

Locality and Linearization: The Case of Kinande

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Abstract: Holmberg and Hróarsdóttir (2003) present facts about conditions on raising in Icelandic which led Hiraiwa (2005) and Chomsky (2005) to posit a new version of the cycle. The relevant Icelandic facts involve a raising construction which is blocked by an intervening experiencer, unless the experiencer undergoes wh-movement; the puzzle had to do with how wh-movement could improve the status of a raising operation, given that raising would have to precede wh-movement in the derivation on standard approaches to the cycle. I consider data from Kinande, a Bantu language of the Democratic Republic of the Congo, which are formally similar to the Icelandic data discussed by Holmberg and Hróarsdóttir. We will see evidence that the Kinande data should not be accounted for in terms of locality at all; rather, they are instances of Distinctness, a ban on structurally adjacent nodes with the same label (Richards 2001, to appear). If this account can be generalized to Icelandic, then our approach to the cycle can be simplified.*

Key words: Kinande, Icelandic, Distinctness, cycle, locality

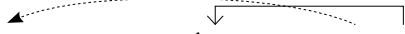
1. Introduction

Holmberg and Hróarsdóttir (2003) present a set of facts from Icelandic which challenge an earlier approach to the cycle. In Icelandic, as in many languages, raising is blocked by an intervening experiencer (in boldface in (1b)):

- (1) a. $\overbrace{\text{Ólafur hefur virst} [\text{__ vera gáfaður}]}$
 Olaf has seemed to.be intelligent
 ‘Olaf has seemed to be intelligent’
- b. $\overbrace{*\text{Ólafur hefur virst henni} [\text{__ vera gáfaður}]}$
 Olaf has seemed **to.her** to.be intelligent
 ‘Olaf has seemed **to her** to be intelligent’

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However, *wh*-extraction of the intervening experiencer makes raising possible again:

- (2) **Hverjum** hefur Ólafur virst [__ vera gáfaður]?
to.whom has Ólaf seemed to.be intelligent
 ‘To whom has Olaf seemed to be intelligent?’
- 

What is puzzling about the well-formedness of (2) is that, on standard approaches to cyclicity, *wh*-movement of the experiencer ought to follow raising of the subject in the derivation, since the landing site of *wh*-movement is higher than that of raising. The locality violation incurred by raising is apparently rescued by a subsequent operation of *wh*-movement. If we think of this type of locality restriction as following from restrictions on the behavior of Probes (for instance, if we posit a requirement that Probes must Agree with the closest possible Goal), then it is difficult to see how subsequent operations could repair this type of locality violation.

Hiraiwa (2005) and Chomsky (2005) took these facts, among others, as evidence for a new version of the cycle: they argued that operations within a phase are simultaneous with each other, effectively making the unit of the cycle the phase, rather than the maximal projection. By making Raising and *wh*-movement simultaneous in (2), they argued, we can understand why *wh*-movement can rescue a locality-violating instance of Raising.

Kinande, a Bantu language spoken in the Democratic Republic of the Congo, offers a pattern of data which is formally quite similar to the Icelandic ones given above. The data involve a morpheme discussed by Baker and Collins (2006) called the *linker* (Pierre Mujomba, p.c.):

- (3) a. Ukáseny' esyóngwé.
 you.chop 9-wood
 ‘You chop wood’
 b. Ukásenyer' esyóngwé **sy'** omó músítú.
 you.chop-APPL 9-wood 9-L 18-in 3-forest
 ‘You chop wood in the forest’
 c. Ukásenyer' omó músítú ***mw'*** esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 9-wood
 ‘You chop wood in the forest’

The linker in (3) is boldfaced and italicized. As the data in (3) show, the linker appears just when the VP contains multiple XPs; it follows the first XP, and agrees with it in noun class. We can see in (3b–c) that the word order in the Kinande VP is moderately free, allowing either of the word orders given. Baker and Collins (2006) analyze the linker as a functional head, which triggers movement of one of the VP-internal phrases to its specifier, and I will accept this analysis here; see their work for further arguments to this effect.

Interestingly, movement to the pre-linker position is not completely free. As we have just seen, locative expressions like *omó músítú* ‘in the forest’ may in principle

move to the pre-linker position; the relevant example is repeated in (4a). However, as (4b) shows, this movement is blocked by an intervening Benefactive DP:

- (4) a. Ukásenyer' omó músítú mw' esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 9-wood
 'You chop wood in the forest'
- b. *Ukásenyer' omó músítú mw' ómwamy' esyóngwé
 you.chop-APPL 18-in 3-forest 18-L 1-chief 9-wood
 'You chop wood in the forest for the chief'

We can see in (5), however, that if the Benefactive DP undergoes overt wh-movement, movement of the Locative expression to the pre-linker position becomes well-formed:

- (5) Ní **ndi** y' úkásenyer' omó músítú mw' esyóngwé?
 is **who** 1-L you.chop-APPL 18-in 3-forest 18-L 9-wood
 'For whom do you chop wood in the forest?'

The Kinande data in (4–5) are formally similar to the Icelandic examples in (1–2); in both languages, a certain type of movement is blocked when another DP intervenes, but can be rescued by wh-movement of the intervener. Kinande thus raises the same problems for the traditional version of the cycle that Icelandic does.

In what follows, I will argue that the Kinande data should not in fact be analyzed in terms of locality at all. Rather, I will claim, these facts follow from the principle of Distinctness (Richards 2001, to appear), a condition imposed by the phonology-syntax interface, which has the effect of banning structurally adjacent nodes with the same label. I will begin by describing the Kinande facts more fully, and then will introduce the Distinctness principle and show how it covers the facts; finally, we will return to Icelandic.

2. Kinande

We saw in (4b) above that a Locative expression may not precede the linker if the sentence also contains a Benefactive DP. As the data in (6) show, either the Benefactive or the direct object may precede the linker in such a sentence (here (4b) is repeated as (6a)):

- (6) a. *Ukásenyer' omó músítú mw' ómwamy' esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 1-chief 9-wood
 'You chop wood in the forest for the chief'
- b. Ukásenyer' ómwamí y' esyóngwé omó músítú.
 you.chop-APPL 1-chief 1-L 9-wood 18-in 3-forest
 'You chop wood in the forest for the chief'
- c. Ukásenyer' esyóngwé sy' ómwamy' omó músítú.
 you.chop-APPL 9-wood 9-L 1-chief 18-in 3-forest
 'You chop wood in the forest for the chief'

We have also already seen that (6a) may be rescued via wh-extraction of the Benefactive. In fact, wh-extraction of either DP rescues the sentence:

- (7) a. Ní ndi y' úkásenyér' omó músítú mw' esyóngwé?
 is who 1-L you.chop-APPL 18-in 3-forest 18-L 9-wood
 'For whom do you chop wood in the forest?'
 b. Ní ki ky' úkásenyér' omó músítú mw' ómwami?
 is what 7-L you.chop-APPL 18-in 3-forest 18-L 1-chief
 'What do you chop in the forest for the chief?'

Wh-extraction in these examples must be overt. This is striking, since the most common way of forming wh-questions in Kinande involves wh-in-situ; nevertheless, wh-in-situ fails to improve the status of examples like (6a):

- (8) *Ukásenyér' omó músítú mw' esyóngwé ndi?
 you.chop-APPL 18-in 3-forest 18-L 9-wood who

Another way of fixing (6a) is to convert one of the two DPs in the sentence to a pronoun. The affected DP will then be represented by a morpheme in the verbal complex (which we may think of either as a clitic or as an agreement morpheme; see Richards (to appear) for some discussion):

- (9) a. Ukámúsenyer' omó músítú mw' esyóngwé.
 you.chop-1-APPL 18-in 3-forest 18-L 9-wood
 'You chop wood in the forest for him'
 b. Ukásisenyer' omó músítú mw' ómwami.
 you.chop-9-APPL 18-in 3-forest 18-L 1-chief
 'You chop it in the forest for the chief'

If we think that the Locative expression is (at least optionally) a PP, then the Kinande data described here may be captured by the following generalization: *The linker may not be followed by two overt DPs*. Thus, the Locative expression may precede the linker in sentences in which there is only one internal DP argument, but if there are two internal DP arguments, it cannot, unless one of these DP arguments is removed via wh-extraction or pronominalization.

The effects of this generalization can also be seen in the interaction of applicativization and causativization, two operations which add internal DP arguments. As we have already seen, Kinande has applicative heads which introduce Benefactive DP arguments:

- (10) a. Abákalí bakáseny' esyóngwé.
 2-women 2-chop 9-wood
 'The women chop wood'
 b. Abákalí bakásenyera Kámbalé y' esyóngwé.
 2-women 2-chop-APPL Kambale 1-L 9-wood
 'The women chop wood for Kambale'

Kinande also has lexical causatives:

- (11) Ngásenyesay' abákali *b'* esyóngwé
 I.chop-CAUS 2-women 2-L 9-wood
 'I make the women chop wood'

However, a verb with a Benefactive applicative cannot be causativized:

- (12) *Ngásenyeseraya Kámbalé *y'* abákaly' esyóngwé
 I.chop-APPL-CAUS Kambale 1-L 2-women 9-wood
 'I make the women chop wood for Kambale'
 'I make Kambale chop wood for the women'

The example in (12) cannot have any of the meanings which would be logically possible; it is simply ill-formed. This is what we expect, by now; a VP with three internal DP arguments will always fall afoul of the generalization that the post-linker field cannot contain two DPs. As we also expect, (12) can be rescued by overt *wh*-movement of either of the DPs in the post-linker field:

- (13) a. Ní ndi *y'* úkásenyaseray' abákali *b'* esyóngwé?
 is who 1-L you.chop-APPL-CAUS 2-women 2-L 9-wood
 'For whom are you making the women chop wood?'
 'Who are you making chop wood for the women?'
 b. Ní ki *ky'* úkásenyaseray' Kámbalé *y'* ómwami?
 is what 7-L you.chop-APPL-CAUS Kambale 1-L 1-chief
 'What are you making Kambale chop for the chief?'

Again, the generalization seems to be that the post-linker field may not contain two overt DPs.

3. Distinctness

Richards (2001, to appear) develops an account of a variety of syntactic phenomena that seem to involve bans on multiple instances of the same kind of thing too close together. One such phenomenon is quotative inversion in English, as discussed, for example, by Alexiadou and Anagnostopoulou (2001):

- (14) a. "It's raining," said the weatherman
 b. "It's raining," said [the weatherman] [to the anchorwoman]
 c. *"It's raining," told [the weatherman] [the anchorwoman]

(14a) is an instance of quotative inversion, in which the subject remains in a postverbal position and a quotation appears before the verb. We can see in (14b) that quotative inversion is possible in sentences in which the subject shares the postverbal field with another phrase (in this case, a PP). However, as (14c) shows, quotative inversion is impossible if the result would be a postverbal field containing multiple DPs.

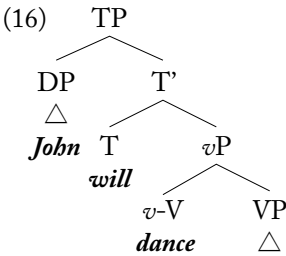
Ross (1972) discusses another phenomenon from English with a similar character. He points out that although the verb *begin* may take a complement verb ending in *-ing*, and although *begin* may itself end in *-ing* (for example, in progressive forms), these two options may not both be taken at the same time:

- (15) a. It began raining
 b. It's beginning to rain
 c. *It's beginning raining

In Richards (2001, to appear) I try to develop a general account of phenomena like these, which seem to involve a ban on multiple syntactic objects of the same kind in close structural proximity. Part of the goal of this earlier work was to develop sufficiently precise definitions of the relevant notions of 'of the same kind' and 'in close structural proximity' for the theory to be capable of making predictions. In what follows I will briefly summarize the major claims of that earlier work; for a fuller discussion of the facts I will have to refer readers to Richards (2001, to appear).

The proposal makes crucial use of the approach to Spellout developed in Chomsky (2001) and much subsequent work, in which material is sent to the PF interface periodically throughout the derivation, whenever a phase has been completed (and I will follow Chomsky in assuming that the relevant phases are CP and transitive *v*P). In particular, following Nissenbaum (2000), I will assume that once a phase has been constructed, the complement of the phase head undergoes Spell-out, with the phase head itself and its specifier (or specifiers) waiting until the next phase has been completed to undergo Spell-out.

I will also crucially assume a version of Kayne's (1994) Antisymmetry. In particular, I will assume that one of the tasks of the grammar is to establish a linear order between the terminal nodes of the sentence at least by the point of Spell-out, and that this linear order is determined by properties of the tree, essentially along the lines proposed by Kayne:



Given a tree like the one in (16), on Kayne's theory, the grammar establishes a set of linearization statements $\langle \alpha, \beta \rangle$, such that α asymmetrically c-commands β , and such linearization statements are taken to determine that α must precede β . In the tree in (16), for example, the grammar will construct linearization statements like $\langle \text{DP}(\textit{John}), \text{T}(\textit{will}) \rangle$, $\langle \text{T}(\textit{will}), \text{v-V}(\textit{dance}) \rangle$, and so forth.

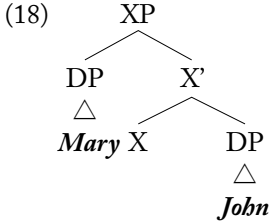
The proposal made in Richards (2001, to appear) is that linearization statements are limited in the kind of information they may make reference to. To a first approximation, we can say that linearization statements may only make reference to node labels (see Richards to appear, in particular, for further discussion of this issue, where we see that the situation is somewhat more complicated). Moreover,

the linearization process is subject to the following constraint:

(17) *Distinctness*

Linearization statements of the form $\langle \alpha, \alpha \rangle$ are uninterpretable.

We can illustrate the behavior of Distinctness with the tree in (18):

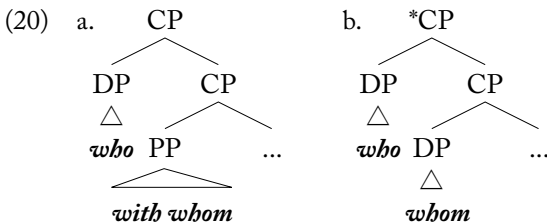


If a tree like the one in (18) were sent to PF, the linearization algorithm would generate the linearization statement $\langle DP, DP \rangle$, since the DP *Mary* asymmetrically c-commands the DP *John*. Crucially, the claim is that linearization is unable to make reference to any of the richer information that would distinguish these DPs from each other; the linearization statement cannot say, for example, $\langle DP (Mary), DP (John) \rangle$, or $\langle DP\text{-in-specifier-of-X}, DP\text{-complement-of-X} \rangle$. Because the linearization statement $\langle DP, DP \rangle$ is uninterpretable (perhaps because it is simply uninformative, or because it looks like an instruction to make DP precede itself), such a structure will be rejected at the PF interface. Thus, Distinctness effectively bans structures in which multiple objects with the same label in an asymmetric c-command relation both occupy the same Spell-out domain.

To consider a less abstract example of a Distinctness effect in English, consider the behavior of sluicing with multiple remnants:

- (19) a. I know someone was dancing with someone,
 but I don't know [*who*] [*with whom*].
 b. *I know someone insulted someone,
 but I don't know [*who*] [*whom*].

Sluicing with multiple remnants is in principle possible, as (19a) shows, but not if both of the sluicing remnants are DPs, as we see in (19b). Distinctness allows us to capture this difference, as long as the sentences in (19) contain Spell-out domains with at least the following structures in them:



In (20a), linearization can proceed via the linearization statement $\langle DP, PP \rangle$. In (20b), by contrast, the linearization statement is $\langle DP, DP \rangle$, and since this statement is uninterpretable, the sentence is ill-formed.

Richards (to appear) develops this theory at some length; I will refer interested readers to that work for further discussion. In the remainder of this section I will concentrate on establishing three claims about Distinctness: first, that it is unconcerned with linear adjacency; second, that it is sensitive to phase boundaries; and third, that it is not only a condition on the behavior of DPs, but of syntactic objects more generally.

3.1. Distinctness is not about linear adjacency

The examples of Distinctness we have seen so far have involved linear adjacency between the offending phrases. This is not crucial, however. Consider again, for instance, the contrast in (14), repeated as (21):

- (21) a. “It’s raining,” said the weatherman
 b. “It’s raining,” said [the weatherman] [to the anchorwoman]
 c. * “It’s raining,” told [the weatherman] [the anchorwoman]

The example in (21c), on the theory developed here, is a Distinctness violation; the two bracketed DPs are both in the same Spell-out domain, and the resulting structure is therefore unlinearizable. The facts do not change if we insert an adverb between the postverbal phrases:

- (22) a. “It’s raining,” said the weatherman **sadly**
 b. “It’s raining,” said [the weatherman] **sadly** [to the anchorwoman]
 c. * “It’s raining,” told [the weatherman] **sadly** [the anchorwoman]

Thus, the relevant principle cannot simply be a ban on adjacent DPs, or on adjacent phrases with the same label.

3.2. Distinctness is sensitive to Spell-out boundaries

One of the arguments from Richards (to appear) that Distinctness is sensitive to Spell-out boundaries has to do with the distribution of a morpheme in Chaha, a Semitic language of Ethiopia. Chaha is a head-final language, with a form of object shift which moves specific objects past certain adverbs (Degif Petros, p.c.):

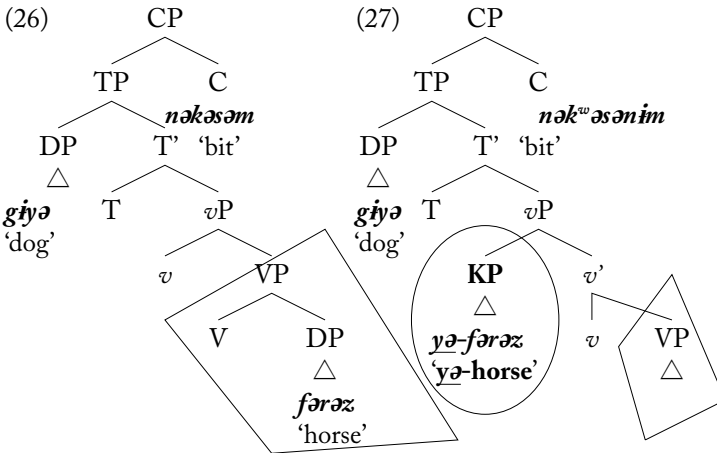
- (23) a. C’am^wit nɨmam ambɨr tičəkɨr
 C’. normally cabbage cooks
 ‘C’am^wit normally cooks cabbage’
 b. *C’am^wit ambɨr nɨmam tičəkɨr
 C’. cabbage normally cooks
- (24) a. *C’am^wit nɨmam ambɨr x^wita tičək^winn
 C’. normally cabbage the cooks
 b. C’am^wit ambɨr x^wita nɨmam tičək^winn
 C’. cabbage the normally cooks
 ‘C’am^wit normally cooks the cabbage’

In (23), the nonspecific object *ambir* ‘cabbage’ must remain to the right of the adverb *nimam* ‘normally’; in (24), the specific object *ambir x^wta* ‘the cabbage’ must appear to the left of the same adverb. I analyze these word order facts in terms of an operation of overt object shift of a kind which is familiar from many languages, which moves specific objects to a higher position in the tree.

When the direct object is animate¹, the effects of specificity are seen, not only in word order, but also in morphology; specific animate direct objects must bear a prefix *yə-*:

- (25) a. *Giyə fərəz nəkəsəm*
 dog horse bit
 ‘A dog bit a (non-specific) horse’
 b. *Giyə yə- fərəz nək^wəsənim*
 dog **yə** horse bit
 ‘A dog bit a (specific) horse’

I analyze this prefix as a functional head K which is responsible for shielding one DP from another when both appear in the same Spell-out domain. We can understand the facts in (25) in terms of the trees in (26):



In both of these trees, the *vP* is transitive, and hence a phase, and therefore the complement of *v* is sent to PF via Spell-out (represented by the four-sided figures). In (26), the direct object is non-specific, and therefore remains within the *vP* phase; as a result, the subject and object DPs are linearized in different Spell-out domains, and the structure can be linearized. In (27), by contrast, the direct object is specific, and therefore undergoes Object Shift to the edge of *vP*. If the direct object were an ordinary DP, the subject and object DPs would be linearized in the

¹ See Richards (to appear) for discussion of why animacy should be relevant for this phenomenon.

same phase, and linearization would fail. Adding the prefix *yə*, on this account, allows the grammar to protect these two instances of DP from each other, perhaps because KP is a phase.

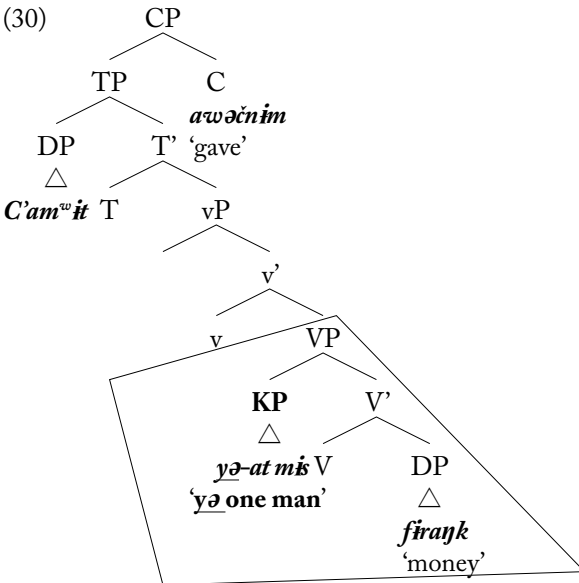
When we turn to ditransitives, the distribution of *yə* is somewhat different. Indirect objects in ditransitive constructions must always bear *yə*, regardless of specificity:

- (28) C'am^wit *yə*-at *mis* *fɪraŋk* *awəčnim*
 C'am^wit **yə** one man money gave
 'C'am^wit gave money to a (specific or non-specific) man'

Conversely, *yə* is banned from appearing on direct objects in ditransitives, again regardless of specificity:

- (29) a. C'am^wit *yə*-tkə *x^wita* *giyə* *awəčnim*
 C'am^wit **yə** child the dog gave
 'C'am^wit gave the child a/the dog'
 b. *C'am^wit *yə*-tkə *x^wita* *yə*-gyə *awəčnim*
 C'am^wit **yə** child the **yə** dog gave

The facts about ditransitives can be made to follow using a tree like the one in (30):



In (30), we can see that regardless of whether the indirect object undergoes Object Shift or not, it will share a Spell-Out domain with a DP (either the subject or the direct object). Conversely, the direct object will either be alone in its Spell-Out domain (if the indirect object shifts) or will share a Spell-Out domain with a KP, rather than with a DP (if the indirect object does not shift). For the most part, the

pattern of facts follows from these considerations.

The pattern of facts just described for Chaha is not simply a quirk of Chaha; we find similar patterns attested in a variety of other languages, including Hindi, Miskitu, and Spanish (the pattern has come to be referred to as “differential case marking”). In all of these languages, a type of case marking appears on specific animate direct objects, and on all indirect objects, and (in general) on no direct objects of ditransitives. The morphemes in question are *ko* in Hindi, *ra* in Miskitu, and a preposition *a* in Spanish. In (31–33), we can see the behavior of these morphemes on direct objects of monotransitive verbs:

- (31) a. Ravii (ek) gaay k^hariidnaa caahtaa hai [Hindi: Mohanan 1994]
 Ravi one cow to-buy wish AUX
 ‘Ravi wishes to buy a (non-specific) cow’
 b. Ravii ek gaay-ko k^hariidnaa caahtaa hai
 Ravi one cow **KO** to-buy wish AUX
 ‘Ravi wishes to buy a (specific) cow’
- (32) a. Yang aaras (kum) atkri [Miskitu: Ken Hale, p.c.]
 I horse a bought
 ‘I bought a horse’
 b. Yang aaras-ra atkri
 I horse **RA** bought
 ‘I bought a/the (specific) horse’
- (33) a. Laura escondió un prisionero durante dos años [Spanish: Torrego 1998]
 Laura hid a prisoner for two years
 ‘Laura hid a (non-specific) prisoner for two years’
 b. Laura escondió a un prisionero durante dos años
 Laura hid **A** a prisoner for two years
 ‘Laura hid a (specific) prisoner for two years’

In (34–36), we see that these morphemes also appear on indirect objects:

- (34) Ilaa-ne m^āā -ko baccaa diyaa [Hindi]
 Ila ERG mother **KO** child gave
 ‘Ila gave a/the child to the mother’
- (35) Yang tuktan ai yaptika-ra brihbalri [Miskitu]
 I child his mother **RA** brought
 ‘I brought the child to his mother’
- (36) Describieron un maestro de Zen al papa [Spanish]
 they-described a master of Zen **A**-the pope
 ‘They described a Zen master to the pope’

And finally, in (37–39), we see that these morphemes fail to appear on direct objects of ditransitives:

- (37) *ilaa-ne m^āā -ko bacce-ko diyaa [Hindi]
 Ila ERG mother **KO** child **KO** gave
 ‘Ila gave a/the child to the mother’

- (38) *Yang tuktan -ra ai yaptika-ra brihbalri [Miskitu]
 I child *RA* his mother *RA* brought
 ‘I brought the child to his mother’
- (39) *Describieron a un maestro de Zen al papa [Spanish]
 they-described *A* a master of Zen *A*-the pope
 ‘They described a Zen master to the pope’

Distinctness allows us to capture this widely-attested pattern in terms of a general principle.

3.3. Distinctness is not restricted to DPs

The examples given so far of Distinctness effects have so far all involved interactions between DPs. This is not necessary, however; we can find examples of Distinctness conditioning interactions between other kinds of heads.

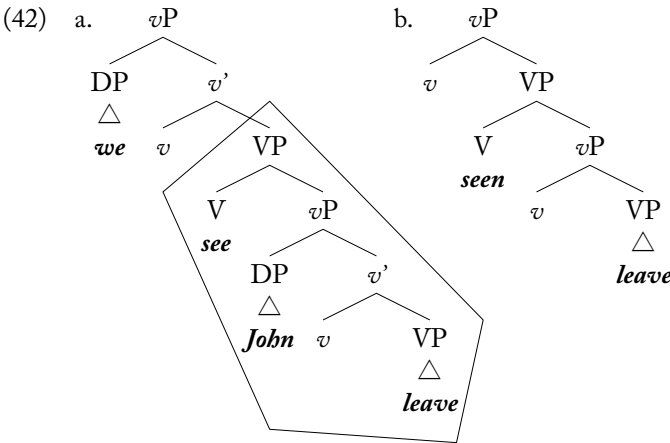
One instance of this comes from the behavior of verbs of perception and causation in English. These verbs may take complements with bare verbs:

- (40) a. We saw John leave
 b. We let John leave
 c. We made John leave

When they take bare-verb complements, however, the verbs of perception and causation cannot be passivized:

- (41) a. *John was seen __ leave
 b. *John was let __ leave
 c. *John was made __ leave

We can see how the contrast in (40–41) follows by considering the trees in (42), which represent the higher *v*P domains in (40a) and (41a):



In (42), the higher *v* is transitive, and hence a phase head; as a result, the higher instance of *v* is shielded from the lower instance of *v*. Both instances of *V* are

linearized in the same phase; I argue in Richards (to appear) that Distinctness very generally applies only to functional heads, and that *V* is therefore immune to its effects. In (42b), by contrast, the higher *v* is passive. If we follow Chomsky (2001) in ascribing phasehood to *vP* only when *v* is transitive, then we expect that in (42b) the two instances of *v* will be linearized together, and will violate Distinctness. The contrast in (40–41) is therefore accounted for; this is an instance of Distinctness applying, not to *DP*, but to *v*.

Another difference between the examples in (40) and those in (41) is that the two verbs are adjacent in the latter but not in the former. Distinctness leads us to expect that this is not the relevant difference between the examples, however, and examples like the ones in (43) seem to show that this is correct:

- (43) a. [How many prisoners] did you see ___ leave?
 b. [How many prisoners] did you let ___ leave?
 c. [How many prisoners] did you make ___ leave?

Thus, it is perfectly possible for verbs to be linearly adjacent; what is crucial is that the higher instance of *v* be transitive if the verb is to take a bare-verb complement, as we see in (40) and (43). We also predict, correctly, that unaccusative verbs will never take bare-verb complements, since they will lack a transitive *v* to shield the two instances of *v* from each other. This is confirmed, for instance, in the behavior of *seem*, which can take bare predicates of other kinds, but not bare verbs:

- (44) a. John seems [intelligent]
 b. John seems [a fine fellow]
 c. *John seems [enjoy movies]

3.4. Conclusions

The preceding sections have been a brief review of the theory of Distinctness; interested readers are invited to consider Richards (to appear) for further discussion of the theory. In general, we have seen that Distinctness bans instances of projections (in fact, specifically functional projections) with the same label which are in an asymmetric *c*-command relation and share a phase. I suggested that this ban can be related to Kayne's theory of Antisymmetry; projections with the same label cannot be linearized directly, perhaps because the linearization algorithm is limited in the features it can make use of to distinguish between the projections that it is to linearize. In the next section, we will see how Distinctness accounts for the Kinande facts with which we began.

4. Kinande

Recall that the Kinande facts discussed above had to do with the distribution of arguments in the postverbal field, and in particular on the conditions on movement to the position preceding a post-verbal morpheme called the linker. We saw facts which seemed to lend themselves to a theory based on locality; locative expressions may in principle undergo movement to the pre-linker position, but

such movement is blocked if a benefactive argument is present:

- (45) a. Ukásenyér' omó músitú *mw'* esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 9-wood
 'You chop wood in the forest'
- b. *Ukásenyér' omó músitú *mw'* **ómwamy'** esyóngwé
 you.chop-APPL 18-in 3-forest 18-L 1-chief 9-wood
 'You chop wood in the forest for the chief'

Exploring further, we learned that the difficulty with (45b) is apparently not one of locality at all. Assuming that *omó músitú* 'in the forest' is at least optionally projected as a PP, we can understand the fuller range of facts listed in (46) as reflecting a ban on multiple DPs after the linker:

- (46) a. *Ukásenyér' omó músitú *mw'* ómwamy' esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 1-chief 9-wood
 'You chop wood in the forest for the chief'
- b. Ukásenyér' ómwamí y' esyóngwé omó músitú.
 you.chop-APPL 1-chief 1-L 9-wood 18-in 3-forest
 'You chop wood in the forest for the chief'
- c. Ukásenyér' esyóngwé sy' ómwamy' omó músitú.
 you.chop-APPL 9-wood 9-L 1-chief 18-in 3-forest
 'You chop wood in the forest for the chief'

(46a) is simply a repetition of (45b): here the PP is in pre-linker position, and both the DPs follow the linker. In (46b–c), one of the two DPs precedes the linker, and the other follows it, as does the PP.

We also saw that examples like (46a) may be repaired by processes that remove one of the DPs from the post-linker field, including wh-movement (as in (47)) and cliticization or pro-drop (as in (48)):

- (47) a. Ní ndi y' úkásenyér' omó músitú *mw'* esyóngwé?
 is who 1-L you.chop-APPL 18-in 3-forest 18-L 9-wood
 'For whom do you chop wood in the forest?'
- b. Ní ki ky' úkásenyér' omó músitú *mw'* ómwami?
 is what 7-L you.chop-APPL 18-in 3-forest 18-L 1-chief
 'What do you chop in the forest for the chief?'
- (48) a. Ukámúsenyer' omó músitú *mw'* esyóngwé.
 you.chop-1-APPL 18-in 3-forest 18-L 9-wood
 'You chop wood in the forest for him'
- b. Ukásísenyer' omó músitú *mw'* ómwami.
 you.chop-9-APPL 18-in 3-forest 18-L 1-chief
 'You chop it in the forest for the chief'

Thus, we arrive at the conclusion that the contrast in (45) has nothing to do with locality at all. Rather, it is a violation of a type familiar to us from the discussion

of Distinctness; multiple DPs may not remain too close together. As long as all of the material in the post-linker field is transferred to PF in the same Spell-out operation (perhaps because the linker is itself a phase head), the facts follow from Distinctness.

As I noted at the beginning of the paper, the Kinande facts resemble Icelandic facts first discussed by Holmberg and Hróarsdóttir (2003), which have had a profound effect on our understanding of the cycle. Like Kinande, Icelandic exhibits a type of movement which is blocked by the addition of another DP, but which may be rendered possible again by *wh*-movement of the intervening DP:

- (49) a. $\overbrace{\text{Ólafur}}^{\downarrow}$ hefur virst [$\underline{\quad}$ vera gáfaður]
 Olaf has seemed to.be intelligent
 ‘Olaf has seemed to be intelligent’
- b. * $\overbrace{\text{Ólafur}}^{\downarrow}$ hefur virst **henni** [$\underline{\quad}$ vera gáfaður]
 Olaf has seemed **to.her** to.be intelligent
 ‘Olaf has seemed **to her** to be intelligent’
- c. $\overbrace{\text{Hverjum}}^{\downarrow}$ hefur Ólafur virst [$\underline{\quad}$ [$\underline{\quad}$ vera gáfaður]?
to.whom has Olaf seemed to.be intelligent
 ‘**To whom** has Olaf seemed to be intelligent?’

Analyzing the facts in (49) in terms of locality, Hiraiwa (2005) and Chomsky (2005) concluded that our understanding of the cycle needed to be changed, so that the *wh*-movement in (49c) would no longer need to follow raising of *Ólafur* in the derivation.

As we saw at the beginning of the paper, the Icelandic triple in (49) is formally similar to the Kinande one in (50):

- (50) a. $\overbrace{\text{Ukásenyér}'}^{\downarrow}$ omó músítú *mw'* esyóngwé.
 you.chop-APPL 18-in 3-forest 18-L 9-wood
 ‘You chop wood in the forest’
- b. * $\overbrace{\text{Ukásenyér}'}^{\downarrow}$ omó músítú *mw'* **ómwamy'** esyóngwé
 you.chop-APPL 18-in 3-forest 18-L 1-chief 9-wood
 ‘You chop wood in the forest for the chief’
- c. $\overbrace{\text{Ní}}^{\downarrow}$ **ndí** y' úkásenyér' omó músítú *mw'* esyóngwé?
 is **who** 1-L you.chop-APPL 18-in 3-forest 18-L 9-wood
 ‘**For whom** do you chop wood in the forest?’

Here, again, a movement operation (in this case, movement to the pre-linker position) is blocked by the presence of an additional DP (in this case, a benefactive DP), and can be made possible again by *wh*-movement of the intervener. However, we have seen evidence that the Kinande triple in (50) should not be analyzed in

terms of locality, but rather in terms of Distinctness. One of the arguments for this conclusion was based on the fact that raising to the pre-linker position can be rescued by *wh*-extraction of *either* of the post-linker DPs; thus, (50c) is well-formed, but so is (51):

- (51) Ní **ki** ky' úkásenyer' omó músítú mw' ómwami?
 is **what** 7-L you.chop-APPL 18-in 3-forest 18-L 1-chief
 'What do you chop in the forest for the chief?'

The fact in (51) is hard to understand in terms of a locality-based account, but follows from a Distinctness-based one. Can we find similar effects in Icelandic?

Unfortunately, the Icelandic data are unclear on this point; some speakers do indeed accept the formal equivalent of (51), and others reject it (many thanks to Thorbjörg Hróarsdóttir and Halldór Sigurðsson for their Icelandic judgments):

- (52) %Hver hefur vírst **henni** [_ vera gáfaður]?
 who has seemed **to.her** to.be intelligent
 'Who has seemed **to her** to be intelligent?'

The debate over the status of (52) is a topic for further study. If we arrive at the conclusion that examples like (52) are well-formed, then we have an argument for analyzing the Icelandic facts in terms of Distinctness rather than via locality; raising past the experiencer is ill-formed, not because of a locality violation, but because it puts the raised DP and the experiencer DP unacceptably close together. Such a conclusion would have important consequences for the theory, since it would remove one of the main arguments for the conclusion that operations within a phase are simultaneous.

If (52) is ill-formed, then an account in terms of Distinctness might still be constructed, though we will have to try to understand why Icelandic differs from Kinande in that only one of the offending DPs may rescue the Distinctness-violating structure by undergoing *wh*-movement. We might begin to account for the Icelandic data by focusing on a difference between Kinande and Icelandic; the Kinande Distinctness violation under consideration here involves failure to move a DP out of the post-linker domain (when that domain contains another DP), while the Icelandic violation involves raising of a DP into a domain in which it is unacceptably close to another DP. Thus, the Kinande violation has to do with the underlying positions of the DPs when they are first Merged, while the Icelandic violation is created via movement. In Richards (to appear) I begin to develop a theory of how languages choose among mechanisms for repairing Distinctness violations; if the Icelandic and Kinande facts are all to be captured by Distinctness, then the contrast discussed here will be relevant for that project as well.

I have offered an argument here that we should exercise caution in analyzing phenomena in terms of locality. Some phenomena which appear superficially to involve locality violations, I have suggested, are in fact violations of Distinctness, a principle which governs the relation between syntax and phonology and which

bans certain types of syntactic structures, rendering them unlinearizable. If the Icelandic facts discussed here, like the formally similar Kinande facts that have been our main point of interest, can be captured via Distinctness, then our theories of locality and of the nature of the cycle can be correspondingly simplified.

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【要 旨】

局所性と線状化:キナンデ語の分析

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Holmberg and Hróarsdóttir (2003) は、アイスランド語の主語上昇は経験者 (experiencer) の存在により阻止されるが、経験者要素が wh 移動により文頭に移動するなら阻止されないという興味深い事実を指摘した。この事実は、wh 移動が主語上昇よりも先に適用されることを示しており、循環 (cycle) 範疇を最大投射とするこれまでの考え方では説明がつかないものであるが、Hiraiwa (2005) と Chomsky (2005) は cycle を phase (位相) とする新しい考え方を提示し、主語上昇も wh- 移動も同一 phase 内の操作となるので局所性違反は免れるとした。本稿ではアイスランド語と形式的に同様の事実を示すキナンデ語 (コンゴ民主共和国で話されているバンツー諸語の一つ) を考察し、キナンデ語の事実は局所性 (locality) により分析されるのではなく、同一 Spell-out 境界内では同じ標識を持つ節点が構造上近接することを禁じる「示差性 (distinctness)」という制約 (つまり、統語構造から発音への制約) (Richards 2001, to appear) によって捉えられることを論じる。この分析がアイスランド語の分析にも適用できるならば、循環のあり方は簡潔化できることになる。