

# A Note on the Categorization of Nominal expressions

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## Abstract

This paper argues that the distinction that Déchaine and Wiltschko (2002) make between on the one hand r-expressions, first and second person pronouns, and on the other hand third person pronouns is misleading. If more data is taken into consideration and some of the data that Déchaine and Wiltschko present are interpreted differently, Chomsky's (1982) distinction between r-expressions and pronouns seems to be justified.

## 1 Introduction

In the literature a distinction is made between r-expressions, anaphors and pronominals. This distinction has its origin in the different features that Chomsky (1982) set up to characterise the different types of nominal expressions.

The class of pronouns has been the subject of intensive research during the last decade. The main focus of these studies is the structural differences that exist between first and second person, and third person pronouns (Déchaine & Wiltschko, 2002, 2003 and Ritter, 1995) and the difference between strong and weak pronouns (Cardinaletti, 1999, Cardinaletti and Starke, 1996, 1999).

Chomsky's division has been questioned and in a recent paper Déchaine and Wiltschko (2002) suggest that nominal expressions in English can be divided into three syntactically different classes. In their categorization r-expressions and first and second person pronouns fall in the DP-class. Third person pronouns fall in the φP-class and *one* fall in the NP-class.

The purpose of this paper is to show that this categorization cannot be maintained. Without really making a stand on whether the three way distinction of nominal expressions is correct or not, I argue on the basis of the same and extended data that Déchaine's and Wiltschko's categorization is not correct.

The structure of the paper is as follows. In the second section I present Déchaine's and Wiltschko's study. In the third section I present arguments against their classification. The final section is a summary and conclusion.

## 2 Déchaine & Wiltschko (2002)

Déchaine & Wiltschko (2002) (henceforth D&W) and Wiltschko (2002) argue that there is no such primitive as pronoun in syntax. Their claim is that there are

three structurally different pronoun types. These are pro-DP, pro- $\phi$ P and pro-NP.

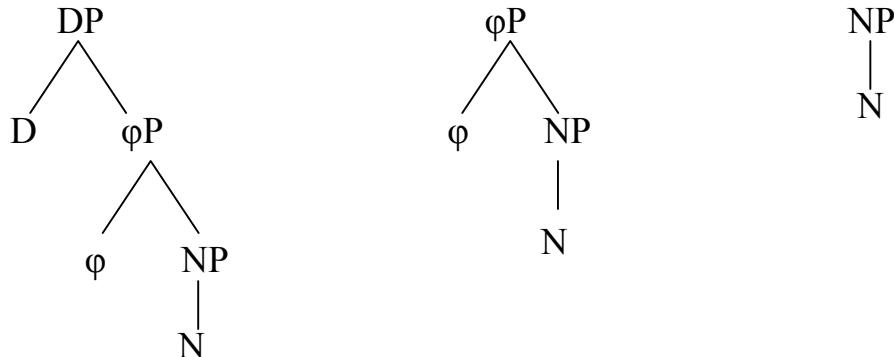
D&W claim that these three types are motivated by the different behaviour of pronouns across languages. Their arguments for pro-DP come from independent pronouns in Halkomelem. These pronouns seem to fall under binding principle C. The arguments for pro- $\phi$ P come from Shuswap independent pronouns which seem to fall under binding principle B. Finally, argument for a pro-NP come from Japanese *Kare*. D&W claim that the problem with treating all pronouns as DPs, is that there must be some stipulated mechanism that allows the syntactic derivation to access the internal structure of the pronoun (Ritter 1995, among others). By assuming different syntactic structures for the three types this problem is avoided. The structures D&W propose are the following (1):

(1)

a. Pro-DP

b. Pro- $\phi$ P

c. Pro-NP



D&W (2002:410-11) claim that the following holds for these nominal proforms; Pro-DPs have the syntax of determiner phrases, i.e. r-expressions; pro- $\phi$ P behave like pronouns under condition B; and pro-NPs behave like lexical nouns.

## 2.1 The typology of English pronouns

D&W claim that English has pronouns in all three categories in (1).

### 2.1.1 One

Starting with the smallest structure, pro-NP, they claim (following Postal, 1966) that *one* has the syntax and semantics of a noun. As an NP *one* may be preceded by a determiner (2a), a quantifier (2b) or a modifier (2c) (D&W's (27)).

- (2) a. the *one*  
     b. *someone*  
     c. the real *one*

Also, *one* substitutes for nouns in elliptical contexts (3):

- (3) Mary likes the blue car and John the green *one*.

D&W claim that since pro-NPs are constants they cannot function as bound variable anaphors (4) (D&W's (30))

- (4) a. \*[Everybody]<sub>i</sub> thinks [*one*]<sub>i</sub> is a genius.  
 $\neq \forall x, x \text{ thinks that } x \text{ is a genius}$   
 b. \*[Everybody]<sub>i</sub> loves [*one*]<sub>i</sub>'s mother.  
 $\neq \forall x, x \text{ loves } x \text{'s mother}$

Furthermore, they claim that *one* cannot support coreference and consequently cannot be bound by an antecedent, (5) (D&W's (31)).

- (5) a. \*[Mary]<sub>i</sub> thinks [*one*]<sub>i</sub> is a genius.  
 b. \*[Mary]<sub>i</sub> loves [*one*]<sub>i</sub>'s mother.

## 2.2 Personal pronouns

### 2.2.1 Determiners

If we turn to the personal pronouns D&W follow Ritter (1995) in her distinction between first and second person pronouns, and third person pronouns. The basis for this distinction is the ability for first and second person pronouns to function as determiners.

- (6) a. *we* linguists      *us* linguists  
 b. *you* linguists      *you* linguists  
 c. \**they* linguists      \**them* linguists

They do point out the fact that *them linguists* is well formed in certain dialects. The difference in (6) leads D&W to treat first and second person pronouns as pro-DPs, and third person pronouns as pro-φPs.

### 2.2.2 Bound variables

The predictions are then the following; third person pronouns will behave as bound variables, (7) and support coreference, (8); and first and second person pronouns will behave as r-expressions, (9) (D&W's (40)) and (10).

- (7) [Everybody]<sub>i</sub> thinks *she*<sub>i</sub> is a genius.  
 $\forall x, x \text{ thinks that } x \text{ is a genius.}$   
 (8) Mary<sub>i</sub> thinks that *she*<sub>i</sub> is a genius.

- (9) I know that John saw *me* and Mary does too.
- = I know that John saw me and Mary knows that John saw me.  
 $\lambda x [x \text{ knows that John saw me}] \& \lambda y [y \text{ knows that John saw me}]$
- $\neq$  I know that John saw me and Mary knows that John saw her.  
 $\lambda x [x \text{ knows that John saw } x] \& \lambda y [y \text{ knows that John saw } y]$

D&W claim that (9) clearly shows that first person pronouns cannot function as variables. The fact that first and second person pronouns can be bound outside a local domain as in (10), contrary to r-expressions, is a problem to the predictions that D&W make.

- (10) a.  $I_i$  know that John saw  $me_i$ .  
b. You know that John saw  $you_i$ .

### 2.2.3 Binding principle C and Strong Cross Over

D&W refer to Demirdache (1997) who claims that condition C effects are strong cross over violations (SCO). She claims that DPs in English are quantificational and therefore undergo quantifier raising.

- (11) a. \*I know  $he_i$  loves Oscar<sub>i</sub>.  
b. LF: \*[Oscar]<sub>i</sub> [I know  $he_i$  loves  $t_i$ ]

In (11) (D&W's (45)) the apparent binding principle C violation is due to strong crossover. Demirdache claims that not all DPs in English are quantificational. Focused and deictically used DPs are not quantificational and therefore may violate binding principle C (Demirdache 1997:78) (14) (Demirdache's (46)).

- (12) Who does Oscar love?  
I know  $he_i$  loves OSCAR<sub>i</sub>, but does he love anyone else?

In (12) the focused DP *Oscar* does not undergo quantifier movement and the sentence is well-formed. Based on Demirdache's discussion D&W claim that first and second person pronouns in English, due to their inherent deictic nature, are not quantificational too. Therefore they do not undergo quantifier raising and do not induce strong cross over effects.

### 2.2.4 Arguments and Predicates

The prediction that D&W make is that third person pronouns,  $\phi$ Ps, can function both as arguments and predicates, whereas first and second pronouns only can function as arguments. That third person pronouns can have both functions is clear from (13).

- (13) a. [she]<sub>arg</sub> kissed [him]<sub>arg</sub>.  
       b. That's [her/him/them]<sub>pred</sub>.

#### 2.2.5 Word formation

A further argument from D&W is that third person pronouns can participate in word formation, i.e. they can be properly denoting (14) (D&W's (51)).

- (14) a. [she]-male  
           [she]-society  
           [she]-oak  
       b. [he]-goat  
           a real [he]-man  
           [him]-bo (bimbo)  
       c. The [hes] would quarrel and fight with the females (J. Swift cited in Webster's *Third International Dictionary*.)

First and second person pronouns on the other hand cannot be used in word formation according to D&W (15) (their 52).

- (15) a. \*[me]-male  
       b. \*[you]-goat

These are the arguments that D&W present for their claim that the English pronoun inventory consists of three types of pronouns, each type with a distinct syntactic structure. First and second person pronouns are pro-DPs, third person pronouns are pro-φPs, and *one* is a pro-NP.

In the next section I will carefully look at these arguments and some additional data and the conclusion is that there is a clear difference between r-expressions and pronouns, and that the differences between pronouns in English seem to involve gender and number to the same extent as person.

### 3 Why Déchaine's and Wiltschko's categorization is wrong.

D&W claim that there is a conceptual advantage with treating different pronouns as syntactically different. It avoids the problem of how syntax can see the internal structure of pronouns if they all are treated as DPs. Even if this is a legitimate reason, there is at least one reason why treating all pronouns (clitics excluded) as DPs. This reason is that the c-selectional properties of predicates can be reduced to DPs, and not DP, φP and NP. In (16) it is enough to state that the c-selectional properties of the predicate *see* is DP, not DP, φP, and NP.

- (16) John saw [Mary/me/you/us/you]<sub>DP</sub> /[him/her/them]<sub>φP</sub> /[one ]<sub>NP</sub> (too).

The problem that D&W mention about seeing inside the structure can probably be overcome by feature percolation and feature checking (see e.g. Adger and Smith, 2003, Heinat, 2003, forthcoming, Zwart, 2002).

### 3.1 *One*

I will not have much to say about *one*. But the main objection to D&W's account of *one* is that it might function as a bound variable as we can see from the following example.

- (17) I don't think that we're skewed [inaudible]. Of course, when *everyone* thinks *one*'s views are skewed, but it's hard for me to imagine that so many ex members and family members would have skewed views.  
 ([http://religiousmovements.lib.virginia.edu/cultsect/mdtaskforce/Gulick\\_Tes\\_transcrip.htm](http://religiousmovements.lib.virginia.edu/cultsect/mdtaskforce/Gulick_Tes_transcrip.htm))

### 3.2 Personal Pronouns

#### 3.2.1 *Determiners*

D&W draw the line between first and second person, and third person pronouns on the distinction between their abilities to function as determiners (6) repeated here.

- (6) a. *we* linguists      *us* linguists  
 b. *you* linguists      *you* linguists  
 c. \**they* linguists      \**them* linguists

This distinction fails to explain why there is also a difference between singular and plural pronouns, as D&W point out but leave unexplained (18).

- (18) a. \**I* linguist      \**me* linguist  
 b. \**you* linguist      \**you* linguist  
 c. \**he/she* linguist      \**him/her* linguist

The dividing line seems to be, but maybe not restricted to, number rather than person.

#### 3.2.2 *Bound Variables*

D&W claim that there is a difference between the two classes of personal pronouns, pro-DP and pro-φP. Pro-DPs cannot function as bound variables. This is generally the case. But there are, however, contexts where first and second person pronouns function as bound variables (19).

- (19) I need someone to put me to bed, and Mary does too.  
 $\lambda x [x \text{ needs someone to put } x \text{ to bed}] \& \lambda y [y \text{ needs someone to put } y \text{ to bed}]$   
 bed.

The distinction between first/second and third person pronouns is obviously not as clear cut as D&W wants it to appear. In fact, with respect to variable binding, first and second person pronouns patterns more with third person pronouns than with r-expressions.

### 3.2.3 Binding and Strong Cross Over

Demirdache's (1997) claim that English DPs undergo quantifier raising may be right, but the binding principle C violations that she and D&W discuss cannot be reduced to strong cross over effects (11). There are at least one reason why binding principle C and strong cross over cannot be unified<sup>1</sup>. Namely that all sentences with embedded pronouns which do not c-command an r-expression would induce strong cross over violations, as in (20) and (21).

- (11) a. \*I know he<sub>i</sub> loves Oscar<sub>i</sub>.
- b. LF: \*[Oscar]<sub>i</sub> [I know he<sub>i</sub> loves t<sub>i</sub>]
- (20) a. Her<sub>i</sub> mother loves Mary<sub>i</sub>.
- b. LF: [Mary]<sub>i</sub> [her<sub>i</sub> mother loves t<sub>i</sub>]
- (21) a. The woman who saw her<sub>i</sub> loved Mary<sub>i</sub>.
- b. LF: [Mary]<sub>i</sub> [the woman who saw her<sub>i</sub> loved t<sub>i</sub>]

That these structures do involve strong cross over effects can be seen in questions, (22).

- (22) a. \*who<sub>i</sub> does her<sub>i</sub> mother love t<sub>i</sub>.
- b. \*who<sub>i</sub> did the woman who saw her<sub>i</sub> love t<sub>i</sub>.

But in contrast to (11) and (22), (20) and (21) are well formed sentences. Since DPs apparently do not move at LF, D&W's assumption that first and second pronouns do not undergo quantifier raising contrary to r-expressions seems unnecessary (see (10) repeated below).

- (10) a. I<sub>i</sub> know that John saw *me<sub>i</sub>*.
- b. You know that John saw *you<sub>i</sub>*.

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<sup>1</sup> See Postal (2004) for arguments that strong cross over cannot be explained as binding principle C violations.

It appears as if there is a reason to make some other distinction between r-expressions and first and second person pronouns other than quantifier raising.

### 3.2.4 Arguments and Predicates

D&W claim that third person function as both arguments and predicates (13).

- (13) a. [she]<sub>arg</sub> kissed [him]<sub>arg</sub>.
- b. That's [her/him/them]<sub>pred</sub>.

They do mention that we find first and second person pronouns in exactly the same positions, i.e. as predicates and arguments (23).

- (23) a. [I]<sub>arg</sub> kissed [you]<sub>arg</sub>.
- b. That's [me/us/you]<sub>pred</sub>.

D&W admit that the predicate/argument distinction is not conclusive evidence for their classification of pronouns. However, they want to explain (23) as equative structures involving two DPs. In equative structures it is possible to switch the two DPs (24). This kind of analysis leaves structures as (25) (c.f. (23b)) unexplained.

- (24) a. Mary is the President.
- b. The President is Mary.
- (25) a. \*I'm that.
- b. \*You're that.
- c. \*He/she is that.

Once again the division between first/second and third person pronouns D&W make seems unnecessary.

### 3.2.5 Word formation

As D&W point out third person pronouns seem to be property denoting and they can therefore participate in word formation as in (26).

- (26) a. she-male
- b. he-goat.

However, there are marginal uses of first and second person pronouns, (27).

- (27) The *mes* and *yous* and *wes* of this world.

I suggest that the difference D&W point out between first/second and third person here is not tied to the number feature. Rather, the division seems to be concerned with the gender feature. Since first and second person pronouns are not inherently specified for gender, or at least they have a limited use in word formation. In the examples given by D&W in (14) the meaning of the third person pronouns are either *female* or *male*.

If gender, and not person, is the reason for this difference in ability to participate in word formation we do not expect to find third person pronouns that are not specified for male or female. These pronouns are *it* and *they*. As expected they do not take part in word formation (28).

- (28) a. \*they-goat (c.f. he-goat)
- b. \*it-dog      (c.f. she-dog)

Once again D&W's categorization of English pronouns breaks down when more data is considered, and in the case of word formation gender, or more exactly, male-female seems to be the features that make it possible for pronouns be part of words.

## 4 Conclusion

In the previous discussion it was shown that D&W's categorization of English pronouns into three different syntactic structures, pro-DP, pro- $\varphi$ P, and pro-NP, cannot be maintained. If the full spectrum of data is considered pronouns seem to be one category of nominal expressions and r-expression another class of nominal expression. Therefore it is necessary to maintain Chomsky's (1982) distinction between pronouns and r-expressions, at least in English. The question if Chomsky's (1982) two way distinction of pronouns into pronouns and anaphora (reflexive and reciprocal pronouns) can be reduced to one class is another question which is not the concern of D&W's paper.

## 5 References

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