

# Sluicing in Dutch: A Problem for PF-deletion approaches

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*The idea that sluicing is derived by movement of a WH-element, following by deletion of the remainder of the sentence (cf. Merchant 2001) is at odds with a peculiar construction in Dutch, the so-called R-pronoun. Pronouns obligatorily take on a locative form in prepositional phrases, but sluicing may salvage or ‘repair’ the original pronominal form. Sentences such as Jan denkt ergens aan, maar niemand weet wat ‘Jan thinks about something but nobody knows what’ do not have a source in Dutch if they are to be derived from grammatical surface strings. Alternative accounts that do not involve deletion may deal with such sentences, provided we make use of the fact that R-features are not agreement features, and need not be copied under sluicing.*

**Keywords:** *sluicing, R-pronoun, default case*

## 1. Introduction

Sluicing has been viewed, arguably more than most other types of ellipsis, as a case of surface-based PF-deletion (Ross 1969, Hankamer and Sag 1976, Merchant 2001, van Craenenbroeck 2010, Temmerman 2013). A sentence such as (1) is derived by deletion as informally indicated in (2):

- (1) Jones wanted to say something, but we didn’t know what.
- (2) Jones wanted to say something, but we didn’t know what [~~Jones wanted to say what~~]

The S (or IP or TP – for the purposes of this paper it does not matter much what we call the elided element) following the WH-expression is deleted under (some form of) identity with a clause elsewhere in the discourse. Similar observations apply to Dutch, although the difference in word order between main clauses (V2) and subordinate clauses (SOV) requires that we abstract away from surface order when establishing identity between the elided clause and its antecedent.<sup>1</sup> The following examples closely parallel the English cases in (1-2):

- (3) Jones wilde iets zeggen, maar we wisten niet wat.
- (4) Jones wilde iets zeggen, maar we wisten niet wat [~~Jones zeggen wilde~~]

The same general approach has also been proposed by Merchant (2004) for fragment answers and elliptical WH-questions:

- (5) A: Someone called.  
B: Who? (< Who [~~called~~])

Again, similar patterns are found in Dutch, which can be accounted for in the same way (Temmerman 2013):

- (6) A: Iemand heeft gebeld.  
B: Wie? (< Wie heeft gebeld?)

One of the classical arguments in favor of a PF-deletion approach to sluicing is the marking of case in languages such as German (Ross 1969: 253-4) (note that *wen* is accusative, and *wem* is dative):

- (7) a. Er will jemandem schmeicheln, aber sie wissen nicht wem/\*wen.  
He wants somebody flatter, but they know not who/\*who  
'He wants to flatter somebody, but they don't know who.'  
b. Er will jemanden loben, aber sie wissen nicht wen/\*wem.  
He wants somebody praise but they know not who/\*who

The choice of the dative or accusative case in the sluiced remnant corresponds exactly to the case of the direct object in the antecedent clause. It is not predictable by general rule or semantic properties, since the dative case of the object of *schmeicheln* is quirky. If we assume that the remnant originates in a clause with an occurrence of the same verb that assigns either dative or accusative case, according to its lexical preferences, in the antecedent clause, this state of affairs is correctly predicted.

## 2. The problem

Dutch has an odd phenomenon, described in detail in Van Riemsdijk (1978): inanimate pronominal objects of prepositions are largely blocked by R-pronouns, compare the examples in (8-9). When the pronoun is a WH-pronoun, both types occur (compare 10a-c):

- (8) a. \*Ik kijk naar het  
I look at it  
b. Ik kijk ernaar  
I look thereat  
'I look at it'

- (9) a. \*Ik kijk naar dat  
I look at that  
b. Ik kijk daarnaar  
I look thereat  
'I look at that'

- (10) a. Naar wat kijkt u het eerst?

To what look you the first  
'What do you look at first?'

- b. Waar kijkt u het eerst naar?  
Where look you the first at  
'What do you look at first?'
- c. Waarnaar kijkt u het eerst?  
Where-to look you the first  
'What do you look at first?'
- d. \*Wat kijkt u het eerst naar?  
What look you the first at?  
'What do you look at first?'

When an R-pronoun is used, preposition stranding is possible (10b), just like pied piping (10c), but when a non-R-pronoun is used in a WH-PP, pied piping is the only option (compare the grammatical sentence (10a) with the ungrammatical counterpart (10d).

For sluicing, the following options hold:

- (11) a. Marie kijkt ergens naar, maar ik weet niet waarnaar.  
Marie looks somewhere at but I know what whereat  
'Marie looks at something, but I don't know at what.'
- b. Marie kijkt ergens naar, maar ik weet niet wat.  
Marie looks somewhere at, but I know not what  
'id'
- c. \*Marie kijkt ergens naar, maar ik weet niet waar.  
Marie looks somewhere at, but I don't know where  
'id'

Note that (11c) is fully grammatical on an irrelevant reading, with *waar* as a locative adverb, but crucially not as a remnant of a split PP, whose P is elided. In this regard, P-stranding in Dutch sluicing is different from P-stranding in English sluicing:

- (12) Marie had an argument with somebody, but I don't know who.

Under a PF-deletion approach to sluicing, it comes as a surprise that (11b) has an ungrammatical source (13a) but is grammatical, whereas (11c) has a grammatical source (13b), but is ungrammatical:<sup>2</sup>

- (13) a. \*Marie kijkt ergens naar, maar ik weet niet wat zij naar kijkt.
- b. Marie kijkt ergens naar, maar ik weet niet waar zij naar kijkt.

Cases like (11b) constitute a type of mismatch that to the best of my knowledge has not been discussed in the literature. The ungrammaticality of sentences like (11c) was noted in Merchant

(2001: 95) and attributed to nonfocusability of *waar*. Whether *waar* cannot be focused, is a moot point. Certainly contrastive focus is fine:

- (14) Het maakt me niet uit WAAR je naar kijkt, als je maar ERGENS naar kijkt.  
 It makes me not out where you at look, if you but SOMEWHERE at look  
 ‘I don’t care WHAT you look at, as long as you look at SOMETHING.’

In direct questions, *waar* may also bear focus:

- (15) WAAR kijk je naar?  
 Where look you at  
 ‘WHAT are you looking at?’

I conclude that *waar* is focusable, and that Merchant’s deletion account does not handle the Dutch cases adequately.

### 3. Feature copying

In light of the problem detailed in the preceding section, we need to look for an alternative account of sluicing. There are two roads we could take at this point: (1) to assume that the underlying structure involved in sluicing is more abstract, and further removed from surface manifestations than we have been assuming so far, or (2) to abandon the idea that sluicing is the result of deletion.

The former road is taken by İnce (2012) in a study of Turkish sluicing. Turkish sluicing presents a problem not unlike the one sketched in the preceding section. In Turkish embedded clauses, the subject has genitive case, but when sluiced, it must bear nominative case:

- (16) a. Ahmet [kim-in Ankara-ya git-tiğ-i] ni san-ıyor-Ø?  
 Ahmet-NOM who-GEN Ankara-DAT go-COMP-poss.3sg acc think-prog-3sg  
 ‘Who does Ahmet think went to Ankara?’  
 b. Ahmet biri-nin Ankara-ya git-tiğ-i ni söyle-di-Ø  
 Ahmet someone-GEN Ankara-DAT go-COMP-poss.3sg acc say-pst-3sg  
 ‘Ahmet said someone went to Ankara’  
 ama kim-Ø bil-mi-yor-um  
 but who-NOM know-NEG-pres-1sg  
 ‘but I don’t know who’

İnce proposes that Genitive case is checked by a ‘C-T-v-V’ amalgam, part of which cannot be formed under sluicing, due to the fact that T-v-V is deleted prior to agreeing with C. This solution is of the ‘bleeding’ variety: We must assume that the process of Genitive assignment is bled by the deletion involved in sluicing. This is not the place to go into the details of İnce’s proposal, nor do I propose to scrutinize the various assumptions underlying it. Suffice it to say

that the proposal does not extend our Dutch problem, since there is no reason to suppose that C is somehow involved in the checking of R-features. What I want to do instead, is to point out an interesting similarity between the Turkish and the Dutch data.

Grammars of Turkish point out that the subordinate clause is of nominal origin, and the genitive case for the subject is therefore somewhat akin to the use of possessive subjects in English constructions like *John's talking to Mary*. The nominal character of the subordinate clause is not present in sluicing as a local trigger for genitive case. Similarly, in the Dutch data considered here, sluiced *waar* is not locally triggered by a preposition. In both cases, the result is a marked difference between sluiced and non-sluiced embedded structures.

Non-deletion accounts of sluicing come in a number of flavors, including approaches assuming LF-copying (Chung, Ladusaw and McCloskey 1995) and direct interpretation (Ginsburg and Sag 2000, Sag and Nykiel 2011). The proposal by Ginsburg and Sag (2000) suggests that the sluiced WH-element is associated with an antecedent, some of the properties of which it inherits, such as case marking. Basically, their proposal is a type of long-distance agreement, requiring that some of the features of the WH-element are identical to those in the antecedent clause. For instance, agreement in animacy seems to be enforced in sluicing:

- (17) a. Somebody entered the building. Guess who/\*what.  
 b. Something happened today. Guess what/\*who.

Now suppose, as seems reasonable, that the syntactic features of *waar* ‘where’ in (11) are [-animate, +R], and those of *wat* ‘what’ [-animate, -R]. Assume further that the default value of [R] is [-R] (or unmarked), and that [+R] is assigned (checked) by a local head of category P. The pattern in (11) now follows if we assume that [animate] is involved in the agreement process, but [R] is not.

At this point the claim that [R] does not partake in agreement between sluiced element and its antecedent is just a stipulation. However, we can show that this stipulation is independently motivated. In other constructions that may involve R-pronouns, agreement never involves the feature [R] itself.

In Dutch relative clauses, the relative pronoun agrees with the antecedent in number, gender and animacy, but not in the feature R: compare *het boek waarover we spraken* ‘the book where-of we spoke’ [*het boek* is [+neuter, +singular, -animate, -R], *waar* is [+neuter, +singular, -animate, +R].

In the resumptive prolepsis construction (Salzmann 2006), a bound pronoun agrees with the object of a *van-PP* (“of-PP”) in gender, number and animacy, but not in the feature R:

- (18) Dit is iets            *waarvan* we denken dat hij *het/\*er* leuk vindt.  
 This is something whereof we think that he it/\*there nice finds  
 ‘This is something we think he likes’

- (19) Van *dit boek* denkt men dat hij *ervan* gehoord had.  
 Of this book thinks one that he thereof heard had  
 ‘Of this book people think that he had heard of it’

In (18), *het* [-R] agrees with *waar-* [+R], and in (19) *er* [+R] agrees with *dit boek* [-R].

So both relative clauses and resumptive prolepsis provide evidence for the claim that [R] is not an agreement feature. In sluicing, the remnant must inherit agreement features from a nonsluiced correlate, except when the remnant can be interpreted as an adjunct (the so-called ‘sprouting’ cases of Chung et al., 1995). Since the R-feature is not inherited, the difference between (11b) and (11c) is predicted. Cases like (11a), where the remnant is a PP, are also predicted to be OK, since the R-feature is not copied from the correlate, but assigned locally by the adposition.

#### 4. Default case marking

In the previous section, I have argued for a dissociation between agreement features such as [animate] and morphosyntactic features that do not serve any role in agreement, such as [R]. In the literature, ever since Ross (1969), much has been said about case features (compare our discussion of the examples in (7) above). Where does case marking stand vis-à-vis the above bipartition of features?

Mostly, case seems to be like agreement, being the morphological expression of a syntactic relation between a nominal constituent and a head, such as a verb or preposition. However, there are cases where case marking is not entirely straightforward, e.g. when case marking elements are not present, as in the famous Mad Magazine sentences (Akmajian 1984):

(20) What? Me worry?!

In *Me worry*, the subject is not the regular nominative form of the pronoun, which typically combines with finite verbs, but the accusative, which functions as default case in English (that is, the case that is assigned when the syntactic context does not determine case assignment). It would seem that when case marking in sluicing is not directly linked to case marking in nonsluiced associates, it involves default case, as is plausibly the case in the Turkish data cited above. (For somewhat similar observations from Mongolian, cf. Sakamoto 2013.)

Dutch has an interesting nominative first person pronoun *ikke* which, unlike the more common form *ik*, is largely restricted to cases where there is no finite verb: in short answers (as one-word utterance), with nonfinite verbs, like the Mad Magazine cases cited above, in reduced comparatives, etc. (Hoeksema 2000). While *ik* can always be used in these contexts as well, *ikke* is by and large *only* used in such contexts. Hoeksema (following Haegeman 1995) also notes that in child language, where finiteness is often absent, the form *ikke* is far more common than in adult Dutch. For one child from the CHILDES dataset, Hein (cf. Elbers & Wijnen 1992), Haegeman presents the following distribution for *ik* versus *ikke*:

Form	+ finite verb	elsewhere
<b>ik</b>	749	73
<b>ikke</b>	10	37

Table 1 *Two nominative forms in the Hein corpus*

Hoeksema (2000) presents similar data for a range of children from the CHILDES database.

Zwart (2000) has argued, contra Hoeksema, that *ikke* is simply a heavy form of *ik*, for cases where extra stress is required, pointing out that *ikke* occasionally is found with finite verbs. Actually, this point could have been made by pointing out the 10 cases of *ikke* with finite verbs in Table 1. However, it should be clear from inspection of this table, that there is a strong tendency for finite verbs to use *ik*, which is significantly weaker for other contexts ( $p < 0.0001$ , according to a two-tailed Fisher exact test). By focusing on the exceptions, Zwart overlooks this very strong association. I can add to this point another observation. If stress is the significant factor, we should expect a lot of occurrences in combinations with focus adverbs in finite clauses (*alleen ikke mag meedoen* ‘only I may participate’), given that focus adverbs always require stress on the following element. But in fact we don’t. In the newspaper corpus *Delpher.nl* the search string “alleen ik” yields 11,530 hits, whereas *alleen ikke* yields 15 hits. Of these 15, only 2 involve subjects of finite verbs.

To return to sluicing, I note that Dutch has a construction with *van* ‘of’, sometimes referred to as quotative *van*, which may involve a kind of non-wh sluicing (Temmerman 2013 calls them embedded fragment answers). Here are some examples:

- (21) a. Wanneer komt hij?  
 When comes he  
 ‘When will he come?’  
 b. Ze zeggen van morgen.  
 They say of tomorrow  
 ‘They say tomorrow.’

As an answer to (21a), the example in (21b) is entirely natural. Just like in the case of sluicing, we have a remnant instead of a full embedded clause. Let us now see if we can find the default form *ikke*. Some googling (all examples below were accessed on June 26, 2014) yields the following:

- (22) Ik hoop van ikke natuurlijk<sup>3</sup>  
 I hope of me of course  
 ‘I hope me!’ [answer to: Who will win the photo challenge?]
- (23) Ik denk van ikke.<sup>4</sup>  
 I think of me  
 ‘I think me’
- (24) Ben bang van ikke nie<sup>5</sup>

Am afraid of me not  
'I am afraid not me'

Note that these cases do not involve finite verbs, whereas *ik denk van ik* typically occurs in sentences like the following (also a google result), where a finite verb follows the second occurrence of *ik*:

- (25) het is net als dat ik denk van ik ga een peuk roken.<sup>6</sup>  
It is just as that I think of I go a fag smoke  
'It is just like when I think I'm gonna smoke a fag'

### 5. Obligatory pied-piping?

The difference between (11a) and (11c) suggests that pied-piping of prepositions is obligatory in sluicing. However, (11b) is at odds with that suggestion. In this section, I will expand a bit more on the problem of pied-piping in connection with sluicing.

In German, pied-piping in sluiced clauses is pretty much obligatory, unlike (most cases in) English (cf. Bayer and Bader 2007, fn. 6).

- (26) Gestern hat sie mit jemandem eine halbe Stunde gesprochen,  
yesterday has she with someone one half hour spoken  
aber ich habe vergessen \*(mit) wem.  
but I have forgotten (with) who
- (27) Gestern hat sie an jemanden einen Brief geschrieben,  
yesterday has she to someone a letter written  
aber ich habe vergessen ??(an) wen.  
but I have forgotten (to) who

Similar examples are OK in English, but also in Dutch, when the preposition is omitted:

- (28) John danced with some girl, but I don't remember (with) which one.
- (29) Jan heeft met iemand gepraat, maar ik weet niet (met) wie.  
Jan has with someone talked, but I know not (with) who  
'Jan talked to someone, but I don't know who'

This suggests very strongly that sluicing is not fed by wh-movement, even though much of the literature suggests otherwise, since wh-movement in Dutch does not allow for preposition stranding, except when the wh-word is also an R-word: *waar*. Compare:

- (30) Met wie heb je gepraat?



With who have you talked  
'Who did you talk with?'

- (31) Waar heb je over gepraat?  
Where did you about talk  
'What did you talk about?'
- (32) \*Wat heb je over gepraat?  
What have you about talked  
'What did you talk about?'

Similar cases can be construed with embedded fragment answers:

- (33) Ze heeft met iemand gepraat, ik denk van Jan.  
She has with someone talked, I think of Jan  
'She talked with someone, I think Jan'

This is to be expected, if embedded fragment answers are a special kind of sluicing. It would be interesting to do a corpus study of pied-piping (or lack thereof) in sluicing (see Nykiel 2013 for a study of preposition omission in various ellipsis constructions in English, including sluicing, short answers and so-called 'split questions'). At the moment, we do not know whether Dutch is in this respect like English and unlike German, or somewhere in between, as it usually is (cf. Van Haeringen 1956, and specifically for PPs, Bouma et al. 2007). And if it is different from German, why?

## 6. Conclusions

In this paper, I present an interesting case in Dutch of sluicing that does not seem to have a straightforward source under a deletion account (unless the account is sufficiently abstract to ignore the expression of R-features). I have analyzed this problem in terms of a dichotomy in the feature system: agreement and case features must be passed on from associated element to sluicing remnant, whereas other features, such as [R], are not. I have made a comparison with special cases of case assignment, in particular default case, which may show up in sluicing but not in the putative underlying clauses.

I hope that the linguistic world will see many more papers spelling out the complicated interactions between sentential structure and sluicing. Merchant (2001) has truly opened the floodgates, and a stream of papers on sluicing is currently enriching our knowledge of how case marking, preposition stranding, and so on show their true colors in the theatre of ellipsis. I am hoping for many more discoveries.

## Notes

- <sup>1</sup> Merchant (2001, 2004) makes a specific proposal for such abstraction in the form of his notion e-Givenness. He does not require that an elided clause be identical to an antecedent clause, but rather, that it is e-given. A clause p is e-given in the context of another clause q iff modulo E-type shifting, p and q mutually entail one another.
- <sup>2</sup> The same observation was made independently by Marlies Kluck (cf. Kluck 2014). See also Zwart (2011: 144).
- <sup>3</sup> <https://nl-nl.facebook.com/Coolblue/posts/10151227152215537>
- <sup>4</sup> <http://partyflock.nl/gallery/2524/comments/page/7>
- <sup>5</sup> <https://www.facebook.com/events/676695249043134/permalink/678063085573017/>
- <sup>6</sup> <http://www.drugsforum.nl/viewtopic.php?f=1&t=41391>

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