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ON THE NOTION OF "DIRECT OBJECT"

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1. INTRODUCTION

In this paper we will try to define the category of "direct object" in Haya and show how an NP can change its grammatical status according to the way in which its semantic role is expressed. In so doing, we will assume that such grammatical relations as "subject" and "direct object" are useful notions in describing and comparing natural languages in Universal Grammar. The same assumption can be found, differently expressed, in recent works such as Keenan and Comrie (1972), Perlmutter and Postal (1974), Johnson (1974a,b; 1976), Fillmore (1976), and Keenan (1975, 1976), among others. Some of the claims that these linguists have made will be confronted with the Haya data.

Very recently, Gary and Keenan (1976) have questioned the claim made by Perlmutter and Postal (1974) that *only one NP at a time can bear a certain grammatical relation to the verb*. They have tried to show that in Kinyarwanda, a Bantu language closely related to Haya, a verb can have, under certain circumstances, two direct objects. They also proposed a weaker version of an important principle presented by Perlmutter and Postal, namely the Relational Annihilation Law. In this paper we will show that *Haya can have even three DO's in the same sentence*, and we will discuss the implications of this fact for Universal Grammar. Before the conclusion, we briefly present a case of partial demotion (of a direct object) due to the nature of the referents more than to the syntactic or semantic relations of the NP's involved.

The paper is organized in the following way: in section 2 we characterize the category of direct object in Haya by selecting a number of rules that apply to what we term "basic" direct objects. In section 3 we show that the same set of rules does not usually apply to prepositional phrases and to other kinds of prepositionless obliques. In section 4, the system of verb-marking is described and it is shown that those NP's that have their semantic role marked on the verb behave like "basic" direct objects. In section 5 we discuss the consequences of defining the verb marking rules as instances of advancement-to-direct object rules. We show that Haya violates both the Uniqueness Assumption and the Relational Annihilation Law. We also show that there is not enough evidence in favor of the Weak Relational Annihilation Law proposed by Gary and Keenan (1976) and discuss the possible consequences for a theory based on grammatical relations.*

2. PROPERTIES OF DIRECT OBJECTS

In the following discussion we will assume that each verb, in its "basic" or "lexical" form (i.e. without semantic markers to indicate semantic relations and without syntactic markers to indicate the application of certain rules such as passivization) takes a certain number (from one to three) of NP arguments. We call these NP's "basic arguments" and distinguish them in terms of the grammatical relation that they bear to the verb. We will then speak of "basic subject", "basic direct object", etc. Such NP's are characterized as having their semantic role implied in the meaning of the verb itself and conveyed by means of such coding properties as agreement (i.e. subject-verb agreement) and word order (the unmarked word order is SVO). When a verb has three basic NP arguments, the (semantic) dative precedes the (semantic) patient (or accusative). Whether these two NP's can be formally distinguished is discussed below.

In accordance with the approach adopted by Keenan (1976) in defining the notion of "subject of" in any given language, we will characterize the category of direct object (DO) in Haya by means of (a subset of) the properties of basic DO's in simple, basic sentences.¹

2.1. Coding properties. Even if Haya could be said to have a fairly "free" word order (cf. Byarushengo and Tenenbaum 1976), the unmarked word order is clearly Su-V-DO-OO (where OO = oblique NP, that is prepositional phrases as well as other kinds of NP's discussed in 3.2 and 3.3 below). It should be noted that the verb obligatorily agrees with the surface Su, and the DO is prepositionless, as seen in (1) and (2).

- (1) abantu bá-ka-bón' ómukázi 'the people saw a/the woman'
people they-P₃-see woman
- (2) omukázy' a-ka-léét' ébitooke n'émótókà 'the woman brought the
woman she-P₃-bring bananas with car bananas by car'

The prepositional phrase (PP) n'émótoka in (2) cannot take over the DO position. Thus (3) is unacceptable:

- (3) *omukázy' a-ka-léét-a n'émótók' ébitooke 'the woman brought by
woman she-P₃-bring with car bananas car the bananas'

2.2. *Reflexivization*. A DO can be reflexivized under subject control (in Haya only Su can control reflexivization). The reflexive morpheme REFL is realized [-ee-] or [-ye-], depending on the preceding environment.

- (4) kat' á-k-éé-bona 'Kato saw himself'
Kato he-P₃-REFL-see

2.3. *Subjectivization*. A DO (if definite or generic²) can be promoted to Su via passivization, as shown in the following examples:

- (5) omukázy' a-ka-cumb' ébitooke 'the woman cooked the bananas' →
woman she-P₃-cook bananas
- (6) ebitooke_i bfi-ka-cumb-w' ómukázi 'the bananas were cooked by the woman'
bananas they-P₃-cook-PASS woman the woman'
- (7) kat' á-ka-sháI' ényama 'Kato cut the meat' →
Kato he-P₃-cut meat
- (8) enyam'_i e_i-ka-sháI-w-a káto 'the meat was cut by Kato'
meat it -P₃-cut-PASS Kato

As can be seen in the above examples, it is the "new" Su that triggers Su-verb agreement in the passive sentences. The verb is marked by the suffix -w- (pronounced -bw- after a vowel), which is inserted immediately before the final vowel. The basic Su is moved immediately after the verb, without being marked by any preposition (cf. 3.3 below).

2.4. *Pronoun-incorporation (or "cliticization")*. A DO can trigger pronoun-incorporation. The clitic pronoun agrees in noun class with the co-referential NP, as shown in the following examples:

- (9) η-ka-gul' égf_ita_i 'I bought the guitar' →
I-P₃-buy guitar
- (10) η-ka-gf_i-gula 'I bought it'
I-P₃-it-buy
- (11) η-ka-bón' ómfika_j 'I saw smoke' →
I-P₃-see smoke
- (12) η-ka-gu_j-bón-a 'I saw it'
I-P₃-it -see

We consider such clitics as *gl* in (10) and *gu* in (12) as *true pronouns* and not agreement markers,³ not only because of their "optionality" (as opposed to the obligatory subject-verb agreement illustrated in 2.1), but also, and crucially, because (under appropriate circumstances) the tone configuration of the sentence marks a clause boundary after the verb even when the coreferential DO appears in the sentence in its "usual" position immediately after the verb. The verb -bón- 'see' for instance, which has an underlying high tone (cf. (11)) shows a falling tone not only when penultimate to a pause

(cf. (12)), but also in (13), which expresses the DO with both a clitic pronoun and a full NP:

- (13) η -ka-gu_j-bón' ómwííka_j 'I saw it, the smoke'
I-P₃-it -see smoke

As shown by Byarushengo, Hyman, and Tenenbaum (1976), the DO in sentences such as (13) must be considered a *right-dislocation*, separated from the rest of the sentence by a phrase boundary which causes the high tone of /-bón-/ to become a falling tone (see also Tenenbaum 1977). Furthermore, notice, as shown in Duranti (1977) that the clitic pronoun cannot appear in the sentence if the corresponding NP is relativized. Thus, (14) is ungrammatical.

- (14) *ómwíí'k' ógwó n-a-gu-bóIn-e 'the smoke that I saw it'
smoke_j that I-P-it_j-see/P₂

If *gu* were to be considered as an optional agreement marker, we do not see any conceivable reason for not allowing sentences like (14), which appear in other Bantu languages such as SeSotho (Morolong and Hyman 1977). Finally, as seen in (15),

- (15) *egít'_i é_i-ka-gí_i-gu!-w-a Inye 'the guitar was bought by me'
guitar it-P₃-it -buy-PASS me

when *egíta* has been promoted to *Su*, the correferential clitic pronoun *-gi-* cannot co-occur.

2.5. *Left-dislocation*. With concomitant pronoun-incorporation, a DO can be left-dislocated and assume the position immediately before the verb (in fact, it can assume other positions as well, as shown by Byarushengo and Tenenbaum 1976, but we will be concerned only with this option). A very rough formulation of the rule would be as follows:

$$(Su) - V - DO_i \rightarrow (Su) - DO_i - V_{[+PRO_i]}$$

Two examples are given in (16) and (17).

- (16) a. omwáán' a-ka-léét' émbwa 'the child brought the dog' →
child he-P₃-bring dog
b. omwáán'_i émbw'_j á_i-ka-gl_j-léeta 'the child, the dog, he
child dog he-P₃-it -bring brought it'
- (17) a. η -ka-gul' ómwéndo 'I bought cloth' →
I-P₃-buy cloth
b. omwéndo_i η -ka-gú_i-gul-a 'the cloth, I bought it'
cloth I-P₃-it -buy

2.6. *Impersonal "ba-" construction*. There is another construction which is used to front a DO and to eliminate the *Su*. As shown in (18) and (19), the verb takes a clitic pronoun coreferential with the fronted DO, and an "impersonal" plural human subject (meaning 'they', class 2).

- (18) ekítabo_i bá-ka-kf_i-gul-a 'the book, they bought it'
book they-P₃-it-buy
- (19) ebitooke_j bá-ka-bf_j-cumb-a 'the bananas, they_i cooked them_j'
bananas they-P₃-them-cook

These constructions can be appropriately translated in English as agentless passives: "the book was bought" (18) and "the bananas were cooked" (19). In fact, as noted by Givón (1976:180), there is another Bantu language, Kimbundu (Angola) that uses this kind of construction for the regular passive, even allowing a prepositional agentive phrase:

- (20) nzua a-mu-mon-o kwa meme 'John was seen by me' (lit. John, they
Joan they-him-saw by me saw him by me) [Kimbundu]

A basic difference between Kimbundu and Haya is that in the latter language the agent cannot be expressed in this construction.

2.7. *Relative clause formation.* Very informally, the relativization of DO's can be summarized as follows: a relative pronoun (of the underlying form V(C)V-o), agreeing with the head noun, introduces the relative clause and the DO is deleted (see Duranti 1977 for alternative secondary patterns). Examples are seen in (21) - (22).

- (21) ebitook' [éby' ómukázi y-a-cúmb-a] 'the bananas which the woman
bananas REL woman she-P₁-cook has cooked'
- (22) enyam' [éyó kató y-a-shál-a] 'the meat that Kato has cut'
meat REL Kato he-P₁-cut
- (23) omukázy' [ów' ómwáána y-a-bón-a] 'the woman whom the child has
woman REL child he-P₁-see seen'

2.8. *Pseudo-cleft formation.* Pseudo-cleft formation involves a relative pronoun in sentence-initial position and the copula before the pseudo-clefted NP, which appears in sentence-final position. The copula (COP) is expressed either by the absence of the preprefix, as in (24) and (25), or by the morpheme ni, with proper names as in (26).

- (24) eby' ómukázi y-á-cumb-á Ø - bitooke 'what the woman has cooked is
REL woman she-P₁-cook COP bananas bananas'
- (25) eyó kató y-a-shal-á Ø - nyama 'what Kato has cut is meat'
REL Kato he-P₁-cut COP meat
- (26) owó n-a-bon-á ní káto '(the one) who I have seen is Kato'
REL I-P₁-see COP Kato

3. PREPOSITIONAL AND PREPOSITIONLESS OBLIQUES

In this section we will show that the category of DO in Haya as defined in section 2 constitutes a proper set, that is, the properties that we have so far described as typical of DO's allow us to distinguish between DO's and

both prepositional phrases (PP's) and other kinds of "obliques". In 3.1 we will show that PP's do not exhibit any of the properties of the DO's illustrated above. In 3.2 we will discuss one kind of prepositionless oblique, i.e. the body part NP in an "affected possessor" construction, and we will discuss whether to consider relative clause formation and pseudo-cleft formation as tests for objecthood. In 3.3 we will briefly examine the agent NP in passive sentences.

3.1. *Properties of PP's (or "what PP's cannot do")*. 3.1.1. *Coding properties*. As already mentioned in 2.1, PP's cannot be placed immediately after the verb if there is an NP in the sentence bearing the relation of DO to the verb.

3.1.2. *Reflexivization*. PP's cannot be reflexivized. In fact, Haya does not even have an "independent" (i.e. non-clitic) reflexive pronoun.

3.1.3. *Subjectivization*. PP's cannot be subjectivized, and prepositions cannot be "stranded". The parentheses in the following examples indicate that even taking some of the constituents away, the sentence remains ungrammatical:

- (27) kat' á-ka-shál' ényama n'ómúhyo 'Kato cut the meat with a knife'
Kato he-P₃-cut meat with knife
- (28) *omuhyó_i gú_i-ka-shál-w-á (ényama) (kató) (na)
knife it-P₃-cut-PASS meat Kato with
'the knife was cut (the meat) (with) (by Kato)'
- (29) kat' á-ka-ly' éhókók' ómú-nju 'Kato ate a chicken in the house'
Kato he-P₃-eat chicken in-house
- (30) *omu-njú_i { m_i } -ka-lf-bw-a (kató) (éhkóko) 'in the house (there) was
h_i eaten (by Kato) (a chicken)'
in-house there-P₃-eat-PASS Kato chicken

Notice that any change of word order would not help in making the above sentences acceptable.

In (30) we have tried to subjectivize the whole locative omú-nju 'inside the house' (we tried both agreement markers mu (cl. 18) and ha (cl. 16)). Verb-agreement with locative phrases is not unusual in Haya, as often in Bantu, but in order for sentences like (34) to apply, a particular marker must be attached to the verb, as we will illustrate in section 4.2 below.

Example (31) shows that no better results are obtained by trying to extract the NP out of the prepositional phrase:

- (31) *enjw'_i é_i-ka-lf-bw-a (kató) (éhkóko) (omu/omwo)
house it-P₃-eat-PASS Kato chicken in/there
'the house was eaten (by Kato) (chicken) (in/there)'

In (31) we have tried, unsuccessfully, to apply a pronoun-retaining strategy by leaving in the sentence the preposition mu- plus a pronominal marker -o (omwo), which, in other circumstances conveys the meaning of 'there, inside it'.

3.1.4. *Pronominalization.* A PP cannot be pronominalized by pronoun-incorporation. Preposition plus PRO is the only way in which prepositional phrases can be pronominalized in Haya, as illustrated in (32) and (33).

- (32) *kat' á-ka-gu_i-shá' ényama_j 'Kato cut [with] it_i the meat.'
 Kato he-P₃-it-cut meat (gu_i = knife)
- (33) kat' á-ka-shá' ényama ná-gwo 'Kato cut the meat with it'
 Kato he-P₃-cut meat with-it (cf. (27))

3.1.5. *Left-dislocation and impersonal "ba-" construction.* Since these two constructions involve pronoun-incorporation, which is not allowed for PP's, they are not available for PP's.

3.1.6. *Relative-clause formation.* PP's are relativized by either applying the verb-coding strategy (but in this case, as we will argue in section 4, they cannot be considered as obliques) or by means of a pronoun-retaining strategy. However, they cannot, generally, be relativized in the same way as DO's (one possible exception would be relativization out of a complex prepositional phrase, but this kind of relative clauses are only marginally acceptable; cf. Duranti 1977). Example (34) illustrates the pronoun-retaining strategy:

- (34) omuhy'_i [ógwó_i kató y-a-shá' ényama ná-gwo_i]
 knife REL Kato he-P₁-cut meat with-it
 'the knife that Kato has cut with'

Recall, in contrast, that, as shown in 2.7, no copy pronoun can be left behind by a relativized DO (cf. ex. (14)).

3.1.7. *Pseudo-cleft formation.* The same considerations made for relative clause formation hold for pseudo-cleft formation. Example (35) illustrates the pronoun-retaining strategy in pseudo-clefting a (prepositional) instrumental NP:

- (35) ogwó_i kató y-a-shá' ényama ná-gwó_i β-múhyo 'what Kato has cut the
 REL Kato he-P₁-cut meat with-it COP-knife meat with is a knife'

3.2. *"Affected possessor" constructions.* Haya possessive constructions involving body parts allow, or sometimes require, the possessor NP to be realized as a DO (cf. Hyman 1977). In Haya sentences corresponding more or less to the English *I broke the arm of the man*, the possessor, namely *man*, is, in effect, more DO-like than the body part, i.e. *arm*. Thus, we have sentences like the following:

- (36) n-a-hend' ómushá'fj' ómukôno 'I broke the arm of the man' (lit.
 I-P₁-break man arm I broke the man the arm)

In sentences like (36) the possessor (also an "experiencer") can be subjectivized, as in (37), pronominalized with a clitic, as in (38), and undergo all the other grammatical processes applicable to DO's.

- (37) omusháíja y-a-hend-w-a iny' ómukóno 'the man was broken the arm
 man he-P₁-break-PASS me arm by me'
- (38) n-a-mu-hend' ómukóno 'I broke him the arm'
 I-P₁-him-break arm

The body part, on the other hand, cannot be subjectivized and cannot be nominalized in the same way as the possessor NP:

- (39) *omukóno_i gw_i-a-hend-w-a (inyé) ómusháíja^d 'the arm was broken (by me)
 arm it-P₁-break-PASS me man (to) the man'
- (40) *n-a-gu-hend' ómusháíja 'I broke it (to) the man'
 I-P₁-it-break man

Given our properties-based definition of DO's, we conclude that in such constructions as sentence (36) the possessor NP is syntactically a DO, whereas the possessed NP (i.e. the body part), which should be the "basic" DO of the verb, is not a DO.⁵

We must notice, however, that an NP like omukóno 'arm' in (36) still shares some of the properties of DO's. Such properties are relative clause formation and pseudo-cleft formation, as shown in the following examples:

- (41) omukón' [ógwó n-a-hend' ómusháíja] 'the arm that I broke the man'
 arm REL I-P₁-break man
- (42) ogwó n-a-hend' ómusháíja Ø-mukóno 'what I broke the man is (his)
 REL I-P₁-break man COP-arm arm'

We can interpret these facts in at least two ways: one solution would be to accept the idea that at some earlier stage of the derivation the body part was in fact the DO of the verb and that it got demoted from its role because of the promotion of the possessor NP to the role of DO. In this case, we might say that the body part NP lost all the DO properties except the accessibility to relative clause formation and pseudo-cleft formation. Another solution would be to say that in fact relative clause and pseudo-cleft formation, as described in 2.7, are not limited to DO's. There are, in other words, non-DO prepositionless NP's that can undergo that particular kind of relativization rule. The noun omukóno in (36) would be one of those. In this case relative clause formation (and pseudo-cleft formation) would turn out to be not very good tests for objecthood in Haya. As a working hypothesis we retain these as tests for objecthood, keeping in mind their "weakness". Such a decision will find some support in later discussion, where we will see how (partially or totally) demoted DO's can "lose" their ability to be relativized or pseudo-clefted.

3.3. *The agent NP in passive sentences.* As shown in 2.3, after passivization has applied, the "demoted" Su (semantic agent) is a prepositionless NP immediately following the verb. Thus, in terms of "surface" structure it looks like a DO. However, it is not available for any of the rules that we have described as characteristic of DO's. Not even the relative clause formation or the pseudo-cleft formation, which have been character-

ized as "weak" tests for objecthood in 3.2. Both (43) and (44) are completely unacceptable:

- (43) *omukázy' [ów' ébítóoke by-a-cumb-í|-w-e]
 woman REL bananas they-P₁-cook-P-PASS
 'the woman that the bananas were cooked (by)'
- (44) *ow' ébítóoke by-a-cumb-í|-w-e ø-mukâzi
 REL bananas they-P₁-cook-P-PASS COP-woman
 '(the one) who the bananas were cooked (by) is the woman'

This gives further support to the claim that the DO's are a particular subset of the prepositionless NP's that follow the verb, and it shows that the properties that we outlined in section 2 are significant with respect to objecthood.

4. VERB MARKING

In this section we will show that some semantic roles of NP arguments can be marked on the verb by means of verb suffixes (or *extensions*) and that the NP's that are verb-marked share the properties of "basic DO's".

We will consider the following semantic relations: 1) instrumental; 2) locative: (i) 'in', (ii) 'at, on'; 3) dative (e.g. experiencer, goal, etc.).

4.1. *The instrumental.* The instrumental role of an NP argument is marked in the verb by the suffix -í- or -ís/es- (cf. Trithart 1977). An example is given in (45):

- (45) kató y-a-shaz' { ómuhý' ényama } 'Kato cut the meat with the
 ényam' ómúhyo } knife'
 Kato he-P₁-cut/INSTR knife meat/meat knife

The stem of the verb 'cut' is -sháí- (cf. ex. (7)). When the instrumental suffix (INSTR) -í- is added, the /l/ becomes [z] by spirantization (cf. Trithart 1977). The instrumental NP omúhyo 'knife' in (45) shares all of the properties of basic DO's. For instance, not only can it appear immediately after the verb (however, as shown in (45), there is no "preferred" order), but it can also be subjectivized, as in (46), left-dislocated, as in (47), and relativized as a basic DO, as in (48).

- (46) omuhýo_i gw_i-a-shaz-i-bw-a kat' ényama 'the knife was used to cut
 knife it-P₁-cut-INSTR-PASS Kato meat the meat by Kato'
- (47) kat' ómuhýo y-a-gu-shaz' ényama 'Kato, the knife, he used it/cut
 Kato knife_ihe-P₁-it_i-cut/INSTR meat with it the meat'
- (48) omuhý' [ógwó kató y-a-shaz' ényama] 'the knife that Kato cut the
 knife REL Kato he-P₁-cut/INSTR meat meat (with)'

The fact that omúhyo may be left-dislocated, as in (47), means that it can also trigger pronoun-incorporation. If we try reflexivization, as in (49),

- (49) kató y-a-ye-shaz' ényama 'Kato caused himself to cut the
 Kato he-P₁-REFL-cut/INSTR meat meat'

we must have an instrumental NP coreferential with the Su, which is an agent. In this case the instrumental marker acquires the meaning of a higher verb CAUSE.

4.2. *Locatives*. "Simple" locative relations, corresponding more or less to the English *in + NP* and *at/on + NP* can be marked on the verb by the suffixes *-mu* and *-ho*, respectively (sometimes these markers are also accompanied by the applicative morpheme *-l/le-*, also used for expressive benefactive and dative relations, as illustrated in 4.3).

4.2.1. *-mu Locatives*. Examples (50) shows that when the verb is marked by *-mu* (and, in this particular case, by the applicative morpheme), the NP that expresses the location of the event referred to (or the location of a mentioned object) can be subjectivized:

- (50) enjw'_i 'é_i- ka-lf-fl-w-a mú kat' énkóko
 house_i it_i-P₃-eat-APP-PASS LOC Kato chicken
 'the house was eaten-in the chicken by Kato'

Locatives marked on the verb can also undergo pronoun-incorporation, as in (51):

- (51) kat' á-ka-gi_i-lf-fl-a mw' énkóko 'Kato ate the chicken in it (the
 Kato he-P₃-it-eat-APP LOC chicken house)'

They also can undergo all the other syntactic processes characterizing DO's, e.g. reflexivization, left-dislocation, relativization, and pseudo-cleft:

- (52) kat' á-k-éé-bon-a mw' óbukáma 'Kato saw chiefhood in himself'
 Kato he-P₃-REFL-see LOC chiefhood
- (53) kat' énjw'_i á-ka-gi_i-lf-fl-a mw' énkóko 'Kato, the house, he ate
 Kato house_i he-P₃-it-eat-APP-LOC chicken the chicken in it'
- (54) enjw' [éyó kató y-a-lf-fl-a mw' énkóko] 'the house in which Kato
 house REL Kato he-P₁-eat-APP LOC chicken ate the chicken'
- (55) eyó kató y-a-li-il-a mw' énkóko θ-ńju
 REL Kato he-P₁-eat-APP LOC chicken COP house
 'what Kato ate the chicken in is the house'

4.2.2. *-ho Locatives*. The *-ho* locatives, except for the different meanings they convey, behave in the same way as the *-mu* locatives we have just illustrated in 4.2.1. The following examples thus illustrate subjectivization, pronoun-incorporation, and reflexivization:

- (56) eméez'_i é_i-ka-lf-fl-w-a h' ómwáan' ébitooke 'the table was eaten ba-
 table it-P₃-eat-APP-PASS LOC child bananas nanas on by the child'
- (57) omwáán' a-ka-gi_i-lf-fl-a h' ébitooke 'the child ate the bananas on
 child he-P₃-it-eat-APP LOC bananas it (=gi, table)'
- (58) omusháfj' a-k-éé-shang-a h' ámahéla 'the man found money on
 man he-P₃-REFL-find LOC money himself'

4.2.3. *Subjectivization of the whole locative phrase.* With the locative marker on the verb, and the verb agreeing with the locative phrase (the agreement marker is ha- for both -mu and -ho locatives), it is possible to subjectivize a whole locative phrase, as shown in the following examples:

- (59) omu-njú há-ka-lí-í-w-a mú kat' éḡkóko (cf. (30))
in-house there-P₃-eat-APP-PASS LOC Kato chicken
'in the house (there) was eaten the chicken by Kato'
- (60) aha-meezá há-ka-lí-í-w-a hó kat' éḡkóko
on-table there-P₃-eat-APP-PASS LOC Kato chicken
'on the table (there) was eaten the chicken by Kato'

Although transformationally speaking, the locative NP's marked on the verb behave in the same way as instrumental NP's, there is an interesting difference. Whereas the NP expressing the instrument does not take the preposition if the verb has been marked for the instrumental relation, as seen in (45) (repeated with a different past tense in (61)), the NP expressing the location cannot occur without a preposition unless a clitic coreferential pronoun appears in the verbal complex. Thus (62) is good, but (63) is not.

- (61) kat' á-ka-sház' { ényam' ómúhyo } 'Kato cut the meat with the
 { ómuhy' ényama } knife'
Kato he-P₃-cut/INSTR meat knife/knife meat
- (62) kat' á-ka-gí-í-í-w-a mw' éḡkók' éñju_i 'Kato ate the chicken in it,
Kato he-P₃-it-eat-APP LOC chicken house the house'
- (63) *kat' á-ka-lí-í-w-a mw' éḡkók' éñju 'Kato ate the chicken in the
Kato he-P₃-eat-APP LOC chicken house house'

Notice, however, that éḡkóko in (62) shows a falling tone on the second syllable. This indicates a phrase boundary between éḡkóko and éñju (cf. Byarushengo, Hyman, and Tenenbaum 1976). As mentioned in 2.4, an NP such as éñju in (62) must be interpreted as a "right-dislocated" constituent. In this sense it does not have the same syntactic status as ómúhyo 'knife' in (61) (on the special status of locative NP's in a Bantu language closely related to Haya, see Dalgish 1976).

4.3. *Dative NP's.* A verb can also be marked for an NP argument that has, roughly, the range of meaning of Fillmore's (early) dative. The suffix used is the so-called "applicative" or "applied" morpheme -il/əl- (the choice between the two vowels being determined by vowel harmony rules). As shown in the following examples, the dative NP in the unmarked word order immediately follows the verb:

- (64) omukázy' a-ka-cumb-í! ' ábáán' ébitooke 'the woman cooked the child-
woman she-P₃-cook-APP children bananas ren the bananas'
- (65) ḡ-ka-léét-əl' ómusháfj' égíta 'I brought the man the guitar'
I-P₃-bring-APP man guitar

- (66) kat' á-ka-gul-ll' óbugóny' ánfí 'Kato bought for the party a fish'
Kato he-P₃-buy-APP party fish

In all three sentences the dative NP exhibits all the properties of basic DO's. Examples (67) and (68) show subjectivization of *abáana* in (64) and *omusháíja* in (65), respectively.

- (67) abáána bá-ka-cumb-ll-w' ómukázy' ébítóoke 'the children were cooked
children they-P₃-cook-APP-PASS woman bananas bananas by the woman'
- (68) omusháíj' a-ka-léét-el-w-a íny' égfíta 'the man was brought the
man he-P₃-bring-APP-PASS me guitar guitar by me'

Example (69) shows that reflexivization can apply when the dative NP is co-referential with the subject:

- (69) omukázy' a-k-éé-cumb-ll' ébítóoke 'the woman cooked (for) herself
woman she-P₃-REFL-cook-APP bananas the bananas'

Also other tests can be successfully applied, such as relative clause formation, pseudo-cleft formation, and pronoun-incorporation. Example (70) illustrates this last property:

- (70) omukázy' a-ka-bá_i-cumb-ll' ébítóoke_j 'the woman cooked (for) them
woman she-P₃-them-cook-APP bananas [children] bananas'

A significant characteristic of Haya datives is that they can be expressed only in the just mentioned way. Whereas instrumentals and locatives have an alternative prepositional coding (cf. section 3 for examples), there is no dative preposition in Haya corresponding to English *to* or *for*. The same phenomenon has been noticed in another Bantu language (Kinyarwanda) by Gary and Keenan (1976) and Kimenyi (1976). As they point out, this restriction in the coding of this semantic relation creates some problems for a theory that would like to account for the above mentioned marking-rules in terms of *advancements*. We will discuss some of these problems in the next section.

5. HAYA AND THE THEORY OF RELATIONAL GRAMMAR

In this section we would like to discuss the Haya data with respect to some of the claims made by "relational grammarians"⁷ in terms of Universal Grammar. In particular we will provide further evidence for what Gary and Keenan (1976) have called the *Non-uniqueness Assumption*, according to which a language can have more than one NP bearing the same grammatical relation to the same verb. Furthermore, we will show that if we consider the verb-marking suffixes illustrated in section 4 as a result of advancement-to-DO rules (or "object-creating rules"), the Relational Annihilation Law (see below) is repeatedly violated. Finally, we will discuss whether the Haya data may support the weaker version of the Relational Annihilation Law proposed by Gary and Keenan (1976).

5.1. *Advancement rules in Relational Grammar.* In the theory of Relational Grammar, advancement rules are the only kind of rules that affect

the status of an NP with respect to its grammatical relation to the verb (or predicate). That is, given the primitive ("pure") grammatical relations "subject of", "direct object of", and "indirect object of" (called "terms" by Perlmutter and Postal) and the "impure" grammatical relations benefactive, instrumental, locative, etc. (called "non-terms"), and given the Relational Hierarchy $Su^* DO < IO < \text{non-terms}$, a rule that affects the relation of an NP, NP_i to its verb can only move NP_i up in the hierarchy. This is explicitly stated in the following (proposed universal) principles:

- (71) *The Usurpation Principle* (Johnson 1974b): All usurpation rules [i.e. rules that make an NP take over the grammatical relation borne by another NP] move elements up in the A[ccessibility] H[ierarchy]⁸ or else raise elements into a superordinate clause.
- (72) *The Reranking Law* (Perlmutter and Postal 1974): A rule that alters the status of an NP with respect to termhood [i.e. the property of being a "term"] must increase the rank of that NP.

A rule like passivization, for instance, would be simply stated as $DO \rightarrow Su$. The demotion of the "original" (or "basic") Su would not need to be stated in the rule because of the following principle:

- (73) *The Relational Annihilation Law* (Perlmutter and Postal 1974): When an NP, NP_i , assumes the grammatical relation borne by another NP, NP_j ($i \neq j$), then NP_j ceases to bear any grammatical relation whatsoever [with the verb]. Such NP_j 's are called *chômeurs*.

The grammar of the particular language would specify the way in which a rule is concretely realized in terms of word order, agreement, case marking. In Haya, for instance, we would have to state that the "original" Su is moved immediately after the verb and marked by zero (see 2.3 above).

The above mentioned principles state that *demotions are implied by advancements*. In fact, since Perlmutter and Postal (1974) assume that one and only one NP can bear, at any given stage of derivation, a particular grammatical relation to the verb (e.g. there can be only one Su or only one DO), an advancement rule (e.g. Instrument \rightarrow DO) should never be allowed to create another instance of an already present grammatical relation without causing the NP already bearing that relation to be demoted from its status.

Similar kinds of verb-marking morphemes to the ones illustrated in section 4 have been described in other (Bantu and non-Bantu) languages as *side-effects* of advancement rules. Chung (1976), for instance, shows that in Bahasa Indonesian when an indirect object (IO) or a benefactive NP, instead of being marked by prepositions, is marked on the verb (in a way very similar to the one illustrated for Haya), it exhibits all the properties of basic DO's. On the other hand, the basic DO loses its DO properties. Chung argues that these facts can be explained by postulating a sort of Dative Movement Rule (benefactive and IO advancement-to-DO) that respects the Relational Annihilation Law. When the IO or benefactive NP is advanced to DO, the basic DO is demoted (or "goes *en chômage*").

Following this kind of approach, we might argue that the instrumental, the locative, and the dative NP's are marked on the verb as a result of ad-

vancement-to-DO rules. This would explain why they share the DO-properties (see above in section 4). However, Haya presents some problems with respect to this kind of analysis. First of all, whereas we might argue that sentences such as (45) are derived from sentences such as (27) via an instrumental → DO rule,⁹

(27) kat' á-ka-sháí' ényama n'ómúhyo 'Kato cut the meat →
Kato he-P₃-cut meat with knife with a/the knife'

(45) kat' á-ka-sház' { ényam' ómúhyo } 'Kato cut the meat with
{ ómuhy' ényama } a/the knife'
Kato he-P₃-cut/INSTR meat knife/knife meat

the same analysis could not be adopted for sentences with a dative-marked verb like (64):

(64) omukázy' a-ka-cumb-ii' ómwáán' ébítooke 'the woman cooked the
woman she-P₃-cook-APP child bananas bananas for the child'

As already mentioned, for such sentences there is no corresponding prepositional phrase, and therefore, there is no "source" for an advancement-to-DO rule. Discussing the same phenomenon in Kinyarwanda, Gary and Keenan (1976) propose to consider all the cases of dative NP's as "primitive" DO's. That is, DO's that are not "derived" by advancement rules. The applicative suffix -ii/ei- (Kinyarwanda -ir-) would be triggered by the semantic role of the NP in the sentence. In so doing, however, Gary and Keenan must reject the *Uniqueness Assumption* (only one instance of any grammatical relation). They propose in fact the *Non-uniqueness Assumption*, which allows a language to have more than one NP in the same grammatical relation to the verb. Kinyarwanda would be a language that can have two DO's. In the following section we will discuss whether the Haya verbs that can take three basic NP arguments can be said to have two basic DO's.

5.2. *Verbs with three basic arguments.* As already mentioned in section 2, there are few verbs in Haya that take three basic NP arguments. We will consider the verbs -siig- 'smear', -ólek- 'show', and -há- 'give'. Examples (74) - (76) show sentences with three full NP's:

(74) kat' á-ka-siig' ómwáán' ámajúta 'Kato smeared oil on the child/
Kato he-P₃-smear child oil Kato smeared the child with oil'

(75) kat' á-k-ólek' ómwáán' épíca 'Kato showed the child a picture'
Kato he-P₃-show child picture

(76) kat' á-ka-h' ómwáán' ékitabo 'Kato gave the child a book'
Kato he-P₃-give child book

In the above examples both the NP's following the verb share all the properties of basic DO's, as we shall now demonstrate.

5.2.1. *Coding properties.* As seen in (74) - (76) both NP's are prepositionless. The semantic dative (i.e. omwána 'child' in all three examples)

must immediately follow the verb in the unmarked word order. As shown in 4.3 the same order is found with verb-marked dative NP's. For both kinds of dative NP's, the order becomes fundamental when the other NP after the verb is eligible to the dative role (e.g. if it has a human referent). This is shown in the following sentences:

- (77) η-k-óólek' ómwáán' ómukâzi 'I showed the woman to the child' (not
I-P₃-show child woman *I showed the child to the woman)
- (78) η-k-óólek' ómukâzy' ómwáana 'I showed the child to the woman' (not
I-P₃-show woman child *I showed the woman to the child')
- (79) η-ka-híffg-||' ómuhíffgy' émbwa 'I found a dog for the hunter' (not
I-P₃-find-APP hunter dog *I found a hunter for the dog)
- (80) η-ka-híffg-||' émbw' ómuhíigi 'I found a hunter for the dog' (not
I-P₃-find-APP dog hunter *I found a dog for the hunter)

5.2.2. *Subjectivization.* Both NP's can be subjectivization via passivization. However, there is a constraint on the application of this rule, that is, whereas the dative NP can be subjectivized starting from the sentences given in 5.2, as seen below, the non-dative NP (let us call it "accusative") cannot be subjectivized if there is a full agent NP in the sentence, as shown in (84) - (86).

- (81) ómwáán' a-ka-siig-w-a kat' ámajúta 'the child was smeared oil
child he-P₃-smear-PASS Kato oil by Kato'
- (82) ómwáán' a-k-óólek-w-a kat' épíca 'the child was shown the pic-
child he-P₃-show-PASS Kato picture ture by Kato'
- (83) ómwáán' a-ka-háá-bw-a kat' ék|tabo 'the child was given a book
child he-P₃-give-PASS Kato book by Kato'
- (84) *amajúta gá-ka-siig-w-a kat' ómwáana 'the oil was smeared (on)
oil it-P₃-smear-PASS Kato child the child by Kato'
- (85) *epíca é-k-óólek-w-a kat' ómwáana 'the picture was shown (to)
picture it-P₃-show-PASS Kato child the child by Kato'
- (86) *ekitabo kf-ka-háá-bw-a kat' ómwáana 'the book was given (to) the
book it-P₃-give-PASS Kato child child by Kato'

The same constraint holds with dative NP's marked by the applicative morpheme, as seen in (87):

- (87) *ebitooke bf-ka-cumb-||-w-a kat' ómwáana 'the bananas were cooked
bananas they-P₃-cook-APP-PASS Kato child for the child by Kato'

We suggest that the unacceptability of these sentences is due not to the "demoted" status of the accusative NP (which is accessible to all the other rules given in section 2; cf. below), but rather to a conflict between the agent NP and the dative NP in occupying the immediately-after-the-verb po-

sition. In fact, we have seen before that the only coding property of the agent NP in a passive sentence is its immediate postverbal position. We have also seen that dative NP's tend to occupy that same position. Our "conflict" hypothesis is supported by the acceptability of agentless passive sentences like the following:

- (88) amajúta gá-ka-siig-w' ómwána¹⁰ 'oil was smeared (on) the child'
oil it-P₃-smear-PASS child
- (89) ep'c' e-k-óólek-w' ómwána 'the picture was shown (to) the
picture it-P₃-show-PASS child child'
- (90) ek'itabo k'f-ka-háá-bw' ómwána 'the book was given (to) the
book it-P₃-give-PASS child child'

These sentences show that the accusative NP is subjectivizable when the dative cooccurs in the sentence. Finally, sentences like (91) show that when the dative NP is a clitic and leaves the postverbal position free, the accusative NP can be subjectivized even in a sentence with the agent expressed:

- (91) bá-ka-mw-óólek-w-a káto 'they were shown him by Kato'
they-P₃-him-show-PASS Kato

(91) is in fact ambiguous between the two readings 'they (DAT) were shown him (ACC) by Kato' and 'they (ACC) were shown to him (DAT) by Kato'.

5.2.3. *Reflexivization.* Both non-subject NP's can be reflexivized, as shown by the ambiguity of (92):

- (92) ŋ-k-éé-h' ómwána 'I gave a/the child to myself'
I-P₃-REFL-give child 'I gave myself to a/the child'

5.2.4. *Pronoun-incorporation.* Both NP's can trigger pronoun-incorporation with multiple pronouns capable of cooccurring:

- (93) kat' á-ka-ga-mú-siig-a 'Kato smeared him with it/smeared it
Kato he-P₃-it-him-smear on him'
- (94) kat' á-ka-gí-mw-óólek-a 'Kato showed it to him'
Kato he-P₃-it-him-show
- (95) kat' á-ka-ki-mú-h-a 'Kato gave it to him'
Kato he-P₃-it-him-give

5.2.5. *Other tests.* Also left-dislocation, impersonal "ba-", relative clause formation, and pseudo-cleft formation apply to both NP's.

5.2.6. *Discussion.* We have shown that the verbs that take three basic NP arguments have two NP's behaving like DO's. This might be construed as further support for Gary and Keenan's proposal, which would give equal basic status to two underlying objects. However, one might claim that *other* rules or contexts exist which distinguish, say, datives and accusatives. This hypothesis might be preferred for the sake of saving the Uniqueness Assump-

tion, which makes a much stronger claim than the Non-uniqueness Assumption proposed by Gary and Keenan.

In the following sections we will provide additional data supporting a multiple DO analysis in Haya. We will show that Haya can have up to three NP's bearing the grammatical relation DO to the same verb. Our data will violate both the Relational Annihilation Law and its "weak" version proposed by Gary and Keenan (1976).

5.3. *Violation of the Relational Annihilation Law.* One of the main arguments presented by Chung (1976) in favor of a "relational" analysis of Dative Movement (i.e. benefactive and IO → DO) in Bahasa Indonesian was the loss of properties that the "basic" (or "deep") DO undergoes whenever the IO or benefactive NP is marked on the verb. Chung shows how difficult it is to account for these facts within the framework of Transformational Grammar using structural descriptions. Relational Grammar, on the other hand, offers a very satisfactory account of this phenomenon by means of the Relational Annihilation Law (cf. (73) above). When the IO of benefactive NP is "advanced" to DO (the marking on the verb cooccurs with the change of grammatical relations, i.e. as a side-effect of the rule), the original DO is demoted to an oblique status. Thus, it loses all its DO properties.

We will show in this section that the same argument cannot be adopted for Haya, because in our case the basic DO keeps all its properties when its verb gets marked for any of the semantic roles illustrated in section 4.

5.3.1. *A "basic" DO and an instrumental NP.* When the instrumental relation is marked on a verb that already has a DO, such as -téé|- 'hit' in (96), the basic DO can still be subjectivized as in (97), it can trigger pronoun-incorporation as in (98), and (99), and satisfy all the other tests for direct objecthood.

- (96) kat' á-ka-tééz' ómwáán' ékfti 'Kato hit the child with a piece
Kato he-P₃-hit/INSTR child wood of wood'
- (97) ómwáán' a-ka-tééz-l-bw-a kat' ékfti 'the child was hit by Kato
child he-P₃-hit-INSTR-PASS Kato wood with a piece of wood'
- (98) kat' á-ka-mu-tééz' ékfti 'Kato hit him with a piece of wood'
Kato he-P₃-him-hit/INSTR wood
- (99) kat' á-ka-ki-mu-tééz-a 'Kato hit him with it'
Kato he-P₃-it-him-hit/INSTR

5.3.2. *A "basic" DO and a locative NP.* The following examples show that the basic DO keeps all the DO properties when the locative relation is marked on the verb.

- (100) abáána bá-ka-bón-el-w-a mú kát' ómu-kyaaló [SUBJECTIVIZATION]
children they-P₃-see-APP-PASS LOC Kato in-village
'the children were seen in the village by Kato'
- (101) kat' á-ka-ki-ba-bón-el-á mu 'Kato saw them in it'
Kato he-P₃-it-them-see-APP LOC [PRONOUN-INCORPORATION]

- (102) abáán' [ábó kató y-a-ki-bon-el-é mu] 'the children that Kato saw
 children REL Kato he-P₁-it-saw-APP LOC in it' [REL CLAUSE]

5.3.3. A "basio" DO and a dative NP. We have already discussed in 5.2.2 under which conditions the accusative NP can be subjectivized. Examples (103) and (104) show pronoun-incorporation of the accusative NP and of both the accusative and dative NP respectively:

- (103) ŋ-ka-bí-cumb-íl' ómwáana 'I cooked them [bananas] for the child'
 I-P₃-them-cook-APP child
- (104) ŋ-ka-bí-mú-cumb-íl-a 'I cooked them for him'
 I-P₃-them-him-cook-APP

Example (105) shows that the reflexive pronoun can refer to either one of the two NP's and therefore, both NP's can be reflexivized:

- (105) a-ka-b-e-ít-íl-a 'he killed them for himself'
 he-P₃-them-REFL-kill-APP 'he killed himself for them'

The other tests for objecthood also apply.

The data illustrated above provides further support to the claim that Haya can have two DO's. It is difficult to see how one could still argue that sentences like (96) or (100) have a DO and an IO instead of simply accepting the idea of two NP's having the same syntactic status, i.e. two DO's.

5.4. *The Weak Relational Annihilation Law.* Similar data to the ones illustrated above were found in Kinyarwanda by Gary and Keenan (1976) and Kimenyi (1976). In order to save the general assumption made by Relational Grammar on the relation between advancements and demotions, Gary and Keenan propose a weaker version of the Relational Annihilation Law, which is also consistent with their Non-Uniqueness Assumption.¹⁷

- (106) *The Weak Relational Annihilation Law* (Gary and Keenan 1976): If in a given language, L, application of a promotion to X rule exceeds the valence of X in L then one of the X's is demoted to non-term status.

By "valence" of a grammatical relation X to a given verb they mean "the maximum number of full NP's that can simultaneously bear the relation X to a given verb in a *relationally primitive* sentence. A sentence is *relationally primitive* just in case no term changing rules are involved in its derivation (Gary and Keenan 1976:116).

The Weak Relational Annihilation Law allows a language to have more than one NP bearing the same grammatical relation to the verb, and at the same time, saves the basic assumption made by Perlmutter and Postal (1974) that the demotion of an NP from its grammatical relation X to the verb can be accounted for by a general principle instead of case by case. In what follows we will show that Haya can have sentences with *three* DO's and therefore, in order to provide evidence for the Weak Relational Annihilation Law, we should be able to demonstrate that Haya can have three DO's in a *relationally primitive* sentence.

5.5. *Three DO's*. In sentences like (107) and (108) three NP's can be shown to have DO status.

- (107) kat' á-ka-siig-ls' ómwáán' ámajút' ékitambála
 Kato he-P₃-smear-INSTR child oil handkerchief
 'Kato smeared the oil on the child with the handkerchief'
- (108) kat' á-ka-cumb-ll-ll-a mw' ómwáán' ébitook' ómu-nyúngu
 Kato he-P₃-cook-APP-APP LOC child bananas in-pot
 'Kato cooked the bananas in the pot for the child'

In (107) omwáana (DAT), amajúta (ACC), and ekítambála (INSTR) all share the properties of basic DO's and can therefore undergo both pronoun-incorporation and subjectivization as seen in the following examples:

- (109) kat' á-ka-ki-ga-mú-siig-ls-a 'Kato smeared it on him with it'
 Kato he-P₃-it-it-him-smeared-INSTR (ki = handkerchief; ga = oil)
- (110) a. omwáán' a-ka-siig-ls-l-bw-a kat' ámajút' ékitambála
 child he-P₃-smear-INSTR-PASS Kato oil handkerchief
 'the child was smeared oil with the handkerchief by Kato'
- b. amajúta gá-ka-siig-ls-l-bw' ómwáán' ékitambála¹²
 oil it-P₃-smear-INSTR-PASS child handkerchief
 'the oil was smeared on the child with the handkerchief'
- c. ékitambála kf-ka-siig-ls-l-bw' ómwáán' ámajúta
 handkerchief it-P₃-smear-INSTR-PASS child oil
 'the handkerchief was used to smear the oil on the child'

The other tests also apply.¹³

In (108) the nouns omwáana, ébitooke, and ómu-nyúngu all have DO status. Examples in (111) show the application of passivization.

- (111) a. omwáán' a-ka-cumb-ll-ll-w-a mú kat' ébitook' ómu-nyúngu
 child he-P₃-cook-APP-APP-PASS LOC Kato bananas in-pot
 'the child was cooked-for bananas in the pot by Kato'
- b. enyungw' á-ka-cumb-ll-ll-w-a mw' ómwáán' ébitooke
 pot it-P₃-cook-APP-APP-PASS LOC child bananas
 'the pot was cooked-in bananas for the child'
- c. ébitooke bf-ka-cumb-ll-ll-w-a mw' ómwáán' ómu-nyúngu
 bananas they-P₃-cook-APP-APP-PASS LOC child in-pot
 'the bananas were cooked for the child in the pot'

In (112) all three nouns are incorporated as pronouns:

- (112) kat' á-ka-gi-bl-mú-cumb-ll-ll-á mu 'Kato cooked them for him
 Kato he-P₃-it-them-him-cook-APP-APP LOC in it'

The other tests also apply.

Notice that the above sentences provide decisive support to the Non-Uniqueness Assumption. In fact we cannot simply say for Haya that the two

grammatical relations DO and IO are "collapsed". We still would have another DO to justify. Thus even accepting the claim that what in some languages look like "the same grammatical relation" are in fact the realizations of two different grammatical relations that lost their differentiating features, we would still have to allow one of the two grammatical relations to "double".

5.6. *Three DO's in relationally primitive sentences.* As mentioned above, in order to validate the Weak Relational Annihilation Law in Haya, we must find cases of relationally primitive sentences with three DO's. Examples (107) and (108) are not appropriate because they would involve at least one advancement rule: instrumental → DO (for (107)) and locative → DO (for (108)). Accepting the hypothesis made by Gary and Keenan (1976) on the dative marking triggered by the semantic relation and not by an advancement-to-DO rule, we can see three possible ways in which to come up with three DO's in a relationally primitive sentence (i.e. without applying any relation-changing rule): (i) by finding a verb with three basic DO's; (ii) by marking with an applicative morpheme (for dative) a verb that already has two DO's; (iii) by marking with two applicative morphemes a verb that already has one DO.

Of all three possibilities, (i) and (iii) are not realized in Haya. There are no verbs with three basic DO's (i.e. verbs with four "basic NP arguments"), and it is not possible to mark two dative relations on the same verb by means of the applicative morpheme.¹⁴ Thus we are left with (ii). We will briefly examine one case (but other examples would exhibit the same properties) and show that the three NP's that should behave as DO's do not fully exhibit all the properties outlined in section 2 above.

To begin, sentences like (113) with three full NP DO's are hardly acceptable:

- (113) ?*kat' á-ka-si|g-||' ábantw' ómwáán' ámajúta
 Kato he-P₃-smear-APP people child oil
 'Kato smeared the child with oil for the people'

The acceptability of (113) does not improve with different word orders. If we pronominalize one of the dative NP's, as in (114), we get a more acceptable sentence:

- (114) ?kat' á-ka-bá-si|g-||' ámajút' ómwána 'Kato smeared the oil on the
 Kato he-P₃-them-smear-APP oil child child for them'

A sentence with three (clitic) pronouns is the only one that is completely acceptable:

- (115) kat' á-ka-ga-ba-mú-si|g-||-a 'Kato smeared it on him for
 Kato he-P₃-it-them-him-smear-APP them'
 (116) kat' á-ka-ga-b-éé-si|g-||-a 'Kato smeared it on himself
 Kato he-P₃-it-them-REFL-smear-APP for them'

In (116) above reflexivization has applied.

Starting from (114), only ómwána can be subjectivized via passivization and only if the other NP's (except the agent) are pronominalized, as in (117):

- (117) omwáán' a-ka-ga-bá-siig-ii-w-a káto 'the child was smeared oil
child he-P₃-it-them-smear-APP-PASS Kato for them by Kato'

Given the fact that even sentences like (118) and (119) are unacceptable,

- (118) *omwáán' a-ka-bá-siig-ii-w-a kat' ámajúta 'the child was smeared for
child he-P₃-them-smear-APP-PASS Kato oil them the oil by Kato'
- (119) *abantu bá-ka-siig-ii-w' ómwáán' ámajúta 'the people were smeared-for
people they-P₃-smear-APP-PASS child oil oil (on) the child'

one cannot simply argue that passivization cannot apply because of conflict among the various NP's trying to get the immediate postverbal position. Recall from (110a) that amajúta does not have to occupy the position immediately after the verb. Nevertheless, both (118) and (119) are unacceptable. In (118) we have removed the dative NP abantu 'people' by pronominalizing it; in (119) we have left the agent unexpressed. If the unacceptability of passive sentences derived from (113) (which is also unacceptable) was due to the coding conflict of different NP's wanting to take over the immediate postverbal position, both (118) and (119) should have been acceptable. It appears that the predicate in such examples is somehow "overloaded" and rules are not free to apply as in the other cases illustrated in previous sections. It is then at least problematic to argue for relationally primitive sentences with three DO's as being "normal" or "well-accepted" in Haya. Furthermore, recall that if the number of verbs like -siig- 'smear', which take two basic DO's, is highly restricted, the number of possible sentences with three 'primitive' DO's is even more restricted. We are still confronted with the acceptability of sentences like (115) and (116). So far pronoun-incorporation seemed to be a very strong test for objecthood. It may happen, however, that partially demoted DO's will lose properties such as subjectivization and relative clause formation, but they will retain pronoun-incorporation. This is the case when an instrumental relation is marked on a verb which already has one basic DO and a dative DO marked by the applicative morpheme. In sentences like (120) both omwáána 'child' and ébitooke share all the properties of DO's, whereas n'ómúhyo 'with knife' behaves as a regular prepositional phrase (cf. (3) above).

- (120) kat' á-ka-shá-i-ii' ómwáán' ébitooke n'ómúhyo
Kato he-P₃-cut-APP child bananas with knife
'Kato cut the bananas for the child with the knife'

If we mark the semantic relation of the instrumental on the verb, as in (121), the result is an unacceptable sentence:

- (121) *kat' á-ka-shá-i-iz' ómwáán' ébitook' ómúhyo
Kato he-P₃-cut-APP/INSTR child bananas knife
'Kato cut the bananas for the child with the knife'

None of the three postverbal NP's can be subjectivized via passivization, even if the agent is eliminated:

- (122) a. *omwáán' a-ka-shá-i-iz-i-bw-a (kató) ómúhy' ébitooke
child he-P₃-cut-APP-INSTR-PASS Kato knife bananas
'the child was cut-for the bananas with the knife (by Kato)'

- b. *ebitooke b́f-ka-shá|l-iz-l-bw-a (kató) ómwáán' ómúhyo
bananas they-P₃-cut-APP-INSTR-PASS Kato child knife
'the bananas were cut for the child with the knife (for Kato)'
- c. *omuhýó gú-ka-shá|l-iz-l-bw-a (kató) ómwáán' ébitooke
knife it-P₃-cut-APP-INSTR-PASS Kato child bananas
'the knife was used to cut the bananas for the child (by Kato)'

As seen in (123), relative clause formation on the basic DO ebitooke and the dative (benefactive) ómwána also yields unacceptable sentences:

- (123) a. *ébitook' ébyó kató y-a-shal-iz' ómwáán' ómúhyo
bananas REL Kato he-P₁-cut-APP/INSTR child knife
'the bananas that Kato cut with the knife for the child'
- b. *ómwáán' ówó kató y-a-shal-iz' ómuhý' ébitooke
child REL Kato he-P₁-cut-APP/INSTR knife bananas
the child for whom Kato cut the bananas with the knife'

However, both pronoun-incorporation and reflexivization are allowed on all three NP's, as seen in (124) and (125).

- (124) kat' á-ka-bi-gu-mu-shá|l-iz-a 'Kato cut them for him with it'
Kato he-P₃-them-it-him-cut-APP/INSTR
- (125) kat' á-ka-gu-mw-éé-shal-iz-a 'Kato cut himself for him with it'
Kato he-P₃-it-him-REFL-cut-APP/INSTR 'Kato cut him for himself with it'
'Kato caused himself to cut it for him'

If one attempts to interpret the Su as coreferential with the instrumental NP (made into a reflexive), a causative reading is obtained (cf. Trithart 1977).

5.7. *The Human Constraint.* Another case of partial demotion we would like to mention is related to the nature of the referents involved in the action rather than to the syntactic/semantic relations borne by the NP's to the verb. It turns out that certain grammatical processes of DO's having a human referent can be blocked by the advancement to Su of another nonhuman DO. Consider the following example:

- (126) kat' á-ka-tééz' ómwáán' ékfti 'Kato hit the child with a piece
Kato he-P₃-hit/INSTR child wood of wood'

We know from what was said earlier that both ómwána and ékfti are DO's. Nevertheless, there is a difference in their status. Whereas the advancement to subject of ómwána does not affect the status of ékfti (which can still trigger or undergo some of the rules that characterize DO's, e.g. pronoun-incorporation in (127) and relative clause formation in (128)),

- (127) ómwáán' á-ka-ki-tééz-l-bw-a káto 'the child was hit with it
child he-P₃-it-hit-INSTR-PASS Kato by Kato'
- (128) ekity' éky' ómwána y-a-teez-l-bw-a káto 'the piece of wood that
wood REL child he-P₁-it-INSTR-PASS Kato the child was hit with
by Kato'

the advancement to subject of ekít) affects the objecthood of omwáana, which now cannot trigger pronoun-incorporation or be relativized, as seen in (129) and (130), respectively.

- (129) *ekítí kí-ka-mu-téézi-i-bw-a káto 'the piece of wood was used to
wood it-P₃-him-hit-INSTR-PASS Kato hit him by Kato'
- (130) *omwáán' ów' ékítí ky-a-téez-i-bw-e káto
child REL wood it-P-hit-INSTR-PASS-P₃Kato
'the child that the piece of wood was used to hit by Kato'

Notice that a sentence like (129) but with a full NP instead of the pronoun -mu- 'him' is fully acceptable:

- (131) ekítí kí-ka-téézi-i-bw-a kat' ómwáana 'the piece of wood was used
wood it-P₃-hit-INSTR-PASS Kato child by Kato to hit the child'

This phenomenon seems to be independent from semantic relations. In (126) - (131) the human NP is an accusative; in (132) it is a locative, and in (133) it is a dative.

- (132) a. kat' á-ka-bón' éshwel' áha-mwáana 'Kato saw the fly on
Kato he-P₃-see fly on-child the child'
- b. omwáán' a-ka-gí-bón-w-a hó káto 'the child was seen it (fly)
child he-P₃-it-see-PASS LOC Kato on by Kato'
- c. *éshwel' é-ka-mu-bón-w-a hó káto 'the fly was seen on him by
fly it-P₃-him-see-PASS LOC Kato Kato'
- (133) a. kat' á-ka-cumb-il' ómwáán' ébitooke 'Kato cooked the bananas
Kato he-P₃-cook-APP child bananas for the child'
- b. omwáán' a-ka-bí-cumb-il-w-a káto 'the child was cooked them
child he-P₃-them-cook-APP-PASS Kato by Kato'
- c. *ébitooke bí-ka-mú-cumb-il-w-a káto 'the bananas were cooked
bananas they-P₃-him-cook-APP-PASS Kato (for) him by Kato'

In (132b) the locative DO has been subjectivized and the basic DO eshwéla 'fly' has been pronominalized. The sentence is acceptable. In (132c), on the other hand, the basic (nonhuman) DO is subjectivized and the locative (human) DO is pronominalized, and the sentence is not acceptable. If we were to apply the other tests we would find the same behavior illustrated with examples (126) - (131). The same is true for the sentences in (132). However, when the DO's are either both human or both nonhuman, as in (134) and (135), respectively, the constraint does not hold:

- (134) abáána bá-ka-mu-léét-əl-w-a káto
children they-P₃-him-bring-APP-PASS Kato
'the children were brought him by Kato'
'he was brought the children by Kato'
- (135) ébitooke bí-ka-gí-cumb-il-w-a káto 'the bananas were cooked for
bananas they-P₃-it-cook-APP-PASS Kato it (e.g. dog) by Kato'

We will tentatively call the constraint here mentioned the *Human Constraint*, and we will state it informally in the following way:

- (136) *The Human Constraint*: In a sentence with more than one DO, the advancement to subject of a DO with a nonhuman referent affects the objecthood of any other present DO with a human referent.

This constraint can be thought of as related to the higher likelihood that a subject will be human rather than nonhuman (cf. Hawkinson and Hyman 1974, Keenan 1976). It seems that in order for a nonhuman DO to become Su, the other (human) DO must be "not in play". Pragmatically one could argue that the human referent must be of lesser importance with respect to the action of the verb than the nonhuman referent. Because this violates one's expectations (human referents should be more "involved" in actions than nonhuman referents) the syntactic consequence is a "dead object" or a "prepositionless oblique" (cf. Hyman 1977, Morolong and Hyman 1977).

6. SUMMARY AND CONCLUSION

In this paper we have provided further evidence for the Non-uniqueness Assumption proposed by Gary and Keenan (1976) by showing that in Haya three NP's can bear the grammatical relation DO to the same verb. We have also shown that if we consider verb-marking as related to advancement rules (e.g. instrumental → DO, locative → DO) Haya regularly violates the Relational Annihilation Law proposed by Perlmutter and Postal (1974) and probably the weaker version stated by Gary and Keenan (1976) as well.

One case has also been presented in which a (partial) demotion seems to be related to the nature of the referents rather than to the grammatical or semantic relation of the NP's. This has been tentatively related to the greater likelihood in discourse of human referents to occupy the subject slot over nonhuman referents.

We must conclude then that, in terms of Universal Grammar, demotions must be stated independently from promotions (e.g. advancements), even if in some languages they may depend on one another. A similar suggestion has been made by Comrie (1976) in discussion demotional passives in several different languages of the world.

NOTES

*This paper is a revised version of a paper (with the same title) presented on June 24, 1976 at the African Workshop organized by Larry M. Hyman and Russell G. Schuh. We wish to thank all the people who gave us comments and suggestions, in particular, Jim Heringer and Larry Hyman for their help, encouragement, and comments on earlier drafts of this paper.

¹For the concept of "basic" sentence, see Keenan (1976).

²The same constraint does not hold for subjects of active sentences.

³Even though pronouns and agreement markers are usually related diachronically (cf. Givón 1976a), synchronically speaking they may be substantially different.

⁴Without inye 'me', sentence (39) is acceptable with the meaning 'the

arm was broken by the man', that is, with omusháíja 'man' acting as the agent NP. The source of this sentence would be omusháíj' a-ka-hénd' ómukóno 'the man broke the arm' and not (36).

⁵We are not really concerned here with the problem of whether or not it might have been a DO at an earlier stage of the derivation (cf. Hyman 1977).

⁶Cf. Trithart (1977).

⁷Cf. Perlmutter and Postal (1974) and the papers in Cole and Sadock (eds.).

⁸Johnson refers to the Accessibility Hierarchy given in Keenan and Comrie (1972): Su > DO > IO > Obj. of Prep. > Possessive NP > Obj. of Comparison (where > means "greater or equal in accessibility").

⁹The same argument holds for locatives, since there are prepositional locatives from which to derive the ones marked on the verb. We must point out, however, that locatives, as shown earlier (cf. 4.2), keep the "preposition" when the full NP is expressed in its postverbal position.

¹⁰The three sentences (88), (89), and (90) are all in fact ambiguous. The postverbal NP can also be interpreted as agent. In this case these sentences would mean 'the oil was smeared by the child', 'the picture was shown by the child', and 'the book was given by the child'.

¹¹Both the Weak Relational Annihilation Law and the Non-uniqueness Assumption contradict one of the predictions made by Relational Grammar on the effect of passivization on the verb. According to Perlmutter and Postal (1974) and Keenan (1975) one of the generalizations captured by the relational definition of passivization (DO → Su for Perlmutter and Postal; Su → OO or Ø for Keenan) would be the fact that the verb of a passive sentence is by definition "intransitive" (having lost its DO). However, if a language is allowed to have more than one DO (like Kinyarwanda and Haya, for instance) the verb of a passive sentence can still have an NP acting as DO. Therefore we cannot affirm that passivization makes the verb intransitive.

¹²This sentence as well as (c) must be agentless for the same constraint illustrated in 5.2.1. Note in all of these examples that the instrumental verb marking is effected by means of the two extensions -is-I- as argued by Trithart (1977).

¹³For relative clause formation, see Duranti (1977).

¹⁴It is, however, possible to have two applicative morphemes when there are both a dative and a locative, as in example (108).

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