

Subject requirement, complementizers and optionality*

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Abstract

This paper addresses the issue of optionality in complementizer insertion/drop and related subject/object asymmetries in A'-dependencies, by focusing on the variation attested in Mainland and Insular Scandinavian. On the one hand, there is extensive literature discussing subject/object asymmetries in complementizer insertion/drop in Mainland Scandinavian A'-dependencies (cf. Taraldsen 1986, Allan et al. 1995:193, Faarlund et al. 1997: 193, Teleman et al. 1999:555, Thráinsson 2007: 443, a.o.). On the other hand, Icelandic does not display such an asymmetry (Thráinsson 2007: 409), but is the only Scandinavian language with productive Stylistic Fronting, whereas Faroese displays a mixed behavior (cf. Thráinsson et al. 2004, Thráinsson 2007). Stylistic Fronting (SF) is a specific type of fronting that moves various types of constituents to a preverbal position, is restricted to clauses lacking an overt preverbal subject and is productive in subordinate clauses (e.g. embedded Wh-, relative clauses; Maling 1980, 1990, Jónsson 1991, Holmberg 2000). It has been suggested that SF is an EPP-driven mechanism (Holmberg 2000, Ott 2009) or that SF licenses subject extraction, which seems to some extent controversial (Rognvaldsson & Thráinsson 1990; cf. Franco 2009a, 2009b), thus it may be concluded that Icelandic also displays some sort of subject/object asymmetry at the CP-IP interface.

The paper proposes a unifying analysis for Mainland Scandinavian, Icelandic and, potentially, Faroese, and argues that SF and SOM insertion are two different strategies to check one of the (at least) two features encoded on the lowest CP head Fin^0 (cf. Rizzi 1997). Such feature-checking mechanism ensures proper anchoring of the clausal semantic content (i.e. event structure and clausal arguments) to the discourse. The account is based on comparative synchronic and diachronic facts, such as recent findings on long extractions in Mainland Scandinavian, with respect to drop/insertion of the complementizer SOM, and the diachronic evolution and loss of SF in Old Swedish (Delsing 2001), by contrast to Icelandic.

Keywords: Scandinavian, Stylistic Fronting, complementizer, Finiteness, Subject/object asymmetries.

1. Introduction

If we take a comparative look at the pattern of complementizer insertion and complementizer drop in Scandinavian subordinate clauses (Thráinsson 2007: 443-460), we immediately notice something that may sound unsurprising: Icelandic is different. The following examples show that Icelandic does not allow drop of the relative particle SEM, cf. (1b), whereas Mainland Scandinavian (MSc, in this paper represented primarily by Swedish and Norwegian varieties) does, in object relative clauses: SOM is dropped in (1a). By contrast, C-drop¹ in declarative complements is subject to

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¹ In the paper I use the generic term C-drop to refer to drop of complementizer, (relative) particle and other overt

variation in MSc. In many varieties, the complementizer AT/ATT cannot be dropped if it introduces a declarative clause whose subject has been extracted, cf. (2a), which indicates that the variety is sensitive to C-trace effects². The situation is the opposite in Icelandic, C-drop is only marginally accepted, despite the subject extraction, cf. (2b).

- (1) a. *Bilen (som) vi mötte er mycket vacker.* (Swedish)
 Car.the SOM we met is very beautiful
 “The car we met is very beautiful”
- b. *Þetta er maðurinn *(sem) María hitti í gær.* (Icelandic)
 This is man.the SEM Mary met yesterday
 “This is the man Mary met yesterday” [Thráinsson 2007: 447, 8.130; 407, 8.37b]
- (2) a. *Denne boka veit eg (?*at) __ vil interessere deg.* (Norwegian)
 this book know I that will interest you
 “This book, I know will interest you”
- b. *Þetta vonum við ?*(að) __ muni einhverntíma verða gert* (Icelandic)
 This hope we that shall sometimes become done
 “This, we hope will be done at some point” [Thráinsson 2007: 446, 8.129]

Basically, the differences between the properties of Icelandic and other Scandinavian languages, with respect to complementizer drop/insertion, can be summed up as follows:

- i) C-drop in Icelandic is highly restricted, if any, cf. (1b);
- ii) Icelandic does not show C-trace effects, cf. (2b), but, in this case anti-C-trace effects.

By contrast, Mainland Scandinavian (and Faroese) do not behave uniformly, with respect to i) and ii), thus it would be preferable to refer to the single languages (Norwegian, Swedish, Danish...) rather than to MSc. The problem is that even this choice would not be appropriate, given the broad dialectal variation encountered within each macrovariety. The phenomena investigated in this paper have been treated by previous literature as more or less uniform in each language, (Taraldsen 1986, 2001, Allan et al. 1995:193, Thráinsson 2007), although some works acknowledge the microvariation in the complementation possibility of Norwegian (Áfarli 1994) and Danish (Vikner 1991, Mikkelsen 2002).

In this respect, Icelandic stands out as a more uniform, “well-behaving” language, without significant synchronic variation. The general question, then, is

A) which properties are related to C-drop/insertion (and C-trace effects) and how come such properties receive such a variable morphosyntactic realization in some languages (Norwegian, Swedish, Danish, but also non-Scandinavian languages, like English, etc.) but not in others (i.e. Icelandic).

For the present purposes, the answer is searched within Scandinavian languages, which offer diverse patterns of possibilities with respect to C-drop/insertion, but differ minimally in other grammatical properties. This paper builds up on the proposal put forward by Boef & Franco (2010,

subordinators.

² There is significant variation with respect to C-trace effects in Norwegian, whereas in Swedish C-trace effects are generally shared among all the speakers. In this case the complementizer in question is the declarative AT (Norwegian) or ATT (Swedish), ScanDiaSyn fieldwork data. The presence of C-trace effects in Norwegian is highly controversial, since there is enormous variation among speakers (even of the same family, fieldwork data in Boef & Franco, in prep.). Perhaps the great variation is to be attributed to the fact that there is no such thing as spoken standard Norwegian, but rather many different coexisting grammars grouped as Norwegian. The specific parameters of variations are yet to be identified.

in prep.) that C-trace effects can be related to the creation of clausal boundaries, by means of the declarative complementizer AT/ATT blocking appropriate feature inheritance from the clausal CP domain into the embedded one. However, the paper does not deal specifically with AT/ATT-trace effects, but concentrates on insertion/drop of the relative particle SOM/SUM/SEM in the various Scandinavian languages.

One significant aspect that distinguishes Icelandic from Faroese and Mainland Scandinavian is the special pro-drop status of the language (cf. Vikner 1995, Svenonius 2000, Biberauer et al. 2010, a.o.). On the one hand, the setting of the pro-drop parameter in Icelandic (expletive and semiargumental post-verbal pro-drop) might play a role in C-drop possibilities of this language, but it is not obvious how. On the other hand, the possibility to omit the subject has been related to another peculiarity of this language, namely Stylistic Fronting (SF), cf. Maling (1980, 1990). SF is a specific type of fronting that moves various types of constituents to a preverbal position, is restricted to clauses lacking an overt preverbal subject and may occur in subordinate clauses (e.g. embedded Wh-, relative clauses; Maling 1980, 1990, Jónsson 1991, Holmberg 2000). It has been suggested that SF is an EPP-driven mechanism (Holmberg 2000, Ott 2009) or that SF actually licenses subject extraction (Rögnvaldsson & Thráinsson 1990). Poole (2007) shows that the latter argument contains a logical error. In any case the most problematic aspect for these accounts is the optionality of Icelandic SF, which is at best reduced to a difference in the EPP-checking requirement. By contrast, the optionality of SF in other non-Germanic varieties has been explained as a difference at the level of information structure (Fisher and Alexiadou 2001 for Old Catalan, Mathieu (2006) for Old French, cf. also Franco (in prep.) for Old Florentine). A related question then is

B) what is the role of SF in Icelandic grammar and whether its optionality can be related to the optionality (and variability) of C-drop/insertion in the other Scandinavian languages.

Question A) and question B) are at the basis of the investigation presented in this paper, which is structured as follows: Section 2 presents novel facts on Mainland Scandinavian long A'-dependencies, showing that previous proposals concerning C-drop/insertion are not adequate; section 3 illustrates Icelandic SF and discusses the limits of some existent accounts; section 4 presents the proposal: the facts illustrated up to this point are related to conditions imposed by information structure via a feature-checking mechanism that enables anchoring of the clausal semantic content to the discourse. The features involved are encoded on FinP (cf. Rizzi 1997, 2004, Haegeman 2006) and expressed as [finiteness], and [definiteness]: the nominal counterpart, in relation to the double (N; V) nature of C (cf. Déchaine & Tremblay 2011, Muyskens 2008, Chomsky 1995). Section 5 illustrates a series of borne-out predictions following from the proposal, and section 6 is the conclusion.

2. Mainland Scandinavian

There is extensive literature discussing the distribution of complementizers in A'-dependencies in Mainland Scandinavian (Taraldsen 1986, 2001, Allan et al. 1995:193, Faarlund et al. 1997: 193, Telemann et al. 1999:555, Thráinsson 2007). Specifically, some works discuss the pattern of distribution for the complementizer SOM in relative and embedded Wh- clauses. SOM is a special form (some argue it is a relative operator, Taraldsen 2001, Vikner 1991; other a complementizer, Thráinsson 2007: 447) used to introduce A'-dependencies. In relative clauses, SOM is obligatory only with subject extractions, (3a), otherwise it can be dropped:

- (3) a. *Jeg kjenner mannen *(SOM) kom hit* (Norwegian)
 I know man.the SOM came here
 "I know the man who came here"
- b. *Jeg kjenner mannen (SOM) Maria skal møte i morgen*

I know man.the SOM Maria will meet tomorrow
 “I know the man Mary will meet tomorrow”

The same pattern given in (3) holds for Swedish, whereas Danish has different possibilities related to the availability of another form, DER, which is syncretic with the subject expletive, and is used in subject extraction only (cf. Vikner 1991; Taraldsen 2001; Mikkelsen 2002):

- (4) a. *Vi kender en lingvist (DER/SOM) vil læse denne bog* (Danish)
 We know a linguist DER/SOM will read this book
 “We know a linguist who will read this book”
- b. *Vi kender en bog (*DER)/(SOM) denne lingvist vil læse*
 We know a book DER/SOM this linguist will read
 “We know a book that this linguist will read” [Vikner 1991]

Because of the existence of such lexical element (DER) the Danish system is more complex. I will briefly address the Danish cases in section 5 (but cf. Boef & Franco in prep.), and focus on Norwegian and Swedish for the remainder of the paper. Accordingly, I will refer to Norwegian and Swedish, as to Mainland Scandinavian (MSc) in this paper.

It has been proposed that SOM-insertion in Swedish and Norwegian depends on the licensing of a nominative feature in the subject position (Taraldsen 2001: 168), much in the flavor of the *-i* morphology of the French *qui*, for the *que/qui* alternation (Kayne 1976). In the example below, a pair illustrates the subject/object asymmetry related to the complementizer morphology in French

- (5) a. *Je connais l'homme **qui**/***que** __ est venu ici* (standard French)
 I know the man who is come.PART here
 “I know the man who came here”
- b. *Je connais l'homme **que**/***qui** Marie va rencontrer __*
 I know the man that Mary goes meet.INF
 “I know the man that Mary is going to meet”

In the GB framework, then, SOM-insertion is analyzed as a strategy to enforce proper government and prevent ECP effects with subject extractions, an account that has been fairly fortunate in the literature on subject/object asymmetries (Taraldsen 1978, 1986, 2001, Rizzi 1990, Rizzi & Shlonsky 2006: 17). Taraldsen (2001: 168) analyzes Norwegian SOM as either an expletive or an argument. Specifically, he suggests that in non-subject extractions (cf. 3b), SOM is optionally doubling the argument, since the head of the relative is not an operator in Norwegian. By contrast, SOM in subject relative clauses can be either an expletive or an argument, cf. (3a). The reason why Taraldsen (2001) distinguishes between expletive and argumental nature of SOM is related to SOM-distribution in Norwegian embedded Wh-questions. Norwegian embedded Wh- questions on the subject require that the Wh- element be followed by SOM, as in (6), whereas SOM is ungrammatical in object questions, as in (7).

- (6) *Vi vet ikke hvem ***(SOM)** oppfant ostehøvelen* (Norwegian)
 we know not who SOM invented the cheese slicer
 “We do not know who invented the cheese slicer”
- (7) *Vi vet ikke hvem ***(SOM)** de her ansatt*
 we know not who SOM they have hired

According to Taraldsen (2001:168), the ungrammaticality of SOM-insertion in object extractions as in (7) is due to the fact that “interrogatives have operators in Spec-CP, and operators cannot be doubled by pronouns. Hence, the SOM in (4) [here (6)] can only be an expletive, and (5) [here (7)], where SOM cannot be an expletive, is ungrammatical with SOM.” A first problem with this idea is that it cannot be straightforwardly extended to other Scandinavian languages with SOM-complements, such as Swedish. In Swedish, SOM is not ungrammatical in indirect object Wh-questions, as (8b) shows³:

- (8) a. *Hon undrade vem *(som) kom* (Swedish)
 She wondered who SOM came
 “She wondered who came”
- b. *Hon undrade vem (som) Johan träffade*
 She wondered who SOM Johan met
 “She wondered who John met”

So far I have mainly addressed facts concerning relative clauses: for reasons of space, I will not discuss embedded Wh- questions in detail here. The pattern of SOM-insertion in this context becomes a little more unclear, with some differences between Swedish and Norwegian, however, it can be properly accounted for under the hypothesis that diachronic evolution played a role in shaping the complementation system in the two languages (cf. Section 5).

Taraldsen (2001: 168) draws a parallel between Norwegian SOM, which he interprets as an expletive, and the *-i* morphology on the complementizer *qui* in French, which would be reminiscent of expletive pronoun *il*. However, the suggestion that SOM, on a par with French *qui*, licenses nominative case on C (by c-commanding the subject position, namely Spec, IP, cf. Rizzi and Shlonsky 2006: 17) encounters some problems once we observe the pattern of SOM-distribution in long A'-dependencies. Consider below the examples of long extractions out of a declarative complement embedded under a verb of saying (*å si* = to say, for Norwegian) or a semi-factive, propositional attitude predicate (*å hoppa* = to hope, for Swedish).

- (6) a. *Jeg kjenner mannen (SOM) du sa (*SOM) kom hit.* (Norwegian)
 I know the man SOM you said SOM came here
 “I know the man you said came here”
- b. *Jeg kjenner mannen (SOM) du sa (*SOM) Maria skal møte i morgen.*
 I know the man SOM you said SOM Mary will meet tomorrow
 “I know the man you said Mary will meet tomorrow”
- (7) a. *Jag känner mannen (SOM) du hoppas (*SOM) kommer hit.* (Swedish)
 I know the man SOM you hope SOM comes here
 “I know the man you hope will come here”
- b. *Jag känner mannen (SOM) du hoppas (*SOM) Maria ska träffa imorgon.*
 I know the man SOM you hope SOM Mary will meet tomorrow
 “I know the man you hope Mary will meet tomorrow” [Boef & Franco, in prep.]

3 In Swedish, SOM is not ruled out in object questions, but just optional. The same difference is reflected in long extractions. This characteristic is arguably a result of diachrony, cf. Section 5.

The subject/object asymmetry attested for Swedish SOM-insertion in relative clauses, cf. (3) above, disappears in long extractions, as the pairs in (6)-(7) show. Interestingly, neither Norwegian, nor Swedish speakers accept SOM-insertion in the most deeply embedded clause in long subject extractions, see (6a) and (7a), but they accept SOM if it is directly selected by the matrix (...*mannen som du sa/hoppas*...=...man SOM you said/hope...). In this case, the pattern of SOM-insertion does not depend on which argument is being extracted, because SOM-insertion in the most deeply embedded clause is ungrammatical anyway (cf. also Boef & Franco, in prep.).

Compare now the pattern of French *que/qui* alternation for long extractions:

- (8) a. *L'homme que tu pense qui/*que est venu ici* (standard French)
 The man that you think who is come.PART here
 "The man you think came here"
- b. *L'homme que tu pense que/*qui Marie va rencontrer*
 The man that you think that Mary goes meet.INF
 "The man you think Mary is going to meet"

Standard French⁴ does not allow complementizer drop in long extractions, contrary to MSc. Moreover, the subject/object asymmetry reflected in the *que/qui* alternation is maintained and appears on the extraction site, i.e. on the most deeply embedded clauses, on a par with French short extractions. If we consider long extractions, then, the hypothesis that the asymmetry is due to nominative licensing may explain the French *que/qui* alternation (Taraldsen 2001, Rizzi & Shlonsky 2006 and ref. therein), but not the MSc SOM-insertion.

Differently from Swedish and Norwegian, Icelandic notoriously does not show any subject/object asymmetry⁵ with respect to complementizer insertion/deletion in (long) A'-dependencies. In Icelandic, the complementizer cannot be left out in object extractions, cf. (9), by contrast to Norwegian and Swedish (Thráinsson 2007: 447). The specific complementizer form that Icelandic adopts for relative clauses is SEM, but notice that such form cannot follow a Wh- element in embedded questions, in (10):

- (9) *Báturinn *(sem) Jón á er stór* (Icelandic)
 Boat.the SEM John owns is big
 "The boat that John owns is big" [Thráinsson 2007: 410, 8.45]
- (10) a. *Ég veit ekki hver (*sem) kemur*
 I know not who.NOM SEM comes
 "I do not know who will come"

4 In Quebecois French the most embedded *que* of object extractions can be deleted. The mechanisms behind this possibility are still under debate, as it is not clear whether *que*-deletion is induced by contact with English, by phonological reasons (cf. Martineau 1988) or else. I cannot discuss this issue here, but I thank Ur Shlonsky (p.c.) for pointing that out to me.

5 Faroese, on the other hand, does not show any subject/object asymmetry either, but the complementizer ID, following the Wh- element in indirect questions, is entirely optional:

- (i) a. *Eg veit ikki hvør (ið) kemur* (Faroese)
 I know not who.NOM ID comes
 "I do not know who will come"
- b. *Eg veit ikki, hvønn (ið) hann hevur sæð*
 I know not who.ACC ID he has seen
 "I do not know who he has seen" [Thráinsson 2007: 449, 8.134]

Here two issues are at stake, the first one, shared with Icelandic, is why the complementizer following the Wh-phrase can be deleted, and the second one is how to explain the optionality of such complementizer in Faroese. I leave this issue open for future research.

- b. *Ég veit ekki hvern (*sem) hann hefur séð*
 I know not who.ACC that he has seen
 “I do not know who he has seen”

[Thráinsson 2007: 449, 8.134]

The fact that Icelandic Wh-elements are morphologically marked for case may suggest that the idea that complementizer insertion is required to check a nominative feature be extended to Icelandic. In this perspective, nominative would be checked on C, thus allowing subject extractions, without ECP effects on the empty Spec, IP position (cf. Rizzi & Shlonsky 2006). Along these lines, nominative-checking would be ensured by the Wh-element *hver* in Icelandic embedded Wh-questions on the subject in (10a), whereas in object questions this is done by the overt subject *hann* in (10b). In relative clauses, where case is not overtly marked on any Wh-operator, SEM is obligatory, but, at this point, assuming that SEM-insertion does depend on case-checking seems a hasty conclusion, given that

- (i) There is no subject/object asymmetry in SEM-insertion, which is instead expected if SEM is related to nominative licensing;
 (ii) Icelandic behaves similarly to Norwegian and Swedish, with respect to long A'-dependencies: SEM is ruled out in the most-deeply embedded clause and there is once again no subject/object asymmetry in its distribution. The only difference from Swedish and Norwegian thus being the obligatory character of SEM-insertion in Icelandic, in the higher clause:

- (11) a. *Ég þekki manninn *(SEM) þú sagðir *(SEM) %(að) kom hingað* (Icelandic)
 I know man.the SEM you said SEM that came here
 “I know the man that you said came here”
 b. *Ég hata manninn *(SEM) þú sagðir *(SEM) (að) María ætlar að hitta á morgun*
 I hate man.the SEM you said SEM that Mary is.going to meet tomorrow
 “I hate the man that you said that Mary will meet tomorrow”

The facts in (11) show that SEM cannot be omitted when introducing the embedded clause “...þú sagðir...”, whereas it cannot be selected by this declarative predicate. By contrast, the complementizer AÐ (that) in the most deeply embedded clause is apparently optional for object clauses, but preferred for many of the interviewed speakers in the subject clauses, which shows an anti-C-trace effect (Icelandic does not have C-trace effects, see Vikner 1995). However, the discussion of function and distribution of AÐ, although potentially relevant for the present proposal, requires further data and a separate discussion, which I leave to forthcoming research (cf. also Boef & Franco, in prep.).

2.1. Interim summary

In this section, I have illustrated some facts that are problematic for the proposal that the relative particle SOM, used in Norwegian, Swedish and Danish A'-dependencies, is inserted to check a Nominative feature in C, which in turns directly c-commands the canonical subject position in Spec,IP. This idea has been adopted by comparing SOM to a complementizer which can either behave as an argument or as an expletive, on a par with the *-i* morphology on French *qui* (Taraldsen 1986, 2001). However, the distribution of SOM in long A'-dependency disconfirms the hypothesis that SOM licenses subject-extractions via nominative case checking, since case-checking is a local operation, but SOM-insertion is forbidden in the most-deeply embedded clause, containing the extraction site. Table 1 below gives an overview of the distribution of SOM/SEM in Swedish, Norwegian and Icelandic.

Table 1.

	Swedish		Norwegian		Icelandic	
	Subj	Obj	Subj	Obj	Subj	Obj
distribution <i>som/sem</i>						
short rel. clause	OK	(OK)	OK	(OK)	OK	OK
long rel. clause – high cl	(OK)	(OK)	(OK)	(OK)	OK	OK
long rel. clause – low cl	*	*	*	*	*	*
short embedded question	OK	(OK)	OK	*	*	*
long emb. question – high cl	(OK)	(OK)	*	*	*	*
long emb. question – low cl	*	*	*	*	*	*

(OK) = SOM is optional; OK = SOM/SEM is obligatory; * = SOM is ungrammatical

Table 1 reveals a difference between Norwegian and Swedish in the long embedded Wh- questions of the form “she wondered who (SOM) you think came here/Mary met”. These facts reflect the optionality of SOM in Swedish, vs. its ungrammaticality in Norwegian in Wh- complements where an overt subject is spelled out (cf. (7)-(8) above). I come back to these facts in Sections 4 and 5.

3. Icelandic Stylistic Fronting

Icelandic is the only modern Scandinavian language with productive Stylistic Fronting (SF).⁶ SF is a type of movement arguably distinct from topicalization or focalization of constituents giving rise to V2 word order in Germanic languages. The literature (Maling 1980, 1990; Rögnvaldsson and Thráinsson 1990; Jónsson 1991; Holmberg 2000; a.o.) agrees that the main characteristics distinguishing SF from other types of fronting are:

- absence of an overt (definite) subject in thematic position, arguably Spec,IP (Spec, AgrS or Spec, SubjP in cartographic terms, cf. Cardinaletti 2004);
- lack of restriction to root contexts: SF is productive in embedded clauses, including A'-dependencies
- SF is optional: it alternates with the subject expletive *það* (impersonal clauses) or with a gap⁷ (extractions, cf. Maling 1980, 1990; Rögnvaldsson 1984, 1996)
- the stylistically fronted element is preferably “light”: pied-piping of a large phrase is generally disallowed in SF contexts (Thráinsson 2007: 348-349; Wood 2011)

The examples below illustrate the distribution of SF, which consists of moving a lexical item, arguably a (remnant) phrase, (cf. Franco 2009a, Ott 2009) to a position preceding the inflected verb:

Subject extraction

- (12) a. *Þetta er maðurinn [sem lesa vildi ___ allar bækurnar]* (Icelandic)
 this is man.the that read wanted all books.the
- b. *Þetta er maðurinn [sem vildi lesa allar bækurnar]*
 this is man.the that wanted read all books.the
 “This is the man that wanted to read all the books” [Thráinsson 2007: 374, 7.79, 7.81]

Subject drop/impersonal construction

⁶ The presence of SF in Faroese seems to be restricted to formal writing (Maling 1990, Thráinsson et al. 2004)

⁷ Sigurðsson (1990) argues that SF may alternate with a gap, rather than the overt expletive *það*, even in impersonal constructions, where the subject referent is easily recoverable from the discourse context.

- (13) a. *Þeir segja [að **dansað** verði ___ í brúðkaupinu]* (Icelandic)
 they say that danced will-be in wedding-the
- b. *Þeir segja [að **það** verði dansað í brúðkaupinu]*
 they say that there will-be danced in wedding-the
- c. **Þeir segja [að **það** **dansað**/ **dansað** **það** verði ___ í brúðkaupinu]*
 they say that it danced/danced it will-be in wedding-the
 “They said that people will dance at the wedding” [Thráinsson 2007, 355, 7.35]

SF, in (12a), alternates with a subject gap, (12b). In complement clauses with impersonal constructions, as (13) shows, SF is in complementary distribution with the overt subject expletive *það* (the order SF – V – *það* is also ungrammatical). A clear distinction between SF and topicalization appears to be with preposing of a locative PP in subordinate clauses, where topicalization is restricted to some types of phrases (such as adverbials, locative and temporal phrases) for most Icelandic speakers (cf. Hrafnbjargarson and Wiklund 2009). The following example shows that locative PP preposing is grammatical only if “stylistically fronted” in absence of an overt subject in Spec,IP, as in (14b), whereas it is ungrammatical when undergoing the V2 type of topicalization yielding the order XP – V – subject, as in (14a)⁸:

- (14) a. **Þeir sem **í Danmörku** hafði hann hitt ___...* (Icelandic)
 those that in Denmark had he met
 “Those that he had met in Denmark...”
- b. *Þeir sem **í Danmörku** hafa verið ___ ...*
 those that in Denmark have been
 “Those who have been in Denmark...” [Thráinsson 2007, 380-381, 7.95-96]

The categories that can be probed and stylistically fronted belong to a spurious set (Maling 1980, 1990, Holmberg 2000, Johnson 1991). Not only may past participles or locative PPs undergo SF, but also adverbs, phrasal negation, verbal particles, predicative adjective, nominal predicates, infinitives, PP and, allegedly (Holmberg 2000), DP arguments. These categories are arguably ranked according to an accessibility hierarchy, but the actual ordering has been object of debate (Maling 1990, Jónsson 1991, Hrafnbjargarson 2003, Franco 2009a, and Wood 2011 for experimental support). A locality condition seems to impose on such ranking, so that phrases merged higher in the structure are interveners for SF of lower constituents.

The explanations that the literature offers to SF can be distinguished as based on either one of the following two hypotheses:

- i) the P-feature hypothesis (PFH)
 - ii) the ϕ -licensor hypothesis (ϕ LH)
- i) the PFH has been first proposed by Holmberg (2000) and describes SF as an EPP-driven mechanism. Along these lines, SF is preposing of any lexical category bearing a formal P(honological)-feature which can satisfy EPP. Even assuming that Holmberg's analysis can account for the impossibility to stylistically front an auxiliary (i.e. a functional, rather than lexical verb, cf. also Maling 1990), the hypothesis resorts to EPP as a basic assumption, which is fair, as long as the function of EPP in the grammar is clear. In the case of SF, however, EPP is not conceptually tight to a subject requirement (cf. Chomsky 1995, Rizzi 2006, Rizzi and Shlonsky 2006), but to a generic requirement that the specifier of a functional projection be spelled out (Chomsky 2000) or the left

8 See Franco (2009a: 29-38) for a detailed discussion on the difference between topicalization, locative inversion and SF in Icelandic.

edge of the clause be filled, as proposed by Sigurðsson (2010). In this case, then, it becomes hard to understand the real trigger behind a rather speculative notion such as EPP. What is EPP? Is it a universal principle and why so? These questions are still open, and this paper does not aim at solving the issue, but rather at facing the problem by resorting to different theoretical tools.

Another problem for the PFH is the restriction of some undefined spell-out conditions imposing on the stylistically fronted material. It is not clear which phonological or prosodic rule would impose that Icelandic SF⁹ probes only “light” elements, such as remnant VPs (verbal heads or particles, cf. Ott 2009, Franco 2009a), and cannot pied-pipe bigger chunks of structure, or even long, plurisyllabic adverbials.¹⁰ Another challenge to the PFH hypothesis consists in the fact that phrasal categories like locative PPs must be entirely fronted when undergoing SF (no P-stranding allowed, cf. Thráinsson 2007: 346), but SF of a verbal head cannot pied-pipe a verbal particle or an object (VP fronting is ungrammatical, cf. Thráinsson 2007: 349): it is not clear which PF condition could impose such a restriction.

ii) the ϕ LH proposes that SF is related to the subject requirement. Ott (2009) argues that SF targets the subject position, (Spec,TP) and is an EPP-driven movement, which also partly complies with Holmberg's (2000) analysis of SF. However, Ott (2009) proposes that the optionality of SF depends on the choice between a derivation via parallel movement (Chomsky 2000) or just raising the subject to Spec, CP and delete its copy in Spec, IP under identity. The possibility offered by parallel movement is arguably available only in Icelandic, where I° has an EPP feature disjoint from ϕ -features (cf. also Sigurðsson 2010), thus the latter can be checked via long-distance Agree or subject raising-to-C, whereas SF satisfies EPP.¹¹ What is not clear with this type of account is, again, what determines a certain parametrization of EPP or other in a grammar: why should there be an edge feature after all? A related issue would be what sort of mechanism induces change in a grammar in this respect: there is evidence that many young speakers prefer *það*-constructions to SF, where this is an option, but why one construction should be preferred to another one is still unaccounted for, under the assumptions that the two options are perfectly equivalent for information structure.

An alternative proposal instantiating the ϕ LH is sketched in Franco (2009a), who suggests that SF is a mechanism that licenses subject drop/extraction by checking the “formal counterpart of the subject ϕ -features in a position directly C-commanding Spec,IP” where such features are encoded, along the lines of Rizzi and Shlonsky (2006, 2007).

The problem with these accounts is how the heterogeneous variety of lexical categories undergoing SF may respond to such a specific feature-checking mechanism, and, with respect to Franco's (2009a) and ultimately Rizzi and Shlonsky's (2006) proposal, what such “formal counterpart of ϕ -features” amounts to. However, this proposal can be properly adjusted and account for the facts in a more suitable manner. Specifically, the answer to this puzzle is found in the complementary distribution between SF and overt expletive subjects realized as *það*. The feature specification of this pronoun is arguably [3rd person singular, - referential]: assuming that 3rd person singular is [-person] (Sigurðsson 2011), *það* receives a default interpretation on the basis of its semantically minimal feature specification. On the basis of this observation and of further facts, in sections 4 and

9 This is not the case for the SF attested in Old Romance, see Franco (2009a) for a comparison between Icelandic and Old Italian SF.

10 A more systematic study on the segmental and suprasegmental properties involved in SF is illustrated in Wood (2011), but the results do not support a purely PF-based analysis of the phenomenon.

11 “I tentatively propose that not V-to-T, but rather the dissociation of ϕ -features of T and its EPP-property are the underlying reason for SF, and perhaps also responsible for morphological subject-verb agreement (active in Icelandic, but not in the Mainland Scandinavian languages; Platzack 1987). In non-SF languages, the EPP-property of T must be directly connected to (abstract) agreement: T universally raises the phrase it agrees with, i.e. it is invariably the subject that gets attracted to Spec-T. By contrast, in Icelandic agreement (valuation of ϕ -features) does not imply movement; subject case is assigned under Agree at a distance, but some other category can be raised (*pace* Rizzi 2006: 121)” (Ott, 2009: 170).

5 I argue that such minimal feature specification on subjects may be one proper condition for SF.

4. The proposal

The facts presented in sections 2 and 3 seem to indicate that subject/object asymmetries are attested both in MSc and Icelandic but they obtain as different phenomena. In MSc, they are reflected in the patterns of C-drop (SOM-drop) and in C-trace effects, whereas Icelandic has SF which is an asymmetrical phenomenon because it can only obtain with subject extractions/drop.

Moreover, both MSc C-drop and Icelandic SF are optional phenomena, but such “optionality” cannot be true and remains ultimately unexplained, given that the variation, in both language groups, is limited, at least, by an asymmetric restriction on the structural position of the dropped/extracted argument (i.e. subject vs. object).

In order to present the proposal, some assumptions and claims are made. First, the proposed account intends to reformulate the speculative notion of EPP in terms of a complex feature-checking mechanism with interpretive bearings in information structure. Rizzi & Shlonsky (2006, 2007) propose a theoretically more economic account that subsumes the notion of EPP and explains ECP effects: they refer to the “Subject Criterion”, as to the requirement that the features encoded in the highest IP subject position be checked. Since the lowest CP head, Fin, locally c-command the highest IP subject position, alternative strategies, checking the “formal counterpart” of these features encoded in FinP, may enable subject extraction (Rizzi & Shlonsky 2007). Along these lines, I assume that EPP results from the requirement of checking a combination of features encoded in the lowest CP head (cf. Rizzi 2004, Rizzi & Shlonsky 2006, 2007, Frascarelli 2007), and such feature-checking can be enforced by various grammar-specific strategies. The CP system encodes various features which basically enable a pragmatic anchoring of the clausal semantics, structurally provided in the vP/IP domain, to the discourse, located syntactically in CP. A vast literature discusses the structural properties of the complementizer system, primarily the seminal cartographic work by Rizzi (1997), according to which the C-domain is split into functional subheads:

(15) [_{CP} Force...Top*...Focus...Top*...Fin...]_{IP}

For the present purposes, I adopt a slightly modified, updated version of the C-domain, in which the lower Topic phrase is replaced by a Modifier phrase: a non-criterial position where adverbials and other syntactic material (often related to the modal categories identified by Cinque 1999) can front and receive discourse prominence (cf. Rizzi 2004, Haegeman 2006).

Second, Sigurðsson (2011) identifies three main features in the CP domain: [Finiteness], whose interpretation provides anchoring to the speech time and location; [Λ], which identifies the speaker and the hearer; and [Topic], which can consist of an aboutness/shift topic (cf. Frascarelli 2007), of a contrastive or of a familiar topic (cf. also Bianchi and Frascarelli 2009 for English). According to Sigurðsson, then, clausal arguments are also anchored to the discourse by matching the Λ-features. Together with him, I assume that among the phi-features of each argument, only [Person] is interpreted in the CP. In this sense, 1st person is interpreted as [Λ: +speaker, -hearer]; 2nd person as [Λ: -speaker, +hearer] and 3rd person as [Λ: -speaker, -hearer], namely [-person] (cf. Sigurðsson 2004, 2010, 2011).

A third assumption, based on a recent proposal by Déchaine & Tremblay (2011)¹², is that FinP not only encodes [finiteness], which is a verbal feature enabling the pragmatic anchoring of the predicate (i.e. of the event-time) to the speech-time, but also a nominal feature, called [definiteness]. Checking of [definiteness] enables pragmatic anchoring of clausal arguments to the

¹² Déchaine & Tremblay (2011) refer to Chomsky’s (1995) identification of C as (+V;+N) and to Muyskens (2008: 249) who interprets definite/indefinite determiners as markers of discourse status. Whence the hypothesis that [definiteness] be interpreted in the information structure.

discourse and yields the interpretation corresponding to the Λ -features valued by the respective arguments, according to their person-feature specification. In this respect, the fact that 3rd person is interpreted as [-person] is crucial for the productivity of SF. In section 3 it was illustrated how SF is in complementary distribution with the overt expletive *það*, which is 3rd person. If Λ is [-person] with expletive constructions, and SF is in complementary distribution with expletives, we can then assume that SF may target a position in a C-domain (cf. Franco 2009a for evidence), provided that Λ is [-person].

A final assumption, crucial for the analysis proposed here, follows Sigurðsson's (2011) idea that Scandinavian, and, more generally, Germanic V2 languages license argument drop configurationally, by contrast to, say, Romance languages where verbal morphology has pronominal properties and may license argument drop via long-distance agreement. Configurational languages such as the Scandinavian ones, then, require that the dropped argument be in a local configuration with the licensing CP head where it must be interpreted. For this reason, topic drop requires an empty left edge:

- (16) a. _____ *kommer tillbaks imorgon* (Swedish)
 come.Ø-AGR back tomorrow
 ‘‘I/we/she/etc. will be back tomorrow’’
- b. *Imorgon kommer *(jag/hon/ ...) tillbaks.*
 tomorrow come.Ø-AGR *(I/she/ ...) back [Sigurðsson 2011: (3)-(4)]

In other words, Germanic topic drop, which includes subject-drop as an instance of argument drop, requires that the dropped argument locally matches [Λ] in CP, which explains the V2 restriction (cf. Sigurðsson 2011). In this perspective, a subject can be dropped or extracted if (i) it is also a Topic in the CP or (ii) an alternative strategy ensures that the relevant person features are interpreted in the CP, i.e. [Λ]-values properly match with an element in a local configuration with them. With respect to (ii), such local position cannot be Spec,IP, given that this position is specific for subjects, but would more likely be FinP.

This idea finds a concrete realization in expletive insertion, which allows post-position or extraposition of subjects, and, arguably, in SF (cf. Wood 2011: (41)). For the present analysis, SF is a mechanism that checks the verbal counterpart of the [Finiteness/Definiteness] feature combination encoded in FinP. As will become clearer in the following section, the nominal counterpart [Definiteness] either receives a default interpretation, i.e. if [Λ : -person], or is checked by another element (e.g. a Wh-OP), in SF constructions.

The core idea of this proposal is then stated in (17) below:

- (17) SOM-insertion in MSc and SF in Icelandic are both strategies to check one of the [Finiteness/Definiteness] complex of features encoded on FinP, and, by doing so, subject extractions or subject drop are licensed.

4.1. Icelandic SF

An important aspect that distinguishes this proposal from the hypothesis that SOM is a nominative element concern the nature of the structural position hosting SOM (and SF, in Icelandic). Differently from Spec, IP, the lexical realization of FinP is not merely dependent on syntax, but is imposed by pragmatics. This entails that FinP may not be spell-out in case, for instance, the arguments to be anchored the discourse are recoverable from the discourse pragmatics. Of course overt subjects in Spec,IP can be easily anchored to the discourse because they are in a local configuration with FinP. However, there are cases where the subject can be dropped simply because it is recoverable from previous context, i.e. Λ is identified by a matching relation with the features valued in the CP of a

preceding clause, as is the case for Italian, among other pro-drop languages, where the features identified the dropped subject are “inherited” by a preceding matrix CP (cf. Frascarelli 2007). In Scandinavian languages, verb agreement has no pronominal properties, thus subject-drop is restricted to configurations in which its reference is either locally recoverable or interpreted by default, as in the case of Icelandic non-referential 3rd person singular. In this respect, the basic difference between Icelandic and MSc is that Icelandic allows [Λ : -person, -referential] to be morphologically realized as \emptyset : compare (18) and (19b) with (19a) (below, (19) repeats (13) for convenience).

- (18) ?*Peir segja [að ___ verði dansað í brúðkaupinu]* (Icelandic)
 they say that there will-be danced in wedding-the
 “They say that people will dance at the wedding”
- (19) a. *Peir segja [að **dansað** verði ___ í brúðkaupinu]*
 they say that danced will-be in wedding-the
- b. *Peir segja [að það verði dansað í brúðkaupinu]*
 they say that there will-be danced in wedding-the
- c. **Peir segja [að það **dansað**/ **dansað** það verði ___ í brúðkaupinu]*
 they say that it danced/danced it will-be in wedding-the
 “They said that people will dance at the wedding” [Thráinsson 2007, 355, 7.35]

The lack of an overt expletive in (18) is not ungrammatical, because the features that the pronoun (in 19b) spells out can be interpreted as default (-person, non-referential). Thus the reason of this alternation cannot be related to checking subject-specific features. I propose that the reason is pragmatic, and it amounts to spelling out a position whereby some clausal content can be anchored to the context, i.e. FinP.

The stylistically fronted element (in 19a) conveys some semantic content (in this case aspectual information concerning the predicate, i.e. the result of an event, cf. Franco, in prep.) which is fronted to the CP. The event-time is thus interpreted as anchored to the discourse (speech-time, cf. Third assumption, section 3 above). Such interpretation is arguably given from the feature-checking mechanism driving SF: the fronted element (a (remnant) phrase, in (19) above, cf. Franco 2009a, Ott 2009, Wood 2011), checks the verbal counterpart on FinP: [Finiteness¹³]. At this point we can just assume that the nominal counterpart, in SF constructions, is indeed either [- Definiteness], which corresponds to a [-referential, -person] subject, or [+ Definiteness] in which case it may be checked by a (Wh-)OP undergoing successive cyclic movement to a higher position as in (12) repeated here as (20) for convenience:

- (20) a. *Þetta er maðurinn [OP_{rel} sem [_{SF} < OP_{rel} > **lesa**] vildi ___ allar bækurnar]* (Icelandic)
 this is man.the that read wanted all books.the
- b. *Þetta er maðurinn [OP_{rel} sem < OP_{rel} > vildi lesa allar bækurnar]*

¹³ Notice that also other elements commonly undergoing SF, such as adverbs, verbal particles, predicative adjectives, nominal predicates, generally categorize at least as [+V]. Some elements arguably undergoing SF, such as PP complements (cf. Holmberg 2000), may also be interpreted as [+V], given that P is [\pm N; \pm V]. Franco (2009a), however, argues that nominal predicates, predicative adjectives and potentially also adverbs (i.e. all the categories that may also undergo V2 topicalization) target a non-criterial position in CP, where they receive discourse prominence: ModP (cf. Rizzi 2004, Haegeman 2006). Arguably, adverbs may be cyclically independent from Wh-movement to Spec,FinP and move directly to ModP, so they do not intervene. Cf. fn. 17 below.

this is man.the that wanted read all books.the

“This is the man that wanted to read all the books” [Thráinsson 2007: 374, 7.79, 7.81]

The feature-checking mechanism involved in (20a) is given in (21) below. In this case, the remnant phrase (i.e. vP) containing the subject-relative OP is moved to Spec,FinP¹⁴. In (21) the OP matches the nominal counterpart of FinP, whereas SF can check [Finiteness].

(21) ...Spec, FinP [<Rel/Wh-OP> _[-Fin, +De] SF_[+Fin, -De] Fin^o_[+Fin, +De]: [SubjP Ø_[-pn]]

The [Definiteness] feature on FinP may be arguably checked in an alternative way, by expletive insertion, given that Icelandic *það* is only preverbal and occurs exclusively in a [+definite] subject position (cf. Thráinsson 2007, Bentzen 2007). For (18b), the feature-checking mechanism would then be as in (22) below:

(22) ... Spec, FinP [*það* _[-Fin, +De]] Fin^o_[+Fin, +De]: [SubjP Ø_[-pn]]

Notice that in expletive-constructions the string *það-SF*, contrary to relative OP – SF in (21), is ungrammatical because syntactically underivable and semantically incompatible: *það*-merger applies only at the CP/IP interface. Moreover, *það* is semantically vacuous and creates a chain with an associate in *rhematic* position carrying the relevant semantic information. By contrast, SF contributes to information structure in that it fronts the relevant semantic content to a *thematic* position (in terms of functional opposition between *theme* and *rheme*). Thus expletive constructions and SF-constructions are minimally different strategies to check the feature-complex encoded in FinP, which leads to some predictions discussed in the following section.

Before doing so, I wish to discuss how the present proposal applies to MSc.

4.2. MSc SOM

As proposed in (17) above, SOM also enters the feature-checking mechanism imposed on FinP in order to license subject-extractions. How so? Looking back at Table 1, we can see that SOM is only obligatory with short subject extractions, i.e. when the subject of the relative clause is otherwise impossible to recover. In long subject extractions, SOM is ungrammatical altogether, despite the lack of an overt subject in the most embedded clause, contrary to the expectations of the Nominative Licensor Hypothesis (cf. Section 2), see (6a) repeated below as (23).

(23) *Jeg kjenner mannen [(som) du sa [(*)som] kom hit]].* (Norwegian)
 I know the man SOM you said SOM came here
 “I know the man you said came here”

The difference between (23) and short subject-extraction is explained, in the current proposal, as an interpretive difference. While [Nominative] always needs to be checked locally (as is the case for the *-i* morphology on *qui*, in French), the function of MSc subject-specific SOM is that of anchoring the extracted argument to the discourse. Crucially, discourse-anchoring is a mechanism that affects the interpretation of that argument in the higher clause, i.e. the clause containing the probe for the relative OP movement. In other words, SOM insertion in (23) is only grammatical where the relative OP is interpreted, i.e. in the highest embedded CP. This is precisely what is expected, given that the relativized argument in (23) is interpreted as “the man [YOU SAID [came here]]”, who is not necessarily the coreferent with “the man [that came here]”.

In the present analysis, subject-specific SOM checks the nominal counterpart of FinP, locally c-commanding the Spec, IP subject position. This enables subject-extraction without triggering any

¹⁴ For a derivation of SF in subject-relative clauses see Franco, in prep.

ECP effects, or, in other words, criterial freezing of the subject in the highest IP position (cf. Rizzi 2004).

- (24) a. ...mannen [_{FinP}[+De] SOM [_{+De}] [_{IP} ____ kom hit
 man.the SOM came here
 “The man who came here”

A still open question at this point concerns the optionality of SOM in object extractions¹⁵ and in long A'-dependencies. If the function of SOM is to check [Definiteness] on FinP, why is it at all possible when an overt subject in Spec,IP is present? Postulating that SOM may or may not check such feature, depending on the argument that is being extracted, is of course a completely *ad hoc* solution that remains unexplained in terms of acquisition.

The optionality puzzle is faced from a diachronic perspective. Following a seminal proposal in Franco (2009a), also on the basis of facts analyzed in Delsing (2001), the proposed account explains the optionality of SOM in some clauses vs. its obligatoriness in others as the result of an overlap between two grammars introduced at different diachronic stages. This proposal is discussed in greater detail in the following section, where diachronic evidence is provided. In a nutshell, the analysis is that the first grammar had just a non-subject specific SOM, which distributed symmetrically over subject and object clauses, and there is a later reanalysis of SOM to subject-specific in a second grammar. As a relic of the first system, “optional”, non-subject specific SOM still coexists with the second, subject-specific SOM. This difference can be accounted for in structural terms, by assuming that the “old” and the “new” SOM occupy two distinct positions in a split-CP (Boef & Franco, in prep.). Figure 1 illustrates optional, non-specific SOM, which is arguably merged on a high CP head, precisely as a relative subordinator. By contrast, Figure 2 illustrates that subject-specific SOM is arguably merged in Fin⁰, locally C-commanding the subject position in IP, thus enabling subject-extractions (Rizzi & Shlonsky 2007).

Figure 1. Short object extractions/
 Higher clause of long extractions

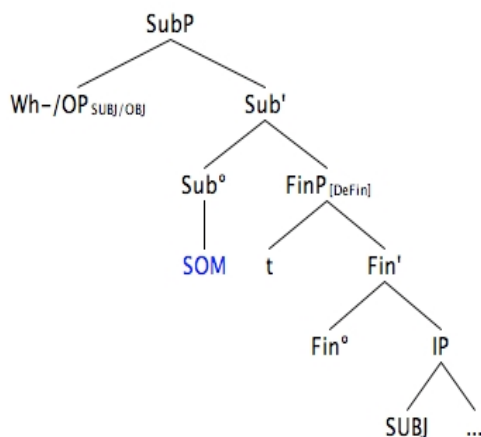
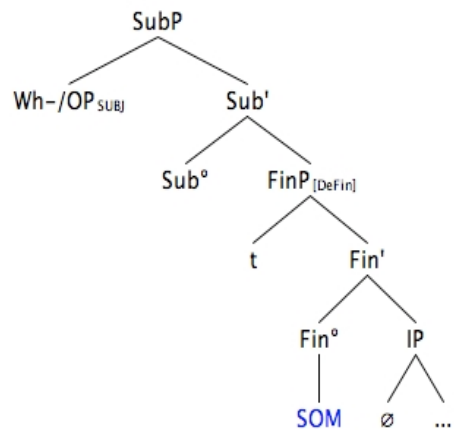


Figure 2. Short subject extraction



The analysis proposed here for both Icelandic SF and MSc SOM gives rise to a series of predictions that are discussed in the following section.

¹⁵ As mentioned in the introduction, SOM is optional in object-relative clauses both in Norwegian and Swedish, but while it is optional in object-indirect-Wh- questions in Swedish, it is ungrammatical in the same context in Norwegian (cf. Table 1). This difference is tentatively explained below.

5. Predictions

In this section I discuss some predictions following from the proposal, by distinguishing synchronic comparative facts, from the diachronic facts supporting the idea in (17) above.

5.1. Comparative support

A first prediction stemming out of (17) is that, if subject-specific SOM-insertion and SF are both mechanisms to check the features specified on FinP, they should be attested, at least in the same syntactic contexts, as alternatives for the grammars in which they are respectively productive. Looking at the respective languages, we can observe that Icelandic, which has productive SF, does not have any subject specific relative particle: the distribution of SEM does not display any subject-object asymmetry (cf. Table 1). By contrast, MSc grammars do not permit SF but make use of subject-specific particles to derive subject extractions. This is not only true of Norwegian and Swedish, which require SOM, but also of Danish, where the subject expletive DER is reanalyzed as relative particle in subject extractions, and alternates with SOM in subject relative clauses (25a and b). Crucially, Danish allows for multiple complementizers but only cases where at least either SOM or DER are present in the order SOM – (AT) – DER are grammatical (cf. Vikner 2001, Mikkelsen 2002), in subject relatives:

- (25) *Vi kender de lingvister* (Danish)
we know the linguists
- a. *DER ville læse denne bog*
There will read this book
- b. *SOM ville læse denne bog*
SOM will read this book
- c. *?SOM DER ville læse denne bog*
SOM there will read this book
“We know the linguists who will read this book”. [Mikkelsen 2002: 9]

Mikkelsen (2001) observes that (i) DER occurs only in subject relative clauses; (ii) SOM occurs in subject and non-subject relative clauses; (iii) when SOM AT DER are all present they must appear in that order; (iv) either SOM or DER must be present in the subject relative clause (Mikkelsen 2002: 2).

These facts are explained under the hypothesis that Danish has a mixed system where two alternative strategies, subject-specific SOM or DER-insertion, apply, cf. (25a) and (25b) and (iv) above. The co-occurrence of DER and SOM in (25c) is here explained with the hypothesis that the double nature of SOM, cf. (iv), is due to an overlap of the new complementation system with subject specific SOM with a diachronic relic of the old MSc complementation where SOM is non-subject specific, in Danish, as well as in other MSc languages. By contrast to SOM, Danish DER occurs in the most deeply embedded clause in a subject Wh- extraction on a par with French *qui*: compare (26) below with Table 1 and (8a).

- (26) *Jeg ved ikke* (Danish)
I know not
- a. *hvem du tror DER har gjort det*
who you think there has done it

- b. **hvem du tror SOM har gjort det*
 who you think SOM has done it
 “I do not know who has done it”

[Mikkelsen 2002: 7, (20)]

The fact that DER is only subject-specific and behaves more similarly to French *qui*, than to MSc SOM seems to support the idea that Danish has a complex complementation structure, making use of different strategies: expletive insertion (DER), subject-specific particle and non-subject specific relic (SOM). Moreover Danish, on a par with other MSc, does not allow for SF.

Let us consider now a borderline case: Faroese. In Faroese, relative clauses are introduced by the relative particle SUM¹⁶, whose distribution matches that of SOM in Norwegian and Swedish.

- (27) a. *Báturin (SUM) Jón eigur er stórur* (Faroese)
 boat.the that John owns is big
 “The boat that John owns is big”
- b. *Ofta eru tað konurnar *(SUM) koma fyrst*
 Often are there women who come first
 “Often there are women who come first” [Thráinsson 2007: 448, (8.132)]

Importantly, SOM/SUM can never be omitted in non-restrictive relative clauses (cf. Thráinsson 2007: 447), namely, non-restrictive relative clauses do not display any subject-object asymmetry with respect to SOM/SUM insertion.

- (28) a. *Den här bilen, *(SOM) jag aldrig har sett förut, er vacker* (Swedish)
 This here car SOM I never have seen before, is beautiful
 “This car here, which I have never seen before, is beautiful”
- b. *Tær konurnar, *(SUM) ____ skulu vera heima, eru burtustaddar* (Faroese)
 They women.the who shall be home are away
 “The women, who shall be home, are away” [Thráinsson 2007: 447, (8.131), (8.132b)]

The obligatoriness of SOM/SUM in all non-restrictive relative clauses¹⁷ can be tentatively explained in terms of different structural properties of non-restrictive and restrictive relative clauses. Differently from restrictive relatives, non-restrictive ones are not selected, but rather adjoined to the head noun that they modify. Arguably, then, their CP constitutes a full phase-edge, subject to the Phase Impenetrability Condition (PIC, Chomsky, 1999). Instead, the CP of restrictive relative

¹⁶ SUM is not used in embedded Wh-questions, where the complementizer associated to the Wh-XP is ID: this complementizer is optional and has a symmetric distribution. Albeit I cannot discuss this in the present paper, these facts do not represent an obstacle to the present proposal.

¹⁷ SOM/SUM-deletion is ungrammatical also when introducing long non-restrictive relative clauses, as the Norwegian example below shows:

- (i) a. *Johan, *(SOM) du sa *(SOM) jobber hele tida, gikk til en konferanse i går* (Norwegian)
 John, SOM you said SOM work all time went to a conference yesterday
 “John, who you said works all the time, went to a conference yesterday”
- b. *Johan, *(SOM) du sa *(SOM) du ikke har møtt, synger i et kor*
 Johan, SOM you said SOM you not have met sings in a choir
 “Johan, who you said you have not met, sings in a choir” [Boef & Franco, in prep.]

clauses, being directly c-commanded by the head noun, would be transparent for inheritance of features that permit the recoverability of the extracted noun: the difference is illustrated by contrasting Figure 3 and Figure 4.

Figure 3. Restrictive relative clauses

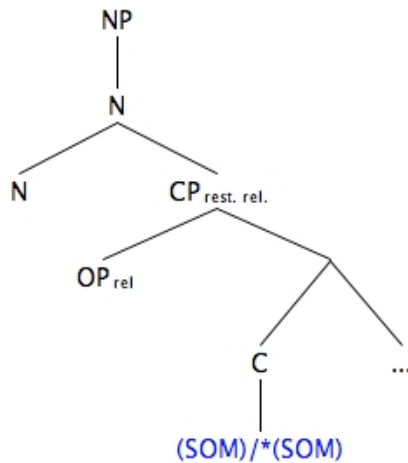
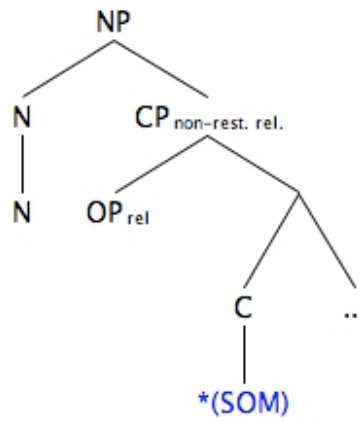


Figure 4. Non-restrictive relative clauses



This analysis is in line with the idea that SOM/SUM insertion is a strategy to anchor an argument to the discourse, in order to satisfy the requirement of Full Interpretation (Chomsky 1986, 1995). In non-restrictive relative clauses, the reference of the extracted noun is not recoverable, unless the C-position onto which it is interpreted is overtly spelled out (by SOM, in this case). Given that non-restrictive relative clauses are adjoined, this requirement expectedly holds symmetrically for coreference of subject or object OPs with the head noun. The lack of symmetry in non-restrictive relative clauses, on a par with long extractions, is then analyzed as a consequence of the fact that SOM/SUM is not a nominative licenser, but an element that checks the nominal features required for the interpretation of the extracted arguments in CP.

Differently from MSc, Faroese allows for SF, although this phenomenon is less productive than in Icelandic and seems restricted to literary texts or written language (cf. Thráinsson et al. 2004). The fact that Faroese grammar has both a SUM distribution that matches that of MSc SOM, and SF, like Icelandic, does in fact comply with the expectation that SOM/SUM insertion and SF are two alternative strategies for extraction. The following example indeed shows that an ungrammatical deletion of SUM, cf. with (28b) above, can be rescued by SF (of *heima*), as Thráinsson (2007: 447) points out:

- (29) *Tær konurnar, (SUM) heima skulu vera ____, eru burtustaddar* (Faroese)
 They women.the who home shall be are away
 “The women who shall be home are away” [Thráinsson 2007: 447, (8.132c)]

The peculiarity of Faroese, then, is that the two alternatives are coexistent in one system, which actually seems to result from the competition between two grammars (i.e. the MSc-like and the Icelandic-like) also with respect to other syntactic properties, such as V2 (cf. Heycock et al. 2010, a.o.).

A further expectation concerns the feature specification of Icelandic clauses with SF, in contrast to clauses with expletive insertion or with a subject gap. Arguably, SF checks the verbal counterpart of FinP, whereas expletives are nominal elements, thus checking the nominal counterpart of FinP. Accordingly, it is predicted that *það*-clauses, namely expletive constructions, are islands to extraction of an argument (e.g. subject relativization), because such an extraction would trigger

minimality effects with the feature specification of the expletive in Spec, FinP. This prediction is borne out by well-known facts in the Icelandic literature: in (30c) below, *það* intervenes with the movement of the subject relative OP, whereas SF, in (30b) being [+Finiteness] does not.

- (30) a. *Þetta er mál sem ___ hefur verið rætt* (Icelandic)
this is issue that has been discussed
- b. *Þetta er mál sem **rætt** hefur verið*
this is issue that discussed has been
- c. **Þetta er mál sem **það** hefur verið rætt*
this is issue that there has been discussed
“This is an issue that has been discussed” [Thráinsson 2007, 353, 7.28-31]

The (lack of) intervention effects in (30b) and (30c) is schematically represented in (31a) and (31b) respectively:

- (31) a. **Rel/Wh-OP** [+Fin, +De] **SF** [+Fin, -De] → OK
b. ***Rel/Wh-OP** [+Fin, +De] **það** [+Fin, +De] → Minimality effects

The fact that SF does not create an island to Wh- movement can be accounted as follows. SF of “items from the verbal complex” (Maling 1990) such as past participles, infinitives, verbal particles, predicative adjectives is phrasal movement of a (remnant) vP or PP to Spec,FinP (cf. Franco 2009a, Ott 2009). The moved phrase also contains the probed Wh- argument that is extracted once the larger phrase reaches the CP. I propose that there are different kinds of SF: when the fronted element is a sentential adverb or a negation, there is no remnant movement involved, but XP movement to Spec,ModP, a projection immediately above FinP where adverbials receive discourse prominence (Rizzi 2004, Haegeman 2006). Adverbial movement is thus cyclically independent from Wh-movement to Spec,FinP (see Franco 2009a for details). The feature specification of the adverbial is such that no minimality with the Wh-OP is triggered. Moreover, the accessibility hierarchy of SF (Maling 1990, Holmberg 2000, Hrafnbjargarson 2004, Franco 2009a) is explained with the fact that the Wh-OP cannot “pied-pipe” the (remnant) vP if the latter is in the scope of a phrasal adverb or a negation, for obvious semantic reasons.

What remains to be explained is the alternance of a gap with SF, given in (30a) and (30b). In section 4, I have proposed that SF contributes to information structure by anchoring the event time to the speech time, thus anchoring some semantic content to the discourse. In this perspective, (30b) above would receive a slightly different interpretation from (30c). Where the past participle is fronted, as in (30b), an aspectual feature of the predicate is anchored to the speech-time: the information concerning the result of an action/event (**rætt**) acquires discourse prominence, by being “thematized” (cf. Franco, in prep. and references therein). By contrast, the semantic content concerning the action/event encoded in the predicate structure remains in rhematic position. Thus clauses without SF have a different information structure: no semantic information is given discourse prominence, but is instead conveyed in a presentational way, by leaving it in rhematic position, with either an expletive or a gap in thematic position. The contrast between functional theme and rheme is given in Table 2 below:

Table 2

Construction type	Theme	Rheme
SF	SF: semantically full	Semantically vacuous / residual
Subject gap (e.g. relative clause)	Ø: inheriting feature via OP-	vP: semantically full

	A'-binding	
Expletive construction	<i>Það</i> : semantically vacuous	Associate: semantically full

The alleged subtle interpretive difference between cases of subject extractions where nothing fronts and with SF, cf. (30a) and (30b), seems corroborated by further facts. If the head noun of a subject relative clause with SF is definite, the sentence is degraded, for some speakers¹⁸. Halldór Sigurðsson (p.c.) provides the following judgments:

- (32) a. *Maðurinn sem ___ hefur keypt nokkrar bækur*
 Man.the who has bought some books
- b. *?/??Maðurinn sem **keypt** hefur nokkrar bækur*
 Man.the who bought has some books
 “The man who has bought some books”
- c. *Þeir/menn/allir sem **keypt** hafa nokkrar bækur*
 they/men/all who bought have some books
 “(All) those who have bough some books” [Halldór Sigurðsson, p.c.]

Notice that, if the head noun is a pronoun (*Þeir*) or a generic/indefinite noun (*menn/allir*), cf. (32c) the sentence is totally acceptable, whereas it is less acceptable with a definite head noun (*maðurinn*, cf. 32b). This judgment is reflected in a frequency test: by searching the exact string “*sem lesið hafa*” (=who read have.3PL) on a search-engine (Google search, 27.04.2012, 11:30), the great majority of the results (total of about 67.300 entries) display an indefinite/generic head noun. On the first 10 Google pages, the most frequent head nouns are *Þeir* (=they), *allir* (=all), *Íslendingar* (=Icelanders), *margir* (=many), *flestir* (=most) (or bare nouns modified by these elements). The trigger for the marginal definiteness effect in (32b) vs. (32a) indicates that there is a pragmatic, rather than a syntactic difference between clauses with and without SF. The degradation effects in (32) are still an open issue. In the present perspective, this difference could be tentatively explained in terms of feature specification on FinP. On the one hand, it is true that SF does not create an island to Wh- extraction (cf. (30) and discussion above). On the other hand, FinP has a double specification, namely [\pm Finiteness; \pm Definiteness]. A working hypothesis is that the nominal/verbal features of FinP (cf. Chomsky 1995) may not be simultaneously valued (+) and be both morphologically spelled out. A strict interpretation of this requirement is that a [+Fin] specification on FinP is incompatible with a [+De] specification because that clause may not have both an overt element checking [Fin], i.e. SF, and an overt element checking [+De]. Given that Icelandic SEM is not subject-specific and cannot check the [+De] imposed for the interpretation of the extracted definite subject, the requirement cannot be fulfilled, and the interpretation is partially compromised. For what is presently known in Icelandic, valuation of the verbal counterpart of FinP, i.e. [+Fin], pairs with lack of valuation of the nominal counterpart, i.e. [-De]. This hypothesis requires, however, further testing.

5.2. Diachrony

In this subsection I provide some support to my proposal, which is based on diachronic comparative facts. Given that relative clauses are the ideal context for observing both the distribution of SOM in MSc and of SF in Icelandic, I will concentrate on those. The complementation structure of Scandinavian relative clauses has undergone some diachronic changes: both Old Eastern

¹⁸ But not for others: at a first look it seems that younger speakers (20-30+) are not sensitive to such definiteness effect, whereas older speakers (45-50+) are. There seems to be an even sharper definiteness effect (irrespective of speakers' age) in Wh- clauses where the Wh-Op is a definite subject. This point deserves further investigations.

Scandinavian (here represented by Old Swedish) and Old Western Scandinavian (here, Old Icelandic) used similar particles and strategies to derive relative clauses (cf. Faarlund 2008, Delsing 2001, Nygaard 1906), but, around 1350-1400 the Swedish system underwent some major changes that resulted in a basic difference from the Icelandic one (cf. Franco 2009a, ch. 4). The history of the various relative particles in (Old) Swedish and (Old) Icelandic is illustrated in Table 3 below¹⁹.

Table 3. Relative particles in Old Swedish and Old Icelandic

	1200	1300	1400	1500	1600	1700	1800	1900
SWEDISH	OV	-----	OV/VO	-----	VO	-----		
<i>Ø</i>	-----							
<i>som</i>	-----							
<i>ær</i>	-----	-----						
<i>ther</i>	-----	-----	-----	-----	-----	-----	-----	-----
<i>hvilkin (som)</i>			-----	-----				
ICELANDIC	OV/VO	-----				VO	-----	
<i>sem</i>	-----							
<i>er</i>	-----	-----	-----	-----	-----	-----	-----	-----

Table 3 shows that Old Swedish had several possibilities for introducing a relative clause: the particle *ÆR*, a *Ø*-complementizer and *SOM*, which was in fact an unspecific form on a par with Old and Modern Icelandic *SEM*, given that it displays a symmetric distribution between subject and object clauses. In Old Swedish (i.e. up to 1350), *SF* is practically always found in subject extractions, according to Delsing (2001). Around 1350-1400, however, there is a big change in the Swedish grammar involving word order change (from *OV* to *VO*) among other properties. At this stage, the particle *ÆR* disappears, while *THER* is introduced, and, crucially a *Wh*- pronoun, *HVILKIN* (=which) is adopted for introducing relative clauses. As Delsing (2001) observes, object relative clauses are usually introduced by *HVILKIN* alone, whereas subject relative clauses are introduced by *HVILKIN SOM* or *HVILKIN THER* (cf. (33)). The fact that *SOM*(/*THER*²⁰) begins to have an asymmetric distribution suggest that it becomes subject-specific.

- (33) *Brudhgöma HULKIN SOM är äronna konungir* (Old Swedish, 1350-1400)
 Groom which SOM is honour king.GEN
 “The groom who is the king’s honour” [Delsing 2001, 159, 48, BU]

Under the hypothesis of such a reanalysis, the prediction is that *SF* is in complementary distribution with *SOM* in subject relative clauses, once *SOM* becomes subject-specific. In other words, the *Wh*-element *HVILKIN* should be followed either by *SOM* or by *SF*, but not by both. As expected, strings of the type *HVILKIN – SOM- SF* or *HVILKIN- SF- SOM* have not been attested so far, and when the *Wh*- is not followed by *SOM*, it is obligatorily followed by *SF*, in subject relative clauses.

- (34) a. *som grymasto diwr HULKE adrigh kunna ___ mättas*
 like most.cruel anymals which never can be.satisfied

¹⁹ The Old Swedish part of the table is taken from Delsing (2001).

²⁰ The fact that *THER* alternates with *SOM* in subject extractions seems to indicate that they are both subject specific. However, further investigations with respect to the diachrony of *THER* are necessary. For the moment I might just speculate that *THER* is the ancestor of an expletive, originally a locative, *DER*, which is indeed reanalyzed as a subject specific element in Modern Danish (cf. section 5.1), a language developed from Old Eastern Scandinavian, on a par with Modern Swedish.

“Like the most cruel animals which can never be satisfied”

- b. *HULKIN framgik til sanctum gregorium*
 which forth.went to saint Gregory
 “Which went forth to saint Gregory”

[Delsing 2001, 163, 54, Greg]

Therefore, this prediction is borne out. The explanation for such a reanalysis of SOM and the eventual loss of SF in the Swedish and the other MSc languages onto which this system spread could be based on an economy principle. Arguably, the old complementation structure, in which generic SOM is associated to SF in subject extractions, competes with the new system, after the introduction of the Wh- element. However, the combination “Wh- SF” loses the competition (in the sense of Lightfoot 1999, Lightfoot & Westergaard 2007) with the newer and more economic strategy that involves just one case of movement (the Wh- element) and one case of merge (subject-specific SOM, rather than movement of the stylistically fronted phrase, cf. Franco 2009a).

The question, at this point, is why Icelandic SEM has such a different distribution from SOM, i.e. it is not subject-specific. I analyze this difference as a result of the fact that the Icelandic system has never undergone the Swedish reanalysis.

If this is the case, a further prediction is that (Old) Icelandic subject specific clauses, e.g. subject restrictive relative clauses, should never be introduced by a Wh- element followed by SEM, by contrast to the Swedish HVILKIN SOM cases. In order to verify this prediction I have carried out a corpus search on the data reported in Faarlund (2008), and on 44 Old Icelandic sagas, from the online archive in the IcePaHC. It resulted that the only cases where the string Wh- SEM is attested are free relatives, in which SEM has a subject/object symmetric distribution and the Wh- element is interpreted as a quantifier. Moreover, these sentences display that there is SF in case of subject extraction, as in (35), contrary to Old Swedish where HVILKIN – SOM – SF is unattested:

- (35) a. *Til HVERS SEM draga vill* (Old Icelandic)
 To each.GEN SEM pull wants
 “To everyone who wants to pull”

- b. *Er þú hefir jafnan uppi látið hver SEM beðið hefir*
 That you have always up let each.NOM SEM asked have
 “... that you have always told whoever has asked” [IcePaHC, Fornrit search]

This means that Icelandic maintains the same strategy for checking the FinP features in subject extraction, and the complementation system does not undergo a reanalysis of the Old Swedish kind.

6. Optionality explained

On the one hand, the diachronic facts illustrated in section 5.2 provide further support to the analysis of SOM distribution in MSc. It has been shown that SOM undergoes a diachronic reanalysis from non-subject specific to subject specific. Arguably this change in the grammar occurred as the result of a competition between two different systems. In the older system, which was similar to Icelandic, SF was productive, but eventually disappeared, due to the fact that the old system lost the competition against the new one, in which SOM can actually check the nominal feature on FinP. In cartographic terms, I analyze the old SOM as a bare relative subordinator, on a par with Icelandic SEM, whereas the “new” SOM as an element that merges in FinP. In a split CP structure, the generic subordinator SOM/SEM is then merged in SubP (cf. Haegeman 2006, a.o.), whereas the subject-specific SOM merges in FinP, on a par with SF, as is schematically represented in (36)²¹.

²¹ Brackets indicate that SOM is optional, exclamation mark that SOM is obligatory.

(36)	[SubP	Sub°	ModP	FinP	Fin°
Sw./No.	Wh/OP	(SOM)		<Wh/OP>	SOM!
Ic.	Wh/OP	SEM	Adv/Neg SF	[<Wh/OP> SF]/ <i>það</i>	

The different, but compatible, functions of old and new SOM and the fact that they do not occupy the same position allow them to be both retained in the same grammar, where the competition between the two systems is stabilized at this specific point (c.f. Lightfoot 1999). The optionality of SOM in object and long A'-dependencies is explained under the hypothesis that SOM, in those cases, is just a diachronic relic of the generic subordinator of the old complementation system, where relative clauses could be introduced by a morphologically null subordinator as well, cf. Table 3 above. In terms of language change, this hypothesis is compatible with the idea that the competition between the old and the new system may reach different points of stability, depending on the specific grammar. For this reason, crosslinguistic variation and microvariation among the Swedish and the Norwegian dialects is expected.

On the other hand, the optionality of SF in Modern Icelandic, vs. its higher frequency, arguably obligatoriness, in Old Icelandic is explained both in light of its interpretational properties (cf. Sections 4, 5) and as a consequence of a diachronic change. The different interpretation of extraction clauses with and without SF may account for the optionality of SF in relative clauses, cf. (30) above, and discussion. Instead, the alternation between the Icelandic expletive *það* and SF in other clause types (e.g. impersonal constructions), results precisely from a diachronic change: as Falk (1993) already observes, Old Scandinavian has no overt expletive form, i.e. *það* is not present in the lexicon with an expletive function. However, once *það* begins to function as an expletive the productivity of SF drops dramatically (Falk 1993, Rögnvaldsson 1984), arguably because *það*-insertion is in competition with SF and is a more economic strategy, under the hypothesis that *merge* wins on *move*.

To conclude, I have argued that SF and SOM are both strategies to check the features encoded on FinP. SF checks the verbal counterpart, [Finiteness], whereas the obligatory SOM checks the nominal counterpart [Definiteness]. This account generates some predictions concerning the syntax and the interpretation of the clauses in which these elements appears, and such predictions are borne out by comparative synchronic and diachronic facts. The optionality of non-subject specific SOM as well as of SF is explained in light of the respective discourse-configurational properties related to information and as a result of a complex diachronic reanalysis that created a fundamental division in the Scandinavian complementation system.

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