

Chapter 1

A Symmetric Theory of Anaphora

In this chapter I will illustrate the empirical necessity of the notion “ \bar{A} -anaphor”: in order to account for the distribution of reciprocals in Italian, this notion must be incorporated in the grammar. After establishing the existence of \bar{A} -anaphors, I will turn to some of their properties.

1.1 Reciprocals in Italian

The reciprocal in Italian is expressed either by the clitic form *si*, homophonous with the reflexive clitic, or by the discontinuous expression *l'uno . . . l'altro* ‘the one . . . the other’. We will be concerned with the latter case. (The discussion of the Italian constructions is based on Belletti 1982, although the analysis that I will suggest differs in various respects from Belletti’s.)

The two members of the discontinuous reciprocal expression must be separated by a preposition, as in (1), or by an NP, as in (2):

(1)

- a. *i miei amici parlano l'uno dell'altro*
my friends speak one of the other
‘my friends speak of each other’
- b. **i miei amici parlano dell'un(o) l'altro*
my friends speak of one the other

(2)

- a. *hanno criticato l'uno le idee dell'altro*
(they) criticized one the ideas of the other
‘they criticized each other’s ideas’
- b. **hanno criticato le idee dell'un(o) l'altro*
(they) criticized the ideas of each other

The members of the reciprocal expression seem to enter into a binding relation:

(3)

- a. quei reporters ammiravano l'uno [_{NP} le foto dell'altro]
 those reporters admired one the pictures of the other
 'those reporters admired each other's pictures'
- b. * quei reporters ammiravano l'uno [_{NP} le tue foto dell'altro]
 those reporters admired one your pictures of the other

The contrast between (3a) and (3b) illustrates a standard Specified Subject Condition effect. In (3b) the association between *l'uno* and *l'altro* is blocked by the subject of the NP in which *l'altro* occurs.

The reciprocal expression as a whole (or alternatively *l'uno*; see below) must be related to an antecedent in an A-position, as shown in (4), which is the standard paradigm illustrating the behavior of anaphors:

(4)

- a. i miei amici hanno parlato l'uno dell'altro per tre giorni
 'my friends spoke about each other for three days'
- b. *Mario ha parlato l'uno dell'altro
 'Mario spoke about each other'
- c. Mario ha sostenuto che i miei amici parlarono l'uno dell'altro
 'Mario maintained that my friends spoke about each other'
- d. *i miei amici sostennero che Mario parlò l'uno dell'altro
 'my friends maintained that Mario spoke about each other'
- e. *i miei amici mi hanno costretto a parlare l'uno dell'altro
 'my friends obliged me to speak about each other'
- f. ho costretto i miei amici a parlare l'uno dell'altro
 'I obliged my friends to speak about each other'

The ungrammaticality of sentences (4b), (4d), and (4e) is straightforwardly accounted for by the binding theory. In all these sentences, the reciprocal expression does not have an antecedent in the opaque domain (governing category) in which it occurs. In (4b) the reciprocal does not have an antecedent. In (4d) and (4e) the reciprocal does not have an antecedent in its governing category, which is the embedded clause. On the other hand, (4a), (4c), and (4f) contain no binding theory violations and are therefore grammatical.

In brief, two anaphoric relations are at work in the reciprocal constructions of Italian:

(R1): the anaphoric relation between *l'uno* and *l'altro*

(R2): the anaphoric relation between *l'uno* and an A-antecedent

Alternatively, (R2) may be formulated as the anaphoric relation between *l'uno* . . . *l'altro* as a whole and an antecedent.

I will now argue that (R1) is an instance of an \bar{A} -anaphoric relation. That is, for (R1) *l'uno* (the antecedent of *l'altro*) is in an \bar{A} -position, and for (R2) the antecedent of *l'uno* is in an A-position:

(R1) is an \bar{A} -anaphoric relation: *l'uno* is the \bar{A} -antecedent of *l'altro*.

(R2) is an A-anaphoric relation: *l'uno* needs to be related to an A-antecedent.

The fact that (R2) is an A-anaphoric relation is obvious: in (4a), (4c), and (4f) the antecedent of *l'uno* is in a subject position (A-position). In order to establish that (R2) is an \bar{A} -anaphoric relation, we must show that *l'uno* (the antecedent of *l'altro*) is in an \bar{A} -position. In this respect, note that when *l'uno* is in an A-position, the association between *l'uno* and *l'altro* is no longer constrained by the binding theory. This is shown by (5), which directly contrasts with (3b):

(5)

l'uno ammira le tue foto dell'altro

'one admires your pictures of the other'

In (5) *l'uno* is in an A-position—a subject position. The association between *l'uno* and *l'altro* is not blocked by the subject of the NP in which *l'altro* occurs. In short, when *l'uno* is in an \bar{A} -position, as in (3b), the association between *l'uno* and *l'altro* is subject to the Specified Subject Condition—the binding theory. However, when *l'uno* is in an A-position, the association between *l'uno* and *l'altro* is not subject to the binding theory. Sentences such as (5) also indicate that not only the anaphoric relation (R1) but also the anaphoric relation (R2) ceases to exist when *l'uno* is in an A-position. Neither (5) nor (6) contains an antecedent for *l'uno*:

(6)

confondo sempre l'uno con l'altro

'I always confuse one with the other'

Since (R1)—and for that matter (R2)—exists when *l'uno* is in an \bar{A} -position and since for (R1) *l'uno* is the antecedent of *l'altro*, (R1) is an instance of an \bar{A} -anaphoric relation: *l'uno* is the \bar{A} -antecedent of *l'altro*.

1.2 Symmetric Anaphoric Systems

Having established the existence of \bar{A} -anaphoric relations, let us now investigate some of their general properties. Note first that the binding theory as formulated in Chomsky 1981 (henceforth, LGB) is a theory of A-binding; it is solely concerned with A-anaphoric relations. From our discussion of reciprocal constructions in Italian, it appears that this theory must be generalized to constrain both A- and \bar{A} -anaphoric relations.

In the Government-Binding (GB) theory, A-anaphoric expressions may be overt or not: the reflexive in (7a) is an overt anaphoric expression, whereas the empty category in (7b) left by the extraction of a noun phrase—NP-trace—is not:

(7)

- a. John_i hit himself_i
- b. John_i was hit *t_i*

The anaphoric expression may also receive an independent thematic role (θ -role) or not. That is, it may or may not have an interpretation different from the one its antecedent has. In (7a) the reflexive anaphor is interpreted as the patient *y* that was hit by *x*, and *John* is interpreted as the agent *x* that hit *y*. In this case it happens that $x = y$. In (7b) the anaphoric trace does not seem to receive an interpretation distinct from that of its antecedent *John*. Since A-anaphoric expressions may be overt or not and since they may bear an independent θ -role or not, they may be classified as follows with respect to the features [$\pm\theta$ -role], [\pm overt]:

(8)

- a. [$+\theta$ -role, +overt]
- b. [$-\theta$ -role, +overt]
- c. [$-\theta$ -role, -overt]
- d. [$+\theta$ -role, -overt]

GB theory acknowledges the natural-language occurrence of three of the four possibilities. Case (8a) is instantiated by reciprocals and reflexives, and case (8c) by NP-traces; see the preceding discussion of (7a–b). Case (8d) is instantiated by pronominal elements that are not phonetically realized, namely, PRO and pro. Let us consider PRO for the purpose of illustration. In LGB this element has a dual nature: it is an anaphor and a pronominal. We will see in chapter 2 that this dual characterization will prevent PRO from appearing in governed posi-

tions; that is, PRO may not appear as a constituent of a major XP category—such as VP, NP, or PP—or as subject of a tensed clause. (The notion “government” will be defined in section 2.3.1.) Consider now the following representation:

(9)

John_{*i*} was forced *t_i* [PRO_{*i*} to hit Bill]

In the embedded clause of (9) PRO receives the θ -role of agent. This θ -role is different from the one assigned to the controller of PRO, namely, *John*.

I would like to suggest that the middle construction in French illustrates the case of an overt anaphor that does not bear an independent θ -role—in other words, that it instantiates case (8b). In this construction the normal object appears in subject position, the verb is in the active form and agrees with the subject, and the reflexive pronoun *se* is attached to the verb:

(10)

ce livre_{*i*} se_{*i*} vend bien

‘this book sells (itself) well’

Assuming the analysis of these constructions suggested in Williams 1981a, middle constructions display the same characteristics as passive constructions: specifically, the object does not receive a Case-feature within VP, and the subject does not receive a θ -role. In Aoun 1979, Jaeggli 1982, and Borer 1984, it is suggested that clitics absorb Case. (I capitalize *Case* when it stands for *Case-feature*.) Assuming that the nonreferential reflexive clitic absorbs objective Case in (10), the referential NP must end up in subject position, where it receives Case. This is forced by Case theory, which requires every lexical NP to have Case (Rouveret and Vergnaud 1980, LGB). As Williams argues, the syntactic representation of (10) will thus be as follows:

(11)

ce livre_{*i*} [_{VP} se_{*i*} vend *t_i* bien]

It is irrelevant for the purpose of our discussion whether middle constructions are generated by a lexical rule or a syntactic rule. Representation (11) seems to capture the basic characteristics of this construction: the surface subject has the θ -role of the object since it is coindexed with it, the subject position itself receives no θ -role, and the verb bears a reflexive clitic.

Since the nonreferential *se* is an anaphor, it must be bound by the subject position, and since the subject position is not a position to which a θ -role is assigned, the referential element in subject position must be coindexed with the object position in order to receive its θ -role. This is required by the θ -Criterion, a well-formedness condition on the distribution of θ -roles that requires every referential element to bear a θ -role and every θ -role to be assigned to one and only one referential element. This well-formedness condition, part of the θ -theory, will be discussed in detail in chapter 2 (see especially section 2.10). Incidentally, the θ -Criterion explains why the reflexive *se* in (11) must be nonreferential. Since there is but one θ -role to be assigned and since the surface subject is a referential element, it must receive the unique θ -role. If *se* were to be referential, two distinct elements would share a unique θ -role, thus violating the θ -Criterion.

The characterization of *se* as a nonreferential element follows from the θ -Criterion. Moreover, as Williams points out, the characterization of *se* as an anaphor follows from the binding requirements. A pronominal clitic such as *le* cannot occur instead of the anaphoric *se*. The reason is that the binding theory would require this pronoun to be disjoint from the antecedent *ce livre*:

(12)

**ce livre_i le_i vend bien*

'this book sells it well'

It thus appears that middle constructions illustrate case (8b): *se* is an overt anaphor that does not bear an independent θ -role.

At this point, it is interesting to wonder whether \bar{A} -anaphors may also be classified with respect to the features $[\pm\theta\text{-role}, \pm\text{overt}]$. In section 1.1 we discussed an instance of an overt \bar{A} -anaphor that bears an independent θ -role: *l'altro*, which thus instantiates case (8a). In the following chapters we will see that cases (8b–d) are also instantiated for \bar{A} -anaphors. Case (8d) is instantiated by *wh*-traces or variables (chapter 2). Case (8c) is instantiated by the gap coindexed with the clitic (chapter 4). Finally, case (8b) will be instantiated in existential constructions, as discussed in chapter 5 where various instances of \bar{A} -anaphors are analyzed.

1.3 The Organization of the Grammar

We have seen that the distribution of various nominal expressions may be accounted for by the interaction of three theories: bounding theory, government theory, and binding theory. We have also encountered two other theories constraining syntactic representations: Case theory, which requires every NP to have Case, and the θ -Criterion—part of the θ -theory—which is a uniqueness condition on the assignment of θ -roles:

(13)

- a. Bounding theory (includes Subjacency)
- b. Government theory (includes the Empty Category Principle)
- c. Binding theory (includes the binding principles)
- d. θ -theory (includes the θ -Criterion)
- e. Case theory

In the following chapters we will examine these theories and their interaction in detail. Together they constrain the distribution of nominal expressions generated by the following system of rules:

(14)

- a. Lexicon
- b. Syntax
 - i. Base rules
 - ii. Transformational component
- c. Phonetic Form (PF) component
- d. Logical Form (LF) component

The Lexicon specifies the abstract morphophonological structures of each lexical item, its categorial features and its contextual features. The form of the base rules is constrained by the X-bar theory (Chomsky 1970). Base rules and lexical insertion rules generate deep structures (D-structures). These structures are mapped into S-structures by the rule Move α , leaving empty categories—traces—bearing the same index as their antecedents. Move α , which constitutes the transformational component, may also apply in the two interpretive components: the PF component and the LF component. The Syntax thus generates S-structures. S-structures are in turn mapped into PF and LF, yielding

Surface-structures and LF-structures, respectively. The organization of the various components of the grammar is represented visually as follows:

(15)

