

Subject Extraction out of Free Relatives in Norwegian*

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1. Extraction out of free relatives

Extraction out of free relative clauses (FRs) is not expected to be possible as adjuncts are typically islands for movement. Such movement violates Subjacency and the ECP. However, Engdahl (1997):56 noted that Norwegian seems to allow the extraction of the subject of a free relative in some instances. She gave the example shown in (1).

- (1) Denne kunstneren_i kjøper jeg hva enn t_i produserer¹
this artist buy I what ever produces
'I buy whatever this artist produces'

An illustration of this extraction (assuming the headless analysis of free relatives) is given in (2).

(2)

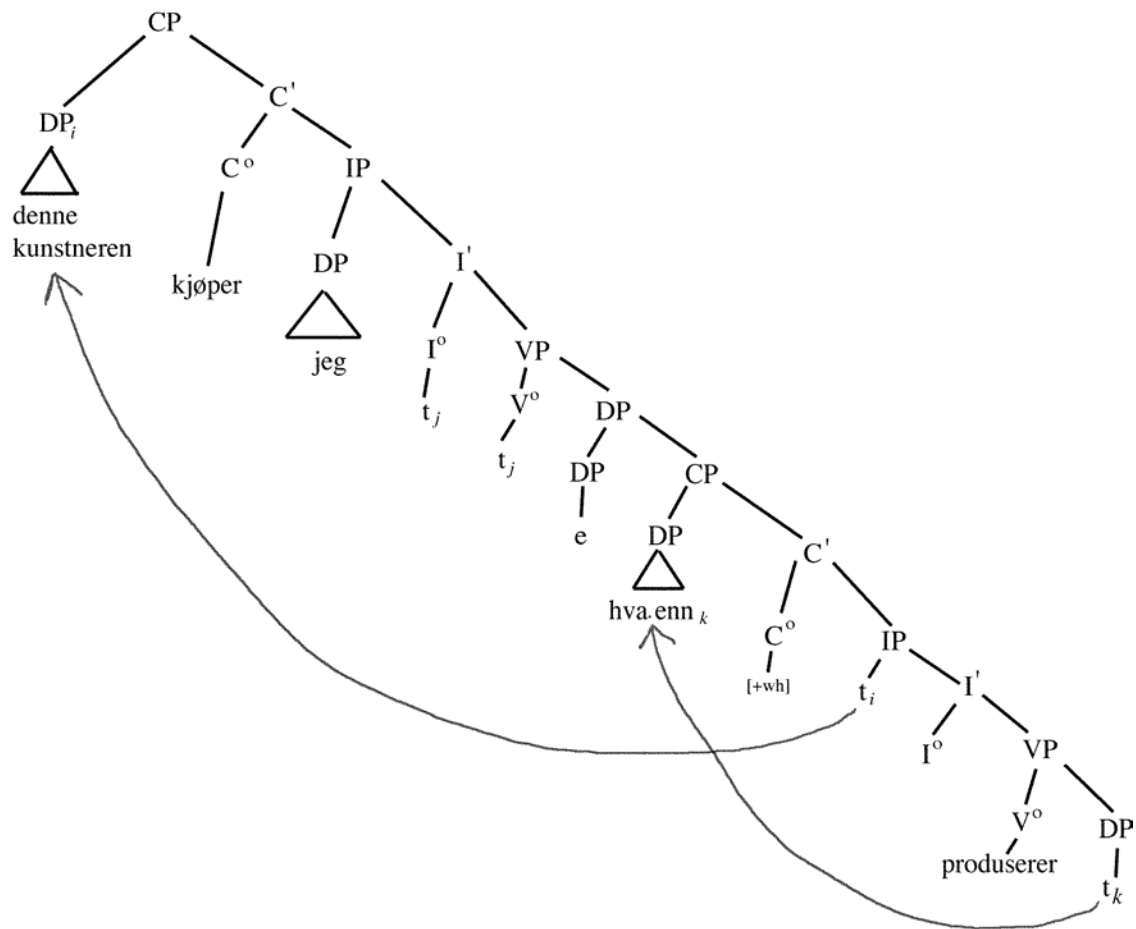
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¹ Engdahl marks the extraction site in (1) as if *denne kunstneren* originated between *hva* and *enn*, and indeed the FR may be either *hva enn denne kunstneren produserer* or *hva denne kunstneren enn produserer*, as both are grammatical and have the same meaning. However, in (i-a), *enn* can only occur in the position shown, and not adjacent to *hvor*. Because extraction is not possible in this case, as shown in (i-b), I assume the extraction site to be as I have marked it in (1).

(i)

- (a) Jeg kjøper hvor mye denne kunstneren enn produserer
I buy how much this artist ever produces
'I buy however much this artist produces'
- (b) *Denne kunstneren_i kjøper jeg hvor mye t_i enn produserer
this artist buy I how much ever produces
'I buy however much this artist produces'

Additionally, Engdahl marks *enn* as optional in (1), but as far as I have been able to determine all such extractions are not grammatical without it.



It is only possible to extract the FR subject under very specific conditions. Testing the limits of this extraction has led to the finding of strict lexical restrictions on the matrix verb, the FR verb, and the subject of the FR. First, the matrix verb must be able to reflect a dual meaning: one which applies to the FR as a whole (as the object of the sentence) and one which applies to the extracted subject itself (which is interpreted in some sense as the object of the verb in sentences such as (1)). This pattern is shown and discussed in section 2.1. Second, the FR verb must be one which reflects that the FR as a whole originated from its subject, that is, be what I term a *create*-type verb. Examples showing this are given in section 2.2. Finally, the subject of the FR must be someone who can be thought of in terms of their work, i.e. an artist or an author. This is shown in section 2.3.

Taken together, these requirements allow an interpretation of a sentence such as (1) in which the extracted FR subject can be thought of as the object of the matrix verb. This is because one can refer to, for example, something an artist has produced in terms of the artist themselves: one is able to refer to an artist, and mean their work(s). Therefore the matrix verb

needs to mean the same whether the FR as a whole or the extracted subject is taken to be its object. The FR verb has to be a *create*-type verb because the FR needs to be something which can be referred to in terms of its creator.

The question of whether or not this phenomenon is really extraction or not is addressed in section 3. An alternative analysis where the subject position of the FR is filled with a *pro* is considered. Some additional data are presented which look similar but almost certainly need a *pro* analysis. Whether or not this data is really the same as the core cases presented here is left open. The conclusion is given in section 4.

2. Data

2.1 Restrictions on the matrix verb

The matrix verbs which allow grammatical extraction of the FR subject are those which allow a dual application to the extracted subject and to the FR as a whole, with the same meaning. Different matrix verbs (which are in bold) are shown in (3), where the rest of the sentence is held constant with the grammatical (1). For example, *kopierer* ('copies') ((3-a-iii), below) is a good matrix verb because one can be said to copy an artist or author if one copies their work. The best verbs I have found are given in (3-a). Those in (3-b) are grammatical, but are not as good as those in (3-a). Examples of matrix verbs which result in ungrammatical extraction are given in (3-c).

(3) (a)

- (i) Denne kunstneren_i **kjøper** jeg hva enn t_i produserer
this artist buy I what ever produces
 'I buy whatever this artist produces'
- (ii) Denne forfatteren_i **oversetter** jeg hva enn t_i produserer
this author translate I what ever produces
 'I translate whatever this author produces'
- (iii) Denne kunstneren_i **kopierer** jeg hva enn t_i produserer
this artist copy I what ever produces
 'I copy whatever this artist produces'
- (iv) Denne kunstneren_i **saboterer** jeg hva enn t_i produserer
this artist sabotage I what ever produces
 'I sabotage whatever this artist produces'

- (v) Denne forfatteren_i **leser** jeg hva enn t_i produserer
this author read I what ever produces
'I read whatever this author produces'
- (vi) Denne kunstneren_i **beundrer** jeg hva enn t_i produserer
this artist admire I what ever produces
'I admire whatever this artist produces'
- (b)
- (i) Denne kunstneren_i **byr** jeg **på** hva enn t_i produserer
this artist bid I on what ever produces
'I bid for whatever this artist produces'
- (ii) Denne kunstneren_i **selger** jeg hva enn t_i produserer
this artist sell I what ever produces
'I sell whatever this artist produces'
- (iii) Denne kunstneren_i **liker** jeg hva enn t_i produserer
this artist like I what ever produces
'I like whatever this artist produces'
- (iv) Denne kunstneren_i **hater** jeg hva enn t_i produserer
this artist hate I what ever produces
'I hate whatever this artist produces'
- (c)
- (i) *Denne kunstneren_i **ser** jeg **på** hva enn t_i produserer²
this artist look I at what ever produces
'I look at whatever this artist produces'
- (ii) *Denne kunstneren_i **slår** jeg hva enn t_i produserer
this artist hit I what ever produces
'I hit whatever this artist produces'
- (iii) *Denne kunstneren_i **spiser** jeg hva enn t_i produserer
this artist eat I what ever produces
'I eat whatever this artist produces'
- (iv) *Denne kunstneren_i **tar** jeg **på** hva enn t_i produserer
this artist touch I on what ever produces
'I touch whatever this artist produces'

² It seems that this and at least some of the other ungrammatical sentences are also not good when the FR subject is not extracted. Why this should be is unclear. However, the extraction makes them markedly worse.

The verbs which either allow or disallow extraction of the FR subject in the above examples are consistent with the proposed analysis which hypothesizes that the extracted FR subject is taken to be the object of the matrix verb. Under this analysis, extractions will be possible in exactly those instances where taking the FR subject to be the object of the matrix verb will have the same interpretation as taking the FR as a whole to be the object. In talking in depth with my main informant I found that this was his sense of how a grammatical sentence with an extracted FR subject is interpreted.

2.2 Restrictions on the FR verb

As we have seen, the extracted FR subject is being interpreted in the way that the FR as a whole should be, as the object of the matrix verb. The FR verb, therefore, needs to mean that the FR as a whole is something that originated from the embedded subject, in the sense that if someone thinks up, makes, produces, or paints something, it originated from that person. This is a requirement because one can talk about what an artist makes (as in (4-a-iv), below) in terms of the artist themselves, but this is not possible to do with what an artist likes ((4-b-i), below), for example. The sentences in (4-a) shown FR verbs which allow extraction of the FR subject, and those in (4-b) do not allow extraction.

(4) (a)

- (i) Denne kunstneren_i kjøper jeg hva enn t_i **produserer**
this artist buy I what ever produces
 ‘I buy whatever this artist produces’
- (ii) Denne kunstneren_i kjøper jeg hva enn t_i **finner på**
this artist buy I what ever finds on
 ‘I buy whatever this artist thinks of’
- (iii) Denne kunstneren_i kjøper jeg hva enn t_i **maler**
this artist buy I what ever paints
 ‘I buy whatever this artist paints’
- (iv) Denne kunstneren_i kjøper jeg hva enn t_i **lager**
this artist buy I what ever makes
 ‘I buy whatever this artist makes’
- (v) Denne forfatteren_i kjøper jeg hva enn t_i **skriver**
this author buy I what ever writes
 ‘I buy whatever this author writes’

- (vi) Denne kunstneren_i kjøper jeg hva enn t_i **skaper**
this artist buy I what ever creates
 ‘I buy whatever this artist creates’
- (b)
- (i) *Denne kunstneren_i kjøper jeg hva enn t_i **liker**
this artist buy I what ever likes
 ‘I buy whatever this artist likes’
- (ii) *Denne kunstneren_i kjøper jeg hva enn t_i **ser på**
this artist buy I what ever looks at
 ‘I buy whatever this artist looks at’
- (iii) *Denne kunstneren_i kjøper jeg hva enn t_i **tar på**³
this artist buy I what ever touches on
 ‘I buy whatever this artist touches’
- (iv) *Denne kunstneren_i kjøper jeg hva enn t_i **kjøper**
this artist buy I what ever buys
 ‘I buy whatever this artist buys’
- (v) *Denne forfatteren_i kjøper jeg hva enn t_i **oversetter**
this author buy I what ever translates
 ‘I buy whatever this author translates’

Thus we see the grammaticality of extraction with the examined FR verbs which is expected under the hypothesis put forward here of how such sentences are interpreted.

2.3 Restrictions on the extracted subject

Predictably, there is also a lexical restriction on the extracted subject: it must be someone who can be thought of in terms of their original work, as artists, authors, sculptors and painters can all be. This can be seen in the minimal pair in (5) where extraction is grammatical when the FR subject is presumed to be an artist (i.e. someone who can be thought of in terms of their original work), but ungrammatical when this is not a possible interpretation.

³ In addition to the literal meaning of *ta* ('touch'), it has another meaning similar to 'make,' and under that interpretation (4-b-iii) is grammatical. (This is the "King Midas" interpretation.)

- (5) (a) Denne maleren_i saboterer jeg hva enn t_i maler
this painter sabotage I what ever paints
 ‘I sabotage whatever this painter paints’
 (b) *Denne husmaleren_i saboterer jeg hva enn t_i maler
this house-painter sabotage I what ever paints
 ‘I sabotage whatever this house painter paints’

It is worth noting that some FR subjects can be extracted with certain matrix verbs but not with others, as shown for *kokk* (‘cook’) in (6).

- (6) (a) Denne kokken_i beundrer jeg hva enn t_i lager
this cook admire I what ever makes
 ‘I admire whatever this cook makes’
 (b) *Denne kokken_i kjøper jeg hva enn t_i lager
this cook buy I what ever makes
 ‘I buy whatever this cook makes’

Extraction of proper names is grammatical but the extraction of pronouns is degraded. A proper name, however, must be interpreted to be someone who can be thought of in terms of their original works, that is, they are presumed to be an artist of some sort.

- (7) (a) John_i kjøper jeg hva enn t_i produserer
John buy I what ever produces
 ‘I buy whatever John produces’
 (b) ??Han_i kjøper jeg hva enn t_i produserer
he buy I what ever produces
 ‘I buy whatever he produces’

3. Is it extraction?

It has been suggested that this phenomenon is not extraction at all, a possibility if the subject of the free relative is filled with a *pro*.⁴ This analysis is particularly appealing for the case in (8) where, given the

⁴ Thanks to Anders Holmberg, Kyle Johnson, and Peter Svenonius for suggesting this analysis.

extraction analysis, the FR subject has been extracted when the FR as a whole is an adjunct.⁵

- (8) Denne forfatteren_i oversetter jeg hvor enn t_i skriver
this author translate I where ever writes
 ‘I translate wherever this author writes’

The sentence in (8) must be interpreted as it is that author's work which is being translated, in the place where that author writes. Under the extraction analysis, this is an instance where the meaning is disambiguated by extraction of the FR subject. The sentence *Jeg oversetter hvor enn denne forfatteren skriver* (‘I translate wherever this author writes’) can mean that one is translating either that author's work, or anything else. This single interpretation would be explained if, in fact, *denne forfatteren* were the object of the matrix verb and if the subject of the FR were filled with a *pro*, i.e. if the deep structure were *Jeg oversetter denne forfatteren_i hvor enn pro_i skriver*.

Similarly, (9-b) is grammatical but has a different meaning than (9-a).

⁵ Predictably, it is not possible to extract the FR subject when the FR is part of a subject (as in (i-a)), or in some cases when it is part of an adjunct (as in (i-b)).

(i)

- (a) *Denne kunstneren_i kjøper [hvem enn t_i produserer] grønnsaker
this artist buys who ever produces vegetables
 ‘Whoever this artist produces buys vegetables’
- (b) *Denne kunstneren_i kjøper jeg malerier [når enn t_i produserer noe]
this artist buy I paintings when ever produces any
 ‘I buy paintings whenever this artist produces any’

However, this may not be due to the oft-noted complement--noncomplement asymmetry (Huang (1982)). Under the extraction analysis, the sentences in (i) are ungrammatical because they don't allow an interpretation in which the extracted subject can be understood with respect to the matrix verb in the same way that the FR is. Extraction out of a FR in adjunct position is then possible when there is not an object (as in (8)), allowing the interpretation that the extracted FR subject is the object of the matrix verb.

- (9) (a) Jeg fordømmer hva enn denne administrasjonen gjør
I condemn what ever this administration does
 (b) Denne administrasjonen fordømmer jeg hva enn gjør
this administration condemn I what ever does
 ‘I condemn this administration, whatever it does’
 * ‘I condemn whatever this administration does’

We must assume that the structure in (9-b) is *Denne administrasjonen_i fordømmer jeg t_i hva enn pro gjør*, rather than being a case of extraction of the FR subject. However, if a *pro* analysis were applied to the cases looked at in the previous sections we would then be at a loss to explain the ungrammatical sentences because topicalization of the object should be possible in all such cases.

Two sentences which were seen earlier have two possible interpretations, as shown in (10). It is possible that one meaning results from the extraction of the FR subject and the other from a sentence with *pro* in the FR subject position. Whether in fact the core phenomenon presented here is really extraction of a FR subject out of an adjunct island or is the result of a sentence with a *pro* in FR subject position remains a question for further research.

- (10) (a) Denne kunstneren_i liker jeg hva enn t_i produserer
this artist like I what ever produces
 ‘I like whatever this artist produces’ or
 ‘I like his artist, whatever she/he produces’
 (b) Denne forfatteren_i hater jeg hva enn t_i skriver
this author hate I what ever writes
 ‘I hate whatever this author writes’ or
 ‘I hate this author, whatever she/he writes’

4. Conclusion

Sentences in which the FR subject has arguably been topicalized need to meet a combination of lexical requirements to make the enterprise semantically passable. The fact that the extracted subject is in some sense interpreted as the object of the verb and as the subject of the FR suggests a flexibility of Norwegian. As the extracted FR subject needs to serve a dual purpose it follows that such extractions are limited to instances in which the following hold. First, the matrix verb must be one which will allow the same interpretation whether taking the FR or the extracted subject as its object. For example, if one reads whatever an author writes, one can be

said to read that author. Second, the FR verb must be one which indicates that the FR as a whole originated from the FR subject so that the FR is something which one can speak of in terms of its creator. For example, one can speak of something an artist paints in terms of the artist themselves, but not of something an artist reads. Finally, the subject of the free relative must be someone who can be thought of in terms of their original work. The matrix verb can also affect whether a given FR subject can be grammatically extracted or not. *Beundre* ('admire') seems to work in most cases, for example, whereas *kjøper* ('buy') more severely limits the possible extractions.

The purpose of this paper has been to investigate the limits of such extractions and the focus has been on the sentences in which the interpretation has been the same as the interpretation of the sentence where the FR subject is in situ. There are other cases which are related to the core cases described here, mentioned in section 3. These seem to be cases which are most probably the result of the existence of a *pro* in the FR subject position and movement of the sentential object. Whether the core cases, which have been presented here as extraction, can more profitably be analyzed in this way remains an open question. In either case there is an unexpected contrast between the grammatical and ungrammatical sentences examined which are the same structurally.

References:

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