ON THE *PRO/pro* DISTINCTION

Germán F. Westphal

The University of Maryland Graduate School, Baltimore

This paper reviews the theory that accounts for the distribution of [PRO] and [pro], and concludes that the distinction standardly assumed in the Government and Binding framework with respect to these two elements does not hold on either empirical or theoretical grounds, particularly if a Minimalist approach is taken. The paper also argues that the different abstract pronouns discussed in the literature are in fact contextual realizations of one single abstract pronominal NP with open φ features at the UG level, namely the *proneme* /PRO/.

1. INTRODUCTION

In the Government and Binding approach, Chomsky (1982) assumed the following typology of empty pronominal categories:

(1) a. PRO = [+ PRONOMINAL, + ANAPHORIC]

 b. pro = [+ PRONOMINAL, - ANAPHORIC]

In this view, [PRO] and [pro] are subject to the Binding Theory of (Chomsky, 1981):

(2) A. An anaphor is bound in its governing category.

 B. A pronominal is free in its governing category.

 C. An R-expression is free.

Given that [PRO] is both [+ PRONOMINAL] and [+ ANAPHORIC], it is subject to Principles A and B, which is a contradiction. Thus, Chomsky (1981) deduced the PRO-Theorem, which states that [PRO] is ungoverned.

As far as [pro] is concerned, it is subject to Principle B. Hence, it must appear in governed positions and must be Case marked, subject to licensing by AGR according to Rizzi (1986).

Thus, in the Government and Binding approach, [PRO] and [pro] are in complementary distribution, as exemplified by the following data from English and Spanish:

(3) a. John persuaded Bill [PRO to leave], where [PRO] is controlled by the matrix object.

    b. Juan dijo [que pro venía]
       Juan said [that pro was-coming]
       Juan said that he was coming.

In the Minimalist Program of (Chomsky, 1995), however, Government plays no role in the syntax proper and thus, the Binding Theory cannot be invoked to deduce the PRO-Theorem. Consequently, the distribution of [PRO] cannot be predicted, except by stipulating the null Case requirement, which may be theoretically coherent given the visibility condition on chains and the Principle of Full Interpretation, but has no independent motivation. Moreover, the null Case requirement on [PRO] is not only stipulative, but also empirically inadequate since [PRO] can in fact be Case-marked nominative and oblique as Sigurðsson (1991) has convincingly argued.

Nevertheless, the features [+ PRONOMINAL, + ANAPHORIC] and [+ PRONOMINAL, - ANAPHORIC] continue to be tacitly assumed for [PRO] and [pro], respectively. In the absence of Binding in the syntax proper, however, there is nothing that prohibits the presence of [pro] in the subject position of infinitives and gerunds if we make the claim that [pro] can also receive null case, e.g.

(4) [pro to do linguistics] is fun.

instead of the standard analysis

(5) [PRO to do linguistics] is fun.

Actually, if [PRO] requires an antecedent given its [+ ANAPHORIC] feature, (4) is to be prefered over (5) since there is no prima facie antecedent for the abstract pronoun in the relevant example. One consequence of this is that the distinction between [PRO] and [pro] in terms of null Case disappears.

Moreover, in languages such as Spanish, for each overt nominative pronoun there is both a [pro] and a [PRO] counterpart with the same ϕ features, e.g.

(6) { Nosotras / pro } prometemos [PRO no bañarnos desnudas en el lago]
    { We-fem. / pro } promise [PRO not to-bathe-ourselves naked-fem.pl. in the lake]

Thus, any theory of abstract pronominals must assume either that UG includes a collection of different [PRO]s and [pro]s marked for person, number, gender, etc., which would be highly costly, or that the ϕ features of [PRO] and [pro] are actually open and contextually specified by the environments in which these elements appear. Let us assume the latter for reasons of economy. Moreover, let us assume that [PRO] and the several types of [pro] discussed in the literature, e.g. (Rizzi, 1986), are *alloforms* of an even more abstract pronominal NP, namely the *proneme* /PRO/, which is minimally specified as [+ PRONOMINAL] with open ϕ features, [α PERSON, β NUMBER, γ GENDER, δ CASE, etc.], which is this paper's central claim.

2. THE [+/- ANAPHORIC] DISTINCTION

As discussed above, the crucial difference between [PRO] and [pro] is that [PRO] is [+ ANAPHORIC] whereas [pro] is [- ANAPHORIC]. Consider the following example, however:

(7) Ella nos vio [que e bailábamos samba]
    She us saw [that e danced-1st.p.pl. samba], where 'e' is controlled by the matrix object.
    She saw us dancing samba.

What is the nature of 'e' in (7)? Is it [PRO] or [pro]? If it is [PRO], then it can receive nominative case since it is the subject of a tensed clause. If it is [pro], then [pro] must be [+ ANAPHORIC] in the same sense that [PRO] in (3) is, to the extent that it is controlled by the matrix object. As it currently stands, the theory has no principled way of deciding the issue. However, in either case the distinction between [PRO] and [pro] disappears.

Consider further:

(8) a. Todo quedó desolado [después de destruir { Atila / él } la ciudad]
        Everything remained desolated [after of to-destroy { Attila / he } the city]
        Everything remained desolated after { Attila/he } destroyed the city.

    b. Atila se retiró [después de destruir e la ciudad]
        Attila withdrew [after of to-destroy e the city]
        Attila withdrew after destroying the city.

What is the nature of 'e' in (8b)? Here, 'e' is the subject of an infinitive and it has 'Atila' as its mandatory antecedent. By conventional wisdom, it should be [PRO]. However, within the structure in brackets, it is in free variation with the nominative NPs 'Atila' and 'él' as shown in (8a). According to this, [PRO] should also be able to receive nominative case, not only null case as claimed by Chomsky (1995). Nevertheless, if 'e' is not [PRO], but [pro], then [pro] must be [+ ANAPHORIC] since it has a mandatory antecedent. Again, the distinction between [PRO] and [pro] cannot be maintained either way.

3. CASE-MARKED [PRO]

Consider the Icelandic data and their analyses in (9) and (10) taken from (Sigurðsson, 1991):

(9) a. Strákarnir komust allir í skola.
        The boys-Nom. got all-Nom.pl.masc. to school.
        The boys all managed to get to school.

    b. Strákana vantadi alla í skolann.
        The boys-Acc. lacked all-Acc.pl.masc. in the school.
        The boys were all absent from school.

(10) a. Strákarnir vonast til [að PRO komast allir í skola]
        The boys-Nom. hope for [to PRO-Nom get all-Nom. to school]
        The boys hope to get all to school.

    b. Strákarnir vonast til [að PRO vanta ekki alla í skóllann]
        The boys(N) hope for [to PRO-Acc. lack not all-Acc. to school]
        The boys hope to be all absent from school.

Thus, according to Sigurðsson (1991), [PRO] can be Case-marked in Icelandic. If it were not, the floating quantifier 'all' would not have a source for its Case. But is it really [PRO]? If we assume that the relevant inaudibilia is not [PRO], but [pro], it would be legal for it to be Case-marked, but then it would have to be [+ ANAPHORIC] since the examples in (10) are instances of control. In fact, the inaudibilia represented by [PRO] in the analyses above is mandatorily coreferential with the subject of the main clause.

In any event, regardless of whether we assume [PRO] or [pro], the Icelandic data show that the distinction between these two elements cannot be maintained since we must conclude either that [PRO] can be marked by a grammatical case other than null case, just like [pro], or that [pro] is [+ ANAPHORIC], just like [PRO] is.

4. THE INTERPRETATION OF [PRO] and [pro]

Chomsky (1981) has argued that [PRO] must be controlled by an antecedent or it must be arbitrary (ARB) in reference:

(11)   John hopes [PRO to win]   [PRO] is controlled by the matrix subject.

(12)   a. [PRO to do linguistics] is fun.   [PRO] is arbitrary in reference.

b. Es lindo [PRO estar siempre contento]   [PRO] is arbitrary in reference.
It is nice [PRO to be always happy-masc.sing.]

However, [PRO] has a third reading. In fact, in Spanish it can refer to the speaker and thus have a referent in the world, just like [pro] or a lexical pronoun. Compare examples (13a-b) and (14a-b):

(13)   a. Es lindo [PRO estar siempre contentos]   [PRO] = We-masc.
It is nice [PRO to be always happy-masc.pl.]

b. Es lindo [PRO estar siempre contentas]   [PRO] = We-fem.
It is nice [PRO to be always happy-fem.pl.]

(14)   a. Es lindo [que pro estemos contentos]   [pro] = We-masc.
It is nice [that we be happy-masc.pl.]

b. Es lindo [que pro estemos contentas]   [pro] = We-fem.
It is nice [that we be happy-fem.pl]

Thus, the interpretations of (13a-b) and (14a-b) are exactly parallel, regardless of whether the relevant inaudibilias are [PRO] or [pro]. Moreover, the referential capacity of [PRO] can be the same as that of [pro] or some lexical pronouns, as the examples under (15) show:

(15)   a. Fue una locura [PRO bañarme desnuda en el lago]
It was a crazy-thing [PRO to-bathe-myself naked-fem.sg. in the lake]

b. Fue una locura [PRO bañarte desnuda en el lago]
It was a crazy-thing [PRO to-bathe-yourself naked-fem.sg. in the lake]

c. Fue una locura [PRO bañarnos desnudas en el lago]
It was a crazy-thing [PRO to-bathe-ourselves naked-fem.pl. in the lake]

As far as the ARB interpretation of [PRO] is concerned, it is not unique to [PRO], but it is also shared by *gossip* [pro], which is third person plural in Spanish, just like the unstressed 'they' of English:

(16)   [pro dicen que pro andan diciendo que pro dijeron...]
[they say that they are-going-around saying that they said...]

Finally, [pro] is also subject to control as example (7) shows. Consequently, both [PRO] and [pro] allow for the same type of interpretations, and there is no distinction between them from a semantic perspective.

5. EXPLETIVE [PRO]

Another distinction between [PRO] and [pro] standardly assumed is that [PRO] is never pleonastic, whereas [pro] may be. This is a consequence of the ARB interpretation of uncontrolled [PRO]. However, if we assume that the subject of infinitives is always [PRO], the standard assumption, then Spanish must have expletive [PRO]s as (17a) and (17b) show:

(17)   a. [pro es bien triste [PRO parecer [que uno es tonto]]]
              [it is very sad [PRO to seem [that one is dumb]]]

        b. *[pro es bien triste [uno parecer [que uno es tonto]]]
              [it is very sad [one to seem [that one is dumb]]]

Thus, the distinction between [PRO] and [pro] does not appear to hold from this perspective either.

6. ENGLISH AND RUSSIAN CASE-MARKED ABSTRACT PRONOUNS

Consider the following examples due to Dick DeArmond via personal communication:

(18)   a. John said that he was sick and then [he went home]

        b. John said that he was sick and then [e went home]

(19)   a. Ivan skazal, chto on bolen, i togda [on poexal domoj]
             Ivan said, that he sick, and then [he went home]

        b. Ivan skazal, chto on bolen, i togda [e poexal domoj]
             Ivan said, that he sick, and then [e went home]

As in the case of the Spanish data discussed above, the empty category in (18b) and (19b) can be either [PRO] or [pro]. However, let us first show that there is indeed an abstract pronominal NP in the subject position of the second conjunct of these examples. Consider the following evidence:

(20)   a. John ate breakfast and then [he shaved himself]

        b. John ate breakfast and then [e shaved himself]

(21)   a. Ivan pozavtrakal i potom [on pobril<u>sja</u>]
             Ivan had-breakfast and after-that [he shaved-<u>himself</u>]

        b. Ivan pozavtrakal i potom [e pobril<u>sja</u>]
             Ivan had-breakfast and after-that [e shaved-<u>himself</u>]

(22)   First, my car was hit t and then [e (was) smashed t]

(23)   First, John was very sad but next [e appeared [t to be very happy]]

Examples (20) and (21) involve the presence of a reflexive element, which requires an antecedent within the second conjunct. Example (22) involves passivization, which requires the presence of the displaced logical object in subject position of the second conjunct for the trace to be legal. Example (23) involves raising, which requires the presence of the logical subject of the complement clause in the subject position of 'appear' for the relevant trace to be legal too. Since all these examples are perfectly grammatical, it follows that they must include an abstract pronominal subject in the second conjunct for the reflexives and the traces to be legal. This is particularly true if a minimalist approach is asumed since in such an approach, conjunction reduction, which would involve deletion of interpretable material, is not a feasible alternative. However, as in any traditional conjunction reduction analysis, the inaudibilia in subject position of the second conjunct must be licensed under identity with the subject of the first conjunct. Thus, (24b) cannot have the same interpretation as that of (24a), i.e. the inaudibilia in (24b) cannot refer to 'Peter.' It can only refer to 'John.'

(24)   a. John ate breakfast and then [Peter shaved himself]

        b. John ate breakfast and then [e shaved himself]

However, the ungrammaticality of (25) below appears to be a prima facie counterexample to the licensing under identity claim:

(25) *First, there was darkness and next [e was light]

This calls for an explanation, which is readily available if Expletive Adjunction at LF is assumed. In fact, if Expletive Adjunction in terms of feature movement applies, as suggested by Chomsky (1995), then the relevant LF analysis of (25) is the one given under (26):

(26)   a. First [there+darkness] was t-of-darkness

       and next

       b. [e+light] was t-of-light

After Expletive Adjunction the material in brackets in (26a) is not identical with that in brackets in (26b), and hence the clash in grammaticality. Thus, (25) is not a counterexample, but actual evidence in favor of the assumption that it includes an abstract expletive pronoun in the second conjunct. If this was not the case, then Expletive Adjunction would not apply and we would not have an explanation for the ungrammaticality of (25).

Now, what is the nature of 'e' in (18)-(25)? If it is [pro], then it must be [+ anaphoric], a property of [PRO], not [pro]. If it is [PRO], then it must be case marked nominative since it is the subject of a tensed clause, which is a property standarly assumed of [pro], not [PRO]. In either case, no distinction can be made.

7. CONCLUSION

This paper has shown that the abstract pronominal elements standardly known as [PRO] and [pro] become indistinguishable in certain syntactic contexts, particularly if a Minimalist approach is taken. Thus, the best possible solution would be to assume that they are in fact contextually specified *alloforms* of an even more abstract pronominal NP with open φ features at the UG level, namely the *proneme /PRO/*.

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