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3 On the Function of Agreement

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MY CONTRIBUTION CONCENTRATES on the role of agreement in the functioning of language. It recapitulates some of the analyses and results of (Lehmann 1982a) and adds some new points concerning the role of agreement in the expression of syntactic relations. My basic thesis is that agreement is referential in nature. It helps identify or reidentify referents. It does this by giving information on grammatical properties of its referent and, thus, of the NP representing it if one is around. The functions of agreement in the marking of syntactic relations derive from this primary function.

1 The Notion of Agreement

I will start by offering a working definition of agreement in order to preliminarily delimit the range of phenomena we are talking about.

(1) Definition of agreement

Constituent *B* agrees with constituent *A* (in category *C*) if and only if the following three conditions hold true:

- a. There is a syntactic or anaphoric relation between *A* and *B*.
- b. *A* belongs to a subcategory *c* of a grammatical category *C*, and *A*'s belonging to *c* is independent of the presence or nature of *B*.
- c. *c* is expressed on *B* and forms a constituent with it.

The definition in (1) virtually succeeds in comprising all and only those grammatical phenomena that have traditionally been called agreement. Since the proposed notion of agreement is thus extensionally equivalent

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to the traditional notion, I hope that it also makes explicit the intuition standing behind it.

The definition provides us with a decision procedure enabling us to tell whether a given phenomenon is agreement or not. This should be useful since we might entertain partially different conceptions of agreement. One thing the definition excludes from agreement is *government*. In fact, government can be one of the relations mentioned in condition (1a), and therefore agreement can appear in a government relation, namely on a governing term; but government is not subsumed under agreement.

With one possible exception, the conditions of the definitions are independent of each other, and each is quite specific. Their conjunction may thus appear to identify an arbitrary, unnatural concept. This is because the definition is a strictly static, structural one which does not tell us what agreement does and what it is for. To this question we will now turn.

2 Internal and External Agreement

At first glance, we find two radically different kinds of agreement. The first of these is illustrated in (2) through (4).¹

- (2) illarum duarum bonarum
 that.GEN.PL.FEM two.GEN.PL.FEM good.GEN.PL.FEM
 feminarum
 woman.GEN.PL.FEM
 ‘of those two good women’ *Latin*
- (3) bagus wajaḷ-gu baḡul-djin-gu
 DET.DAT boomerang-DAT DET.GEN-∅-DAT
 yaḡa-ŋu-njdjin-gu
 man-GEN-∅-DAT
 ‘to the man’s boomerang’ *Dyirbal*
- (4) yibi yaḡa-ŋgu njaḷŋga-ŋgu djilwal-ŋu-ru buḡa-n.
 woman man-ERG [child-ERG kick-REL-ERG] see-REAL
 ‘The man whom the child had kicked saw the woman.’ *Dyirbal*

Example (2) shows the familiar agreement of the determiner, numeral and adjective attribute; (3) and (4) show the less familiar agreement of other attributes, namely of the possessor NP and the relative clause. This is, indeed rare, but by no means restricted to Dyirbal. The same

¹ The following abbreviations are used in this paper: ANAPH anaphoric, AT attributor, CL noun class, DYN dynamic, REAL realized, REL relative marker.

kind of agreement may be found in all adnominal modifiers, including article, possessive pronoun and nominal apposition.

This kind of agreement may involve the category of case, but never the category of person, as our three examples clearly show. There are, of course, agreement phenomena of the same kind and otherwise quite similar to the ones adduced which do not involve case. What matters here is that agreement in adnominal modification may be case agreement but never person agreement.

The second kind of agreement is illustrated in examples (5) through (7) from Abkhaz.

- (5) (sarà) a-x°əc'-k°à a-s°q°'-k°à
 I ART-child-PL ART-book-PL
 φ-rə-s-to-yt'.
 ABS.3-DAT.3.PL-ERG.1.SG-give.DYN-FIN
 'I give the books to the children.' *Abkhaz*
- (6) à-c'k°'ən-c°a rə-y°n-k°à
 ART-boy-PL OBL.3.PL-house-PL
 'the boys' houses' *Abkhaz*
- (7) (sarà) s-q'ə+n+t°'
 I OBL.1.SG-from
 'from me' *Abkhaz*

In (5) we see the verb agreeing with the absolutive, ergative and indirect object actants. In (6) the possessum agrees with the possessor NP. Example (7) shows the agreement of the postposition with its complement. Some of these processes are relatively rare, but none is restricted to Abkhaz. Examples (5) to (7) virtually exhaust the constructions in which this type of agreement may be found. They are the constructions in which an NP depends on the agreeing term, excluding those where the NP bears a concrete semantic relation, i.e., an adverbial relation to the superordinate term so that it is not properly an NP but an adverbial.

This kind of agreement may involve the category of person, but never the category of case, as the examples again show quite clearly. Notice, in particular, that the construction of possessive attribution figures in both sets ((3) and (6)), but only the possessor may show case agreement, while only the possessum may show person agreement. Since the two sets of constructions do not otherwise overlap, one may wonder whether it is really the same construction which may show both agreement of the modifier and agreement of the head. The answer is an interesting "no" for the details of which see Lehmann (1983, sec. 3.3).

As I said, at first these two kinds of agreement appear to be radically different. In the first set of constructions, modifiers appear to agree with

their heads, while in the second kind governing terms agree with their dependent NPs. What can agree in case never agrees in person, and vice versa. However, the fact that the two kinds of agreement exclude each other means that they are in a perfect complementary distribution. From what we know about complementary distributions, this points to a deeper functional unity. And in fact, in all these constructions it is the case that something agrees with an NP. While this has already been granted for the constructions of person agreement, it is an unwonted analysis of the facts of case agreement. I think it will be conceded that the facts of adnominal modifier agreement as illustrated in (2) through (4) *can* be analyzed by saying that the modifier agrees with its NP, rather than by having it agree with its head noun. There is a variety of arguments to the effect that they *must* be analyzed this way. I will present two of them, based on (8) and (9).

- (8) tri svetlye komnaty
 three.NOM.PL light.NOM.PL room.GEN.SG
 'three light rooms' *Russian*
- (9) den alten Frauen
 the.DAT.PL old.DAT.PL woman.PL
 'to the old women' *German*

In Russian, the lower numerals take their semantic head noun as a genitive attribute in the singular. Nevertheless such an NP is grammatically plural, as becomes evident when it includes an adjective attribute: the adjective in (8) shows nominative plural and thus agrees with its NP, not with its head noun (cf. also Babby in this volume). In German, determiners and attributes show case agreement (the morphemic glosses in (9) simplify the facts a bit). In general, case is a syntactic category of the NP, not particularly one of its head noun. In German, however, the situation is especially clear since case is not a morphological category of a whole class of nouns to which the one in (9) belongs. Thus, quite apart from the syntactic inappropriateness of an analysis which makes determiners and attributes agree in case with their head nouns, here there is simply no morphological basis for this solution since nothing can be made to agree with a constituent in a category which this constituent does not possess. We thus have to conclude that adnominal modifiers agree with their NP.²

This enables us to formulate the generalization that *all agreement refers to an NP*. For the sake of accuracy, we should mention here

² This conclusion was reached already in Fauconnier (1971). Keenan (1979, 16) tries to evade it by excluding case agreement from agreement; but in vain, since gender and number agreement are no different.

- (11) ki-su ch-a Hamisi
 CL7-knife CL7-AT Hamisi
 'Hamisi's knife'

Swahili

In Hungarian, there is a special pronominal suffix, *-é*, which is appended to a possessor noun, possibly a possessive pronoun, as in (10); it picks up a concept in lexical anaphora and makes it a possessum. The suffix has two semantic components. One is of an anaphoric-pronominal nature and represents the categories of the possessum. In (10), we see the plural number of the possessum represented in the suffix *-i*. The second component is an attributor which makes the pronoun relational. Its meaning is, thus 'that of *X*,' where *X* is the possessor noun or pronoun to which the suffix is appended.

If such a possessive phrase with an anaphoric head comes to be used in apposition to its nominal referent, we have gone already half of the way to the agreement of the possessor. The next step of this evolution can be illustrated by the Swahili example (11). Here the two semantic components of the agreeing attributor, the first representing the categories of the possessum, the second linking it to a possessor, are represented by distinct morphemes. The spirit of the construction might be brought out by such English phrases as *the knife, that of Hamisi*, though this contains an appositive construction, while in (11) we are dealing with normal possessive attribution. The erstwhile anaphoric pronoun has ceased to be (obligatorily) anaphoric.

The final step in this evolution is the agglutination of the agreeing attributor to the possessor. This step has been carried out by languages related to Swahili, e.g., Tswana, and is exemplified in (3). Thereby, the categories of the possessum appear on the possessor, so that we have internal agreement of the possessor with the possessum. I submit this as a paradigm case for the evolution of internal agreement in general, including agreement of other attributes. The anaphoric pronoun which is the source of the internal agreement marker evidently expresses that the attribute which it attaches to is to be taken to be coreferential with something mentioned before (or yet to be mentioned, in the case of cataphoric origin). Its original syntactic function is to serve as a dummy head for an attribute which cannot stand alone.

The evolution of external agreement by grammaticalization of personal pronouns is much better known, both because much work has been done on what my colleagues call *cross-reference* and because we all witness its current development in spoken French. In (12) are some real-life examples from the *Corpus d'Orleans*. For the sake of variation, this time I have chosen examples which show cataphoric pronouns, referring to NPs yet to come. The anaphoric use of the same elements is illustrated once in (12a). I need not prove what is well known, namely that all these personal clitics derive from Proto-Romance independent

personal pronouns, which in turn go back to Latin personal pronouns and weakly demonstrative pronouns. At the same time, it is obvious that in (12), these elements function in syntactic agreement. We might show that they are not yet affixes, as is sometimes claimed. But they will end up as external agreement affixes, as already illustrated by (5).

- (12) a. *Moi oui, moi je suis d'ici moi.*
 'Me yes, I'm from here.' *French*
- b. *Ils ont peut-être un les gens.*
 'Perhaps they have one, the people.'
- c. *C'est nous qu'on les fait les bateaux.*
 'It's we who make the ships.'
- d. *Ils s'en occupent peut-être mieux des enfants.*
 'Perhaps they care better for the children.'

The next example from Nahuatl shows that the less familiar agreement of the postposition may have exactly the same sort of early stage.

- (13) *ii-waan iskic tlaaka-tl ya in maaseewal-li*
him-with all man-ABS go ART vassal-ABS
 'Every man went with his vassal' *Nahuatl*

Again the pronominal element on the postposition cataphorically cross-references something which much later in the sentence is represented by an NP. Further grammaticalization of this construction leads to the agreement of the postposition with its nominal complement as shown in example (7).

The anaphoric personal pronoun which is the source of the external agreement marker evidently presupposes a certain syntactic relation belonging to the meaning of the element which later will carry the agreement; and it expresses that this relation extends to a certain referent which may be present in the linguistic context or in the speech situation. Its original syntactic function is to fill a syntactic position which is opened up by that syntactic relation and which may not be left unoccupied.

4 The Function of Agreement

We can now draw the conclusion from this evidence. At certain places in a discourse, reference is made to a certain referent. For logical and economic reasons,⁴ the referent is not identified by fully specifying all its attributes each time it recurs in the discourse. Rather, it is identified by

⁴ The logical reasons are of the kind known from the Bach-Peters Paradox.

mentioning some of the categories which it belongs to, especially person, number, gender/class and case. (Incidentally, here language functions in a way quite different from predicate calculus, which would employ individual constants for this purpose.) The pronouns appearing in such places signal that we are dealing—still or already—with a referent also appearing elsewhere in the discourse or in the speech situation. This function of identification or reidentification of a referent and keeping the reference to it constant is also the original function of agreement markers when they develop from such pronouns. The requirement that a referent be identified at a certain point in a discourse may be syntacticized in the sense that there may be a syntactic relation creating a syntactic position to be occupied by the entity to which the relation extends; and the rules of syntax may require this position to be filled.

The grammaticalization of the pronominal filler to a marker of agreement involves a number of things. When the referent of the pronominal filler is represented by a nominal expression in the same syntactic construction, we get syntactic agreement of the pronominal filler with the nominal expression. At the same time, the pronoun attaches to the word from which the syntactic relation extends and thus becomes an agreement affix of the latter. Given that the referent of the agreement affix is in the same construction and thus in the immediate neighborhood, the original semantic function of representing a referent becomes less imperative and is gradually changed into a grammatical function, namely that of signalling that what the presupposed syntactic relation relates to is the referent NP.

We may illustrate this by some of our examples. The case agreement affixes in (3) attach to a determiner and to a genitive attribute. Both of these imply a relation of adnominal modification, of subconstituency within an NP. The agreement markers signal that the NP looked for is one in the dative so that if there is a noun in the dative in the construction, this is taken to be the head of the modifiers. Similarly, the person agreement prefix in (7) attaches to a postposition, which implies a relation of government of an NP. The agreement marker signals that the NP looked for is in the first person singular, so that if there is such an NP in the construction, this is taken to be the complement of the postposition.

By contingency, an agreement affix may help set up and identify a certain syntactic relation. Thus the noun 'house' in (6) probably does not necessarily imply a relation to a possessor. Here the appearance of the agreement prefix helps set up this relation. Again in (5), it would be impossible to know which NP has which syntactic function vis-à-vis the verb if the agreement markers did not tell us. To be precise, the three syntactic functions in question are inherent in the verb, not set up by the agreement prefixes. They are distinguished by the fact that there is a prefix slot reserved for each of the three relations. So

here agreement helps identify a syntactic relation. At the same time, it is clear that these functions of agreement are derivative and that its primary function remains the identification of the referent to which the relation extends.

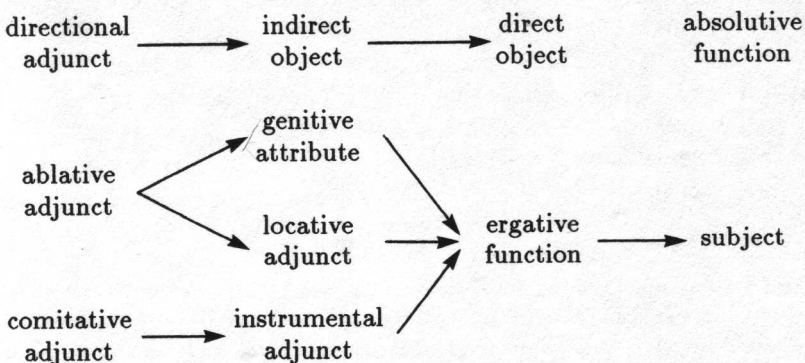
5 External Agreement and Case Marking

Finally, we will come to a more precise understanding of the functioning of agreement by comparing it with a strategy whose primary function it is to identify dependency relations in which an NP is dependent. This is the strategy of case marking (in the proper, narrow sense which excludes agreement), which makes use of case affixes, adpositions and relational nouns intervening between the superordinate term and the dependent NP and combined with the latter.

A genitive affix on an NP signals that the relation of this NP to the context is to be the dependent element in a construction of adnominal modification, probably dependent on a noun, possibly in a possessive relationship. Again, the preposition *a* before an Italian NP signals that the relation of this NP to its context is to be dependent on a verb as its indirect object or directional adjunct. The case markers thus identify distinct syntactic and semantic relations.

Since in any one language, there are many such relations of NP dependency, it follows that they must be semantically distinct. In fact, general grammar lists dozens of case functions, among them quite concrete ones such as praeterlative and sublative; and there are languages, e.g., Permiak, with more than twenty case affixes to express them. Suppose now we order all these case functions on a scale, with the semantically richest, most concrete ones, the properly semantic functions, at the left end and the semantically empty, most grammaticalized ones, the properly syntactic functions, at the right end. This is the grammaticalization scale of case functions, of which I give an abbreviated and simplified version in (14) (cf. Lehmann 1982b, ch.III.4.2.).

(14) Grammaticalization scale of case functions



We need not go into details of this figure or the evidence for it.⁵ It suffices to see that the properly syntactic case functions are those which are subject to the government of a word in which they are inherent, while the properly semantic case functions are not subject to government, are not inherent in anything and therefore have to be established.

It is against this background that we have to see the following empirical generalization: If a language has (overt) case marking at a given vertical position of (14), it will have overt case marking for all the positions to its left. And if a language has external agreement at a given vertical position of (14), it will have external agreement for all the positions to its right. This implies that case marking is typically used for the semantic functions, while external agreement is typically used for the syntactic functions. This in turn implies that case marking and external agreement may cooccur in a language. All this is, of course, overwhelmingly true. The typical constellation, which recurs in countless languages, is the presence of an agreement affix on the verb for the subject function even if the language does not have any other external agreement, matched with the absence of a case affix on the subject, even if the language does have other (grammatical) cases. The reverse situation is never found. This follows naturally from our generalizations.⁶

It is not the case that external agreement and case marking are in a strict complementary distribution, either among languages or within every language: However, the pair of implicational generalizations formulated above make for a tendency towards such a complementary distribution. To the degree that this is true, we may again suspect a common functional denominator for the two complementary processes. External agreement presupposes a dependency relation of the agreement carrier to an NP and gives information about that NP. Case marking gives information on a dependency relation of its carrier NP and presupposes the element on which the NP depends. Both strategies attach a marker to one relatum (each to the opposite one), but external agreement presupposes the relation and specifies the other relatum, while case marking specifies the relation and presupposes the other relatum. Thus both strategies economize, but they economize on different kinds of information. Therefore each is employed in that context where that particular kind of information need not be given. Both are successful ways of signalling a dependency relation, but external agreement is more successful on purely syntactic relations, while case marking is more successful on semantic relations.

⁵ Each arrow stands for a transition for which there is historical evidence.

⁶ In Yuman and Cushitic languages, the subject, but not the direct object, has a case suffix. This situation is not accounted for by (14). Perhaps (14) should be weakened by putting subject and direct object in one column.

Therefore, I propose not to subsume agreement under case marking, nor vice versa, but to keep the two notions distinct. Their common denominator does not lie on the level of linguistic structure, but on that of linguistic functions: both of them share the function of signalling NP dependency relations.

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