Root phenomena as interface phenomena: Evidence from non-sententials

1 Introduction

To what extent should syntax encode meaning? The way this question has been addressed within the generative framework has fluctuated over the past four decades, but the general tendency has been to complexify the syntactic component to account for much of the complexity of natural language. In the early days of Generative Semantics, all meaning was assumed to be present at D-structure. The current Minimalist view is that many combinatorial properties of semantics are derived from syntax, and that (at least some) systematicities of compositional semantics are associated with phrase structure (Ramchand 2011). The Cartographic approach in particular assumes transparent mapping between form and interpretation, and "syntacticises as much as possible the interpretive domains" Cinque & Rizzi (2010: 64), based on evidence from word order and the order of overtly realised functional morphemes.

This paper questions the extent to which syntax is necessary to account for two phenomena with discourse/pragmatic properties, with the following preoccupation in mind: how should we use Occam's Rasor to dispose of undesirable theoretical entities? More specifically: should we rely on syntax (as opposed to other components) to explain restrictions on the distribution of phenomena with a discourse import, as advocated by the Minimalist Programme and implemented in the classic Cartographic approach? Or should we minimise the role of syntax when these restrictions can be captured by other components of grammar, as advocated e.g. by Culicover & Jackendoff (2005)?

The empirical basis for this discussion is root phenomena in non-sententials. The root properties of non-sententials have been discussed in the literature (Stainton 2004; Culicover & Jackendoff 2005) but to my knowledge the extent to which non-sententials can host root phenomena has not been investigated *per se*.

The paper is organised as follows. Section 2 defines root phenomena in general and lays out the central research question (i.e. to what extent should syntax encode the root properties of clauses/ utterances). Section 3 introduces the syntactic structure relevant to the subsequent discussion: fragments (or non-sententials), i.e. non clausal structures with root properties. The main evidence is provided in the following two sections, demonstrating that French fragments can host 'dislocated' topics (4) and that Japanese fragments can host (root) politeness markers (5). Conclusions are drawn in 6.

[0]I would like to thank Shigeru Miyagawa, Reiko Vermeulen, Mika Kizu and Hidekazu Tanaka for comments and enlightening remarks about the Japanese data (which doesn't imply they agree with my analysis), and Mika Takewa for her generous help in gathering these data. Special thanks to Kristine Bentzen for comments and discussion. Many thanks also to the audiences at the Department of Linguistics at KU Leuven (2010), the GIST2 workshop (Ghent, 2010), the conference "On Linguistic Interfaces" (Belfast, 2010), and the SLE 2011 workshop on "New forays into root phenomena".

2 Root phenomena and their host

Root phenomena are those that normally occur in matrix clauses but are also allowed in a restricted set of embedded ("root-like") clauses (Heycock 2005). Typical examples in English include auxiliary inversion, argument fronting, locative inversion, and tag questions as illustrated in turn below. As shown in the (b) examples, these phenomena tend not to be possible in embedded clauses.[1]

(1) a. Man, are we in for it!! (Green 1976: 8a)
b. *He discovered that boy, was I in over my head. (Green 1976: 8b)

(2) a. Her regular column, she began to write again. The other ones, she never resumed.
b. *When her regular column she began to write again, I thought she would be OK. (Haegeman 2010b: 1b)

(3) a. In the deepest part of the forest lived a scary Gruffalo.
b. He told me that in the deepest part of the forest lived a scary Gruffalo.

(4) a. Acupuncture really works, doesn't it?
b. I suppose acupuncture really works, doesn't it?

Since Emonds (1970), many have attempted to capture root phenomena as a syntactic property of clauses. That approach associates the ability for a clause-type to stand alone with its ability to host root phenomena. Root-like clauses are generally assumed to be essentially finite embedded clauses selected by verbs of assertion (such as *told* in (4-b) — see e.g. Hooper & Thompson 1973; Emonds 2004), although some adjunct clauses have also been found to allow root phenomena (see Heycock 2005 for an overview). Under a strict version of the syntactic approach, clauses are endowed with some kind of Boolean feature [+/- root], and only those belonging to the type [+ root] can host phenomena such as those illustrated in (1)-(4). It has recently been proposed that root properties could be captured syntactically by positing a reduced structure in non-root clauses (as in Haegeman 2006), and/or by appealing to restrictions on syntactic movement across elements endowed with properties inherent to rootness (Haegeman 2010b,a).

Syntactic accounts of rootness acknowledge the key role of the interpretive properties of the host: It is generally assumed, following the seminal work of Hooper & Thompson (1973), that root phenomena are confined to non-presupposed, asserted clauses.[2] I do not propose to question the need to identify the interpretive properties of the host, but the need to associate such properties with particular syntactic structures exclusively.

[1] The extent to which embedded clauses allow root phenomena will not be explored here. See De Cat (in preparation) for an analysis of French dislocation as a root phenomenon and its licensing in embedded clauses.

[2] Although see Wiklund et al. (2009); Bentzen (2011) for evidence that the key interpretive feature of the host may be the ability to convey the Main Point of the Utterance rather than being asserted or non-presupposed.

I will assume, based on De Cat (2012), that the essential properties licensing root phenomena are indeed interpretive in nature, and that licensing results from the interaction of the interpretive properties of root phenomena themselves with the properties of their host — yielding variability across and within clause types. Two types of interpretive properties are involved: (i) those that indicate speaker involvement and (ii) epistemic/ information structural properties. All root phenomena involve epistemic/ information structural properties (requiring their host to be a locus of truth evaluation *à la* Reinhart (1981)); speaker involvement is only required in a subset of cases. Note however that nothing in the argument developed in the present paper hinges on that particular analysis. The main point of this paper is to show that some root phenomena can occur in hosts that are not clausal (even if sluicing is considered), and that consequently, rootness is not necessarily a property encoded syntactically in the C domain.

Before introducing the two root phenomena of interest in this argument, I turn to a brief introduction to the relatively under-studied structure which we will see can host (some of) them.

3 Non-Sententials / fragments

Spontaneous speech prominently features utterances that, in spite of not manifesting themselves as full clauses, are fully interpretable by their addressee. As an extreme example of what can be achieved using such fragments, consider the exchange in (5), involving three people. Imagine Person A looking out of the window and uttering (5-a) (signalling the existence/presence of a strange sheep) and fainting immediately afterwards. Person B then comments (5-b) to Person C, who concludes about A: (5-c).

(5) a. Oh un mouton à pois !
oh a sheep with dots
'Oh, a dotted sheep!'

b. Difficile à imaginer.
hard to imagine
'[That's] hard to imagine.'

c. D'où son malaise.
from-where his faintness
'Hence his faintness.'

Fragments (also known as non-sententials Progovac et al. 2006) or Bare Argument Ellipsis (Culicover & Jackendoff 2005)) are verbless utterances interpreted as full propositions with assertoric force. The whole exchange in (5) takes place without a single full clause being uttered: the utterances appear to consist of just a DP (5-a), and AjdP (5-b) and a PP (5-c). Note also that the first fragment occurs out of the blue, i.e. without any preceding linguistic context.

A question that has been hotly debated since the 70s is that of whether such non-sentential utterances should be analysed syntactically as full clauses or not. Recent pro-

ponents of the YES option include Merchant (2001, 2004, 2008); recent proponents of the NO option include Culicover & Jackendoff (2005); Stainton (2006); Progovac (2006).

Merchant (2004) proposes that fragments are fully propositional in syntax, but that most of their structure remains unpronounced. He analyses fragments as ellipsis, and more specifically as a form of sluicing. Merchant argues that the fragment occupies the specifier of a left-peripheral phrase (which he suggests may be FocusP) whose head is endowed with an E feature. This feature has two functions: (i) it instructs PF not to parse its complement (and hence not to pronounce it) and (ii) it consists of a partial identity function over propositions, which is supposed to ensure that the complement of an E-endowed head has an appropriate antecedent in the discourse (which essentially ensures that the content of the unpronounced structure is identifiable/recoverable). Crucial for the argument developed below is the fact that, under the ellipsis analysis, the full structure must be inherited verbatim from the immediately preceding discourse. Merchant (2006) uses island sensitivity as key evidence for his sluicing analysis: he attributes the unacceptability of the answer in (6) to the illicit movement the pronounced constituent would have had to undergo to reach the [spec,FP] position.

(6) Q: Does Abby speak the same Balkan language that *Ben* speaks?
A: *No, *Charlie*.
No, she speaks the same Balkan language that *Charlie* speaks.

However, Merchant also recognises that a direct interpretation approach is needed for at least some fragments, for which there exists no full-blown syntactic counterpart (as in (5-c)).

Culicover & Jackendoff (2005) and Stainton (2006) argue that the syntactic ellipsis approach cannot account for all fragments, and that the direct interpretation approach should be postulated as default, because it is more economical. Key evidence (to which we will return later in the paper) comes from cases where the fully pronounced structure would be ungrammatical, for instance as a result of island violation. Examples of such fragments are provided below (all are adapted from Culicover & Jackendoff 2005). In each example, the context is provided in (a), the fragment in (b), and the full syntactic structure one would have to postulate for it following Merchant's analysis is given in (c).

(7) a. Haruko has been drinking sake all weekend.
b. Yes. And shochu.
c. *And shochu, Haruko has been drinking sake t all weekend.

(8) a. Whose sake has she been drinking?
b. Her mother's.
c. *Her mother's, she has been drinking t sake.

(9) a. Haruko drinks sake that comes from a very special part of Japan.
b. Where?
c. *Where does Haruko drinks sake that comes from a very special part of (Japan)?

(10) a. Yasu met a child who speaks Urdu.

b. With a Japanese accent?
c. *With a Japanese accent, Yasu met a child who speaks Urdu *t*.

In addition to these, some examples of fragments have no full-clause equivalent at all:

(11) a. Would you like a drink?
b. How about tea?

Furthermore, Merchant's sluicing analysis predicts that fragments cannot occur out of the blue (as they require a context sentence to be copied from), contrary to what we observe in (5-a) (see also (36) below).

Stainton (2006) beautifully argues that such fragments have pragmatic Force in spite of not having syntactic Force, which implies that there is no one-to-one correspondence between "what [is] done (a "full-fledged speech act" i.e. propositional, force-bearing and literal) and what [is] used (lexical projections, not of semantic type <t>, not having [an expression encoding] force, and not embedded in any higher tree)" (Stainton 2006: 29).

4 First set of data: French dislocated topics in fragments

4.1 The evidence

Spoken French features complex fragments, consisting of a verbless phrase (henceforth labelled the *nucleus*) and a peripheral (also verbless) phrase (henceforth labelled the *satellite*). The nucleus conveys the main information of the utterance (and could thus be thought of as focussed). It is highlighted in bold in examples (13) and (14) below.

(12) a. [$_{\text{Focus}}$ XP] satellite (XP = *nucleus*)
b. satellite [$_{\text{Focus}}$ XP]

The satellite is set off from the nucleus by dislocation prosody: left-dislocation prosody when it appears on the left of the nucleus; right-dislocation prosody when it appears on the right. Roughly put, left-dislocation prosody makes the right boundary of a phrase salient in terms of pitch (its melody is characterised by a rise in fundamental frequency (F^0) culminating on the nucleus of the accented (final) syllable), intensity (there is a marked stress on the last syllable of the left-peripheral element) and duration (the stressed syllable is lengthened) — see Deshaies et al. (1993); Rossi (1999); Mertens et al. (2001); De Cat (2007a). A phrase uttered with right-dislocation prosody is destressed and tends to feature a low, flat pitch, or a lower copy of the preceding prosodic contour (Delattre 1966; Ashby 1994; Rossi 1999; Mertens et al. 2001; De Cat 2007a).

The satellite cannot be seen as dislocated in the traditional sense of the term, as it is not associated with a position or a resumptive element inside a clause.[3] However, it displays a number of core characteristics of dislocated elements in spoken French (see De Cat 2007a for details): (i) it receives similar prosody; (ii) it can be omitted (provided its referent is salient enough in the context); and (iii) it appears to fulfil the same informational function as dislocated elements: either it expresses what the utterance is about (as in (13)), or it restricts the (temporal or spatial) domain within which the predication holds (as in (14)).[4]

(13) a. **les**$_i$ **voilà**, les petits copains$_i$.
them PRESENTATIVE the little friends
'Here (are) the little friends.'
b. Je les$_i$ vois, les petits copains$_i$.
I them see the little friends
'I see the little friends.'

(14) a. et maintenant, **de la tomate**.
and now PART the tomato
'And now (let's add) some tomato.'
b. Et maintenant, on met de la tomate.
and now one puts PART the tomato
'And now let's add some tomato.'

Under a WYSIWYG (*what you see is what you get*) approach, complex fragments can be analysed as adjoined structures, just like their full-clause counterpart (De Cat 2007b,a). Adjunction is a primitive (Lebeaux 1988) or default operation (Boeckx 2008) that does not provide explicit mapping instructions and does not involve feature checking. It allows for a loose semantic relation between the satellite and the nucleus, the exact content of which is recovered from the context.

4.2 Do they host true root phenomena?

One might object that the satellites are not the manifestation of a root phenomenon. The jury is still out as to the root status of right-dislocated topics (see e.g. de Vries 2009, *pace* De Cat 2007a)[5] and left-dislocated topics in Romance have been shown to be acceptable

[3] A noteworthy exception is (13), which shows that satellites can in principle be resumed by a clitic (just like dislocated elements, as shown by the indexing in (13)), but only if there is a syntactic host for the clitic. Exploring what makes the presentative *voilà* a possible clitic host is however beyond the scope of this paper.

[4] The data set used in this study comes from two French corpora of spontaneous interaction between children and adults: the York corpus (available on CHILDES) and the Cat corpus. They contain speech from 4 children (between the ages of 1;10 and 3;6) — ages are given in year;months.days — and adults from Belgium, Canada and France. Recordings took place fortnightly (York corpus) or monthly (Cat corpus) and lasted 30 minutes. For details regarding the transcription and coding procedures, see De Cat & Plunkett (2002) and De Cat (2002).

[5] I will leave this for subsequent work, and concentrate below on left-peripheral satellites.

in contexts normally hostile to root phenomena (such as central adverbial clauses, as in (15) — see e.g. Haegeman (2010b)).

(15) Si ce livre-là tu le trouves à la Fnac, achète-le.
if that book-there you it find at the Fnac buy-it
(Haegeman 2007: (11))
'If you find that book at the Fnac, buy it.'

Haegeman (2010b) explains the unexpected acceptability of (15) by the availability of a Topic position below FocusP in Romance but not in languages like English. Central adverbial clauses are argued not to have a root projection in their C-domain (i.e. ForceP or SpeakerDeixisP), and this blocks the projection of the higher TopicP, leaving the lower TopicP (which is exclusive to Romance) unaffected. Crucially, those low topics are claimed not to have root properties. Hence their occurrence in central adverbial clauses in Romance is argued to be compatible with the non-root status of these clauses cross-linguistically.

In fragments however, under a cartographic approach, one would have to assume that the satellite occupies the higher TopP position, given that everything below FocusP is unpronounced. This would automatically confer to the satellite the status of root phenomenon under Haegeman's analysis.

Could it be that not all topics higher than FocusP are root? This is the claim of Bianchi & Frascarelli (2010), who postulate the existence of three types of left-peripheral topics: Aboutness-Shift topics (A-topics), Contrastive topics (C-topics) and Given topics (G-topics). The proposed cartography is as follows (with the asterisk indicating recursivity):

(16) $[_{ShiftP}$ A-Topic $[_{ContrP}$ C-Topic $[_{FocP}$ $[_{FamP*}$ G-Topic $[_{FinP}$ $[_{IP}$ ...

A-topics display the following set of essential characteristics:

(17) A-topics
- a. have an impact on Common Ground management:[6] They are associated with a shift in the conversation and "newly propose or reintroduce a topic in the discourse" (Bianchi & Frascarelli 2010: 9);
- b. precede FocusP (and may in fact be outside the C-domain altogether) and have a distinctive prosodic contour (in Italian);
- c. are "merged in the structure as an independent speech act and can only be conjoined with a root(-like) clause implementing another speech act" (Bianchi & Frascarelli 2010: 27); as a result they can be combined with a clause of any illocutionary type (contrary to C-topics, which are restricted to declarative clauses);
- d. are restricted to clauses that express non-reported speech acts, which are

[6]Common Ground management is defined as "the sequence of conversational moves performed by participants [...] that determines the way in which the CG content develops" (Bianchi & Frascarelli 2010: 6)

necessarily unembedded.[7]

The satellites in the examples below clearly fit key A-topic criteria: they occur in interrogatives (18) and exclamatives (20), they express a shift in perspective (19) and (21),[8] and of course they occur in fragments, the unembeddable speech act *par excellence*: (18) conveys a request, (19-a) and (19-b) an assertion, (19-c) an acknowledgement, and (20) an order.

(18) Celui-là, comme ça?
that-one-there like that
'[Shall we put] that one like this?'

(19) a. Moi, avec l'éponge.
me with the sponge
'I [will do it] with the sponge.'
b. Moi aussi, une cape
me too a cape
'Me too, [I want] a cape.'
c. Ah toi aussi, un petit peu de jus d' orange.
ah you too a little bit of juice of orange
'Ah, you also [want] some orange juice.'

(20) Toi, dans ta chambre !
you in your bedroom
'[Go to] your bedroom!'

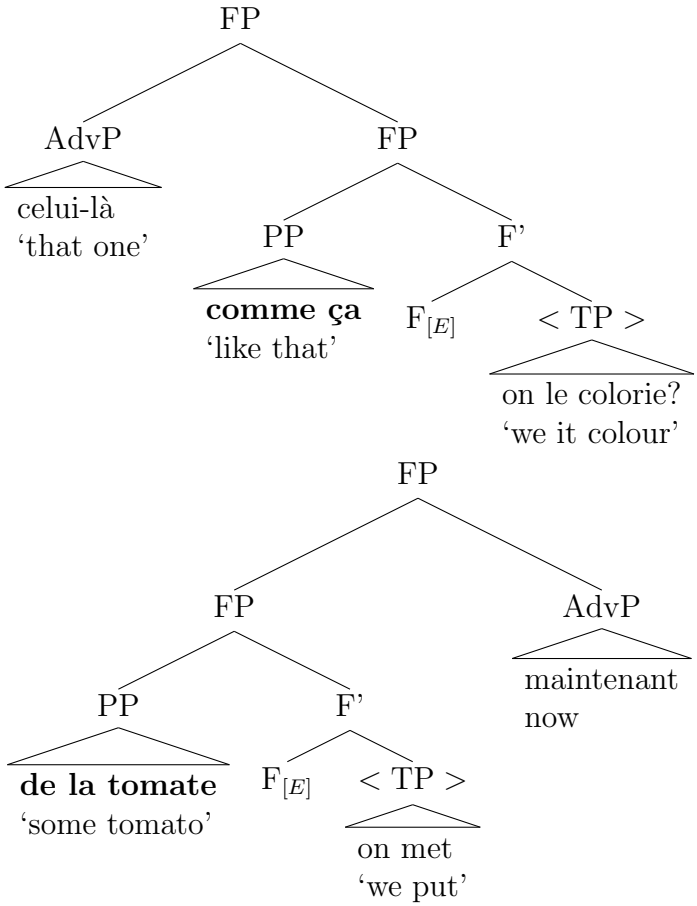
It is unclear whether the three-way topic distinction proposed by Bianchi & Frascarelli (2010) applies to French (see De Cat (in preparation) for discussion). But even if it does, the evidence above indicates that satellites display the characteristics of topics with root properties.

4.3 Are these elided full clauses?

How much structure should we postulate for complex fragments? The sluicing approach (Merchant 2004, 2006) could in principle accommodate dislocated topics as long as these are hosted higher than FP. The nucleus (in bold in the trees) would move to [spec,FP], and because the topic is merged higher than FP, it would remain unaffected by the silent spell out of F's complement.

[7] It is unclear whether they can be embedded at all (Bianchi & Frascarelli 2010 speculate that the embedded A-topics in their corpus might be performance errors).

[8] The satellites in these examples are not contrasted with a referent in the linguistic context, which rules out a C-topic analysis.



A sluicing analysis is impossible for those complex fragments that do not have a full sentential counterpart, such as (5-c), (21), (22), and for those whose full-sentential counterpart would be ungrammatical, such as (23-a) (as French does not allow the fronting of *quoi* 'what').

(21) La boutonnière de ce bouton-là, **la voilà**.
the button-hole of that button-there it PRESENTATIVE
'THERE's that button's button hole!'

(22) Les bleus, **oui**. Les rouges, **non**.
the blue yes the red no
'The blue ones can. The red ones can't.'

(23) a. **Quoi**, le bleu?
what the blue
'What [is the matter with] the blue one?'
b. *Quoi (est-ce qu') il a, le bleu?
what is it that it has the blue

Similarly, a sluicing analysis is ruled out in cases where the full sentential equivalent

would violate an island constraint, as in the examples below.[9] A sluicing analysis of the perfectly acceptable (24-b) would require extracting *aussi du shochu* 'also some shochu' from a coordinate structure, as shown in the non-elided (24-c). However, the latter is ungrammatical, and can therefore not to be considered the source for (24-b). The parentheses indicate that the presence of a dislocated topic does not alter the (un)grammaticality of the fragment/ sentence.

(24) a. Haruko a bu du sake tout le weekend.
Haruko has drunk some sake all the weekend
'Haruko has been drinking sake all weekend.'
b. Oui. Et (sa) (soeur), aussi du shochu.
yes and her sister also some shochu
(i.e. Haruko's sister drank sake and (also) shochu all weekend.)
c. *Et (sa soeur), aussi du shochu, elle a bu du sake *t* tout le weekend.
and her sister also some shochu she has drunk some sake all the weekend
weekend

4.4 Summary of findings

The satellite in French complex fragments is the non-sentential counterpart of dislocated topics in full clauses. It has similar interpretive, prosodic and syntactic properties. A sluicing analysis has been shown not to capture complex fragments in cases where there is no full-clause equivalent and where the full-clause equivalent would violate a syntactic island. Under a cartographic approach, the satellite would be equivalent to a root topics, even under the three-way distinction proposed by Bianchi & Frascarelli (2010): it is necessarily higher than [FocP], and akin to A-topics. I conclude that these non-clausal structures can host a root phenomenon, in spite not projecting a C-domain.

5 Second set of data: Japanese politeness markers in fragments

5.1 The evidence

Miyagawa (2012) shows that the politeness marker -MAS- (underlined in (25)) occurs exclusively in root-like clauses.

(25) Watasi-wa piza-o tabe-<u>mas</u>-u.
I-TOP pizza-ACC eat-MAS-PRES
'I will eat pizza.' (Formal register)

[9] The examples in this case are made up and were checked with 8 native speakers for acceptability.

In verbless clauses, another politeness marker is used (-DES-), which is functionally equivalent to -MAS- (Miyagawa, p.c.). In De Cat (2012), I show that -DES-, like -MAS-, is restricted to root clauses. The simple, verbless clause in (26-a) hosts (-DES-); its embedded equivalent in (26-b) doesn't (it cannot), and as a result politeness is marked in the matrix clause only in that sentence.

(26) a. Tomoko-san-wa atama-ga ii desu.
Tomoko-HONOR-TOP head-NOM good DES
'Tomoko is clever.' (Lit: 'Tomoko's head is good.')
b. [Tomoko-san-wa atama-ga ii to] omi-masu.
Tomoko-HONOR-TOP head-NOM good QUOTE believe-MAS
'I believe Tomoko is clever.'

The root politeness marker-DES- can appear in fragments that cannot be accounted for by the syntactic ellipsis approach, i.e. fragments that do not have a full clausal structure. (27-b) and (28-b) show that -DES- can be used in fragments that, under Merchant's (2004) analysis, would have to be extracted out of island (complex NPs or coordinated structure). The examples below are adapted from Culicover & Jackendoff (2005).[10]

(27) a. Haruko-wa [nihon-no tokubetu-na tokoro-de tukurareteiru]
Haruko-TOP Japan-GEN special-CONNECTIVE place-at produce-PAST-ASP
sake-o nomi masu.
sake-ACC drink masu
'Haruko drinks sake that comes from a very special part of Japan.'
b. Doko desu/*masu ka?
where DES/MAS Q
'Where?'

(28) a. Syusyoo-wa tomato-jyuusu to nani-ga suki-desu-ka?
prime-minister-TOP tomato-juice and what-NOM fond-of-DES-Q
'The Prime Minister likes tomato juice and what?'
b. Biiru-desu.
beer-DES
'Beer.'

The examples in (29-b) and (30-b) show that -DES- can be used in fragments for which the non-elided counterpart (following Merchant's analysis) would be ungrammatical.

(29) a. Nanika nomi masu ka?
something drink MAS Q

[10]Incidentally, note that the impossibility to use -MAS- in the fragments above provides additional evidence against a sluicing analysis: if these were syntactically full clauses copied from an antecedent in the discourse, they would involve verbs and the use of -MAS- rather than -DES- would be obligatory. Merchant's variable island repair strategy, which is invoked to account for the extractability of question words out of elided islands, can therefore not be invoked here, on account of the presence of DES rather than the expected MAS.

'Would you like a drink?'

b. Otya-wa doo desu/*masu ka?
tea-TOP how DES/MAS Q
'How about tea?'

(30) a. Pizza-o tor-oo.
pizza-ACC order-VOLITIONAL
'Let's get a pizza.'

b. Margharita desu/*masu ka?
Margharita DES/MAS Q
'Margharita?'

5.2 Are these in fact reduced clefts?

An alternative analysis of the Japanese fragment data presented above is to derive them as reduced clefts, along the lines of Saito (2004) or Kizu (2005). However, as pointed out in Merchant (2001), the interpretive properties of clefts differ from those of fragments. Cross-linguistically, it is widely acknowledged that the object of the matrix copular clause is in focus and that the embedded clause is presupposed (see e.g. Kizu 2005 for Japanese).[11] The focused element itself is normally presupposed in clefts, and tends to require an exhaustive interpretation. Fragment answers are not subject to such restrictions, as illustrated in (31) (from Merchant 2001: 120):

(31) Q: What did the burglar take?
A: Nothing. / #It was nothing at all that the burglar took.

The requirement for an exhaustive reading in clefts but not in fragments is also visible in the examples below. (32) illustrates this with interrogative clefts vs. interrogative fragments (van Craenenbroeck 2010). The modifier *for example* is impossible in the cleft question (as it is incompatible with an exhaustive reading) but perfectly fine in the fragment.

(32) You should talk to somebody in the legal department for help with that.
a. Who, for example? Fragment
b. #Who is it, for example? Cleft

A similar effect is observed in (33), where the presence of the modifier *else* signals a non-exhaustive answer, violating the expectation of exhaustivity arising from the use of the cleft.

(33) Harry was there, but
a. I don't know who else.
b. #I don't know who else it was.

[11] There are exceptions, in which new information does appear in the embedded clause — see Delin (1992).

The contrast below indicates that English and Japanese carry the same semantico-functional restrictions on clefts, and that fragments are immune to those in both languages.

(34) Kanojo-wa anata-yori sinsetsuna tomodachi-ga ooi.
she-TOP you-more-than nicer friends-NOM many
'She has nicer friends than you.'

a. #Kanojo-ga anata-yori ooi-no-wa dono sinsetuna
she-NOM you-more-than many-NOMINALISER-TOP which nicer
tomodachi-na-no?
friend-copular-Q
Lit: 'Which nicer friends is it that she has more than you?'

b. Dono-tomodachi-desu-ka?
which-friends-DES-Q

Finally, Merchant (2001) notes that clefts are attested (albeit infrequently and possibly not in all languages) in out-of-the-blue context, in which case the object of the matrix clause receives an existential interpretation. However, the contrasts in (35) show that there are restrictions on the availability of an existential reading in putative clefts, depending on the (overt) presence of the embedded clause. This is not predicted under a sluicing approach, as the ellipsis occurs post-spell-out and in the PF component only.

(35) a. Oh a sheep!
b. Oh it's a sheep!
c. Oh it's a sheep (#that I see / #that is there)!

The fragment in (35-a) cannot do more than signal the existence/presence of a sheep. The partly elided cleft in (35-b) implies some kind of ambiguity resolution in the context (e.g. the speaker may have been wondering what was making a strange noise, or what had been making holes in the curtains): it signals identification and not mere existence. The same appears to hold for Japanese:

(36) a. Ara, hitsuji desu!
oh sheep DES
'Oh a sheep!'

b. #Ara, asoko ni mieru no wa hitsuji desu!
oh there at is-visible NOMINALISER TOP sheep DES
'Lit: Oh it's a sheep that I see.'

c. #Ara, asoko ni iru no wa hitsuji desu!
oh there at exists NOMINALISER TOP sheep DES
'Lit: Oh it's a sheep that exists.'

5.3 Summary of findings

Japanese fragments have been shown to host politeness markers, a phenomenon restricted to root hosts. Politeness markers are attested in fragments that elude a sluicing analysis. An analysis in terms of reduced cleft has been shown to be inadequate on interpretive grounds. Here again the conclusion has to be that non-clausal structures can host a root phenomenon, in spite of not projecting a C-domain.

6 Conclusions

The data discussed in this paper provide clear evidence for the existence of syntactically non-clausal structures with root properties. The observation that non-sententials (or fragments) have pragmatic Force is not new (Stainton 2006). What is new is evidence that, in spite of lacking syntactic Force, fragments can host phenomena that are restricted to root hosts when they occur in full clauses. These include root phenomena with an information structural import (i.e. the dislocated topic in French complex fragments) and root phenomena expressing speaker anchoring (i.e. politeness marking in Japanese fragments).

Two general conclusions can be drawn from the above. Firstly, the empirical domain of syntax should not necessarily be coextensive with the sentence or clause: smaller structures also need accounting for — not just because they are pervasive in spontaneous speech, but also because they display syntactic phenomena in need of an explanation. This does not automatically call for a revision of core minimalist assumptions (as demonstrated by Progovac 2006). Secondly, the existence of root phenomena in fragments that cannot be captured by a full-clause analysis shows that what confers root properties to a host is not necessarily syntactic. If the interpretive component needs to be relied on to confer root status to a syntactic structure in those cases, should we not confer it the same role in full clauses? I would be tempted to follow the wisdom of William of Occam, especially if it leads us towards a better account for learnability.

References

Ashby, W. J. (1994). An acoustic profile of right-dislocations in French. *Journal of French Language Studies 4(2)*. 127–145.

Bentzen, K. (2011). *The status of the embedded V-Neg word order*. Ms. University of Tromsø.

Bianchi, V. & Frascarelli, M. (2010). Is topic a root phenomenon?. *Iberia 2*. 43–88.

Boeckx, C. (2008). *Bare syntax*. Oxford: Oxford University Press.

Cinque, G. & Rizzi, L. (2010). The cartography of syntactic structures. In Heine, B. & Narrog, H. (eds.), *The Oxford Handbook of Linguistic Analysis*. Oxford: Oxford University Press. 51–65.

Culicover, P. & Jackendoff, R. (2005). *Simpler Syntax*. Oxford: OUP.

De Cat, C. (2002). *French Dislocation*. Doctoral dissertation. University of York.

De Cat, C. (2007a). *French Dislocation: Interpretation, Syntax, Acquisition*. Oxford Studies in Theoretical Linguistics 17. Oxford: OUP.

De Cat, C. (2007b). French dislocation without movement. *Natural Language & Linguistic Theory 25(3)*. 485–534.

De Cat, C. (2012). Towards an interface definition of root phenomena. In Aelbrecht, L., Haegeman, L., & Nye, R. (eds.), *Main Clause Phenomena. New Horizons*. Amsterdam: John Benjamins. 135–157.

De Cat, C. (in preparation). *Dislocated topics in hostile environments*. Ms. University of Leeds.

De Cat, C. & Plunkett, B. (2002). Qu' est ce qu' i(l) dit, celui+là ? Notes méthodologiques sur la transcription d'un corpus francophone. In Pusch, C. D. & Raible, W. (eds.), *Romanistische Korpuslinguistik: Korpora und gesprochene Sprache / Romance Corpus Linguistics: Corpora and Spoken Language*. cd-rom edition. Tübingen: Narr.

de Vries, M. (2009). The left and right periphery in Dutch. *The Linguistic Review 26*. 291–327.

Delattre, P. (1966). Les dix intonations de base du français. *French Review 40(1)*. 1–14.

Delin, J. (1992). Properties of it-cleft presuppositions. *Journal of Semantics 9*. 289–306.

Deshaies, D., Guilbault, C., & Paradis, C. (1993). Prosodie et dislocation Ã gauche par anaphore en français québécois spontané. In Crochetière, A., Boulanger, J.-C., & Ouellon, C. (eds.), *Actes du XVe Congrès international des linguistes*.

Emonds, J. (1970). *Root and structure-preserving transformations*. Doctoral dissertation. MIT.

Emonds, J. (2004). Unspecified categories as the key to root constructions. In Adger, D., De Cat, C., & Tsoulas, G. (eds.), *Peripheries. Syntactic edges and their effects*. Dordrecht: Kluwer. 75–120.

Green, G. (1976). Main clause phenomena in subordinate clauses. *Language 52(2)*. 382–397.

Haegeman, L. (2006). Conditionals, factives and the left periphery. *Lingua 116(10)*. 1651–1669.

Haegeman, L. (2007). Operator movement and topicalisation in adverbial clauses. *Folia Linguistica 18*. 485–502.

Haegeman, L. (2010a). The movement derivation of conditional clauses. *Linguistic Inquiry 41(4)*. 595–621.

Haegeman, L. (2010b). The internal syntax of adverbial clauses. *Lingua 120*. 628–648.

Heycock, C. (2005). Embedded root phenomena. In Everaert, M. & van Riemsdijk, H. (eds.), *The Blackwell Companion to Syntax*. Oxford: Blackwell.

Hooper, J. B. & Thompson, S. A. (1973). On the applicability of root transformations. *Linguistic Inquiry 4(4)*. 465–497.

Kizu, M. (2005). *Cleft constructions in Japanese Syntax*. New York: Palgrave MacMillan.

Lebeaux, D. (1988). *Language acquisition and the form of the grammar*. Doctoral dissertation. University of Massachussets.

Merchant, J. (2001). *The syntax of silence. Sluicing, islands and the theory of ellipsis*. Oxford: OUP.

Merchant, J. (2004). Fragments and ellipsis. *Linguistics and Philosophy 6*. 661–738.
Merchant, J. (2006). "Small structures": A sententialist perspective. In Progovac, L., Paesani, K., Casielles, E., & Barton, E. (eds.), *The Syntax of Nonsententials*. Linguistik Aktuell. Amsterdam: John Benjamins. 73–92.
Merchant, J. (2008). Variable island repair under ellipsis. In Johnson, K. (ed.), *Topics in ellipsis*. Cambridge: CUP. 132–153.
Mertens, P., Goldmann, J.-P., Wehrli, E., & Gaudinat, A. (2001). La synthèse de l'intonation à partir de structures syntaxiques riches. *TAL (Traitement Automatique des Langues) 42(1)*. 142–195.
Miyagawa, S. (2012). Agreements that occur mainly in the main clause. In Albrecht, L., Haegeman, L., & Nye, R. (eds.), *Main Clause Phenomena: New Horizons*. Amsterdam: John Benjamins.
Progovac, L. (2006). The syntax of nonsententials: Small clauses and phrases at the root. In Progovac, L., Paesani, K., Casielles, E., & Barton, E. (eds.), *The Syntax of Nonsententials: Multidisciplinary Perspectives*. Amsterdam: John Benjamins. 33–71.
Progovac, L., Paesani, K., Casielles, E., & Barton, E. (eds.) (2006). *The Syntax of Nonsententials: Multidisciplinary Perspectives*. Amsterdam: John Benjamins.
Ramchand, G. (2011). Minimalist semantics. In Boeckx, C. (ed.), *The Oxford Handbook of Linguistic Minimalism*. Oxford: Oxford University Press. 449–471.
Reinhart, T. (1981). Pragmatics and linguistics: An analysis of sentence topics. *Philosophica 27*. 53–94.
Rossi, M. (1999). *L'intonation. Le système du français : description et modélisation*. Paris: Ophrys.
Saito, M. (2004). Ellipsis and pronominal reference in Japanese clefts. *Nanzan Linguistics 1*. 21–50.
Stainton, R. (2004). In defense of non-sentential assertion. In Szabo, Z. (ed.), *Semantics vs. Pragmatics*. Oxford: Oxford University Press. 383–457.
Stainton, R. (2006). *Words and Thoughts. Subsentences, Ellipsis, and the Philosophy of Language*. Oxford: OUP.
van Craenenbroeck, J. (2010). Invisible last resort: A note on clefts as the underlying source for sluicing. *Lingua 120(7)*. 1714–1726.
Wiklund, A.-L., Bentzen, K., Hrafn Hrafnbjargarson, G., & Hróarsdóttir, þ. (2009). On the distribution and illocution of V2 in Scandinavian *that*-clauses. *Lingua 119*. 1914–1938.