PRIMARY OBJECTS, SECONDARY OBJECTS, AND ANTIDATIVE

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Languages differ as to whether they are accusative or ergative. In other words, grammatical rules in some languages are sensitive to the distinction between Subjects and Objects; in others, to the distinction between ergatives and absolutives. The central thesis of this paper is that, similarly, rules in some languages are sensitive to the distinction between Direct Objects and Indirect Objects; but in others, they are sensitive to a distinction between PRIMARY and SECONDARY OBJECTS. A Primary Object is an Indirect Object in a ditransitive clause or a Direct Object in a monotransitive clause, while a Secondary Object is a Direct Object in a ditransitive clause.*

1. THEORETICAL PRELIMINARIES. The general theoretical framework of this paper is R[elational] G[rammar], but its conclusions have implications for other typological approaches to grammatical relations (e.g. Givón 1979, 1984a, Comrie 1981, 1982), as well as other formal theoretical frameworks in which grammatical relations play a significant role (e.g. Bresnan 1982, Marantz 1984, Dowty 1982, Hoekstra 1984, Williams 1984). The theoretical framework assumed here is most at odds with the standard version of RG (Perlmutter 1983, Perlmutter & Rosen 1984) in assuming that an adequate linguistic theory must not only characterize the outer limits of the set of possible human languages, but must also distinguish those properties of language which are typical or normal from those which are atypical or unusual, and must provide principles which characterize the normal case.

The following example illustrates this metatheoretical point. In early RG, a principle along the lines of 1 was considered as a possible law.

(1) FINAL AGREEMENT PRINCIPLE: Verbs can agree only with final terms, i.e. nominals which are Subjects, Direct Objects, or Indirect Objects at the final grammatical level.

Evidence against this principle was presented by Lawler (1977:225). He showed that, in a passive clause of Achenese (Indonesia), the verb agrees with the initial subject, not the final one:

(2) a. *GƆPNYAN ka GɨI-cɔm lon.*
she PERF 3-kiss I
'She (already) kissed me.'

b. *lon ka GɨI-cɔm le-GƆPNYAN.*
I PERF 3-kiss by-she
'I have already been kissed by her.'

The verb in 2b agrees with the initial subject *gɔpnyan* 'she', not the final subject *lon* 'I'. In RG, the initial subject in a passive clause is grammatically a CHÔMEUR, a relation borne by a nominal whose grammatical relation has been taken over by another nominal. Since chômeurs are non-terms, agreement with a chômeur is inconsistent with the Final Agreement Principle. In the face of evidence like

* I am indebted to Judith Aissen, Scott DeLancey, Don Frantz, Ed Keenan, David Perlmutter, and Sandy Thompson for comments on earlier drafts of this paper.

the Achenese, attempts to formulate a law incorporating the Final Agreement Principle were abandoned. Given the goal of finding a set of exceptionless laws which characterize the set of possible languages, such a move was justified. What the resulting theory fails to capture, however, is the fact that the verb agreement rule in Achenese is UNUSUAL: The Final Agreement Principle does accurately characterize MOST cases of verb agreement among the languages of the world.

The idea that linguistic theory should distinguish normal linguistic phenomena from unusual ones is hardly new; it has run through much of the history of linguistic theory, both non-generative and generative. Within generative theory, it is explicit in the approach to markedness of Chomsky & Halle 1968 and Chomsky 1981. The Cross-Category Harmony Principle of Hawkins 1983 illustrates clearly for one domain (that of word order) the extent to which languages cluster around a norm, and become increasingly fewer with increased deviation from that norm. I propose that such notions can be expressed in RG by augmenting the theory with a set of markedness principles that characterize the normal properties of language. I believe that many of the laws of RG that were proposed, and later rejected in the light of counter-examples—as well as a number of controversial laws that are still defended by proponents of RG, despite arguments against them—all express viable markedness principles.[1]

I will discuss in this section certain tentative markedness principles, to which I will appeal in subsequent arguments. The first of these incorporates the Final Agreement Principle stated above.[2]

(3) FINAL LEVEL PRINCIPLE: Grammatical rules normally refer only to the final level of grammatical relations.

This principle is implicit in most theories other than RG, since the use of multiple levels by RG is what most distinguishes it from other theories (cf. Perlmutter 1982). In fact, the inability to refer to syntactic levels other than the final one is built into most other theories; it is often unclear how these theories might treat the phenomena which RG handles by reference to non-final levels. But the fact that other theories do not allow reference to such levels is indicative of the unusual nature of such phenomena.

A second markedness principle is the following.

(4) TRANSPARENCY PRINCIPLE: Grammatical relations referred to by specific rules in a language should be transparent from surface evidence in the language.

[1] Both Newmeyer 1980 and Mallinson & Blake 1981 claim that the popularity or viability of RG is greatly weakened by the number of instances in which proposed laws have apparently been falsified. This may be a true historical account of the perception of RG within the field; on my approach, however, the existence of exceptions to RG 'laws' no more weakens the viability of RG as a theory than the existence of marked exceptions to principles of core grammar weakens the viability of Government/Binding Theory.

[2] I assume that the Final Level Principle has various principled exceptions. The rules of English specifying various idiosyncratic properties of passive clauses, such as the case-marking of the chômeur, must refer to more than one level—since, in RG, characterizing a clause as passive requires reference to at least two levels.

This principle is stated here in an extremely vague fashion, but deliberately so. Exactly what constitutes transparency 'from surface evidence' is left open; but I hope the basic intent of the principle will become clear below. It is aimed at minimizing analyses which refer to grammatical relations that may be well-motivated for other languages, but which are of dubious motivation in the language being analysed. The effect of the Transparency Principle, as I appeal to it below, will be to rule out (at least in normal cases) a certain class of abstract analyses.

A third markedness principle is less controversial, and is implicit in much generative theory.

(5) NATURAL CLASS PRINCIPLE: If a class of nominals is referred to by grammatical rules in many languages, then an adequate theory should treat it as a natural class.

Analogs of this principle have a long history in generative phonology—in which it has long been assumed that, if a class of sounds is referred to by phonological rules in many languages, then an adequate theory of features should provide a natural way to characterize these sounds.[3]

The arguments below will occasionally appeal to these markedness principles. Two points should be borne in mind about the role of these. First, they are in general empirical hypotheses; thus it is only because languages seem generally to conform to the Final Level Principle that it is a viable markedness principle.[4] Similarly, Hawkins' Cross-Category Harmony Principle can be interpreted as such a principle, and it is clearly empirical.[5]

Second, markedness principles characterize only typical cases. The fact that a particular analysis violates a markedness principle provides an argument against that analysis only if there is reason to believe that the phenomenon being described is typologically normal. I assume that violations of markedness principles are acceptable in unusual or atypical cases; thus I accept an analysis

[3] It is worth noting that some of the notions of subject discussed by Perlmutter 1982 violate the spirit of the Natural Class Principle. For example, he defines a 'working 1' (working subject) as a nominal which is a subject at some level and a term at the final level. RG at present apparently does not provide a NATURAL way to characterize working subjects. A theory would be preferred that did not need to employ a definition like the one Perlmutter proposes.

[4] The Final Level Principle could be falsified if it were shown that languages do not generally conform to it—that rules referring to non-final levels are not in fact unusual. But showing that a construction is cross-linguistically normal or unusual requires a methodology distinct from those generally employed in syntactic investigation. In principle, it would require careful collection of data for a suitable sample of languages, taking problems of genetic and areal bias into consideration. At the present stage of research, it is clear that no systematic evidence of this sort is available to support the Final Level Principle; it is simply an hypothesis based on my own impressions. But what would falsify it should be clear: a carefully selected sample of languages in which the majority of rules refer to non-final levels. Admittedly, it remains unclear EXACTLY what states of affairs would falsify it. (Is a situation normal if it holds in only 60% of cases?) As an initial approximation, one might characterize a situation as cross-linguistically normal if the number of cases in which it occurs is greater, with statistical significance, than the number of cases in which it does not.

[5] But some characteristics of markedness, such as the Natural Class Principle, seem to be non-empirical methodological principles.

of verb agreement in Achenese that refers to initial subjects, because verb agreement in Achenese is apparently unusual.

2. INDIRECT OBJECT ADVANCEMENT. The object of study of this paper is semantically ditransitive sentences in English and other languages, like the sentences in 6–7. The classical treatment of these English sentences in RG is:

(6) *John gave the book to Mary.*
Su DO IO

(7) *John gave Mary the book.*

Initial	Su	IO	DO
Final	Su	DO	Chômeur

A sentence like 6 is considered basic in the sense that it involves a single syntactic level, while 7 is non-basic in that it involves two levels—an initial level, at which the grammatical relations are identical to those in 6, and a final level, at which the initial IO is the final DO, and the initial DO a final chômeur.[6] In other words, sentences like 7 involve a rule of Indirect Object Advancement, whereby an IO advances to become the DO. (I will argue later for an alternative analysis of these sentences.) Analyses similar to that just described for 6–7 have been proposed for analogous pairs of sentences in other languages, such as the following:

(8) Indonesian (Chung 1976:41)
a. *Saja mem-bawa* SURAT *itu kepada* ALI.
I TRANS-bring letter the to Ali
'I brought the letter to Ali.'
b. *Saja mem-bawa-kan* ALI SURAT *itu.*
I TRANS-bring-BEN Ali letter the
'I brought Ali the letter.'

Many languages, however, do not exhibit alternations like those in 6–7, but employ a single construction for clauses containing notional IO's. (I use the terms 'notional' DO and IO as theory-neutral labels for the patient/theme and goal/beneficiary, respectively, in semantically ditransitive clauses.) In some languages, this single construction resembles that in English sentences like 6. French is such a language:

(9) *Jean a donné le livre à Marie.*
John PERF give the book to Mary.
'John gave the book to Mary.'

French would be described in RG as a language lacking IO Advancement.[7]

In a number of other languages, however, the single construction for clauses containing notional IO's resembles the construction in English sentences

[6] The evidence given for analysing *Mary* in 7 as final DO includes the fact that, for most speakers, the only passive of 7 is one in which *Mary* has advanced to Su: *Mary was given the book by John*, rather than ?**The book was given Mary by John* (see Frantz 1981, Postal 1982).

[7] Actually, Postal 1982 argues that a few French verbs do govern IO Advancement under varying circumstances. But it seems fair to say that most French verbs that can take IO's do not allow IO Advancement.

like 7. Ojibwa (Algonkian) is such a language:

(10) Ojibwa (Rhodes 1976:139)
n-gi:-mi:n-A: *mzinhigan ža:bdi:s.*
1-PAST-give-3.ANIM book John
'I gave John a book.'

The notional IO here is not marked with a preposition; it behaves, as we shall see presently, more like the single object in monotransitive clauses than the notional DO in 10 does. The form of transitive verbs in Ojibwa varies according to the animacy of the object. Thus the verb in 11a is what Bloomfield 1956 calls the TRANSITIVE ANIMATE form, used because the object is animate, while that in 11b is the TRANSITIVE INANIMATE form, used because the object is inanimate:

(11) a. *n-uwa:pem-A: u-tay-uwa:-n.*
1-see-3.ANIM 3-dog-3pl.-OBVIATIVE
'I see their dog.' (Bloomfield, 155)
b. *n-uwa:pent-A:N u-ci:ma:n-uwa:.*
1-see-3.INAN 3-canoe-3pl.
'I see their canoe.' (p. 159)

Note that the verb in 10 is transitive animate, indicating the animacy of the notional IO *ža:bdi:s* 'John' rather than the inanimacy of the notional DO *mzinhigan* 'book'. The properties of the object-marking can be described as follows:

(12) In transitive clauses containing a notional DO but no IO, the object affix represents the notional DO. In clauses containing both a notional IO and a notional DO, the object affix represents the notional IO.

Rhodes accounts for these facts by positing obligatory IO Advancement. Since such advancement is obligatory in Ojibwa on his analysis, the initial IO *ža:bdi:s* 'John' will be the final DO, and the initial DO *mzinhigan* 'book' will be a final chômeur. Thus the facts in 12 can be described by this rule:

(13) The object affix represents the final DO.

Analyses similar to that of Rhodes for Ojibwa have been proposed for a number of other languages, e.g. Cree (Jolley 1982), Mohawk (Postal 1977, 1982), and Tzotzil (Aissen 1983). Two observations about such an analysis are in order here. First, it violates the Transparency Principle discussed above: it is opaque in that we have no surface evidence that *mzinhigan* 'book' in 10 is ever a DO, or that *ža:bdi:s* 'John' is ever an IO. In other words, on the basis of surface evidence alone, one would conclude that a grammatical relation of Ojibwa groups the notional IO in ditransitive clauses with the single object in monotransitive clauses; but one would not conclude that any grammatical relation groups the notional DO in ditransitive clauses with the single object in monotransitive clauses. Such a grammatical relation might be motivated by analogy to other languages, or even by semantic relations, but not by the surface evidence of Ojibwa.[8]

[8] This assumes that Ojibwa has no other rules which apply to notional DO's in both monotransitive and ditransitive clauses, but which do not apply to notional IO's. Such rules would provide the kind of surface evidence that would render an analysis like that of Rhodes more transparent. As far as I can determine, however, none of the rules discussed by Rhodes are of that sort. He assumes an early derivational RG framework with rule ordering, and the rule of IO Advancement apparently precedes all rules that refer to objects; hence no rule applies to what are initial DO's on his analysis.

Such considerations have led others to dismiss analyses like that of Rhodes. In discussing a similar set of facts in Huichol (Uto-Aztecan, Mexico), Comrie 1982 rejects an obligatory IO Advancement analysis by appealing to a general methodological principle similar to the Transparency Principle. He requires that grammatical relations used in grammatical descriptions be justified language-internally. It is unclear, however, exactly what constitutes such justification. According to Borg & Comrie (1984:109), it involves 'demonstrating that each identified grammatical relation represents a clustering of syntactic properties in the language, sufficient to justify the internal cohesion of the grammatical relation and to set it off from other grammatical relations'. But this seems far too strong: instances in which only one rule in a language refers to a particular grammatical relation would be rendered LOGICALLY IMPOSSIBLE. It seems a mistake to decide such issues on a-priori grounds, since the question is ultimately an empirical one. It is certainly a possibility that Rhodes' analysis is an accurate characterization of the grammar internalized by Ojibwa speakers. Even though the surface evidence alone would presumably not lead Ojibwa speakers to such an analysis, it is not inconceivable that they do arrive there either on the basis of semantic roles (since the role of the notional DO in such clauses is the same as that of prototypical DO's) or on the basis of innate knowledge of grammatical relations. However, if (as I argue below) constructions like that in Ojibwa are rather common cross-linguistically, then it might be worthwhile to try to find an alternative analysis for them. As with markedness principles in general, violations of the Transparency Principle are acceptable in unusual cases, but unacceptable in describing typologically common constructions.

A second observation to be made about analyses like that of Rhodes for Ojibwa is that they introduce an unexplained asymmetry into the theory. That is, even though there are languages like Ojibwa that have been analysed as having obligatory IO Advancement, there are no languages which have been analysed in RG as having obligatory passive. Why should this be true? The answer is that, if passive were to become obligatory in a language, then the language would be analysed as having become ergative. For example, if passive became obligatory in English, then what is now the final subject would be used for notional objects of transitive verbs, and for notional subjects of intransitive verbs. D. Johnson 1977 argues that a language with an obligatory passive rule would be unstable, and would undergo reanalysis to become ergative; and Chung 1978 claims that such reanalysis did occur in Tongan and Samoan when passives acquired a frequency much higher than actives. The Transparency Principle predicts that, as a language approaches having an obligatory passive, it is likely to be reanalysed. A language with obligatory passive may be possible, but it will be typologically unusual. The instability of such languages presumably results from the opacity of their grammars; their reanalysis by speakers

is a reflection of a tendency to assign an analysis that conforms to the Transparency Principle.

If languages which develop an obligatory passive rule are unstable, and likely to be reanalysed as ergative, then it seems plausible that languages which develop an obligatory IO Advancement rule should also be unstable, and are likely to be reanalysed to some more transparent analysis. I will now offer an identification of that more transparent analysis.

3. PRIMARY OBJECT AND SECONDARY OBJECT. The central proposal of this paper is that, just as some languages employ the grammatical relations ERGATIVE and ABSOLUTIVE, which can be defined in terms of subject and object—as in Figure 1a—so too some languages employ the grammatical relations P[RIMARY] O[BJECT] and S[ECONDARY] O[BJECT], which can be defined in terms of DO and IO—as in Figure 1b.

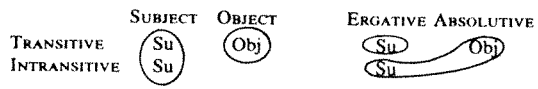

FIGURE 1a.

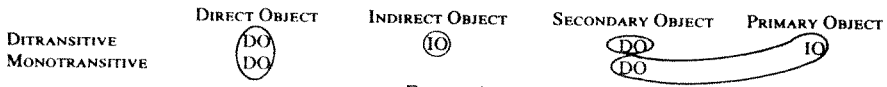

FIGURE 1b.

By Fig. 1b, a nominal is a PO if it is an IO in a ditransitive clause, or a DO in a monotransitive clause; it is an SO if it is a DO in a ditransitive clause. The categories PO and SO provide us with a means for a transparent analysis of ditransitive clauses in Ojibwa, one that does not appeal to obligatory IO Advancement. We can say that Ojibwa ex. 10 above involves a single syntactic level at which *ža:bdi:s* 'John' is the IO (and hence PO), while *mzinhigan* 'book' is the DO (and hence SO); and that the object affix on the verb represents the PO. In fact such an analysis is much in the spirit of the traditional view of such clauses by Algonkianists. As Ellis (1983:284) says in his grammar of Cree, a language closely related to Ojibwa,

> '... there is no such thing in Cree as DIRECT versus INDIRECT object. The PERSON to whom a thing is *given, lent, shown, told, sent* etc. is the immediate object of the verb. The THING *given, lent, shown* etc. is the second object and one position further removed.'

Ellis' 'immediate object' corresponds to PO, his 'second object' to my SO.

Other proposals in the literature bear some similarity to the one offered here. Bresnan 1982 categorizes the grammatical relation of *Mary* in 14 as OBJ, that of *the book* as OBJ2:

(14) *John gave Mary the book.*

Her OBJ and OBJ2 seem to correspond to my PO and SO respectively. However, she provides no general theory of grammatical relations incorporating OBJ and OBJ2. The literature on Lexical-Functional Grammar does not make it clear what considerations are relevant in identifying the OBJ and OBJ2 in other languages; they might as well be ad-hoc grammatical relations used in the grammar of English, and it is quite unclear what relation they bear to more familiar grammatical relations like DO and IO. Bresnan does not pursue the implications of such relations either for English in particular or for universal grammar in general.

The proposal in the literature which most resembles the one suggested here is made by Blansitt 1984, who uses the term 'dechticaetiative' for what I call PO's, and notes the parallel between his proposal and ergativity. But Blansitt's approach is essentially descriptive, and he does not pursue his proposal in the direction discussed here. Comrie 1982 uses the term PRIME OBJECT to refer to what I would call the PO in Huichol. However, his view of the relationship between prime objects and DO's is very different from mine; I discuss his proposal in §5 below. Again, Kisseberth & Abasheikh 1977 use the terms PRINCIPAL OBJECT and SUBSIDIARY OBJECT for PO's and SO's respectively in Chi-Mwi:ni (Bantu).

I will use the term PRIMARY OBJECTIVITY to refer to instances in which a distinction is made between PO's and SO's. Languages like Ojibwa, in which rules are sensitive to this distinction, will be called PRIMARY OBJECT LANGUAGES; those in which rules are sensitive to the distinction between DO's and IO's, I call DIRECT OBJECT LANGUAGES. In the remainder of this section, I will present evidence for other instances of PO languages.

In Huichol, object agreement works very much as in Ojibwa, the verb agreeing with the PO.[9] Thus the prefix *wa* '3pl. object' represents the DO in a monotransitive clause, as in 15a, or the IO in a ditransitive clause, as in 15b:

(15) Huichol (Comrie 1982:99, 108)

a. *Uukaraawiciizɨ tɨɨri me-WA-zeiya.*
women children 3pl.-3pl.-see
'The women see the children.'

b. *Nee uuki uukari ne-WA-puuzeiyastia.*
I man girls 1sg.-3pl.-show
'I showed the man to the girls.'

Note that the verb does not agree with the SO, i.e. the DO in ditransitive clauses (Comrie, 108):

(16) *Nee uukari uuki ne-Ø-puuzeiyastia.*
I girls man 1sg.-3sg.-show
'I showed the girls to the man.'

Palauan (Micronesia) is another language in which the verb agrees with the PO. The object agreement suffix represents the DO in monotransitive clauses like 17a, but the IO in ditransitive clauses like 17b:

[9] Comrie 1982 describes the Huichol facts in a somewhat different manner. I discuss this in §5 below.

(17) Palauan (Josephs 1975:96, 347)
a. *A Droteo a cholębędę-TĘRIR a rę-ngalęk.*
DET D. DET hit-3pl. DET PL-child
'Droteo is going to hit the children.'
b. *Ak m-il-s-TĘRIR a rę-sęchęl-ik a hong.*
I VERB-PAST-give-3pl. DET PL-friend-my DET book.
'I gave my friends a book.'

In a number of languages, case-markers (either affixes or adpositions) occur with PO's. For example, in Khasi (Mon-Khmer, Assam), the preposition *ya* marks the PO—the DO in monotransitive clauses like 18a, and the IO in ditransitive clauses like 18b:

(18) Khasi (Rabel 1961:77)
a. *ka la yoʔʔii YA ʔuu khlaa.*
she PAST see OBJ the tiger
'She saw the tiger.'
b. *ʔuu hiikay YA ŋa ka ktien phareŋ.*
he teach OBJ 1sg. the language English
'He teaches me English.'

Note that the SO is unmarked in 18b. The contrast between 18b and 19 is particularly revealing since the same verb is used in both sentences—the difference being that 18b is ditransitive, while 19 is monotransitive (Rabel, 77):

(19) *ʔuu hiikay YA ka ktien phareŋ.*
he teach OBJ the language English
'He teaches English.'

The nominal *ka ktien phareŋ* 'the English language' is the DO is both sentences; but it occurs with the preposition *ya* only in 19, since only there is it the PO.

Similar case-marking is found in a number of Tibeto-Burman languages. In Lahu (Burmese-Lolo, Burma and Thailand), the postposition *thàʔ* marks PO's:

(20) Lahu (Matisoff 1973:156–7)
a. *ŋà THÀʔ tâ dɔ̂ʔ.*
1sg. OBJ NEG.IMP hit
'Don't hit me.'
b. *lìʔ chi ŋà THÀʔ pîʔ*
book that 1sg. OBJ give
'Give me that book.'

In Kokborok (Bodo-Garo, Assam), the suffix *-nɔ* marks PO's:

(21) Kokborok (Karapurkar 1976:54–5)
a. *buruɯy-čhikla-rɔg-Nɔ rɔhɔ́r-di.*
girl-young-many-OBJ send-IMP
'Send the young girls.'
b. *buphaŋ-Nɔ tuɯy ru-di.*
tree-OBJ water give-IMP
'Give the tree water.'

In Kham, a West Tibetan dialect, the suffix *-lay* occurs on certain PO's, but apparently never on SO's. In monotransitive clauses, the DO is sometimes unmarked, as in 22a, and sometimes marked with *-lay*, as in 22b–c:

(22) Kham (Watters 1973:44, 46, 54)
a. *nga: zihm nga-jxy-ke.*
1sg. house 1sg.-build-PAST
'I built a house.'
b. *no-e ka:h-LAY poh-ke-o.*
3sg.-ERG dog-OBJ beat-PAST-3sg.
'He beat the dog.'
c. *no-e nga-LAY cyu:-NA-ke-o.*
3sg.-ERG 1sg.-OBJ watch-1sg.-PAST-3sg.
'He watched me.'

In ditransitive clauses, the IO is marked by *-lay* (Watters, 44):

(23) *no-e nga-LAY bxhtanji ya-N.-ke-o.*
3sg.-ERG 1sg.-OBJ potato give-1sg.-PAST-3sg.
'He gave a potato to me.'

Verb agreement in Kham also refers to PO's: the object suffix in 22c represents the DO, in 23 the IO.[10]

Nez Perce (Oregon Penutian), also employs a suffix that marks PO's. The suffix *-na/-ne* occurs on the DO in monotransitive clauses like 24a, but on the IO in ditransitive clauses like 24b:

(24) Nez Perce (Aoki 1970:106, Rude 1982:470)
a. *ʔa-mčí·sa miyaʔás-NA.*
1,3-hear child-OBJ
'I hear a child.'
b. *kaa ʔee wéet'u čaʔáʔ yiyewíis-NE ʔe-ẇníise páhap.*
and you not rightly poor.one-OBJ 2.ERG-give daughters
'And it is not right for you to give your daughters to such a poor one.'

Verb agreement is also with the PO (Rude, 470):

(25) *wéet'u hi-NÁAČ-niqana kiléemet.*
not 3.SUBJ-PL.OBJ-gave pipe
'He did not give the pipe to them.'

Aissen 1983, operating within RG, argues that IO Advancement is obligatory in Tzotzil, a Mayan language spoken in Mexico.[11] She provides a very careful defense of this analysis; but her arguments depend on her claim that, without obligatory IO Advancement, there is no natural way to characterize the class of nominals which control absolutive agreement on the verb. Here the notion

[10] The form of the suffix in the two examples is different; I assume that this is phonological, not syntactic.

[11] Actually, Aissen argues that the facts are best accounted for by a rule stipulating that Tzotzil has no final IO's, rather than stipulating that IO Advancement is obligatory. However, the effect is the same for the purposes of this paper; her analysis still violates the Transparency Principle.

of PO provides an alternative (and more transparent) account of the facts. The set of absolutive affixes represents the subject of an intransitive verb, the DO of a monotransitive verb, and the IO of a ditransitive verb. The following three examples illustrate this with the 1sg. absolutive suffix *-on*:

(26) Tzotzil (Aissen 1983:277, 280)

a. *Vinik-ON.*
man-ABS.1sg.
'I am a man.'

b. *Mi č-a-mah-ON.*
Q ASP-ERG.2sg.-hit-ABS.1sg.
'Are you going to hit me?'

c. *Mi mu ś-a-čon-b-ON l-a-čitome.*
Q NEG ASP-ERG.2sg.-sell-BEN-ABS.1sg. the-your-pig
'Won't you sell me your pigs?'

The Tzotzil case is important in illustrating how the notion of PO interacts with ergativity. The PO/DO parameter is independent of the ergative/accusative, and they combine to allow four language types. An accusative language can be of either DO or PO type, and so can an ergative language. Thus we must distinguish two distinct absolutive categories: DO-Absolutives, which group intransitive subjects with DO's; and PO-Absolutives, which group them with PO's. It is the latter notion of absolutive which is relevant to verb agreement in Tzotzil.

None of the languages discussed in this section presents any serious problem for the classical version of RG; all the facts can be accounted for by positing obligatory IO Advancement. But the number of languages cited undermines such an account if one accepts the Transparency Principle: violations of such markedness principles are acceptable only in unusual cases. Nor are the languages cited the only PO languages. Rather, as I will argue in §4, once one accepts the possibility of a PO language, a large number of more familiar languages appear to fall into the category.

4. ANTIDATIVE. Since its beginning, RG has recognized the significance of some sort of relational hierarchy along these lines:

(27) Su > DO > IO > Obliques

However, how ergative languages fit into this hierarchy has always been a matter of some debate. One proposal, from D. Johnson 1974, is that a different hierarchy applies in ergative languages:

(28) Abs > Erg > IO > Obliques

I wish to extend Johnson's proposal to PO languages by proposing that the hierarchical ordering among terms (i.e. Su's, DO's, and IO's) consists of a set of ordered pairs among grammatical relations:

(29) a. Su > Obj
b. Abs > Erg
c. DO > IO
d. PO > SO

4.1. As Faltz 1978 observes, some languages treat IO's like obliques, assigning them grammatical properties that place them below DO's; but other languages treat IO's like DO's, and assign them grammatical properties that place them above DO's of ditransitive clauses.[12] Within the framework of this paper, Faltz's first type is a DO language, thus conforming to 29c, while his second is a PO language, thus conforming to 29d. Faltz argues, on the basis of his observation, that IO's cannot be hierarchized relative to DO's; this brings into question any relational hierarchy like 27 or 28. But the approach in 29 solves this problem: a language that treats IO's as higher than DO's is really a PO language, placing the PO above the SO.

I further want to propose that, for each of the four ordered pairs in 29, an advancement or promotion rule permits a nominal bearing the lower grammatical relation of the pair to advance and take on the higher grammatical relation. The advancement corresponding to the first pair in 29 is the familiar rule of passive (cf. Perlmutter & Postal 1977). A property of passivization, shared with the other three advancements which correspond to the orderings in 29, is that it decreases the syntactic valence of the clause—the number of final terms. Thus a monotransitive clause will become intransitive, a ditransitive clause monotransitive. This valence-decreasing effect of passivization is especially clear in languages with object agreement. For example, an active monotransitive clause in Chi-Mwi:ni such as 30, displays its syntactic valence of two quite clearly by the presence of two agreement prefixes on the verb:

(30) Chi-Mwi:ni (Kisseberth & Abasheikh, 185)
wa:na wA-zI-bozele zibu:ku.
children 3pl.NC_2-3pl.NC_8-stole books
'The children stole the books.'

The first prefix in 30 (of Noun Class 2) is subject agreement, the second (Noun Class 8) is object agreement. When 30 is passivized, the decrease of the syntactic valence from two to one is reflected directly by the fact that the verb now bears only one agreement prefix (Kisseberth & Abasheikh, 186):

(31) *zibu:ku zI-bozel-a na wa:na.*
books 3pl.NC_8-stole-PASS by children
'The books were stolen by the children.'

The single agreement prefix in 31 marks agreement with the new subject. The lack of agreement with the original subject and the presence of a preposition show that the original subject is not a syntactic argument in 31. The RG notion of chômeur provides a convenient way to characterize such nominals.

Passive is often described as 'detransitivization'; but 'valence-decreasing' is more accurate, since passivization of a ditransitive clause results in a mono-

[12] Among the grammatical properties in question are verb agreement (if the verb agrees with nominals at a given position on the hierarchy, it generally agrees with higher positions); case-marking (both affixes and adpositions—higher positions generally do not have more case-marking than lower ones); and advancements (if nominals of grammatical relation X can advance to Y, then so can nominals of grammatical relation Z, where Z is higher on the hierarchy than X but lower than Y).

transitive one. This is especially clear in Kinyarwanda (Bantu), in which the verb of a ditransitive clause bears three prefixes, one for each term:

(32) Kinyarwanda (Kimenyi 1980:132)
Umugabo Y-a-KÍ-MU-haa-ye.
man he-PAST-it-him-give-ASP
'The man gave it to him.'

After passivization, the verb bears two prefixes, illustrating that the valence has been decreased from three to two (Kimenyi, 132):

(33) *Y-a-GI-haa-w-e n'ûmugabo.*
he-PAST-it-give-PASS-ASP by-man
'He was given it by the man.'

The advancement rule corresponding to the second pair of grammatical relations in 29 is that of Antipassive, whereby an ergative advances to become an absolutive; the original absolutive thereby becomes a chômeur.[13] Consider a basic transitive clause in Inuktitut (Eskimo):

(34) Inuktitut (M. Johnson 1980:12)
Piruutisi-up Siisa-Ø kapi-vaa.
Brutus-ERG Caesar-ABS stab-3sg.3sg.
'Brutus stabbed Caesar.'

Inuktitut is an ergative language: the transitive subject of 34 is in the ergative case, while the object is in the absolutive. If the ergative nominal advances to absolutive by Antipassive, then the original absolutive will become a chômeur:

(35) *Piruutisi-Ø Siisa-mik kapi-si-vuq.*
Brutus-ABS Caesar-COMIT stab-ANTIPASS-3sg.
'Brutus stabbed Caesar.'

The case-marking here reflects directly the fact that the original ergative nominal ('Brutus') has become absolutive. The fact that the original absolutive ('Caesar') has become a chômeur is reflected both by its taking on oblique case-marking, and by the fact that the verb no longer agrees with it: the verb in 34 agrees with both nominals, but in 35 it agrees only with the absolutive nominal. This illustrates the fact that Antipassive, like Passive, decreases the syntactic valence of a clause.

The advancement rule corresponding to the third pair in 29 above is the familiar one of IO Advancement, also known as Dative. I will say nothing more about it at this point.

The remainder of this section will be devoted to arguing for the existence of an advancement rule corresponding to the fourth pair in 29. This rule involves the advancement of an SO to become a PO, the original PO thereby becoming a chômeur. I will call this rule ANTIDATIVE, since it bears the same relation to the dative rule that Antipassive bears to Passive. I will argue that Antidative

[13] I differ here from the most widely accepted approach to antipassive in recent RG work. Most analyses follow Postal 1977 in treating antipassive as a sequence of two rules: demotion of subject to object, and subsequent re-promotion to subject. The difference hinges largely on views of the theoretical status of grammatical relations like ergative and Primary Object; I discuss this in §8 below.

is a very common rule cross-linguistically—and that, in fact, it occurs in English.

4.2. Consider again the classical Dative Analysis of Eng. ditransitive sentences:

(36) a. *John gave the book to Mary.*
Su DO IO
b. *John gave Mary the book.*
Initial Su IO DO
Final Su DO Chômeur

The Antidative Analysis which I defend here is as follows:

(37) a. *John gave Mary the book.*
Su IO(PO) DO(SO)
b. *John gave the book to Mary.*
Initial Su DO(SO) IO(PO)
Final Su DO(PO) Chômeur

The Antidative Analysis differs from the Dative Analysis in treating sentences like those in 37a as basic. It follows traditional descriptive approaches in describing the NP immediately after the verb in such sentences as the IO, and the second NP after the verb as the DO. But it differs from both approaches in claiming that the notions of PO and SO play a central role in the grammar of English—in fact a more central role than the notions DO and IO. Using the definitions given above, *Mary* in 37a is a PO, since it is an IO; but *the book* is an SO, since it is a DO in a ditransitive clause.

According to the Antidative Analysis, sentences like 37b involve the rule of Antidative, whereby the SO *the book* advances to become the PO. The original PO becomes a chômeur as a result of the advancement. Thus the Antidative Analysis differs from the Dative Analysis, and from many traditional descriptive approaches, in denying that *to Mary* in 37b is the final IO. Such prepositional phrases are treated, on this analysis, as analogous to the *by*-phrases of passive clauses:

(38) *John was seen by Sally.*

In RG, *Sally* is here the initial subject, but a final chômeur. This corresponds to the description of *Sally* in other frameworks as the 'logical subject', but not the 'grammatical subject'; grammatically it is just the object of a preposition. My treatment of PP's with *to* in clauses like 37b is analogous: *Mary* is the logical IO, but not a grammatical IO; grammatically, it is just the object of a preposition. Restricting the term 'indirect object' (as applied to English) only to nominals without a preposition, like *Mary* in 37a, has precedents in other descriptive approaches; thus it is defended by Mallinson & Blake (124–5).

My arguments for the Antidative Analysis are based on the fact that it permits the statement of various rules of English to be simpler, as well as more consistent with markedness principles. Consider first the 'case-marking' rules of English, which presumably specify which nominals occur with prepositions. Compare the case-marking required under the two analyses.

(39) Under Dative Analysis:
Without preposition: Su, DO, DO-chômeur.
With preposition: Non-primaries other than DO-chômeurs.[14]

(40) Under Antidative Analysis:
Without preposition: Terms.
With preposition: Non-terms.

The Antidative Analysis is clearly simpler. Furthermore, given the Natural Class Principle discussed in §1 above, the Antidative Analysis claims that Eng. case-marking is cross-linguistically normal: it can be formulated by reference to classes of nominals which the theory characterizes as natural classes, namely terms and non-terms. The Dative Analysis, in contrast, claims that Eng. case-marking is unusual, since the class of nominals which it claims occur without prepositions is not a natural one—namely that of Su's, DO's, and DO-chômeurs. I will argue shortly that English case-marking is cross-linguistically normal, as the Antidative Analysis claims.

It is worth noting that the Antidative Analysis claims that case-marking in English clauses directly reflects their syntactic valence. Clauses like 37a contain three NP's which do not occur with a preposition, and the Antidative Analysis claims that such clauses are ditransitive. Clauses like 37b contain two such NP's, and are claimed to be monotransitive.

Compare now the Eng. word-order rule under the two analyses:

(41) Under Dative Analysis:
Su – V – DO – DO-chômeur – Non-primaries other than DO-chômeurs

(42) Under Antidative Analysis:
Su – V – PO – SO – Non-terms (or equivalently: Su – V – IO – DO – Non-terms)

Again, the Antidative Analysis is simpler; the Dative Analysis requires reference to the unnatural class 'non-primaries other than DO-chômeurs.'[15] The Dative Analysis also violates the Final Level Principle by referring to DO-chômeurs: this is not a final grammatical relation, since a nominal is a DO-chômeur if it is a chômeur at the final level, but a DO at the level prior to its becoming a chômeur. Hence reference to DO-chômeurs involves implicit reference to a non-final level. This would be acceptable if Eng. word-order rules were unusual; but as I show below, they are not.

[14] A PRIMARY is defined in RG as a Su or DO. ('Nuclear term' is also used in the RG literature for the same notion.) A NON-PRIMARY is thus an IO or a non-term.

[15] A reviewer points out, however, that there is a strong preference for IO-chômeurs (on my analysis) to precede other PP's:

(a) *John gave the book to Mary in Chicago.*
(b) *?John gave the book in Chicago to Mary.*

This suggests that the word-order rule should require reference to IO-chômeurs, thereby weakening the argument based on 41–42.

However, the relevant principle seems to be that obligatory PP's normally precede non-obligatory ones. Thus obligatory PP's which are not initial IO's exhibit the same preference:

(c) *John put the book on the shelf yesterday.*
(d) *?John put the book yesterday on the shelf.*

Conversely, initial IO's which are not obligatory do not exhibit the same preference:

(e) *John taught karate to elderly women for two years.*
(f) *John taught karate for two years to elderly women.*

Hence the rule accounting for the difference between (a) and (b) does not appear to refer to IO-chômeurs.

4.3. In principle, one would need a diverse and genetically unbiased sample of languages to test whether a given rule is normal. I will assume here, however, that it is initially plausible to consider a construction cross-linguistically normal if one shows that a small sample of languages from different language families and different parts of the world exhibit the properties in question. I will thus argue that the case-marking and word-order rules of English are cross-linguistically normal because a small but diverse sample of languages apparently exhibits very similar rules.

As noted above, for example, Indonesian has two constructions for clauses containing IO's; they bear a remarkable similarity to the two English constructions in their case-marking, word order, and other syntactic properties. Chung 1976 discusses sentences like those in 43 at length, and defends an analysis similar to the Dative Analysis for English:

(43) Indonesian (Chung 1976:41; = 8, above)
a. *Saja mem-bawa* SURAT *itu kepada* ALI.
I TRANS-bring letter the to Ali
'I brought the letter to Ali.'
b. *Saja mem-bawa-kan* ALI SURAT *itu.*
I TRANS-bring-BEN Ali letter the
'I brought Ali the letter.'

Chung treats sentences like 43a as basic, assuming that *Ali* is the final IO; and she claims that sentences like 43b involve advancement to DO. On her analysis, Indonesian will require case-marking and word-order rules very similar to those given for English above, except that Indonesian exhibits greater freedom of word order. Thus 42 would describe the unmarked word order of Indonesian. The arguments given above for an Antidative Analysis for English apply equally well to Indonesian. The rules of Indonesian which must be formulated in terms of DO's—according to Chung—would be formulated instead, on the Antidative Analysis, in terms of PO's. The evidence Chung presents for the putative chômeur status of the second nominal after the verb, in sentences like 43b, would be attributed to their being SO's (the rules she discusses apply only to PO's).[16]

[16] One difference between English and Indonesian is the use of the suffix *-kan* (or one of a number of alternate forms) in clauses like 43b. On Chung's analysis, one might interpret this suffix much like passive affixes in various languages, as an indication of IO Advancement. On the Antidative Analysis, this suffix indicates syntactic ditransitivity; this is analogous to the use of affixes which indicate transitivity in a number of languages, as discussed by Hopper & Thompson 1980. In fact, they specifically note the Indonesian suffix *-kan*, and point out that its general function is to increase the transitivity of the verb (though their notion differs somewhat from the concept of

Similar remarks apply to the majority of instances in the literature that have been described as involving advancement to DO: most such cases really involve PO's.

Many other SVO languages exhibit—either as one construction for semantically ditransitive sentences, or as the only construction—structures analogous to Eng. sentences like *John gave Mary the book*, i.e. with the notional IO (without a preposition) immediately following the verb, followed by the notional DO:

(44) a. Swahili (Bantu) (Mallinson & Blake 1981:32)
Msichana a-li-m-fungu-lia mwalimu mlango.
girl she-PAST-him/her-open-applied teacher door
'The girl opened the teacher the door.'

b. Kinyarwanda (Bantu) (Dryer 1983:129)
Yohaâni y-oher-er-eje Maríya íbárúwa.
John he-send-BEN-ASP Mary letter
'John sent Mary a letter.'

c. Mandarin (Chinese) (Li & Thompson 1981:376)
Wǒ sò-le tā yi píng jiǔ.
I give-PERF 3sg. one bottle wine.
'I gave him/her a bottle of wine.'

d. Vietnamese (Mon-Khmer) (Thompson 1965:227)
Cho tôi ba đồng.
give me three piastre
'Give me three piastres.'

e. Twi (Kwa) (Christaller 1875:118)
wó-yì ǫhéne tów.
they-pay king taxes
'They pay the king taxes.'

f. Itonama (Macro-Chibchan) (Camp & Liccardi 1967:265)
umu počone mamaʔna ah-mi-di-makiʔko ahme-ʔe uwaka.
man like.that going.to 3-not-Q-give his-son meat
'Is the man not going to give his son meat like that?'

g. Huasteca Nahuatl (Uto-Aztecan) (Beller & Beller 1977:207)
kin-kowi-lih-ki i-kone-wa seh pico.
3sg.3pl.-buy-APPLIC-PAST his-child-POSSD.PL one pig
'He bought his children a pig.'

h. Puluwat (Micronesian) (Elbert 1974:128)
wo pwe le wuwaló Ruuk tóŕopwe eey.
you will soon take Truk paper this
'Take this paper now to Truk.'

valence used here). They note, for example, that *-kan* is used to form transitive causative verbs out of intransitive verbs and adjectives, indicating increased valence; this is like its use in ditransitive sentences under the Antidative Analysis for these sentences, but not under Chung's Dative Analysis.

i. Fulani (West Atlantic) (Taylor 1953:9)
machuḍo hokki puchu gauri.
slave gave horse corn
'The slave gave the horse corn.'

j. Hausa (Chadic) (Migeod 1914:47)
Ba yaro keauta.
give boy present
'Give the boy a present.'

In none of these languages is there any reason to believe that these sentences involve IO Advancement. In fact, in Kinyarwanda we have specific reason to believe that IO Advancement has not applied. The notional DO in 44b possesses the syntactic properties of other DO's. I have argued (Dryer 1983), on language-internal grounds, that such Kinyarwanda clauses should be analysed as basic: the first nominal after the verb is the IO, while the second one is the DO. In most of the languages in 44, the constructions illustrated are apparently the only ones for semantically ditransitive clauses. The only alternative to analysing such clauses as containing an IO (i.e. a PO), followed by a DO (i.e. an SO), would be an obligatory IO Advancement rule; but this is undesirable, for the same reasons given above against such an analysis of Ojibwa. Thus clear evidence exists for a cross-linguistically unmarked construction Su – V – IO – DO, with the IO not marked with a preposition; so we have ample reason to analyse Eng. clauses like *John gave Mary the book* in the same way.

There is thus no reason to believe that the case-marking and word-order rules of English are at all unusual cross-linguistically. The markedness principles argue for the Antidative Analysis, which characterizes the English rules as typologically normal.

4.4. In the remainder of this section, I will discuss the implications of the proposals of this paper for one language, Southern Tiwa (Tanoan, New Mexico), since the theoretical constructs proposed here provide a considerably more straightforward account of a set of facts that have attracted some interest in the RG literature. The language uses a set of prefixes on the verb in transitive clauses that simultaneously code the person and number of both the Su and DO:[17]

(45) Southern Tiwa (Allen & Frantz 1983a:304, 312)

a. *bey-mu-ban.*
2sg.1sg.-see-PAST
'You saw me.'

b. *ti-'u'u-mu-ban.*
1sg.3sg.-child-see-PAST
'I saw the child.'

Note that the DO is often incorporated into the verb, as in 45b. It still functions

[17] These prefixes also code noun class; but I will ignore this, since it is irrelevant to the discussion here. See Allen & Frantz 1983a for details.

as DO, as discussed by Allen et al. 1984, and as is illustrated by the fact that the form of the verbal prefix still varies with it. I will return to this rule of noun incorporation in §5.

Southern Tiwa employs two constructions for semantically ditransitive clauses (Allen & Frantz 1983a:306–7):

(46) a. *ti-khwien-wia-ban* *seuanide-'ay.*
1sg.3sg.-dog-give-PAST man-to
'I gave the dog to the man.'

b. *ta-khwien-wia-ban* *seuanide.*
1sg.3sg.3sg.-dog-give-PAST man
'I gave the man the dog.'

These constructions differ in two ways. First, the notional IO *seuanide* 'man' occurs with a bound postposition -'*ay* in 46a, but is unmarked in 46b. Second, the verb agrees with the notional IO in 46b, but not in 46a. Allen & Frantz's 1983a analyses of these clauses are outlined schematically here.

(47) a. Analysis for 46a:

I	GAVE	DOG	TO MAN.
Su		DO	IO

b. Analysis for 46b:

I	GAVE	MAN	DOG.
Initial Su		IO	DO
Final Su		DO	Chômeur

This resembles the Dative Analysis for English—particularly in that the notional IO is the final IO when it is marked by an adposition, but the final DO when it does not occur with an adposition. Assuming the analysis in 47, Allen & Frantz thus argue that the verb agreement rule for Southern Tiwa is:

(48) The verb agrees with the Su, DO, and DO-chômeur.

If their argument is correct, it is theoretically important, since it would provide evidence for agreement with chômeurs—analogous to Lawler's evidence for agreement with chômeurs in passive clauses of Achenese. But their description is suspicious, since it refers to the unnatural class 'Su, DO, and DO-chômeur'—the same one specified in the Dative Analysis for English. Compare the following Antidative Analysis.

(49) a. Analysis for 46b:

I	GAVE	MAN	DOG.
Su		IO	DO

b. Analysis for 46a:

I	GAVE	DOG	TO MAN.
Initial Su		DO(SO)	IO(PO)
Final Su		DO(PO)	Chômeur

The Antidative Analysis now allows a much simpler account of verb agreement in Southern Tiwa: the verb simply agrees with final terms. The verb agrees with all three terms in 46b, but not with the notional IO in 46a—since, according to the Antidative Analysis, the notional IO is a final chômeur there. The Southern Tiwa verb agreement system is thus similar to the Kinyarwanda pronominal affix system in that, as discussed above, the number of pronominal affixes on the verb (or the number of nominals coded pronominally on the verb) directly reflects the syntactic valence of the clause. Thus Antidative in Southern Tiwa, like other advancement rules, clearly decreases the syntactic valence of the clause.[18]

Southern Tiwa does not, therefore, provide evidence for agreement with nonfinal levels. It is doubtful, in fact, whether Allen & Frantz' analysis is possible for any human language. The Southern Tiwa facts are exactly what one would expect to find in a language with Antidative, in which the verb agrees with all final terms.[19]

5. SPLIT OBJECTIVITY. So far, this paper has discussed primary objectivity as if it were a property of languages—as if all languages were either of PO type, basing their rules on the distinction between PO's and SO's, or of DO type, basing their rules on the distinction between DO's and IO's. However,

[18] Allen et al. formulate a more general agreement rule, claiming that the verb agrees in general with initial absolutives that are final chômeurs. This covers not only initial DO's in clauses like 46b, but also possessed nominals in Possessor Ascension clauses, and initial Su's in Goal Advancement clauses; all these are chômeurs on their analysis. Thus, either we cannot maintain the claim that the number of nominals coded on the verb always reflects the syntactic valence of the clause in Southern Tiwa, or else we must offer some alternative analysis for these other types of clauses. A full account is beyond the scope of this paper; but I would like to propose that, in the other constructions which Allen et al. analyse as chômeurs, the nominals are all SO's, just like the DO in clauses such as 46b. Admittedly this requires a novel analysis for Goal Advancement clauses like the following (Allen et al., 305):

(a) *in-seuan-wan-ban* (*na*).
1sg.3sg.-man-come-PAST 1sg.
'The man came to me.'

Allen & Frantz 1983b give convincing arguments that, in such clauses, 1sg. *na* is not the initial Su, but the final Su; and that -*seuan*- 'man' is not the final Su, but is coded on the verb in the same way as initial DO's in the passive of ditransitive clauses. This is accounted for, on the analysis of Allen et al., if 1sg. *na* undergoes Goal Advancement to Su, with -*seuan*- as initial Su but final chômeur. It is also consistent, however, with the following analysis.

(b)

	MAN CAME TO ME.
Initial Su	Goal
Final SO	Su

This analysis is not consistent with early versions of the Chômeur Condition, whereby the advancement to Su should place the initial Su 'en chômage'. However, D. Johnson & Postal 1980 argue for weakening the Chômeur Condition, allowing nominals to avoid becoming chômeurs if they 'simultaneously' acquire a distinct grammatical relation. This view is further defended by Dryer 1982.

The analysis in (b) is also inconsistent with the definition of SO given in Fig. 1b, since that definition assumes that SO's can occur only in clauses containing a PO. However, it is consistent with a slightly different approach to defining the notions PO and SO, discussed in §8 below. The demotion of a Su to SO is conceptually analogous to Inversion, whereby a Su is demoted to IO.

[19] The analysis given here thus seems to bring Southern Tiwa into line with all other languages in which the verb can agree with three nominals. In such languages, the three nominals seem always to be Su, DO, and IO.

the literature has shown that ergativity is not really a property of languages, but rather a property of rules. The term 'split ergativity' is used to describe instances in which some rules in a given language refer to the grammatical relations SUBJECT and/or OBJECT, while other rules in the same language refer to the grammatical relations ABSOLUTIVE and/or ERGATIVE. Thus, in many languages, morphological rules are sensitive to the absolutive/ergative distinction, while syntactic rules are apparently sensitive to the subject/object distinction (cf. Anderson 1976). Other languages show split morphological ergativity; e.g., in Warlpiri (Jelinek 1984), case-marking follows an ergative pattern, while clitics follow an accusative one (i.e. according to the subject/object distinction). Still other languages have split syntactic ergativity, in which some syntactic rules refer to the subject/object distinction, others to the absolutive/ergative distinction. For example, in Quiché (Mayan), subjects control reflexivization:

(50) Quiché (Larsen & Norman 1979:349)
x-Ø-u-kamsa-j r-iib' lee achih.
COMPL-3sB-3sA-kill-SUFF 3sA-self the man
'The man killed himself.'

Hence reflexivization follows an accusative pattern. The rule of relativization, however, follows an ergative pattern: absolutives can be relativized, while ergatives cannot. Thus 51 is unambiguous: *lee achih* 'the man' can be interpreted only as the object in the relative clause, and hence absolutive. It cannot be interpreted as the subject, and hence ergative (Larsen & Norman, 357):

(51) *x-Ø-inw-il lee achih (lee) x-Ø-u-ch'ay lee ixoq.*
COMPL-3sB-1sA-see the man (the) COMPL-3sB-3sA-hit the woman
'I saw the man whom the woman hit.' (NOT 'I saw the man who hit the woman.')

Similarly, many languages exhibit both passive and antipassive rules. Passive is inherently accusative, since it refers to the grammatical relations SUBJECT and OBJECT; antipassive is inherently ergative, since it refers to the grammatical relations ABSOLUTIVE and ERGATIVE. Inuktitut, for example, has an antipassive rule, illustrated in 34–35 above. It also possesses a passive rule:

(52) Inuktitut (M. Johnson, 9)
a. *Piita-up Maali-Ø kunik-paa.*
Peter-ERG Mary-ABS kiss-3sg.3sg.
'Peter kissed Mary.'
b. *Piita-mit Maali-Ø kunil-tau-vuq.*
Peter-ABL Mary-ABS kiss-PASS-3sg.
'Mary was kissed by Peter.'

Because case-marking in Inuktitut follows an ergative pattern, the fact that the object has advanced to become the subject in 52b is somewhat opaque, since *Maali* occurs in the absolutive case in both clauses. However, it is in the absolutive in 52a because it is an object, in 52b because it is an intransitive subject. This is reflected more clearly by the properties of *Piita*: in 52a, it occurs in the ergative case and the verb agrees with it, both facts being indicative of its subject status. But in 52b, it occurs in the oblique ablative case, and the verb no longer agrees with it—both facts being indicative of its chômeur status.

There is evidence that primary objectivity also is really a property of rules, rather than of entire languages. In some instances, within a given language, some rules refer to the DO/IO distinction, others to the PO/SO distinction. In Southern Tiwa, for example, the PO/SO distinction is relevant to various rules, like Antidative, Passive, and Verb Agreement; but the DO/IO distinction is relevant to Object Incorporation. Only DO's can incorporate (cf. Allen et al.)[20] Thus a DO in a monotransitive clause can incorporate, as in 45b above; and so can a DO in a ditransitive clause as in 46a–b. But an IO cannot. The incorporated noun in 53 can be interpreted only as DO:

(53) Southern Tiwa (Allen et al., 304)
ta-hliawra-wia-ban.
1sg.3sg.-lady-give-PAST
'I gave the lady to him.' (NOT 'I gave him to the lady.')

Very similar facts apparently are manifested in Mohawk (Postal 1982): the verb agrees with the PO, but it is the DO which incorporates. In Tzotzil, a number of rules, including verb agreement and passive, depend on the PO/SO distinction (see the examples in 26 above); but Aissen 1984 describes a rule of quantifier interpretation which depends on the DO/IO distinction. In 54a, the preverbal quantifier *ʔep* 'many/much' is associated with the DO *fiesta*. But in 54b it is associated with the DO *tak'in* 'money', rather than with the IO *ʔabteletik* 'workers':[21]

(54) Tzotzil (Aissen 1984:5, 7)
a. *ʔep ʔi-s-k'el-ik k'in li tzebetike.*
many COMPL-ABS.3-look-PL fiesta the girls
'The girls saw many fiestas.'
b. *ʔep ch-k-ak'-be tak'in ʔabteletik.*
much INCOMPL-ABS.1-give-BEN money workers
'I gave a lot of money to the workers.' (NOT 'I gave money to a lot of workers.')

A final example of split objectivity is illustrated in Yindjibarndi, a Pama-Nyungan language of Australia. This language employs an objective case which is generally used for both objects in ditransitive clauses:

(55) Yindjibarndi (Wordick 1982:174)
Ngaarta yungku-nha ngayu murla-yi.
man.NOM give-PAST me.OBJ meat-OBJ
'A man gave me the meat.'

However, in imperative sentences the DO occurs in the nominative case, which

[20] The PO/SO distinction is also relevant to noun incorporation in Southern Tiwa, however—in that a DO that is an SO always incorporates, but a DO that is a PO sometimes does not, depending on various factors.

[21] Aissen formulates her rule to refer to initial absolutives: the rule picks out initial Su's of intransitive verbs, and initial DO's of both monotransitive and ditransitive verbs. Thus Tzotzil requires both notions of ABSOLUTIVE mentioned above. The quantifier interpretation rule refers to the notion DO-Absolutive, while the verb agreement rule refers to that of PO-Absolutive. (Note that the orthography used in 54 differs slightly from that in 26 above.)

is otherwise used for subjects:

(56) *Karlima-nma Warrunha.*
hold.back-IMP Blackie.NOM
'Hold Blackie back.' (Wordick, 169)

But Wordick reports (p. 61, fn. 3) that, in ditransitive imperative sentences, it is specifically the DO, and not the IO, which occurs in the nominative. Even in declarative sentences, 3rd person DO's may optionally occur in the nominative; but again this applies only to DO's. Thus, although DO's and IO's are not distinguished by the normal pattern here, the case-marking rule is sensitive to the DO/IO distinction.

The passive rule in Yindjibarndi, however, depends on the PO/SO distinction. In monotransitive clauses, the DO can advance to subject:

(57) *Ngaarta-lu thywayi-nguli-nha pattyarri.*
man-INST spear-PASS-PAST euro.NOM
'The euro got speared by the man.' (p. 171)

But in ditransitive clauses, only the IO can advance to subject. Thus 58a is acceptable as a passive of 55, but 58b is not:

(58) a. *Ngayi yungku-nguli-nha murla-yi ngaarta-lu.*
I.NOM give-PASS-PAST meat-OBJ man-INST
'I was given the meat by a man.'
b. **Murla yungku-nguli-nha ngayu ngaarta-lu.*
meat.NOM give-PASS-PAST me.OBJ man-INST
'The meat was given to me by a man.' (p. 174)

English exhibits a type of split objectivity analogous to that in Inuktitut, described above. Just as Inuktitut rules include both Passive and Antipassive, there is reason to believe that English rules include both Dative (IO Advancement) and Antidative. I have already argued that English has an Antidative, and that sentences like 59a are the Antidative versions of ones like 59b:

(59) a. *John gave the book to Mary.*
b. *John gave Mary the book.*

A small class of Eng. verbs are like *give* in that they occur in two constructions; but they differ from *give* in that, when the notional IO immediately follows the verb, the notional DO uses the preposition *with* (cf. Channon 1982). Among the verbs in this class are *supply, provide, furnish*, and *present*. I will call these '*supply*-verbs' and use *supply* as the exemplar for the class. Thus *supply* occurs in the two constructions illustrated here:

(60) a. *Our firm supplies coats to the army.*
b. *Our firm supplies the army with coats.*

The classical RG treatment of sentences like 60a–b is the same as for 59a–b: thus 60a is treated as basic, while 60b is treated as having undergone IO Advancement. What is unusual about these verbs is that their DO-chômeurs occur with the preposition *with*. Whether this is lexically determined or semantically determined (as argued by Channon), the fact remains that this analysis of *supply*-verbs forces more complex case-marking and word-order rules:

(61) a. Case-Marking under classical analysis.
Without preposition: Su, DO, DO-chômeur (except with *supply*-verbs)
With preposition: Non-primaries, except for DO-chômeurs other than those with *supply*-verbs.
b. Word-Order under classical analysis.
Su – V – DO – DO-chômeur (except those with *supply*-verbs) – Non-primaries (except for DO-chômeurs other than those with *supply*-verbs)

My analysis for the sentences in 60 is:

(62) a. Antidative

	Our firm supplies coats		*to the army.*
Initial	Su	SO(DO)	PO(IO)
Final	Su	PO(DO)	Chômeur

b. IO Advancement

	Our firm supplies the army		*with coats.*
Initial	Su	PO(IO)	SO(DO)
Final	Su	PO(DO)	Chômeur

Here it is claimed that English does have a rule of IO Advancement, but that it applies only with *supply*-verbs. The virtue of this analysis is that it allows us to maintain the simple case-marking and word-order rules in 40 and 42 above. We can still say that terms are unmarked, while non-terms occur with a preposition; and that the word order is Su – V – PO – SO – Non-terms.[22]

Let us return to the main idea of this section, namely that primary objectivity is a property of individual rules, rather than of entire languages. The evidence just cited from *supply*-verbs shows that the grammar of English must refer both to the notion of PO and to that of DO.

The evidence for split objectivity presents a problem for an alternative approach to primary objectivity which is proposed by Comrie 1982 with reference to Huichol—and is implicit in the work of various linguists, like Givón 1984a,b and Faltz 1978. As noted above, the verb in Huichol agrees with what I call the PO in my theory. Comrie uses the term 'prime object' for the PO; but it is clear from his discussion that he associates no theoretical significance with this notion, and that he considers prime objects to be really DO's. His claim is thus that Huichol differs from other languages in how it associates semantic roles with grammatical relations: in other languages it is the patient/theme which is the DO, but in Huichol it is the recipient/beneficiary. What the patient/theme is, on Comrie's analysis, is not clear, but it is not a DO. His theory is thus reminiscent of claims (as in Keenan 1976, Keenan & Comrie 1977, and Marantz 1984) that, in at least some ergative languages, the absolutive is 'really' the subject; such ergative languages are said to differ from other languages in what semantic roles are associated with the grammatical relation SUBJECT. But just as split ergativity presents a problem for such a view of ergativity, so too

[22] Note that, since ?**Our firm supplies the army coats* is unacceptable for most speakers, we must say that *supply*-verbs trigger either IO Advancement or Antidative.

split objectivity presents a problem for Comrie's proposal about objects. His proposal requires that every language be one of two types—(a) one in which the patient/theme in a ditransitive clause is the DO, or (b) one in which the recipient/beneficiary is the DO. But if there are languages in which some rules group the single object in monotransitive clauses with the patient/theme in ditransitive clauses, while other rules group it with the recipient/beneficiary—in other words, if some rules refer to what are DO's on my analysis, but others to PO's—then Comrie's approach will not work. We need to recognize two grammatical relations for describing such languages, and the distinct notions PO and DO serve that function. Given that the theory requires these two notions, it is clearly PO, not DO, which is relevant to the verb agreement rule in Huichol.

Although primary objectivity is really a property of rules rather than of languages, I will continue to refer to PO and DO languages loosely, as a way of referring to types in which many rules refer to PO's and DO's respectively. Thus, even though the grammar of English may refer to the category IO, it is convenient to describe English as a PO language, since the grammatical relation PO seems to play a more central role in the grammar.

6. THREE KINDS OF PASSIVE. The traditional RG view is that Passive is advancement of a DO to subject (Perlmutter & Postal 1977). The analysis presented here requires a modification of this—since in English, on my analysis, it is PO's that advance to subject, not DO's. Thus if we apply Passive to what is a basic clause on my analysis like 63a, it is the IO (and hence PO) that can advance to subject, as in 63b—not the DO (and hence SO), as in 63c:[23]

(63) a.	*John gave Mary*	*the book.*		
	Su	PO(IO)	SO(DO)	
b.	*Mary*	*was given the book*	*by John.*	
Initial	PO(IO)		SO(DO)	Su
Final	Su		SO(DO)	Chômeur
c.	**The book*	*was given Mary*	*by John.*	
Initial	SO(DO)		PO(IO)	Su
Final	Su		PO(IO)	Chômeur

To advance the SO to Subject, Antidative must apply first, promoting the SO to PO:

(64)	*The book*	*was given to Mary*	*by John.*	
Initial	SO(DO)		PO(IO)	Su
	PO(DO)		Chômeur	Su
Final	Su		Chômeur	Chômeur

Thus Passive in English involves the advancement of PO's to Subject.

In other languages, however, it is the DO that advances to Subject. In a French sentence like 65a, it is the DO that advances to Subject, as shown in

[23] For some speakers, 63c is acceptable. I discuss this below.

65b; the IO (and hence PO) cannot, as shown in 65c:[24]

(65) a. *Jean a donné le livre à Marie.*
'John has given the book to Mary.'
b. *Le livre a été donné à Marie par Jean.*
'The book has been given to Mary by John.'
c. **Marie a été donnée le livre par Jean.*
'Mary has been given the book by John.'

Clearly the fact that, in English, the PO advances to Subject—while in French, the DO does so—is not an accidental difference between the two languages. The role of the PO in English is related to the general prominence that the notion PO plays in English in contrast to French. But I leave it to a future general theory of split ergativity and split objectivity to account for these facts.

A third kind of Passive is found in some languages, in which ANY object can advance to Subject. Thus, if we apply Passive to the Kinyarwanda sentence in 66a, either object can advance to Subject, as shown in 66b–c:

(66) Kinyarwanda (Kimenyi, 127)
a. *Umugabo y-a-haa-ye umugóre igitabo.*
man he-PAST-give-ASP woman book
'The man gave the woman the book.'
b. *Igitabo cy-a-haa-w-e umugóre n'ûmugabo.*
book it-PAST-give-PASS-ASP woman by-man
'The book was given to the woman by the man.'
c. *Umugóre y-a-haa-w-e igitabo n'ûmugabo.*
woman she-PAST-give-PASS-ASP book by-man
'The woman was given the book by the man.'

Given the position (defended by Dryer 1983) that 66a is basic, and involves an IO followed by a DO, 66b–c both involve direct advancement of an object to Subject.

There are also speakers of English for whom passive can advance any object to Subject. For them, sentences like 63c (?*The book was given Mary by John*) are acceptable. Although a number of informal proposals have been made within RG to account for the acceptability of 63c for such speakers, no satisfactory account has been found within the classical IO Advancement approach. Ex. 63c is the passive of 63a (*John gave Mary the book*); but *the book* is a chômeur in 63a on the classical analysis, and hence ought not to be advanceable to subject.

It has been suggested that these sentences involve advancement of the IO to DO AFTER the DO *the book* advances to subject.[25] But this leaves the problem

[24] I assume that the French preposition *à*, unlike the English preposition *to*, does mark final IO's. Support for this assumption is provided by examples in which the *à*-phrase co-occurs with a preverbal IO clitic: *Jean lui a donné le livre, à Marie.*

[25] This would violate a possible law (mentioned by Kimenyi) that would forbid the advancement to a grammatical relation that was held by another nominal at an earlier level when that nominal has itself undergone an advancement.

of why such an advancement is not also possible for the majority of speakers of English who find 63c unacceptable. Presumably the grammars of such speakers include something to prevent the IO from advancing to DO after the DO advances to Subject. But this approach would in effect require an account of the difference between the two 'dialects' in terms of what amounts to extrinsic ordering—something RG has otherwise avoided. The approach proposed in this paper allows for an account of the difference between the two 'dialects' in terms of an independently motivated parameter of cross-linguistic variation: for some speakers, passive is the advancement of the PO to Subject, while for others it is the advancement of any object to Subject.

7. THE THEORETICAL IMPORTANCE OF SECONDARY OBJECTS. As noted in §3 and §5, various linguists have observed the grammatical relation PO—although most have either taken the view that PO's are really DO's, or have treated PO as an ad-hoc grammatical relation in a specific language, failing to relate it to grammatical relations in other languages. Few, however, have noted the significance of the grammatical relation SO: it is either ignored, or viewed as a type of oblique.

Thus Comrie 1982 refers to SO's as 'patients of ditransitive verbs'; he argues, as noted above, that they are not DO's, but never says what they ARE. Faltz 1978 rather mysteriously refers to SO's as 'real DO's', to distinguish them from 'IO's of the DO type'; but it is not clear, on his approach, how to distinguish these 'real DO's' with ditransitive verbs from the DO's which occur with monotransitive verbs.

The traditional RG approach treats SO's as chômeurs, a type of non-term. But, as noted above, this fails to account for the fact that SO's are generally term-like in their grammatical properties. The traditional RG approach treats it as an accident that SO's in English do not bear prepositions. But, as demonstrated above, other languages are like English in this regard. The fact that SO's possess various other properties of objects, such as their ability to be promoted to subject by passive in Kinyarwanda, again illustrates that they occupy a higher position on the relational hierarchy than non-terms.

Many other theoretical approaches share the RG view of SO's as non-terms or as being like obliques. Thus Emonds 1976 argues that *a letter* in 67 occurs in a PP with an empty preposition:

(67) *I gave Bill a letter.*

But his account fails to capture the fact that such NP's must immediately follow the first object—unlike other plausible instances of PP's with empty prepositions, e.g. temporal expressions like *last night*. The following examples show clearly that SO's must be distinguished from PP's with empty prepositions:

(68) a. *I gave Bill a letter at the store last night.*
b. *I gave Bill a letter last night at the store.*
c. **I gave Bill at the store {a letter last night / last night a letter.}*
d. **I gave Bill last night {a letter at the store / at the store a letter.}*

Other linguists concerned with grammatical relations also treat SO's like obliques; thus Dowty considers SO's on a par with IO's marked with *to*. Marantz (22) claims that *a porcupine* in 69 'is an indirect argument of the verb *gave* and should display precisely the same syntactic behavior it would if it were marked by a preposition':

(69) *Elmer gave Hortense a porcupine.*

The evidence in this paper shows, however, that SO's exhibit properties distinct from those of PO's and of obliques.

8. THE THEORETICAL STATUS OF PRIMARY OBJECT AND SECONDARY OBJECT. In §3, I described PO and SO as being defined in terms of the notions DO and IO (Fig. 1b). However, there are reasons to believe that it may be better to view PO and SO as primitive notions on a par with DO and IO, and thus to use a principle relating the various primitive notions DO, IO, PO, and SO to each other.[26] The reason for this is as follows. If we use the definition in Fig. 1b, then an asymmetry arises between the notions IO and SO: if IO is a primitive notion, and SO is defined in terms of Fig. 1b, then it is in principle possible to have clauses containing an IO but no DO, but it is not possible to have clauses containing an SO but no PO. Fig. 1b excludes the latter, but nothing prevents the former. In fact, there is reason to believe that the former situation is possible. A Latin passive clause like 70 has no final DO (since it has advanced to Subject), but a final IO is present, as indicated by the dative form *puellae* 'girl':

(70) *Munus puellae datum est.* 'The gift was given to the girl.'
gift(NOM) girl(DAT) given is
Initial DO IO
Final Su IO

There is reason to believe that SO's possess the same property. I argued above for the following analysis:

(71) *Mary was given the book by John.*
Initial PO(IO) SO(DO) Su
Final Su SO(DO) Chômeur

But this analysis is inconsistent with Fig. 1b: at the final level of 71, *the book* is a DO of a clause not containing an IO. So, by Fig. 1b, *the book* should be the PO, not an SO. But there is clear evidence, from clauses analogous to 71 in other languages, that this is not the case. Consider these Swahili sentences:

(72) Swahili (Perlmutter 1980:220–21)
a. *Johni a-li-m-p-a mkunga* ZAWADI.
John he-PAST-her-give-ASP nurse present
'John gave the nurse the present.'
b. *Mkunga a-li-p-ew-a* ZAWADI *na Johni.*
nurse she-PAST-give-PASS-ASP present by John
'The nurse was given the present by John.'

On Perlmutter's analysis, the IO has advanced to DO in 72a, so that *zawadi*

[26] The same issue arises with the concepts of ergative and absolutive; I would argue that they too are primitive notions rather than defined ones, but discussion of that is beyond the scope of this paper.

'present' is a chômeur in both 72a and 72b. He argues that this accounts for the fact that the verb does not agree with *zawadi* in 72b. On my account, 72a is basic; so my analysis of 72b is:

(73)

	Mkunga	*a-li-p-ew-a*	*zawadi*	*na Johni.*
	nurse	she-PAST-give-PASS-ASP	present	by John
Initial	PO(IO)		SO(DO)	Su
Final	Su		SO(DO)	Chômeur

'The nurse was given the present by John.'

On my account, the verb in Swahili agrees with the PO. Since the verb does not agree with *zawadi* in 72b, *zawadi* must be an SO as indicated, not a PO. But to achieve that, we cannot define PO and SO as in Fig. 1b.

If the notions SO and IO are on a logical par, then we would not expect the SO to become a PO in 72b—any more than we would expect the IO in the Latin passive clause to become a DO after the DO advances to Subject. What we need, therefore, is a principle which (unlike Fig. 1b) treats PO, SO, DO, and IO on a logical par. This can be achieved if we regard all four as primitive notions, and relate them by the following principle:

(74) The PO/SO Principle.

a. If a nominal possesses any of the four object relations (DO, IO, PO, SO) at the initial level, then it must also possess at the initial level the corresponding object relation, defined as follows:

Monotransitive PO ↔ Monotransitive DO
Ditransitive PO ↔ IO
SO ↔ Ditransitive DO

b. If a nominal is affected by a rule, then its object relations must conform after the rule to the correspondence defined in (a). A nominal is defined as being AFFECTED by a rule if one of the following conditions holds:

(i) The rule specifically assigns a relation to the nominal.
(ii) Application of the rule results in a relation held by the nominal being acquired by another nominal.

c. If a nominal is NOT affected by a rule, its relations do not change—even if that means that a nominal's object relations no longer conform to the correspondence defined in (a).

The situation covered by 74b(i) and 74c is illustrated by the French sentence 65b: *Le livre a été donné à Marie par Jean* 'The book has been given to Mary by John.' The application of Passive specifically assigns the Su relation to *le livre*, thereby causing it to lose its DO relation. Since it is affected by the rule, it also loses its SO relation, by 74b. But the initial IO *Marie* is not affected by the application of Passive, which assigns no relation to it—nor does Passive assign any relation held by *Marie* to any other nominal. Hence, by 74c, *Marie* retains its status as IO—even though, contrary to Fig. 1b, it is no longer a ditransitive PO. Similar comments apply to *the book* in 71 and *zawadi* in 72, which retain their SO status despite the fact that they are no longer ditransitive

DO's.[27] The PO/SO Principle is further illustrated by advancements to object discussed in §9 below.

The situation described above for Swahili is apparently typical; thus the SO in Southern Tiwa also remains as SO when the PO advances to Su. However, I am aware of one instance in which an SO becomes the PO when the previous PO loses its grammatical relation. Rhodes 1976 describes a number of Ojibwa rules which detransitivize monotransitive clauses—among them reflexivization, as in 75a, and unspecified object deletion, as in 75b:[28]

(75) Ojibwa (Rhodes, 123)

a. *gi:-ba:škz-od-zo.*
PAST-shoot-TRANS.REFL-INTRANS.3
'He shot himself.'

b. *gi:-ba:škz-ow-e:.*
PAST-shoot-TRANS.INDEF.OBJ-MEDIAL.INTRANS.3
'He shot someone.'

These rules both apply to PO's, since in ditransitive clauses it is the notional IO to which they apply (Rhodes, 141–2):

(76) a. *n-gi:-mi:n-di-zo-N.* *mzinhigan.*
1-PAST-give-REFL-INTRANS-3.INAN book
'I gave myself a book.'

b. *n-gi:-mi:g-w-e:-N.* *mzinhigan.*
1-PAST-give-INDEF.OBJ-MEDIAL.INTRANS-3.INAN book
'I gave someone the book.'

[27] There are a number of technical issues as to how one might formalize the approach implicit in the PO/SO Principle within the framework of Perlmutter & Postal 1977, 1983. It clearly requires that a single object nominal bear two grammatical relations at once (or a single complex grammatical relation like [DO,PO]). In fact, if we extend the approach employed in the PO/SO Principle to ergativity—and employ two distinct absolutive relations, DO-Abs and PO-Abs, as outlined in §3 above—then an object nominal must actually bear three grammatical relations at once. In *John gave Mary the book*, then, *Mary* is PO, IO, and PO-Abs, while *the book* is SO, DO, and DO-Abs. PO-Abs is a grammatical relation held by PO's and intransitive Su's, while DO-Abs is held by DO's and intransitive Su's. Note further that an intransitive Su will be simultaneously PO-Abs and DO-Abs. Thus *John* in *John walks* will bear three grammatical relations: Su, DO-Abs, and PO-Abs. Clearly there must be correspondence principles relating the two Abs relations to other ones:

(a) A nominal is a PO-Abs iff it is an intransitive Su or a PO.
(b) A nominal is a DO-Abs iff it is an intransitive Su or a DO.

A number of further problems and issues exist in formalizing this approach to grammatical relations within the existing formalisms of RG. I leave these unresolved here.

[28] On Rhodes' analysis, both these rules are instances of a general rule of object incorporation. The names I use here follow the names commonly used for similar rules in other languages. Both, in fact, might be analysed as instances of antipassive.

The morpheme-by-morpheme divisions in 75 are rather arbitrary. Rhodes provides such divisions only in the phonological underlying representations: 75a is /gi:-ba:škiz-w-idi-zo-w/ 'PAST-shoot-TRANS-self-INTRANS-3', while 75b is /gi:-ba:škiz-w-iw-e:-ø-w/ 'PAST-shoot-TRANS-INDEF.OBJ-MEDIAL-INTRANS-3'. The morpheme glossed MEDIAL is one that occurs in verbs which undergo noun incorporation.

What is particularly significant about both these examples is that the verb agrees with the notional DO *mzinhigan* 'book': the final suffix *-n* indicates an inanimate object. As discussed above, ditransitive verbs in Ojibwa generally agree with the PO, not the SO. The natural conclusion is that the loss of PO status by the notional IO, resulting from these rules, causes the SO to take over the PO relation. This cannot be automatic, however. The evidence cited above from Swahili shows that the SO remains as such when the DO advances to Su. Although the different rules at work in the two cases (passive vs. reflexivization/unspecified object deletion) might play a role in predicting this difference, I assume that it must be stipulated for Ojibwa that SO's advance to PO in such clauses.

It should be emphasized that the facts just discussed provide an additional argument for a PO analysis of Ojibwa, in contrast to the obligatory IO Advancement analysis of Rhodes. On his analysis, notional DO's with ditransitive verbs are chômeurs. But the verb agrees with the notional DO in 76. Rhodes accounts for this by a rule that advances chômeurs to DO in such clauses. But such an advancement is forbidden in most versions of RG, since it violates the Chômeur Advancement Ban of Perlmutter & Postal 1983. Allowing such rules would greatly diminish the empirical content of the notion chômeur.[29] This problem does not arise with the PO analysis proposed here, since the necessary advancement is simply one of SO to PO—essentially the Antidative rule, which is independently motivated in other languages.

9. ADVANCEMENTS OF OBLIQUES TO OBJECT. I will now briefly discuss a couple of instances in which oblique nominals advance to object. I will show that the approach presented here provides an account of such constructions that is as good as, or better than, previous accounts.

First, consider Benefactives: in many languages, there is reason to distinguish these from true IO's: Thus, in English, initial IO's can be distinguished from initial Benefactives: when they occur with a preposition, IO's appear with *to*, while Benefactives appear with *for*. I have argued in this paper that notional IO's marked with *to* are final chômeurs. My approach to Benefactives, however, is much closer to the traditional RG account, in that I treat sentences like this as basic:

(77) *John baked a pie for Mary.*
Su DO Ben

Sentences like 78 involve the advancement of the Benefactive *Mary* to become the IO:

(78) *John baked Mary a pie.*

Initial	Su	Ben	DO(PO)
Final	Su	IO(PO)	DO(SO)

The idea that Benefactives might advance to become IO's is natural, since initial IO's and Benefactives are clearly similar semantically, and are treated similarly in many languages. Advancing a Benefactive to IO essentially involves neutralizing the Benefactive/IO distinction. When the Benefactive *Mary* advances to IO in 78, it also automatically becomes a PO, by the PO/SO Principle: since it is affected by the rule, it must conform to the correspondence in 74a after the rule has applied. By 74b(ii), the original PO *a pie* is also affected by the rule, since the rule application results in *Mary* acquiring the PO relation—which is already held by *a pie*. As a result, *a pie* must conform to 74a; if it retains its status as DO at the final level, then it must also be SO, since the clause is ditransitive at the final level.[30]

There are a number of reasons for treating sentences like 77 as basic, rather than ones like 78. The benefactive nominal in 78 otherwise behaves like a final term in its case-marking and position. We can account for that directly if it is a final term. Since its semantic properties would suggest that it is an initial non-term, it must have advanced to become a term. Conversely, the benefactive in 77 has the case-marking and position of a final non-term. Since it is an initial non-term, we can account for the facts if we treat 77 as basic. We might account for these properties if the initial benefactive were a final chômeur—as I have argued is true with IO's marked with *to*. But there is no plausible way by which it might become a chômeur. For an initial non-term to become a final chômeur, it must first advance to become a term, and subsequently be placed 'en chômage' by the advancement of another nominal. Quite apart from the fact that such a scenario is otherwise either rare or impossible, the complexity of such an analysis seems quite unmotivated compared to the one assumed here.

The RG literature provides extensive documentation on advancements to object. In most cases, it is assumed that the advancement is to DO. The framework presented in this paper allows for four possible types of advancement to object, since there are four types of object to which a nominal might advance. Whether the full range of four possibilities is attested among the languages of the world is a matter for future research. But I will present evidence here for advancement to SO in Kinyarwanda.

Kimenyi describes an elaborate system of advancements to object in Kinyarwanda, but I will restrict attention to Instrumental Advancement:

(79) Kinyarwanda (Kimenyi, 79):

a. *Úmwáalímu a-ra-andik-a íbárúwa n'ííkárámu.*
teacher he-PRES-write-ASP letter with-pen
'The teacher is writing a letter with the pen.'

b. *Úmwáalímu a-ra-andik-iish-a íbárúwa íkárámu.*
teacher he-PRES-write-INST-ASP letter pen
'The teacher is writing a letter with the pen.'

Kimenyi motivates this advancement by showing that there are a large number of grammatical properties which characterize objects, and which the instrumental nominal possesses in 79b but lacks in 79a.

[29] Note that there seems to be no obvious way to account for the agreement by reference to initial DO's, since ditransitive verbs do not generally agree with initial DO's in Ojibwa.

[30] By some versions of the Chômeur Condition, the original PO in 78, *a pie*, should become a chômeur, since *Mary* acquires the PO relation. As noted in fn. 18 above, however, D. Johnson & Postal argue for weakening the Chômeur Condition.

Instrumental Advancement in Kinyarwanda differs from many other advancements to object, both in Kinyarwanda and in other languages, in two respects. First, advancements to object in SVO languages typically result in the advanced nominal occurring in immediately postverbal position—as with Benefactive Advancement in English, as in 78 above. But in 79b, the instrumental follows the notional DO, even though it has otherwise acquired the properties of an object. Second, advancements to object typically cause the original object to lose its 'object properties'. The traditional account of this is that the original object has become a chômeur. But Instrumental Advancement in Kinyarwanda does not have this effect: Kimenyi shows that the original object retains its 'object properties'. He shows that Locative Advancement is different from Instrumental Advancement in both respects, though he describes these as idiosyncratic properties of the different advancement rules. But these facts can be accounted for if instrumentals in Kinyarwanda advance to SO. Kinyarwanda word order is basically Su – V – PO – SO – Non-terms (as in English), as illustrated in 79 above. It was shown in 66 that both DO's and IO's in Kinyarwanda can advance to Subject by passive. And Kimenyi shows that, in general, both DO's and IO's in ditransitive clauses possess the various 'object properties'. Hence analysing Instrumental Advancement in Kinyarwanda as advancement to SO accounts for the word order, and for the fact that both the instrumental and the DO possess the relevant 'object properties'.

10. TOWARD AN EXPLANATORY ACCOUNT OF PRIMARY OBJECTIVITY. Why should some languages group DO's of monotransitive clauses with IO's of ditransitive clauses, while others group them with DO's of ditransitive clauses? I will now outline an approach to answering these questions in functional terms.

The question of why language should exhibit both DO/IO and PO/SO distinctions is similar to that of why language should exhibit both subject/object and absolutive/ergative distinctions. I will address the second question first, and then show that an analogous answer applies to the first. Although the absolutive/ergative distinction often strikes people as bizarre, the relationship between grammatical relations and semantic roles in an ergative language is in many ways more direct than it is in an accusative language. It seems fair to say that the PROTOTYPICAL subject of a transitive verb is an agent, while the prototypical object of a transitive verb and the prototypical subject of an intransitive verb is a patient/theme. In other words, the prototypical ergative nominal is an agent, while the prototypical absolutive nominal is a patient/theme (cf. Anderson 1977, Keenan 1984). Thus the grammatical relation ABSOLUTIVE can be viewed as a grammaticization of the semantic role patient/theme. There are, of course, many intransitive verbs whose subjects are agents:

(80) *John is walking.*

But the subjects of such verbs are generally also patient/themes. Thus, in 80, although *John* is an agent, it is also patient/theme, since John undergoes the change of state designated by the verb (cf. Jackendoff 1972). Furthermore, with many such intransitive verbs, the themehood of the subject is more inherent in the meaning of the verb than is its agenthood. Thus, in 81, *John* may or may

not be agent, but is necessarily the patient/theme regardless of the context:

(81) *John went into the river.*

The ergative/absolutive distinction is thus essentially a grammaticization of the semantic distinction between non-theme agents and patient/themes.[31]

What this means is that, in a language (like English) in which the subject/object distinction is prominent, patient/themes will not be expressed by a single grammatical relation; rather they will be expressed in an intransitive clause by the subject, in a transitive clause by the object. As a result, English has many verbs whose transitive and intransitive uses are rather different, in that the intransitive subject corresponds semantically to the transitive object. The verb *open* is a well-known example:

(82) a. *The door opened.*
b. *John opened the door.*

This phenomenon does not occur in an ergative language, since the patient/theme will be the absolutive in both situations.

The subject/object distinction, however, is linked more closely to discourse/referential/pragmatic structure. Subjects of transitive clauses tend to be moe 'topical': they are more often definite, human, or non-3rd person than are objects. Subjects of intransitive clauses tend to be more like subjects of transitive clauses in this respect. Hence the subject/object distinction can be viewed as the grammaticization of 'more topical' vs. 'less topical'. The ergative/absolutive and Subject/Object distinctions differ in that the former is linked to semantic roles, the latter to discourse/pragmatic function.[32]

Analogous comments apply to the two types of distinctions made with objects. The DO/IO distinction follows semantic roles more closely: the DO of either a monotransitive or a ditransitive clause is prototypically a patient/theme, while the IO is a recipient/beneficiary. The PO/SO distinction, in contrast, is linked more closely to discourse/pragmatic function. In ditransitive clauses, the IO tends to be more 'topical' than the DO, since the IO is generally human and definite, and often 1st or 2nd person; the DO is generally non-human and indefinite, and almost invariably 3rd person. In the terminology of Givón 1979, 1984a, the IO in a ditransitive clause is a 'secondary clausal topic'. In a monotransitive clause, the DO is the secondary clausal topic, being more topical than oblique nominals. Thus the PO/SO distinction can be viewed as a grammaticization of secondary topic vs. non-topic.

The fact that languages like Ojibwa and Huichol have systems of object affixes on verbs which vary with the PO, and not with the SO, is not surprising, given the above functional considerations. Since IO's vary for person, while

[31] By contrast, the distinction in active languages (Sapir 1917, Klimov 1972, 1977, Harris 1982, and Munro & Gordon 1982) appears to be the grammaticization of the semantic distinction between agents and non-agent patient/themes. Thus ergative languages and active languages both involve grammaticization of semantic roles, but differ in whether they treat agent themes like other themes or like other agents.

[32] The framework of Role and Reference Grammar (Van Valin & Foley 1980) is based on the interplay between these same two systems.

DO's in ditransitive clauses generally do not, it makes more sense functionally for the verb in a ditransitive clause to code the person of the IO rather than the person of the DO, since the latter is generally predictable.

In fact, if a language has grammatical rules such that the verb only codes the person/number of human objects, then it will seem to be a PO language—since, except in highly unusual circumstances, only PO's will be human. But to describe such a language as of PO type would be misleading, since the rules in question would actually refer to human objects. And it is quite possible that some of the languages cited above as of PO type are really languages in which rules refer to human objects or non-3rd person objects, rather than PO objects. Scott DeLancey has suggested to me that this is a likely alternative for a number of Tibeto-Burman languages. It is often difficult to determine from the available sources whether this is true. If one re-examines the individual arguments given in §§2–3, however, such an alternative generally proves unworkable. Object affixes in Ojibwa occur with inanimate objects. The Huichol examples involve human SO's. The Kokborok example involves an inanimate IO. Hence, even though something along the lines of a human/non-human distinction is a likely diachronic source for primary objectivity, that distinction has apparently often been grammaticized and re-analysed as a PO/SO distinction.

One interesting property of the general picture sketched here is that the PO/SO and Subject/Object distinctions are alike in that both are linked to discourse/pragmatic function; but the DO/IO and absolutive/ergative distinctions are alike in that both are related to semantic roles. Whether there are ways in which the PO/SO distinction behaves grammatically more like the Subject/Object distinction than the absolutive/ergative distinction, and conversely for the DO/IO distinction, is a matter for future research.[33]

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[33] Warlbiri (Australia) exhibits a type of split ergativity and possible split objectivity that shows the absolutive/ergative distinction going with the DO/IO distinction, as the discussion above predicts. Jelinek shows that the clitic system in Warlbiri operates accusatively, while the case-marking system on nominals operates ergatively. To some extent, the clitic system also operates according to the PO/SO distinction, while the case-marking system operates according to the DO/IO distinction. Note the accusative clitic agreeing with the dative-marked IO in the following (Jelinek, 54, cited from Hale 1973:333):

ngajulu-rlu	*ka-rna-ngku*	*karli-Ø*	*yi-nyi*	*nyuntu-ku.*
I-ERG	PRES-1sg.NOM-2sg.ACC	boomerang-ABS	give-NONPAST	YOU-DAT

'I am giving you a boomerang.'

Other aspects of the system suggest, however, that the PO/SO distinction may not be relevant here.

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