ON THE INTERNAL STRUCTURE OF PRONOMINAL DP's

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Natural languages have two categories of pronouns: some essentially behave like full DPs, the others display special syntactic properties, in particular they must appear at S-structure in a derived position. A very common situation is that pronouns belonging to the two classes have a different lexical form: this is found for example in Romance languages, which display the two morphologically distinct series of strong and clitic pronouns, and in some Germanic languages. In other cases, however, pronouns belong to two different classes displaying one and the same morphological form. This is the case of weak pronouns, which occur in derived positions like clitic pronouns, but are very often homophonous with strong pronouns: thus, apparently the same pronoun can be found either in a derived position or in the base position.

In this paper, an approach to the syntax of pronouns is outlined by exploring the hypothesis that different types of pronouns have a different internal structure. Strong pronouns are full DPs and contain the lexical category NP embedded under DP; N-to-D movement along the lines of Longobardi (1991) is argued to apply. Clitic pronouns consist of purely functional projection(s). As for the internal structure of weak pronouns, we will observe that they differ from clitics in that they contain a further functional projection, containing what we call a morpheme of "support": It is the presence of this morpheme which is responsible for their ambiguous status and may lead to their analysis as strong pronouns.

These simple hypotheses allow a principled account of apparently unrelated phenomena, which concern both the morphological shape and the syntactic behavior of pronouns:
1) we account for the morphological reduction that very often characterizes clitic pronouns with respect to strong pronouns: it is nothing else than the consequence of the reduced syntactic tree attributed to them;
2) we derive the particular syntactic behavior of clitic and weak pronouns on one side and strong pronouns on the other, namely the properties known as Kayne's tests for clitichood. A reinterpretation of these tests will also be necessary;
3) the proposed analysis also provides a possible explanation of why weak and clitic pronouns, contrary to strong pronouns, obligatorily undergo syntactic movement.

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1 For proposals concerning the internal structure of pronouns, see Hestvik (1990) for English and Norwegian, Ritter (1991) for Hebrew, and Rouveer (1991) for Welsh.

2 Our discussion deals with 3rd person object pronouns, but it can be easily extended to object pronouns of other persons and
1. STRONG VS. CLITIC PRONOUNS

Romance languages have two morphologically distinct series of pronouns (cf. Kayne 1975). The two classes differ with regard to their distribution: Strong pronouns only occur in postverbal position, thus displaying the same distribution as full DPs; they never undergo syntactic movement, which is instead obligatory for clitic pronouns. We illustrate the contrast for Italian:

(1) a. Conosco lui/*lo.
   [I] know him

b. *Lui/Lo conosco __.

The same contrast is found in all canonical DP-positions. For instance, a strong but not a clitic pronoun can appear in an A', left-dislocated position, or in isolation:

(2) a. Lui/*Lo, Gianni lo conosce da tempo.
   him, Gianni him knows since long

b. Chi conosci?  Lui/*Lo.
   whom know [you] him

The following definition based on the distribution of pronouns can be adopted:

(3) a. strong pronouns only occur in canonical DP positions

b. clitic pronouns only occur in (*special*) derived positions

The pattern in (1)-(2) is not typologically related to Romance languages. Germanic languages also display strong and clitic pronouns. In order to abstract away from the effects of the scrambling operation, which also affects full DPs in Germanic languages, consider the contrast in the specCP position: a strong pronoun can occur in this position, which is unavailable instead for clitics. We provide examples from spoken and Southern German (cf. Abraham 1991) and West Flemish (cf. Haegeman 1992), respectively:

3 The fact that a pronoun is cliticized on the functional head which also contains the verb (i.e. the derived position in (3) is a position adjacent to the verb), does not enter into the definition of "clitic". In this respect, consider French negation, which is analysed as a clitic also in infinitival contexts, where it does not incorporate with the verb (cf. Pollock 1989):

(i) a. Jean ne parle pas allemand.
   Jean not speaks not German

b. Jean regrette de ne pas parler allemand.
   Jean regrets to not not speak German

The fact of being cliticized on the verb or not must depend on the way verb movement takes place in the language. See Zwart (1992) for a possible account of why, in Germanic languages, those pronouns which qualify as clitic according to the definition in (3) are not cliticized on the verb, but on an empty functional head, as shown in the following sentences from Dutch (Zwart 1992), spoken and dialectal (Southern) varieties of German (Abraham 1991) and West Flemish (Haegeman 1992):

(ii) a. dat Jan t gisteren gelezen heeft.
   that Jan it yesterday read has

b. dat de Mutter m was gegeven hat
   that the mother to-him something given has

c. dan-k ik ze die boeken gegeven een.
   that I to-her the books given have
Similarly to Italian clitics, a German clitic pronoun cannot be left-dislocated, nor appear in isolation:

    to-him, to-him want I not help

b. Wem hast du geholfen? Dem/*M.
    to-whom have you helped him

2. The "DIFFERENT STRUCTURE" HYPOTHESIS

We start from the preliminary hypothesis that pronouns differ in their lexical category: they may be listed in the lexicon either as lexical or functional elements. Given these two possibilities, strong pronouns will qualify as N(ominal), clitic pronouns will be of category D(eterminer). According to X-bar theory, pronouns project an XP as follows:

(6) a. strong  b. clitic

```
    DP
   /   \                  DP
  D'  ┌───┐                   \-
     \   △
    D°  └───┘
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      D°
     ┌───┐
    NP  └───┘
       \-
      N°
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Pronominal DPs corresponding to clitic and strong pronouns thus differ in their internal structure. Clitic pronouns project a DP and do not contain any nominal projection, as shown in (6b). The proposal made by Abney (1987), who considers English pronouns to be intransitive D°s, is thus applied to clitic pronouns, in order to express the intuition that they only realize the functional portion of the DP. This immediately explains why clitic pronouns never co-occur with determiners, as shown here for Italian and German:

(7) a. *il/*questo lo
    the/this it

b. *dem m
    theDAT himDAT

Not every pronoun is generated in D°. Differently from Abney (1987) among others, in (6a) we propose that strong pronouns are generated in N° and necessarily project a NP which combines with functional projection(s), creating an extended projection in the sense of Grimshaw (1991).\(^4\)

The analysis in (6) has the advantage of explaining without additional assumptions why clitics often display the same morphological form as determiners. This observation, made on the basis of Romance languages, (8) (cf. Uriagereka 1992, among many others), holds true for Germanic languages as well, as shown here for German, (9), and West Flemish, (10):\(^5\)

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\(^4\) (6a) is a simplified structure. For the existence of further functional projections between DP and NP, see Cinque (1990, 1992), Crisma (1991), and below, Section 6.

\(^5\) L. Haegeman (p.c.) points out that in West Flemish, the clitic der had a homophone in the determiner system: it was the genitive form of the article.
(8) a. La conosco.
    [I] her know
b. la ragazza
   the girl

(9) a. Ich hab's gelesen.
    I have it read
b. weil du das Auto übersehen hast
    because you the car oversee have (Abraham 1991)

(10) a. da Marie d'joengers nio gegeven eet
    that Marie to-the boys it not given has
b. tgel
    the money (Haegeman 1992)

On the other hand, strong pronouns never pattern with determiners, which supports our proposal that they are not generated in D*:

(11) a. Conosco lei.
    [I] know her
b. *lei ragazza
    her girl

Notice that for the sake of the argument, it is sufficient to propose that clitics are D*s. There are however good reasons to believe that the highest head of the extended projection of the noun is better characterized in terms of the K(ase)* of Giusti (1992, 1993): the determiner is nothing else than the realization of Case in languages with no morphological case. Under Giusti's proposal, it is possible to understand why in languages with morphological case such as German, clitics are homophonous with case endings (cf. m, s, etc. in Abraham 1991). We thus conclude that clitics, on a par with case morphemes and determiners, must be regarded as realizations of the K* category. 6

2.1. N-TO-D MOVEMENT IN PRONOMINAL DPS

Notice that at S-structure, strong pronouns do not appear in N*, but in D*: on a par with clitics, strong pronouns do not co-occur with determiners, (12), and modified strong pronouns always precede the modifier, (13) (cf. Longobardi 1991): 7

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6 Since clitics and determiners are not necessarily one and the same lexical entry, we expect that they may undergo different diachronic processes. Depending on the phonetic environment, standard Italian developed the masculine determiner il, which does not have a clitic counterpart (though it does in dialects):

(i) a. Lo conosco.
    [I] him know
b. lo zio/il ragazzo
    the uncle/the boy

7 Phrases like (i) are not counterexamples to the claim made in the text. They are only possible with the 3rd person singular pronouns lui and lei in a meaning roughly equivalent to "partner":

(i) il mio lui/la mia lei
    the my him/the my her

With the same meaning, the pronouns lui and lei can marginally appear in a position which precedes the possessive (lui: mio tuo), giving rise to a configuration which is possible with proper names (see (17) in the text), but ungrammatical with other pronouns:

(ii) *io tuo/*.noi vostri
    I yours/we yours
(12) a. *i noi/*i ricchi noi (cf. i ricchi amici di Maria
the we/the rich we
the rich friends of Maria)
b. *il lui
the him

(13) a. noi due (cf. due amici
we two
two friends)
b. *due noi

The strong pronoun generated in N° undergoes head-to-head movement, thus appearing in D° at S-structure. Following Chomsky’s (1992) approach, we assume that the pronoun is generated as a fully inflected form and moves (DP-internally) to the functional head(s) in order to check its inflectional features. (14) is the S-structure representation of a strong pronoun:

(14) \[ \text{DP lui [NP t]} \]

Further empirical support for (14) comes from the observation, due to Guglielmo Cinque, that strong pronouns can be preceded by adjectives in exclamatory contexts, (15). Notice that in the same context, determiners are excluded, (16):

(15) a. Povero lui!
poor him
b. Poveri noi!
poor us

(16) Povero (*il) professore!
poor the professor

These facts are only compatible with the hypothesis that strong pronouns are generated in N°, combined with the hypothesis that nominals in non-argument function, e.g. in exclamatory contexts, are not necessarily introduced by the category D (cf. Longobardi 1991).

The question now arises as to why the movement of strong pronouns to D° must apply in the syntax and cannot be postponed to LF, as can be the case with proper names, and common nouns such as casa and camera in Italian: these can be moved to D° either at LF or in the syntax, thus giving rise to the following pairs of sentences (cf. Longobardi 1991 and 1992, respectively):

(17) a. Il mio Gianni ha finalmente telefonato.
the my Gianni has finally called up
b. Gianni; mio ti: ha finalmente telefonato.

(18) a. La mia casa/camera è più bella della tua.
the my home/room is more beautiful than the yours
b. [Casa;/Camera; mia ti:] è più bella della tua.

The ungrammaticality of a strong pronoun remaining in N° can be understood either in syntactic or in semantic terms. As for the former solution, the pronominal head can be said to display “strong” features in the sense of Chomsky (1992) and obligatorily undergo feature checking in the syntax (DP-internally). The fact that in languages with no morphological case, pronouns are the only DPs which show morphological case suggests that the strong

A similar lexicalization applies in English with the 3rd person singular pronouns he and she: they are used for little children, in the meaning of “boy” and “girl”, respectively:

(iii) Is it a he or a she?

Notice that such reanalysis processes are only possible if the pronoun is in N° at some stage of the derivation, which independently supports the proposal made in (6a).
feature which distinguishes nouns from pronouns is the Case feature. Alternatively, as pointed out by Longobardi (1991), pronouns can never appear in the N° position at S-structure because they are never "used to refer to a kind" and never "provide a range to a (lexical or overt) determiner understood as an operator" (contrary to proper names, which occasionally do). Pronouns directly designate the entity they refer to. Under either analysis, N-to-D movement in pronominal DPs is forced to apply in the syntax. This is also true of those languages such as English, in which no syntactic N-to-D movement is otherwise attested: contrary to Italian, in English proper names never move to D° (cf. Old John came in vs. *John old came in, as discussed in Longobardi 1991).

2.2. The "lexicized N" hypothesis

The structure we have proposed in (14), repeated here as (19), differs minimally from (20), which entails that (strong) pronouns are base-generated in D° and embed an empty NP:

(19) [DP lui [NP t]]
(20) [DP lui [NP e]]

Notice that the two analyses are neutral with respect to paradigms (12)-(13), but (20) fails to explain the contrast in (15)-(16) concerning exclamatory contexts.⁸

However, there is one main argument in favour of (20): the existence of sentences such as (21a), which are analysed as in (21b), with the pronoun in D° and the lexical noun in N° (cf., among many others, Postal 1969 and Abney 1987 for English, and Longobardi 1991 for Italian):

(21) a. noi/voi linguisti
    we/you linguists
    [DP noi/voi [NP linguisti]]

It is evident that the "lexicized N" hypothesis illustrated in (21) speaks against an analysis like the one depicted in

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⁸ Other non-argumental contexts are compatible with both analyses. In vocative, (i), and predicative, (ii)-(iii) constructions N-to-D movement of a proper name can apply, as in (1b) and (1b), and a determiner can be present, as in (1b) (cf. Longobardi 1991, from which the examples are taken):

(i) a. Mio caro Gianni, vieni qui!
    my dear Gianni, come here
    b. Gianni, mio caro tè, vieni qui!
(ii) a. Si è mascherato da vecchio Cameressi.
    [he] himself is disguised as old Cameressi
    b. Si è mascherato da Cameressi vecchio tè.
(iii) a. Verrebbe essere figlio di Maria.
    [he] would like to be son of Maria
    b. Verrebbe essere il figlio di Maria.

Therefore, it is not possible to establish the exact categorial status of strong pronouns (whether N or D) when they occur alone in the following examples:

(iv) a. Lei, venga qui!
    you, come here
    b. Tu, vieni qui!
    you, come here
(v) a. Gianni è sempre lui.
    Gianni is always him
    b. Tu sei sempre tu, non cambi proprio mai.
    you are always you, [you] not change really never
(19). However, it can be shown that sentences of this kind must be attributed a different structure, which makes them neutral between (19) and (20). Notice that only 1st and 2nd person pronouns can embed a lexically realized NP, whereas 3rd person pronouns give rise to ungrammaticality, (22b):

\[(22) \quad \begin{align*}
\text{a. } & \text{noi/voi linguisti} \\
& \text{we/you linguists} \\
\text{b. } & \text{*[DP loro [NP linguisti]]} \\
& \text{they linguists}
\end{align*}\]

However, the same constraint operates in (23) and (24), where the pronoun is followed by a PP in an adjoined position and by a relative clause, respectively:

\[(23) \quad \begin{align*}
\text{a. } & \text{noi/voi [con i capelli rossi]} \\
& \text{we/you with the hair red} \\
\text{b. } & \text{*loro [con i capelli rossi]} \\
\end{align*}\]

\[(24) \quad \begin{align*}
\text{a. } & \text{noi/voi [che amiamo/amate il rock]} \\
& \text{we/you who love the rock} \\
\text{b. } & \text{*loro [che amano il rock]}
\end{align*}\]

It is difficult to see how one and the same constraint operates on two so different syntactic configurations. Suppose, on the other hand, that (22) and (23)-(24) have the same structure: linguisti in *noi linguisti* is not analysed as in (21b), but occupies an adjoined position on a par with the PP in (23a) and the relative clause in (24a). That linguisti can appear in an adjoined position is supported by the following example, where the head noun is realized by amici:

\[(25) \quad \text{i miei amici [linguisti]}
\text{the my friends linguists}\]

The fact that with adjectival modifiers, we obtain the same pattern as in (23)-(24) suggests that in (26a), the adjective is not "internal" to the pronominal DP (in the spec of some Agr projection between D° and NP, cf. Cinque 1990, 1992 and fn. 4), but occurs in a postnominal adjoined position, on a par with the PP in (23) and the relative clause in (24):

\[(26) \quad \begin{align*}
\text{a. } & \text{noi/voi ricchi} \\
& \text{we/you rich} \\
\text{b. } & \text{*loro ricchi}
\end{align*}\]

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9 This adjunction structure is also possible in the singular:

\[(i) \quad \begin{align*}
\text{a. } & \text{il mio amico [linguista]} \\
& \text{the my friend linguist} \\
\text{b. } & \text{mio zio [dottore]} \\
& \text{my uncle doctor}
\end{align*}\]

There is an interesting German fact which seems to support the hypothesis (26): the noun following the pronoun manifests case morphology in the dative plural, as is usually the case for the head noun:

\[(ii) \quad \begin{align*}
\text{a. } & \text{mit uns Kindern} \\
& \text{with us children} \\
\text{b. } & \text{mit (den) Kindern} \\
& \text{with the children}
\end{align*}\]

This fact is not incompatible with our proposal in (19), since in German, all material adjoined postnominally displays case:

\[(iii) \quad \begin{align*}
\text{a. } & \text{Er antwortete Herrn Schulz, dem Direktor der Schule.} \\
& \text{he answered Mr. Schulz, the director of the school} \\
\text{b. } & \text{die Aufgaben des Kollegen Abteilungsleiters} \\
& \text{the tasks of the colleague head of the department}
\end{align*}\]
The only elements which can occur in post-pronominal position with pronouns of all persons are quantifiers:

(27) a. noi/voi/loro due
    we/you/they two
b. noi/voi/loro tutti
    we/you/they all

(28) a. noi/voi/loro soli
    we/you/they only masc.pl.
b. io/tu/lei sola
    I/you/she only femm.sing.

The analysis of the contrast between (26) and (27)-(28) is straightforward: The quantifier in (27)-(28), contrary to the adjective in (26), is external to the pronominal DP in the sense that the pronoun occupies the complement position to the head Q (cf. Cardinaletti and Giusti 1991); the pronominal DP is moved to specQP, thus landing in a position which precedes the quantifier (cf. Giusti 1992, Shlonsky 1991). The agreement on the quantifier solo, which is ungrammatical if it precedes the pronoun, becomes possible if it follows the pronoun; it can be interpreted, as usual, as a signal of syntactic movement and consequent spec-head agreement:10

(29) a. [QP solo/*soli [DP noi/voi/loro]]
    only/only mascl.pl. we/you/they
b. [QP noi/voi/loro [Q/ soli [DP t]]

We conclude that the possibility of sentences such as (21a) cannot be taken to evidence for the "lexicalized N" hypothesis, and are therefore neutral between the two analyses (19) and (20). Since only (19) can account for i) the fact that strong pronouns are never homophonous with determiner (see (11)), ii) the occurrence of pronouns in exclamatory contexts (see (15)-(16)), and iii) the reanalysis processes mentioned in fn. 7, we consider it to be the correct one.

2.3. Motivating Pronoun Movement

If our proposal concerning the internal structure of pronouns is correct, we can hypothesize that the property responsible for the different syntactic distribution of clitic and strong pronouns (as seen in Section 1) is the presence or absence of the lexical projection NP in their X-bar theoretic representation. Following a suggestion by Luigi Rizzi, the lack of the NP projection must be regarded as the factor responsible for the obligatory movement of clitic pronouns to the derived position.

In order to derive the fact that the movement of auxiliaries is not subject to parametric variation, but always takes place in overt syntax, Chomsky (1992) assumes that elements without semantically-relevant features are not visible to LF-rules.11 Suppose that in an analogous way, DPs without a semantic content cannot be moved at

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10 Here, we ignore cross-linguistic variation in the movement of the pronoun to specQP in the case of universal quantifiers, which is obligatory in e.g. English and French, but optional in Italian:

(i) a. we/you/they all vs. *all we/you/they
   b. nous/vous/eux tous vs. *tous nous/vous/eux
   c. noi/voi/loro tutti vs. tutti noi/voi/loro

11 This claim is valid for English and Romance. In languages such as German, Dutch and Scandinavian, auxiliaries and main verbs display the same movement possibilities: neither move in embedded contexts, and both must move to the 2nd position in matrix clauses. Although a full discussion of this point would lead us too far, the possibility could be envisaged that languages may choose not to categorise auxiliary verbs as such. Thus, Chomsky's proposal would hold for those languages which have
LF; if they do not move in the syntax, a violation of the checking procedure (as far as the Case feature is concerned) would be produced. This means that clitic pronouns, which do not contain the lexical projection NP, must undergo syntactic movement; on the other hand, strong pronouns, which contain the NP projection, do not need to move, hence, according to the minimalist program, they cannot move.\textsuperscript{12}

If this is correct, the "different structure" hypothesis derives the different movement possibilities of strong and clitic pronouns. In other words, there exists a close connection between the internal structure of a pronominal DP and its syntactic distribution.

3. **On Ambiguous Pronouns**

We have seen so far that pronouns with a different syntactic behavior, such as clitic and strong pronouns, can be also characterized by a different lexical form. In other cases, one and the same pronoun seems to be able to occur either in the base position or in a derived position, without a difference in its lexical form. We interpret this by proposing that the pronoun belongs to two different pronominal classes. We will refer to the pronouns in derived position as "weak" pronouns; when they occur in the base position, we are dealing with the "strong" counterpart of a weak pronoun.

Examples from Swedish, German and Italian are given below (we will come back later, Section 5.1., to the question of why the pronoun must be stressed when it remains in the base position):\textsuperscript{13}

\begin{enumerate}
\item[(30)]
\begin{enumerate}
\item a. Anna såg kanske inte *den/DEN.
Anna saw maybe not it
\item b. Anna såg den kanske inte ___.
\end{enumerate}
\item[(31)]
\begin{enumerate}
\item a. daß ich gestern *ihn/IHN gesehen habe.
that I yesterday him seen have
\item b. daß ich ihn gestern ___ gesehen habe.
\end{enumerate}
\item[(32)]
\begin{enumerate}
\item a. Il professore diede l’autorizzazione *loro/a loro.
the professor gave the authorisation to them
\item b. Il professore diede loro l’autorizzazione ___.
\end{enumerate}
\end{enumerate}

(Holmberg 1991)

(Cardinaletti 1992)

(Cardinaletti 1991)

Under the "different structure" hypothesis we are arguing for in this paper, the distribution of these pronouns can be accounted for by making the simple hypothesis that they are ambiguous, i.e. they are listed in the lexicon with two different specifications: in the "strong" analysis, they are categorised as nominal, in the "weak" analysis, they are functional elements. Accordingly, either one of the structures in (33) can be projected (these structures will be partially revised in Section 6):

the category "auxiliary" in their grammar.

\textsuperscript{12} We are assuming that clitic movement is two-stepped: XP movement followed by X*-movement. Only the first step is accounted for here. Different reasons motivate clitic movement further up to the host head (cf. Cardinaletti and Starke 1993). We thus reject the view that clitic placement is driven by only one requirement, as proposed, among others, by Sportiche (1992) and Uriagereka (1992).

\textsuperscript{13} The "derived" position is different for clitic and weak pronouns: there are reasons to believe that clitics are heads and attach to functional heads (cf. Kayne 1991), whereas weak pronouns are maximal projections, which need to move to the specifier position of some Agr projection in order to be "licensed" (cf. Cardinaletti and Starke 1993 for discussion). This difference is not relevant for the present concerns, and will not be further discussed in this paper.
In the analysis (33b), weak pronouns represent the functional projection of the DP, on a par with clitics. When structure (33a) is projected, the pronoun is generated as N° and moves DP-internally to D°, on a par with strong pronouns. This explains why weak pronouns, like clitic and strong pronouns, never co-occur with determiners, as shown in (34) for German:

(34) *den ihn
    theACC himACC

The analysis argued for in Section 2.3., combined with the structures in (33), derives the fact that these pronouns may either remain in the base position or be moved. When analysed as in (33a), they cannot move, when analysed as in (33b), they must undergo overt movement.

4. Motivating Different Lexical Entries

In the following two Sections, we provide independent evidence in favour of the hypothesis that weak and strong pronouns are differentiated by their lexical entry.

4.1. Diachronic Change

Under the hypothesis that diachronic change consists in the change of lexical specifications, we predict that it may concern the syntactic category of the lexical entry of pronouns. Thus, a possible change is for a pronoun with two lexical entries to lose one of them. An example of this change is provided by the history of Italian. The singular pronouns *lui and lei could be used in Old Italian as dative weak pronouns, without the Case-assigning preposition a, on a par with the dative plural pronoun loro (examples taken from Rohlfs 1968:137,163-164):14

(35) a. mostrato ho lui tutta la gente ria
    shown have [I] to-him all the people guilty
    (Dante, Div. Comm., Purg. 1, 64)

b. ond'io risposi lei
    then I answered to-her
    (Dante, Div. Comm., Purg. 33, 91)

c. quel che loro volea dire
    what to-them he wanted say
    (Jacopone)

Whereas loro is still a weak pronoun in Modern Italian, lui and lei are nowadays only analysed as strong pronouns:

(36) a. *Ho consegnato lui/lei un pacco.
    [I] have delivered to-him/to-her a packet

b. Ho consegnato un pacco a lui/ a lei.
    [I] have delivered a packet to him/to her

c. Ho consegnato loro un pacco.
    [I] have delivered to-them a packet

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14 Both lui/ lei/ loro in Old Italian and loro in Modern Italian are not cliticised on the verb (cf. Cardinaletti 1991). This confirms the claim made in fn. 13 that the derived position is not necessarily the same for weak and clitic pronouns.
The proposal that there are pronouns which are ambiguous between two lexical entries allows us to account for the above paradigms in very simple terms. In Old Italian, lui and lei were ambiguous pronouns, i.e. they had two lexical entries: D or N, whereas they are unambiguously analysed as N in Modern Italian. The diachronic change can be understood as the loss of the lexical specification "D":

(37) \[ \text{lui/lei: D, N} \quad \rightarrow \quad \text{lui/lei: N} \]

4.2. German Genitive Pronouns

Consider now the way genitive Case is marked on pronouns in a language with morphological case such as German. Depending on the status of pronouns, two different forms are attested. Strong pronouns have a corresponding genitive form, weak pronouns do not have a regular genitive form, but display a suppletive form, taken from the paradigm of possessives:

(38) a. strong NOM der die das
     GEN dessen deren dessen

b. weak NOM er sie es
     GEN seiner ihrer (seiner)

Notice that German nouns have the genitive ending s in the strong declension and n in the weak declension, (39); the pronouns in (38a) thus display the weak declension:

(39) a. des Buch-es 
     of the book
b. des Abgeordnet-en 
     of the delegate

The fact that unambiguous strong pronouns, contrary to weak pronouns, have a regular genitive form in their paradigm, confirms the hypothesis that they must be assigned a nominal status.

5. On the Disambiguation of Ambiguous Pronouns

The question arises as to how to distinguish between the strong and the weak use of ambiguous pronouns. The choice between the two is not free. Although they display the same morphological form, further conditions govern their distribution. As noted above in (30)-(31), weak pronouns must be moved; they can stay in the base position only if they are analysed as strong pronouns, e.g. if they are stressed. The idea we would like to pursue is that ambiguous pronouns will always be analysed as in (33b), if there is no evidence to the contrary. This can be formulated as in (40):

(40) Minimize structure (applied to pronouns):
     Analyse a pronoun as lacking the NP projection, unless there is evidence to the contrary.

In the following Sections, we will discuss some pieces of evidence which force either one of the analyses of ambiguous pronouns.

5.1. Kayne's Tests for Clitichood

Kayne (1975) elaborates some syntactic tests which draw a distinction in the syntactic behavior of strong and clitic pronouns. He concludes that among other properties, only the former can be focussed, modified and

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15 This principle does not only apply to pronouns, but represents a general economy strategy. See Safir (1992) for a similar proposal applied in the clausal domain.
conjoined. We illustrate the relevant contrasts on the basis of Italian (similar facts obtain in other languages; we refer the reader to the specific works: Kayne 1975 for French, Haegeman 1992 for West Flemish, Zwart 1992 for Dutch, etc.):

(41)  
  a. Conosco LUI, non Maria.  
      [I] know him, not Maria  
  b. *Lo conosco, non Maria.

(42)  
  a. Conosco [voi due].  
      [I] know you two  
  b. *[Vi due] conosco.

(43)  
  a. Conosco [lui e lei].  
      [I] know him and her  
  b. *[Lo e la] conosco.

Kayne did not analyse weak pronouns. Recent analyses have shown that weak pronouns display the same properties as clitics (cf. Holmberg 1991 for Swedish, Cardinaletti 1991 for Italian loro, Cardinaletti 1992 for German). Some examples for Swedish and for Italian loro are provided below; all examples are grammatical if the pronoun is strong and appears in the base position:

(44)  
  a. *Anna såg DEN kanske inte __.  
      Anna saw it maybe not  
  b. *Anna såg [dem båda] inte __.  
      Anna saw them both not  
  c. *Anna såg [mej och mej] inte __.  
      Anna saw me and you not

(45)  
  a. *Il professore non diede LORO l'autorizzazione __, ma a Gianni.  
      the professor not gave to-them the authorisation, but to G.  
  b. *Il professore diede [loro due] l'autorizzazione __.  
      the professor gave to-them two the authorisation  
  c. *Il professore diede [loro e loro] l'autorizzazione __.

Thus, these properties do not correlate with the fact that a pronoun is cliticized onto the verb, as in Kayne’s original proposal. The correct generalization should be phrased in the following terms: pronouns occurring in (special) derived positions manifest the above properties. This correlation can be visualized in the following table:16

(46)  

<table>
<thead>
<tr>
<th></th>
<th>CLITIC</th>
<th>WEAK</th>
<th>STRONG</th>
</tr>
</thead>
<tbody>
<tr>
<td>distribution: DP positions</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>properties: focalization</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>modification</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>coordination</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The proposals made in the preceding Sections allow us to give a natural explanation of the correlation illustrated in (46). Suppose that focalization and/or modification and/or coordination force the analysis (33a), i.e. the analysis in which the pronoun contains the NP projection.17 Under the hypothesis made in Section 2.3.,

16 Since weak pronouns are not heads (see fn. 13 and fn. 14), these properties cannot be simply attributed to a phonological constraint, requiring that a clitic must be “light” in order to be attached to the host. A purely syntactic reason is at work here.

17 As a matter of fact, only a category with a lexical content can be focussed, modified and conjoined. Focussing of a functional head, such as a complementizer, an article or a preposition, is impossible, (i). In the same way, it seems semantically odd to modify a functional head. Finally, notice that conjunction cannot apply to functional categories, (ii):
according to which only pronouns lacking the NP projection are moved in the syntax, we obtain the desired result: Focalizing and/or modifying and/or coordinating a pronoun has the consequence that it cannot undergo syntactic movement. On the other hand, if a pronoun is not stressed nor modified nor conjoined, the principle "Minimize structure" will lead to its interpretation as lacking the NP projection, which makes its movement in overt syntax necessary.

5.2. Interaction with verb movement

The phenomenon of object shift found in Scandinavian languages has the following restriction: It cannot apply if verb movement has not also applied:

(47)  a. *Anna har den inte sett __.
      Anna has it not seen
   b. Anna har inte sett den.                        (Holmberg 1991)

Without trying here to formulate an explanation of the correlation between verb movement and pronoun movement (see Chomsky 1992 for a possible motivation), we only notice that no focalization on the pronoun is now necessary, in contrast to (30a). The possibility of sentences like (47b) challenges our proposals and raises the question of the status of the pronoun in this case. Two solutions come to mind:

(48)  a. Since it is not stressed, the pronoun lacks the NP projection.
   b. Stress is not necessary for a pronoun to remain in the base position.

Notice that (48a) implies that the correlation between the lack of the lexical projection and the obligatory syntactic movement argued for in Section 2.3. should be abandoned: a pronoun lacking the nominal projection seems to occur in the same position as full DPs. Since the above proposal has enough generality not to be rejected, we opt for the alternative solution in (48b).

In (30), stress is taken to be phonological evidence for the presence of the NP projection: if the pronoun is not stressed, principle (40) forces its analysis without the NP projection, which in turn forces the syntactic movement of the pronoun. Stress becomes unnecessary when the speaker can draw the same conclusion in a different way. In (47), where the verb has not moved, an ambiguous pronoun such as den can be analysed as a strong pronoun, i.e. as containing the NP projection. Therefore, it is allowed to occur in the same position as full

(i)  a. *So CHE ho ragione.
      [I] know that [I] have reason
   b. *Conosco IL ragazzo
      [I] know the boy
   c. *Ho parlato Di Gianni.
      [I] have spoken of Gianni

(ii) a. *Ho invitato [il e la] docente.
       [I] have invited the MASC and the FEM teacher
       [I] have spoken of and with Gianni

Interestingly, "lexical" prepositions (in the sense of van Riemsdijk 1990) can be conjoined:

(iii) Ho guardato [sotto e dietro] l'armadio.
     [I] have looked under and behind the wardrobe

As a possible counterexample to the above considerations, we should mention the possibility of focalizing the auxiliary do in English, as in: I DID go. This possibility should not count as a counterexample, since it can be analysed as involving the sigma projection of Laka (1990).
A similar paradigm obtains in Italian: a strong pronoun has to be focussed in order to occur in the complement position to a verb (because a clitic is a possible alternative in that context), but no stress in necessary in the complement position to a preposition (where a clitic is independently barred):

(49) a. Ho visto LUI/L’ho visto.
    [I] have seen him
b. Ho parlato con lui/*Ho parlato con lo.
    [I] have spoken with him

6. ON THE LEXICAL COMPLEXITY OF WEAK PRONOUNS

Let us consider now the way of expressing the distinction between clitic and weak pronouns. The question is: why can a weak pronoun such as Swedish den be analysed as a strong pronoun and consequently occur in the base position (as in (30a)), whereas a clitic pronoun such as Italian Io cannot, being always excluded from the base position (as in (1a))? The answer, we believe, must again be searched for in the internal structure of pronouns. Weak pronouns, like strong pronouns, are morphologically complex forms: they contain a morpheme, which we call a "morpheme of support", which is absent in clitic pronouns.

Look at the respective form of weak and clitic pronouns in the languages considered. In German, the morpheme ih, [i:], distinguishes weak from clitic pronouns, which only consist of the case morpheme; ih represents the support:

(50)   

<table>
<thead>
<tr>
<th>WEAK</th>
<th>CLITIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ihn</td>
<td>m</td>
</tr>
<tr>
<td>ihn</td>
<td>n</td>
</tr>
<tr>
<td>&quot;himDAT&quot;</td>
<td></td>
</tr>
<tr>
<td>&quot;himACC&quot;</td>
<td></td>
</tr>
</tbody>
</table>

A similar distinction is found in Dutch: clitics only consist of the agreement morpheme marking phi-features, whereas weak pronouns are morphologically more complex:

(51)   

<table>
<thead>
<tr>
<th>WEAK</th>
<th>CLITIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>haar</td>
<td>r</td>
</tr>
<tr>
<td>hem</td>
<td>m</td>
</tr>
<tr>
<td>het</td>
<td>t</td>
</tr>
<tr>
<td>&quot;her&quot;</td>
<td></td>
</tr>
<tr>
<td>&quot;him&quot;</td>
<td></td>
</tr>
<tr>
<td>&quot;it&quot;</td>
<td></td>
</tr>
</tbody>
</table>

In Scandinavian languages, the relevant contrast is provided by the difference between enclitic articles and pronouns. The enclitic determiners only consist of the morphemes realizing phi-features and lack the d- or the h-

---

18 A concurrent analysis of (47b) is that den is a weak pronoun which has undergone vacuous movement, under the additional hypothesis that the past participle has been moved to the functional projection containing participle morphology. This could also explain why a clitic pronoun such as n (lacking the support, see Section 6, below) can sometimes be found in post-participle position (as pointed out by an anonymous reviewer):

(i)  

Vir har ikke sett n.
we have not seen him

19 As for German es, the question arises as to whether es should also be regarded as a morpheme of support. At least for those speakers who can marginally coordinate es if stressed and pronounced with a long [e], it seems possible to consider the es of es as a support on a par with the ih of ihm. The question remains open as to whether the different phonological form of the support is a hint for a different syntactic status.
morpheme which appears on weak pronouns (see also fn. 16):\(^{20}\)

(52) \begin{align*}
\text{WEAK} & \quad \text{CLITIC (determiner)} \\
\text{den} & \quad \text{stol-en} \quad "\text{chair-the}" \\
\text{han} & \quad \text{hus-et} \quad "\text{house-the}" \\
\text{det} & \quad \text{det}
\end{align*}

In Italian, the form \text{loro} is a complex form containing the support morpheme \text{r}, which is never found on clitic pronouns:\(^{21}\)

(53) \begin{align*}
\text{WEAK} & \quad \text{CLITIC} \\
\text{lo-\text{r-o}} & \quad \text{gli/le; lo/la/etc.}
\end{align*}

The question arises as to whether the support is an independent syntactic head which projects an XP according to \(X^\prime\)-theory, or is not present in the syntactic tree, being inserted by rules of the morphological component (Word Synthesis rules in the framework proposed by Halle 1991). Suppose that the support is the realization of a syntactic head and projects an XP. This means that weak pronouns have a more complex internal structure than clitics. The structures in (6) and (33) must be reformulated as in (54) (according to the Mirror Principle of Baker (1985), SuppP must be lower in the structure than \(D^o\), since the support appears first in the linear morpheme order):

(54) \begin{align*}
\text{a. strong} & \quad \text{b. weak} & \quad \text{c. clitic} \\
\text{DP} & \quad \text{DP} & \quad \text{DP} \\
\bigtriangleup & \quad \bigtriangleup & \quad \bigtriangleup \\
\text{SuppP} & \quad \text{SuppP} & \quad \text{SuppP} \\
\text{D}^o & \quad \text{D}^o & \quad \text{D}^o \\
\text{Supp}^o & \quad \text{Supp}^o & \quad \\
\text{NP} & \quad \text{NP} & \quad \\
\bigtriangleup & \quad \bigtriangleup & \quad \bigtriangleup \\
\text{N}^o & \quad \text{N}^o & \quad \\
\end{align*}

Notice that no "syntactic" support must be assumed for Romance clitics, although they appear to be bi-morphemic: 3rd person clitics can be analysed into the \(\lambda\) morpheme and the agreement morpheme marking phi-features: \(\text{\textit{l-o}}, \text{\textit{l-a}}, \text{\textit{l-s}}\).

\(^{20}\) The comparison between pronouns and determiners is legitimate also in the case of weak pronouns (see Section 2. for clitics). Notice that Germanic languages also display supported determiners:

(i) \begin{align*}
\text{a.} & \quad \text{hus-et} \quad \text{house-the} \\
\text{b.} & \quad \text{det stora huset} \quad \text{(Swedish)} \\
\quad & \quad \text{the big house}
\end{align*}

(ii) \begin{align*}
\text{a.} & \quad \text{vom Kind} \quad \text{of the \textit{DAT} child} \\
\text{b.} & \quad \text{von dem Kind} \quad \text{(German)} \\
\quad & \quad \text{of the \textit{DAT} child}
\end{align*}

The syntactic status of the \(\text{\textit{d}}\) morpheme and the distribution of supported determiners will not be discussed here.

\(^{21}\) The final \(\text{o}\) in \text{loro} can be viewed as a word marker in the sense of Harris (1991); \(\text{o}\) is the unmarked word marker, which occurs in adverbs and non-agreeing past participles and makes no reference to gender. As a matter of fact, \text{loro} is not inflected for gender, not as a pronoun, nor as a possessive (\text{la loro casa} "the\text{\textit{FEM}} their house\text{\textit{FEM}}", vs. \text{la sua casa} "the\text{\textit{FEM}} his\text{\textit{FEM}} house\text{\textit{FEM}}").
etc. There are reasons to believe that the \( \downarrow \) morpheme, which for the ease of exposition will be called L-support, has a different status from the support found in weak pronouns:

a) no support appears in Germanic clitic pronouns, which only consist of the case morpheme, as in German, or of the agreement morpheme, as in Dutch (see (50)-(51) above). In Romance languages, on the other hand, the agreement morpheme is usually not sufficient to characterize a clitic pronoun: \(^{22}\)

\[
\begin{align*}
(55) & \quad \text{a. German m} & (\text{instead of \( \text{ihn} \)}) \\
& & \text{him} \\
& \quad \text{b. Dutch r} & (\text{instead of \( \text{haar} \)}) \\
& & \text{her}
\end{align*}
\]

\[
\begin{align*}
(56) & \quad \text{a. Italian *a} & (\text{instead of \( \text{la} \)}) \\
& & \text{her} \\
& \quad \text{b. French *a} & (\text{instead of \( \text{la} \)}) \\
& & \text{her}
\end{align*}
\]

b) the support found in weak pronouns disappears in demonstratives, whereas the L-support is still found in demonstratives:

\[
\begin{align*}
(57) & \quad \text{German \( \text{diesen} \)} & (\text{cf. \( \text{*diesihn} \)}) \\
& & \text{this}^{\text{ACC}} \\
(58) & \quad \text{Italian \( \text{quello} \)} & (\text{cf. \( \text{*que-o} \)}) \\
& & \text{that}
\end{align*}
\]

c) in the Italian weak pronoun \( \text{loro} \), the L-support co-occurs with the syntactic support.

We can thus conclude that the two supports have a different status, in particular there is no equivalent of the L-support in Germanic languages. Differently from the support found in weak pronouns, it is reasonable to propose that the L-support is introduced by the Word Synthesis rules of the morphological component (cf. Halle 1991) and is therefore not present in the syntactic tree.

The morphological complexity of weak pronouns, in our terms the fact that they display a support, is thus the cause of the fact that they can be analysed as strong pronouns, which are also morphologically complex words. Consequently, it is possible to find the homophonous strong counterpart of a weak pronoun in syntactic positions open to full DPs. On the other hand, clitics do not display a support, and therefore can never be analysed as strong pronouns: this has the consequence that they must always undergo syntactic movement.

CONCLUSIONS

In this paper, some aspects of the syntax of pronouns have been discussed. In particular, we have proposed that different pronouns have a different internal structure, and a close connection has been established between the internal structure of pronouns and their syntactic distribution.

Strong pronouns are generated as N*’s, project the full nominal structure, and move DP-externally to D*. They behave like full DPs in that they do not undergo syntactic movement.

---

\(^{22}\) The paradigm found in Galician (cf. Uriagereka 1992) can be accounted for in morphophonological terms and cannot count as a counterexample to the claim made in the text:

\[
\begin{align*}
(\text{l}) & \quad \text{a. Todo o mundo a veu.} \\
& & \text{everyone it saw} \\
& \quad \text{b. Moita xente veu.} \\
& & \text{many people saw it} \\
& \quad \text{c. Ouvimo-lo.} \\
& & \text{heard [we] it}
\end{align*}
\]
Clitic pronouns are D⁰s and lack the lexical NP projection. This explains 1) why both in Romance and Germanic languages, they are homophonous either with determiners or with case morphemes, and 2) under the hypothesis that elements without lexical content are not visible to LF-rules, why they must be moved in the syntax to a derived position.

Weak pronouns share with clitics the property of lacking the lexical projection, with the consequence of obligatorily undergoing syntactic movement; however, weak pronouns are more complex than clitics since they contain a morpheme of support, which is represented in the syntactic tree as a further functional projection. Since this morpheme is displayed by strong pronouns as well, it is very often the case that weak pronouns are homophonous with strong pronouns.

The evidence discussed in favour of the different categorization of pronouns comes from both syntactic and morphological considerations, as well as from diachronic data.

APPENDIX: THE GERMAN DATIVE PLURAL PRONOUN IHNFEN

The proposed analysis makes the prediction that a pronoun which displays the nominal part of the DP cannot be analysed as a weak pronoun, but will qualify unambiguously as a strong pronoun. This prediction seems to be incorrect for one pronoun. The German dative plural pronoun ihnen is the only pronoun of the language which has a case ending different from that of the corresponding definite article. It displays a n morpheme which is not present in the article:

(59) a. mit dem Kind vs. mit ihm
with the child with him
b. mit den Kindern vs. mit ihnen
with the children with them

This additional morpheme is the same as the n morpheme appearing on the noun in the dative plural, (60a), which, following Giusti (1992, this volume), can be analysed as a case agreement morpheme. Suppose that the agreement procedure which applies when N⁰ is a noun also applies when N⁰ is a pronoun. It follows that ihnen can be considered a morphologically complex form and analysed as in (60b) (where the vowel [e] is presumably inserted for phonetic reasons):23

(60) a. mit den Kinder-n
b. mit ihn-e-n

If this analysis is correct, the morphological difference between pronouns and articles found in (59b) receives a principled account. Furthermore, it implies that ihnen must be categorised as N⁰.24

The presence of the case morpheme n, which appears on nouns, forces the analysis of ihnen as containing

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23 The same holds for the strong pronoun denen "to-them", as expected.

24 In German, relative wh-words display the same morphological forms as articles. Since they occur in specCP, they are full DPs. Given our analysis of ihnen, we expect that relative wh-words differ from articles in the dative plural. The expectation is borne out, thus confirming the correctness of our hypothesis:

(i) 
die Kinder, denen ich geholfen habe, ...
the children, to-whom I helped have
the NP projection. Thus, it should only qualify as a strong pronoun and never be used as a weak pronoun. This prediction is however incorrect: \textit{ihnen} can have non-human referents, a possibility not available to strong pronouns (as originally observed by Kayne 1975). Compare (61a) with (61b,c), containing the strong counterpart of the same pronoun, and (61) with (62), containing a pronoun with human reference:

(61) a. Ich habe ihnen zwei Seiten herausgerissen. (ihnen = den Büchern)
    I have to-them two pages torn out (to-them = to-the books)

b. *Ich habe IHNEN zwei Seiten herausgerissen.


(62) a. Ich habe ihnen die Hände geschüttelt.
    I have to-them the hands shaken

b. Ich habe IHNEN die Hände geschüttelt.

c. Ich habe [ihnen und ihnen] die Hände geschüttelt.

If this discussion is correct, it appears that the internal structure of a weak pronoun can include the NP projection. This means that under the "different structure" hypothesis, the difference between strong and weak pronouns should be seen not only in the presence or absence of the NP-projection, but in the presence or absence of some other projection. Without trying here to address this question, it is worth while to notice that \textit{ihnen} has a special behavior with respect to other weak pronouns:

a) contrary to other dative pronouns, it cannot represent the host for the cliticized form \textit{es} of the 3rd person neuter pronoun \textit{es}:

(63) a. daß ihm's Hans gegeben hat.
    that to-him-it Hans given has

b. *daß ihnen's Hans gegeben hat.

b) \textit{ihnen} does not have a clitic counterpart \textit{nen} in those spoken and dialectal (Southern) varieties of German which have clitics (see Section 1.). In other terms, the analysis of this pronoun as being simply D° is not available:

(64) a. daß die Mutter m was gegeben hat.
    that the mother to-him something given has

b. *daß die Mutter nen was gegeben hat.
    that the mother to-them something given has

\[\text{---}\]

\[25\] The oddness of (63b) cannot be attributed to a phonological constraint on the sequence [ns], as suggested by A. Tomaselli (p.c.). Consider the possibility of the sequence in words such as \textit{Hans, uns} "us", and the fact that cliticization of \textit{es} is grammatical with a verb, which ends in [n] in the 3rd person plural:

(i) Sie haben's gelesen.
    they have it read

\[\text{---}\]

\[26\] There could be an independent reason for the ungrammaticality of the form \textit{nen}, as suggested by L. Rizzi (p.c.): Truncation could be impossible in bisyllabic words. Since in German a long vowel only occurs in open syllables, syllabification must be: [iː-nen]. Thus, the phonological constraint would prevent truncation of the first syllable. Notice that this should be stated as a language-specific constraint, since in the similar truncation found in Italian, \textit{sto} [sto] from \textit{questo} [que-sto], truncation can apply to the first syllable.
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