Objecthood

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1. The Subject

Continuing controversy surrounds the status in the grammar of **grammatical relations** (GRs) such as **subject** and **object**. Centrally, there is the issue of their primitive vs. defined character. Crucial here is not the difference between the positions of Keenan (1976a) and Johnson (1977b) concerning subjecthood. Keenan does not provide a definition of subject; rather, lie offers a criterion, in the form of a checklist of properties, in terms of which the subject NPs in a language and in particular sentences may be distinguished from non-subject NPs. Even its criterial status is not unproblematical, as Johnson shows; and this should not be surprising. Some of the properties (like the ability to 'launch floating quantifiers') do not uniquely characterize subjects; others, such as highest accessibility to relativization, are associated only contingently with subjecthood (see Anderson, 1979a). Apart from this, the development of a universal subject-selection decision procedure depends on the availability of an independent characterization of the role of subjecthood in the grammar; and we need to establish in the first place whether GRs are indeed primitive or defined.

For Relational Grammar (RG; see, e.g. Johnson, 1974, 1977a, b; Perlmutter and Postal, 1977) and Arc Pair Grammar (APG; Johnson and Postal, 1980), GRs are primitive. In the theory of Chomsky (1965) and its 'extended standard' descendants, GRs are defined with respect to configurations of categories: the subject of 'a sentence is 'the relation holding between the NP of a sentence of the form NP‾Aux‾VP and the whole sentence', etc. In Fillmore's Case Grammar (CG) subject etc. can be defined in the same way, the difference being that the relevant configurations arise only derivatively, crucially by the suppression of nodes labelled with **case relations** (CRs) (see particularly Fillmore, 1968).

In neither of the latter two frameworks do the entities defined have any syntactic relevance. In the case of the (extended) standard framework this follows from their exclusion from the syntactic base. Moreover, it is unnecessary (and not obviously viable) to maintain that the same definitions can be applied to derived structures. It is not obvious that 'deep subjects' and 'surface subjects' have analogous systematic roles in the grammar, and thus that the notion 'subject' (and its derivatives) is a unitary one.[1]

As for CG, however, it is possible to conceive of a variant let's call it a Case/Relational Grammar (CRG) in which the GRs, though defined in the course of the syntactic derivation, nevertheless are crucial to the expression of syntactic regularities. The framework advocated in Anderson (1977) can be interpreted in this way. There, the subject of a clause, for instance, is defined (cycle-finally) in terms of a hierarchy of CRs, but is invoked as such in the formulation of (subsequent) generalizations in the grammar.

Johnson (1977b: 690) claims that if Keenan (1976a) had succeeded in establishing a definition of subject, then 'it would be possible to eliminate the term SUBJ[ect] from L[inguistic] T[heory] altogether in favor of reference to the defining criteria; that is, on this view, SUBJ is a notational convenience'. However, this is not necessarily true of the definitional approach. To the extent that such a 'notational convenience' is repeatedly

[1] In Equational Grammar (Sanders, 1972), on the other hand, where syntactic rules are sensitive to dominance and not precedence relations, a configurational distinction between subject and object NPs must be retained throughout the syntax.

appealed to in the formulation of grammatical generalizations, we are justified in attributing some significance to the notation.

In a CRG, for example, subjecthood, once conferred at the end of each cycle (according to Anderson, 1977) on the argument highest in the hierarchy of CRs, is thereafter available to the expression of syntactic generalizations.[2] The conferring of subjecthood embodies a hypothesis concerning the special status in the syntax of the argument bearing the highest-ranking CR (whatever, in any particular case, that CR happens to be). This claim is supported to the extent that syntactic regularities involve repeated reference to just this set of arguments. Moreover, if full **subject-formation** consists in the neutralization of CRs, then on any subsequent cycles the identity of the CR(s) of a subjectivized argument will not be available to any (non-global) formulation of a syntactic rule: after subject-formation the defining properties for subjecthood are not themselves necessarily locally recoverable.

Such a CRG, then, includes a specific claim concerning the relative roles of CRs, or at least those CRs that are 'removed' by subject-formation, and GRs like subject: only CRs are available initially and within the **cyclic clause,** i.e. the main clause in the sentential configuration to which the cyclic rules are currently applicable at a particular point in the derivation. GRs become available only on the cycle following that which applies to the clause containing the arguments with which those GRs are associated; and, as in English, with full subject-formation the CRs of the affected argument then cease to be available. As far as I am aware, this accords with the relevant observations that have been made.[3]

Those properties of subjects which are apparently well-supported such as highest accessibility to relativization (Keenan and Comrie, 1977) (even if they don't necessarily correlate with subjecthood as such Anderson, 1979a), are associated with NPs in embedded sentences, and thus are compatible with end-of cycle subject-formation. Cyclic clause reference, on the other hand, is to CRs and not GRs. Thus, where in a language application of equi and reflexivization is subject to relational control, the antecedent is specified in terms of CRs; specifically, in these instances control is exercised by an **ergative** phrase (semantically, in the framework of Anderson, 1977, 1979a 'potential controller' of the scene denoted by the predication). Observe that ergative phrases include not only

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[2] Consider too the configurational definitions for GRs proposed by Chomsky (1965: ch.2., §22) and particularly Katz (1972:ch.3, §9). These are 'a notational convenience': as I have pointed out elsewhere (Anderson, 1977: §1.2), the semantic regularities which on Katz's account invoke 'subject' or 'indirect object' can instead be referred to their defining configurations. However, given the standard-theory conception of the base, the defined relations participate in important generalizations: the relations are repeatedly invoked in the semantics and form the basis of the claim that 'the form of semantic composition by which readings of subconstituents are amalgamated, insofar as it depends on syntactic information about these subconstituents, depends only on information about how they are grammatically related' (Katz, 1972: 111). Thus, each of the set of grammatical relations 'is required in the semantic component as part of the statement of a specific type of combination that readings can undergo in the rules forming semantically interpreted underlying phrase markers from lexically interpreted underlying phrase markers' (ibid.). The notation introduced by the definitions embodies a claim concerning what is the semantically relevant syntactic information associated with the set of underlying structures.

[3] I have contrasted RG and CRG with respect to whether GRs are basic or derived. However, the CRG hypothesis might be maintained relatively independently of the 'derivationality' assumption. Provided that a distinction can be drawn within a framework, as perhaps in APG, between a logical substructure and the rest, the hypothesis has a straightforward analogue, and the arguments in its favour in principle carry over; in terms of APG, the CRG hypothesis involves a claim that the GRs are not included in the 'logical relational signs'. In the sections which follow, however, we shall maintain the assumption of derivationality made by almost all relevant discussions of recent provenance, particularly in view of the uncertain status of its analogues in non-derivational grammar.

'agentives' but also nuclear (noncircumstantial) 'instrumentals' and 'forces' and 'experiencers' (of which the latter are simultaneously ergative and locative).

On the other hand, the target for **ascensions** like subject-raising the raisee being specified as bearing a GR (subject), as is appropriate in an embedded sentence is the CR **absolutive** (Anderson, 1977: ch. 3; 1979a: §1; 1979b), as (la) and (lb) exemplify:

(1)   a.   John is likely to use this example again.
        b.   I expect John to use this example again.
        c.   This example is easy to over-use.

Whether the raisee appears in subject (a, c) or object (b) position in the main clause (this being determined by the hierarchy of CRs), the CR of the target is always absolutive. If it involves an ascension, i.e. if 'tough movement' is an ascension rule, (1.c) shows raising of a nonsubject in the absence from the embedded sentence of a subject.

The CR absolutive has a special status. It is necessarily present initially in the derivation of any predication; as such, it is the **principal** CR. It may also occur twice in a single predication; e.g. in Anderson 1977) equative sentences are analysed in this way. Semantically, it introduces the argument that represents the participant that is affected most intimately by the process or state denoted by the predicate, and, as such, it may be involved in the most detailed selectional restrictions with respect to the predicate (cf. Moravcsik, 1978a: 271; Anderson, in press a). In conjunction with the CR locative, i.e. where locative and absolutive are assigned initially to the same argument, absolutive confers 'holisticness' (Anderson, 1975); and, in general, absolutive is associated with 'exhaustiveness' (unless overridden). Otherwise, the CR itself contributes little specifically to the semantics of the predication; its specific interpretation depends on the character of the predicate (and therefore its other arguments). Absolutive arguments undergo actions and processes, including experiential ones; they are located or moved in predications of location or movement (including in(to) or out of existence 'factitives').

The non-locational CRs, absolutive and ergative, are syntactically more 'active' than the locational pair, locative and ablative. This is perhaps associated with their semantic character: the intimate relation to the predicate of the absolutive, and the 'empathizability' of ergatives (Anderson, 1979a). On the other hand, locationals are both normally less empathetic and presuppose absolutives, which they locate.

Selectional restrictions and other semantic regularities invoke CRs and not GRs. For instance, adverbials like *deliberately* modify only NPs that are agentive (non-locative ergative), as is illustrated by (2)

(2)   a.   Hairy Mary deliberately knocked Beppo over.
        b.   Beppo was deliberately knocked over by Hairy Mary.
        c.   *Beppo deliberately realized the truth.
        d.   *The truth was deliberately realized by Beppo.

(2b) shows that it is not necessarily 'surface' subjects that are modified by *deliberately,* and (2c/d) that not all 'deep' subjects are so modified. Thus, the most general formulation is permitted by a grammar whose base includes the CR ergative; reference to subjects is irrelevant. (See further on CRs and adverbial modification Anderson, 1979a: §3; in press a.) Lexical relationships also refer to CRs rather than GRs (Anderson in press a, b); again this is consistent with the absence of GRs (or the configurations in terms of which they are defined) from the base; it is puzzling if they are not.

Subject, then, is a derived relation. Specifically, it is a **principal derived** relation, in that subject is the only obligatory GR in a sentence which displays GRs; and, for example, it is

the subject of a sentence that is most accessible to relativization. However, it is not necessary that the derived principal of a sentence be distinct from the basic or initial principal. In Dyirbal, for example, the absolutive NP remains principal relation, in the absence of subject-formation, and as such is most accessible (Anderson, 1977: §3.5.4; 1979a: §2.). Moreover, not all distinctive derived principals can be subjects, without considerable extension of our understanding of the term and the concomitant obfuscation of important typological differences. Thus, the 'topic' or 'focus' of Tagalog (Schachter, 1976, 1977; also Gil in this volume) differs from an English subject in various crucial respects: most importantly, there is no appeal to a hierarchy of CRs with respect to 'topic-formation'; all participants are equally available for 'topic'-hood. This distinctiveness of subject-formation is expressed by a criterion for subjecthood formulated as in (3)

(3)   Subjecthood
        a.   A language has subjects to the extent that the agent in unmarked action
                transitive sentences shares distinctive properties with the (agent/patient)
                participant in intransitives which it does not share with the patient in action
                transitives; and the agent and the intransitive participant are the subjects of
                their sentences.
        b.   Other constructions have a subject to the extent that they contain a participant
                manifesting these subject properties.

We must turn now to consider whether the characterization of objecthood is inconsistent with the hypothesis of CRG that GRs are derived.

2. Objective Properties

We are concerned here with the GR object, and more specifically **direct object**, if this can be plausibly distinguished from **indirect object**. The set of elements designated objects in different traditions (and their associated properties) varies even with respect to a single language. One tradition accords the term to almost any non-subject argument of a predicate. The task of any account of objecthood is to delimit this set in a way that permits universal and typological generalizations concerning just this set to be formulated, such that as many as possible of the properties commonly attributed to objects are thereby explicated. As with subjects we need to determine whether object is a defined term or a primitive. Is it basic and undefined, as claimed by RG? Or is it defined? By what? Further, is it derived, as required by CRG, for which only CRs are basic? On any intuitive understanding of the term, object is clearly not itself 'a CR; indeed, as has been frequently observed, it conflates a number of distinctions in CR, and there is no CR that is uniquely expressed as an object. Absolutives, embodying the relation contracted by the entity which undergoes processes and has states attributed to it, such that it is, for example, located in locational predications and moves in directional predications, can appear in both subject and object position and elsewhere, as shown in (4):

(4)   a.   The apples fell to the ground.
        b.   Janos loaded the apples on the trailer.
        c.   Janos loaded the trailer with the apples.
        d.   The apples are on the trailer.

In all these sentences *the apples* is absolutive (for discussion see Anderson, 1975; 1977: §1.9), but only in (b) is it the object, according to common usage and in terms of the kind of syntactic behaviour we shall examine below. If this is so, then object cannot be equated

with any CR; moreover, in (4b) it is associated specifically with an absolutive that is nonsubjective: in a CRG it is therefore derived (given the derivative status of subjects). We thus have a clear distinction in the claims made by RG and CRG.

However, much discussion of objects correlates with neither of these positions, but again with attempts to reduce objecthood to possession of certain independent properties. I want now to look at some of these potential object properties in that they will, despite their evident lack of universal validity, be of considerable relevance to the resolution of the central issue of the defined vs. primitive status of objects. We shall be focusing, particularly in section 3, on properties of English; we shall find that even in a single language there is no consistent behavioural pattern of objecthood. Nevertheless, we shall furnish in section 4 a definition of the notion 'potential object' in terms of CRs.

2.1. Notional

There is a strong tradition in grammatical studies wherein object is given a notional definition. To Zandvoort, for instance, an object is what one calls 'a noun or pronoun denoting a person or thing affected by the action expressed by the verb' (1964: §588); for Gildersleeve and Lodge 'verbs are called *Transitive* when their action *goes over to* an object' (1895: § 213). Such views are incompatible both with RG, as definitional, and with CG/CRG as formulated above, in attributing a single semantic relation to objects. But the motivations for denying CR status to object seem to be sound; and, indeed, the difficulty of attributing a single such function to objects has long been recognized. In considering such a definition, Jespersen observes that 'it is difficult to apply the definition to countless other sentences in which, however, grammarians never hesitate to use the term object' (1924: 157). Elsewhere, he also illustrates that 'no simple definition can be given of the relation of the object to the verb, such as 'receiver of the action' or 'the person or thing directly affected by the action'' with a set of sentences including those in (5) (Jespersen 1933: §11.3):

(5)   a.   They murdered the chief.
        b.   Mother cut the pie.
        c.   The boy saw the moon.
        d.   The boy wanted a bad hiding.
        e.   We left London.
        f.   We missed the train.
        g.   Mary nodded her head.
        h.   The architect built a house.
        i.   Sir Charles nodded approval.

Despite the tradition, a simple unitary (let alone exclusive) notional definition of object seems to be unlikely in face of the evidence exemplified by (4) and (5). Nor are there semantic properties whose possession we can attribute uniquely to objects: 'holisticness', for instance, is associated with both objects and intransitive subjects (Anderson, 1975; 1977: §1.8).

Jespersen and others (e.g. Moravcsik, 1971: §3.2.3) have characterized the object as 'intimately connected with the verb of the sentence' (1933 108); for Jespersen, however, 'less intimately so than the subject'. In so far as this is intended as a claim concerning semantic relations, it remains very vague and not obviously true, however interpreted. Keenan, citing Moravcsik, claims that 'semantic restrictions on objects are usually more specific than those on subjects' (1976a: 321). This is scarcely any more explicit and again empirically questionable: are there verb-object relations that are not duplicated by some instance of verb-subject? Moravcsik herself concedes elsewhere that 'intransitive subjects

... are very similar to direct objects and to other verb complements in that many specific properties are presupposed by their verbs' (1974: 100). Indeed, in a later work she offers the hypothesis that universally the noun phrase referent properties in terms of which selectional restrictions between transitive verbs and their objects are statable are similar to or identical with the properties in terms of which selectional restrictions between intransitive verbs and their subjects are statable, while at the same time being very different from the properties that are significant from the point of view of sectional restrictions between transitive verbs rind their subjects (1978a: 271), the subjects of transitive verbs being much less finely subcategorized by the verb. In a CRG intransitive subjects and transitive objects are both absolutive.

Perhaps one can maintain, though, that both subjects *and* objects show 'more specific' restrictions than are imposed on other argument types. But, in so far as it is correct, this is largely a reflection of observations we have already made, concerning the neutralizing function of subject-formation and the diversity of verb-object and verb-subject relations allowed for by the non-specificness of the CR absolutive. A semantic characterization of objecthood thus shares in this respect some of the problems displayed by notional definitions of subject (Cf. e.g. Jespersen, 1924: ch. XI; Keenan, 1976a: 321-322). Even in this respect they cannot be differentiated. Such semantic characteristics as we can associate with subjects and objects reflect the underlying CRs.

2.2. Configurational

However, perhaps we should interpret Jespersen's claim concerning the 'intimate' relation between verb and object as having to do with syntactic structure specifically. A similar claim is reflected in the assignment of the verb and the object NP to the same mother, VP, in many accounts of, say, English sentence structure (though this is incompatible with Jespersen's view concerning the greater 'intimacy' displayed by subjects). But these accounts will also typically attribute other daughters to VP, for example PPs and S. Of course, in terms of Jespersen's 'theory of ranks', the object is a 'primary'; but the motivation for this is obscure and it is not clear that it is such on any other grounds than being a NP. The criterion he offers elsewhere for designating subjects and objects 'primaries' is a semantic one 'they denote comparatively definite and special notions' (Jespersen, l937: §33.6) – which selects, if anything, (a subset of) NPs simply. (See Sanders in this volume on the significance of NP-hood as such.) In fact, the use of 'a notional criterion here, together with the claim that, although the object is 'intimately connected with the verb', it is 'less intimately so than the subject' (Jespersen, 1933: 108), which would be difficult to support on syntactic grounds, makes it doubtful that Jespersen himself has a syntactic (rather than a notional) 'intimacy' in mind. Nevertheless, we should give some consideration to just this possibility, and specifically to the notion that the object is that NP which is immediately dominated by VP, which is essential to the definitions proposed by Chomsky and Katz (as well as to the (nonrelational) grammatical framework proposed by Sanders I1972), wherein the distinct motherhood of the subject and object NPs is crucial).

The viability of such a configurational definition depends upon the universality of VP and upon the uniqueness of object NPs as daughters of VP. However, VP cannot be motivated universally, it would appear: if constituents are continuous (as is well-motivated in a derivational grammar – cf. Anderson, 1979c), then, for example, VSO structures (either in underlying or surface representations) are obviously problematical;[4] even in SOV

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[4] We should take into account here one piece of evidence that might appear to call into question the conclusion reached in the preceding discussion, that VPs are necessarily non-universal. Anderson and Chung (1977: 25) conclude that: 'In VSO languages, as well as in other types of languages, rules

languages, motivations for an OV grouping seem to be lacking (Schwartz, 1972; Hinds, 1973; DeArmond, in press; though see Hasegawa, 1980, for a not very conclusive defence of VP in Japanese). In a SVO language like English, VP is difficult to motivate in base as opposed to derived structures (McCawley, 1970), wherein it designates a type of mutilated sentence. If there are VP-less bases of any kind, then a configurational definition of object cannot provide the basis for the expression of semantic regularities as envisaged by Katz: objects are not configurationally distinct from subjects.[5] Moreover, it cannot provide a definition of derived object if VP is lacking from some such structures. This conclusion is unsurprising in a CRG, in which GRs and 'VP' are derived and non-universal (Anderson, 1977:ch.3). But it is obviously also compatible with a RG, whereby GRs are primitive and VP, where relevant, may also be derived.

  Even in languages in which VP is motivable (most plausibly, as we have seen, derivatively), objects are well defined configurationally only if they are the sole instances

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exist which are sensitive to a structural difference between subjects and objects. The difference in question is independent of the linear position in the clause of the NP affected, and persists after the deletion of one or other of the NPs involved in a transitive construction. From this it must follow that subject and object are structurally distinct; and in the nature of things, this distinction cannot be taken to refer to position relative to the verb in a VSO language'. This could be taken to support the view that relational elements as such are, possibly primitively, available to the syntax; and certainly no configurational specification seems to be possible, given that a 'no tangling' condition is imposed on constituency lines.

  However, Anderson and Chung (1977: 21) point to some phenomena in Breton which they suggest provide some evidence 'that a constituent VP, consisting of just the verb and its object(s), may need to be posited despite the fact that this unit cannot form a continuous constituent of the usual sort'. The evidence concerns topicalization, whereby one and only one constituent can be fronted, as in (i)

(i)   Buoc'h   an   den   a varvas.
        cow   the   man   died.3SG
        'The man's cow died'

or, with fronting of only the possessor phrase, which 'leaves behind a possessive pronoun', (ii):

(ii)   An   den   a varvas   e   vuoc'h.
        the   man   died   his   cow

A verb can be fronted, as in (iii)

(iii)   C'hoarzhiñ a   ra   ar   baotred.
        laugh-INF   do   the   boys
        'the boys laugh'

ra being a form of the verb *ober* which is found 'in the place of the original finite verb', the infinitive *c'hoarzhiñ.* And, crucially, we find fronted verb-plus-object(s), such as in (iv):

(iv)   Lenn   eul   levr   brezhoneg a   ran   bemdez.
        read-INF a   book   Breton   do.1.SG   everyday
        'I read a Breton book everyday'

Anderson and Chung (1977: 24) suggest that this shows 'that a verb and its complements do form a unit at some levels of structure in Breton, a unit which does not include the subject; and from this it follows that there may well be a way to distinguish subjects and objects in terms of constituent structure'. However, the support for this conclusion is rather weak. For instance, a possible characterization of such sentences as (iv), close to a derivation which they themselves consider, involves fronting of 'a complement to the 'do' verb, a complement containing the 'read' verb and its subject *and* object, followed by deletion of its subject under identity with the subject of 'do'. This requires no reference to VP, and no abandonment of the no tangling condition.

[5] 5. If VP is lacking in either basic or derived structures, then doubt is thrown on the viability of Sanders' (1972) proposals (see too Radford, 1977: §1.3).

of a particular category (say, NP) to be dominated by VP. Sentences like (6) are therefore problematical, even (if found only) in derived structures

(6)   Jay awarded Fiona the prize.

unless both post-verbal NPs are to be counted as objects, and the definition is not required to yield a unitary output.
If both these NPs are daughters of VP in deep structure, then assigning them the same function would be undesirable for a Katzian semantics, given not just the distinct semantic roles fulfilled by the two phrases, but also simply the need to keep them apart without recourse to sequence. For this reason and others (cf. Katz, 1972: 105, note 34; see also Jackendoff and Culicover, 1971), (6) has been taken to be derived from a structure which more directly underlies (7)

(7)   Jay awarded the prize to Fiona.

by a rule of **dative movement**. Thus, for Katz, the direct object, the first post-verbal NP in (7), is defined on the configuration [NP, VP, Pred-Phrase, S], and the indirect object, the final NP in (7), is [NP, PP, VP, Pred-Phrase, S], subject being [NP, S] (Katz, 1972: 105, 298-299). However, this simply pushes the problem elsewhere, for there are other PPs which can co-occur with a NP or with each other and which, apart from not being 'traditional' indirect objects in the narrow sense, involve semantically distinct roles, as illustrated by (8)

(8)   a.   Blip argued with Blop about verb phrases.
       b.   Fiona took the tiara from Poland to Hungary.

Chomsky (1965: 107), for instance, allows for VP to be expanded as (among other things) 'V (NP) (PP) (PP) (Manner)'. The verbs in (8) must be subcategorized as taking two optional PPs (as well as 'Manner', which is a functional label disguising, possibly among other things, another PP): are they both indirect objects? This difficulty is compounded in languages, like Japanese, in which (even if VP could be motivated) both putative direct objects and putative indirect objects (and functionally distinct arguments) are marked in the same way, by postpositions (cf. Radford, 1977: 17).
        There does not seem to be a non-ad hoc configurational definition for direct and indirect object, with respect to either base or derived structures, even if VP is assumed. For example, we can define object in English, using Katz's definition for direct object, but at some point in the derivation of 'a sentence like (6) both NPs will be objects and the PP in (7) is not an object at any point in its derivation (and it is not clear how we can characterize it even as an indirect object). We return below to the question of whether such assignments are appropriate or not. Even if they are, such a definition of object remains inevitably parochial in the context of the non-universality of VP and the possible absence of NPs which lack an adposition.

2.3. Sequential
Other characteristics of putative object NPs have the same status. Clearly precedence, even if it is **GR-significant** in providing a means of identification for GRs in some languages (as, say, English), is not GR-significant in others (Sanskrit, Czech); and therefore cannot provide the basis for a universal definition (unless we postulate unwarranted underlying ordering for the latter and underlying ordering is controversial even for the former). Moreover, even in those languages where precedence is GR-significant there is no constant

cross-linguistic relation involved: the object may precede the verb or follow it (SVO vs. SOV); it may be juxtaposed to the verb or not (SVO vs. VSO). There is no combinatory possibility that has not been established as an unmarked surface order for some languages (sec Pullum, 1977; on VOS, Keenan, 1978; on OVS, Derbyshire, 1977; on OVS and OSV, Derbyshire and Pullum, 1981). Of course, these orderings are not always strongly GR significant in being the only or main 'signal', but we can find strongly significant languages of all of the SVO (English), VSO (Breton, Samoan), SOV (Ijo) and VOS (Malagasy) types, at least. Note finally that, given that GRs need not be signalled, even predominantly rather than necessarily, by precedence, we cannot even maintain the very weak precedence based position that a language will accord to object NPs some distinctive precedence characteristic or other.[6]

2.4. *Inflexional*

It is equally, or even more, apparent that inflexional marking is not universally GR-significant. Further, even with languages which have relatively rich inflexional systems, grammatical descriptions typically fail to isolate a unique marker of objecthood: witness terms like 'accusative' vs. 'genitive' vs. 'dative' object. Nor does accusative, say, necessarily uniquely mark objects in any non-language-particular sense: consider the discussion of the different uses of the accusative listed in a typical Latin grammar like Gildersleeve and Lodge (1895).

   The English pronominal system at one time developed, with the merging of the oblique case inflexions, towards the possession of such a possibly unique marker *(him* vs. *he,* etc.): i.e. an inflexion which (together with being attached to the 'objects' of prepositions) was associated with many grammarians' intuitive notion of an object. But this form is now, particularly in colloquial English, associated with surface postverbal and post-prepositional (and absolute) position rather than objecthood. Contrast in this respect the pairs in (9):

(9)   a.   Whom/who did Harriet embrace?
      b.   I/me.
      c.   It was I/me.

In the (a) example we have in colloquial English a non-accusative object; in the (c) an accusative non-object; (b) is absolute. Compare for details the discussions by Jespersen (1933: §14.1-5), Klima (1961) and Postal (1974: §6.10, §12.8).[7] If non-post-prepositional *whom* in the more conservative dialect of (9) marks objects, then once again both of the post-verbal NPs in (6) are objects (*Mary gave him it, Mary gave me him*). However, the

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[6] Of course, as indicated above, it is possible to provide a universal precedence-based definition of GRs trivially by assuming some underlying order to be universal. The evidence thus far offered for any such proposal (cf. Bach, 1974) is unconvincing. It should be particularly noted that, even if it can be shown that different languages do not require distinct underlying orders (consistent with other typological properties, such as implicational universals involving word order), a single-order base proposal is not obviously preferable to that of a base which does not order arguments in precedence (for discussion see Anderson, 1977: §1.11).

[7] We can characterize the more conservative dialect as involving end-of-cycle or shallow structure case-marking by an **oblique** (non-subject, otherwise non-specific) inflexion. Let us, following traditional parlance, refer to this oblique inflexion, whose unmarked use is to mark the object (though not necessarily uniquely), as **accusative**. In the colloquial dialect the oblique marker is post-cyclic (or surface), and follows *wh*-movement: cf. (9a). This is an oblique marker which we can refer to as a **surface** (as opposed to shallow) **accusative**, which marks (among other things) only those objects which are post-verbal.

main conclusion to draw at this point is that colloquial English is now even further from having an inflexional marker of objecthood; and this lack is typical.

It may be that there are languages (such as Polish? – cf. Comrie, 1975: §1.1) in which the accusative marks objects consistently; but this is not universal and moreover is impossible to establish in the absence of an independently arrived at status for objects.[8] Also, in the formulation of the object-inflexion relationship it is the morphological distinctions which are definienda objecthood is given; and we identify an accusative by its primary object-marking capacity. We must look elsewhere for defining properties but where?

2.5. Interim summary

The non-universality of these various properties and their failure to converge is unproblematical for the assumption that direct object is a primitive, given Johnson's argument concerning subjects. However, it is reasonable to expect any defender of such a view to provide some account of the invariant role of direct objecthood in linguistic theory. It is not clear in what this might consist. The participation of direct objects in putatively universal rules such as passive or dative movement is indecisive, given that there are languages which lack passivization or which contain advancements to subject which do not

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[8] And even accusatives which in signalling objecthood do not alternate with datives etc. may alternate with the inflexion whose unmarked use is to mark the subject, i.e. the **nominative**, as in Finnish, for example. Thus the Finnish accusative is assigned to (non-partitive, non-plural, non-pronominal) objects if in the same clause there is an overt subject, as in (i)

(i)   Maija   söi   kala-n.
          Maija   ate   fish-ACC

whereas in the first and second person imperatives, as lacking an overt subject, no accusative marker is attached to the object:

(ii)   Syö(-kaa) / Syokaamme   kala.
          eat(-PL) /   let.us.eat   fish

as is also the case with the 'objects' of 'impersonal' verbs (Comrie, 1975: 115-116; Wickman, 1955: 13-18). Moreover, accusative-marking is apparently post-cyclic in that the accusative is inserted even if the infinitival verb of the object has lost its subject, provided the most immediately dominating finite verb has a subject. Contrast (iiia) and (iiib)

(iii)a. Mina   kaskin   hanta   syomaan   tuo-n   kala-n.
          I   ordered   him   eat   that-ACC   fish-ACC
       b. Kaske   hanta   syomaan   tuo   kala.
          order   him   eat   that   fish

(Comrie, 1975: 116), in which *tuo kala* bears an accusative inflexion only if, as in (a), the finite verb (which may be followed by a whole string of infinitives) has a subject. However, the accusative is inserted in non-imperatives even if the first/second person pronoun subject is omitted (Comrie, 1975: 118-119), consonant with the lateness of such deletions.

However English (note 7) and Finnish accusatives are to be characterized explicitly, they do not correlate in any simple way with objecthood. Even in those Uralic languages where the accusative is extended to objects in imperatives (as is the case with pronouns even in Finnish), 'indefinite' or 'partitive' objects are coded distinctively, and no plural accusative is found (Wickman, 1955).

Notice finally here Timberlake's remarks made in the course of a discussion of a situation in North Russian analogous to that in Finnish described above, concerning which he concludes that the nominative-object phenomenon 'shows that there is not necessarily a direct correlation between case and grammatical function' (Timberlake, 1974: 219). Further, he also shows that nominative appears for accusative even where the direct object function is not normally assumed to be involved, as with 'accusatives /nominatives of extent' (ibid. §3.3). Clearly, here too there is a complex mapping between inflexions and relations (functions). On other accusative/non-accusative inflexional alternations (associated with definiteness, animacy, topicality, etc.) see Sauvageot (1971), Moravcsik (1978b), and Lazard in this volume.

take direct objects as their starting-point (cf. Keenan, 1976b: §2.1; or the English examples discussed below), and that dative movement is a poorly supported process (cf. Anderson, 1978, on English; or Perlmutter and Postal's, 1983: §8, rather desperate re-analysis of Kinyarwanda in which a single sentence is claimed to be ambiguous between a pre- and post-dative movement structure; but cf. also Givon in this volume). Similarly, the evidence of hierarchical phenomena such as accessibility to relativization is somewhat equivocal. For instance, there is a lack of evidence for separating out indirect object as a separate position on the hierarchy: 'indirect objects' behave either like direct objects or like goal phrases. Moreover, some hierarchical phenomena rank 'indirect objects' (of either kind) above direct: consider the scope relationships discussed by, for example, Ioup (1975).

I am going to suggest that objecthood is variable within a particular domain, variable both among languages and with respect to regularities in a particular language: specifically, objects are a subset of (nonsubjective) absolutives; and, as such, there may be more than one object in a simple sentence. This is argued for Kinyarwanda by Gary and Keenan (1977) and for other Bantu languages by Gary (1977). However, the same conclusion follows from a consideration of the syntax of English alone. Not only are there no consistent attributes of objecthood in English, but also more than one 'object' may occur at the same derivational stage (or stratum or whatever) in a simple sentence. This emerges from any attempt to establish object properties for English.

3. English Objects

Postal (1974) is concerned to provide a substantial body of evidence in support of the rule of **raising,** particularly in the syntax of English, and particularly as involving the extraction of the subject of an object complement to become itself the direct object of the cyclic clause, so that *John* in (1 b), though initially the subject of the embedded sentence whose verb is *use,* ascends via raising to become object to *expect.* Crucial to Postal's argument is evidence for the derived objecthood of NPs like *John* in (lb). One might thus have expected that such a wide-ranging discussion would throw up a number of object attributes. However, most of the arguments offered by Postal are designed to demonstrate either the derived non-subjecthood of the putatively raised NP in such sentences or its status as an argument (not necessarily the object) of the main clause verb. Thus, the 'traditional' arguments discussed in Postal's chapter 3 are (with a possible exception considered below) of the latter kind; while, for instance, the arguments in sections 4.2-3 are concerned with syntactic properties that are associated with (derived) subjects.

There are, however, one or two potential object properties among those considered by Postal. I want now to investigate the viability of these. Part of the interest of them is that they show that, even with respect to a single language, the set of NPs selected by regularities that it might be suggested refer to objects are not the same: different well-defined sets of NPs participate in these regularities. We shall be concerned here with **passivization** (Postal, 1974: §3.1), **particle movement** (Postal, 1974: §12.6) and the **interpolation ban** (Postal, 1974: §4.11).

Objecthood in English is traditionally associated with passivization, such that it has been claimed, for example, that 'the subject of a passive verb is what in the active would be an object' (Jespersen, 1933: §12.3). Such a claim is also embodied in the account of passive as a universal rule offered by adherents of RG (notably by Perlmutter and Postal, 1977). Passive is a rule which, in derivational terms, associates a stage at which there is a clause containing a subject and direct object with an immediately succeeding stage at which the former direct object is the subject of the clause and the former subject is consequently displaced as such. However, as we have observed, availability for passive is clearly non-significant with respect to objecthood if there are languages that lack passivization but, on

some other grounds, may be said to possess objects, or that contain other advancements to subject. Moreover, as we shall now see, even in English the objects defined by passive do not coincide with those arguments selected by other potential object invoking regularities.
This is true of the objects associated with verb particles in English. These can occur, whatever their basic position (Emonds, 1972; Anderson, 1978: 684-686), on either side of an immediately post-verbal NP, as in (10):

(10)   a.   John gave back the money.
       b.   John gave the money back.

unless the NP is (in origin) an 'indirect object', when only the (b) variant is possible:

(11)   a.   *John gave back the girl the money.
       b.   ?John gave the girl back the money.

and even this is rejected by some speakers. However, (12) is acceptable:

(12)   John gave the girl the money back.

Of course, we can relate the anomalous character of (11b) to rule ordering or equivalent global devices (like stratal differences), and suggest that the distribution of the particle reflects the underlying status of the NPs, given that *the girl* in (11)-(12) might be derived from a *to*-phrase, and *the money* from a direct object:

(13)   a.   John gave back the money to the girl.
       b.   John gave the money back to the girl.
       c.   *John gave the money to the girl back.

Motion-particles like *back* cannot follow prepositional phrases:

(14)   a.   John crossed back over the road.
       b.   *John crossed over the road back.

But (11b) is generally more acceptable than (13c) or (14b); and such a derivation does not account for the anomalousness of (11a).
       What seems to be involved here is a general rejection of such particles on either side of locative objects, as illustrated by (17)

(15)   a.   *John crossed back the road.
       b.   *John crossed the road back.
       c.   John crossed the road.

This accounts for the anomalous character of both (11a) and (15a/b); whereas in (11b) *back* precedes an object, which is permissible, but follows a locative object, which is not: hence its uncertain status.
Placement of motion particles is thus sensitive to a rather different set of post-verbal NPs than passive, given that the subject of a passive corresponds to only the first of two post-verbal NPs

(16)   a.   The girl was given the money.
       b.   *The money was given the girl.

c.   The money was given to the girl.

The dialectal restrictedness of (16b), wherein *the money* corresponds to the second of two post-verbal NPs, contrasts with its happy acceptance of 'a following particle in (12); and the non-viability of *the road* in (15) as a locus for particles contrasts with its availability for passivization:

(17)   The road was crossed.

On the other hand, there are, as is well known, immediately post-verbal NPs that reject passivization, as in (18)

(18)   a.   *Five kilos are weighed by that bag.
         b.   *A diamond ring is contained by that bag.
         c.   *A diamond is resembled by that stone.

while there are NPs contained in prepositional phrases which are eligible:

(19)   This bed was slept in.

Passive and motion-particle placement involve a rather different set of NPs; and this variation is not attributable to independently motivated derivational differences. Certainly, one can devise notational stratagems for relabelling recalcitrant NPs (like *this bed* in (19) cf. Dalglish, 1976: 65-66), and/or one can invoke rule ordering/stratal differences (as in the case of (11b), for example); but these represent cosmetic devices for concealing the non-homogeneity of objects as defined by various phenomena.
      As a further illustration of this, consider the interpolation ban proposed by Postal (1974: §4.11). This forbids the interpolation of, for example, an adverb between a verb and its object (unless the object can be considered to have undergone 'complex NP shift'), as in (20)

(20)   a.   *John crossed very slowly the road.
         b.   John crossed (the road) very slowly.

In these terms *the girl* in (21) is also an object:

(21)   a.   *John gave very belatedly the girl the money.
         b.   John gave the girl the money very belatedly.

But then so is *the money* in both (22) and (23):

(22)   *John gave the girl very belatedly the money.
(23)   a.   *John gave very belatedly the money to the girl.
         b.   John gave the money very belatedly to the girl.
         c.   John gave the money to the girl very belatedly.

Both post-verbal NPs in (21)-(22) are objects: *the money is* not displaced as such by dative movement. Again, equivocation as to the level at which the interpolation ban applies means that rule ordering and the like might be invoked to avoid this conclusion: (22) is excluded at a stage at which *the money* still has the status it has in (23a), i.e. prior to dative

movement. But this cannot be the stage at which (21.a) is excluded. Also, there is no independent motivation for what would be an ad hoc use of this poorly supported device.

Thus if all of passive, *back*-placement and the interpolation ban refer to objects, the set of objects is variable, and it does not vary simply in accordance with, for example, the changes in objecthood predicted by dative movement, whereby an indirect object assumes direct objecthood and the previous direct object is displaced as such. Neither do the varying sets accord with those derived from configurational or positional definitions, such as (for English) 'post-verbal prepositionless NP'; nor with morphological marking. These observations are intended to illustrate that there is not a list of properties, even within a single language, which selects a homogeneous set of arguments as objects. There is no universal definition of object; nor is it, in the case of English, a language-particular constant. But while the former lack may not be damaging for the view that (direct) object is a universal, given that it is taken to be a primitive (large aspects of its particular manifestations may vary), provided that object interacts in a determinate fashion with other constants and there is some principled delimitation of the variation, surely the latter is: the primitive relation object has no well-defined role in the syntax of English. I suggest that the situation we find in English is typical, though I cannot document this in the confines of this contribution; for one detailed illustration see the discussion of objects in Chi-Mwi:ni (a Bantu language closely related to Swahili) by Kisseberth and Abasheikh (1977).

4. Objecthood as variable

Let us now look at how the range of objects in English might be characterized within a CRG in which definitions are based on the array of CRs associated with a particular predicate and their hierarchization with respect to subject-selection. Space again forbids the justification of the assignments of CRs made here; for extensive discussion, see especially Anderson (1977, 1978, 1979a, b, 1980).

In a subject-forming language subjects are selected in accordance with the hierarchy of CRs in (24)

(24) *Subject-selection hierarchy*: erg > erg,case > abs,case > abs

where '>' means 'is preferred as subject over', i.e. the subject of a sentence will be that argument whose CR assignment is furthest to the left in the hierarchy ((24) exhausts the hierarchy on the assumption that abs is universally present in a predication). Various sentence types and the subject selections made are displayed in (25)

(25) I   II
   a. The pyramid toppled.   a. John toppled the pyramid.
      abs   erg   abs

   b. John is the scapegoat.   b. Henry made John the scapegoat.
      abs   abs   erg   abs abs

   c. The dog walked away.   c. John walked the dog away.
      erg,abs   loc   erg   erg,abs loc

   d. The trunk contains the diamonds d. John loaded the trunk with the diamonds.
      abs,loc   abs   erg   abs,loc   abs

   e. The girl received the money.   e. John gave the girl   the money.
      erg,loc   abs   erg   erg,abs,loc abs

In each instance the hierarchically highest CR is selected as subject. Further, the post-verbal sequence obeys the same hierarchy. In (b) in (25) neither abs argument outranks the other, the selection of subject and sequence is arbitrary with respect to CRs, but is rather governed by discourse factors: *John* and *the scapegoat* could be interchanged (depending on the discourse context). The set of sentences in (II) are 'transitivizations' of those in (I) formed by addition of a fresh erg argument; where the structure is already 'transitive', i.e. contains separate arguments marked by erg and abs, this results in a 'di-transitive' structure.[9] I ignore here the alternatives to (d) and (e) represented by *The diamonds are in the trunk/John loaded the diamonds in the trunk* and *The money went to the girl/John gave the money to the girl,* in which the loc is non-absolutive, in that they do not introduce arrays of CRs essentially different from those already illustrated.

The various different objects required by the regularities we have surveyed can be defined with respect to these arrays of CRs and the hierarchy of (24). What they have in common is that objects are abs NPs denied subjecthood: let us therefore call a non-subjective abs argument a **potential object**. (This also characterizes the objects in (5).) Which subset of such NPs is invoked by particular rules, and in different languages, is variable.

For instance, not all of these abs phrases in English lack a preposition; a potential object receives no (non-idiosyncratic) prepositional marker except where immediately preceded by a non-erg phrase, as in (IId) in (25). However, the subset of verbs of the type of (Id) which are also holistic (like those in (IId)), i.e. in which the conjunction of loc and abs is initial, take a prepositional abs, as in (26)

(26)   The hall swarmed with linguists.
            abs,loc   abs

Such prepositional abs phrases also allow a preceding adverb, i.e. they evade the interpolation ban; but so too does the post-verbal abs in (lb) (though (27b) seems slightly less happy).

(27)   a.   John loaded the trunk very slowly with diamonds.
       b.   ?The hall swarmed very frequently with linguists.
       c.   John is very frequently the scapegoat.

So, the subset required by the interpolation ban also excludes a postverbal abs (i.e. a potential object) which is not outranked with respect to the hierarchy by its subject. This abs is also ambivalent with respect to morphological marking: cf. (9c).

Particles may be placed before any non-abs phrase, as in (13b), while they may appear on either side of an abs which is not also loc: contrast (10) and (15). This excludes (11a), which is of type (IIe) in (25). (11b) is ambivalent, in that the particle precedes an abs that meets the condition but follows one that does not. However, we should note that the situation with other particle types is different; for example, consider the distribution of those like *up* with holistic verbs.

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[9] The abs CR associated with the [loc,erg] argument in (IIe) is derived only (as a result of raising), given the analysis of such sentences as involving two component predications in which the lower, of the character of the predication in (Ic), is the abs argument in the upper (whose other argument is the erg *John,* i.e. it is causative). If such a decompositional source is repugnant, then *the girl* in both (Ie) and (IIe) is simply [erg,loc]. In that case the notion 'potential object' proposed below must be modified to specify either an erg or an abs (i.e. any non-locational argument, given the analysis of Anderson, 1977) denied subjecthood.

The abs NP that corresponds to the subject of a passive is the highest-ranking abs. If this highest-ranking abs is already selected as subject, then no passive is available: thus, actives such as (25Ia, b, c, d) have no corresponding passive; and passives such as (18) are also thereby excluded, in that the corresponding actives have subjects which combine abs with a locational CR (Anderson, 1977: §3.3.3, 1979a) and absolutive objects. This means, of course, that with respect to the set in (25) we have a passive only where the active has an erg (agentive or 'dative') subject and abs object. However, we should also note that predications of the character of (18) in which the locative is (non-holistic and) 'internal' (inessive) do show passive-like equivalents like *A diamond ring is contained in that box*. Possibly these are to be associated with some variant of the same generalization as passives. In that case, this generalization correlates in a still more complex fashion with objecthood as required by other regularities.

5. Conclusion

An object is a member of the 'syntactically active' subset of nonsubjective abs arguments (or abs and erg arguments, if the suggestion made in note 9 is adopted), i.e. of potential objects. The membership of the subset may vary from regularity to regularity, the variation corresponding systematically with the CRs present, as we have observed in the case of English. But this variable subset is the most 'active' after subjects; for example, where variable accessibility is involved, the 'active' subset of potential objects ranks immediately below subjects (cf. Keenan and Comrie, 1977). The most active subset of arguments, those which undergo subject-formation, are the most accessible of all. For instance, the set of arguments eligible for promotion to subject (e.g. by passive) includes a subset of potential objects. This characteristic of second rank in terms of 'syntactic activity' is the invariant attribute of objecthood. But its status in this ranking is defined by the hierarchy of CRs, just as the range of variation is associated with the array of CRs. The character of objecthood is incompatible with attributing to it the nature of a primitive.

In some languages the membership of the set of objects with respect to particular regularities may even include abs argument types not represented in (25), namely **extra-propositional** (or non-nuclear/circumstantial) arguments. For instance, in some Bantu languages objecthood may be conferred on the extra-propositional abs which introduces instrumental phrases (Gary, 1977) as well as on other abs arguments in a sentence. In other languages, the maximal subset of potential objects that are objects may be smaller than in English, e.g. in German the [erg,loc] argument in type (25IIe) is perhaps only marginally an object on any criterion.

Objects, then, are a variable subset of the set of non-subjective abs phrases; i.e. they represent a non-universal diversification of this set. They are necessarily associated only with subject-forming languages, given the definition of potential object suggested above; that is, unless the notion can be generalized over all second-ranking derived relations, if any other such there be. Further, if all subject-forming languages have objects, the possession of objecthood is involved in a bilateral implicational universal. This special position of (at least a subset of) absolutes even in a subject-forming system may be a reflection of the status of absolute as the initial principal relation.

Where further universal properties may lie is in the answers to such questions as: Is there a universal core of objects (defined in terms of, for example, the CRs in the predication) which is found in all object exhibiting languages? For instance, will the set of objects always include the abs in actional predications like (25I1a), i.e. in which there is an agentive subject? On the other hand, are abs arguments that are extrapropositional, such as instrumentals (on their analysis as non-nuclear absolutes, see Anderson, 1977: §2.6.2, in

press b: §5), less likely to be objects? Is there, indeed, a hierarchy of predication-types with respect to the exhibiting of objecthood? There certainly seems to be a hierarchy of this kind with respect to subjecthood, as in part embodied in the subjecthood criterion (3), in which actional, rather than experiential transitives have a special status.

Moreover, are specific object-invoking 'processes' associated with particular restrictions on objecthood? For instance, though passive may leave the effect of 'promoting' even non-absolutives to subject, as in 19), is passivization in another respect more restrictive than some other 'processes' in applying only to ergative predications (cf. Anderson, 1980)? Indeed, do 'object processes' enter into a hierarchy of restrictiveness with respect to objecthood (again measured, say, in terms of the array of CRs in the predication)? For example, are shallow accusatives (note 7) always no less restrictive than the set of arguments eligible for passivization? How does such a hierarchy relate to that suggested in the preceding paragraph? Are they both measured in terms of 'a ranking of predication-types based on CRs? Are there other kinds of correlations between object properties? Does, for instance, the existence of a richer inflexional system, whereby accusative is opposed to other case inflexions like dative, restrict the range of arguments available for object 'processes' (cf. the comment on German above)?
The resolution of these speculations requires extensive and intensive empirical investigation. Read on!

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