   [Op] ta renwei Zhangsan weishenme laile?   (Mandarin Chinese)
          he think   Zhangsan why   came
          'Why does he think Zhangsan came?'

A similar case can be made for Northern Norwegian, where degree questions fail to show any overt wh-movement.

(63)   [Op] er du gammel?   (Northern Norwegian)
          are you old
          'How old are you?'

The operator here, I argue in work in progress, binds a degree variable provided by the AP.

Thus it is reasonable to assume that there are in fact operators that bind elements other than DP trace. However, the operators postulated in the work discussed above are restricted to very specific bindees (polarity, for yes-no questions, a class of indefinites, in (62), a degree variable, in (63)). It is still unclear that a null operator such as the one in (55d, f) should be postulated. It would have to be allowed to bind virtually any category, cf. the examples in (1) in §1. If such an operator exists, it is quite unclear what prevents it from appearing in other constructions than the cleft, i.e. what prevents such constructions as (56-59).

Instead, I propose that that-clefts are, at least in some cases, the result of movement, somewhat as in, e.g., Schachter 1973, Pinkham & Hankamer 1975, and Kayne 1994. However, unlike those works, I do not assume that *which*-type clefts are the result of movement out of the CP, and furthermore I am not committed to any modern Scandinavian relative clauses being derived by movement of the NP head (cf. Platzack 1997). Specifically, I assume the structures in (65) for the CP predicate in English clefts; the classical structures for relative clauses are given here in (64) for comparison.[8]

---

[8] Pinkham & Hankamer 1975 argue as I do that there are two types of clefts, one derived by movement of the focus, and allowing a range of categories, and the other having the mid-70's equivalent of a null operator analysis and allowing only DP foci. They argue on wholly different grounds, however, and it does not seem that their argumentation goes through. See Gundel 1977 for discussion.

(64) a. RC: $[_{CP}$ wh$_i$ $\emptyset$ $[_{IP}$ ... t$_i$ ...]]

b. RC: $[_{CP}$ Op$_i$ (that) $[_{IP}$ ... t$_i$ ...]]

(65) a. Cleft: $[_{CP}$ wh$_i$ $\emptyset$ $[_{IP}$ ... t$_i$ ...]]

b. Cleft: $[_{CP}$ t$_i$ (that) $[_{IP}$ ... t$_i$ ...]]

The (a) structures are essentially identical, while the (b) structures are importantly different: in the relative clause, there is a null operator, which I assume is of the category DP; this means that the whole relative clause is a type O predicate, in the sense explained in §3. The Cleft predicate in (65b), on the other hand, is a type L predicate: it contains a trace for a moved element which is not bound within the predicate itself. This trace may be any category, in principle.

These structures turn out to be nearly identical to the structures proposed for clefts with *that* and *which* in Kiss 1996. There, what I have been calling a small clause is a FocusP, headed by a Focus head. The element that moves (in clefts with *that*) or is base-generated (in clefts with *who* or *which*) in SpecFocusP is interpreted as having 'exhaustive' focus, called 'identificational focus' in Kiss 1997. The only structural difference is that Kiss assumes that the copula originates in F, and raises out of it, while I assume that the copula selects the small clause as its complement.

There is a slight contrast in (66) that might be taken as support for this distinction. The idea would be that (66b) is perfect, because the reflexive actually moves, and can be reconstructed, while (66a) is less than perfect, because the reflexive is never actually in a position to be bound by its antecedent, and must be interpreted via an operator.

(66) a. ? It is himself who John likes best

b. It is himself that John likes best

It may at first seem to be a disadvantage of this analysis that it fails to more closely unify relative clauses and clefts. On the contrary, I believe that this is an advantage of the analysis. There are several indications that cleft predicates and relative clauses are not the same. For example, the distribution of wh-elements is different. Consider the pairs in (67).

(67) a. the part of the airport where they stopped me

b. * It was in customs where they stopped me

c. the reason why they stopped me

d. * It was because of my hair why they stopped me

Here it can be seen that *where* and *why* are possible relative operators, but not possible cleft operators (note also that even the occasional wh-elements in MS relative clauses, such as Swedish *vars* discussed in §1.3, are not possible in clefts). Similarly, Icelandic, Norwegian, and Danish allow *að/at* in clefts, but not in relative clauses, as discussed in §§1-2.

The operator analysis sketched in (65a) raises questions regarding case; there must be some mechanism for assigning case to the focus. Examples like those in (68) show that in English, this case is the objective one (but cf. §2.1 in which it is noted that Scandinavian shows connectivity effects here, and that Icelandic also allows nominative in general).

(68) a. It's me who always hurts myself/himself.

b. * It's I who always hurt myself.

I will not propose any specific case-assignment mechanism here, leaving the problem unresolved. More troubling is the fact that the movement analysis of (65b) falsely predicts (69b) rather than (69a).

(69) a. It's me that always hurts myself/himself.

b. * It's I that always hurt myself.

This problem does not arise in Scandinavian (cf. §§6.2-3 below), and I will leave it as an unresolved problem for English.

If clefts and relative clauses are two different kinds of structure, then why are they so alike, a fact stressed by Schachter 1973? I think that they are alike because they both

represent ways of converting a clause into a type of predicate. However, they are different in that the relative clause, a modifier, is a predicate of type NP/NP or DP/DP, in categorial grammar terms, while a cleft predicate is a predicate of type S/DP, in the case of clefts with *which*, and S/XP, in the case of clefts with *that*.[9]

It can be assumed that this distinction has its locus in the complementizer (essentially following the line in Rizzi 1990). This means there is a variety of null complementizers. There must be a null +wh relative complementizer, which allows *which*, *who*, *why*, and *where*, but disallows *what*, *whichever*, and various other wh-elements. It heads a CP which can be adjoined to NP (or DP) (Rizzi 1990 marks it '+predicative'). I assume that this has to do with its semantic type; perhaps this C converts the operator-variable chain into an open position in the semantics (like a theta-position) which can only be discharged through identification, in the sense of Higginbotham 1985. Another way to describe the restriction on the distribution of relative complementizers would be to say that the relative complementizer creates an open NP position, rather than a DP position; since NPs are not valid arguments, it would not be possible to use the relative clause as a small clause predicate.

In addition, there must be a +wh complementizer which appears with *which* and *who* (but not *what* or *why* or *where*) and which heads a CP that appears as a small clause predicate; this C head must convert the operator chain into an open DP position (uncontroversially, in fact, since *which* and *who* are DPs). Below I will propose an explanation for why such CPs do not appear more generally as small clause predicates.

Continuing on the assumption that the differences among clauses are determined by the features of the complementizer, there must also be a variety of −wh complementizers. There must be a *that* which heads a relative clause, and which requires a null operator of the category DP in its specifier (presumably handled by checking theory). There must also be a null variant of this complementizer, which is not a proper governor (because it cannot cooccur with a subject gap). There must be another complementizer *that* which, like the +wh cleft complementizer, heads an open proposition, but which, unlike that element and unlike the relative *that*, does not require any operator in its specifier. Finally, there must be a null non-governing variant of this cleft *that*.

Another option would be to try to work out a theory of operators and chains that derived the various differences. On such a theory, for example, there would not be many complementizers *that*, but one; the null operator that appears in relative clauses would be of a type that binds a DP gap but creates an open NP position. The cleft CP would become a type L proposition simply by virtue of a constituent moving out of it. I will not try to work out such a theory here but simply note its appeal.

5.3. ANSWERING THE QUESTIONS

Now it is possible to answer the questions raised in §5.1 above regarding the first version of the analysis sketched at the beginning of this section. The first question had to do with why such a wide range of categories were allowed , when null operators typically have a very restricted range of binders. In the new version of the analysis, there is no null operator; the clefts that allow a range of categories, namely the clefts with *that* and its null counterpart, involve actual movement.

The second question had to do with why other categories of predicate were not possible in the cleft construction. Here I will suggest that this is because the *it* in subject position in a cleft is extraposition *it*, an element independently observed only to appear in connection with elements of the category CP. I.e., the dummy subject *it* in the cleft in (70) is linked to the CP in essentially the same way as the subject in the structure in (70b).

---

[9] In Montague 1973, relative clauses are type $<e,t>$ (basically equivalent to S/DP), and a special rule allows them to combine (under intersection) with nominative elements (NPs in the terms assumed here), which are also $<e,t>$, to produce nominative elements of type $<e,t>$. However, intersection seems to me too coarse a device for noun phrase modification, and I assume that relative clauses are actually second-order predicates over NPs, i.e. type $<<e,t>,<e,t>>$.

(70)   a.   It was this little tube of glue that he shoplifted

      b.   It was unfortunate for everybody involved that he shoplifted

To see the CP restriction on extraposition *it*, consider (71). (71a-b) show that extraposition *it* can appear even when the predication over the CP subject is equative. (71c) is an example with a relatively heavy AP subject; cf. Svenonius 1994 on non-entity-denoting elements as subjects. (71d) shows that extraposition with *it* is not possible for the AP.

(71)   a.   That the king was foolish was the point of the story

      b.   It was the point of the story that the king was foolish

      c.   Expensive for me is cheap for everybody else

      d. *   It is cheap for everybody else expensive for me

Thus, we do not expect to find cleft constructions with non-CP predicates. Consider the derivations sketched in (72).

(72)   a.   was Ted Turner [$_{CP}$who gave a billion dollars to the UN]

      b.   It was Ted Turner [$_{CP}$who gave a billion dollars to the UN]

      c.   was Ted Turner [$_{AP}$ eccentric]

      d. *   It was Ted Turner [$_{AP}$ eccentric]

      e.   Ted Turner was eccentric

In (72a-b), the copula takes a small clause, and because the predicate there is CP, *it* can be inserted in subject position. In (72c), the copula takes a small clause, but since there is no CP, *it* cannot be inserted. Instead, the only option to satisfy the EPP in the main clause is to raise the subject of the small clause, resulting in (72e).

    This leads to the third question originally posed in §5.1, namely, why do CP predicates not turn up in other contexts than that of the cleft? Namely, why do we not find structures of the type in (73), where for example (73a) is derived straightforwardly from (72a)?

(73)   a. *   Ted Turner was who gave a billion dollars to the UN.

      b. *   I consider Bill Gates who has the most money.

      c. *   With Michael Milken that got out of jail, things should get fun.

Here I would like to suggest that this is because extraposition *it* is not only possible in clefts, it is in fact necessary. Specifically, I propose that *it* serves not only to satisfy the EPP, but also to anchor the CP predicate, in the sense of Svenonius 1994, an analysis of clausal anchoring which builds on Enç 1987, and Farkas 1992.

    The concept of anchoring which is relevant here is a point of interface between the syntax and the semantics. In order to be interpreted as a proposition, CP must be anchored to some set of possible worlds. I have argued (Svenonius 1994) that this anchoring is mediated by the complementizer. Various factors affect the choice of anchor, including the verb used; cf. the factive (74a), where the content of the embedded CP is presupposed to be true, and the non-factive (74b).

(74)   a.   The UN realizes that the US will never pay its debt

      b.   The UN suspects that the US will never pay its debt

It has been pointed out that anchoring is sensitive to syntactic structure (cf. Kiparsky & Kiparsky 1970); although both of the sentences represented by (75a) are ordinary, the sentences in (75b) are likely to induce factivity, with the result that the version with *false* is anomalous.

(75)   a.   It is true/false that Clinton has attacked Iraq.

      b.   That Clinton has attacked Iraq is true/#false.

It seems that DPs can provide anchoring as well; compare (76a), which has a factive interpretation, to (76b), which does not.

(76) a.   the realization that ozone depletion is harming amphibians

     b.   the suspicion that ozone depletion is harming amphibians

Given that a DP may provide anchoring, and that a CP must be anchored, I propose that in the configuration of the cleft, there is no anchor for the CP, and this is why extraposition *it* must be inserted. Consider again the structures represented in (72a-b), slightly modifed here as (77a-b).

(77) a.   was Ted Turner [$_{CP}$that gave a billion dollars to the UN]

     b.   It was Ted Turner [$_{CP}$that gave a billion dollars to the UN]

     c. * [$_{CP}$that gave a billion dollars to the UN] was Ted Turner

In (77a), I argue, there is no anchor for the CP. This leaves it without a complete interpretation. When extraposition *it* is inserted, as in (77b), I suggest, CP is anchored to the real world as a presupposition. This is the semantic contribution of extraposition *it*, not substantially different from the semantic contribution assumed for referential *it*, which is to point out some familiar non-human entity in the context of the discourse. This anchoring is overridden in examples like (75a), where the predicate provides a different, non-presuppositional anchoring. The point with (75b) was that when the syntactic configuration is disturbed, the anchoring supplied by the predicate is no longer available; in that case, presupposition is the default anchoring (see Svenonius 1994 for details).

     The next obvious question is why (77c) is not allowed, given that movement to subject position is generally allowed for CPs. I assume that it is because the CP has no anchor in that position. I must assume that the default anchoring (as in (75b)) is not available in (77c) as a result of the CP in that example being a predicate.

     This is generally consistent with the rare nature of CP predicates. Most apparent cases of CP predicates can be shown to actually be subjects, in inverse constructions (Moro 1997, Heycock 1994). For example, (78a) looks like a case of a CP predicate. However, it should actually be analyzed as in (78b), where a DP predicate has been promoted from the small clause complement to the copula. Heycock 1994 demonstrates this with examples like those in (78c-d), where, she argues, in the small clause complement to *consider*, inversion is not possible.

(78) a.   John's problem was [that nobody wanted to know about his problem]

     b.   John's problem$_i$ was [that nobody wanted to know about his problem t$_i$]

     c.   I consider [that nobody cares the problem]

     d. * I consider [the problem that nobody cares]

The CPs in (78a-c), then, are in subject positions, and are different from the cleft CPs in not being predicates (they also do not contain gaps or operator-variable chains). Truly predicative CPs, it appears, cannot be licensed by their own subject, nor by any default rule. They can only be saved by the insertion of extraposition *it*.

6. Scandinavian Clefts

Here I briefly summarize the findings from §2 above, the patterns for Scandinavian clefts, and then show how the analysis described in §5 applies to Scandinavian.

6.1. SWEDISH

First, recall that Swedish has *som* optionally in all cases, except where there is a subject gap, in which case *som* is obligatory. A few representative examples are repeated here from §2. Swedish clefts never contain *att*.

(79) a.   Det var Jon (som) jag träffade i staden   (Swe)
           it was Jon as   I   met   in town

     b.   Det var i staden (som) jag träffade Jon
           it was in town as   I   met   Jon

     c.   Det var rött (som) han målade huset
           it was red as   he   painted the.house

This suggests, in the context of the current analysis, that Swedish *som* is like English *that*, a category-neutral C head which allows movement to form an L-type predicate from the CP. Recall from §1 that there was evidence that *som* was a head in Old Norse as well. The optionality of *som* is most simply analyzed as being due to a null counterpart of *som*. As for the difference between subject gaps and other gaps, I have no improvement to make on the analysis of Taraldsen 1986 of *som* as a proper governor, its null counterpart failing to be one. Recall that predicative and depictive APs are perfectly acceptable in clefts in Swedish, with and without *som*. This is expected, given that all clefts are derived by movement.

6.2. NORWEGIAN AND DANISH

Next, there is the Norwegian/Danish pattern (there were, it will be recalled, only slight differences between the two standards). Norwegian and Danish fairly strictly use *som* only with DP foci.[10]

(80) a.   Det var Jon (som) eg traff i byen   (Nor)
          it was Jon as I   met in town

      b.   Det var i byen (*som) eg traff Jon
          it was in town as I met Jon

      c.   Det var raudt (?som) han måla   huset
          it was red as   he painted the.house

Thus it is natural to take *som* to be an operator of the category DP, like English *which*. Of course, it could be maintained that *som* is a complementizer, as in the analyses (of relative clauses) in Taraldsen 1986 and Vikner 1991, among others. This is especially natural in light of the facts from subordinate interrogatives, in which *som* cooccurs with wh-elements, as in (14b) in §1 above, or the similar (81).

(81)   Eg lurer   på kven som ikkje har betala   (Nor)
             I wonder on who as   not   has paid
             'I wonder who hasn't paid'

But if we are to assume that *som* is a head, then we need a way to restrict the cleft focus to DP. This could be accomplished either by supposing that *som* obligatorily enters into a spec-head configuration with a null DP operator, essentially as in Vikner 1991, or that there is movement but that *som* checks DP features in SpecCP, disallowing non-DPs from passing out of CP. On any of these variants, *som* can in some sense be said to have DP features. However, the multiply-filled COMP examples from non-standard Danish, some of which are shown here, make it appealing to put relative and cleft *som* in SpecCP, rather than in C as in interrogatives.

(82) a.   Det er danskene som at   der   laver det bedste øl   (Colloquial Dan)
          it is the.Danes as   that there make the best   beer

      b. ? Det er Frankrig som at Danmark skal spille mod   på lørdag
          it is France as   that Denmark shall play against on Saturday

Assuming, as is natural, that *at* is a complementizer element, either we must have CP recursion in (82) (as explicitly argued for by Vikner 1991), or else *som* is in SpecCP. I will assume that *som* is in fact an operator that lands in SpecCP, exactly like English *which*.

    Recall that Norwegian and Danish allow *at* with PPs.

(83) a. · Det var i byen at   eg traff Jon   (Nor)
          it was in town that I   met Jon

      b. * Det var Jon at   eg traff i byen
          it was Jon that I   met in town

      c. ? Det var naken at   han vaska   golvet
          it was naked that he washed the.floor

---

[10] Actually, finite clauses and infinitives with the infinitive marker *å* also appear fairly freely in clefts with *som*, but they appear generally in DP contexts in MS, for example as the complements to prepositions.

Either there is an operator which binds just PP traces, or else clefts with *at* are derived by movement. I will assume that they are the result of movement, and that *at* is in C. This *at* must have prepositional features which prevent non-PPs from moving through SpecCP.

Recall that the one time *at* appeared with a DP focus was in combination with other relative elements, as in (82). If *som* is a complementizer in a CP above the one headed by *at*, as Vikner 1991 proposes, then this remains unexplained. However, if *som* has whatever features *at* checks, then sentences like those in (82) are expected to be good. Thus, although *som* only binds DP trace, it appears to have P features.

Moving on to the null complementizer, recall that Norwegian and Danish are rather liberal with respect to what categories could appear as the focus in a cleft (cf. the examples in (80), or those in (1) in §1). This kind of categorial freedom was what motivated a movement analysis for English. Thus, I suggest, Norwegian also has a complementizer like English *that* and Swedish *som* which allows any category to move out of CP; more specifically, it is like the null variants of those complementizers, since it, like them, is not pronounced and is not a proper governor.

With respect to AP, recall that AP foci were generally acceptable with no complementizer. This is now expected. In finer detail, a resultative AP was marginally acceptable with *som* (cf. (80c)), suggesting that those APs are marginally DP-like in the relevant sense. A depictive AP was marginally acceptable with *at* (cf. (83c)), so those APs are marginally like PPs.

Danish also has the element *der*, with subject DPs.

(84)   Det var Jon der   traf mig i byen   (Dan)
          it was Jon there met me in town

Recall, too, that *der* can cooccur with other elements, in non-standard Danish.

(85)   a.   Det er Peter, som   der ryger   (Colloquial Dan)
       b. ? Det er Peter,   at der ryger
       c.   Det er Peter, som at der ryger
             it is Peter as   that there smokes

Nølke 1984 proposed that *der* is in subject position, like expletive *der*. This is also adopted and defended in Taraldsen 1992. Still assuming that *at* is in C, this accounts neatly for the obligatory ordering seen in the construction. Vikner 1991 argues against this approach, suggesting that relative *der* occupies C^0; but in order to explain the cooccurrence he is forced to allow CP-recursion, and in order to explain the obligatory order of the various relative elements, he is forced to make additional assumptions. I will not review the various arguments here, but refer the reader to the literature.

This set of assumptions straightforwardly captures the observed combinations of relative elements: *som* is a DP operator in SpecCP, *at* is in C and has P features, and *der* is or can be in SpecIP and has subject features. One last comment is in order for (85b), because there is no prepositional element in the specifier of *at*. I must assume that although *at* prevents non-PPs from entering its specifier, it does not require anything to appear there. The subject *Peter* in (85b) is base-generated, as *der* creates a type O predicate, so nothing ever moves through the specifier of *at* in (85b).

6.3. ICELANDIC
The last pattern is the Icelandic one. In Icelandic, *sem* was seen to allow only DP and PP foci in clefts, though perhaps also marginally AP, as in (86c) (from Thráinsson 1979:77, who does not mark it as marginal).

(86)   a.   Það eru Íslendingarnir sem eru bestir í skák.   (Ice)
             it are the.Icelanders as are best in chess
             'It is the Icelanders that are best at chess'
       b.   Það var til að búa   til kakó   sem við keyptum mjólk.
             it was to to prepare to cocoa as we bought   milk
             'It was to make cocoa that we bought milk'

c. ?   Það er gulur   sem bíllinn er
       it   is yellow as   the.car is

The pattern can be captured by assuming, as for Norwegian and Danish, that *sem* is like English *which*, an operator landing in SpecCP. However, unlike *which* and Norwegian and Danish *som*, *sem* is not strictly limited to binding DP trace; it can also bind PP trace. This can be described by assuming that *sem* is '–V,' the featural specification that N and P have in common (recall that Norwegian and Danish *som* was argued to have P features, even though it could only bind DP trace).

   If this is the right analysis, then *sem* has apparently been reanalyzed since Old Norse times (cf. (8b) in §1.1). This also means that there must be a null complementizer in Icelandic, though it can only cooccur with the operator element *sem*. Jóhannes Gísli Jónsson (personal communication) points out that the lack of inflection on *sem* makes it an unlikely pronoun in Modern Icelandic. However, an advantage of the analysis is that it captures the possibility, noted for colloquial Icelandic, of *sem* cooccurring with *að*, without multiplying head positions.

(87)   a. ?   Það er Pétur sem að   hún elskar   (Colloquial Ice)
             it   is Peter as   that she loves

       b.   Það er án   klæða sem að hann þvær   gólfið
             it   is without clothes as   that he   washes the.floor

If *sem* is not in SpecCP, then these examples require either CP recursion, as in Vikner 1991, or a split Comp, as in Rizzi 1995. Note also that the assumption that *sem* is an operator, and that the DP has not moved, allows an account of the cases in which the case on the focus fails to match that of the gap, as seen in (28-29) above, in §2.1, or as in (88a).

(88)   a.   Það er brennivín   sem hann varð   fullur af   (Ice)
             it   is liquor.NOM as   he   became drunk of
             'It's liquor he got drunk on'

       b. *   Brennivín   varð   hann fullur af
             liquor.NOM became he   drunk of

       c.   Brennivíni varð   hann fullur af
             liquor.DAT became he   drunk of
             'Liquor, he got drunk on'

(88b-c) show that topicalization requires the case on the fronted element to match that of the gap, i.e. there is connectivity between the moved element and the gap. The argument here is reminiscent of early arguments from failure of connectivity for non-movement analyses of clefts, e.g. as in the examples in (89) (cf. also §5.2 above).

(89)   a.   It's myself I don't like
       b.   It's me I don't like
       c. *   Me, I don't like

(89a) shows connectivity, which is consistent with movement, but which of course can be achieved in other ways as well. (89b) shows failure of connectivity, which is not consistent with more uncontroversial cases of movement, such as topicalization, shown in (89c). The failure of connectivity argues that there is (or can be) an operator in clefts with *sem*, not that *sem* actually is that operator. However, I will continue to assume that *sem* in Icelandic clefts is an operator, and that it occupies SpecCP.

   Thráinsson 1979, chapter 2, argues, following Pinkham & Hankamer's 1975 analysis of English, that Icelandic allows two different derivations for clefts: one is relative extraposition, and the other is a cleft transformation. Clefts with DP foci are ambiguous, and clefts with non-DP foci must come from the cleft transformation. Thus, the relative structure in (90a), which requires nominative case on the predicative DP, is the source for the version of the cleft in (90b) that has nominative case on the focus, while the version of (90b) that has dative case on the focus is derived by a cleft transformation.

(90) a.   Það sem ég gleymdi var stefnumótið /*stefnumótinu.   (Ice)
            it   as   I forgot was the.date.NOM/ the.date.DAT
            'What I forgot was the date'

      b.   Það var stefnumótið /stefnumótinu sem ég gleymdi.
            it   was the.date.NOM/the.date.DAT as I forgot
            'It was the date that I forgot'

However, as noted in §1.3 above, an extraposition analysis raises more questions than it answers. I will assume instead that both versions of (90b) involve the same structure, and that the difference has to do with the assignment of nominative case, which is less restricted in Icelandic than in English or MS.

Icelandic, it will be recalled, also allows clefts just with *að*, but only when the gap is a PP.

(91) a. * Það var Jón að   ég hitti í bænum   (Ice)
            it   was Jon that I   met in town

      b.   Það var í bænum að ég hitti Jón
            it   was in town that I   met Jon

      c. * Það var rautt að   hann málaði húsið
            it   was red that he   painted the.house

Here, as with Norwegian, it could be assumed that *að* is a complementizer which allows movement, like English *that*, except that *að* checks prepositional features. Interestingly, there is also a preposition *að*, historically the same word as the complementizer (Danish also has the preposition, *ad*). Thus it is even more plausible for Icelandic than for Norwegian that *að* checks prepositional features on the trace in its specifier. In Icelandic, there is no null counterpart to *að*.

The facts about cooccurrence are also satisfyingly solved. *Að* appears (albeit marginally) alongside *sem* in clefts with DP foci, as in (87a), when it could not appear by itself. The analysis allows an explanation of this fact: *að* is impossible in clefts with DP foci because *að* must check prepositional features. But *sem* has been shown to be –V, neutral between a prepositional and a nominal. So when *sem* appears in the specifier of *að*, it plausibly checks the prepositional features, even when itself binding a DP trace.

A final comment about Icelandic concerns the marginally acceptable resultative and predicative AP examples, as in (86c). If they are to be captured, a simple way to do so would be to assume that they can marginally be treated as DPs, or rather, their traces can marginally be treated as DP traces. Depictive AP was generally impossible in Icelandic clefts, and this is described by the proposal made here.

7. Conclusion

As I stated in the introduction, this is a working paper and the primary goal has been to present a tangled thicket of data in as clear a way as possible. In particular I have not done justice to the previous literature, especially the wealth of literature on relative clauses. The differences among the Scandinavian languages in the cleft construction turn up most clearly in what relative element is used, and this is what I have concentrated on. Descriptively, there is a correlation between what can show up as the focus of the cleft and what can show up as the introducing element in the CP predicate of the cleft.

In §5 I examined a similar correlation in English and suggested that there is evidence for movement of the focus out of the cleft predicate, in some cases (evidence which is lacking in relative clauses). The fact that Kiss 1996 independently arrived at the same conclusion is quite encouraging. However, the analysis entails that there are movement and non-movement structures that look superficially very similar, for example, the pair in (66), or the similar pair in (92).

(92) a. ?   It was himself who John was going to talk about
      b.   It was himself that John was going to talk about

I have suggested that in the example with *who*, *who* is an operator occupying the specifier of a CP which functions as a type O predicate over a base-generated small clause subject, while

in the example with *that*, *that* heads a CP which functions as a type L predicate over a DP which has moved out of it.

Setting this interpretation of the distinction to work on the Scandinavian data, I am led to claim that the same contrast holds for the pair in (93), where Norwegian *som* is like English *who*, while Swedish *som* is like English *that*.

(93) a. ? Det var seg sjølv som han skulle snakke om (Nor)
     b.   Det var sej själv som han skulle tala om (Swe)
          it was RFX self as he should talk about

The judgments seem consistent with the hypothesis, though the contrast is subtle, as it is in (92), and the explanation for it is not entirely understood (specifically, it is unclear why the (a) examples should be good at all). Note that there is no contrast in (94), nor is there expected to be, since the null complementizers in Norwegian and Swedish are alike.

(94) a. Det var seg sjølv han skulle snakke om (Nor)
     b. Det var sej själv han skulle tala om (Swe)
        it was RFX self he should talk about

I have stated the restrictions in terms of categorial features, and have located them in the complementizers as well as on the various operators proposed. None of these moves have been extensively justified. In particular, the restrictions as stated are too coarse to capture the observed patterns in the data, such as the differences between depictive and resultative APs, or the difference between locative and directional PPs. I believe that a more refined understanding of the relation between syntactic category and semantic interpretation is needed.

Other shortcomings of the analysis are many. No explanation has been given for the consistent failure of null complementizers to allow subject gaps; the claim that they are not proper governors is simply descriptive. The connection between the Danish use of *der* as an expletive and its use as a relative element has not been explored. The *som* discussed here and the *som* which appears in embedded interrogatives (and in main clause interrogatives in some dialects; see Åfarli 1986, Rice & Svenonius to appear) appear to be more distant from one another than they are on other analyses, where they are both heads. The exceptional nature of the predicates postulated in §5.2 , which predicate over such a wide range of categories, has not been investigated. I can only say that I hope to address these and other problems in the not too distant future.

References

Akmajian, Adrian. 1970a: 'On deriving cleft sentences from pseudo-cleft sentences,' *Linguistic Inquiry* 1:149-68.

Akmajian, Adrian. 1970b: *Aspects of the Grammar of Focus in English*. PhD dissertation, MIT (Published 1979 by Garland, New York).

Allan, Robin, Philip Holmes, and Tom Lundskær-Nielsen. 1995: *Danish: A Comprehensive Grammar*. Routledge, London.

Aoun, Joseph, and Yen-Hui Audrey Li. 1993: 'Wh-elements in situ: Syntax or LF?' *Linguistic Inquiry* 24.2:199-238.

Borsley, Robert. 1997: 'Relative clauses and the theory of phrase structure' *Linguistic Inquiry* 28.4:629-647.

Bowers, John. 1993: 'The syntax of predication.' *Linguistic Inquiry* 24.4:591-656.

Browning, Marguerite. 1987: *Null Operator Constructions*. PhD dissertation, MIT, Cambridge, Ma.

Chierchia, Gennaro. 1985: 'Formal semantics and the grammar of predication.' *Linguistic Inquiry* 16.3:417-43.

Chomsky, Noam, and Howard Lasnik. 1977: 'Filters and control.' *Linguistic Inquiry* 8.3:425-504.

Christensen, Kirsti Koch. 1995: 'A Kaynean analysis of Modern Norwegian (MN) and Old Norse (ON) relatives' MS. University of Bergen. Paper presented October 14, 1995 at University of Tromsø.

Enç, Mürvet. 1987: 'Anchoring conditions for tense' *Linguistic Inquiry* 18.4:633-657.

Faarlund, Jan Terje. 1992: *Norsk syntaks i funksjonelt perspektiv*. Universitetsforlaget, Oslo.

Faarlund, Jan Terje. 1994: 'Old and Middle Scandinavian,' in *The Germanic Languages*, ed. by E. König and J. van der Auwera, 38-71. Routledge, London.

Faarlund, Jan Terje, Svein Lie, and Kjell Ivar Vannebo. 1997: *Norsk referansegrammatikk*. Universitetsforlaget, Oslo.

Farkas, Donka. 1992: 'On the semantics of subjunctive complements,' in *Romance Languages and Modern Linguistic Theory* (*Current Issues in Linguistic Theory* Vol. 91), ed. by Paul Hirschbühler and Konrad Koerner, 69-104. John Benjamins Publishing Company, Amsterdam.

Gundel, Jeanette. 1977: 'Where do cleft sentences come from?' *Language* 53:543-59

Heggstad, Leiv, Finn Hødnebø, and Erik Simensen. 1975: *Norrøn Ordbok*. Det norske samlaget, Oslo.

Heycock, Caroline. 1991: *Layers of Predication: The Non-Lexical Syntax of Clauses*. PhD dissertation, University of Pennsylvania, Philadelphia, Pa.

Heycock, Caroline. 1994: 'The internal structure of small clauses: New evidence from inversion' *Proceedings* of NELS 25.

Heycock, Caroline, and Anthony Kroch. 1997: 'Inversion and equation in copular sentences,' paper presented at the Workshop on the Syntax and Semantics of (Pseudo-)Clefts at ZAS in Berlin.

Higginbotham, James. 1985: 'On semantics.' *Linguistic Inquiry* 16:547-94.

Higgins, F. R. 1973. *The Pseudo-Cleft Construction in English*. PhD dissertation, MIT. (Published in 1979 by Garland, New York).

Holmberg, Anders. 1993: 'On the structure of predicative NP.' *Studia Linguistica* 47:126-38.

Kayne, Richard. 1994: *The Antisymmetry of Syntax*. MIT Press, Cambridge, Ma.

Kiparsky, Paul, and Carol Kiparsky. 1970: 'Fact.' *Progress in Linguistics*, ed. by Manfred Bierwisch and Karl Erich Heidolph, 143-73, Mouton, The Hague.

É. Kiss, Katalin. 1996: 'The focus operator and information focus,' *Working Papers in the Theory of Grammar* 3.2, Research Institute for Linguistics, Hungarian Academy of Sciences, Budapest.

É. Kiss, Katalin. 1997: 'The cleft construction as a Focus projection,' paper presented at the Workshop on the Syntax and Semantics of (Pseudo-)Clefts at ZAS in Berlin.

Koopman, Hilda, and Dominique Sportiche. 1988: 'Subjects,' MS. UCLA.

Montague, Richard. 1973: 'The proper treatment of quantification in ordinary English,' in *Approaches to Natural Language*, ed. by J. Hintikka, J. Moravcsik, and P. Suppes, Reidel, Dordrecht.

Moro, Andrea. 1997: *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge University Press, Cambridge.

Nygaard, Marius. 1906: *Norrøn Syntax*. H. Aschehoug & Co., Oslo.

Nølke, Henning. 1984: 'Clefting in Danish?' in *Topics in Danish Syntax*, ed. by Finn Sørensen and Lars Heltoft, 34-71, Akademisk forlag, København.

Pinkham, Jessie, and Jorge Hankamer. 1975. 'Deep and shallow clefts,' in *Papers from the Eleventh Regional Meeting, Chicago Linguistics Society*, ed. by Robin Grossman, James San, and Timothy Vance, 429-50, CLS, Chicago.

Platzack, Christer: 1997. 'A representational account of restrictive and non-restrictive relatives: The case of Swedish' Working Papers in Scandinavian Syntax 59:33-63.

Rice, Curt, and Peter Svenonius. 'Prosodic V2 in Northern Norwegian,' to appear in *Language*.

Rizzi, Luigi. 1990: *Relativized Minimality*. MIT Press, Cambridge.

Rizzi, Luigi. 1995: 'The fine structure of the left periphery,' MS. Université de Genève.

Rooth, Mats. 1985: *Association with Focus*. PhD dissertation, UMass, Amherst.

Schachter, Paul: 1973. 'Focus and relativization' *Language* 49.1:19-46.

Stowell, Tim 1981: *Origins of Phrase Structure*, PhD dissertation, MIT, Cambridge, Ma.

Svenonius, Peter. 1994: *Dependent Nexus: Subordinate Predication Structures in English and the Scandinavian Languages*. PhD dissertation, UCSC, Santa Cruz, Ca.

Svenonius, Peter. 1996: 'Predication and functional heads,' in *The Proceedings of the Fourteenth West Coast Conference on Formal Linguistics*, ed. by José Carmacho, Lina Choueiri, & Maki Watanabe, 493-508. CSLI, Stanford.

Svenonius, Peter. Forthcoming: 'Subject positions and the placement of adverbials,' in *Subjects, Expletives, and the EPP*.

Taraldsen, Knut Tarald. 1978: 'The scope of wh-movement in Norwegian.' *Linguistic Inquiry* 9:623-40. Reprinted in 1989 in *Syntaks/Syntax*, ed. by Ernst Håkon Jahr and Ove Lorentz, 199-213. Novus, Oslo. Page numbers here are from the reprint.

Taraldsen, Knut Tarald. 1986b. '*Som* and the Binding Theory,' in *Topics in Scandinavian Syntax*, ed. by Lars Hellan and Kirsti Koch Christensen, 149-184. Dordrecht: D. Reidel.

Taraldsen, Knut Tarald. 1992. 'Second thoughts on *der*,' in *Structure de la Phrase et Théorie du Liage*, ed. by Hans-Georg Obenauer and Anne Zribi-Hertz, 217-249. Presse Universitaires de Vincennes, Paris.

Thráinsson, Höskuldur. 1979: *On Complementation in Icelandic*. PhD dissertation, Harvard University (Published 1979 by Garland, New York).

Venås, Kjell. 1978: 'Samansette setningar med «det».' *Maal og Minne*

Vikner, Sten. 1991. 'Relative *der* and other C^0 elements in Danish.' *Lingua* 84:109-136.

Åfarli, T. 1986. 'Absence of V2 effects in a dialect of Norwegian,' in *Scandinavian Syntax*, ed. by Östen Dahl & Anders Holmberg, 8-20. Institute of Linguistics, University of Stockholm.

Åfarli, Tor. 1994: 'A promotion analysis of restrictive relative clauses' *The Linguistic Review* 11:81-100.

Åfarli, Tor. 1995: 'A unified analysis of relative clause formation in Old Norse' MS. Universitetet i Trondheim.

Peter Svenonius
HUM fak, Øvre Lysthus
Universitetet i Tromsø
N-9037 Tromsø, NORWAY
sven@isl.uit.no