

More on the Anaphor Agreement Effect

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This article provides additional evidence for the universality of Rizzi's (1990) anaphor agreement effect, under which the ungrammaticality of nominative anaphors in English, Italian, and Icelandic is due to the presence of agreement. Languages without agreement are shown to allow nominative anaphors. Objective anaphors cannot be associated with agreement, unless the agreement is a special anaphoric form. Superficial counterexamples to Rizzi's proposal are shown not to be problematic. The relative merits of two formal accounts outlined by Rizzi (1990) are discussed. Finally, it is suggested that the anaphor agreement effect can be a diagnostic for the presence of covert agreement.

Keywords: anaphora, agreement, reflexive, reciprocal, binding, coreference

Rizzi (1990) proposes that the reason why anaphors are barred from the subject position of tensed clauses in examples such as (1) is that anaphors cannot agree.

- (1) *They think that each other are nice.

According to Rizzi, this *anaphor agreement effect* "holds quite systematically in natural languages" (1990:26).

- (2) *The anaphor agreement effect*

Anaphors do not occur in syntactic positions construed with agreement.

Rizzi supports his claim with Italian and Icelandic examples involving nominative subjects and nominative objects, showing that with both, the presence of agreement precludes a nominative anaphor. In this article I provide additional evidence for the universality of the anaphor agreement effect. Further, I show that there is one well-defined class of exceptions not discussed by Rizzi: anaphors can agree when there is a special anaphoric form of agreement.

If Rizzi's hypothesis is correct, the ungrammaticality of nominative subject anaphors has nothing to do with the fact that they have nominative Case (contra Brame 1977, Koster 1978, Anderson 1982, Maling 1984, Everaert 1991) and nothing to do with the fact that the anaphor is

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in subject position (contra Kayne 1984, 1994, Chomsky 1986). Agreeing anaphors will always be ungrammatical, regardless of their Case or position.¹

Rizzi's hypothesis makes at least two additional predictions. First, nominative subject anaphors should be grammatical in languages without agreement, unless blocked by other aspects of the binding theory. That prediction is known to be true (e.g., Yang 1983, Fisher 1988); I will present grammatical examples of nominative anaphors from the literature. Second, the anaphor agreement effect should not be limited to nominative anaphors; it should also hold of anaphors with objective Case.

(3) *Prediction*

Anaphors should be prohibited from syntactic positions construed with object agreement.

I will show that this prediction also appears to be correct, with one modification. Object agreement is incompatible with anaphors, unless the agreement is a special anaphoric form.

I will also discuss several types of superficial counterexamples to the anaphor agreement effect. As I will show, none are real counterexamples. In some cases the anaphor is actually embedded inside the agreeing element as its possessor. In other cases the agreement morphology has features that do not match those of the anaphor so that there is no agreement in the technical sense of feature matching or checking.

If the anaphor agreement effect is real and universal, with the exception noted above, then we want to know why. Although it is not my goal in this article to provide a formal account of this phenomenon, I will briefly discuss the two possible approaches suggested by Rizzi (1990). One approach is based on the idea that the agreeing element must be at least as referential as the agreement. Under that view, anaphors cannot agree because anaphors are less referential than pronominals and agreement is pronominal. This view needs to be modified so that agreement may be either pronominal or anaphoric, in order to correctly predict that when the agreement is anaphoric, an anaphor can agree because the anaphor and the anaphoric agreement are equally referential.²

Rizzi's second approach is based on the idea that agreement, as a pronominal, is subject to Principle B of the binding theory. When an anaphor is coindexed with agreement, the result is ungrammatical because it is impossible to simultaneously satisfy the binding needs of both elements without violating either Principle A or Principle B. With the modification that agreement

¹ The idea that agreement plays a role in blocking anaphors in subject position is not new. This idea is incorporated into the binding theory in Chomsky 1981:209, where agreement counts as a SUBJECT for the purposes of determining the binding domain. George and Kornfilt (1981) argue that the role that agreement plays in the binding theory is to define the finite/nonfinite distinction, in place of Tense. Johnson (1985) proposes that an agreeing subject anaphor triggers a violation of the *i*-within-*i* Condition. Piccolo (1985) suggests that there is a feature clash if an anaphor is coindexed with agreement, under the assumption that agreement is pronominal. Other proposals to be discussed here linking the presence of agreement to the impossibility of having anaphors in certain positions can be found in Bok-Bennema 1991 and Pica 1993.

² The idea that agreement can be anaphoric is not new. See, for example, Reuland 1981, Harlow 1981, and Borer 1989.

may be pronominal or anaphoric, this second approach also correctly predicts that anaphors are compatible only with anaphoric agreement.³

I will also suggest that if it can be established that the anaphor agreement effect is universal, it may be possible to use it as a diagnostic for the presence or absence of covert agreement. That is, if anaphors are grammatical in some position, the prediction is that there is no covert agreement associated with that position. However, the diagnostic would be less reliable in the other direction. If anaphors are ungrammatical in some position, the ungrammaticality might be due to the presence of covert agreement but, alternatively, it might be due to other effects of the binding theory.

One additional topic of interest that I will only touch on is the various strategies (alternative constructions) that languages use to avoid agreeing anaphors. I will give examples of several, such as the use of default agreement forms or intransitive verb forms, but I will not explore the very interesting question of which strategy is used in which language and why.⁴ It should be noted that there is nothing special about these alternative constructions (that is, they are not reserved for languages in which anaphors would otherwise agree; they are merely constructions that occur independently in the languages of the world. As a result, it is impossible to prove that for any particular language, the use of one of these alternative constructions is actually caused by a need to avoid an agreeing anaphor. However, when taken as a whole, the data examined here support the quite remarkable conclusion that the construction in which an anaphor agrees is apparently never selected in the languages of the world (with the exception noted above involving a special form of anaphoric agreement).

The article is organized as follows. In section 1 I summarize Rizzi's evidence that nominative anaphors cannot agree and supplement this evidence with examples of grammatical nominative anaphors from languages without agreement. In section 2 I focus on languages with object agreement, showing that object anaphors are prohibited if they agree, unless the language has a special anaphoric form of object agreement. In section 3 I present potential counterexamples to the anaphor agreement effect, arguing that none are real counterexamples. In section 4 I summarize Rizzi's two theoretical approaches to the question of what causes the anaphor agreement effect, and in section 5 I discuss the possibility of using this effect as a diagnostic for (the absence of) covert agreement.

1 Evidence for the Anaphor Agreement Effect

In this section I summarize the evidence that Rizzi (1990) presents in support of the idea that anaphors are incompatible with agreement. I then supplement this evidence with examples illustrating that nominative anaphors are possible in languages that lack agreement.

³ The claim is not actually that the agreement is a full-fledged pronoun or anaphor that is independently subject to the binding theory. Rather, Rizzi's technical proposal considers the binding requirement of the agreement only as a step in calculating the binding domain of the agreeing element.

⁴ A reviewer points out that Marantz (1984) observes that an intransitive construction is always used when the reflexive is an affix or a clitic.

1.1 Rizzi's Evidence

To distinguish the effect of agreement from the effect of subject position, Rizzi focuses on examples involving agreeing nominative objects in dative subject constructions. He shows that agreeing nominative objects cannot be anaphors, but that dative subjects, which do not agree, can be.

In Italian a dative subject can act as the antecedent of an anaphor, but only if the anaphor does not agree. The following example contains a dative subject and a genitive object that does not trigger agreement. The genitive object is an anaphor, taking the dative subject as its antecedent.

- (4) A loro importa solo di se stessi.
 to them(DAT) matters(3SG) only of themselves(GEN)
 'All that matters to them is themselves.'
 (Rizzi 1990:(15a))

However, when the object is in the nominative Case, it triggers nominative agreement. In that situation the object cannot be an anaphor.⁵

- (5) a. *A loro interessano solo se stessi.
 to them(DAT) interest(3PL) only themselves(NOM)
 'They are interested only in themselves.'
 (Rizzi 1990:(15b))
 b. A me interessano solo loro.
 to me(DAT) interest(3PL) only they(NOM)
 'I am interested only in them.'
 (Rizzi 1990:(14b))

Rizzi points out that such examples cannot be ruled out by an Empty Category Principle (ECP) approach, contra Chomsky 1986, because the postverbal nominative object can be extracted in this construction, yet it cannot be an anaphor.

- (6) I libri che a Gianni sono piaciuti di più . . .
 the books that to Gianni(DAT) pleased most . . .
 'The books that pleased Gianni most . . .'
 (Rizzi 1990:(14))
 (7) *A loro piacciono se stessi.
 to them(DAT) please themselves(NOM)
 'They please themselves.'
 (Rizzi 1990:(13b))

⁵ The claim that the agreement with the nominative anaphor is what causes the problem in examples such as (5a) is strengthened by the fact that (at least some) speakers accept examples such as (5a) and (10b) below if the agreement is removed and the verb appears with third singular default agreement (Maria Nella Carminati, personal communication).

Icelandic also has dative subject constructions. Rizzi provides examples from Maling 1984 contrasting a grammatical long-distance anaphor, which does not agree (being inside a PP), with an ungrammatical agreeing anaphor; compare (8a) and (8b).⁶

- (8) a. Sigga_i telur að mér lfi vel vid sig_i.
 Sigga thinks that me(DAT) likes(SUBJUNCTIVE) well with self
 ‘Sigga thinks that I like himself.’
 b. *Sigga_i telur að mér lfi sig_i.
 Sigga thinks that me(DAT) likes(SUBJUNCTIVE) self(NOM)
 ‘Sigga thinks that I like himself.’

Note that it is possible for subjects to be anaphors, as long as they have a lexical Case such as dative and thus do not agree, as in (9a). But a nominative subject, which does agree, cannot be an anaphor, as in (9b).

- (9) a. Hún sagði að sér þætti vænt um mig.
 she_i said that self_i(DAT) was(SUBJUNCTIVE) fond of me
 (Maling 1984:(8b))
 b. *Jón segir að sig elski Maria.
 Jon_i says that self_i(NOM) loves(SUBJUNCTIVE) Maria
 (Rizzi 1990:(15b))

⁶ Everaert (1991) claims that unlike reflexives, Icelandic reciprocals can be agreeing nominative objects.

- (i) Þeim leiðist hvor annar.
 them(DAT) find-boring one(NOM) another(NOM)
 ‘They find one another boring.’
 (Everaert 1991:(16b))

Jóhannes Jónsson (personal communication) finds this example marginal and points out that since it has third singular agreement, one cannot be sure that it manifests anything other than default third singular agreement. However, he provides the following examples in which the reciprocal is plural. His judgments favor (iia), with plural agreement, over (iib), where the agreement remains singular, but he finds both examples marginal.

- (ii) a. Þeim leiðast hvorir aðrir.
 them(DAT) find-boring(PL) one(NOM.PL) another(NOM.PL)
 b. Þeim leiðist hvorir aðrir.
 them(DAT) find-boring(SG) one(NOM.PL) another(NOM.PL)

Even in English one occasionally hears speakers use reciprocals as subjects in tensed clauses, in examples such as the following:

- (iii) ?*They don’t know what each other are talking about.

Nevertheless, I find such examples very marginal, as I believe most speakers do.

Everaert suggests that the behavior of reciprocals is exceptional and that this is expected if, following Heim, Lasnik, and May (1991), reciprocals are not anaphors (although they contain an anaphor). However, if so, we would expect examples with agreeing reciprocals to be perfectly grammatical, which they certainly are not.

There is a general problem that reciprocals are acceptable in some contexts where reflexives are not (e.g., *They tied each other’s shoes* vs. **They tied themselves’s shoes*). However, this problem is beyond the scope of this article. Here I will assume, with Rizzi, that both reflexives and reciprocals are subject to the anaphor agreement effect.

With respect to the above data, it has been argued that the lack of nominative anaphors is due to an accidental morphological gap in the paradigm of anaphors: namely, there just do not happen to be any nominative anaphors (Brame 1977, Koster 1978, Anderson 1982, Maling 1984). But Rizzi points out that it is unlikely to be a coincidence that the same accidental gap shows up in English, Icelandic, Italian, and many other languages.⁷ He argues that “Italian provides clear evidence against the gap in the paradigm hypothesis” (1990:34) because first and second person stressed reflexives are formed by combining pronouns (which do exist independently) with the intensifier *stesso*.

- (10) a. A voi importa solo di voi stessi.
to you(DAT.PL) matters(3SG) only of yourselves(GEN)
‘All that matters to you is yourselves.’
- b. *A voi interessate solo voi stessi.
to you(DAT.PL) interest(2PL) only yourselves(NOM)
‘You are interested only in yourselves.’
(Rizzi 1990:(18))

1.2 Nominative Anaphors in the Absence of Agreement

If it is the presence of agreement that blocks anaphors and not the presence of nominative Case, then we expect to find grammatical nominative anaphors in languages without agreement. Indeed, nominative anaphors are grammatical in languages such as Khmer, Vietnamese, Chinese, Korean, and Thai (Fisher 1988). Fisher gives the following Khmer example from Huffman 1970:

- (11) Mít teʒŋ-pii neʒq_i kit thaə kluəŋ_i ciə kounsəh.
friend both person think that self be student
‘The two friends_i reasoned that they(self)_i are students.’
(Huffman 1970:231)

She also cites the following Vietnamese example from Trúống Văn Chình 1970:

- (12) Anh-áy_i e rằng mình_i cũng không khỏi tội.
he fear that self also not avoid sin
‘He_i is afraid that he(self)_i will not avoid punishment.’
(Trúống Văn Chình 1970:202)

Huang (1982) discusses similar examples in Chinese.

- (13) Zhangsan_i shuo ziji_i hui lai.
Zhangsan say self will come
‘Zhangsan_i said he(self)_i will come.’
(Huang 1982:331)

⁷ The same point is made by Johnson (1985).

Finally, Fisher cites a Korean example from Yang 1983 and a Thai example from Grima 1978.

- (14) Kitil-in_i sɔlo-ka_i kyəŋcæŋgha-nin-kəs-il calangha-n-ta.
 they-TOPIC each-other-NOM compete-ASP-COMP-ACC boast-ASP-DEC
 ‘They_i boast that each other_i are competing.’
 (Yang 1983:4)
- (15) Səmmāy_i khít wáa tuaʔeɛŋ_i ca dāy pay.
 Somai think that self FUT get go
 ‘Somai_i thinks that he(self)_i will get to go.’
 (Grima 1978:120)

Fisher’s data show that nominative subjects can be anaphors in the absence of agreement.

To these data we can add an example of a grammatical nominative object anaphor in a language without agreement. In Japanese, dative subject constructions take nominative objects, just as dative subject constructions do in Italian and Icelandic; but there is no agreement in Japanese. As a result, the nominative object can be an anaphor.

- (16) Sensei ni (wa) zibun ga wakar-ani-i.
 teacher DAT (TOPIC) self NOM understand-not-PRES
 ‘The teacher does not understand himself.’
 (Shibatani 1977:(33a))

This range of data on nominative anaphors supports Rizzi’s position that anaphors are incompatible with agreement. In the next section I turn to languages with both subject and object agreement. If the (modified) anaphor agreement effect is universal, objective anaphors should be ungrammatical if they agree (unless there is a special form of anaphoric object agreement).

2 Languages with Object Agreement

There are many familiar examples of languages without object agreement that allow anaphors in object position. English is such a language.

- (17) He likes himself.

In this section I examine three languages that have object agreement—Swahili, Inuit, and Nez Perce—and show that these languages conform to the prediction of Rizzi’s hypothesis. They do not allow agreeing objects to be anaphors, with one well-defined exception. Objective anaphors can agree just in case a special anaphoric form of agreement is present.

2.1 Swahili

In Swahili objects agree in person, number, and noun class.⁸ The object agreement morpheme occurs inside the verbal complex just before the verb stem.

⁸ Inanimate NP objects do not usually agree in Swahili, unless they are focused. For an account of animacy effects on object agreement, see Woolford 1995, to appear a.

- (18) Watu wa Kenya wa-na-*wa*-penda watoto.
 people of Kenya 3SUBJ.PL-PRES-3OBJ.PL-like/love children
 ‘Kenyan people like children.’
 (Keach 1995:(4a))
- (19) Ahmed a-na-*m*-penda Halima.
 Ahmed 3SUBJ.SG-PRES-3OBJ.SG-love Halima
 ‘Ahmed loves Halima.’
 (Vitale 1981:137)

Pronominal objects can be overt if they are contrastively stressed, as in (20a), but they are normally null (pro), as in (20b). Nevertheless, null objects trigger agreement just as overt objects do.

- (20) a. Juma a-li-*m*-busu yeye.
 Juma 3SUBJ-PAST-3OBJ-kiss her
 ‘Juma kissed her.’
 (grammatical with contrastive stress on *her*, Hoekstra and Dimmendaal 1983:55)
- b. Juma a-li-*m*-busu.
 Juma 3SUBJ-PAST-3OBJ-kiss
 ‘Juma kissed her.’
 (Vitale 1981:117)

Reflexive pronouns can also be overt when emphasized, but they are normally also null. The question is, can reflexive objects agree? At first glance, the reflexive examples in (21) appear to be counterexamples to the anaphor agreement effect because they have a morpheme, *ji-*, in the object agreement slot in the verbal complex.

- (21) a. Ahmed a-na-*ji*-penda mwenyewe.
 Ahmed 3SUBJ-PRES-REFL-love himself(EMPHATIC REFLEXIVE)
 ‘Ahmed loves himself.’
 (Vitale 1981:137)
- b. Ahmed a-na-*ji*-penda.
 Ahmed 3SUBJ-PRES-REFL-love
 ‘Ahmed loves himself.’
 (Vitale 1981:137)

However, reflexive objects cannot trigger the normal form of object agreement that appears in (20). Instead, this special reflexive object agreement morpheme, *ji-*, must appear. The fact that normal object agreement cannot occur with anaphoric objects supports the view that the anaphor agreement effect is universal. However, because anaphoric objects can occur with anaphoric agreement, we must modify the statement of that effect to include this well-defined exception.

- (22) *The anaphor agreement effect (modified)*
 Anaphors do not occur in syntactic positions construed with agreement, unless the agreement is anaphoric.

Reciprocals in Swahili are also consistent with (22). However, unlike reflexives, reciprocals do not occur with the special anaphoric agreement. In fact, there is no overt reciprocal NP in Swahili, and reciprocal constructions have no morpheme at all in the object agreement slot preceding the verb stem. Instead, they have a reciprocal suffix in the region where derivational morphemes occur following the verb stem. Contrast the following reciprocal example, which does not show object agreement, with example (18), which shows plural object agreement.

- (23) Ahmed na Halima wa-li-pend-*an-a*.
 Ahmed and Halima 3SUBJ.PL-PAST-LOVE-RECIP-IND
 ‘Ahmed and Halima loved each other.’
 (Hoekstra and Dimmendaal 1983:69)

The lack of an overt object and the absence of an object agreement morpheme suggest that this is an intransitive construction. In Swahili, morphemes that affect the number of arguments that the verb takes commonly follow the verb stem, and it is reasonable to assume that this reciprocal morpheme has made the construction intransitive (by absorbing a θ -role).⁹ Making reflexive and reciprocal constructions intransitive is common in the languages of the world (Aissen 1982, Marantz 1984).

Thus, we see that although Swahili normally has object agreement (at least for human objects), normal object agreement never occurs with anaphoric objects. We have also seen two different strategies that allow languages with object agreement to avoid violating the anaphoric agreement effect in constructions with anaphoric objects: (a) using a special anaphoric form of agreement and (b) making the verb intransitive.

2.2 Inuit

The prediction that agreeing objects cannot be anaphors is correct for Inuit. In the normal pattern of transitive clauses shown in (24a), both the subject and the object agree. When the object is an anaphor, this pattern with portmanteau subject-object agreement is ungrammatical, as in (24b) (Bok-Bennema 1991).

- (24) a. Angutip arnaq taku-vaa.
 man(ERG) woman(ABS) see-IND.3SG.3SG
 ‘The man sees the woman.’
 (Bok-Bennema 1991:28)
- b. *Hansiup immi asap-puq.
 Hansi(ERG) himself(ABS) wash-IND.3SG.3SG
 ‘Hansi washed himself.’
 (Bok-Bennema 1991:51)

⁹ Under Marantz’s (1984) account of intransitive anaphoric constructions, the intransitivized verb would still have an object, at least at D-Structure, because the intransitivizing morphology absorbs the subject θ -role, rather than the object θ -role. The object moves to the surface subject position, where it triggers subject agreement as in a passive.

Instead, Inuit avoids violating the anaphor agreement effect by realizing constructions with reflexive objects as intransitive constructions, either with no (surface) object at all, as in (25a), or with the object in oblique Case, not triggering object agreement, as in (25b). The agreement morphology that surfaces in (25a–b) reflects only subject agreement, as in any intransitive clause.¹⁰

- (25) a. Asap-puq.
 wash-IND.3SG
 'He washed himself.'
- b. Angut immi-nut taku-vuq.
 man himself-DAT see-IND.3SG
 'The man sees himself.'
 (Bok-Bennema 1991:50)

To account for the fact that agreeing objects cannot be anaphors in Inuit, Bok-Bennema proposes a filter that rules out two coindexed agreement morphemes.¹¹

- (26) *Reflexive Agreement Filter* (Bok-Bennema 1991:52)
 *[. . . agr_i agr_j . . .]

Bok-Bennema's filter is designed to apply to the situation characterized in (27), where an anaphor is coindexed with the object agreement morpheme and its antecedent is coindexed with the subject agreement morpheme.

- (27) antecedent_i subject-agreement_i . . . anaphor_i object-agreement_i

Since this situation is a subcase of the anaphor agreement effect, it can be subsumed under Rizzi's proposal. In contrast, the anaphor agreement effect cannot be subsumed under Bok-Bennema's filter because that filter does not account for the Italian data discussed in section 1, where the agreeing object cannot be an anaphor, even though its antecedent does not agree.

Let us now turn to another ergative language with object agreement that shows evidence of the anaphor agreement effect.

2.3 *Nez Perce*

Nez Perce is like Inuit in that the construction with normal subject and object agreement, shown in (28), cannot be used when the object is a reflexive (Rude 1982). Instead, a special form of agreement is used, as in (29).

¹⁰ If the Case glossed absolutive in example (24) is nominative, as assumed by Bittner (1994), then this is a variant on the nominative object examples discussed by Rizzi, with an ergative rather than a dative subject. Alternatively, the identity of the Case glossed absolutive in this example might be objective, as in similar examples from Nez Perce (see section 2.3) discussed in Woolford 1997. If so, this example shows that [Spec, Agr_O] disallows anaphors when object agreement is present.

¹¹ A similar proposal appears in Pica 1993:

- (i) *Disjoint Agreement Principle*
 Any two distinct AGR within a head-adjunction structure must be assigned distinct indices.

- (28) a. Háama-nm péé-'wi-ye wewúkiye-ne.
 man-ERG 3SUBJ.3OBJ-shoot-PERF elk-OBJ
 'The man shot an elk.'
 (Rude 1988:(30))
- b. Háama-nm péé-'wi-ye ('ip-né).
 man-ERG 3SUBJ.3OBJ-shoot-PERF him-OBJ
 'The man shot him.' (not himself)
 (Rude 1985:205)
- (29) Háama 'ipnéé-'wi-ye ('ipinnfx).
 man(NOM) 3SG.REFL-shoot-PERF 3SG.INTENS
 'The man shot himself.'
 (Rude 1985:205)
- (30) *Reflexive prefix series* (Rude 1985:40)
- | | Singular | Plural |
|-----|----------|----------|
| 1st | 'inéé- | nemée- |
| 2nd | 'imée- | 'imemée- |
| 3rd | 'ipnéé- | 'imemée- |

The fact that the normal object agreement cannot be used when the object is an anaphor supports the view that the modified version of the anaphor agreement effect in (22) holds universally. The strategy used to avoid an agreeing object anaphor in Nez Perce is like the one used in Swahili: a special anaphoric form of agreement is required when the object is a reflexive.¹²

2.4 *Object Anaphors in an Ergative Language without Object Agreement*

Let us now contrast these languages with languages that lack object agreement. There are a number of familiar nominative-accusative languages such as English and German that lack object agreement and freely allow reflexive objects. Their existence provides further support for the anaphor agreement effect. Rather than providing evidence from one of these familiar languages, however, I will focus on a less familiar, ergative language that lacks object agreement.

Two of the object agreement languages discussed above happen to be ergative. Ergative languages often have object agreement, and Edmondson (1978) and Bok-Bennema (1991) have noted that many ergative languages do not use the ergative construction when the object is an anaphor. Given this, one might wonder if the ungrammaticality of object anaphors is something that follows from ergativity. However, this is not so. Not all ergative languages bar object anaphors

¹² Nez Perce is also like Inuit in prohibiting an ergative subject in the reflexive construction. However, what is striking is that Nez Perce makes use of both a special form of object agreement and a change in the Case pattern (to the nominative subject pattern that does not normally involve object agreement in Nez Perce) when either strategy alone would be enough to avoid a violation of the modified anaphor agreement effect. For more detail on some of the factors that influence the choice of Case pattern in Nez Perce, see Woolford 1997, to appear b.

in ergative constructions. Object anaphors are allowed in ergative languages that do not have object agreement, such as Enga (Lang 1973).¹³

- (31) Baa-mé tánge pi-ly-á-mo.
 he-ERG self hit-PRES-3SG.SUBJ-AUGMENT
 ‘He is hitting himself.’
 (Lang 1973:49)

2.5 Conclusion

The goal of this section has been to show that anaphors are incompatible with normal object agreement. We have seen three object agreement languages that prohibit agreeing object anaphors, unless a special form of anaphoric agreement is used. These three languages have also illustrated several other strategies that languages use to avoid violating the anaphor agreement effect. With respect to the languages considered thus far in this article, the modified anaphor agreement effect holds without exception. This increases empirical confidence in the universality of the modified anaphor agreement effect. However, certain languages display apparent counterexamples to the effect. Let us now turn to these to determine whether or not they are genuine counterexamples.

3 Apparent Counterexamples to the Anaphor Agreement Effect

Tamil, Modern Greek, Georgian, Albanian, Jacaltec, Selayarese, and French all initially appear to have anaphors that agree. In this section I will examine each of these cases to determine whether or not they are genuine counterexamples to the anaphor agreement effect and whether or not they require the statement of that effect in (22) to be modified further in any way.

I will show that these potential counterexamples fall into several classes, none of which are real counterexamples to the anaphor agreement effect. In Tamil, although an agreement morpheme is present, its features do not match those of the anaphor. Because the features do not match, I will argue that there is no coindexing and thus, in a technical sense, no agreement.¹⁴ Several other languages are somewhat similar in that the agreement that appears is simply the default form of agreement and, again, its features do not match those of the anaphor. In still other languages, the anaphor turns out to be embedded inside the agreeing NP, as its possessor, so that the anaphor itself is not what triggers verbal agreement. Finally, I will show that there are two different ways of analyzing the French data under which they are not problematic for the view that the anaphor agreement effect is universal.

¹³ Enga does manifest object agreement with the indirect object of a few verbs of communication, but not with verbs such as ‘hit’ (Lang 1973:48).

¹⁴ In terms of Rizzi’s formal proposals to account for the anaphor agreement effect, to be discussed in detail in the next section, I will argue that the anaphor and the agreement do not form a chain in this situation.

3.1 Tamil

Kayne (1994:54) rejects Rizzi's proposal that anaphors are excluded from positions associated with agreement, citing Dravidian languages as counterexamples. Kayne's evidence is the statement from Yadurajan 1988:182 that "the Dravidian languages allow subject anaphors (with the antecedent in the higher sentences)" and the fact that some of these languages, such as Tamil (Steever 1987:739), have subject agreement. Although both statements about Dravidian languages are true when taken separately, the implication that Kayne draws from their combination is not. First of all, only finite verbs agree in these languages and normally only matrix verbs are finite (Steever 1987:739). Thus, normally, when a reflexive subject occurs in an embedded clause, the embedded verb is nonfinite and there is no agreement. In such cases the anaphor does not agree.

- (32) Taan varrataa Murukeecan
 self come(PRES.NOMINALIZING SUFFIX.ADVERBIALIZING SUFFIX) Murugesan
 connaaru.
 say(PAST.3SG.HONORIFIC)
 'Murugesan said he (himself) was coming.'
 (Asher 1985:(13a))

Nevertheless, there is one special construction, the reported-speech construction, that does allow a finite embedded clause with subject agreement.¹⁵ That construction does allow an anaphor in subject position; however, the agreement that surfaces takes an unexpected form. Contrast the form of agreement that occurs when the embedded subject is a pronoun, as in (33), with the form of agreement that occurs when the embedded subject is a reflexive, as in (34). When the embedded subject is a third person reflexive, *the embedded verb does not show third person agreement*; instead, it shows first person agreement, just as it does in the example with a first person subject in (35).¹⁶

- (33) Murukeecan avaru varraar-ηη
 Murugesan he come(PRES.3SG.HONORIFIC)-QUOTATIVE/COMP
 connaaru.
 say(PAST.3SG.HONORIFIC)
 'Murugesan said, "He's coming." ' (preferred interpretation)
 'Murugesan said he was coming.' (with coreference, "not ruled out in certain contexts"
 (Asher 1985:2))

¹⁵ The sources cited on Tamil do not list this construction as a counterexample to the generalization that Tamil sentences are limited to one finite verb, nor do they explain why they do not consider it a counterexample.

¹⁶ The last morpheme on the verb is called a "quotative particle" by Asher (1985), but Yadurajan (1988:182) labels it as a complementizer. It is clear that the reflexive *taan* is third person in Tamil since it is never used with a first or second person antecedent (Asher 1985). The word order differences in these examples are not significant.

A similar agreement pattern occurs in Dogon, where logophoric pronouns (which require a third person antecedent) trigger first person agreement (Culy 1994).

example with a first person antecedent, we find that the agreement on the verb remains third person.

- (38) Vetja me dhimset.
 self(NOM) CLITIC(1SG.DAT) feel-sorry-for(3SG.PRES.NONACTIVE)
 'I feel sorry for myself.'
 (Hubbard 1985:91)

It thus appears that the third person singular agreement morpheme in such examples is simply the default agreement, an inert slot filler. In this situation there is no agreement feature checking and thus no actual agreement in a technical sense. Thus, these cases are not counterexamples to the anaphor agreement effect, as long as it is formulated to refer only to agreement in a technical sense, where actual feature checking takes place, rather than merely to the presence of an agreement morpheme.

3.2.2 *Georgian* Georgian also initially appears to have counterexamples to the anaphor agreement effect. In Georgian, nominative, accusative, and dative NPs trigger some sort of agreement, and these same normal agreement forms appear to occur in reflexive constructions.¹⁷

- (39) Gela irçmunebs tavis tavs.
 Gela(NOM) he-convincing-*him* self's self(DAT)¹⁸
 'Gela is convincing himself.'
 (Harris 1981:125)

However, as in Albanian, the reflexive always triggers third person agreement, even when it is bound by a first or second person antecedent (Harris 1981:23), as shown in (40).

- (40) Čems tavs vakeb.
 my self(DAT) I-praise-*him*
 'I praise myself.'
 (Harris 1981:27)

A reviewer notes that this point can be made more clearly using the pair of examples in (41), which have nominative objects in contrast to the dative object in (40), because unlike dative objects, nominative objects can trigger the verb agreement that appears on the tense/aspect morpheme. (41b) shows the first person verb agreement that normally occurs with first person objects, but in (41a), where the object is an anaphor, the agreement is third person instead.

¹⁷ According to Nash-Haran (1992; also Nash 1995), the person markers on the Georgian verb are clitics.

¹⁸ Glosses for the verbal morphemes indicating the series and class of the verb have been omitted from the examples from Harris 1981.

- (41) a. (Me) cemi tavi m-i-qvar-s.
 1SG 1SG.GEN self(NOM) 1DAT-RELATIVE PREFIX-love-3PRES
 'I love myself.'
 (Example provided by a reviewer from Léa Nash, personal communication)
- b. V-u-qvar-var (me).
 1NOM-RELATIVE PREFIX-love-1PRES 1SG
 'He/She/They love me.'
 (Marantz 1989:33)

Thus, it may be appropriate to analyze Georgian as using default third person singular agreement when anaphors are involved, in order to avoid violating the anaphor agreement effect, paralleling the analysis of Albanian above. Alternatively, it may be appropriate to class Georgian with the next group of languages involving an anaphor as a possessor embedded inside a third person element.¹⁹

Given that Georgian allows object anaphors to occur with default agreement, one might expect that it would also allow nominative anaphors in subject position. However, it does not.

- (42) *Vano pikrobs, rom tavis tavi tamada ikneba.
 Vano(NOM) he-thinks that self's self(NOM) toastmaster(NOM) he-will-be
 'Vano thinks that himself will be toastmaster.'
 (Harris 1981:26)

There are at least two possible reasons for the ungrammaticality of this example. As we have seen, not all languages allow the default agreement strategy as a means of getting around the anaphor agreement effect. It is possible that Georgian allows default agreement in the construction in (41) where the anaphor is an object, but not in the construction in (42) where it is a subject. Alternatively, the ungrammaticality of (42) may simply be due to (other aspects of) the binding theory. The anaphor agreement effect is not the only condition on anaphors. That is, for nominative subject anaphors to occur in a language, it is necessary, but not sufficient, to avoid a violation of the anaphor agreement effect. The binding theory must also be satisfied.

3.3 Languages with Possessor Constructions

In this section I examine two additional languages that manifest superficial counterexamples to the anaphor agreement effect: Modern Greek and Selayarese. Each of these languages initially appears to have an agreeing reflexive object. However, there is strong evidence for Modern Greek that the reflexive is actually embedded inside the object, as its possessor, and thus does not agree.

¹⁹ Although the form of the Georgian reflexive looks superficially like the form of the reflexives in the next group of languages, where the anaphor is actually a possessor, a reviewer prefers the default agreement account in the absence of the additional evidence that we will see in Modern Greek below, pointing out that "even if the possessor of a reflexive has the same ϕ -features as the antecedent, while the reflexive itself has different or underspecified ϕ -features, this need not be taken as evidence that the possessor is the 'bound' element in the sense of binding theory."

The object as a whole agrees, but it is not an anaphor. Selayarese appears to have a similar reflexive construction, but one could also argue that this language belongs with the group just described, where reflexives trigger default agreement. In either case Selayarese does not violate the anaphor agreement effect.

3.3.1 *Modern Greek* Rivero (1988:415) discusses the fact pointed out by Joseph (1976:fn. 7) that Modern Greek allows nominative anaphors in the embedded subject position of finite clauses.²⁰ Since nominative subjects agree with the finite verb in Modern Greek (Joseph 1976), such examples initially appear to be counterexamples to the anaphor agreement effect.²¹

- (43) O Giánnis pisteúí óti o eautós tou éfnai philós mou.
 the Giannis thinks that the(NOM) self(NOM) of-his is friend of-mine
 Lit. 'Giannis thinks that hisself is my friend.'
 (Rivero 1988:415)

However, we can see that such examples are not actually counterexamples to the anaphor agreement effect once we understand that it is not the nominative NP as a whole, but the possessor of that NP, that is the anaphor, as Iatridou (1988) has shown. One piece of evidence that Iatridou gives involves examples in which what initially looks like an object anaphor is doubled by a clitic. The fact that the clitic remains masculine, regardless of the features of the anaphor and its antecedent, indicates that the clitic is not doubling the anaphor. The clitic is doubling the object, but the anaphor is embedded inside the object as its possessor.

- (44) O Costas ton thavmazi ton eafton
 the(NOM.MASC.SG) Costas CL(ACC.MASC.SG) admires DET(ACC.MASC.SG) self
 tu.
 his(GEN.MASC.SG)
 'Costas admires himself.'
 (Iatridou 1988:(3))

²⁰ Nominative anaphors are "excluded in traditional grammars of Modern Greek" (Rivero 1988:415).

²¹ Rivero (1988:415) distinguishes the behavior of nominative anaphors in Greek from that of nominative anaphors in Spanish, which function as (emphatic) pronominals in embedded subject position that are free to corefer or not. She presents evidence that the nominative anaphor in this example is in an A-position and that it is "not an emphatic non-A expression in apposition to a null item" (Rivero 1988:416).

Rivero proposes that the ability of nominative anaphors to occur in finite clauses in Modern Greek is connected to the fact that finite subjects undergo raising in examples such as (i).

- (i) Oi ánthropoi moiázoun [óti t douleíoun].
 the men look-like(3PL) that work(3PL)
 'The men seem to be working (lit. The men look like that are working).'
 (Rivero 1988:(2b))

That view makes sense if NP-trace is an anaphor. However, raising is not possible from infinitival clauses in Modern Greek, according to Rivero, which is surprising if raising from finite clauses is possible. Given that something very close to (i) with an overt subject pronoun in the embedded clause is grammatical in English, as shown in (ii), it is possible that the Greek construction in (i) has a similar structure, with pro drop of the embedded subject rather than raising.

- (ii) The men look like they are working.

- (45) I Maria ton thavmazi ton eafton
 the(NOM.FEM.SG) Maria CL(ACC.MASC.SG) admires DET(ACC.MASC.SG) self
 tis.
 her(GEN.FEM.SG)
 ‘Maria admires herself.’
 (Iatridou 1988:(9a))
- (46) Egho ton xero ton eafton mu.
 I CL(ACC.MASC.SG) know DET(ACC.MASC.SG) self my(GEN.1SG)
 ‘I know myself.’
 (Iatridou 1988:(9b))

A second piece of evidence discussed by Iatridou also involves the clitic in these examples. If the object as a whole were the anaphor, then it would be coindexed with both the clitic and the subject antecedent. But that configuration would violate Principle B of the binding theory because the clitic is a pronoun and should not be able to be bound by an NP as close as the subject.

To Iatridou’s evidence can be added examples such as (47) in which the agreement triggered by the NP containing the possessive anaphor is always third person, regardless of the person of the possessive anaphor and its antecedent.

- (47) Thelo ton eafton mu na petixi.
 want(1SG) the(ACC) self my succeed(3SG)
 ‘I want myself to succeed.’
 (Joseph 1976:(13a))

If the accusative NP, *ton eafton mu*, is the subject of the lower clause (an exceptional-Case-marking construction), then that NP triggers third person agreement directly. If (as suggested to me by Kyle Johnson) that NP is actually in the upper clause, controlling a pro subject of the embedded clause, the same point can be made. That pro subject has a third person feature to match its controlling NP and thus triggers third person agreement.

If it is the possessor that is the anaphor in Modern Greek examples such as (43), then these examples are not counterexamples to the anaphor agreement effect, because the possessor does not trigger agreement.²²

3.3.2 *Selayarese* The second language in this group is Selayarese (an Austronesian language

²² As a reviewer points out, these constructions are a bit mysterious because the possessor in the reflexive constructions looks just like an ordinary possessor. It has no special reflexive form. The head noun, the *self* morpheme, is what makes the possessor behave like an anaphor (or obligatorily bound pronoun). Yet the *self* morpheme does not appear to be an anaphor itself, despite its morphological form.

spoken in Indonesia). Reflexive objects initially appear to trigger the normal form of object agreement, as the following two examples show:

- (48) La-jañjang-*i* kalen-na.
 3ERG-see-3ABS self-3
 'He saw himself.'
 (Finer 1994:(6a))
- (49) La-ʔalle-*i* doeʔ-injo i Basoʔ.
 3ERG-take-3ABS money-the DET Baso
 'Baso took the money.'
 (Finer 1994:(2a))

However, when we examine reflexive constructions with first and second person antecedents, we see that the reflexive object always triggers third person agreement on the verb, regardless of the person of the antecedent (Dan Finer, personal communication).

- (50) a. Ku-jañjang-*i* kaleng-ku.
 1SG.ERG-see-3ABS self-1SG
 'I saw myself.'
- b. Mu-jañjang-*i* kalem-mu.
 2FAMILIAR-see-3ABS self-2FAMILIAR
 'You saw yourself.'
- c. To-jañjang-*i* kalem-ba.
 1EXCLUSIVE-see-3ABS self-1EXCLUSIVE
 'We(exclusive) saw ourselves.'
- (51) a. Ku-alle-*i* doeʔ-injo.
 1SG-take-3ABS money-the
 'I took the money.'
 (Finer 1994:(2b))
- b. Ku-keoʔ-*ko*.
 1SG-call-2FAMILIAR
 'I called you.'
 (Finer 1994:(2e))

This pattern indicates either that Selayarese avoids violating the anaphor agreement effect by using default agreement with reflexives or that it uses a construction in which the anaphor is embedded inside the object as its possessor.

The reflexive object has the same overt form as a normal possessed object in Selayarese, supporting the view that a possessive construction is involved.

- (52) La-jañjang-*i* i Ali andoʔ-na.
 3ERG-see-3ABS DET Ali mom-3
 'His mom saw Ali.'
 (Finer 1994:(5a))

- (53) La-jaŋjang-i kalen-na.
 3ERG-see-3ABS self-3
 'He saw himself.'
 (Finer 1994:(6a))

Though further investigation is required to determine the structure of the reflexive construction, these examples provide sufficient evidence to conclude that Selayarese does not violate the anaphor agreement effect.²³

3.4 French Past Participle Agreement

The final potential counterexample to the anaphor agreement effect involves French participle agreement. This construction initially appears to be a counterexample because reflexive object clitics trigger the same agreement that nonreflexive object clitics and other sorts of moved objects do. The following examples contrast a nonagreeing participle in (54) with an agreeing participle in (55) through (57). We see that the reflexive clitic in (55) agrees and that it takes the same form of agreement as the nonreflexive clitic in (56) and the passive subject in (57).²⁴

- (54) Cécile a décrit Marie comme sympathique.
 Cecile has described Marie as friendly
- (55) Cécile s'était décrit-*e* comme chaotique.
 Cecile REFL-was described-FEM as chaotic
 'Cecile described herself as chaotic.'
- (56) Cécile l'a décrit-*e* comme sympathique.
 Cecile her-has described-FEM as friendly
- (57) Cécile était décrit-*e* comme sympathique.
 Cecile was described-FEM as friendly

Nevertheless, there are at least two possible analyses of French participle agreement under which examples such as (55) are not counterexamples to the anaphor agreement effect. If the agreement found in reflexive clitic examples such as (55) is anaphoric, like the anaphoric agreement that

²³ According to Finer (1995), the morphemes glossed here as object agreement morphemes are actually clitics because they can attach to sentence elements other than the verb under certain circumstances. If so, then we have additional evidence that anaphors do not agree in Selayarese. However, if clitic doubling produces a chain of the same relevant sort as agreement does under Rizzi's account of the anaphor agreement effect (to be discussed in detail in section 4), then his account predicts that anaphors should not be clitic doubled. Recall from section 3.3.1 on Modern Greek that Iatridou (1988) points out that if a nonreflexive clitic were to double a reflexive object, both would be coindexed with the antecedent of that reflexive. The resulting configuration would violate the binding theory because the pronominal clitic would be bound by the antecedent of the reflexive.

(i) Costas_i clitic_i admires himself_i.

As Iatridou notes, this configuration is not problematic if the clitic is a reflexive as well.

²⁴ I would like to thank Elisabeth Villalta for providing these examples.

agreement effect should refer not to the simple presence of an agreement morpheme, but to the presence of agreement in the technical sense of feature matching (checking). In addition, the correct approach must bar anaphors with normal agreement, but allow them with anaphoric agreement.

Both of Rizzi's proposals satisfy these requirements. Rizzi views the anaphor agreement effect as some kind of chain condition, following a proposal by Picallo (1985). What Rizzi's two proposals have in common is (a) the idea that the agreeing element and the agreement are co-indexed and in the same chain and (b) the idea that agreement is a pronominal element, as suggested in Chomsky 1981. Although Rizzi does not consider the possibility that agreement may sometimes be anaphoric, it turns out that both of his proposals correctly predict that only pronominal agreement is incompatible with agreement. Anaphoric agreement is compatible with an anaphor under both of his approaches.

Rizzi's first proposal attributes the anaphor agreement effect to a chain condition requiring the agreeing element to be at least as referential as the agreement. His second proposal derives the effect from a modified version of the binding theory. Let us examine each of the proposals in turn.

4.1 Rizzi's Referential Hierarchy Approach

Rizzi's first proposal to account for the anaphor agreement effect is a modification of Picallo's (1985) idea that the impossibility of an anaphor in subject position is due to a feature clash between the anaphor and the subject agreement. If these two elements form a chain and if agreement is pronominal, as in Chomsky 1981, then the result is ruled out because elements in the same chain clash with respect to the features [anaphoric] and [pronominal].

Rizzi notes that this chain condition must be formulated with care because if it is formulated in a very simple, strong manner, prohibiting any feature clashes between chain members, it will improperly rule out many grammatical constructions involving chains composed of elements with different features. For example, R-expressions, pronouns, and anaphors can all undergo NP-movement, forming a chain with the NP-trace that is left behind; but we do not want to rule out all chains with a feature difference between the moved element and the NP-trace. If the NP-trace is an anaphor, for example, a very strong chain condition would rule out NP-movement of R-expressions and pronouns owing to a feature clash between chain members.

To avoid such problems, Rizzi proposes a weaker chain condition that does not require feature matching; instead, the pattern of features must obey a hierarchy. Rizzi's chain condition requires that the features of an argument be as high as or higher than the features of a nonargument in the same chain, with respect to the following "referential autonomy hierarchy":

- (58) *Referential autonomy hierarchy*
 R-expressions > pronouns > anaphors

The intuitive idea is that the argument of a chain should "be the most referentially autonomous element in the chain" (Rizzi 1990:37). The precise statement of Rizzi's chain condition is as follows:

(59) *Rizzi's chain condition* (Rizzi 1990:37)

There cannot be a nonargument in the chain which is higher in the referential autonomy hierarchy than the argument.

Under the assumption that the agreeing element is an argument and the agreement is a nonargument, this chain condition rules out agreeing anaphors. If the agreement falls into the category of pronoun on the above hierarchy, then it can never be in the same chain with an argument that is lower on the hierarchy, as an anaphor would be. In contrast, if the agreement is anaphoric (although Rizzi does not discuss this possibility), it is at the same level on the hierarchy as an anaphor; thus, an anaphor agreeing with anaphoric agreement does not violate the chain condition. Rizzi's chain condition therefore correctly predicts that the anaphor agreement effect holds only when the agreement is pronominal.

With respect to chains formed by NP-movement, Rizzi appears to assume that the moved element is the argument and the NP-trace is a nonargument. Under that assumption, plus the assumption that an NP-trace is an anaphor, an NP-moved element is always as high as or higher than its NP-trace on the hierarchy in (58), regardless of whether the moved element is an anaphor, pronoun, or R-expression. Rizzi does not discuss how this chain condition applies to chains formed by \bar{A} -movement, however. Assuming that a *wh*-trace is an R-expression, Rizzi's chain condition would appear to rule out \bar{A} -movement of anything other than an R-expression. \bar{A} -movement of a pronoun or anaphor would result in a chain in which the moved element (the argument) is lower than the *wh*-trace (the nonargument) on the hierarchy in (58). Rizzi's chain condition would thus appear to incorrectly rule out examples such as the following:

- (60) a. Him_i I think I met t_i yesterday.
 b. Himself_i I think he likes t_i.

One solution to this problem would be to drop the idea that a trace is a nonargument and return to the standard notion that a moved element and its trace share an argument, so that they both qualify as arguments with respect to this chain condition. Since the chain condition only compares the features of arguments with those of nonarguments, this chain condition would never affect chains formed by movement.²⁶

Work by Lasnik (1989) initially suggests that Rizzi's chain condition may actually be one manifestation of a broader condition that is not limited to elements of the same chain (at least under the standard view that a chain includes no more than one θ -role). Lasnik argues that effects attributed to Principle C of the binding theory such as the fact that a pronoun cannot bind an R-expression are manifestations of the following broader generalization:

(61) *Lasnik's (1989) generalization*

A less referential expression may not bind a more referential one.

²⁶ Kyle Johnson (personal communication) points out that this problem does not arise under Barss's (1986) view that a *wh*-trace is always of the same category as the moved element.

Lasnik focuses on examples involving binding relations among elements that are not members of the same chain, such as the following pair from Japanese. (62b) is ungrammatical because a less referential anaphor in the middle clause binds a more referential pronoun in the lowest clause.

- (62) a. John-ga_i [kare-ga_i [zibun-ga_i tensai da to] omotte iru to] itta (koto).
 John-NOM he-NOM self-NOM genius COP COMP think PROG COMP said (fact)
 ‘John_i said that he_i thinks that self_i is a genius.’
- b. *John-ga_i [zibun-ga_i [kare-ga_i tensai da to] omotte iru to] itta (koto).
 John-NOM self-NOM he-NOM genius COP COMP think PROG COMP said (fact)
 ‘John_i said that self_i thinks that he_i is a genius.’

Given this broader applicability of what one might call the “referential hierarchy condition” to coindexed elements that are not in the same chain, one might think that Rizzi’s chain condition (and therefore the anaphor agreement effect itself) is a subcase of Lasnik’s condition. However, there is some evidence that the anaphor agreement effect is actually distinct from Lasnik’s condition. In English it appears that avoiding a violation of the anaphor agreement effect is more important than avoiding a violation of Lasnik’s condition. (63a) is grammatical even though a reflexive binds a pronoun, violating Lasnik’s condition. The alternative would be to violate the anaphor agreement effect, as in (63b), but this is not acceptable.

- (63) a. They_i have convinced themselves_i that they_i are smart.
 b. *They_i have convinced themselves_i that themselves_i are smart.

However, Rizzi does not pursue and defend his first proposal; instead, he focuses on an alternative, binding-theoretic proposal that he views as a “more sophisticated way of deriving the anaphor-agreement effect that is worth exploring” (Rizzi 1990:37). Let us now turn to that proposal.

4.2 Rizzi’s Binding Theory Approach

The leading idea behind Rizzi’s second proposal to account for the anaphor agreement effect is fairly simple, although the details are complex and technical. The basic idea is as follows: an agreeing anaphor creates a situation in which two elements have exactly the opposite binding requirements, which cannot possibly be simultaneously satisfied. This account requires two assumptions: (a) agreement morphemes are pronominals subject to Principle B of the binding theory and (b) an agreeing element and the agreement are coindexed. When an anaphor agrees, three elements become coindexed: the agreement, the anaphor, and the antecedent of that anaphor.²⁷

- (64) antecedent_i . . . [_{AgRP} anaphor_i agreement_i . . .]

²⁷ The anaphor and the agreement are coindexed because they are in an agreement-checking relationship. The anaphor and its antecedent are coindexed because of the binding theory. Assuming that these are the same type of coindexing, the result is that the antecedent of the anaphor is also coindexed with the agreement.

Assuming that the anaphor and the agreement have the same governing category (more on this below), this configuration necessarily results in a violation of either Principle A or Principle B of the binding theory. If the antecedent is close enough to bind the anaphor, then it is close enough to bind the (pronominal) agreement morpheme as well, violating Principle B. If the antecedent is far enough away to avoid a Principle B violation with respect to the agreement morpheme, then it is too far away to bind the anaphor, creating a Principle A violation.²⁸

Let us see how this works in a concrete example.

(65) *They_i think that [themselves_i are_i nice].

In (65) there is no possible selection of a governing category for the anaphor that will simultaneously satisfy the binding requirements of both that anaphor and its agreement. If we select the matrix IP as the governing category, then Principle A is satisfied because the anaphor has an antecedent within its governing category. However, Principle B is violated because the pronominal agreement is bound by an antecedent within its governing category. If we select the embedded IP as the governing category, then Principle B is satisfied, but Principle A is violated because the anaphor has no antecedent within the governing category.

Although Rizzi does not discuss constructions with object agreement, the approach works here too. An agreeing object anaphor taking the subject as its antecedent would produce the following configuration:

(66) [Subject_i Object(anaphor)_i Agr(pronominal)_i VP]

The subject is close enough to bind the object anaphor, so Principle A is obeyed. The subject is also coindexed with the object agreement (because both are coindexed with the object), but since the object agreement is pronominal with respect to the binding theory, a violation of Principle B results. Selecting an alternative antecedent outside the clause would avoid the Principle B violation, but would create a Principle A violation with respect to the object anaphor. Note, however, that if the agreement in (65) is anaphoric, rather than pronominal, no problem arises because the binding needs of the anaphoric agreement and the anaphor can be satisfied within the same governing category.

The basic idea of Rizzi's binding approach is appealing because it subsumes the anaphor agreement effect under the binding theory. Moreover, it could lead to an overall simplification of the binding theory if stipulations can be removed that were designed to exclude anaphors from nominative subject position. However, there are a number of technical details to be ironed out that are only briefly addressed in the few pages that Rizzi devotes to this account.

One of these technical details is how to ensure that the governing category of the anaphor and the governing category of the agreement are the same category. If the anaphor in (65) could

²⁸ A problem that must be solved here is why no violation of Principle B is produced simply by the fact that the agreeing element binds the agreement. Rizzi concludes that "chain-internal binding relationships must be irrelevant" (1990:37). If they were not, agreement would always violate Principle B. He suggests that "the binding principles solely concern genuine referential dependencies between different arguments" (1990:37) (possibly with the exception of Principle A).

take the matrix IP as its governing category (since no antecedent is available in the lower IP), while the pronominal agreement takes the embedded IP as its governing category (since it does not require an antecedent), then the binding requirements of both elements could be satisfied and the construction would be incorrectly predicted to be grammatical. Rizzi's discussion of such examples suggests that the requirement that these elements have the same governing category follows from the particular definition of governing category that he uses. This definition is a modification of the standard one with the addition that the binding requirements of the governor must also be considered.

(67) *Governing category* (Rizzi 1990:35)

Z is the governing category for X iff Z is the minimal category with a subject containing X, a governor G for X, and where the binding requirements of X *and* G are satisfiable.

As Rizzi points out, satisfying the binding requirements of governors is usually trivial, since most governors are neither pronouns nor anaphors and thus, for binding-theoretic purposes, need merely be free. Thus, it is no surprise that the need for satisfying those requirements was not previously noticed. The binding requirements of the governor are also essentially satisfied automatically when the governor is pronominal agreement and the agreeing element is also a pronoun, because whatever domain satisfies the pronoun automatically also satisfies the pronominal agreement. Thus, the issue of satisfying the binding requirements of the governor becomes apparent only when those requirements clash with the binding requirements of the governed element. That situation occurs in examples such as (65), where the governed element is an anaphor and the governor is pronominal agreement. Rizzi's account of such constructions is as follows:

The lower clause does not qualify as a GC (governing category) for the anaphor because its binding requirements are not satisfiable, there being no virtual antecedent; the higher clause does not qualify either: there is no virtual indexation simultaneously satisfying the contradictory binding requirements of the anaphor and of its (coindexed) pronominal governing Agr if the main clause is taken as their GC. (1990:38)

Under Rizzi's account, the ungrammaticality of such examples follows from the fact that the anaphor has no governing category. He explicitly states that "the assignment of a GC to a governed element must be compulsory" (1990:38).

Note that contrary to the impression one gets from the simplified version of Rizzi's approach given in the introductory portions of this section, Rizzi's technical proposal does not actually add agreement to the list of items subject to the binding theory; rather, it merely uses the satisfiability of the binding needs of agreement within a designated domain as part of the definition of the governing category of elements that are subject to the binding theory.²⁹

²⁹ Lee Baker (personal communication) notes the following technical problem with Rizzi's definition of governing category and its application to examples such as (65). The binding needs of a pronoun can be viewed as always satisfiable (although not necessarily satisfied) in any domain since a pronoun can always be free. As a result, one could view the needs of the pronominal agreement morpheme as satisfiable within the matrix IP in (65), even though it is coindexed with the matrix subject within that domain. However, Rizzi's discussion of such examples indicates that he wants to

Although Rizzi only sketches the outlines of these two possible approaches to the question of why the anaphor agreement effect holds, both are interesting and both merit further consideration, especially now that the empirical basis for the effect has been strengthened.

5 A Possible Diagnostic of Covert Agreement

In this section I briefly explore the possibility of using the anaphor agreement effect as a diagnostic for the presence of covert agreement.

It is standard to assume that abstract Case is present even when there is no overt Case morpheme, but agreement is not always present under the standard assumption that only particular (structural) positions are associated with agreement. However, the question remains of whether covert agreement is ever present, and if so, whether there is any way to detect its presence.³⁰

If the anaphor agreement effect is established as universal, it could be used as a diagnostic of the presence or absence of covert agreement. If a syntactic position allows anaphors, then we would conclude that there is no agreement associated with that position, not even covert agreement. For example, noting that anaphors freely occur in object position in English, we could rule out the possibility that English has covert object agreement.

However, this diagnostic test would only be reliable in one direction. If anaphors occur in a particular position, we could reliably conclude that no agreement is associated with that position; but if anaphors are barred from a particular position, we could not be sure that covert agreement is present, because there are other restrictions on the positions of anaphors besides the anaphor agreement effect.³¹

disallow the possibility of considering different indices in calculating the satisfiability of the binding requirements of the two elements (the anaphor and the agreement). Instead, he wants to require one virtual indexing to simultaneously satisfy the requirements of both elements.

³⁰ A reviewer points out that the theory should not allow the possibility of covert agreement if the restrictive assumption of the Minimalist Program is correct, that the covert component contains only semantically interpretable elements. However, in Chomsky 1995:277–278 the Minimalist Program is revised such that agreement features are classified as semantically interpretable elements, and there is a discussion of checking ϕ -features that are not overtly manifested (i.e., covert agreement). However, an additional consequence of this revision is that ‘‘interpretable features need not enter checking relations’’ (Chomsky 1995:285). Thus, that theory does not require the presence of covert agreement in order to check the ϕ -features of subjects and objects since ϕ -features need not be checked.

³¹ Nevertheless, the impossibility of anaphors in certain positions might be used as weak evidence for the presence of covert agreement, in combination with other evidence. For example, this weaker use of the anaphor agreement effect could provide additional, independent support for the claims in Speas 1995 and in Cardinaletti 1997 that Mainland Scandinavian languages have covert agreement, despite the lack of morphologically overt finite verb agreement. Mainland Scandinavian languages prohibit anaphors in nominative subject position (Jóhannes Jónsson, personal communication), a fact that would be expected if these languages have covert subject agreement. However, as noted above, the anaphor agreement effect is not the only constraint on anaphors. Thus, the impossibility of nominative subject anaphors in Mainland Scandinavian could follow from other aspects of the binding theory, rather than from the anaphor agreement effect.

6 Conclusions

Rizzi's (1990) claim that anaphors are incompatible with agreement (the anaphor agreement effect) appears to be empirically sound, with one important exception. *Anaphors cannot agree, except when the agreement is a special form reserved for anaphors (anaphoric agreement).*

Rizzi provides evidence that subject/nominative agreement is incompatible with anaphors. I have supplemented that evidence here with contrasting examples of languages without agreement that do allow subject/nominative anaphors. Moreover, I have shown that languages with object agreement also conform to the prediction that anaphors cannot agree, unless there is a special anaphoric form of object agreement that surfaces only with anaphors. The fact that objective anaphors cannot trigger the normal form of object agreement is important, because it rules out theoretical approaches that link the impossibility of nominative anaphors to the fact that they occupy the subject position or to the fact that they have nominative Case.

I have also examined superficial counterexamples to the anaphor agreement effect and shown that none are necessarily problematic for Rizzi's claim. In one class of examples, the agreement morpheme that appears does not match the features of the anaphor, so there is no agreement in the technical sense of feature checking. In another class of examples, the anaphor is not actually the agreeing element; instead, the anaphor is embedded inside the agreeing NP, as its possessor.

I conclude that the anaphor agreement effect is real and apparently universal. Though I have not attempted to provide a formal account of this effect, I have summarized and discussed two possible accounts proposed by Rizzi (1990). One proposal involves a chain condition in which the agreeing element must be at least as referential as the agreement. The other proposal modifies the definition of governing category so that one cannot calculate the binding domain of an anaphor that agrees without also figuring in the binding needs of its governor, the agreement. As I have shown, both approaches correctly predict that anaphors can agree just when the agreement is anaphoric.

The anaphoric agreement effect is not intended to replace Principle A of the binding theory, but it could allow the binding theory to be simplified by the removal of stipulations intended only to prohibit anaphors from positions involving agreement. The anaphor agreement effect may also be useful as a diagnostic of covert agreement.

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