

## The role of (inter)subjectification in the development of the Norwegian prepropriial article into the psychologically distal demonstrative

Merlijn Breunesse<sup>1</sup>, Barthe Bloom<sup>2</sup>

### 1 Introduction

This study is concerned with the colloquial usage of the Norwegian third person personal pronouns *han* (m.) and *hun* (f.) in determiner position. In this use, the noun phrase in which they occur may have a negative connotation, such as in English *Ugh, that idiot!*, or it may refer to a famous person that the speaker expects the addressee to know, such as in English *Woa, that Brad Pitt is a really great actor*. Examples from Norwegian will be shown in Section 2. These uses of the Norwegian third person pronoun determiner were studied by e.g. Delsing (2003), Julien (2005), and Strahan (2008), but the most comprehensive analysis was done by Johannessen (2008, 2014). She calls this determiner the “PDD” (psychologically distal demonstrative) and, showing that it occurs more frequently in the NoTa corpus (2000s) than in the TAUS corpus (1970s), she suggests that it is a rather recent development. We add to the above-mentioned studies by carrying out a statistical analysis of the phenomenon. Moreover, the existing studies have not distinguished between the determiner’s negative use, its use to refer to famous people, and any other uses it might have; a distinction between different uses is especially revealing when we consider that regular demonstrative serve the same functions. Finally, we developed a framework to distinguish between the different uses of the third person pronoun determiner and analyze them from a diachronic perspective. In this way, we were not forced to rely on native speaker judgments, as was the case in the papers mentioned before. This framework will be introduced in the present paper as well.

The build-up of this paper is as follows. First, we will introduce three different uses of the third person pronoun determiner in Section 2 and we will show that regular demonstratives know the same uses. In Section 3, we will argue that these uses represent different stages on a scale of semantic change and we will elaborate on the methodological framework that we used to analyze this. Thereafter, our coding decisions and the results of our analysis will be presented in Section 4. Finally, Section 5 offers a conclusion and suggests possible pathways for further research.

### 2 The data: third person pronoun determiners in textual, recognitional, and subjective use

We extracted the relevant data from two corpora of spoken Norwegian, the TAUS corpus and the NoTa corpus, using the search queries ‘*n’/‘a’/han/hun/hu* + noun and ‘*n’/‘a’/han/hun /hu* + adjective + noun. We then manually removed all cases of non-human reference and cases in which the third person pronoun was not actually in the determiner slot, as exemplified in (1), where *han* and *søsteren min* refer to two distinct individuals.

- (1) *spurte han søsteren min istedenfor ikke sant*  
asked 3PN sister-DEF my instead of not true  
‘he asked my sister instead, didn’t he?’

<sup>1</sup> Friedrich Schiller University Jena, [merlijn.breunesse@uni-jena.de](mailto:merlijn.breunesse@uni-jena.de).

<sup>2</sup> Friedrich Schiller University Jena, [barthe.bloom@uni-jena.de](mailto:barthe.bloom@uni-jena.de).

This resulted in 63 attestations from the TAUS corpus and 179 attestations from the NoTa corpus, spoken by 112 different speakers. We observed, based on these data, that the third person pronoun determiner has (at least) three different uses in common with regular demonstratives: 1) a textual use, 2) a negative subjective use, and 3) a recognitional use. These are considered in the following sections.

## 2.1 Textual reference

Norwegian third person pronoun determiners in textual use have a referent that is located in the preceding discourse. An example can be found in (2):

- (2) Context: ‘when I started on the folk school in the first grade, we had a miss Lowzow. She was not the class-teacher. She was called miss Ziener (...)’

*og men hun frøken e s- Ziener*  
and but 3PN miss e s- Ziener

*det var ei veldigsnill dame hyggelig*  
that was a very.nice lady pleasant  
(...) and, but, **she miss e Ziener**, that was a very nice lady, pleasant.’

This type of use is called “tracking use” by Himmelmann (1996), because it helps the reader/listener to keep track of different participants in the discourse.

## 2.2 Recognitional reference

In the recognitional use of the Norwegian third person pronoun determiner, the speaker expects his addressee to know the referent. Referent identification is based on shared knowledge between the speaker and the addressee, for example because the referent is a famous person. Usually this use is accompanied by a relative clause further specifying the intended referent. An example of the Norwegian third person pronoun determiner in recognitional use is given in (3):

- (3) *ja er ikke hun Angelina Jolie*  
*ja is not 3PN Angelina Jolie*  
‘yes, isn’t that with **she Angelina Jolie**?’

## 2.3 Negative subjective use

Norwegian third person pronoun determiners in negative subjective use show a negative attitude of the speaker towards the referent. An example is given in (4):

- (4) *fordi han idiot-en vi hadde leid som sjåfør*  
*because 3PN idiot-DEF we had hired as chauffeur*  
‘because **he idiot** we had hired as a chauffeur [...] (he drove surely yes seventy in another gear the whole way up)’

## 2.4 Regular demonstratives in textual, subjective, and recognitional use

Regular demonstratives occur with the same functions as the Norwegian third person pronoun determiners. The following examples illustrate the English demonstrative *that* in textual, recognitional, and negative subjective use:

(5) English *that* in textual use

*We were in a pet store and there were beautiful birds and rabbits and a Siberian cat, and my sister really wanted to get a rabbit, but I really wanted **that** cat.*

(6) English *that* in recognitional use

*Remember **that** guy that stole our bikes last year?*

(7) English *that* in negative subjective use

Speaker A: Max ate all the flowers again!

Speaker B: Ugh, **that** stupid dog!

### 3 Methodology

In the following, we will analyze the Norwegian third person pronoun determiner using a framework that we developed for an analysis of the aforementioned uses of demonstratives. Section 3.3 describes this framework. First, however, Section 3.1 argues that these uses have different semantics and Section 3.2 clarifies how the meaning of a demonstrative can be analyzed compositionally.

#### 3.1. A semantic cline

We argue that the three uses of regular demonstratives and the Norwegian third person pronoun determiner introduced in the preceding sections represent different stages on the cline from objectivity to (inter)subjectivity. This cline shows a specific semantic change, called (inter)subjectification, and was introduced by Traugott (e.g. 2003). Traugott argues that meanings change from being based in the external situation (objective), to being based in the speaker's internal belief state (subjective), to being based in the speaker's attention for the addressee's epistemic and social status (intersubjective). Examples of prototypical intersubjective words are the Japanese honorifics, which address the addressee's social status, and words that speakers use to signal discourse structure to their addressees. This semantic change from objective to subjective to intersubjective often goes hand in hand with a meaning shift from concrete to abstract.

The different uses of demonstratives and the Norwegian third person pronoun determiner can be argued to correspond to the three different stages on the cline mentioned above, so that the following is the case:

Objective	>	subjective	>	intersubjective
Textual	>	negative	>	recognitional

The textual use of demonstratives is based in the external world<sup>3</sup>, for which reason they can be considered as the most objective use of the ones described above. The negative subjective demonstratives are clearly subjective, since they embody the speaker's attitude. Recognitional demonstratives are intersubjective, because they take the addressee's epistemic status into account. How then, can we analyze these different stages and uses in a corpus? Since this cline concerns a change in meaning, we first have to consider what exactly the meaning of a demonstrative is.

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<sup>3</sup> This is a grey area; for a discussion in more detail, see the forthcoming PhD dissertation of the first author. The status of the textual use is also elaborated in Section 3.3.

### 3.2. The meaning of demonstratives

The meaning of a demonstrative is here considered as the type of reference frame that it evokes (for frame of reference, see Levinson 2003). A reference frame is a coordinate system in which the referent is located, and it consists of an object (which needs to be located), a ground (in relation to which the object is located), an origo (the center of the frame of reference), a viewer, and angular specifications. These parameters of a demonstrative's reference frame change as we come across its different uses. For now, we are only concerned with the angular specifications and the location of the object.

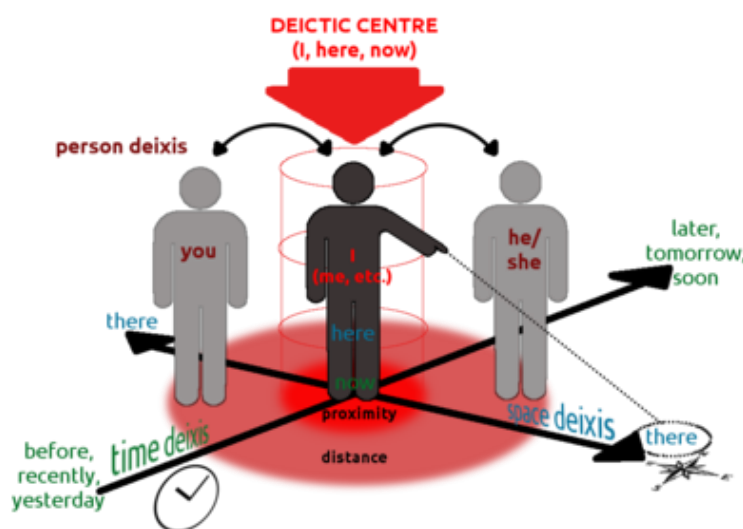


Figure 1. A demonstrative frame of reference (retrieved from <https://en.wikipedia.org/wiki/Deixis>)

In order to illustrate this, let's take a look at what we argue is the most basic, and therefore the most concrete use of demonstratives, that is, their use for reference to a physical entity in the direct surroundings of the speaker (called "situational use" by Himmelmann 1996). The following sentence exemplifies the English distal demonstrative *that* in situational use:

(8) Look at **that** huge lion over there!

The referents of these situational demonstratives are located in the direct physical surroundings of the speaker and can usually be visually perceived. Since the referent may be to the side of the speaker, in front or behind the speaker, and above or below the speaker, this use invokes a three-dimensional frame of reference. It is the most concrete use of demonstratives; all other uses involve changes in the frame of reference that make it less concrete, less three-dimensional, and less objective. These are considered below.

### 3.3. An analysis of demonstrative uses

Table 1 presents the differences in the frames of reference that the individual demonstrative uses evoke.

	<b>Situational/spatial</b>	<b>Textual</b>	<b>Recognitional</b>
<b>Dimension</b>	Three-dimensional	Linear	No frame of reference
<b>Figure</b>	Object in physical surroundings	Object in discourse surroundings	Object in minds of participants
<b>Semantics</b>	Propositional, external, concrete	Textual/internal, abstract	Intersubjective; highly abstract

*Table 1. Demonstratives' frames of reference*

In the “situational/spatial” column we see that the situational use has a three-dimensional frame of reference and a referent in the physical surroundings of the speaker, as was described in Section 3.2. It is therefore the most objective and concrete use.

On the other side of the table is the recognitional use, which represents the opposite extreme. The referents of recognitional demonstratives are located in the internal memory of the speech participants, and are only accessible through common ground. Since the referent is not at a certain distance, physical or textual, from the speaker, no frame of reference is evoked. Evidence for this claim comes from the fact that, to the best of our knowledge, recognitional demonstratives are found in distal form only; there is no proximal recognitional demonstrative to form a deictic contrast with the distal form. The recognitional use, we argue, is the most abstract use of demonstratives. It is also highly intersubjective.

The textual use is found in the middle column, in between the situational and recognitional use. Its referent is located in the discourse context. Discourse, both written and spoken, consists of different text segments following each other and is therefore perceived as linear. For this reason, the frame of reference that demonstratives with textual reference evoke is not three-dimensional, but rather one-dimensional. This use is therefore less concrete than demonstratives in situational use, which evokes a three-dimensional reference frame.

The negative subjective use is more challenging to analyze along the frame of reference parameters introduced above. The reason for this is that the referent may be present in any of the before-mentioned locations. That is, the referent might already be introduced in the discourse, although not necessarily so; it can also be located in the speaker’s memory or in their direct physical surroundings. The deictic contrast between psychologically proximal and psychologically distal does not involve a three-dimensional frame, instead we are dealing with some sort of line stretching out in front of the speaker, at which the referent is located nearby or far away. Hence, we argue that negative subjective demonstratives evoke a one-dimensional, linear frame. In terms of abstractness, it is therefore less concrete than the situational use, but less abstract than the recognitional use. Moreover, we follow Traugott (1982), who claims that textual meaning precedes expressive meaning.

In conclusion, the different uses of demonstratives and therefore the Norwegian third person pronoun determiner show different degrees of abstractness and objectivity. We hypothesize that this corresponds to the diachronic process of the Norwegian third person pronoun determiner. This is tested in the following section.

#### **4. Analysis**

Based on the theory presented in the previous section, the claim that the Norwegian third person pronoun is increasingly often a marker of psychological distance (Johannessen 2008, 2014), essentially consists of two separate statements: 1) that it is increasingly often used with negative subjective reference, or 2) that it is increasingly

often used with recognitional reference. Both statements will be tested here. In order to positively assess the claim, both statements need to be confirmed.

We start out with the second statement, concerning the recognitional use. An increase of demonstratives in recognitional use implies an increase in forms that refer to an entity located in the shared knowledge between the speech participants. To analyze this, we coded each instance of the third person pronoun determiner for the type of reference, with “D” standing for a referent that is located in the preceding discourse and “I” standing for a referent that is located in internal shared knowledge.

Figure 2 shows the frequency of occurrence of discourse and internal reference in the TAUS (1970s) and NoTa (2005) corpora. The category “Other” includes the elements that cannot be conclusively categorized as either belonging to “Located in discourse” or “Located in internal knowledge”. These are not included in the graph.

It can be observed that in the TAUS corpus with data from the 1970s the third person pronoun determiner is used 15 times more often for discourse reference than for internal reference. In the NoTa corpus with data from 2005, the difference between discourse and internal reference is much smaller.

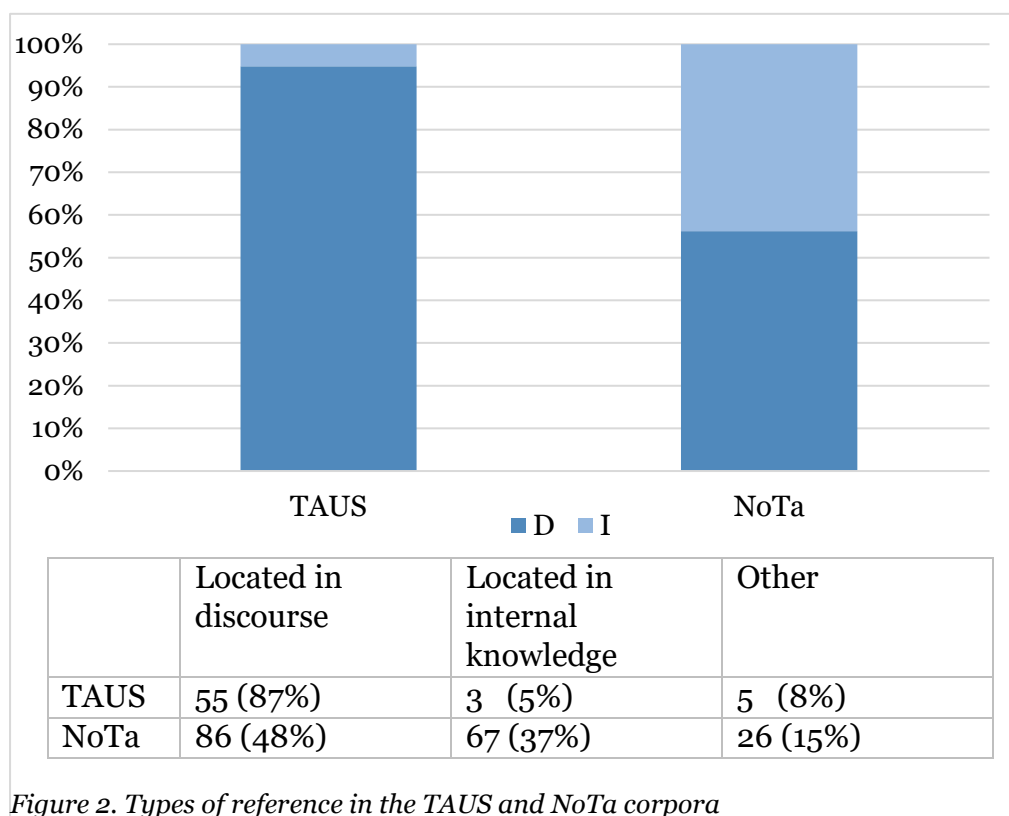


Figure 2. Types of reference in the TAUS and NoTa corpora

Thus, we can conclude that the third person pronoun determiner is increasingly often used as a recognitional demonstrative. A Fisher’s exact test shows that this increase is significant, with  $p = 9.681e-09$  ( $\approx 0.001$ ).

Turning to the negative subjective use, we coded all instances of the third person pronoun determiner for their co-occurrence with a marker of stance, with “y” standing for “yes” and “n” standing for “no”. These markers could be e.g. a negative adjective, or intonational cues. The results are shown in Figure 3. In both corpora the third person pronoun determiner is more often not evaluative than it is evaluative. In the NoTa corpus however, the ratio of evaluative forms is much higher than in the TAUS corpus. Thus it is shown that the third person pronoun determiner is

increasingly often used as a marker of negative stance. A Fisher's exact test shows that this increase is significant, with  $p = 0.004$ .

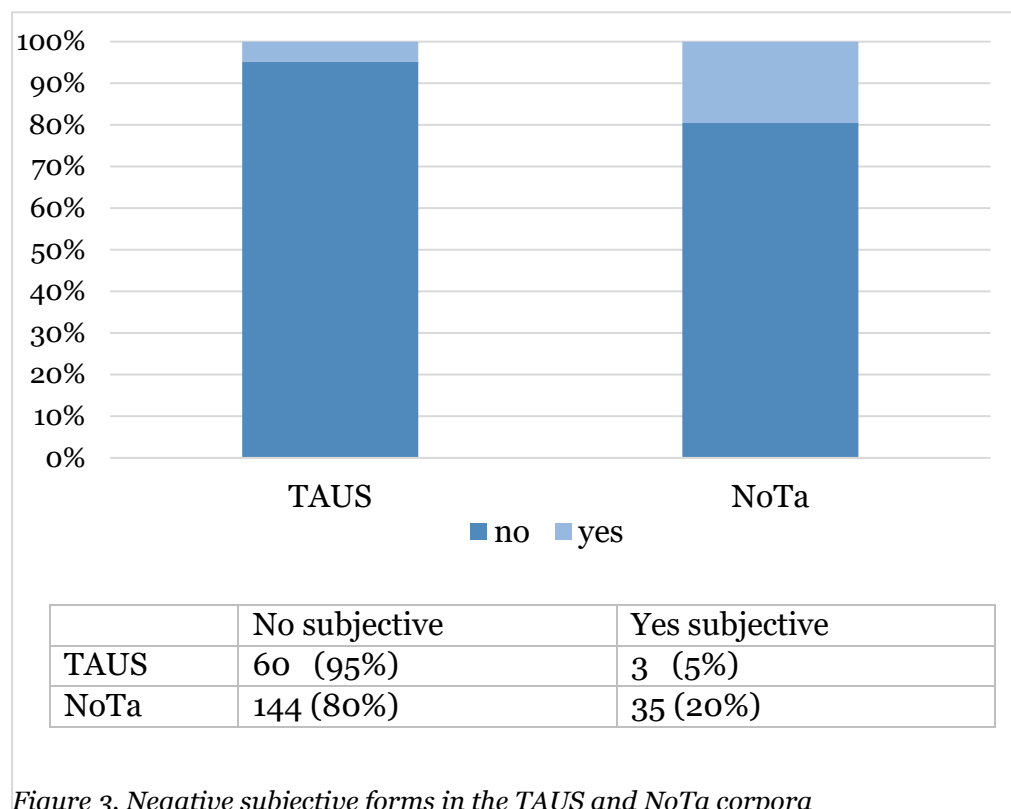


Figure 3. Negative subjective forms in the TAUS and NoTa corpora

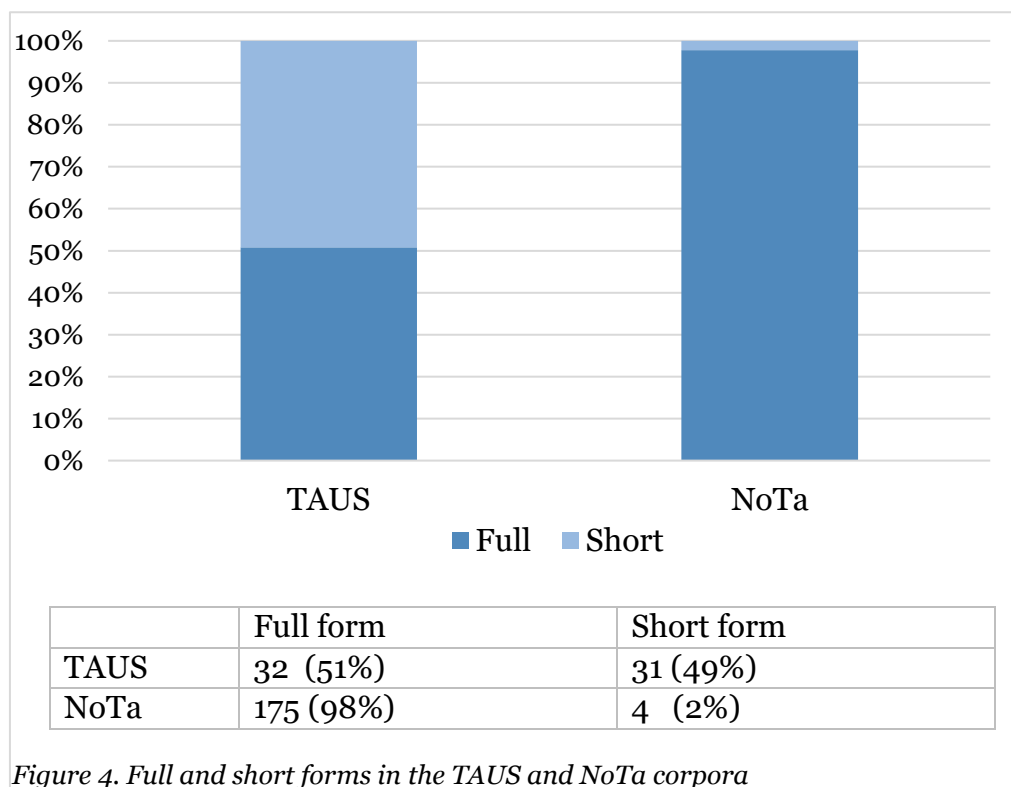


Figure 4. Full and short forms in the TAUS and NoTa corpora

With these meaning shifts from relatively objective to intersubjective and from neutral to subjective comes along a formal development, namely from the reduced form to the full form of the third person pronoun determiner. This is shown in Figure 4. This increase in full forms is significant with  $p = 0.002$ .

These are some nice results, but we have to take into account that the data points are not independent. This is because they were not all spoken by different people. In the TAUS corpus, for example, 39 instances of the 63 of the third person pronoun determiner were spoken by the same speaker, “a43”. A Generalized Linear Mixed Effects model shows that “Corpus” is a very significant predictor of whether a form has internal reference or not, even when the speaker is involved as a random effect. In the NoTa corpus, the chances that demonstrative determiner has internal reference are significantly larger ( $p < 0.001$ ) when compared with the TAUS corpus. Similarly, the chances that the demonstrative determiner in the NoTa corpus is evaluative are significantly higher ( $p = 0.003$ ) than in the TAUS corpus. This proves that the increase in subjectivity and intersubjectivity mentioned above are not due to speaker preference.

Finally, we had to take into account that the TAUS and NoTa corpora do not only differ in a diachronic aspect, but also that they contain data from different genres and registers. The older corpus almost entirely consists of interviews, while the more recent one mainly contains dialogues between two people who know each other. In the latter situation, it is expected that intersubjective constructions occur more frequently due to a larger common ground between the speech participants. Therefore, it may be that the different number of occurrences of negative subjective and recognitional third person pronoun determiners in the corpora is due to a difference in register/genre, rather than due to a diachronic development. For this reason, we compared the mixed effects models of above with the same mixed effects models that had “genre” rather than “corpus” as a predictor variable. ANOVAs showed that the models based on “corpus” were significantly better than the ones based on “genre”, both in the prediction of reference ( $p = 0.002$ ) and of subjectivity ( $p = 0.002$ ).

## 5. Conclusion

In conclusion, we have shown that the Norwegian third person pronoun determiner is increasingly often used for recognitional reference and negative subjective reference. Based on that, we may conclude that it has developed into a psychologically distal demonstrative, which confirms Johannessen’s observations. The speaker and the genre or register were rejected as alternative explanations. To analyze the different uses of the third person pronoun determiner we developed a new framework for the analysis of demonstratives that is based on the semantic clines from objective to (inter)subjective and from concrete to abstract. This framework allowed us to carry out a corpus study which confirmed the hypothesis with statistical significance.

We know from Latin that the increased (inter)subjectivity of the distal demonstrative *ille* played a role in its development into the old French definite article (Carlier and De Mulder 2010). Therefore, it might be rewarding to track the further development of the third person determiner and compare its direction of change to the path taken by *ille*. Additionally, it could be interesting to look at the factors that triggered the development of the third person pronoun into a marker of psychological distance in determiner position. As we have shown, marking psychological distance is known from the different uses of regular demonstratives, which have mapped their spatial semantics onto the psychological or emotive domain. It is particularly striking that a third person personal pronoun has acquired this use, while initially lacking the distal semantics. In order to gain insight in this phenomenon, it would be fruitful to



consider the relation between the prenominal definite article (*den, det, de*) mainly found in adjectivally modified noun phrases and the corresponding series of demonstrative pronouns.

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