Another mixed case: Deep and surface properties of the Dutch *dat doen*-anaphor

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Abstract The Dutch VP-anaphor *dat doen* 'do that' (henceforth the DDA) has properties of both a deep and a surface anaphor, according to the distinction made by Hankamer and Sag (1976). Most types of subextraction are disallowed out of the DDA, suggesting that it is a deep anaphor. However, unaccusative and comparative movement is allowed out of the DDA, suggesting it is a surface anaphor; The DDA is thus one of the many examples of anaphors that do not neatly fall into the distinction by Hankamer and Sag (1976). [1] [2]

1. Introduction

Hankamer and Sag (1976) introduced the seminal distinction between deep and surface anaphors. Deep anaphors, such as the English *do it* in (1), are considered proforms in the sense that they have no internal syntactic structure. The interpretation of deep anaphors is derived from either the linguistic or the non-linguistic context.

(1)   Tom can roller-skate; Amy can't do it.

Surface anaphors on the other hand are assumed to have internal syntactic structure, which has been deleted. A well-known example of a surface anaphor is VP-ellipsis, shown in (2). Surface anaphors cannot

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be deictic and always have to refer to a linguistic antecedent (Hankamer and Sag 1976; Stainton 1997).

(2)   Tom can roller-skate; Amy can't [~~roller-skate~~].

Although the contrast between deep and surface anaphors has not often been discussed for Dutch, it is well-known that Dutch portrays different types of ellipsis, among others (pseudo)gapping, stripping, and modal complement ellipsis. The last type, mainly discussed by Aelbrecht (2010) can be found in (3).

(3)   Jelle zal taarten bakken, maar Piet kan niet.
        Jelle will cakes bake,   but   John can not
        'Jelle will bake cakes, but John will not be able to.'

Dutch does not show mere VP-ellipsis as can be seen in (4), but it has an anaphoric construction with 'to do', (similar to (1)) , as in (5)

(4)   *Jan heeft taarten gebakken, maar Piet heeft niet.
        Tom has   cakes   baked,   but Piet has   not.
        'Tom baked cakes, but Piet hasn't.'

(5)   Jij bakt veel taarten en ik doe dat ook.
        you bake many cakes   and I do   that too
        'You bake many cakes and so do I.'

The previously unstudied anaphor in (5) consists of a form of the verb *doen* 'to do' and the demonstrative pronoun *dat* 'dat'. *Dat doen* has an anaphoric relation with the VP of the first clause (*leest veel boeken* 'reads many books'). In the rest of the paper I refer to this type of anaphor as DDA for *dat doen*-anaphor.

    In contrast to the English 'do it' example in (1), the Dutch DDA is not a clear-cut example of a deep anaphor, but shows properties of both deep and surface anaphors. The mixed behavior is especially visible in the extraction possibilities of the DDA. Subextraction is generally not possible out of the DDA, suggesting that it is a deep anaphor without internal syntactic structure, but unaccusative and comparative movement is allowed, suggesting that it is a surface anaphor that does contain internal syntact structure. This extraction contrast will be fur-

ther discussed and illustrated in 2.4.

The outline of this paper is as follows: In section 2 I discuss the deep and surface properties of the DDA, with a focus on the extraction asymmetries that the anaphor shows. In Section 3 I focus on other anaphors that have been argued to have mixed properties in the literature. In section 4 I briefly sketch a possible analysis of the extraction possibilities of the DDA. I conclude the paper in section 5.

2. Deep and surface properties of the DDA

In this section I discuss the properties of the DDA according to the dichotomy between deep and surface anaphors proposed by Hankamer and Sag (1976). A deep anaphor is base-generated as such and its interpretation can be derived either from the context or from a linguistic antecedent. Surface anaphors, on the other hand, are not base-generated but are derived through ellipsis and can only receive their interpretation from the linguistic antecedent of the ellipsis site. Examples (6) and (7), respectively, are an example of a deep and a surface anaphor.

(6)   Tom can roller-skate; Amy can't do it.

(7)   Tom can roller-skate; Amy can't.

Hankamer and Sag (1976) have developed several tests to determine whether an anaphor can be considered deep or surface. I discuss these tests in the following subsections and apply them to the DDA. I show that the DDA has mixed properties regarding the deep versus surface anaphor dichotomy.

2.1. Test 1: missing antecedents

Hankamer and Sag (1976) show that surface anaphors can host missing or unpronounced antecedents for pronouns, whereas deep anaphors cannot. In (8) and (9) respectively a surface and a deep anaphor occur in a missing antecedent context. In these examples, the pronoun *it* in the second clause cannot take *a cake* from the first clause as its antecedent, since it is in the scope of negation. In the case of the surface anaphor (8), *it* can find an antecedent in the elided VP (indicated in square brack-

ets). However, in (9) there is no elided structure, since deep anaphors are base-generated. Therefore the second *it* cannot find an antecedent here and the example is marked.

(8)   My uncle has never baked **a cake**, but my aunt has [~~baked a cake~~] and **it** was delicious.

(9)   ??My uncle has never baked **a cake**, but my aunt has done it and **it** was delicious.

Example (10) shows that missing antecedents are marked with the DDA.

(10)   ?Mijn oom   heeft nog nooit een taart gebakken. Mijn tante
        my   uncle has   yet never a   cake baked.   my   aunt
        heeft dat wel gedaan en ze was heerlijk.
        has   that POL done   and it was delicious
        ´My uncle has never baked a cake. My aunt has and it was
        delicious.'

The DDA therefore rather patterns with deep anaphors in this respect.

Note, however, that the missing antecedent test has often been criticized in the literature (Bresnan 1971; Miller, Hemforth, Amsili and Flambard 2020; Thompson 2014) for two reasons. First, judgements for missing antecedent sentences are not always that clear because the effect of missing antecedents is not very strong. Second, the missing antecedent test is in fact in conflict with the theory of deep and surface anaphors. The pronoun *it* has all the properties of a deep anaphor, which should entail that *it* does not need a linguistic antecedent and therefore should always be able to occur in missing antecedent contexts. And indeed one finds pronouns like *it* in so-called bridging contexts, where there is no linguistic antecedent. In (11) *she* does not have a linguistic antecedent, but it can derive its meaning from the context implied by *married*.

(11)   Paul married recently. She could have been his mother.

In spite of the rightful criticism on the missing antecedent test, the fact remains that there is a contrast between (8) and (9). Therefore, I

still assume that these examples indicate a difference between deep and surface anaphors. I thus conclude that (10) shows that the DDA behaves as a deep anaphor in this respect, since it is at least marked in this construction.

2.2. *Test 2: inverse scope*

The second test that Hankamer and Sag (1976) propose is the possibility of quantifier raising out of the anaphor, resulting in inverse scope. Example (12) shows scopal ambiguity in a non-anaphorical sentence.

(12)   A doctor takes care of every patient.
        $\exists > \forall$
        $\forall > \exists$

In the surface scope reading, where the existential scopes over the universal operator, there is one doctor that takes care of all the patients, whereas under an inverse reading for every patient there is at least one doctor that takes care of them, but it does not have to be the same doctor. The inverse scope reading is derived through quantifier raising (May 1977).

Surface anaphors are assumed to involve elided syntactic structure that can host the trace of quantifier raising. Therefore, ambiguous scope example (13) with VP-ellipsis is grammatical. Since deep anaphors are base-generated and do not involve ellipsis, they do not allow for inverse scope, as seen in (14). Here the universal quantifier *every*, which is inside the pronominalized VP, cannot move out of it, since there is no internal syntactic structure. (13) and (14) are taken from Bentzen et al. (2013).

(13)   A doctor takes care of every patient and a nurse does too.
        $\exists > \forall$
        $\forall > \exists$

(14)   A doctor takes care of every patient and a nurse does it too.
        $\exists > \forall$
        $*\forall > \exists$

Example (15) shows that the inverse scope reading is not available when the DDA is used. It cannot have the reading where for every patient there is at least one doctor taking care of them.

(15)   Een verpleegster zorgt voor elke   patiënt en   een dokter doet
         a   nurse   cares for   every patient and a   doctor does
         dat ook.
         that too
         ´A nurse takes care of every patient and so does a doctor.'
         $\exists > \forall$
         *$\forall > \exists$

Therefore, I conlude that the DDA again behaves as a deep anaphor in this respect.

2.3.   Test 3: Pragmatic control

The third test to determine the type of anaphora is the possibility of pragmatic control. Deep anaphors can derive their meaning from the context and can therefore be pragmatically controlled. Example (16a) with the deep anaphor *do it* is grammatical. Surface anaphors, on the other hand, do not allow for pragmatic control, since they require an explicit linguistic antecedent. This can be seen from the markedness of example (16b)

(16)   Context: a circus artist is preparing for a dangerous trick
         a.   He is really going to do it, isn't he?
         b.   ??He is really going to, isn't he?

According to this test, the DDA again patterns with deep anaphors, since it does allow for pragmatic control.

(17)   Context: When a circus artist is preparing for a dangerous trick
         Hij gaat dat echt   doen hé.
         he goes that really do   PRTCL
         ´He will really do that hey'.

There is no linguistic antecedent in example (17) but the DDA seems to be able to find an antecedent (the trick the artist is preparing for) in the non-linguistic context.

However, the pragmatic control test for deep and surface anaphors is also under debate, since some surface anaphors, such as VP-ellipsis, also allow for a limited type of pragmatic control (Merchant 2004; Stanley 2000; Schachter 1977), as is shown in example (18).

(18)   A child is struggling with his shoe laces - ´Please, let me´.

Although surface anaphors can be pragmatically controlled, Merchant (2004) and Schachter (1977) argue that they do seem to be more restricted in this respect than deep anaphors, resulting in the difference between example (16a) and (16b). I therefore argue that the DDA behaves as a deep anaphor in this respect since example (17) is grammatical, just like (16a).

2.4.   Test 4: extraction

The final test that Hankamer and Sag (1976) propose involves movement. Since surface anaphors have the syntactic structure to host movement traces, they allow for extraction. Deep anaphors, however, do not contain internal syntactic structure, so they do not allow for extraction. Example (19) indeed shows that wh-movement is allowed out of surface anaphors (19a) but not out of deep anaphors (19b).

(19)   a.   How many meetings did he refuse to attend, and how many meetings did he agree to?
    b.   *How many meetings did he refuse to attend, and how many meetings did he agree to do it?

In section 2.4.1 I show that A-extraction is impossible out of the DDA.[3] In section 2.4.2 I show that most types of A'-extraction are disallowed

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[3] I have not included a section on raising (with raising verbs such as *lijken* 'to seem'). In this case the subject of the embedded clauses moves to the subject position of the main verb. However, this subject does not move out of the DDA, which pronominalizes the VP. Raising constructions are thus grammatical out of the DDA, as expected.

as well, with unaccusatives and comparatives as the two notable excep-
tions.

2.4.1. A-extraction

Example (20) shows that A-extraction of the direct object *de staking* 'the
strike' to subject position in a passive construction is not allowed out of
the DDA.

(20)   *De betoging   werd   vandaag in Gent   georganiseerd
            the demonstration became today   in Ghent organised
         en de staking werd   dat ook gedaan.
         and the strike   became that also done
         Intended: 'The demonstration was organised in Ghent today
         and the strike was as well'

Note that the ungrammaticality of example (20) is not due to a general
incompatibility of DDA with passives or the passive auxiliary. Passiviz-
ation would indeed always be impossible if the passive head were inside
the DDA, since it would either be elided (for surface anaphors) or pro-
nominalized (for deep anaphors). However, example (21) shows that
impersonal passives are allowed in combination with the DDA, indicat-
ing that the voice head is not inside the elided or pronominalized part of
the clause.

(21)   Er   wordt   vandaag in Brussel gestaakt en in Gent wordt
         there becomes today   in Brussels striked   and in Ghent becomes
         dat ook gedaan.
         that also done
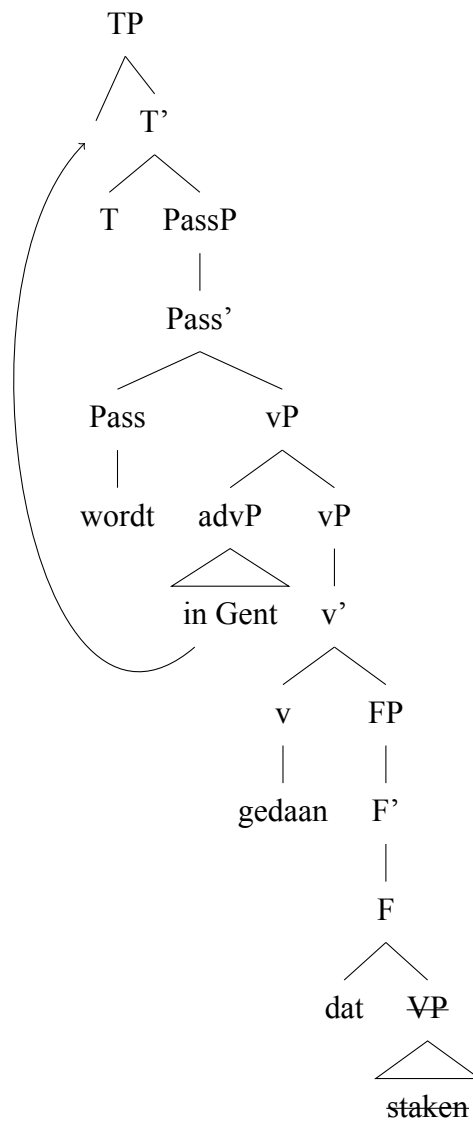   'There are strikes in Brussels today and in Ghent as well."

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(i)   Ik lees veel boeken en Jan   schijnt dat ook te doen.
         I read many books   and John seems that also to do
         'I read many books and John seems to do so as well'

The difference between the regular passive in example (20) (represented by the tree in (23)) [4] and the impersonal passive in example (21) (shown in (22)) is that impersonal passives do not involve movement out of the VP. In (22), there is no direct object to be moved. It is the spatial adjunct *in Gent* 'In Ghent' that moves to spec TP. As it satisfies the EPP feature, there is no need for the expletive *er*'there', which normally occurs in Dutch impersonal passives Broekhuis et al. (2020).

The ungrammatical example (20), however, only differs in the fact that there is movement of a direct object involved. The direct object has to move to spec TP as it cannot be assigned case in its base position. The ungrammaticality of this example is thus not due to the presence of a PassP but to the illegitemate movement of the direct object out of the DDA.

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[4] Note that the trees in (22) and (23) are simplified in the sense that they do not show movements responsible for inflection. Also note that I represent the structure of the DDA as that of a surface anaphor, in the sense that there is a VP structure present that is elided. I, however, have not decided on a deep or surface structure analysis yet, so this representation is only chosen for the purpose of convenience.

(22)

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                    TP
                   /\
                  /  \
                 /   T'
                /    /\
               /    /  \
              /    T   PassP
             /         |
            /          |
           /          Pass'
          /           /\
         /           /  \
        /          Pass  vP
        |           |    /\
        |           |   /  \
        |         wordt advP vP
        |              /\    |
        |             /  \   |
        |          in Gent  v'
        |                   /\
         \                 /  \
          \               v   FP
           \              |    |
            \           gedaan F'
             \                 |
                               F
                              /\
                             /  \
                           dat  V̶P̶
                                /\
                               /  \
                             s̶t̶a̶k̶e̶n̶
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(23)

TP
└ T'
   ├ T
   └ PassP
      └ Pass'
         ├ Pass
         │ └ wordt
         └ vP
            ├ advP
            │ └ in Gent
            └ vP
               └ v'
                  ├ v
                  │ └ gedaan
                  └ FP
                     └ F'
                        └ F
                           ├ dat
                           └ ~~VP~~
                              └ ~~V'~~
                                 ├ ~~DP~~
                                 │ └ ~~de staking~~
                                 └ ~~V~~
                                    └ ~~organiseren~~
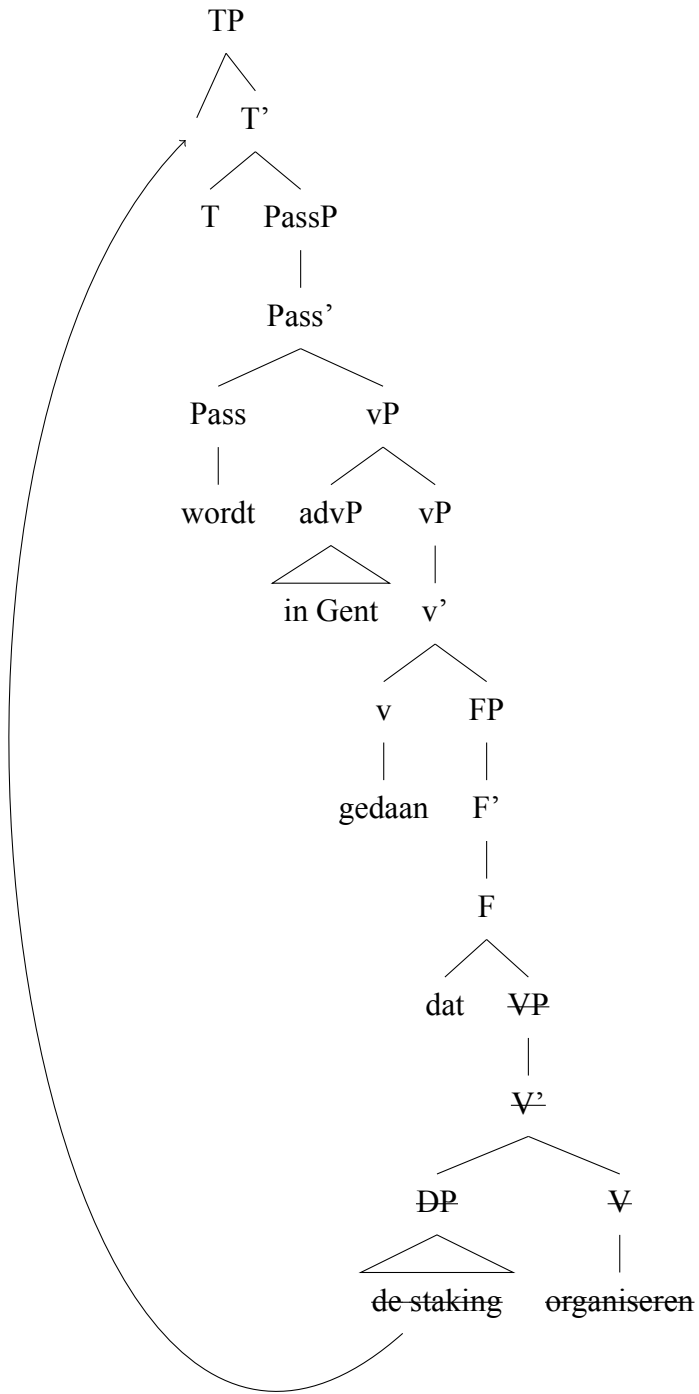
2.4.2.   A'-extraction

Example (24) shows that the DDA does not allow for wh-extraction.

(24)   *Hoeveel taarten heeft Jan gebakken en   hoeveel   taarten
         how.many cakes   has   Jan baked   and how.many cakes
         heeft Piet dat gedaan?
         has   Piet that done
         Intended: 'How many cakes has John baked and how many has
         Piet?'

In (24)wh-movement out of the VP to the left periphery of the clause
is not allowed. This suggests that there is no syntactic structure in the
DDA to host the lower movement copy. The lack of internal structure
is compatible with an analysis of the DDA in terms of a deep anaphor.
     To show that the ungrammaticality of example (24) is really due to
the trace position of the movement chain I contrast (24) with (25).

(25)   Wanneer heeft Jan die   taarten gebakken en   wanneer heeft
         when   has   John those cakes   baked   and when   has
         Piet dat gedaan?
         Piet that done
         'When has John baked those cakes and when has Piet?'

The DDA-example is thus grammatical if the wh-element moves from
a position higher than the VP, for example a temporal adverb in (25),
which is a vP-adjunct (Barbiers 2018). Wh-questions in general are
thus compatible with the DDA, but extraction out of the part that the
DDA pronominalizes/elides (the VP) is prohibited. This contrasts to
(24), where the moved constituent comes from inside the DP, namely
from inside the direct object.
     The ungrammaticality of wh-movement out of the DDA is further-
more not due to independent restrictions on wh-movement out of a VP-
ellipsis site. Schuyler (2002) notes that wh-movement out of English
VP-ellipsis sites is restricted by information structure, explaining that
VP-ellipsis, being a surface anaphor in the sense that it has internal syn-
tactic structure, does show restrictions with respect to movement. She
argues that A'-movement out of an elided VP is only licensed if the smal-

lest TP dominating the eldided VP contains an expression that contrasts with its syntactic correspondent in the antecedent clause.

Schuyler (2002) uses the Contrast-locality condition to explain why (26) is grammatical, whereas (27) is not. In both cases there is wh-movement of the direct object out of the elided VP, but (26) shows a contrastive focus on the modal verb, whereas (27) does not.

(26)   I don't know which puppy you SHOULD adopt but I know which one you SHOULDN'T.

(27)   *I think you should adopt one of these puppies, but I don't know which one you should.

The unavailability of wh-movement out of the DDA in (24) is however not due to informational structure constraints, since the example is still ungrammatical if one adds contrast on the TP, as in (28).

(28)   *Hoeveel taarten HEEFT Jan gebakken en hoeveel   taarten
         how.many cakes HAS   John baked   and how.many cakes
         ZAL   Piet dat doen?
         SHALL Pete that do
         'How many cakes has John baked and how many will Pete?'

I can thus conclude that wh-movement is really disallowed out of the DDA, independent of information structure, suggesting the DDA has no internal syntactic structure to host the movement trace. The same holds for the other types of disallowed A'-movement that I will discuss below.

(29) shows that topicalization of the direct object is not allowed out of the DDA.

(29)   *Claus heb ik vaak uitgenodigd, maar Brusselmans heb ik
         Claus have I often invited,   but Brusselmans have I
         dat nooit gedaan.
         that never done
         Intended: 'I have often invited Claus, but I have never invited Brusselmans.'

Relativization of the direct object is not possible with the DDA, as shown in (30).

(30)   *Jan heeft veel   schrijvers uitgenodigd in zijn carrière, maar
         Jan has   many writers   invited   in his career,   but
         dat is een schrijver die hij dat nooit gedaan heeft.
         that is a   writer   that he that never done   has
         Intended: 'John has invited many writers in his carreer, but that
         is a writer that he has never invited.'

Furthermore, the clefting construction in (31) is ungrammatical, showing that A′-extraction of the direct object *die drie boeken* 'those three books' is not allowed out of the DDA.

(31)   Welke boeken moet Jan lezen? *Het zijn die   drie boeken
         which books   must Jan read? it   are these three books
         die hij dat moet doen.
         that he that must do
         Intended: 'Which books does John have to read? It is these
         three book sthat John had to read.'

Another type of extraction that is disallowed out of the DDA is scrambling. In scrambled constructions direct objects precede adverbs, contrasting with the 'normal' Dutch word order where the direct object follows the adverb. Example (32) shows a scrambled word order since the direct object *'m* 'him' precedes the adverb *vaker* 'more often'. The A′-movement of the direct object that results in a scrambled word order is not allowed out of the DDA.

(32)   *Ik heb 'm vaker   uitgenodigd dan dat jij   'm dat ooit
         I   have em more.often invited   than that you em that ever
         gedaan hebt.
         done   has
         Intended: 'I have invited him more often than that you have
         ever invited him'

Lastly, tough-extraction is also not possible, as shown in (33), where the direct object *dat boek* has moved out of the DDA.

(33) *Dit artikel is lastig om   te   lezen en dat   boek is
      this article is tough to.INF read and that book is   also
      ook   lastig om dat te doen.
      tough to   that to do
      Intended: 'This article is tough to read and so is this book'

So far, the fourth test for deep versus surface anaphors again seems
to indicate that the DDA is a deep anaphor, since most types of extraction
are not allowed out of it. There are however two exceptions to the ban
on extraction in this construction. The first is that some unaccusatives
are allowed in combination with the DDA, even though unaccusatives
are assumed to involve movement out of the VP from object to subject
position. The following example is perfectly fine for the Dutch speakers
I consulted.

(34) Ik ontwaak elke   ochtend heel vroeg en Jan   doet dat ook.
      I wake.up every morning very early and John does that too
      ´I wake up very early every morning and so does John.'

The second exception to the ban on extraction out of the DDA is the
case of comparatives. As mentioned before, the DDA can occur in a
than-clause. The following example illustrates this.

(35) Jan   bakt lekkerdere taarten dan Piet dat ooit gedaan heeft.
      John bakes tastier   cakes   than Pete that ever done   has.
      ´John bakes tastier cakes than Pete has ever done.'

As shown in (36) comparatives are assumed to involve a silent degree
operator, indicated with Op, that moves to the left periphery. (Lechner
and Corver 2017; Kennedy 2002; Chomsky 1977; Lechner 2004). The
ellipsis indicated in (36) is dubbed comparative deletion.

(36) Ik bak   lekkerdere taarten dan [Op$_1$] jij [[t$_1$]-lekkere taarten]
      I bake tastier   cakes   than [Op$_1$] you [[t$_1$]-tasty cakes]
      bakt.
      bake
      'I bake tastier cakes than you do.'

The lower copy of the operator movement is in this case situated inside the VP. If the VP were pronominalized by the DDA (as one would expect under a deep anaphor analysis) there would be no position where the trace of this operator could occur. However, the comparative clause with the DDA is perfectly grammatical. In order to host the trace of unaccusative and comparative movement, internal syntactic structure is needed. In this respect, the DDA patterns with surface anaphors.

2.5.   Summary of the four tests

The four tests discussed above (summarized in table 1) show that the DDA has mixed properties regarding the deep and surface anaphor dichotomy.

Table 1: Summary of the tests for deep and surface anaphors

		DDA	Deep	Surface
1	Missing antecedent anaphora	X	X	✓
2	Inverse scope	X	X	✓
3	Pragmatic control	✓	✓	X
4.1	Extraction out of ellipsis site: in general	X	X	✓
4.2	Extraction out of ellipsis site: unaccusatives	✓	X	✓
4.3	Extraction out of ellipsis site: comparatives	✓	X	✓

The DDA behaves as a deep anaphor in most respects, but allows for two types of extraction, namely unaccusative and comparative movement. Tests 1, 2 and 4.1 suggest that the DDA does not contain internal syntactic structure. Tests 4.2 and 4.3 on the other hand suggest that internal syntactic structure is needed to host traces of unaccusative and comparative movement. The DDA is not the only anaphor to show mixed properties regarding the deep vs surface anaphor distinction. Other mixed cases are discussed in section 3.

3.   Mixed anaphors

Since Hankamer and Sag (1976) observed the distinction between deep and surface anaphors, a lot of research has been conducted to assign many different anaphors to one of these categories. However, the results of these endeavours were not always clear-cut, suggesting that the deep vs surface dichotomy is less strict than Hankamer and Sag (1976) stated..

Houser et al. (2007) show that the Danish anaphor *det*, although

behaving as a surface anaphor, unexpectedly does not allow for A′-extraction. Aelbrecht (2010) noted that Dutch modal complement ellipsis only has very restricted extraction possibilities. Baltin (2012) observes that the British English *do*-anaphor patterns as a deep anaphor, but allows for subextraction in unaccusatives and subject raising. Moreover, Thompson (2014) adds Swedish *det* to the list of anaphors that do not clearly belong to one category. Furthermore, Bentzen et al. (2013) show that the Norwegian *gjøre det* 'do it' has mixed behavior with regard to the deep vs surface anaphor distinction. Again, an extraction asymmetry can be observed for this anaphor, in the sense that A-movement is allowed, but A′-movement is not. There is also a vast amount of literature on the categorization of the *do so* anaphor, which allows for A-extraction but prohibits A′-movement (Houser 2010; Kim 2016; Park 2018). Lastly, Sohn (2015) observes that many Korean anaphors share properties with both deep and surface anaphors.

As I have shown, the DDA is another exception to Hankamer and Sag's distinction in the sense that it has deep anaphoric properties but unexpectedly allows for two types of extraction, unaccusatives and comparative movement. I therefore side with Baltin (2012); Park (2018); Thompson (2014); Messick et al. (2018); Merchant (2013); Sag and Hankamer (1984) who argue that Hankamer and Sag's original dichotomy is too strict.

4.   Sketch of a possible analysis

I have shown that the DDA shows mixed behavior with respect to the properties of deep and surface anaphors. In most respects it patterns as a deep anaphor, suggesting that the DDA does not contain internal syntactic structure. However, it allows for unaccusatives and comparative movement. Without internal syntactic structure these two types of movement cannot be possible, unless one argues that these phenomena do not involve movement, which is unlikely since both have independently been argued to do so. I therefore, assume that the DDA has internal syntactid structure. I follow Baltin (1981) in this sense, by assuming that even prototypical deep anaphors can have more structure than meets the eye. Due to space limitations, I will not provide a detailed analysis of

why unaccusative and comparative movement are possible out of the DDA, whereas other types of movement are not. I will, however, briefly sketch a possible analysis.

Houser et al. (2007) and Houser (2010) provide an analysis for the extraction asymmetries out of the Danish *det* 'dat' anaphor, which does not allow for movement in general but is possible in combination with unaccusatives and passives. They analyse this contrast as an interaction with V2 properties of Danish. V2 languages always attract a topic marked element to the spec CP. In regular cases of A'-movement, it is the moved element that ends up in spec CP. In the anaphoric *det*-construction, the VP-anaphor *det* can however also be attracted to spec CP. If the moved element is in VP-internal position 'det' is more local to spec CP than the VP-internal element, resulting in ungrammaticality of for example wh-movement of a direct object. If the VP-internal element has, however, first moved to subject position (TP) for EPP-reasons, the subject is more local to spec CP than the anaphoric demonstrative, resulting in the grammaticality of unaccusatives and passives.

As Dutch is also a V2 language Broekhuis and Corver (2020), I adopt this analysis to the possibility of comparative movement out of the DDA. The reason for moving higher than the demonstrative *that* is, however, not due to EPP on TP, but to a property that is specific to comparatives. Comparative constructions do not only display movement but also comparative deletion, namely obligatory ellipsis of the AP/DegP (depending on which structure one assumes for comparatives), as shown in (36). If one represents deletion in terms of an [E]-feature on the head which has the ellipsis site as its complement (Merchant 2001), some element inside the comparative, propably the Deg head, carries such a feature. Since I assume that the DDA contains elided syntactic structure, there is another [E]-feature in the structure on [dat], which I have analysed as a functional head above the VP, following Bentzen et al. (2013). The structure for (35) is presented below.
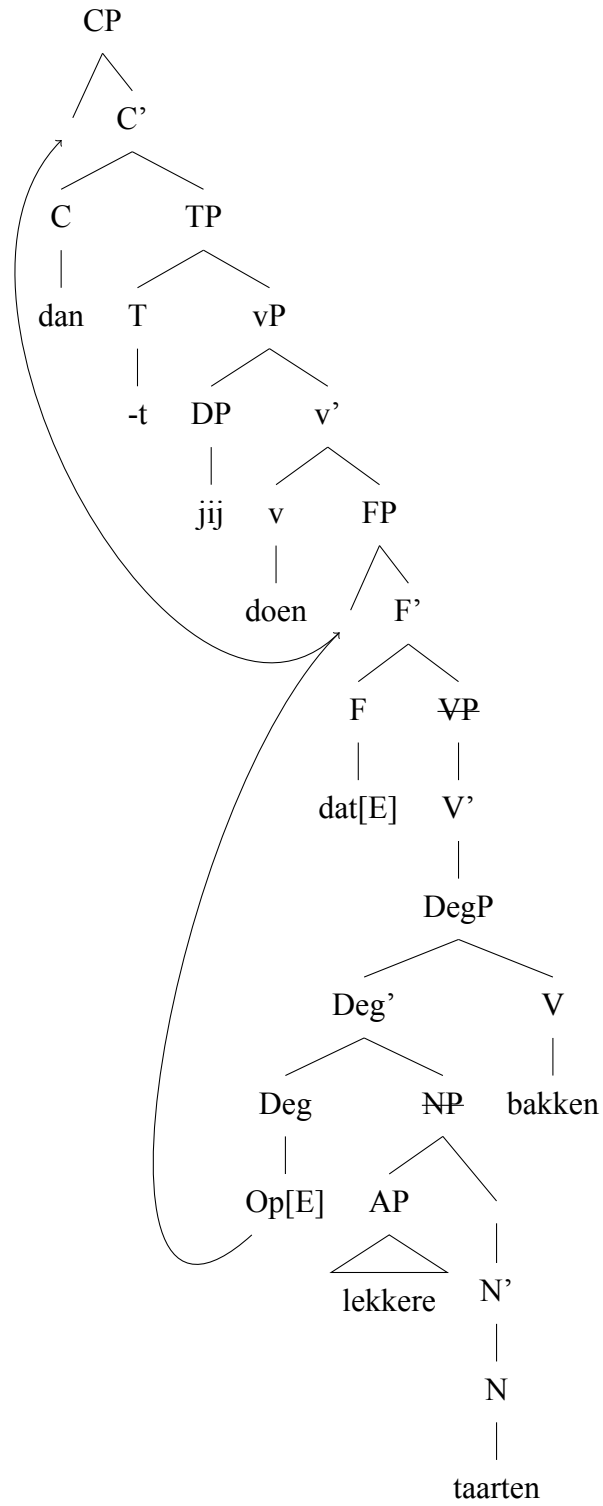
I argue that in the case of comparatives, movement out of the DDA is allowed, since the [E]-features on Deg and *dat* match and Deg therefore is attracted to the spec of the functional projection. In terms of Houser et al. (2007)'s analysis, the degree operator is therefore more local to spec CP than the anaphoric demonstrative *dat* and can move to spec CP, the position where comparative operators are assumed to move to (Lechner and Corver 2017; Kennedy 2002; Chomsky 1977; Lechner 2004).

I thus adopt an analysis following Houser et al. (2007), where the contrast in availability of certain types of extraction out of the DDA is explained in terms of interaction with V2 and locality. This analysis works well for comparative movement but has difficulties in accounting for the contrast between unaccusatives and passives. Unaccusatives are allowed with the DDA but passives are not. If movement of an internal argument to spec TP enabled movement out of the DDA, the ungrammaticality of passives as in (20) would be unexpected. Further research will have to provide an analysis for this puzzle.

5.   Conclusion

In this paper I have demonstrated that the Dutch DDA (*dat doen*-anaphor) shares properties with both deep and surface anaphors, according to the distinction described by Hankamer and Sag (1976). The DDA patterns mostly as a deep anaphor, as it is not able to provide an antecedent for pronouns in missing antecedent contexts; does not allow for inverse scope; can be pragmatically controlled; and generally disallows extraction. However, the DDA also shares properties with surface anaphors, since it allows for two types of extraction, namely unaccusative and comparative movement. This extraction is not expected under a deep anaphor analysis, since there would be no internal syntactic structure to host the movement traces. I therefore argue that the DDA is another counterexample against Hankamer and Sag's very strict distinction between deep and surface anaphors. Following Baltin (1981) I argue that the DDA is a deep anaphor, that nevertheless has internal syntactic structure. An analysis ivolving interaction with V2, following Houser et al. (2007) is on the right track to explain why comparative movement

is allowed, whereas other types of A'-movement are generally not. Future research would, however, have to come up with an explanation for the possibility of unaccusative movement in contrast to the illicitness of passive movement out of the DDA.

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