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DEFICIENT PRONOUNS: A VIEW FROM GERMANIC
A Study in the Unified Description of
*Germanic and Romance**

I. THE GERMAN PARADOX

At first sight, the German system of personal pronouns seems banal. Apparently, pronouns behave just like noun phrases, be it in V2-initial position, (1), or in Mittelfeld, (2), with subjects, (1a) and (2a), or objects, (1b) and (2b):[1]

(1) a. {**Hans** ; **Er**} ist   sehr   nett.
           {*Hans* ; *he* } *is*   *very*   *nice*

      b. {**Hans** ; **Ihn**} haben alle   gesehen.
           {*Hans* ; *him* } *have*   *all*   *seen*

(2) a. Heute   ist   {**Hans** ; **er**} sehr   nett.
           Today   *is*   {*Hans* ; *he*} *very*   *nice*

      b. Alle haben {**Hans** ; **ihn**} gesehen.
           all   *have* {*Hans* ; *him*} *seen*

But it has long been noticed that there is one strange exception in this otherwise regular and unsurprising system: the third person neuter singular *es*. One "bizarre" property of *es* is that it cannot be coordinated; again this holds of all positions (V2 / Mittelfeld; subject / object):

(3) a. {$\sqrt{}$**Dieses Buch** ; *****Es**} und diese Zeitungen   sind sehr schön
           { *this book* ; *it* }   *and these newspapers* *are*   *very*   *pretty*

      b. {$\sqrt{}$**Dieses Buch** ; *****Es**} und diese Zeitungen   hat   er gekauft
           { *this book* ; *it* }   *and these newspapers*   *has* *he* *bought*

(4) a. . . ., daß {$\sqrt{}$**dieses Buch** ; *****es**} und diese Zeitungen sehr schön sind
           that { *this book* ; *it* }   *and these newspapers very pretty are*

      b. . . ., daß er {$\sqrt{}$**dieses Buch** ; *****es**} und diese Zeitungen   gekauft hat
           that he { *this book* ; *it* }   *and these newspapers bought has*

In addition, *es* can not be modified:

(5)   Sogar   {√dieses Buch ; *es}   ist   auf den Boden   gefallen.
      even   { *this book ; it* }   *is*   *on the floor*   *fallen*

Also, *es* has a very limited distribution: it is confined to extremely local positions with respect to its verb, as in (6a) and (7a). This means that topicalization is impossible. Again this restriction holds both for object *es*, which cannot be topicalized out of the Mittelfeld to a V2-initial position, (6b), and for subject *es*, which cannot be topicalized to a higher clause, (7b):

(6)   a.   Hans   hat   {√dieses Buch ; √es}   gestern gekauft.
           Hans   *has*   { *this book ; it* }   *yesterday bought*

      b.   {√Dieses Buch ; *Es}   hat   Hans   gestern gekauft.
           { *this book ; it* }   *has*   *Hans*   *yesterday bought*

(7)   a.   {√Dieses Buch ; √Es}   ist   sehr   teuer.
           { *this book ; it* }   *is*   *very*   *expensive*

      b.   {√Dieses Buch ; *Es}   glaube ich   ist   sehr   teuer.
           { *this book ; it* }   *think I*   *is*   *very*   *expensive*

None of this is true of the other personal pronouns, e.g. those in (1) and (2), which behave in these respects just like noun phrases:

(8)   a.   √   Er und sein Bruder sind sehr nett.   (coordination)
               he and his brother are very nice

      b.   √   Sogar er ist sehr nett.   (modification)
               even he is very nice

      c.   √   Er glaube ich ist sehr nett.   (locality, subject)
               he think I is very nice

      d.   √   Ihn habe ich gesehen.   (locality, object)
               him have I seen

This paradox of utter "normality" hosting utter "strangeness" is what gives the German system of personal pronouns its distinctive flavor. It is also a state of affairs which has resisted successful analysis.

The most natural line of explanation which has been investigated to resolve this paradox, draws on the notion of "classes" of personal pronouns. In several languages, one and the same bundle of {Case, gender, number, person} features can

be realized in two distinct ways. This is, for instance the case of French, where personal pronouns systematically have two realizations. The bundle {accusative, feminine, singular, third} can for instance be realized as either *la* or *elle*.

The *la*-type and *elle*-type pronouns have very different grammatical properties. So much so, that the best treatment is to postulate the existence of two underlying classes of pronouns, often called **clitic** pronouns and **strong** pronouns. French pronouns are then seen as coming in two forms: one clitic form (*la*) and one strong form (*elle*).

It is natural then to extend this distinction in classes of pronouns to the German paradox. Maybe *es* has grammatical properties very different from the other German personal pronouns because *es* belongs to a different **class** of pronouns. This reasoning seems promising, not only because it provides a handle on the paradox, but also because there is a close parallelism between the clitic/strong distinction and the *es*/others distinction.

Strong pronouns behave just like noun phrases, and this was also the case of most German personal pronouns, (1-2). On the other hand, clitic pronouns are subject to restrictions which are strikingly parallel to those of *es*. Thus clitic pronouns cannot be coordinated, they cannot be modified, and they must remain in a very local relationship with the verb to which they are linked. This is illustrated here, for clitic pronouns in both French and Slovak:

(9)   Jean **le**   trouve gentil.
      Jean him   *finds nice*

      a. * Jean **le** et son frère   trouve gentil.
             Jean him and his brother   *finds nice*

      b. * Jean seulement **le**   trouve gentil.
             Jean only him   *finds nice*

      c.   {√Jean ; *le },   Marie croit que Pierre l'apprécie.
             { *Jean ; him* }   *Marie thinks that Pierre him appreciates*

(10) Včera   **ho**   skoro   presvedčil.
      yesterday   *him*   *almost*   *he-convinced*

      a. * Včera   **ho** a jeho brata   skoro   presvedčil.
             yesterday   *him and his brother*   *almost*   *he-convinced*

      b. * Včera   iba **ho**   skoro   presvedčil.
             yesterday   *only him*   *almost*   *he-convinced*

      c. * Včera   **ho**   povedal že   skoro   presvedčil.
             yesterday   *him*   *he-said that*   *almost*   *he-convinced*

Thus, it seems as though the paradox is resolved. The "strange" personal pronoun *es* is simply a clitic personal pronoun, while other German personal pronouns are strong personal pronouns. This would make sense of the similarity between (3-6) on the one hand and (9-10) on the other. Indeed, it is an extremely striking fact about clitic pronouns that they have the same properties across widely distinct languages, and the *es-il-ho* parallelism would simply be one more example of this general parallelism.

But this is also where problems start again: in several respects *es* does **not** behave like a clitic personal pronoun, and this is a very troublesome fact, given the extensive uniformity of clitic pronouns across languages. Thus, object clitics are cross-linguistically unable to occur after prepositions, only strong forms can occur there, but the German *es* does not pattern with clitics with respect to this property:[2]

(11) a. Je pars avec { *le ; √lui }.
 I leave with him

 b. Isiel som k { *mu ; √njemu}.
 gone I am to him

(12) Ich kann ohne es nicht leben.
 I can without it not live

Another difference between *es* and clitics is that all the clitics we know of appear in one of two positions: adjacent to the verb, as the French *le* in (9), or in what has been characterized as "the second position of the clause", as the Slovak *ho* in (10). Once again, this is a pattern found in language after language. But the German *es* behaves differently, appearing neither next to the verb, nor as the second constituent of the clause:

(13) . . ., [daß] [die Mutti] [dem Hans] es jetzt gezeigt hat.
 that the mom to-the Hans it now shown has

(further differences, concerning subject *es*, will be illustrated in section 2).

The paradox thus remains, perhaps more intriguing than before: German personal pronouns seem to be strong pronouns across the board, except for one thoroughly strange element in their midst, *es*, which is somehow clitic-like, but not quite a clitic.

This paradox, and its counterparts in other Germanic languages has spawned a long chronicle of research (to cite but a few: Haider 1984, Travis 1984, Jaspers 1989, Tomaselli 1990, Abraham 1991, Cardinaletti & Roberts 1991, Holmberg 1991, Vikner & Schwartz 1991, Zwart 1991, 1993, Cardinaletti 1992b, Haegeman 1992b, 1993a, Lenerz 1992, Tomaselli & Poletto 1992, Beermann 1993), but has so far resisted explanation.

2. THE ITALIAN SOLUTION

2.1. *The Parallelism*

An important clue to resolving the paradox described above is that some languages which have regular clitic and strong pronouns, **also have "strange pronouns"** which pattern neither with clitic pronouns nor with strong pronouns. For instance, this is the case in Italian (and it is also true of French object pronouns in imperative clauses, cf. Cardinaletti & Starke 1994: fn. 32):

(14) ITALIAN (Cardinaletti 1991)
 a. Non { *a lui } dirò mai { *a lui } tutto {a lui}.
 b. Non { *loro} dirò mai {loro} tutto { *loro}.

 c. Non {gli} dirò mai { *gli} tutto { *gli}.
 not to-him/to-them I-will-say never everything

The pronoun *gli* 'to-him' in (14c) is a clitic, and all Italian pronominal clitics would appear in that position. Obviously, the aprepositional dative *loro* 'to-them' in (14b) is not a clitic: it has different distributional properties. On the other hand, it is obviously not a strong form, like *a lui* 'to-him' in (14a), which appears in the position where a full noun phrase would. It is a "strange in-between" pronoun.[3]

The similarity between the German *es* and the Italian *loro* is magnified by the fact that *loro* has the same clitic-like properties as *es*: it cannot be coordinated, (15a), it cannot be modified, (15b), and its displacement from the usual NP position is strictly local, (15c), while all of these constructions are possible with strong pronominal forms (and with full noun phrases), (16):

(15) a. * Non metterei mai **loro e loro/ai miei figli** il cappuccio.
 not I-will-put never to-them and to-them / to my children the cap

 b. * Non metterei mai **solo loro** il cappuccio.
 not I-will-put never only to-them the cap

 c. * **Loro,** non metterei mai il cappuccio.
 to-them not I-will-put never the cap

(16) a. √ Non metterei mai il cappuccio **a lui e a Gianni.**
 not I-will-put never the cap to him and to Gianni

 b. √ Non metterei mai il cappuccio **solo a lui.**
 not I-will-put never the cap only to him

c. √ **A lui,**   non metterei mai   il cappuccio.
    to him   *not I-will-put never*   *the cap*

Finally, both *es* and *loro* are exempt from any adjacency requirement: contrary to Romance clitics, they need not appear adjacent to any verbal form (cf. German (13) and Italian (14b)), and contrary to other clitics, they are not placed in the second position of the clause.

The German object *es* and the Italian dative *loro* are thus strictly parallel. In fact, the parallelism goes one step further: Italian also has counterparts of the German subject *es*. Next to the strong pronoun *lui* in (17a), Italian possesses overt clitic-like pronouns such as *egli* in (17b). *Egli* contrasts with the clitic subjects of Northern Italian dialects which must remain adjacent to the verb, as in the Venitian (17c):

(17) a. √**Lui**   questo libro   forse   lo ha già letto.
     b. {*****Egli}** questo libro   {√**egli**} forse   lo ha già letto.

     c. {*****El}**   sto libro   {*****el}**   forse   {√**el}** lo ga za leto.
       he   *this book*   *he*   *perhaps he*   *it has already read*

Pronouns like *egli* are exactly parallel to the German subject *es*: they cannot be coordinated, they cannot be modified, their displacement is strictly local, and they need not be adjacent to a verbal form.

The Italian paradigms clearly show that there are three classes of pronouns (not two). Next to strong pronouns and clitic pronouns, there is another type of pronoun, in between clitic and strong, but reducible to neither. Following the terminology used to refer to clitic-like Germanic pronouns (cf. den Besten 1989: 25 and Koster 1978: 209), we call this third class of pronouns "weak" personal pronouns. The term "deficient" is used for the set of both clitic and weak pronouns, to the exclusion of strong forms. For the motivation of this term, cf. Cardinaletti & Starke 1994.

In turn, the existence of a third class of pronouns provides a principled solution to the German paradox. We saw above that the notion of "classes of pronouns" came very close to explaining the German mystery (if *es* belonged to a class different from other German personal pronouns). But the mystery remained because there was no coherent way of fitting *es* into either of the two classes. Now that a closer look at the data uncovered the existence of three classes, the situation is very different: *es* has the same properties as the Italian *loro*, *egli*, the French *il* (see below (29a)), or other similar pronouns of the third type. It is no longer an "utterly strange" pronoun in the midst of a normal system.

From this it follows that the German system of personal pronouns is not mysterious, or strange, or paradoxical. It is a normal instantiation of the underlying tripartite system of personal pronouns. Put differently, the German system of personal pronouns is just like its Italian counterpart. The situation may be represented as follows (this table will to be slightly revised below):

(18)

	Italian		German	
	3.sg.m. dat	*3.pl.dat*	*3.sg.m.acc*	*3.sg.n.acc*
clitic	gli	—	—	—
weak	—	loro	—	es
strong	a lui	a loro	ihn	—

In fact, this tripartition is not only a property of German and Italian. All personal pronouns we have examined—in English, French, Hebrew, Gun and other languages—fall into one of the three classes (cf. Cardinaletti & Starke 1994). It is thus tempting to assume that there is only one system of personal pronouns provided by the human language capacity, with languages differing only as to which class they lexicalize.

2.2. *Some Predictions of the Common System*

Not only does the above provide a solution to the German paradox, but it also makes a range of testable predictions. If German and Italian share the same underlying system of personal pronouns, then the properties known to hold of the Italian system should also be found in German. As we will now show, they are:

• *Prediction #1: human reference.* An extremely surprising property of personal pronouns is that some of them can have only human referents. More precisely, strong pronouns can refer only to human, while clitic and weak pronouns can refer to any entity, human and non-human. In the following Italian example, *cappuccio* can either mean 'cap' (in which case *loro* should refer to a human) or a 'pen-top' (in which case *loro* shouldn't refer to a human). What we observe is that the deficient (aprepositional) *loro* can have both readings, but the strong form *a loro* can refer only to the human (i.e. not to pens):

                                      <+ hum.> <- hum.>

(19) a. Non metterò mai   **loro**   il cappuccio   √   √
      b. Non metterò mai   il cappuccio   **a loro**.   √   *
      not I-will-put never to-them the cap/pen-top to them

This property of the system of personal pronouns is all the more surprising in that it is identical in many unrelated languages (cf. Cardinaletti & Starke 1994).

Now remember that deficient pronouns cannot be coordinated. That means that exactly those personal pronouns which can refer to non-humans, can also not be coordinated. So that by a strange twist of fate, coordinated personal pronouns can never refer to non-human entities:

                                    <+hum.> <- hum.>

(20) a. * Non metterò mai **loro** e loro il cappuccio.   √   √
        not I-will-put never to-them and to-them the cap/pen-top

b. Non metterò mai il cappuccio **a loro** e alle altre   <+hum.> <- hum.>
                                                √   *
not I-will-put never the cap/pen-top to them and to-the others

If we are correct in our reasoning that the German system of personal pronouns is not bizarre, but in fact underlyingly identical to that of Italian, similar restrictions should be found in German. The first prediction is thus that German coordinated personal pronouns cannot refer to non-human entities. Equivalently, German personal pronouns referring to non-human entities cannot be coordinated. This is a robust judgment. Personal pronouns which refer to non-human entities resist coordination:

(21) a. √ Maria hat **ihn** und den anderen eingeladen.   (ihn = Karl)
     b. * Maria hat **ihn** und den anderen repariert   (ihn = den Wagen)
       Maria   has   him and the other invited/repaired (him = Karl / the car)

(22) a. √ **Er** und sein Bruder   sind sehr nett.   (er = Karl)
       he and his brother   are   very nice   (he = Karl)

     b. * **Er** und der daneben   sind nicht verständlich. (er = der Fahrplan)
       he and the one next   are not comprehensible (he = the time-table)

The asymmetry between the first *ihn* which can be coordinated but cannot refer to non-human entities, and the *ihn* which cannot be coordinated but can refer to non-human entities is a direct consequence of the common underlying pronominal system, given that *ihn* is ambiguous: one form of *ihn* is weak (non-coordinable, can refer to non-human), and the other is strong (coordinable, only human).

On the other hand, *es* is the only German weak pronoun which does not have a strong personal pronoun counterpart. The [±human] facts provide a principled explanation for the absence of a strong *es*: there can be no strong form which refers to non-human entities.[4]

Note that we have chosen coordination only for illustrative purposes, but the same holds for other properties. In fact, since only deficient pronouns can refer to non-human entities, German pronouns which refer to non-human entities should be deficient and should thus share all properties with *es*, not only the absence of coordination. Again this is true. Consider locality: it was illustrated above that *ihn* does not need to remain in a local relation to the verb to which it is linked, (6b) versus (8d). But it suffices to change the referent of *ihn* to [-human] and non-local movement (to the sentence-initial position) becomes impossible, (23), just like with *es*. The same contrast is found with the subject counterparts in (24) (compare to (7b) and (8c) above):

(23) a. √ **Ihn** hat Maria gesagt, daß Hans schon   eingeladen hat.
       him has Maria said   that Hans already invited   has
                            (ihn = seinen Freund = his friend)

     b. * **Ihn** hat Maria gesagt, daß Hans schon   gekauft hat.
       him has Maria said   that Hans already bought has
                            (ihn = den Wagen = the car)

     c. * **Es** hat Maria gesagt, daß Hans schon   gekauft hat.
       it has Maria said   that Hans already bought has
                            (es = das Auto = the car)

(24) a. √ **Er** glaube ich ist   sehr nett.   (er = sein Freund)
       he think I   is   very nice   *(he = his friend)*

     b. * **Er** glaube ich ist   sehr teuer.   (er = der Zug)
       he think I   is   very expensive   *(he = the train)*

     c. * **Es** glaube ich ist   sehr teuer.   (es = das Auto)
       he think I   is   very expensive   *(it = the car)*

The same is true of modification: while it was illustrated above that *er* can be modified, (8b), this is true only if it refers to human entities (the same holds of accusative *ihn*).[5]

In sum, the first set of predictions clearly confirms the hypothesis that German shares its underlying syntax of personal pronouns with other languages. More precisely: (i) *es* is not an exception within German, i.e. all non-human pronouns behave like *es*, (ii) *es* is not an exception within human language, i.e. there is a large class of pronouns (weak pronouns), neither clitic nor strong, which behave like it. Table (18) accordingly becomes:

(25)

	Italian		German	
	3.sg.m.dat	*3.pl.dat*	*3.sg.m.acc*	*3.sg.n.acc*
clitic	gli	—	—	—
weak	—	loro	ihn	es
strong	a lui	a loro	ihn	—

• *Prediction #2: maximal projection.* Proceeding to more abstract properties, one syntactic difference between clitic and weak pronouns their position in surface phrase-structure. Clitics behave as heads: when the verb (a head) to which they are adjacent is displaced, they are displaced along with it:

(26) a. Se Gianni l'avesse organizzato con un certo anticipo, ...
       if   Gianni it had   organized   with a certain advance, ...

b. L'avesse   Gianni   organizzato   con un certo anticipo, . . .
   Had   *Gianni* *organized*   *with a certain advance, . . .*

This is taken to indicate that the clitic is literally attached to the verb, from which it follows that it is itself a head.

On the other hand, the aprepositional dative *loro* occupies a phrasal position (XP), cf. Cardinaletti & Starke 1993 for the evidence. (The same conclusion was reached by Kayne 1983 and Rizzi 1986 for French deficient pronominal subjects, (29a), which they took to differ from both object clitics and subject clitics of Northern Italian dialects in being phrasal, i.e. XP.)

If we are correct in our reasoning that German *es*, and other German pronouns in their non-human interpretation, are straightforward instances of weak pronouns, then these pronouns should occupy positions reserved for maximal projections, and should not behave as heads. There is evidence for this, both in V2 constructions and with prepositions:

(27) a. **Es** ist zu teuer.

     b. **Er** ist zu teuer   (dieser Zug).
         it/he *is* *too expensive*   (*this train*)

(28) a. Ich kann ohne   **es** nicht leben.
        I   can   without it   not   live

     b. (Dieser Zug ist sehr schnell,)
         this train is very fast
         ich könnte ohne   **ihn** nicht   pünktlich   ankommen.
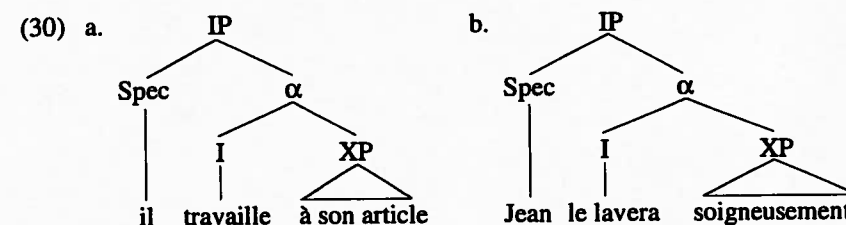   *I   could   without it   not   punctually   arrive*

In (27) the weak pronouns occupy the initial position of a V2 clause. These clauses are known to be uniformly of the type *[XP V*... which appears to be V2. From this it follows that the weak subject pronouns are occupying an XP position (see section 4.1 for evidence that a *pro+clitic* analysis is not appropriate). In (28), the German weak pronouns are objects of a preposition, again a position reserved for maximal projections.

• *Prediction #3: sentence coordination.* Since weak pronouns are maximal projections, they do not amalgamate with a verb, but since clitics are heads, these can in some situations amalgamate with the verb. Rizzi (1986) noted that this provided an explanation for coordination asymmetries:

(29) a. √ Il travaille à son article   et   — pense à ses problèmes.
         he works at his paper   and — thinks of his problems

b. * Jean **le** lavera soigneusement   et   — remettra en place
      Jean it will-wash carefully   and   — will-put back into place

In (29b) the clitic *le* must be repeated in order for the sentence to be felicitous, √*Jean le lavera soigneusement et le remettra en place*. This asymmetry follows from the fact that in (29b) there is no constituent to be coordinated, i.e. there is no constituent that excludes the clitic but includes the verb. On the other hand, there is such a constituent in (29a). The contrast is graphically depicted in (30), where α is the relevant node:

(30) a.
```
        IP
       /  \
     Spec   α
      |    / \
      il   I   XP
      travaille  à son article
```
b.
```
        IP
       /  \
     Spec   α
      |    / \
      Jean le lavera   I   XP
                     soigneusement
```

More minimally, the same contrast obtains between deficient subjects in Standard Italian, those of the *egli*-type, which can be omitted in the second conjunct, and the deficient subjects of some Northern Italian varieties, which cannot:

(31) a. √ **Egli** canta   e   — balla benissimo.   (Standard Italian)
        he sings   and — dances very well

     b. * **La** canta   e   — bala.   (Trentino)
         she sings   and — dances

Exactly the same explanation holds: *egli* is a weak pronoun and is therefore in a specifier position, like *il* in (30a), and can accordingly be omitted in the second conjunct. On the other hand, *la* is a clitic, like *le* in (30b), and thus cannot be omitted in the second conjunct.

Now if *es* is a weak pronoun, occupying the initial specifier in V2 constructions, it should be possible to leave *es* (and the other German deficient pronouns) out of the second conjunct, exactly as with *il* and *egli*, in contrast to French *le* and Northern Italian *la*:

(32) a. √ **Es** kostet viel   und — schmeckt auch nicht gut   (es = das Eis)

     b. √ **Er** kostet viel   und — schmeckt auch nicht gut (er = der Kuchen)
        it/he costs much and — tastes also not good   (the ice-cream/cake)

Again, this is the expected parallelism, confirming the similarity between the Romance and the Germanic pronominal system, and more specifically, that be-

tween weak pronouns such as the German *es*, the French *il* and the Italian *egli*, or dative *loro*.

• *Prediction #4: rigid placement.* A characteristic of deficient pronouns is their rigid placement: they cannot appear "outside" of their clause, e.g. topicalized or dislocated, nor in their basic (thematic) position:

(33) a. {√lui},   questo libro, {√lui} lo ha comprato   {√lui}
     a' {*egli}, questo libro, {√egli} lo ha comprato   {*egli}
        he   this book   it has bought

     b. {√a lui}, Maria, {√a lui} ha dato   questo libro {√a lui} ieri {√a lui}
        to him   Maria   has given this book   yesterday

     b' {*loro}, M. {*loro} ha dato {√loro} questo libro {*loro} ieri {*loro}
        to-them M.   has given   this book   yesterday

The rigid position of subject weak pronouns is systematically above (i.e. to the left of) the rigid position of object weak pronouns:

(34) a. Egli ha dato   **loro**   questo libro.
        he   has given to-them this book

     b. Il a   **tout** fait.
        he has all   done

The distribution of weak pronouns thus seems to mirror the generally assumed distribution of Spec-AgrS and Spec-AgrO, a fact captured by the following generalization: "Weak pronouns are only licensed in Spec-Agr, where they are in a local relation with Case features" (cf. Cardinaletti & Starke 1994).

This generalization about the distribution of weak pronouns also holds for German. Whereas full phrases in the Mittelfeld are relatively free in their distribution, the German *es* and the other deficient pronouns are rigidly placed. Compare (36b), where *ihn = den Parkschein*, with (35b):

(35) a. √ ..., daß **das Gerät**   dem Kunden   **den Parkschein**...
        that   the machine   to-the customer the parking sticker

     b. √ ..., daß **den Parkschein**   dem Kunden   **das Gerät**
        that   the parking sticker to-the customer the machine
        doppelt berechnet hat
        twice   counted   has

(36) a. √ ..., daß **es** **ihn** dem Kunden   doppelt berechnet hat
        that   it him   to-the customer twice   counted   has

     b. * ..., daß **ihn** **es** dem Kunden   doppelt berechnet hat
        that   him   it   to-the customer twice   counted   has

This can be captured by saying that a sequence of two *es*'s can be interpreted in only one way, as illustrated in (37). German speakers can interpret only the first *es* of (37a) as referring to the subject, and the second to the object, while the corresponding noun phrases in (37b-c) are freer in their ordering:

(37) a. ..., weil   **es**   **es**   gegessen hat
     b. ..., weil   **das Kind** **das Brot** gegessen hat
        because the child   the bread   eaten   has

     c. ..., weil   **das Brot** **das Kind** gegessen hat
        because the bread   the child   eaten   has

Again, German personal pronouns behave as we expect, if the German system is similar to its Romance counterpart.

• *Prediction #5: choose the most reduced.* In languages where deficient and strong personal pronouns exhibit different morphology, a simple sentence such as *John watches her* can in principle have two variants: one with the strong pronominal form and one with the deficient form. It turns out, however, that only one of the two is possible, the most reduced one:

(38) a. √ Jean **la** regarde.
        Jean her looks at

     b. * Jean   regarde **elle**.
        Jean   looks at her

However, the strong variant is not altogether excluded:

(39) a. √ Jean regarde **elle** et son frère.
        Jean looks at her and his brother

     b. √ Jean regarde seulement **elle**.
        Jean looks at only   her

Rather, the strong variant can be used **only if the deficient variant is not accessible.** This is neatly phrased as a general principle which requires that the most deficient form be used. If a clitic form is available it must be used, (38). When it is not

available, the strong form becomes (trivially) the most deficient one and can then be used, (39). On the surface, this yields a paradigm in which a pronoun must appear "to the left", unless it is coordinated or modified, in which case it can appear "to the right" (cf. above).

How does this apply to German? If the pronominal system is the same in German and Italian, the choice principle should be observable in both. But the homophony of the German strong-weak pairs (*ihn-ihn*, *sie-sie*) makes it difficult to verify. Consider however the following paradigm:

(40) a. Ich habe √**ihn**   gestern   eingeladen.
          I have   *him*   *yesterday*   *invited*

      b. Ich habe   gestern   *****ihn**   eingeladen.
          I have   *yesterday*   *him*   *invited*

      c. Ich habe   gestern   √**ihn** und Maria eingeladen.
          I have   *yesterday*   *him and Maria*   *invited*

      d. Ich habe   gestern   √**nur ihn**   eingeladen.
          I have   *yesterday*   *only him*   *invited*

At first sight, this paradigm appears quite arbitrary. Why is it that *ihn* is disallowed after the adverb, (40b), but is allowed exactly in those contexts where a strong pronoun would be forced in Italian, (40c-d)? Given the Choice Principle and the fact that the surface form *ihn* is ambiguous between two distinct entities (a weak and a strong personal pronoun), these facts become almost trivial. The weak *ihn* is chosen over its strong counterpart, and the strong (post-adverbial) pronoun can surface only if the weak one is independently impossible. In fact, the above paradigm is exactly parallel to Romance (cf. (38)-(40) above):

(41) a. Ich habe {√**ihn**} gestern {*****ihn**}   eingeladen.
          a′ Jean   {√**la**}   regarde {*****la**}

      b. Ich habe   gestern √**ihn und Maria** eingeladen.
          b′ Jean   regarde √**elle et son frère**

      c. Ich habe   gestern √**nur ihn**   eingeladen.
          c′ Jean   regarde √**seulement elle**

The tabulation of these examples is not meant to imply that the structures of the German and French examples are similar; only the parallelism in the distribution of the pronouns is relevant. Once again, this is a clear confirmation of the similarity of the German and Romance underlying systems, or more precisely, of the fact that German also has several classes of pronouns regulated by the Choice Principle.

There is another set of paradigms governed by the Choice Principle illustrating the similarity between German and Romance: the noun/pronoun asymmetries. Since full NPs do not have several distinct variants in the languages under discussion (i.e. they are mostly strong-only, with no weak or clitic variants), whereas personal pronouns do have several variants, the Choice Principle gives different results in the two cases: with nouns, it always allows the strong form (which is trivially the most reduced form available), but with pronouns it allows the strong form only in contexts excluding deficient forms, such as focalization, etc. Therefore, there should be some contexts in which (strong) full NPs can appear and strong pronouns cannot (unless contrasted, modified, etc.).

This is neatly illustrated by French. While the strong pronoun of (38b), repeated here as (42a), is impossible due to the Choice Principle as explained above, the same Choice Principle entails that a full NP in the same position is perfectly acceptable:

(42) a. * Jean   regarde   **elle**.

      b. √ Jean   regarde   **Marie**.
          Jean   *looks at*   *her/Marie*

We thus have a second paradigm illustrating the application of the Choice Principle to German: while the Choice Principle bans a post-adverbial strong pronoun in (41a), repeated as (43a), it cannot block a strong noun appearing in the same position, (43b):

(43) a. * Ich habe gestern   **ihn**   eingeladen.

      b. √ Ich habe gestern   **Hans**   eingeladen.
          I have   *yesterday*   *him/Hans*   *invited*

This asymmetry straightforwardly follows from the Choice Principle, thus giving new evidence for the similarity of the underlying Germanic and Romance systems.

The paradigms in (40)-(43) fall squarely into place under the minimal assumption that German is not strange, but that its pronouns work like all other pronominal systems we know: they all follow the principle: "choose the most deficient possible pronoun", which is independently motivated in other languages (and which is most plausibly a surface phenomenon to be derived from much deeper primitives).

These paradigms also make some important ancillary points. First, the weak *ihn* can be [+human]. It is not the case that non-human *ihn* is weak and human *ihn* is strong (which was a possible interpretation before): these paradigms also obtain with a [+human] *ihn*, the weak *ihn* is therefore open to both human and non-human interpretation (just as the French clitic *le* or the Italian clitic *lo*). The strong *ihn* however is only [+human] (just like the Romance strong pronouns).

Second, these paradigms show that all other German (object) pronouns have a weak form. Not only are 3rd person pronouns *ihn* and *sie* ambiguous between a weak

and a strong form, but the same holds for the 1st and 2nd person pronouns. This could not be seen before, given that no morphological clue indicates the presence of the weak form, and given that the human-reference test (only deficient forms can be non-human) is irrelevant to these cases. But now, since all three above paradigms remain unchanged with 1st and 2nd person pronouns, if we are to preserve the explanation of all these asymmetries based on one principle, the Choice Principle, it necessarily follows that all German 1st and 2nd person pronouns are ambiguous between a weak and a strong form.

Before leaving this topic, we would like to re-emphasize that the Choice Principle is by no means taken as a primitive principle of the grammar. It would be rather suspect as such, given its construction-specific character. We have used it as a descriptively adequate generalization in order to bring to the fore similarities between Romance and Germanic, and to confirm that German has weak pronouns. We trust however that the Choice Principle is an epiphenomenon, derived from the interaction of more general principles (cf. Cardinaletti & Starke 1994 for discussion and arguments to the effect that Economy of Representation is the underlying primitive).

2.3. *Properties of the Underlying System*

Summarizing, all predictions based on the hypothesis that the German system of personal pronouns is underlyingly identical to that of Romance (with *es* and the non-human personal pronouns belonging to the class of weak pronouns) are fulfilled. Taken together, facts about human reference, choice among pronoun-classes, rigidity of placement in the otherwise liberal Mittelfeld, coordination with shared subject pronouns, and XP vs. X° position of pronouns, provide what seems to us massive evidence for the "normality" of the German system. There is no *es*-paradox, or rather the *es*-paradox is the same as the Italian *loro*-paradox or the French *il*-paradox. All these paradoxes dissolve with the paradigms that indicate the existence of a third class of pronouns.
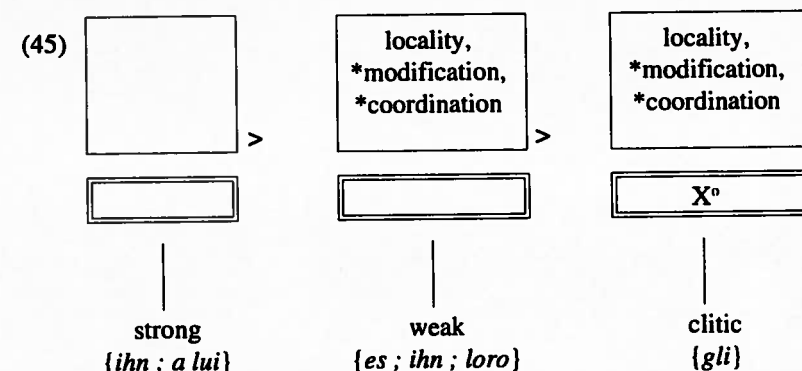
To take stock of our results, let us briefly examine the nature of the underlying system of personal pronouns. The category of weak pronouns is somewhat intermediate between strong pronouns and clitic pronouns. With the former, it shares the fact that it remains an XP on the surface (and other properties such as the possible retention of word-accent), while it shares with the latter the property of resisting coordination or modification. The situation is thus:

(44) a. clitic elements   are   deficient X°s.
       b. weak elements   are   deficient XPs.
       c. strong elements   are   non-deficient XPs.

(Non-deficient heads are the usual non-clitic heads, i.e. verbs, nouns, etc.) It might be important to note here that, strictly speaking, we are not adding anything to the standard theory of grammar by proposing this view of the pronominal system. The

two properties which are central to our claims, namely XP / X° and deficiency (= impossibility of coordination, modification, etc.), are properties which are already contained in any theory addressing the question of clitics. Furthermore, any such theory considers these two properties as independent: there are minimal pairs of heads, one of which is deficient, the other not (e.g. many Slavic auxiliaries). There is thus no covariation between being deficient and being X°. All theories thus contain the notion of weak pronoun as a logical possibility. To actually exclude the possibility of weak pronouns would require some kind of filter banning the combination of the property of being XP with the property of being deficient. Such considerations are important in the face of the superficial examination of facts which misleadingly gives the impression that we are adding an entity to grammatical theory by postulating weak pronouns.

The "deficient" properties of personal pronouns are organized as follows (these are only a small subset of the relevant properties, which extend to morphology, phonology and semantics):

(45)

	locality, *modification, *coordination	locality, *modification, *coordination
		X°

>   >

strong
{*ihn ; a lui*}   weak
{*es ; ihn ; loro*}   clitic
{*gli*}

Finally, let us observe that the strong > weak > clitic relationship in (45) is not just based on the above properties, but is transparent in several other domains. For instance, the Choice Principle which essentially stated that there is a "choice-ordering" among strong and deficient pronouns, i.e. strong > deficient, in fact dictates that clitics are chosen over weak, and weak over strong, i.e. strong > weak > clitic.

Of course, this is only the barest outline of the underlying system of personal pronouns (for a discussion exclusively centered on the properties of this underlying system, see Cardinaletti & Starke 1994). What we are interested in here is that German is a paradox only in the absence of this clear picture of the tripartite system of personal pronouns. The fact that all mystery disappear once the underlying system is recognized in turn lends strong credence to the proposed system.

In this context it is important that the above rhetoric of "assimilating German to Italian" is only a (hopefully) pedagogical tool. Nothing hinges on Romance for the analysis of Germanic. In fact, if Romance did not exist, one could still arrive at the same conclusion: we could have chosen to infer the presence of a third class (and

of the whole underlying system) exclusively on the basis of German (noting the similarity with other languages only as a conclusion). In this sense, German is an important source of evidence for the nature of the underlying tripartition.

Basing the discussion solely on German would have been a somewhat more difficult task only because German does not have overt morphological distinctions between pronouns of distinct classes (as Romance does). But even this can be overcome, and we now turn to a German dialect, which has the clarity of the Romance paradigm, but the syntax of a Germanic language: Olang Tirolese overtly displays the above system Germanic-internally.

3. OLANG TIROLESE

The existence of three distributional classes of pronouns is reproduced Germanic-internally with personal pronouns, coupled with clear indications as to the X'-theoretic nature of each class.[6]

Olang Tirolese, a Germanic variety spoken in the town of Olang in Northern Italy (South Tirol), has morphologically reduced and non-reduced forms for all persons and for both subject and object pronouns. Here, we will concentrate on 3rd person masculine and neuter singular subjects, but all observations hold for the other pronouns as well:[7]

(46)

		non-reduced	reduced
	3.sg.m.nom	[eːr]	[a]
	3.sg.n.nom	[es]	[s]

3.1. *Initial Pronouns*

Only the morphologically heavier form of each pair can appear in V2-initial position, although the lighter form can occur in Mittelfeld positions with the same grammatical function, as the c-examples attest:

(47) a. √ **E:r** isch intelligent.
      he is intelligent

   b. * **A** isch intelligent.
      he is intelligent

   c. √ ...,daß **a** intelligent isch
      that he intelligent is

(48) a. √ **Es** isch toire.
      it is expensive

   b. * **S** isch toire.
      it is expensive

   c. √ ...,daß **z** toire isch
      that it expensive is

On the other hand, all pronouns but *e:r* are deficient. Neither *es* nor *a / s* can occur in isolation, or be coordinated, modified or contrasted:

(49) a. √   Wer   gfollt   do?   E:r.
      who   pleases   you?   he
      Who do you like? Him.

   b. √ **E:r und Maria**   sain   intelligent.
      he and Maria   are   intelligent

   c. √ **La**   e:r   isch   intelligent.
      only   he   is   intelligent

   d. √ **E:r** isch   intelligent, **et Maria.**
      he   is   intelligent, not Maria

(50) a.   Wos   gfollt   do?   ***es.**
      what   pleases   you ?   it

   b. * **es und s Puich**   sain toire.
      it and the book   are expensive

   c. * **la**   es   isch   toire.
      only   it   is   expensive

   d. * **es** isch   toire,   et s Puich.
      it   is   expensive,   not the book

(51) a.   Wer gfollt   do?   ***A.**
      who pleases   you?   he

   b. * ...,daß   **a und Maria**   intelligent   sain
      that   he and Maria   intelligent   are

   c. * ...,daß   **la**   a   intelligent isch
      that   only he   intelligent is

   d. * ...,daß   **a**   intelligent isch, et   Maria
      that   he   intelligent is,   not Maria

(52) a.   Wos   gfollt   do?   ***S.**
      what   pleases   you ?   it

   b. * ...,daß   **z und s Puich**   toire   sain
      that   it and the book   expensive   are

   c. * ...,daß   **la**   s   toire   isch
      that   only it   expensive   is

   d. * ...,daß   **z** toire   isch, et   s Puich
      that   it expensive is,   not the book

We conclude then that *e:r* is a strong pronoun, whereas *es* and *a/s* are deficient forms.

3.2. *Three Classes*

The two properties discussed so far, occurring in V2-initial position and being deficient, are summarized in table (53). As can be easily seen, there are three different distributional classes:

(53)

	V2-initial	non-deficient (e.g. isolation)
e:r	+	+
es	+	−
a - s/z	−	−

The relevant contrast here is that between *es*-type pronouns and *a*-type pronouns. Both are deficient, but they have different distributions. There are thus two classes of deficient pronouns. The difference between them is also clearly indicated: the *es*-type pronouns occur in what is an uncontroversial XP position (the V2-initial position) while the *a*-type pronouns cannot occur in that XP position.[8]

On the sole basis of Olang Tirolese, we thus conclude that there are three classes of pronouns: the strong (non-deficient) forms, deficient forms which behave as XPs, call them "weak pronouns", and deficient forms which behave as X°s, call them "clitic pronouns" (see section 4.1 for arguments against putative phonological accounts of the *a-es* asymmetry). This conclusion is confirmed by other paradigms which require the same tripartition, with *es* a weak pronoun and *a* and *s* clitic pronouns.

3.3. *Choice Between Pronouns*

The pair <*es* ; *s*> shows a strong Choice Principle effect. In the Mittelfeld, where both forms are structurally legitimate, only the reduced form may appear:

(54) a. √ ...,daß z toire   isch.

     b. * ...,daß es toire   isch.
             that it expensive is

This is expected if the two forms are from different **classes** (and are thus submitted to the Choice Principle). On the other hand, in V2-initial positions, the situation is reversed:

(55) a. √ **Es** isch toire.

     b. * **S** isch toire.
          it is expensive

Again, this is not expected: the reduced form is excluded from the V2-initial position for structural reasons (being a head, it cannot occupy an XP position), and therefore the weak pronoun, an XP form, is used according to the Choice Principle (being the smallest available form).

It is not clear how the very existence of the effect could be stated without the postulation of two classes of (deficient) pronouns. Furthermore, these choice-effects are exactly parallel to the effects of the Choice Principle in Romance (and German); but in Romance, the paradigms uncontroversially follow from the presence of two distinct classes. To capture the similarity of choice between two Romance classes and choice, in Olang Tirolese, there seems to be no escape from the conclusion that *es* and *s* belong to two distinct classes of (deficient) pronouns, **in the same sense** as the strong Italian *a loro* and the clitic *gli* belong to distinct classes of pronouns. We thus have two classes of deficient pronouns, and one class of strong pronouns.

Let us consider the pair {*e:r* ; *a*}. In the Mittelfeld, the facts are unsurprising:

(56) a. √ Hans denkt, daß a   intelligent isch.

     b. * Hans denkt, daß e:r intelligent isch.
          Hans thinks that he intelligent is

In V2-initial positions *e:r* can appear without the need for coordination, stress or modification, e.g. (47a). Why is this so? The situation is still ambiguous, we know that *a* is clitic form, and that *e:r* can be strong. But we have not checked whether there exists a weak form of *e:r*, or whether only the strong and clitic form exist. Both views are possible given the above facts, and both lead to rather different pictures of how the Choice Principle applies to strong subjects V2-initially.

In fact, there is evidence that a weak form exists, which is simply not isolated by the above tests. Again, it is the (non-)human interpretation of the pronoun which gives the decisive clue:

(57) a. √ E:r isch toire.   (e:r = der Bleistift)
        he is   expensive   (*he = the pencil*)

     b. * E:r und s Puich sain toire.   (e:r = der Bleistift)
        he and the book are expensive (*he = the pencil*)

If so, the reason why a V2-initial *e:r* need not be stressed is transparent: the V2-initial *e:r* is the weak one, not the strong one (due to the Choice Principle) and the situation is thus parallel to a V2-initial *es* in e.g. (55a). V2-initial weak subjects block strong pronouns but are not blocked by clitic pronouns.

3.4. *Coordination*

The adequacy of treating *es* as a weak pronoun is confirmed by coordination (cf. prediction #3 of section 2):

(58)   √   Es kostit viel und — schmeckt eigentlich guit.
        it costs much and — tastes actually good

Again, *es* behaves as a maximal projection, not as a head. Unfortunately, the contrast with {*a* ; *s*} cannot be illustrated, for lack of appropriate structural context.

To summarize, a number of contexts make a three-way distinctions between *e:r*, *es*, and {*a* ;*s*}. In each case the context provides evidence that they belong to distinct classes of pronouns with distinct properties: *e:r* is both non-deficient and an XP (a strong pronoun), *es* is deficient and an XP (a weak pronoun) and {*a* ; *s*} are deficient and are heads (clitic pronouns). Furthermore the Choice Principle regulates the distribution of two forms of one and the same pronoun: clitics are chosen over weak, and weak over strong.

To state things differently, all the above paradigms simply follow from the classification of *es* as weak and {*a* ; *s*} as clitics. We need not add anything to the theory.

3.5. *Object Pronouns*

Given the Choice Principle, in Olang Tirolese there should be a contrast between subject and object pronouns: since no position in the Mittelfeld requires an XP rather than an X° (contrary to the V2-initial position), there is no need to have the weak object *es* in the lexicon of this language. Thus, the object weak pronoun *es* should not exist in Olang Tirolese. As a matter of fact, only the clitic form *s* is attested for objects (cf. fn. 7).

Evidence that the deficient object forms found in this Germanic variety are real clitics is provided by their ungrammaticality after prepositions, an XP position:

(59) a. *   une s

      b. *   une **in**   (= den Mantel)
              without it / him   *(= the coat)*

      c. √   une **i:n**   (= meinen Freund)
              without him   *(= my friend)*

(60) a.   mit *mo / √**mir**
              with me

      b.   auf *de / √**di:**
              on you

3.6. *Dutch is Similar to Olang Tirolese*

Dutch presents a three-way distributional pattern very similar to that found in Olang Tirolese, although morphologically more limited.[9] Since den Besten 1989: 25 and Koster 1978: 209ff, it has often been observed that Dutch has two morphologically distinct series of pronouns, both for subjects and objects. The "heavier" series straightforwardly qualifies as strong, while the "lighter" pronouns appear deficient:

(61) a.   { √**Zij** ; *****Ze** }   en Jan   willen niet komen.
           they   *and Jan   want not come*

      b.   { *****Zij** ; √**Ze** }   zjin uit voorraad.
           they   *are out of stock*

(62) a.   Ik heb { √**hen** ; *****ze** }   en Jan   gezien.
           I have   them   *and Jan   seen*

      b.   Ik heb { *****hen** ; √**ze** }   gerepareerd.
           I have   them   *repaired*

3.6.1. *Asymmetries in V2-initial Position*

Just as in Olang Tirolese, the deficient subject pronouns of Dutch differ in their capacity to occur in V2-initial position (cf. den Besten 1989: 27):

(63) a. √ **Ze** wil   niet komen.
           she wants not come

      b. * **Ie** wil   niet komen.
           he wants not come

Zwart (1991: fn. 13), investigating similar issues commented on this paradigm, stating that it "is an interesting fact that needs an explanation". The explanation is now familiar and straightforward: *ie* is a clitic, i.e. a head, whereas *ze* is a weak pronoun, i.e. a maximal projection. Dutch has the three familiar types of pronouns. This categorization is confirmed by the usual set of properties: V2 behavior patterns with choice and coordination paradigms.

3.6.2. *The Choice Paradigm*

A clear Choice Principle paradigm holds for each pair. *Ze* is preferred over *zij* whenever possible (compare with (61)):

(64) a. * **Zij** wil niet komen.
     √ **Ze** wil niet komen.
     She wants not come

   b. * ...,dat **zij** niet wil komen
     √ ...,dat **ze** niet wil komen
     that she not wants come

As before, the V2-initial weak subject pronoun (*ze*) is a possible competitor with the strong counterpart (*zij*) and is always preferred over the latter, except in cases of coordination, modification or introduction of new referents. The same situation is found with the pair *ie / hij*. *Ie* is preferred over *hij* whenever possible:

(65) a. * ...,dat **hij** niet kan komen
   b. √ ...,dat **ie** niet kan komen

   c. √ ...,dat **HIJ** niet kan komen
     that he not can come

A sentence-internal unstressed pronoun surfaces as *ie*, and *hij* is barred (cf. (65a) vs. (65b)). *Hij* is allowed only if *ie* is independently excluded. For instance, if the pronoun is contrastively stressed, (65c). In sentence-initial position, however, the situation is reversed. Now, *ie* is excluded for purely structural reasons, and *hij* concomitantly allowed:

(66) a. √ **Hij** wil niet komen.

   b. * **Ie** wil niet komen.
     he wants not come

So far, everything is as usual. But now consider the following contrast (repeated from (66a) and (64a)):

(67) a. √ **Hij** wil niet komen.

   b. * **Zij** wil niet komen.
     he/she wants not to come

Both *hij* and *zij* are strong pronouns but their behavior in V2-initial position is unexpectedly different: *hij* may occur, while *zij* cannot appear unless coordinated, stressed or focalized (e.g. √*zij wil niet komen*). This apparently arbitrary distinction between two otherwise similar pronouns is correlated with the behavior of their deficient counterparts, which is the exact mirror image of (67):

(68) a. * **Ie** wil niet komen.

   b. √ **Ze** wil niet komen.
     he/she wants not to come

In other words, a strong subject pronoun is possible V2-initially (with flat intonation), only if its deficient counterpart is not. Or to put things differently, strong pronouns which have a clitic "brother" are allowed V2-initially (without coordination, focus, etc.) but those which have a weak "brother" are not. The reason for the contrast (67) now seems clear: while, V2-initially, the Choice Principle favors *ze* over *zij*, ruling out the latter in (67b), *hij* is not bothered by *ie*, which is a priori excluded from the competition.

The conclusion comes without surprise. This explanation would seem minimal, since it simply follows from a crosslinguistically motivated system, without addition of any further machinery. But this simple explanation of (67) is crucially based on the Choice Principle, and particularly on the fact that the Choice Principle is sensitive to difference between *ie* and *ze*. But since the Choice Principle is sensitive to **classes** of pronouns, it now follows that *ie* and *ze* are members of distinct classes, in the same sense as the French *le* and *lui* are. We thus have a tripartition of pronouns in Dutch, with the familiar properties, where *ie* is a clitic, *ze* a weak pronoun and *zij* a strong pronoun. [10]

3.6.3. *Sentence Coordination*

Finally, sentence coordination supports the categorization of *'k*, *ze*, etc. as weak pronouns: they can be omitted from the second conjunct, on a par with strong pronouns. They therefore behave as XPs, not as heads:

(69) a. **Ik** zag Marie en — was meteen verliefd.

   b. **'k** zag Marie en — was meteen verliefd.
     I saw Marie and — was immediately in-love

4. ALTERNATIVES AND CONSEQUENCES

4.1. *Alternative Proposals*

Are there alternatives to the present proposal? We know of none. We survey here some different analyses presented in footnotes here and there, and also some analyses meant for distinct data-sets but superficially resembling the one offered above.

4.1.1. pro

As mentioned in section 1, many of the most promising studies of Germanic personal pronouns try to assimilate the deficient Germanic personal pronouns to Romance clitics. The motivation of these approaches has been to devise an analysis which would both capture the deficiency of some Germanic pronouns and keep the inventory of entities down to two: clitic pronouns and strong pronouns.

Above, we argued that (in this case) this perspective is wrong in principle: the property of being an X°/XP, and the property of being strong/deficient are independent (cf. Slavic verbal clitics, but also conjunction clitics in Latin, and several others). It would thus take a new filter to ban the combination of these two properties: deficient XPs. So, the choice is not really between two versus three classes, but between two classes plus a filter versus three classes. The choice between the latter two alternatives is not a matter of a priori guidelines or of taste, but, rather an empirical issue.

Furthermore, we noted that trying to restrict the inventory of pronominal classes to two was inadequate as a matter of fact: Romance has clear, syntactic, three-way paradigms. It is thus futile to rule out such paradigms in principle. The very motivation of keeping the number of entities down to two disappears. At most, what can remain is a desire to keep pronominal classes in **Germanic** down to two, by some sort of a language-specific filter.

But this enterprise is not only wrong-headed in principle and in fact, but the analysis to which it leads is also incapable of dealing with the data. To keep with the simple German paradigms outlined in section 1, the most obvious way of analysing *es* as a clitic in the V2-initial position is to postulate a representation of the following type:

(70) a. **Es** hat ihm   gestern   geschmeckt.
          it   has to-him yesterday   tasted
          Yesterday he liked it.

b.
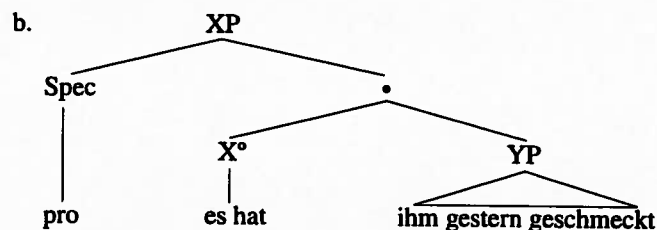
where *pro* is a silent pronoun, similar to that found in the subject position of null-subject languages, and *es* is cliticized onto the verbal form (versions of this are to be found in Zwart 1991, 1993: 146, among others). It was, however noted by the proponents of this approach that, as such, it cannot begin to deal with the fact: it cannot make sense of the contrast between those deficient pronouns which are

allowed V2-initially (the German *es*, the Olang *es*, the Dutch *'k, ze*, etc.) and those which cannot occur there (the Olang *s, a*, the Dutch *ie*, etc.). Both would have the same representation, namely (70b).

4.1.2. *Phonology*

To revise (70b) in order to deal with the relevant contrast, it might be proposed that, in some cases, phonological cliticization is "directional". That is, deficient pronouns such as the Olang *s, a*, or the Dutch *ie*, would obligatorily cliticize phonologically to their left (i.e. they are inherently "enclitic"), while clitics such as the German *es*, the Olang *es*, the Dutch *'k, ze*, would be free to cliticize phonologically in any direction. This would explain why the former do not appear sentence-initially: there is no host to their left.

To deal with embedded V2, where facts are essentially identical, although potential hosts do occur to the left, it might be added that this leftward cliticization must take place inside CP. In the Olang Tirolese (71), for instance, enclisis onto the subordinator (here introducing an adjunct) should be possible, contrary to fact. Thus, the structure must be something like (72):

(71) a. * ..., weil   a   hot   nämlich   des   gimocht

b. √ ..., weil   e:r hot   nämlich   des   gimocht
          because he   has   really   this done

(72)   weil [$_{CP}$ a hot ...

Such a "leftward-in-CP" constraint has been proposed in order to deal with clitic-second (Cl2) phenomena (Ćavar & Wilder 1992) and thus it might be a natural extension to apply it to Germanic. To our knowledge, such a position has never been proposed in print, but it seems to be the simplest, and maybe the only, route to take while maintaining that all Germanic deficient pronouns are clitics.

Before commenting on the empirical adequacy of this analysis, let us note that the picture is not as pretty as we made it out to be. Originally, a strong motivation for the notion of directional cliticization in phonology was provided by the existence of clitic-second (Cl2) effects in e.g. Slavic languages, where clitics cannot appear clause-initially. This contrasts with Romance, for instance, where reference to directionality of cliticization is not necessary. It would be redundant to specifiy directionality (even for those clitics that are not syntactically adjoined to their phonological host and thus are a priori able to cliticize in any direction) since general rules already predict the direction of phonological cliticization, cf. e.g. Nespor & Vogel 1986). But Slavic turns out provide only very fragile support for directionality: Toman (1993) shows that directionality is limited to describing only the simplest facts of Cl2 (as found in Czech), but cannot account for all occurrences of Czech clitics.

In so-called "topic-drop" contexts for instance, clitics occur sentence initially without losing their clitic properties. In such cases, they are simply proclitics. Toman (1993) also notes that some constructions require the clitic to be initial in an Intonational Phrase, a situation flatly contradicting the "leftward-in-CP" approach. He concludes (1993: 114) that, ". . . the clitics involved are neither proclitic nor enclitic. [. . .] the direction of cliticization is established locally at the level at which prosodic structure is determined." In short, the "leftward-in-CP" approach is inadequate to deal with the phenomena that seemed to motivate it in the first place. We are thus considering an alternative which is based on a rather dubious tool, a tool which, so to speak, has not yet found any use.

But let us go on, and see how this tool fares in its new domain, Germanic pronouns. The explanation of the distribution in V2-contexts based on (70b) would be clear, but what of the other properties discussed above? For coordination (the fact that in German, sentences containing *es* can be coordinated without *es* being repeated), the representation (70b) is exactly the **wrong** choice. It makes the Germanic V2-initial deficient subjects structurally parallel to the Northern Italian deficient subjects, or to the French deficient objects. But they are not parallel. The parallelism is rather with the Standard Italian deficient subjects *egli*, etc., or with the French deficient subjects, *il*, etc. Phonological directionality is irrelevant here, too. By definition, directionality does not apply to pronouns possible in V2-initial positions such as *es*. (70b) is thus a misrepresentation, making parallels opposite to those that in fact obtain, and the approach based on it is left helpless when we consider coordination facts.

Let us now turn to the choice-effects. Here it is unclear how to even state the facts. Directional clitics would always have to be preferred over non-directional clitics. And what appears to be the same preference also holds of clitic over strong pronouns, but directionality somehow becomes irrelevant in this case. The situation appears to be hopeless. In fact, this is a clear case where treating all Germanic deficient pronouns as clitics blurs the facts rather than illuminating them.

Finally, what about the contrast between deficient object pronouns, some occurring after prepositions and others not? Again, directionality of cliticization is irrelevant (prepositions are adequate phonological hosts and appear to the left) and we therefore have a mystery: entities which should be alike (clitics) behave differently, with no way to state the facts.

In addition to all these shortcomings, the "clitic-only" approach would make tripartitions look like a conspiracy: sometimes they are genuinely syntactic (as in Romance), but sometimes they are half syntactic and half phonological. Hardly an elegant solution. We are thus faced with a proposal based on a dubious tool, with the help which leaves out many of the relevant facts, and is, moreover, inelegant.

On the other hand, the proposed tripartition handles all cases uniformly and with two simple tools: the head/phrase distinction, and the Choice Principle (the latter being a descriptive statement of a more primitive constraint, see above).

Turning away from the V2-initial pattern, there would appear to be two proposals in the literature which are superficially similar to the present one, Kayne's (1983)

PF clitics and Holmberg's (1986, 1991) N* pronouns. These proposals share several points with the one above: they adopt a tripartite system, the third category coexists with clitic and strong pronouns, it has properties intermediate between clitic and strong pronouns, and the third category is, syntactically, an XP. On the other hand, the similarity between these proposals and ours is rather superficial. These proposals differ from ours both in scope and implementation. We contend that the third category they propose is to be regarded as a (proper) subset of the class of weak pronouns, and as an attempt at that notion.

4.1.3 *PF-clitics*

Dealing with problems structurally similar to those presented by subject-initial V2 clauses (i.e. French preverbal subject pronouns), Kayne (1983) introduced the notion **PF-clitic**, besides the usual (syntactic) clitic and strong pronouns. Although it has never been made explicit, the notion PF clitic seems to reconcile the idea that there are only two classes of pronouns in syntax with the overall need of a tripartition: PF-clitics are normal strong pronouns in syntax (and therefore maximal projections), but are clitics in PF (which of course presupposes a strict disjunction of syntax and PF). This notion has been transposed several times to subject-initial V2 contexts containing unstressed pronouns (cf. inter alia Tomaselli 1990: 438 for German, and Haegeman 1992b for West Flemish).

Although the idea of PF-clitics pursues a similar intuition to the one presented here, it is radically different in its implementation, more limited in scope and empirically inadequate. It is thus desirable that it be substituted with the broader notion of syntactically weak pronouns.

The strongest reason for this lies in the fact that (using Kayne's concepts) whenever (syntactic) clitics differ from strong pronouns with respect to some non-phonological property, the "PF-clitics" pattern with syntactic clitics rather than with syntactically strong pronouns with respect to that (non-phonological) property. Not only is this unexpected in PF-clitic terms, but it is ultimately a counterexample to the very notion of PF-clitics.

Take the [±human] reference phenomena (cf. section 2): this is a clearly non-phonological property with respect to which (syntactic) clitics differ from strong pronouns. Syntactic clitics are capable of referring to non-human entities, but strong pronouns cannot do so. Now, what happens with "PF-clitics"?

According to the theory, they become clitics only at PF. Syntactically, they are normal strong pronouns (thus explaining why they occur in XP positions). Since "PF-clitics" are non-distinct from strong pronouns at SS, the theory predicts (if anything) that "PF-clitics" should be interpretationally parallel to strong pronouns and pattern unlike (syntactic) clitics (there being no direct link between PF and LF). "PF-clitics" should thus be only [+human].

But the facts are the exact opposite. "PF-clitics" can refer to both humans and non-humans, just like "syntactic clitics". More generally, "PF-clitics" are interpretationally parallel to clitic pronouns and pattern unlike strong pronouns.

There is no way to express the real state of affairs within the PF-clitic approach. Three **syntactic** classes are needed.

Similarly, all distributional peculiarities of PF-clitics which are not shared by strong pronouns must now be attributed to PF. Since PF-clitics are strong pronouns in the syntax, and strong pronouns may be modified and conjoined, the impossibility of coordinating and modifying PF-clitics must now be a PF-property. To implement this, the ban on coordination, for instance, should be traced down to a PF-phenomenon, such as "coordination assigns focus to conjuncts, clitics cannot be focused, and therefore clitics cannot occur in coordination". But such reasoning, if rendered explicit, is falsified by languages such as Gun (a Kwa language) in which focus is overtly shown through syntactic displacement: coordinated structures are not displaced.[11] The second basic consequence of the PF-clitic approach is not plausible.

That the empirical scope of the notion of PF-clitic is too restricted is shown by the comparison between French and Italian. The French "PF-clitics" contrast with syntactic subject clitics as found in some Northern Italian dialects (Rizzi 1986) (cf. the discussion around (31) above). In this opposition, the deficient subjects *egli* 'he', etc. of Standard Italian pattern together with the French "PF-clitics".

Since no adjacency holds between *egli* and the verb (cf. (17) above), *egli* is not a "PF-clitic" (in the sense in which the French deficient subjects are PF-clitics). And the fact that *egli* patterns with the French "PF-clitics" (unlike Northern Italian deficient subjects) cannot be expressed. The PF-clitic approach thus fails to generalize across similar subjects of different languages. It is too restricted, dealing with only one subcase of weak pronouns.

A similar point pertains to objects. Some deficient object pronouns do not pattern with object clitics. They are deficient elements but need not be adjacent to any given element. This is the case of the Italian dative *loro* in (14b), of the French accusative *tout* 'all' as in *Il a tout fait* (cf. (34b)), of the West Flemish *jen* in (79) below, of the Swedish *den* 'it' (cf. Holmberg 1986, 1991), etc. Again, a PF-clitic approach fails to generalize to these cases of non-clitic deficient elements.

An explanation in terms of weak pronouns is not subject to any of these difficulties. It naturally expresses semantic and syntactic parallels between clitic and weak pronouns, it generalizes across subjects of different languages, and across weak subjects and objects. The notion PF-clitic is subsumed as a special case of weak pronouns.[12]

4.1.4. Holmberg's N* Pronouns

The fact that Germanic requires a distinct type of deficient element has been recognized foremost by Anders Holmberg. Holmberg (1986, 1991) proposes a three-way syntactic distinction, with weak pronouns: (i) intermediate between clitic and strong pronouns, and (ii) XPs.[13] Again, this is informally very similar to the present proposal, but incompatible and apparently inadequate when rendered explicit.

Holmberg (1991: 157) introduces the category N*, as an explanation for **both** clitic and weak pronouns, asserting that "... pronominal clitics and weak pronouns belong to the same category, which I call N* [. . .] which is inherently maximal [. . .]. N* can be truly X°". Romance clitics are N* which end up as heads, and (Germanic) weak pronouns are N* which end up as XPs. But to the best of our knowledge, no explanation is offered for this result, i.e. there is no reason why the reverse should not hold. Hence, this proposal formally denies what it informally supports: it provides only two formal classes of pronouns (clitic and weak pronouns formally having an identical range of possibilities), but informally assumes three classes. We take it that a principled theory of the three classes should be able to formally capture the asymmetry between weak pronouns (which occur **only** as XP) and clitics (which occur **only** as X°).[14]

4.1.5. Conclusion

From this brief survey, it is evident that there is no alternative to the proposed analysis, neither internal to Germanic, nor in the general analysis of the system of personal pronouns. In this connection, note also that there are several other proposals for a third type of pronoun, or for some XP-type pronouns. All these (as far as we know) are irrelevant to the present proposal since they are, for the most part, a local patching of a difficult paradigm, not proposals about the underlying grammar of the pronominal system, which is our only interest here.

5. WEST FLEMISH

5.1. The West Flemish Tripartition

A number of West Flemish facts offer clear and direct support for the syntactic tripartition of pronouns. Thanks to a relative rigidity in its Mittelfeld, West Flemish has a number of asymmetries which separate the two deficient object pronouns, making one of the strongest cases for a tripartition of object pronouns in Germanic. Although the facts we will present appear to be very clear, confusions are possible when some of the more recent facts are not taken into account.

Within the triplet {*myn* ; *me* ; *ze*} both *me* and *ze* are deficient: they cannot be focalized or coordinated, contrasting with the strong form *myn*:

(73) a. T-is {$\sqrt{}$**myn** ; **me* ; **ze*} da   Valère gezien eet.
         it-is { me ; me ; her }   that Valère seen   has

     b. Valère eet [Marie en {$\sqrt{}$**myn** ; **me* ; **ze*}] gezien.
         Valère has Marie and { me ; me ; her }   seen

West Flemish deficient object pronouns display an asymmetry with respect to prepositions. The deficient object *me* behaves differently from the deficient object *ze*:

(74) a. √ K'een t nie by **myn**.

b. √ K'een t nie by **me**.
   I have it never with me

c. * K'een me ze geplaat.
   I have with her talked

This is the familiar state of affairs, with *ze* a clitic pronoun (and thus a head unable to occur after P) and *me* a weak pronoun (and thus an XP capable of occurring after P). These are not isolated cases: *t* 'it' behaves like *ze*, while *jen* 'you' patterns with *me*.

At least two other contexts exhibit the same distinction as the *P+pronoun* context. First, in West Flemish, nothing may intervene between the complementizer and the subject, except a *ze*-type deficient pronoun (cf. Haegeman 1992b, 1993a, 1993b):

(75)   ... da Valère { Marie ; jun ; jen ; ze } nie zien eet. [C SU]
        that Valère { Marie ; you ; you ; her} not seen has

   a. * ... da **Marie** Valère nie zien eet.   *[C OB SU]
   b. * ... da **jun** Valère nie zien eet.   *[C strong SU]
   c. * ... da **jen** Valère nie zien eet.   *[C weak SU]
   d. √ ... da **ze** Valère nie zien eet.   [C clitic SU]

As above, the deficient *jen* patterns unlike the deficient *ze*.

The second context which distinguishes the two classes of deficient pronouns concerns argument ordering. When both an accusative and a dative noun phrase co-occur, the order among them is strict, "DAT - ACC":

(76) a. √ ... da Valère **Marie**   **den officier** angeroan   eet [DAT ACC]
        that Valère to-Marie the officer   recommended has

b. * ... da Valère **den officier** **Marie** angeroan   eet *[ACC DAT]
        that Valère the officer   to-Marie recommended has

The same is true with the deficient *jen*, but not with the deficient *ze*:

(77) a. √ ...da Valère **Marie** **jen**   angeroan eet   [DAT ACC]
     b. * ...da Valère **jen**   **Marie** angeroan eet   *[ACC DAT]

(78) a. √ ...da Valère **Marie** ze   angeroan eet   [DAT ACC]
     b. √ ...da Valère ze   **Marie** angeroan eet   [ACC DAT]

In fact, we may put the C-subject and the DAT-ACC constraints together: weak and strong elements are subject to a strict ordering, viz. C - SU - DAT - ACC But object clitics are free to intervene anywhere in this sequence. The generalization is simple: (nominal) XPs, and only XPs, are subject to a strict ordering constraint. Only cliticization, i.e. head movement, can circumvent the constraint. This is a clear case where the intermediate status of weak pronouns shows up: although they pattern with clitics for deficiency, weak pronouns pattern with noun phrases and strong pronouns with respect to the ordering constraint.[15]

Finally, as in German, deficient elements cannot appear below a sentential adverb (in fact below the first sentential adverb, cf. Haegeman 1993a). This puts clitic and weak pronouns back together, against strong forms (and noun phrases). Combining this restriction with the ordering constraint, a clear picture of the tripartition appears, in which each of the three classes of pronouns has distinct distributional properties:

(79)   C°   SU   Adv
   a. ... da {ze}   Valère {ze}   gisteren {*ze}   nie gezien eet

   b. ... da {*jen}   Valère {jen} gisteren {*jen} nie gezien eet

   c. ... da {*jun}   Valère {jun} gisteren {jun}   nie gezien eet
      that {her/you}   Valère {her/you} yesterday {her/you} not seen has

5.2. The West Flemish Demonstratives

This simple picture is somewhat complicated by binding facts. While both the *jen*-type and the *jun*-type pronouns are subject to Principle B, Haegeman (1993a) notes that this is not true of the *ze*-type pronouns, the coreference pattern of which instead reflects Principle C, (80c):

(80) a. √ ... dat Marie$_i$ peinst da Jan eur$_i$ gezien eet   (*jun*-type)
        that Marie thinks that Jan her seen has

b. √ ... dat j$_i$ peinst da Jan jen$_i$ gezien eet   (*jen*-type)
        that you   think that Jan you seen has

c. * ... dat Marie$_i$ peinst da Jan ze$_i$ gezien eet   (*ze*-type)
        that Mary thinks that Jan her seen has

Since personal pronouns are uniformly (and cross-linguistically) subject to (some

version of) Principle B, the Principle-C like behavior of *ze* is extremely surprising, if it is a personal pronoun. On the other hand, there is one type of pronoun that is consistently (and cross-linguistically) subject to Principle C: demonstrative pronouns. If we also take into account the fact that *ze* is morphologically related to the (strong) demonstrative *de-ze*, the solution is obvious: *eur* (strong) and *jen* (weak) are personal pronouns, but the clitic *ze* (and the strong form *deze*) are demonstrative pronouns.

The existence of clitic demonstratives might seem surprising within the traditional conception of clitics. However, it should not be, since deficient demonstratives are amply attested cross-linguistically. On the contrary, these facts highlight an important property of the tripartition: it is defined in category-neutral terms. Its primitives (as stated in section 2) are purely structural and distributional: $X°/XP$ and the behavior in coordination, modification, with respect to accentuation, etc. Since these properties hold of all syntactic elements (that is, all syntactic elements have some X-bar status, and all of them have some particular property with respect to coordination, accentuation, etc.), it follows that all syntactic elements belong to one of the classes of (25). As a matter of fact we do find clitic, weak and strong elements outside the realm of personal pronouns, as illustrated here for demonstratives, and valid across the board (adverbs, *wh*-pronouns, etc.).

Other asymmetries oppose the two classes of West Flemish deficient pronouns, which can also be reduced to the two oppositions involved: clitic vs. weak, and personal vs. demonstrative pronoun. First, case distinctions also oppose *ze*-type and *jen*-type pronouns: clitics (in our terms) never have morphological case distinctions between nominative and oblique cases, while weak pronouns (in our terms again) have different forms for nominative and oblique (cf. (80b)). This has been taken to indicate that the *ze*-type pronouns have a unique form for both nominative and oblique, a form which is underspecified for Case features, contrasting with the *jen*-type, which has two distinct forms, each specified for Case (Haegeman 1992a, Corver & Delfitto 1993: 14). These authors then hypothesize that it is this asymmetry in underspecification which is the primitive underlying the *ze-jen* contrasts (rather than, for instance, clitic vs. weak pronoun). The positions which selectively allow one class, in reality allow only (under-) specified elements.

Haegeman (1993a, b) abandons this account, showing that the generalization is incorrect. While object *ze*-type pronouns are demonstrative pronouns (cf. above), their subject counterparts are personal pronouns, subject to Principle B:

(81)   ... dat Marie$_i$ peinst da ze$_i$ Jan gezien eet
        that Marie thinks that she Jan seen has

This entails that the nominative and the accusative forms of *ze* are distinct entities, both carrying a Case specification (<personal pronoun; nominative> versus <demonstrative pronoun; accusative>). It is thus not the case that all clitics are underspecified, and the clitic/weak contrast must be stated in terms of two distinct classes of deficient pronouns, and not as a consequence of Case specification.[16]

Second, the Choice Principle, which otherwise applies unsurprisingly to West Flemish, does not apply for the pair in (82): the deficient form *ze* is not preferred over the strong form *eur*, as it should be, according to the principle:

(82) a.   K'een **ze** gezien.

      b.   K'een **eur** gezien.
            I have her seen

This is supplementary evidence for the fact that *ze* is a demonstrative pronoun, but *eur* is a personal pronoun: the Choice Principle applies only between otherwise identical competitors (cf. section 2 above, and Cardinaletti & Starke 1994), so that it is not applicable between a demonstrative and a personal pronoun.[17]

5.3. *German D-pronouns*

This brings us to another set of demonstratives, the German d-pronouns. At first sight, it is tempting to think of say, *das*, as the strong personal pronoun corresponding to the deficient *es*. But certain properties of d-pronouns indicate otherwise.

The d-pronouns, both the {*der, die, das*} series and the {*dieser, diese, dieses*} series, are (or can be) strong. They can all be coordinated, modified, etc. On the other hand, even in contexts where they are unmistakably strong, they can still refer to both human and non-human entities:

			<+human>	<- human>
(83) a.	Sogar **ihn**	habe ich gesehen.	√	*
b.	Sogar **den**	habe ich gesehen.	√	√
c.	Sogar **diesen**	habe ich gesehen.	√	√
	even him/this one	*have I seen*		
(84) a.	**Er,**	meiner Meinung nach, ist nicht hier.	√	*
b.	**Der,**	meiner Meinung nach, ist nicht hier.	√	√
c.	**Dieser,**	meiner Meinung nach, ist nicht hier.	√	√
	he/	*according to me*	*is not here*	
	this one			

This illustrates that while the tripartition of clitic-weak-strong elements holds across the board, particular interpretive or distributional properties may vary with the nature of the element (e.g. while deficient personal pronouns are old information, this semantic notion would not make much sense for deficient adverbs).

Since both *er* and *der* are strong forms, the contrast in (84a-b) cannot be due to a class-distinction. Rather, it is natural to draw upon the observation that personal and demonstrative pronouns systematically differ with respect to this property: strong demonstrative pronouns can refer to non-human entities while strong personal pronouns cannot. This is the case not only in (84a-c) and in (83a-c), but also in other languages, including the French strong personal pronoun *lui* versus the strong demonstrative pronoun *celui-là*:

			<+human>	<- human>
(85)	a.	C'est **lui** que j'ai vu.	√	*
	b.	C'est **celui-là** que j'ai vu.	√	√
		it is him/that one that I have seen		

We thus conclude that the opposition between *er* and *der* is due to the fact that *der* is a demonstrative pronoun but *er* is a personal pronoun (and the same holds of the accusative counterparts *den* vs. *ihn*). This classification is confirmed by the respective binding properties of each pronoun (cf. the "Response to Commentators" in Cardinaletti & Starke 1994). The Choice Principle also leads to the same conclusion: since no effect obtains between *er/der*, or *ihn/den*, these forms must be distinct and thus not competitors. This follows from the personal/demonstrative asymmetry.

What makes *der* a demonstrative pronoun? Both the morphologically minimal pair *er* (personal) vs. *der* (demonstrative) and the morphological parallelism between *d-ies-er* and *d-er* points to the morpheme *d-*. If *d-* makes *der*-type pronouns demonstrative, not only do we have an explanation for the human reference and binding facts, but we also have an answer to the initial question: *das* is not the strong form of *es*, it is a demonstrative pronoun, and *es* is a personal pronoun.

6. SUBJECT-INITIAL V2

6.1. *Where is the Verb in V2 Constructions?*

There are two schools of thought concerning subject-initial V2 structures: the symmetric school holds that the verb is always in C° (from den Besten 1989[1977] on), while the asymmetric school holds that the verb is in C° for topics, questions, etc. but not for (non-topic) initial subjects (from Travis 1984 on). The two schools thus assign distinct representations to subject-initial V2:

(86) a. [$_{CP}$ Hans$_i$ hat [$_{AGRP}$ t$_i$ seinen Freund angerufen.
         Hans   has   his   friend   called

      b. [$_{CP}$ [$_{AGRP}$ Hans   hat   seinen Freund angerufen.
                                Hans   has   his   friend   called

Structurally, both proposals are compatible with a V2-initial subject being a weak pronoun, i.e. a maximal projection. But things are different when the licensing of weak pronouns is taken into account. First, remember that the distribution of weak pronouns is extremely limited, in fact reduced to a single position. This was illustrated with Italian examples in (33), repeated here as (87):

(87) a. {√**lui**},   questo libro,   {√**lui**}   lo ha comprato   {√**lui**}
     a′ {***egli**},   questo libro,   {√**egli**}   lo ha comprato   {***egli**}
        he   this book   it has bought

     b. {√**a lui**}, Maria, {√**a lui**} ha dato   questo libro {√**a lui**} ieri {√**a lui**}
        to him   Maria   has given this book   yesterday

     b′ {*loro}, M. {*loro} ha dato {√loro} questo libro {*loro} ieri {*loro}
        to-them M.   has given   this book   yesterday

Because of examples such as (88), both schools must postulate a position below C° in Germanic in which subject weak pronouns are licensed:

(88) a. Dem Hans hat **es** geschmeckt.

     b. ...,daß **es** dem   Hans geschmeckt hat.
        that it to-the Hans tasted   has
        ... that Hans liked it.

The symmetric school thus admits two legitimate positions for subject weak pronouns: Spec-CP when the pronoun is initial, and a lower specifier when it is in the Mittelfeld, as in (88b). The asymmetric school on the other hand would hold that there is only one possible position for subject weak pronouns, which it occupies both when V2-initial and when in the Mittelfeld.

To explain why there is this second position available, the symmetric approach might appeal to the fact that the placement of the finite verb in C° turns Spec-CP into an A-position (in virtue of Spec-Head agreement with the finite verb or Agr in C°), and thus an appropriate position for non-topicalized subjects (Cardinaletti 1990, 1992a; Rizzi 1991), and now an appropriate configuration for the licensing of weak pronouns. Suppose we have a configuration such as (89):

(89)
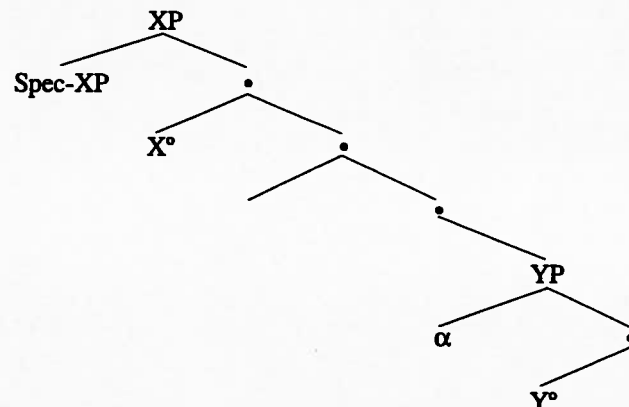
Here α is the (lowest) specifier in which the weak pronoun is licensed. Under the symmetric approach, if the verb has moved above Y°, the weak pronoun will also be licensed in the Spec of the head hosting the verb. In (89), if the verb has moved up to X°, then the weak pronoun should now be licensed in Spec-XP (it is irrelevant here whether it remains licensed also in Spec-YP). Situations of this type abound in Romance (with Spec-XP, in principle free to host the weak pronoun). Consider the following Italian example:

(90)   Avendo **egli** dato un po' di speranza a Gianni, . . .
         having he given a bit of hope to Gianni

In these cases, the finite verbal form has moved beyond the (lowest) Spec licensing the weak pronoun *egli* to some higher head, say X°. From the symmetric approach sketched above, this entails that *egli* is also licensed in Spec-XP, yielding:

(91)   * **Egli** avendo dato un po' di speranza a Gianni, . . .

But this is not the case. Thus, the symmetric approach is faced with a paradox: either it extends the licensing mechanism of weak pronouns in order to include the Germanic V2-initial cases, losing the explanation for Romance, or it thereby retains the tight Romance explanation, but cannot express the Germanic state of affairs. On the other hand, the asymmetric approach does not suffer from any such dilemma: it maintains the restrictive approach to weak-pronoun licensing for both Germanic and Romance. Weak pronouns offer a clear support for asymmetric V2 explanations.[18, 19]

6.2. *Speculation on Absence of Stress*

Some speakers seem to find a V2-initial inanimate pronominal object preferable to the same pronoun in isolation, coordination, etc. If it proves to be the case that topicalization is better than other displacements, this might be due to the marginal

availability of Spec-AgrCP (cf. fn. 19) for object weak pronouns. More precisely, the violation produced by the object landing in Spec-AgrCP would be milder than the one produced by the coordination, etc. of weak pronouns.

This might be correlated with the full acceptability of V2-initial **unstressed** objects in constructions lacking a nominative argument (i.e. constructions with no surface subject, such as impersonal passives and psych predicates), resulting in contrasts such as **?ihm habe ich geholfen* 'to-him have I helped' ('I helped him') vs. *ihm wurde geholfen* 'to-him was helped' ('he was helped'); cf. also *ihm wurde klar, daß* . . . 'to-him was clear that . . .'.

6.3. *Reflexive Deficient Pronouns*

In connection with the discussion of West Flemish, it was noted that deficiency is not restricted to personal pronouns but extends across categories. This extension allows us to address a long-standing puzzle regarding German: the apparently idiosyncratic restrictions on inherent reflexives.

For instance, inherent reflexives cannot be the preverbal constituent of a V2 clause in German, while this is not true of other reflexives:

(92) a. √ Er hat **sich** nicht geschämt.
      * **Sich**   hat er nicht geschämt.
         himself has he not been-ashamed

      b. √ Er hat **sich** nicht gewaschen.
         √ **Sich**   hat er nicht gewaschen.
         himself has he not washed

Suppose that inherent reflexives are deficient pronouns (as they are in Romance). This would make them parallel to the German object *es*. This would directly explain the above paradigm, which is in fact identical to that of *es*. And there is plenty of evidence to the effect that German inherent reflexive (but not other reflexives) are always deficient (cf. Heidolph et al. 1981: 645):

(93) a. * Er erholt   **sich**   und ihn.   (coordination)
         he recovers himself and him

      b. √ Er wäscht **sich**   und ihn.
         he washes himself and him

(94) a. * Wen erholt   Otto? **Sich.**   (isolation)
         who recovers Otto? himself

      b. √ Wen wäscht Otto? **Sich.**
         who washes Otto? himself

(95) a. * Otto erholt   sonntags nicht **sich**.   (contrast)
          Otto recovers on Sunday not   himself

      b. √ Otto wäscht morgens   nicht **sich**,   sondern **ihn**.
          Otto washes in the morning not   himself, but   him

The same goes for other inherent reflexives, briefly illustrated here with *mich* (Helbig & Buscha 1981: 181):

(96) a. * Ich fürchte **mich** und ihn.   (coordination)
          I fear   myself and him

      b. √ Ich wasche **mich**   und ihn.
          I wash   myself and him

6.3. *Clitic Clusters*

Finally, one constraint on clitic clusters might bear upon the question of object clitic versus weak pronouns. This is particularly relevant since the relatively free word order of the Mittelfeld and the fact that no clear XP vs. X° contrast is found here make it difficult to identify the nature of object pronouns (except in West Flemish, cf. section 5.1). The only reliable test seems to be that of prepositions.

It is a surprising fact that accusative 1st/2nd person clitics cannot cooccur with a dative 3rd person clitic (cf. Perlmutter 1971). This is true across Romance (here French), and Slavic (here Slovak):

(97) a. * Il **me lui**   a montré.

      b. * On **ma mu**   ukazal.
          he me to-him has shown

This ban is widely attested not only across Romance and Slavic, but also in such diverse languages as Arabic, Greek, Southern Tiwa, Warlpiri (cf. Bonet 1991, 1994). One especially interesting feature of this constraint is that it seems to apply only to clitics and not to pairs consisting of two different deficient pronouns, one clitic and one weak, cf. the Italian minimal pair:

(98) a. * Lui **mi gli**   ha mostrato.
          he me to-him has shown

      b. √ Lui **mi** ha   mostrato **loro**.
          he me has shown   to-them

Whereas (98a) is simply one more example of the general pattern in (97), example (98b) is identical to the first, except for the fact that the 3rd person dative clitic *gli*

has been replaced by the 3rd person dative weak pronoun *loro*. And this renders the example acceptable.

We thus conclude that whenever the DAT-ACC ban holds of two deficient forms, it follows that these forms are clitics.[20] On the other hand, when two deficient pronouns are immune to the DAT-ACC ban, it follows that one of them is weak, not clitic.

In this connection, the following contrast between Dutch and Olang Tirolese is revealing:

(99) a.   Ze stelden   **me**   **'m**   voor.
           they introduced me   to-him PRT

      b. ? Ze stelden   **'m**   **me**   voor
           they introduced to-him   me   PRT

(100) a. * ..., daß a   **me**   **ra**   vorgstellt hot.
           that he me   to-her introduced has

      b. * ..., daß a   **ra**   **me**   vorgstellt hot.
           that he to-her me   introduced has

These examples indicate that in Olang Tirolese both *me* and *ra* are clitics, but at least one of the Dutch *me* or *'m*, is a weak pronoun. This piece of evidence for the clitic status of Olang Tirolese object deficient pronouns is consistent with the conclusion reached in section 3.5 on the basis of the distribution of these pronouns. [21]

NOTES

[1] Here and throughout, curly brackets show exclusive alternatives: several elements appearing inside curly brackets, as in (1), are several distinct options to fill one position, while several occurrences of curly brackets inside one and the same example, as in (14), are alternative positions for one element.

[2] Most German prepositions require the *da*-P construction instead of P + *es* (cf. van Riemsdijk 1978). This is an independent phenomenon, not affecting the point made in the text.

[3] The *loro* construction is not to be assimilated to "double-object" constructions. See Cardinaletti 1991 for discussion.

[4] There are residual cases, in which *es* refers to a human entity, e.g. *das Mädchen* 'the girl', *das Kind* 'the child'. Obviously, no principled explanation of the absence of a strong *es* obtains here. On the contrary we expect language variation as to the existence of a strong form corresponding to this reading.

[5] Not all modification of deficient pronouns is disallowed. Floating quantifiers for instance can occur:

(i)   Ich habe sie   gestern   alle/beide gekauft.   (German)
       I   have them   yesterday all/both   bought

(ii)   Le   temo   tutte/entrambe.   (Italian)
       them I-fear all/both

[6] The Olang Tirolese data are taken either from Oberleiter & Sfriso 1993 or are personal communications of Margit Oberleiter, who we kindly thank.

[7] The full paradigm of pronouns is:

		nominative		dative		accusative	
	1	i:	e	mir	mo	mi:	me
	2	du:	e	dir	do	di:	de
SG	3m	e:r	a	i:n	in/n	i:n	in/n
	3f	si:	se/ze	i:r	ra	si:	se/ze
	3n	es	s/z	i:n	in/n	—	s/z
	1	mir	mo	ins	ins	ins	ins
PL	2	des	as	enk	enk	enk	enk
	3	si:	se/ze	iman	iman	si:	se/ze

s/z and *se/ze* are allomorphs of, respectively, the 3rd person sing. neuter and 3rd person sing. fem. / pl. reduced pronoun. For the non-existence of accusative *es*, see section 3.5.

[8] Sentence-initial X° elements are never found in V2 clauses, contrary to Cl2 (clitic-second) clauses in e.g. Slavic languages. The only potential counterexample is preposing of a past participle as in German:

(i)   [Gelesen] habe ich dieses Buch nicht.
       read   have I   this   book not

But this cannot be analyzed as an instance of a V°-chain either. Rather, it must be VP topicalization, the so called remnant topicalization of den Besten and Webelhuth 1990. See Čavar and Wilder 1992: 8-9 for discussion of these structures in German, a V2 language, and Croatian, a Cl2 language.

[9] We were able to make some sense of Dutch thanks to the patient help of Marcel den Dikken and Jan-Wouter Zwart with the intricate data, help for which we are extremely grateful.

[10] Similar situations seem to obtain in some Scandinavian languages, judging from Christensen (1984) and Vikner and Schwartz (1991: 8).

[11] Furthermore, it is not the case that clitics are incompatible with focus as such. What clitics may not do is introduce a new discourse entity (cf. Cardinaletti & Starke 1994 for discussion).

[12] The present proposal does not exclude PF cliticization of weak pronouns. There is no reason to deny that weak elements may cliticize at PF. Not all of them do so however, and the exact state of affairs is still somewhat mysterious to us. However, the important and new feature of the present proposal is that the clitic-like properties of weak elements do not simply follow from a possible phonological cliticization, but are a consequence of their syntactic properties. This is most obvious for those weak pronouns that do not cliticize phonologically, such as the Italian *loro*.

[13] Haegeman (1992b: 54), like Holmberg (but based on very different data), argues for a distinction between two (syntactic) types of deficient elements, also labelling them clitic and weak. She however mentions three paths to derive the distinction but concludes "I leave the question [of the distinction between clitic and weak, AC & MS] for future research."

[14] Although the opposition strong/deficient is clear for Swedish (and Scandinavian) pronouns, the exact status of deficient objects is controversial and no positive evidence has yet been adduced in one sense or the other (deficient subject pronouns are weak, being possible in V2-initial position). As we have just

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seen, Holmberg (1991) argues that these pronouns are maximal projections (adjoined to other maximal projections), while Josefsson (1992) claims that they are heads (adjoined to other heads).

[15] That the special properties of *ze*-type pronouns indeed derive from their being heads is argued for at length in Haegeman 1992b, 1993a, b.

[16] The variant of this account asserting that there are two items *ze*, one a demonstrative pronoun and one a personal pronoun, both underspecified for Case, is also ruled out, insofar as it entails the existence of an oblique personal *ze*, which does not obey the coreference pattern.

[17] The relevance of the demonstrative status of *ze* for the lack of contrast was been brought to our attention by Liliane Haegeman. The notion of "identical items" is non-trivial to formalize, and interesting questions about the lexicon follow (i.e. the West Flemish *ze* and *eur* 'she', although semantically parallel, must count as distinct, while the Olang Tirolese *a* and *e:r* 'he' must be non-distinct while semantically, syntactically and morphologically dissimilar). However, no insurmountable difficulties seem to arise.

[18] In a similar vein, note the following facts: while there are some adverbs that can intervene between the initial XP and the V2 verb, they cannot do so when the initial XP is a weak pronoun (cf. Zwart 1993: 142, fn. 9).

(i) a.   Ik   {echter ; nu}   weet't niet.

    b. * K   {echter ; nu}   weet't niet.
       I   {but ; now}   know it not

This is rather straightforward if V2 is asymmetric, with weak pronouns limited to the lower Spec-AgrP position and the adverbs limited to the higher projection (strong subjects can be topicalized to Spec-CP).

[19] Even such an asymmetrical account is still subject to a debate between two positions: the Agr hosting the subject might be either AgrS (Travis 1984, 1991; Zwart 1993) or AgrC (Starke 1993). Based on the fact that Slovak (i) possesses an identical subject/object fronting asymmetry, (ii) has clitics which overtly show the location of AgrC, (iii) places the initial subject in Spec-AgrCP, we here follow the latter position in identifying the relevant Agr with AgrC (the term AgrC stems from Shlonsky (1992), while this structural position has been identified numerous times before).

The choice between the two positions is however not directly relevant to the present concerns, to the extent that the Germanic subject weak pronouns always occur in the highest Agr, if there is more than one. This derives the obligatory adjacency between weak subject pronouns and the complementizer or the finite verb in C°, found in all Germanic languages (cf. Haegeman 1992a for West Flemish, Holmberg 1991: 164-166 for Swedish, Tomaselli 1990 for German, Zwart 1993: 51-52 for Dutch). This proposal is superior to the currently supposed right-adjunction of the subject pronoun to C°, both because it does not use the somehow doubtful mechanism of right-adjunction (cf. Kayne 1994), and because it dispenses with a movement which had no motivation except from the adjacency facts themselves.

[20] Some complications might arise for French imperatives, but discussing these here would take us too far afield, we hope to return to these in future work on Romance.

[21] The fact that Dutch is not subject to the cluster constraint might be correlated with another difference between Dutch and Olang Tirolese. The order of the pronouns is rather loose in the former but rigid in the latter:

(i) a.   ... dat Jan {√'t'r   ; ? 'r't}   gegeven heeft.   (Dutch)
          that Jan {it to-her ; to-her it} given has

    b.   Er gib {* se mo   ; √mo se}   (Olang Tirolese)
          he gives {them to-me ; to-me them}

That the free order of pronouns found in Dutch might be a function of their being clitics and a weak pronoun combined might receive further support from West Flemish, which shows that a combination of two weak pronouns is subject to rigid ordering constraints (see section 4.2.1).

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