

The role of D-features and case for clausal arguments: an account from Icelandic - Mirko Garofalo

A common approach developed in the last decades on clausal arguments and overt determiners is the nominalization hypothesis, which states that clausal arguments preceded by an overt D are embedded into a DP-shell (cf. Borsley and Kornfilt 2000; Roussou 1991 among others). Thus, clausal arguments not accompanied by an overt D are bare CPs. Alternative models either claim a) that clausal arguments are DPs independently from the presence of an overt D as they surface in positions where NPs/DPs can appear (Thráinsson 1979; Knyazev 2016), or b) that all clausal arguments are CPs and the overt pronoun is in Spec,C as shown by the complementary distribution with wh-movement in embedded clauses. The latter view has been proposed for English, see Stroik (1994); Yoon (2001).

This study claims that Icelandic provides strong arguments in favor of the nominalization hypothesis. Firstly, the possibility that a clausal argument is introduced by the determiner *það* ('that') is conditioned by the grammaticality of a regular (i.e. non-clausal) DP in general. As shown in (1), a clausal DP can not be the complement of a clause-selecting head unless a regular DP is also allowed:

- (1a) *Ég ætla* *_[DP þetta] / [*(*það) að fara heim*] | (1b) *Ég þrái* _[DP þetta] / [*(það) að fara heim*]
I intend this that_{ACC} to go home I desire this that_{ACC} to go home
Lit: 'I intend this / to go home' Lit: 'I desire this / to go home'

Thus, the verb *ætla* 'intend' which does not take a regular DP complement cannot have an overt D with its non-finite complement. By contrast, *þrá* 'intend' allows a DP-clause as shown by the possibility of *það* preceding the infinitival clause. Note that the relevant CP may still undergo string-vacuous extraposition out of the DP in examples like (1b).

Secondly, *það* clearly forms a constituent with the following CP in examples where this string immediately follows the finite verb as in (2a). The post-verbal position is reserved for subjects in Icelandic and since only DP subjects can surface there (due to restrictions applied by the D-feature in T), the status of DP is confirmed for the constituent in (2a), while the ungrammaticality of (2b) follows from the nominalization hypothesis:

- (2a) *Er* [*það að sjóða kartöflur*] mjög auðvelt? | (2b) * *Er* [*að sjóða kartöflur*] mjög auðvelt?
is that_{NOM} to cook potatoes very easy is to cook potatoes very easy
'Is it easy to cook potatoes?' Meant: 'Is it easy to cook potatoes?'

However, the contrast between (2a) and (2b) would be mysterious under the hypothesis that all clausal arguments belong to the same category, irrespective of the presence of *það*. (As in English, (2b) is improved by the right intonation, but the counterpart of (2a) would be ungrammatical in English.)

On the other hand, as we can expect, both clausal DPs and CPs are possible in clause-initial position in Icelandic because this position can be occupied by all kinds of (topicalized) phrases:

- (3a) [*Það að sjóða kartöflur*] er mjög auðvelt | (3b) [*Að sjóða kartöflur*] er mjög auðvelt
that_{NOM} to cook potatoes is very easy to cook potatoes is very easy
'Cooking potatoes is easy' 'Cooking potatoes is easy'

Now, cross-linguistically, languages like Modern Greek, Persian, Polish and Russian require the presence of an anticipatory D-element for clausal subjects (see Roussou (1991); Hartman (2012)), which apparently point to the conclusion that clausal subjects need to be assigned structural case. However, these languages differ from Icelandic in that they are not V2 languages. Hence, an unambiguous subject position in these languages is pre-verbal rather than post-verbal. This conclusion is further strengthened by the fact that Mainland Scandinavian languages, which are also V2, behave exactly like Icelandic with respect to examples like (2) and (3), i.e. post-verbal clauses require an anticipatory D-element but pre-verbal clauses do not (e.g. Josefsson 2006 for Swedish). The facts from Icelandic and Mainland Scandinavian languages suggest that the obligatory presence of *það* in examples like (2) relates to the D-feature of T but not structural (nominative) case. This is shown by a) the fact that CP subjects are possible as in (3b) and b) the fact that CP arguments are allowed in correlation with structural case assignment across the board, as verbs assigning accusative case (or nominative case) to their objects do not require the presence of *það* with a clausal complement:

- (4a) *Ég harma* [(*það*) að Sara skuli vera hér] | (4b) *Mér leiðist* [(*það*) að hlusta á hann]
I regret that_{ACC} that Sara shall be here Me bores that_{NOM} to listen to him

‘I regret it that Sara is here’

‘I’m bored of listening to him’

However, being a case-rich language, Icelandic provides a unique window into clausal arguments when the selecting head assigns lexical case. As illustrated in (5), a subject in genitive case must be preceded by *það*, whether the clause is in pre- or post-verbal position (note that lexical case must be morphologically realized, cf. Bayer, Baader og Meng (2001) for German):

- (5a) Varð [***(þess)** að María væri farin] ekki vart? | (5b) [***(þess)** að María væri farin] varð ekki vart
became that_{GEN} that María was gone unnoticed | that_{GEN} that María was gone became unnoticed
‘Did it go unnoticed that María left?’ | ‘It went unnoticed that María left’

The contrast between (2-3) and (5) suggests that clausal CPs are ungrammatical when formal case features need to be checked. At the same time, it also tells us that structural case does not provide any formal case feature, since CPs can surface as arguments. In other words, the hypothesis proposed cross-linguistically that clausal subjects need to be assigned structural case is not valid for Icelandic.

Dative and genitive objects, however, present an unexpected contrast in this respect. There is a subset of verbs assigning dative and genitive case which tend to require *það*, consistently with the hypothesis presented (see (5)), and another subset of verbs like *spá* (‘predict’) and *spyrja* (‘ask’) which are able to select CP arguments despite the fact that they assign lexical case (see (6)):

- (5a) Ég fagnaði [***(því)** að Sara væri komin] | (5b) Ég sakna [***(þess)** að hafa þig hjá mér]
I rejoiced that_{DAT} that Sara were come | I miss that_{GEN} to have you by me
‘I rejoiced for the fact that Sara came’ | ‘I miss having you with me’
- (6a) Sara spáði [**(því)** að Gísli myndi sigra] | (6b) María spurði [**(þess)** hvort Jón væri farinn]
Sara predicted that_{DAT} that Gísli would win | María asked that_{GEN} whether Jón was gone
‘Sara predicted that Gísli would win’ | ‘María asked whether Jón was gone’

Although the contrast between (5) and (6) has traditionally been explained with factivity, in the sense that non-factives tend to select simpler argument structures (see Thráinsson (1979)), the reason for the existence of the pattern in (6) might be due to the ability of the relevant verbs to provide a caseless selectional pattern. This hypothesis is supported by the fact that *það* is also able to PPs expressing time, see (7) in comparison to (6) (although this is a less extended phenomenon). Since prepositions are by norm resistant to case assignment, we can draw the conclusion that the optionality of *það* in (7) is explained by the presence of a caseless selectional pattern:

- (7) Reglurnar [frá **(því)** [pp í fyrra]] hafa breyst
Rules.the from that_{DAT} last year have changed
‘The rules from last year have changed’

The facts from Icelandic clearly show the validity of the nominalization hypothesis and cast new light on the relationship between case assignment and nominalized clausal arguments. The Icelandic data reveal that structural case (contrarily to the aforementioned cross-linguistic analyses) does not correspond to any formal case feature as CP clauses are allowed to surface. The D-feature in T, however, intervenes by ruling out all the non-DP types from Spec,T position. Lexical case, by contrast, is incompatible with CP arguments due to their inability to check formal case features.

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