

Transitivization, causative constructions, and the thematic-licensing of external arguments

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Abstract. I argue that the head responsible for thematically licensing the external argument is neither Voice nor ν , but instead a distinct θ -licensing head, L, which intervenes between Voice and ν . Evidence comes from Kinande, where I show that the ‘lexical causative’ is not ν , Voice, or a Cause head which introduces an event – it is purely a θ -licensor. I then turn to Kinande’s productive causative constructions, and show that in causatives of transitive verbs the Cause head embeds a complement which includes agentive semantics (i.e. it embeds the head which θ -licenses the external argument of the caused event), but the complement nonetheless *does not* include the VoiceP phase. I ultimately argue for a bifurcation of what is traditionally understood as VoiceP into two distinct phrases: a θ -Licensing Phrase (LP), where the θ -role for the external argument is introduced, and VoiceP, which is the locus of the phase boundary, and is where the external argument merges.

Keywords. argument structure; external argument introduction; transitivization; causativization

1. Introduction. Following in the tradition of Kratzer (1996) and Marantz (1997), it is commonly accepted that the external argument (EA) is introduced by a projection above the root, rather than by the root itself. Some call this projection VoiceP, others call it ν P, and many seem to use the two terms interchangeably. Pylkkänen (2008) argued that the two projections are distinct, with ν performing a verbalizing function and Voice semantically introducing the EA (by providing the θ -role for the EA – henceforth ‘ θ -licensing’ the EA) and providing the argument A-position where the EA merges (Spec-VoiceP). Harley (2013) also argued for the distinctness of ν P and VoiceP, but argued that ν is responsible for θ -licensing the EA (in addition to verbalizing the root), while Voice provides the A-position for the EA. In this paper, I follow in Harley’s footsteps by arguing that Voice is not responsible for θ -licensing the EA (although it does indeed provide the the A-position), but further argue that ν is not responsible for this function either. Instead, I argue, a distinct head between ν and Voice is responsible for θ -licensing the EA; I call this head L.

In §2, I discuss the issue of transitivization, focusing specifically on Kinande (a Bantu language spoken in the DRC), and argue that the transitivizer is a realization of the θ -licensing head L, rather than being a realization of ν , a Cause head, or Voice. §3 furthers the argument that Voice does not introduce the EA: in Kinande’s productive causative constructions, the complement of Cause embeds the head which θ -licenses the EA of the caused event, but nonetheless the complement of cause lacks the properties we associate with VoiceP (e.g. phasehood); this crucially contrasts with Japanese productive causative constructions, where the complement of Cause *does* have these properties.

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2. The Kinande transitivizer is only a θ -licenser. Kinande has a transitivizing morpheme *-j-* (realized as *-y-* before vowels) which makes unaccusative verbs transitive:

(1) unaccusative \sim transitive pairs in Kinande

- | | | | | |
|----|-------------------|--------|----------------------|---|
| a. | <i>eripakala</i> | \sim | <i>eripakal-y-a</i> | (to become sour \sim to make sour) |
| b. | <i>erflelemba</i> | \sim | <i>erflelemb-y-a</i> | (to hang [intr.] \sim to hang [trans.]) |
| c. | <i>eryêrâ</i> | \sim | <i>eryêr-y-â</i> | (to be clean \sim to clean) |

Descriptively, this sort of morpheme is often called a lexical causative – but there is little consensus about what the theoretical status of a lexical causative morpheme is. For some, the lexical causative is a verbalizer, which also θ -licenses the EA (see Harley 2013, 2017). For others, the lexical causative is just a Cause head which selects the root directly, and does not necessarily θ -license the EA (see Pytkänen 2008). A third option is to say that the Voice head proposed by Kratzer (1996) is always the head that θ -licenses the EA, and that the lexical causative is just an overt realization of Voice (see Alexiadou et al. 2015). In this section I show that the transitivizer in Kinande is none of these, but is instead the realization of a distinct head, which just θ -licenses the EA, and does not perform any of the other functions associated with *v*, Cause, or Voice.

2.1. THE TRANSITIVIZER IS NOT *v*. Harley (2013) argues convincingly that the projection which merges the EA (VoiceP) must be distinct from the projection which *semantically* introduces the the EA (which she takes to be the *v*P). She does this by showing that in Hiaki the head which introduces transitive semantics is hierarchically lower than the applicative head, but the EA merges in a position higher than the applied argument, as evidenced by the fact that it is the EA that moves to Spec-TP. Harley suggests that the head which semantically introduces the EA is *v*, as the morpheme which introduces transitive semantics to a verb is in complementary distribution with the morpheme which derives the corresponding inchoative verb in Hiaki.

In Kinande, however, there are cases where the transitivizing morpheme *-y-* co-occurs with the overt verbalizer *-h-*, as (2) shows.

(2) Kinande

- | | | | | | |
|----|-------------------|--------|----------------------|--------|------------------------|
| a. | <i>-nene</i> | \sim | <i>erínené-h-a</i> | \sim | <i>erínene-h-y-â</i> |
| | big | \sim | to be(come) big | \sim | to make big |
| b. | <i>omú-kekulu</i> | \sim | <i>eríkekelú-h-a</i> | \sim | <i>eríkekelu-h-y-â</i> |
| | old woman | \sim | to become old | \sim | to render old |
| c. | <i>-bi</i> | \sim | <i>(eribé-h-a)</i> | \sim | <i>eríbi-h-y-â</i> |
| | bad | \sim | (To smell bad) | \sim | To do bad things |

Kinande is not the only language where the transitivizer and the verbalizer can overtly co-occur, as examples from Tiriyo (Cariban), and Tamil (Dravidian) show.

(3) a. Tiriyo (Meira 2000: 261,275)

- | | | | | |
|-------------|--------|---------------|--------|----------------------------------|
| <i>munu</i> | \sim | <i>mun-ta</i> | \sim | <i>mun-ta-nĩ(pi)¹</i> |
| blood | \sim | bleed | \sim | make bleed |

b. Tamil (Sundaresan & McFadden 2017: 156-157)

- | | | | | |
|----------------|--------|--------------------|--------|---------------------------------|
| <i>segappu</i> | \sim | <i>segapp-agg-</i> | \sim | <i>segapp-aakk⁻²</i> |
| red | \sim | red (intr) | \sim | red (tr) |

The fact that the morpheme which θ -licenses the EA can co-occur with a verbalizing morpheme would thus suggest that the θ -licensing morpheme is not the verbalizer *v*.

2.2. THE TRANSITIVIZER IS NOT CAUSE. Pylkkänen (2008) shows that languages differ in terms of where a Cause head can attach to the verbal spine. She proposes that the Cause can either select the root, *vP*, or VoiceP, and she offers a set of diagnostics for determining where the Cause head attaches in a given language. Here I focus on two of the diagnostics, which distinguish between a root-selecting Cause, and a Cause head which selects a bigger complement, namely a *vP* or a phase (VoiceP).³

The first diagnostic concerns adverbial modification: how many events are there in the CauseP which can be targeted by VP-modifiers? Pylkkänen argues that a Cause head introduces a new event (the causing event); if a cause head selects a *vP* or a VoiceP, there are two possible places for VP modifiers to attach: above CauseP (thus modifying the causing event) or below CauseP (thus modifying the caused event). By contrast, if the Cause head selects the root directly, VP modifiers will only be able to attach *above* the CauseP, and thus adverbial modification can only be interpreted as modifying the caused event.⁴ To illustrate the difference, consider the *productive* causative construction in Kinande: when an adverbial modifier is added, the result is that it can be interpreted as referring to either the causing event or the caused event.

- (4) *Omugalímu á-a-hándik-is-á-y-a* *omúlwaná yo omotutu musâ*
 c1.teacher SM1-TM-write-CAUS-TM-TR-fv c1.boy LK1 morning only
 1: ✓ Only in the morning did the teacher make the boy write (modifies causing event)
 2: ✓ The teacher made [the boy write in the morning only] (modifies caused event)

In the first reading in (4), the phrase ‘*only in the morning*’ attaches above CauseP, and therefore modifies the causing event – that is, only the causing event has to be interpreted as happening ‘only in the morning’ - this sentence would still be felicitous if the boy also wrote in the afternoon (it would simply be the case that the teacher was not responsible for him writing in the afternoon). But there is also a second reading, in which ‘*only in the morning*’ attaches below CauseP and modifies only the *caused* event – this second reading is compatible with a scenario in which the boy was writing all morning, and a teacher comes along and prevents him from writing in the afternoon. Thus the *productive* causative construction in Kinande has two possible attachment sites for VP modifiers, making it possible for either the caused or

² In the Tiriyó example, the *-ni(pi)* morpheme is not a causative morpheme; Meira (2000) shows that it is a common transitivizer, and he notes that it can generally co-occur with the causative morpheme.

² Sundaresan & McFadden (2017) show that the Tamil morpheme *-aakk-* is not just a ‘transitive verbalizer’ – it decomposes into the verbalizer *-agg-* and a null C which triggers gemination, devoicing and other regular phonological processes. This can be seen from the fact that these same phonological processes occur to other morphemes when the verbalizer is not overt and there is a transitivizer: for example, this process can also target the final consonant of the root of a transitivized verb, or, if the final consonant of the root is not eligible for gemination, it will target the tense morpheme adjacent to the root.

³ In §3 I address the diagnostics which distinguish between a *vP*-selecting Cause and a VoiceP-selecting Cause.

⁴ Pylkkänen (2008) notes that certain kinds of modification, such as *again*, *partway* and *mostly* can directly modify the root - but this is a special class of modifiers which she calls ‘root modifiers’, which can also modify non-verbal elements (e.g.: ‘*the mostly full glass*’). This diagnostic sets aside root-modification, and focuses only on *adverbial* modification, which is sensitive to the verbal nature of word/phrase it modifies. In this section we will only look at non-agent-oriented adverbial modification – more will be said about agent-oriented adverbial modification in §3.

causing event be targeted by adverbial modification. Therefore, according to this diagnostic, the Kinande’s productive Cause head selects either a *vP* or a VoiceP.

In stark contrast to the productive causative, the *lexical* causative (a transitivized verb) in Kinande only has one attachment site for VP modifiers, so a phrase like ‘*only in the morning*’ cannot modify an event which the “causer” argument is not a participant of (5).

- (5) *Kámbale á-a-hitan-a-y-a Maryá yo omotututu musâ*
 c1.Kambale SM1-TM-be.annoyed-TM-TR-fv c1.Marya LK1 morning only
 1: ✓ Only in the morning did Kambale annoy Marya
 2: #Kambale caused [Marya to be annoyed in the morning only]

In (5) there is one only event which can be target by the adverbial modification, and it is one which Kambale and Marya are both participants of. Unlike in (4), ‘*only in the morning*’ cannot modify the ‘caused event’ (Marya being annoyed) to the exclusion of the ‘causing event’ (Kambale causing something) – thus (5) is *not* compatible with a scenario in which Marya is annoyed in the morning, and Kambale comes along and prevents her from being annoyed in the afternoon. This would suggest that if the transitivizer is a Cause head, it must be a root-selecting Cause head.

This brings us to Pylkkänen’s second diagnostic: if a Cause head selects a root directly, no category defining morphology should be able to intervene between the root and the causative morpheme. By contrast, if a Cause head selects a *vP* or a VoiceP, category defining morphology should, in principle, be able to intervene between the root and Cause. What this means is that if Kinande transitivizer is indeed a root-selecting Cause head (as the previous diagnostic would suggest), a verbalizer should *not* be able to intervene between the root and the transitivizer. However, this prediction is shown to be false, as (2) above, repeated here as (6) shows – a root-*v*-TR sequence is entirely possible.

- (6) a. *eryêrâ* ~ *eryêr-y-â* ~ *eryêr-i-bwâ* ~ **eryêr-w-â*
 clean ~ clean-TR ~ clean-TR-PASS ~ clean-PASS
 be clean ~ clean [sth.] ~ be cleaned ~ be cleaned
 b. *eritsinga* ~ *erĩtsĩng-y-a* ~ *erĩtsĩng-i-bw-a* ~ **erĩtsĩng-w-a*
 shake ~ shake-TR ~ shake-TR-PASS ~ shake-PASS
 shake (intr) ~ shake [sth] ~ be shaken ~ be shaken

Thus we know that transitivizing head selects a verbal complement (i.e. the complement includes *v*), but does not introduce a second event – these two facts together suggest that the Kinande transitivizer is not the Cause head proposed by Pylkkänen (2008), which (she argues) always introduces an event.

2.3. THE TRANSITIVIZER IS NOT VOICE. Kratzer (1996) argued that for all verbs with an external argument, the external argument is semantically introduced by a distinct head, Voice, rather than by the verb. She argues that this Voice head is directly above the verb. The fact that the transitivizer appears above *vP* and θ -licenses the EA, but does not introduce an event, makes it sound very much like this Voice head proposed by Kratzer. Indeed, it makes a lot of sense to say that the same head which θ -licenses the EA in unaccusative-transitive alternations is the same as the head which introduces the EA in other verbs, and this is in fact something I will assume. However, there are several different functions typically associated with VoiceP: 1) θ -licensing the EA, 2) merging the EA or existentially binding the EA vari-

able, and 3) introducing a phase head. I argue that it is necessary to bifurcate VoiceP into two distinct phrases: a Licensing Phrase (LP) which θ -licenses the EA, and VoiceP, which a) either merges the EA (thus saturating the EA variable introduced in LP) or existentially binds the EA variable, and b) introduces a phase boundary. This essentially amounts to 3 claims:

- (7) 1. EA's θ -licensing projection \neq projection where EA variable is \exists -bound in passives.
 2. EA's θ -licensing projection \neq the projection in which the EA merges.
 3. The head which θ -licenses the EA \neq the phase head.

In this section I discuss evidence for claims 1 and 2, specifically related to the transitivizer, and in §3 I discuss evidence for claim 3 (related to transitive verbs in general), which incidentally introduces further evidence for claim 2.

The first point to address is the claim that the EA θ -licensor must be in a distinct projection from the passive Voice Head (which existentially binds the EA variable). While Kratzer (1996) never explicitly addresses the status of the Passive Voice head, some have taken it to be a counterpart of the Active Voice Head, suggesting that it also introduces agent semantics (by introducing an EA variable with a θ -role, and either existentially binding the variable, or saturating it with a null DP – see, for example, Baker & Vinokurova 2009). There are two pieces of evidence which refute this approach: firstly, the transitivizer can co-occur with the passive morpheme (*-w-*, realized as *-bw-* after the transitivizer), as shown in (8). If both the transitivizer and the passive morpheme are realizations of Voice, we wouldn't expect them to co-occur. Secondly, if the passive head is able to simultaneously introduce and existentially bind an EA variable (or saturate it with a null DP), we'd expect that the passive head would be able to directly select an unaccusative stem, and in so doing simultaneously transitivize and passivize an unaccusative verb – but this is not possible, as the last column of (8a,b) shows.

- (8) a. *eryêrâ* \sim *eryêr-y-â* \sim *eryêr-i-bwâ* \sim **eryêr-w-â*
 clean \sim clean-TR \sim clean-TR-PASS \sim clean-PASS
 be clean \sim clean [sth.] \sim be cleaned \sim be cleaned
 b. *eritsinga* \sim *erĩtsĩng-y-a* \sim *erĩtsĩng-i-bw-a* \sim **erĩtsĩng-w-a*
 shake \sim shake-TR \sim shake-TR-PASS \sim shake-PASS
 shake (intr) \sim shake [sth] \sim be shaken \sim be shaken

It is a simple matter to concede that the head which θ -licenses the EA must be distinct from the Passive Voice head, but it can and has been argued that this is because Active VoiceP and Passive VoiceP are two distinct projections, rather than just 'flavors' of Voice. Alexiadou et al. (2015), for example, argue that transitivizing morphemes are realizations of Active Voice, and that that in languages like English and German, Passive Voice is a distinct head which selects a 'defective' Active VoiceP – a VoiceP which introduces an EA variable, but lacks a specifier, and so lacks an EA. This then would account for the fact that the transitivizing and passive morphology can co-occur in Kinande (as well as many other languages).

While I agree with the argument that the Passive Voice head selects a projection headed by the EA θ -licensor, I argue that this projection is *not* VoiceP. To see why this is, let us consider claim 2 in (7) above. The EA is typically assumed to merge in Spec-VoiceP, and this is an assumption that Alexiadou et al. adhere to: for them, the projection where the EA merges is Active VoiceP, which is headed by the EA θ -licensor. However, this misses the important insight offered by Harley (2013), mentioned in §2.1: the EA must merge in a different pro-

jection from the one in which it was θ -licensed. Assuming the mirror principle (Baker 1985), the word/morpheme order in (9) reveals that the applicative head is hierarchically higher than the transitivizer in Hiaki – and yet in active sentences, the agent argument which is θ -licensed by the transitivizer (i.e. the EA) is the one which moves to subject position, rather than argument introduced by the applicative head (the beneficiary). This runs counter to what one would expect if the beneficiary DP was merged higher than the EA. Note that there's no inherent incompatibility between the beneficiary argument and Spec-TP, as the beneficiary can move to subject position if the agent is missing, as in passives (9b). This then suggests that the EA must be merged hierarchically higher than the applied object.

- (9) a. **Active transitivized verb + Applicative:**
 [Agent.NOM [Beneficiary-ACC [[Theme-ACC verb]-TR]-APPL]]
 b. **Passive transitivized verb + Applicative:**
 [Beneficiary.NOM [[[Theme-ACC verb]-TR]-APPL]-PASS]]

Harley points out this paradox of hierarchical ordering goes away if one assumes that the projection which merges the EA (VoiceP) is distinct from (and higher than) the projection in which the EA is θ -licensed (claim 2), and that ApplP can intervene between the two projections. This claim that the projection which merges the EA is distinct from the projection in which the EA is θ -licensed is also the crux of my argument here, but I diverge from Harley in arguing that the EA's θ -licenser is not v (see §2.1), but rather a dedicated θ -licensing head, L.

I now turn to showing that some of the properties typically attributed to Voice – namely phasehood and having the EA merge in its specifier – do not hold of the head which θ -licenses the EA in underived transitive verbs. Thus even in the case of underived transitive verbs, the distinction between Voice and L can be observed.

3. The θ -licensing head in underived transitive verbs is not Voice. Evidence that the EA's θ -licensing head in underived transitive verbs comes from causativized transitive verbs in Kinande. I start by showing that according to Pytkänen's (2008) typology of causatives, Kinande's productive causative constructions would appear to involve a phase-selecting Cause head (i.e. a VoiceP-selecting Cause). However, I argue that the diagnostics proposed Pytkänen are only sensitive to whether an EA/'EA-like' argument has been θ -licensed, and show that in Kinande although the complement of Cause can include agentive semantics (i.e. the EA of the caused event is θ -licensed), there is no Voice head (active or passive) or phase boundary below the Cause head. This would then suggest that the EA's θ -licenser is not Voice.

As shown in in §2.2, Kinande's productive causative construction allows for VP modification of both the caused and causing events, which, according to Pytkänen's (2008) typology, suggests that the Cause head must select either a v P or a phase (VoiceP). To distinguish between a v P-selecting Cause and a VoiceP-selecting Cause, Pytkänen (2008) proposes two diagnostics. The first asks whether morphology which introduces an EA or "EA-like" argument (such as the applied argument of a high-applicative) can intervene between the root and the Cause head - if it can, then Cause selects VoiceP; if it can't, then Cause selects v P. In Kinande the high applicative morpheme *can* intervene between the root and Cause (10). The second diagnostic relates to *agent-oriented* adverbial modification: if agent-oriented modification can target the caused event, the caused event must have the agent of that event θ -licensed below Cause (i.e. Cause must select VoiceP); if agent-oriented modification can only target the agent

of the causing event, then Cause must select vP. Agent-oriented modification can target both the caused and causing event in Kinande (11). Thus, according to these diagnostics, the Kinande Cause head selects a VoiceP complement.

- (10) *á-a-tu-ir-is-a-i-a* *Kanzirá y' ekíseke omo-ririma*
 SM1-TM-cut-APPL-CAUS-ASP-TR-fv Kanzira LK1 cane c18-field
 ‘She made someone cut sugarcane for Kanzira in the field.’
- (11) *omu-lwana a-a-lir-ir-is-a-i-a* *omu-ana*
 c1-boy SM1-TM-cry-PURP-CAUS-ASP-TRANS-fv c1-child
 ✓ ‘The boy **purposefully caused** the child to cry’
 ✓ ‘The boy caused to child to **purposefully cry**.’

The problem is these diagnostics only test whether or not the EA (or an EA-like argument) is θ -licensed below the Cause head – below I show that when diagnostics which specifically target properties of Voice/phasehood are applied, Kinande causative constructions systematically behave as if there is no Voice head/phase boundary in the complement of Cause. This contrasts starkly with Japanese causative constructions, which do embed VoiceP (Harley 2017). I thus argue that Kinande Causatives embed the θ -licensing Phrase (LP), as the EA is θ -licensed below Cause, but VoiceP appears to be absent. The diagnostics I propose for distinguishing between an LP-selecting Cause and a VoiceP-selecting Cause are given in (12). In general these diagnostics distinguish between a VoiceP complement and any smaller complement – they only distinguish between a VoiceP and LP complement in particular when applied to cases where the caused event can be modified by agent-oriented adverbial modification.

- (12) Diagnostics for complement of Cause: LP vs VoiceP

	LP	VoiceP
Can Cause embed passive?	No	Yes
Can Cause embed non-passivizable idioms?	No	Yes
Can causer bind DO pronoun?	No	Yes
Can theme passivize over causee?	Yes	No

The first diagnostic asks whether the Cause head can embed a passivized verb. This directly tests whether or not the complement of Cause includes a Voice head. In Kinande, Cause *cannot* embed a passivized verb (13a), whereas Japanese can (13b).⁵ This then suggests that the Cause head does not embed VoiceP in Kinande.

Can Cause embed a passivized verb?

- (13) **Omu-galímu á-a-hándik-u-is-á-i-a* *bharúha*
 c1-teacher sm.c1-tm-write-pass-caus-asp-tr-fv letter
 Int.: ‘The teacher caused the letter to be written’ **Kinande: No**
- (14) *Mary-wa Taroo-o Ziroo-ni home-rare-sase-ta*
 Mary-top Taroo-acc Ziroo-dat praise-pass-caus-pst
 ‘Mary made Taroo be praised by Ziroo’ (Baker 1988: 415) **Japanese: Yes**

⁵ Note that (14) does need some contextual support to make it sound natural, but the same is true of English; for example, (14) works with a context in which Mary makes Taroo be the center of attention and listen to people praising him; it’s less felicitous if Taroo is not present, and Mary is simply telling Ziroo to praise Taroo to her.

Two potential objections should be addressed before moving on to the next diagnostic. First, one might wonder whether the ungrammaticality of (13) is due to morpheme ordering restrictions – for example, the ‘CARP’ template (Causative-Applicative-Reciprocal-Passive) is pervasive across Bantu languages. However, this does not fully account for the Kinande facts: For one thing, Kinande displays some flexibility in morpheme order for the CAR part of the template (for example, see (10), where the applicative morpheme precedes the causative morpheme). A second reason to doubt that mere morpheme ordering restrictions are the source of (13)’s ungrammaticality is this: across Bantu languages, even when the relative order of a particular pair of suffixes strictly adheres to the CARP template order, the lower head can typically still semantically scope over the higher one (see Hyman 2003). In Kinande however, this is not true of the causative and passive suffixes – even if the morphemes are rearranged to fit the template, the desired reading is not available (15).

- (15) *Omu-galímu á-a-hándik-is-i-b-á-w-a* *ebharúha*
 c1-teacher SM.C1-TM-write-CAUS-TR-b-ASP-PASS-fv letter
 Intended reading: #‘the teacher caused the letter to be written’
 Actual reading: ‘the teacher was made to write the letter’

Another potential objection is that if Active and Passive Voice are in fact two distinct projections, as per Collins (2005) and Alexiadou et al. (2015), then this first diagnostic only shows that the Kinande Cause head cannot embed *Passive* Voice. However, the next diagnostic shows that the Kinande Cause head cannot embed Active Voice either.

The second diagnostic pertains to nonpassivizable idioms. Idioms which cannot be passivized include Active Voice as part of their structural representation (Folli & Harley 2007,⁶ Punske & Stone 2014).⁷ Thus, if Cause can embed nonpassivizable idioms, it would suggest that Cause selects a VoiceP. By contrast, if the Cause head selects a complement smaller than VoiceP, then we expect it to be unable to embed a nonpassivizable idiom. In Kinande the nonpassivizable idiom ‘*to turn one’s tongue like a cow’s tail*’ (‘to eat too much’) cannot be causativized (16). By contrast, in Japanese, nonpassivizable idioms such as ‘*to kill one’s breath*’ (‘to try to avoid notice’) can be causativized (17).

Can Cause embed non-passivizable idioms?

- (16) *Mama a-ma-tu-hung-is-i-a olú-limí lo nga kiyóna*
 c1.mother sm1-tm-1pl.om-turn-caus-tr-fv c11-tongue lk11 like hairy.cow.tail
 ‘Mother is making us turn our tongues like the cow’s hairy tail’
 # ‘Mother is making us eat too much’ **Kinande: No**
- (17) *Hanako-ga Taroo-ni iki-o koros-ase-ta*
 Hanako-nom Taroo-dat breath-acc kill-caus-pst
 ✓ ‘Hanako made Taroo try to avoid notice’ **Japanese: Yes**

⁶ Folli & Harley (2007) did not distinguish between Voice and *v*, so they framed this generalization in terms of *v* rather than Voice, but treat *v* as having various ‘flavors’, including passive.

⁷ Note that this suggests that Active and Passive VoiceP must be the same projection; if a passive projection can always select an active projection, then it is unclear how the structural representation of nonpassivizable idioms would preclude them being passivized. By contrast, if active and passive are both heads of the same projection, Active Voice being part of the structural representation of certain idioms naturally accounts for the inability of these idioms to undergo passivization.

The third diagnostic, taken from Harley (2017), asks whether the Causer can bind a pronominal direct object. This tests whether or not the Causer and the direct object originate inside the same phase. If Cause embeds VoiceP (a phase), then a phase boundary intervenes between the Causer and the pronominal direct object, and so we'd expect co-reference between the two to be acceptable – and in fact, this is precisely what we do see in Japanese (19). If, however, Cause embeds something smaller than a phase, then the Causer and pronominal direct object are in the same phase, and we'd expect a Principle B violation. In Kinande causative constructions we get this principle B violation (18a), which suggests that even though the complement of Cause includes agentive semantics (as shown above), it does not include a phase boundary. Thus the head responsible for introducing the agentive semantics cannot be a phase head.

Can the Causer bind a pronominal direct object?⁸

- (18) *Kámbale a-a-mu-hum-is-a-i-a Mukosa*
 c1.Kambale SM1-TM-OM1-hit-CAUS-TM-TR-fv Mukosa
 'Kambale_i made Mukosa_j hit him_{*i/*j/k}' **Kinande: No**
- (19) *Toru-wa [Kitahara-ni kare-o syookai s]-ase-ta*
 Toru-top Kithahara-dat he-acc introduction do-caus-pst
 'Toru_i made Kitahara_j introduce him_{i/*j}' (Harley 2017:19) **Japanese: Yes**

The final diagnostic concerns passives of causatives: can the theme raise to subject position over the causee? If Cause embeds VoiceP, then we expect that the Causee is in the phase edge, Spec-VoiceP, and it should block movement of the theme through the phase edge; if, however, Cause does not embed VoiceP, we expect the causee does *not* occupy a phase edge, and it should therefore not block movement of the theme through the phase edge. Importantly, this diagnostic is only relevant if the language in question has *symmetric* double object constructions (DOCs), allowing both direct and indirect objects to raise to Spec-TP in passives. Both Kinande and Japanese have symmetric DOCs, as (20) and (21) show.

- (20) Kinande passives of DOCs⁹
- a. *omu-kali a-a-ha-b-a-w-a ama-tunda*
 c1-woman SM.C1-TM-give-b-TM-PASS-fv c6-fruit
 'The woman was given fruits' **goal passive**
- b. *ama-tunda a-a-ha-b-a-w-a omu-kali*
 c6-fruit SM.C6-TM-give-b-TM-PASS-fv c1-woman
 'Fruits were given to the woman' **theme passive**

⁸ In the Kinande example the pronoun is represented by the 'object marker' (glossed as OM1); Bantu languages differ according to whether OMs are more like pronominal clitics or more like agreement markers (see Zeller 2012). One of the most common diagnostics to test the theoretical status of OMs in a given language relates to whether or not the OM can co-occur with co-referential DP in object position; if it can, the OM is more like an agreement morpheme, but if it cannot, it is more like a pronominal clitic. In Kinande the OM *cannot* co-occur with a co-referential DP in object position. In the Japanese example, *kare* is a pronoun, and in normal ditransitive sentences it cannot be co-referential with the subject DP.

i. *Toru-wa Kitahara-ni kare-o syookai si-ta*
 Toru-top Kithahara-dat he-acc introduction do-pst
 'Toru_i introduce him_{*i/*j}' to Kitahara_j (Harley 2017; 18)

(21) Japanese passives of DOCs

- a. *Hanako-wa Taroo-niyotte medaru-o watas-are-ta*
 Hanako-TOP Taroo-by medal-ACC give-PASS-PST
 Hanako was given a medal by Taroo goal passive
- b. *Medaru-wa Taroo-niyotte Hanako-ni watas-are-ta*
 medal-TOP Taroo-by Hanako-DAT give-PASS-PST
 A medal was given to Hanako by Taroo Theme passive

In Kinande this symmetry is maintained in passives of causatives – in particular, theme *can* raise past the causee to become the subject of a passive (22). Strikingly, however, this symmetry is *not* maintained in Japanese passives of causatives, as the theme cannot raise past the causee (23).¹⁰

Can the theme passivize over the causee?

- (22) *Olu-kwi lu-a-seny-is-i-b-a-w-a Kambale*
 c11-wood sm11-tm-chop-caus-tr-b-tm-pass-fv Kambale
 ‘Wood was made to be chopped by Kambale’ (Kambale=causee) **Kinande: Yes**
- (23) **sono hon-wa Taroo-niyotte Hanako-ni kaw-asase-rare-ta*
 that book-top Taroo-by Hanako-dat buy-caus-pass-pst
 Int.: ‘That book was by Taroo made to be bought by Hanako’ **Japanese: No**

The fact that in Japanese the theme cannot raise past the causee in passives of causatives, even though it can raise past the goal in passives of double object constructions, suggests that the causee and goal must occupy different positions. In particular, I suggest that the causee is in Spec-VoiceP, and so it blocks the escape hatch from the Voice phase. By contrast, in Kinande, the cause head does not embed VoiceP, so causee is not in the phase edge (I tentatively suggest that it is in Spec-CauseP, although nothing hinges on this), and thus it does not block the escape hatch for the theme.

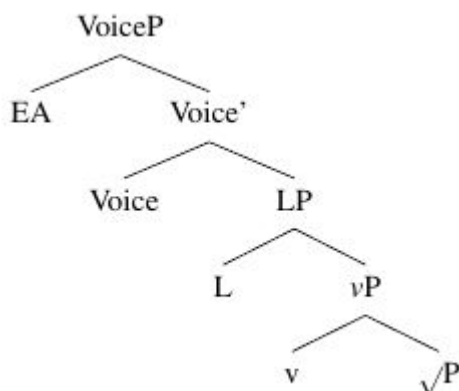
Thus although the Kinande cause head selects a complement which includes agentive semantics (as evidenced by the fact that the causee can be targeted by agent oriented adverbial modification), it does not appear to embed Active Voice (as evidenced by its inability to embed nonpassivizable idioms), Passive Voice (as evidenced by its inability to embed a passivized verb), or a phase (as evidenced by the facts that 1. the causer and theme are in the same binding domain, and 2. the theme can raise to the subject position, suggesting that the causee does not block the phase edge). These four pieces of evidence therefore suggest that the head which θ -licenses the EA must be distinct from Voice.

This suggests that verbs have a tripartite structure above the root: ν P (when categorization happens), LP (where the EA is θ -licensed), and VoiceP (where the EA merges, and the phase head is introduced). This structure is shown in (24).

⁹ My thanks to Mark Baker for giving me access to his Kinande field notes, from which (20) and (22) are drawn.

¹⁰ In both languages, the causee can raise to the subject position in passives.

(24)



It would be reasonable at this point to ask ‘*Well, even if Voice and the θ -licensor are distinct, can’t the EA merge in Spec-LP, and move up to Spec-VoiceP? Why should we assume that it merges in a separate projection from the one in which it is θ -licensed?*’ There are two pieces of evidence which motivate the structure in (24). The first is Harley’s (2013) insight that in Hiaki the EA is θ -licensed *below* the applicative head, but merges *above* it (see discussion of (9), above) – this clearly suggests that EA does not merge in the specifier of the head which θ -licenses it. The second piece of evidence comes from (23): recall that in Japanese passives, a theme can raise to subject position over a goal, but not over a causee (the EA of the caused event). This asymmetry would be puzzling if the Causee DP merged *below* the phase head – why can the theme pass over goal but not a EA in (presumably) Spec-LP? This puzzle disappears if you assume that the EA merges in Spec-VoiceP (the edge of the phase), rather than Spec-LP. The Japanese-internal asymmetry between passives of double object constructions and passives of causatives is resolved: the theme cannot pass over the the causee into Spec-Voice, because the causee merged directly in Spec-VoiceP.

4. Conclusion. I have shown that the transitivizer in Kinande is not a *v*, Cause or Voice head; it is a distinct head, L, which just θ -licenses the external argument, but it does not have the EA merge in its specifier. I then argued that this L head is also responsible for θ -licensing the EA in underived transitive verbs, by showing that in causativized transitive verbs in Kinande, the EA is θ -licensed below the Cause head, despite the apparent absence of Voice in Cause’s complement. I therefore argue that Voice does not θ -license the EA, but that the EA nonetheless merges in Spec-VoiceP.

References

- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2015. *External arguments in transitivity alternations: A layering approach*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199571949.001.0001>.
- Baker, Mark. 1985. The mirror principle and morphosyntactic explanation. *Linguistic inquiry* 16(3). 373–415. <http://www.jstor.org/stable/4178442>.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark C & Nadya Vinokurova. 2009. On agent nominalizations and why they are not like event nominalizations. *Language* 85(3). 517–556. <https://doi.org/10.1353/lan.0.0144>.

- Collins, Chris. 2005. A smuggling approach to the passive in English. *Syntax* 8(2). 81–120. <https://doi.org/10.1111/j.1467-9612.2005.00076.x>.
- Folli, Raffaella & Heidi Harley. 2007. Causation, obligation, and argument structure: On the nature of little *v*. *Linguistic Inquiry* 38(2). 197–238. <https://doi.org/10.1162/ling.2007.38.2.197>.
- Harley, Heidi. 2013. External arguments and the mirror principle: On the distinctness of Voice and *v*. *Lingua* 125. 34–57. <https://doi.org/10.1016/j.lingua.2012.09.010>.
- Harley, Heidi. 2017. The ‘bundling’ hypothesis and the disparate functions of little *v*. In Roberta D’Alessandro, Irene Franco & Ángel J. Gallego (eds.), *The verbal domain*, 3–28. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198767886.003.0001>.
- Hyman, Larry M. 2003. Suffix ordering in Bantu: A morphocentric approach. In Geert Booij & Jaap van Marle (eds.), *Yearbook of morphology 2002*, 245–281. Dordrecht: Springer.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Springer. https://doi.org/10.1007/978-94-015-8617-7_5.
- Marantz, Alec. 1997. No escape from syntax: Don’t try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics* 4(2). 14. <https://repository.upenn.edu/pwpl/vol4/iss2/14/>.
- Meira, S. 2000. *A grammar of Tiriyo (Brazil, Suriname)*. Houston, TX: Rice University dissertation. <https://www.proquest.com/docview/304521863>.
- Punske, Jeffrey & Megan Stone. 2014. Idiomatic expressions, passivization, and gerundization, Linguistics Society of America 2014 Annual Meeting, Minneapolis, MN.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: MIT press. <https://doi.org/10.7551/mitpress/9780262162548.001.0001>.
- Sundaresan, Sandhya & Thomas McFadden. 2017. The articulated *v* layer: Evidence from Tamil. In Roberta D’Alessandro, Irene Franco & Ángel J. Gallego (eds.), *The verbal domain*, 153–178. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198767886.003.0007>.
- Zeller, Jochen. 2012. Object marking in isiZulu. *Southern African Linguistics and Applied Language Studies* 30(2). 219–235. <https://doi.org/10.2989/16073614.2012.737600>.