Slouching towards deponency:
A family of mismatches in the Bantu verb stem

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1. INTRODUCTION. Most Bantu languages have a set of highly productive verbal derivational suffixes which alter the argument structure and semantics of basic verb roots.[1] One example of such a suffix is the Causative, which gives a verb stem causative semantics and allows it to take an extra causer argument. A prototypical instance of the use of the Causative, drawn from Chichewa (Baker 1988:10), is given in 1.[2,3]

(1) a. *Mtsuko u-na-gw-a.*
3.waterpot 3-PST-fall-FV
"The waterpot fell."

b. *Mtsikana a-na-gw-**ets**-a mtsuko.*
1.girl 3SG-PST-fall-**CAUS**-FV 3.waterpot
"The girl made the waterpot fall."

The verb root in sentence 1a, *-gw-* 'fall', is not followed by any derivational suffixes and, thus, retains it basic valency and semantics. In 1b the Causative suffix *-ets-* appears after *-gw-*, giving causative semantics to the verb and shifting its valency from intransitive to transitive.

This paper will discuss some morphological idiosyncrasies involving the four Bantu verbal suffixes listed in table 1. The forms of the suffixes given in the table follow the Proto-Bantu reconstructions of Meeussen (1967:92). The symbol *į* seen in the reconstruction of the Transitive suffix represents the highest front vowel in a symmetric seven-vowel system.

PROTO-BANTU	FUNCTION	LABEL
*-ic-	causativization	Causative
*-id-	applicativization	Applicative
*-į-	causativization	Transitive
*-u-	passivization	Passive

Table 1: Reconstructed Bantu verbal suffixes

Following a convention seen in table 1, throughout the paper, I will use lower-case terms like *passivization* and *applicativization* to refer to abstract morphological processes which can apply to basic verb roots to create derived verb stems showing the syntax and semantics associated

[1] This paper owes an enormous debt to Larry Hyman, whose work on the morphophonology of the Bantu verb stem was a prerequisite to identifying the cases of deponency discussed here. Johanna Nichols should also be acknowledged for pointing out to me several years ago that "pseudo-" verb stems in Bantu could be given the label "deponent". Discussions with Matthew Baerman and comments from attendees of the Conference on Deponency and Morphological Mismatches also contributed to this paper.

[2] As seen in 1, surface forms of verbs in Bantu languages typically end in an inflectional Final Vowel, glossed FV, which is not classified here as part of the verb stem. Most surface forms also appear with a number of verbal prefixes. These will not factor into the discussion here in any crucial way.

[3] A list of glossing abbreviations is found at the the end of this paper. Where possible, glossing conventions follow the Leipzig Glossing Rules with one exception: TRANS is used for the suffix labeled Transitive instead of TR since the term is used in a specialized sense for a suffix associated with causativization. In full-sentence examples like those given in 1, bare numerals, like '1' or '3', in the glosses refer to noun classes. Numerals followed by an 's' or a 'p' refer to singular and plural persons, following rule 5A of the Leipzig Glossing Rules.

with those terms. The capitalized terms Causative, Applicative, Transitive, and Passive, by contrast, will be used to refer to the specific Proto-Bantu morphemes given in table 1 or to the reflexes of those morphemes in the Bantu daughter languages.[4] Since the functions of the Causative and the Transitive largely overlap and the two morphemes can interact in intricate ways to mark a single stem as causativized, as will be briefly discussed in §2.2, a single abstract term, *causativization*, will be used for the syntax and semantics that they encode. Thus, for example, the *Transitive* will often be described as *causativizing* a given verb.[5]

A prototypical use of the Causative suffix was given in 1. As just mentioned, the Transitive suffix typically has a function similar to the Causative, and an example of its use will be seen below in 3. The prototypical function of the Passive is as a straightforward passivizing morpheme: the logical object of a verb marked with the Passive is promoted to subject and the logical subject is either unexpressed or expressed as an oblique argument (typically as an instrumental prepositional phrase). Following Peterson (1999:120), the Applicative can generally be characterized as making "intransitive verbs transitive and transitive verbs 'supertransitive' in that they [will have] two direct objects." (Importantly, the Applicative makes intransitive verbs transitive by letting them take an object—not by adding a subject argument, as seen for causativization in 1b.) A prototypical example of the use of the Applicative, again from Chichewa, taken from Alsina and Mchombo (1993:18), is given in 2.

(2) a. *Chitsîru chi-na-gúl-á mphátso.*
7.fool 7-PST-buy-FV 9.gift
"The fool bought a gift."

b. *Chitsîru chi-na-gúl-**ír**-á atsíkána mphátso.*
7.fool 7-PST-buy-**APPL**-FV 2.girl 9.gift
"The fool bought the girls a gift."

In 2b the presence of the Applicative allows the verb *-gúl-* 'buy' to take an unmarked benefactive object (*atsíkána* '2.girl'), in addition to an unmarked theme (*mphátso* '9.gift'). When the Applicative is not present on that verb, as in 2a, only one unmarked object (a theme) is permitted. (A marked benefactive object, introduced by the preposition *kwa* 'for', would be permitted in a sentence like the one in 2a.)

In descriptions of Bantu languages one can find the use of labels like *pseudo-passive* or *pseudo-causative* to describe verb stems which look as if they are marked with one of the verbal suffixes given in table 1 but which are not clearly associated with corresponding "bare" roots. The data in 3 from Kinande (Hyman 1993:12–13) give an example of such a stem, *-song-ị-* 'gather', which is classified as a pseudo-causative since it is marked with an instance of the Transitive. This stem is contrasted with the regular verb root *-tsap-* 'wet'.

[4] The attested forms of these suffixes vary from language to language, of course, and they will sometimes bear rather opaque relationships to the Proto-Bantu forms, as will become clear over the course of the paper.

[5] The use of the term Transitive for the reconstructed Proto-Bantu morpheme *-ị- was introduced in Good (2005) to avoid terminological confusion where both *-ị- and *-ic- were referred to as "causatives". In other work, these suffixes are sometimes distinguished through the use of modifiers like "short" and "long" or through similar devices.

(3)

STEM	GLOSS	TRANSLATION
-tsap-	'wet'	"get wet"
-tsap-ɟ-	'wet-TRANS'	"make wet"
-tsap-an-ɟ-	'wet-RECP-TRANS'	"wet each other"
**-song-*	—	NO MEANING
-song-ɟ-	'SONG-TRANS'	"gather (trans.)"
-song-an-ɟ-	'SONG-RECP-TRANS'	"gather each other"

The data in 3 show the regular verb root *-tsap-* 'wet' being causativized by the addition of the Transitive suffix and also reciprocalized with the Reciprocal suffix. The morphologically complex stem *-song-ɟ-* 'SONG-TRANS', if regular, would be similarly associated with a bare root *-song-*. However this root is never attested without the Transitive suffix and has no meaning on its own. Furthermore, as seen, the Reciprocal suffix can intervene between *song* and *ɟ* in this stem, clearly indicating that it is synchronically analyzable as consisting of two morphemes, a root followed by the Transitive. The stem *-song-ɟ-*, therefore, looks like it has been causativized with the Transitive even though it is evidently not derived from some more basic verb root, making it reasonable to assign it the label pseudo-causative.

Taken at face value, verb stems like *-song-ɟ-* would seem to be good candidates for the label *deponent*, since they apparently exhibit a form-function mismatch where their morphology signals they belong to a morphosyntactic class they are not "truly" members of. However, there are a number of analytical issues raised by "pseudo-" verb stems in Bantu which make finding unequivocal instances of deponency far from straightforward. For example, with respect to the data in 3, the fact that *-song-ɟ-* is transitive makes it amenable to a treatment where it is, in fact, understood to be causativized—as its morphology would suggest—and the lack of a bare root with form *-song-* evinces a simple morphological gap. Under such an analysis, there would be no actual mismatch between the morphology and the syntax. Rather, the transitive syntax of *-song-ɟ-* would be in line with the presence of morphology which elsewhere is known to derive transitives from intransitives (along the lines of what was seen 1b).

Despite such issues, however, it will be shown here that there do appear to be unequivocal cases of deponency in Bantu. It will be further shown that deponency is not an isolated phenomenon in the family but, rather, is just one exponent of a wider pattern of morphological irregularities. In §2 of this paper further background information on the Bantu verb stem will be given in order to make the rest of the discussion clearer. In §3 one of the simpler sorts of morphological irregularities found in the verb stem will be described: lexicalization of root+suffix combinations. In §4 a number of apparent morphological mismatches in the verb stem will be discussed, which, while not being cases of deponency, will help set the stage for understanding the data in §5, where various classes of deponent verb stems will be covered. Finally, §6 will offer a brief conclusion.

2. THE BANTU VERB STEM.

2.1. MORPHOSYNTACTIC STEMS AND MORPHOPHONOLOGICAL STEMS. The Bantu verb stem can be described with respect to both its morphosyntactic and its morphophonological properties. In general, these two sets of properties will coincide in a given morphological form. However, as we will see in following sections, under certain conditions they can diverge, leading to, in some cases, deponency.

Within the realm of Bantu morphosyntax, the stem is important as the domain in which verbal argument structure is determined. Specifically, as seen in examples like 1 and 2, verb roots in Bantu can be associated with a basic valency, and the addition of suffixes on the root creates

stems whose argument structure is predictable from an examination of the root+suffix combination. This morphosyntactic interaction between the verb root and its suffixes has received a fair amount of attention in work on theoretical syntax (see, for example, Baker (1988) or Alsina (1999)), underscoring the verb stem's importance as a morphosyntactic unit.

At the same time, the Bantu verb stem has long been considered to also be important with respect to morphophonology—specifically, it is the domain over which a number of important phonological phenomena are operative. A selection of these phenomena, drawn from Hyman (1993:25), is given in 4. (See also Downing (1999).)

(4) a. Vowel height harmony is observed in some Bantu languages within (but not outside of) the verb stem.

b. Vowel coalescence often applies differently within the verb stem than it does elsewhere.

c. All vowels between the initial vowel of the verb stem and the obligatory Final Vowel are underlyingly toneless.

In the following sections, we will see further, language-specific morphophonological properties of verb stems relevant to detecting instances of deponency in the family.

2.2. SOME FEATURES OF PROTO-BANTU VERBAL PHONOLOGY AND MORPHOLOGY. In addition to acknowledging that the Bantu verb stem can be conceptualized both as a morphosyntactic and as a morphophonological entity, it will also be important here to be aware of several other aspects of Proto-Bantu verbal phonology and morphology. Table 2 gives the reconstructed consonant inventory for Proto-Bantu, following Schadeberg (2003:146)). The columns in the table break down the consonants by four reconstructed places of articulation: labial, alveolar, palatal, and velar.[6]

PB CONSONANTS			
p	t	c	k
b	l/d	y/j	g
m	n	ny	
mp	nt	nc	nk
mb	nd	nj	ng

Table 2: Proto-Bantu consonant inventory

As indicated in table 2, fricatives are not generally reconstructed for Proto-Bantu (but see Schadeberg (2003:147) about the reconstructions of the palatal stops). Fricatives, however, are widely attested in the daughter languages, often as a result of historical palatalization effects, with a reconstructed "super-high" vowel *ɨ particularly prone to triggering palatalization. We will see below that this latter fact is important to understanding instances of deponency involving the Transitive, whose reconstructed form *-ɨ- consists solely of this vowel.

In fact, not infrequently, the *only* reflex of the Transitive in a given language is as palatalization on a consonant that it would have followed historically—that is, it has no segmental

[6] How to reconstruct the phonetic realization of the consonants *c and *j is not clear, especially with regards to whether they should be interpreted as palatal stops or palatal affricates—and it is even possible that they were not palatal at all (Hyman 2003a:42). In orthographic representations of the Bantu daughter languages, *c* and *j* are generally used to represent (alveo-)palatal affricates.

reflex at all.[7] This can be seen in, for example, the data in 5, taken from the Korekore dialect of Shona (Dembetembe 1987:58). The causativized forms of certain verbs in this language are derived via a palatalizing mutation of the root-final consonant, corresponding, historically, to palatalization triggered by a Transitive suffix immediately following the verb root.

(5)

ROOT	TRANSLATION	CAUS. STEM	TRANSLATION
-svik-	"arrive"	*-svi**ts**-*	"make arrive, help to arrive"
-rir-	"sound, ring"	*-ri**dz**-*	"cause to sound, ring"
-wand-	"be plentiful"	*-wan**z**-*	"increase"
-net-	"get tired"	*-ne**ts**-*	"cause trouble, be troublesome"
-yimb-	"rely on"	*-yi**nzv**-*	"cause to rely on"
-rep-	"be long"	*-re**dzv**-*	"make long, lengthen"

An additional complication regarding the Transitive is that, in many languages—perhaps reflecting an inheritance from Proto-Bantu (see Good (2005:14–15))—it obligatorily appears on any verb stem marked with the Causative suffix, in a complex morphemic combination with shape *-ic-i̧-. Other verbal suffixes, like the Applicative, can appear between these two suffixes, clearly indicating that the combination is bimorphemic.[8] In languages where the Transitive triggers palatalization, this can lead to complex patterns in surface verb forms where a consonant may be palatalized in one stem formed on a given verb root, but not on a morphologically related stem, depending on whether or not it is (or was historically) immediately followed by the Transitive. The data in 6 from Ciyao (Ngunga 2000:236) illustrate this. (The reconstructions in 6 are my own.)

(6)

STEM		PROTO-BANTU	GLOSS
-won-	<	*-bon-	'see'
-won-el-	<	*-bon-id-	'see-APPL'
-won-es-y-	<	*-bon-ic-i̧-	'see-CAUS-TRANS'
-won-ec-es-y-	<	*-bon-ic-id-i̧-	'see-CAUS-APPL-TRANS'

The data in 6 show that the general form of the Applicative in Ciyao ends in an *l*. However, in verbs like *-won-ec-es-y-* 'see-CAUS-APPL-TRANS', which is marked as causativized and applicativized, the Applicative ends in an *s*, consistent with a historical palatalization process, triggered by the Transitive, affecting the single consonant of the reconstructed Applicative form *-id-. Note also that, in this context, the final consonant of the Causative shifts from *s* to etymologically predicted *c*—a kind of depalatalization consistent with the fact that the Causative is not directly followed by the Transitive in this form, unlike in the basic causativized form *-won-es-y-* 'see-CAUS-TRANS'.

The palatalization processes triggered by the Transitive, as we shall see, are not always reflected in regular ways in the Bantu daughter languages. They are often reanalyzed as being morphologically conditioned, and, in more extreme cases, they can be analogically extended to forms where there would have been no palatalization historically. (See Hyman (2003b) for detailed discussion.) This sort of analogical extension appears to have played an important role in some of the cases of deponency to be discussed in §5.

[7] Throughout the paper, I will use the term palatalization to refer to the effects of the vowel *i̧* on preceding consonants. In a few cases, this will include non-prototypical uses of the term to refer to cases where a labial stop alternates with a labial fricative.

[8] See §4.1 for a discussion of principles determining how the verbal suffixes are ordered with respect to one another.

3. LEXICALIZATION OF SUFFIXES ON THE VERB STEM. Given their morphophonological integration with the verb root, it is not surprising to find that the verbal suffixes focused on here often become lexicalized in particular stems. The data in 7 from Luvale, adapted from (Horton 1949:87), provide a relevant example.

(7)

STEM	GLOSS	TRANSLATION
-lw-a-	'fight'	"fight"
-lw-il-	'fight-APPL'	"save"
-lw-il-is-	'fight-APPL-CAUS'	"cause to save"
-lw-ish-il-	'fight-CAUS-APPL'	"cause to fight for"

In Luvale, the productive order for the Causative (C) with respect to the Applicative (A) is CA. However, AC order becomes possible "when a derived form has largely lost its derivative significance (Horton 1949:87)". This can be seen in the verb stem *-lw-il-* 'fight-APPL', given in 7, where the Applicative has lexicalized with the verb root meaning 'fight' to take on the meaning "save". This lexicalization is associated both with the rise of a non-compositional meaning of the root+suffix combination and with a fusion of the combination which allows the morphotactic restriction against Applicative-Causative order to be violated in the form *-lw-il-is-* 'fight-APPL-CAUS', which has the meaning "cause to save". By contrast, the verb stem *-lw-ish-il-* 'fight-CAUS-APPL', which is based on the same root and instantiates the productive Causative-Applicative order, has a fully compositional meaning.

Importantly, lack of semantic compositionality of a root+suffix combination does not necessarily lead to morphological fusion of the sort seen in Luvale. This is illustrated by the Chichewa data in 8 (Hyman and Mchombo 1992:359).

(8)

STEM	GLOSS	TRANSLATION
-uk-	'wake_up'	"wake up"
-uk-ir-	'wake_up-APPL'	"rebel against"
**-uk-ir-its-*	'wake_up-APPL-CAUS'	
-uk-its-ir-	'wake_up-CAUS-APPL'	"cause to rebel against"

The root+suffix combination *-uk-ir-* 'wake_up-APPL' has become lexicalized with the meaning "rebel against" in Chichewa. Despite this, when the stem is causativized, the Causative suffix appears between the root and the Applicative suffix, following a morphotactic constraint found throughout Bantu—which is especially strong in Chichewa and was seen in a weaker form in Luvale just above—where the Causative typically must precede the Applicative, even in many cases where this would be unexpected on semantic grounds (see Hyman (2003c), Good (2005)). This issue will be taken up again in §4.1.

The sort of pattern just illustrated by the data in 8 is interesting in the present context since it points out one possible pathway to deponency-like phenomena in Bantu. If the plain root *-uk-* 'wake_up' were to drop out of Chichewa but *-uk-ir-* meaning "rebel against" were to remain in the lexicon as a bimorphemic entity, this form would superficially appear to be deponent in the sense that it would look like an applicativized verb but would not be associated with a corresponding non-Applicative root (much like the way in which the Kinande pseudo-causative in 3 lacks a corresponding non-Transitive root). It would, however, fall short of unequivocal deponency since a verb stem meaning "rebel against" would be transitive, allowing one to argue the Applicative suffix was still synchronically playing a role in determining the stem's overall valency.

Below, we shall see some cases of apparent deponency which may have followed a path like the one just outlined—with the crucial difference being that the semantics of the lexicalized root+suffix combination is not straightforwardly amenable to an analysis where the suffix is making any contribution, even an abstract one, to the stem's syntax and semantics.

4. MISMATCHES IN THE BANTU VERB STEM. In this section, I will discuss various kinds of "mismatches" found in Bantu which form part of a larger pattern wherein verb stems fall into different morphophonological classes closely associated with morphological types like Causative, Passive, etc. Three kinds of mismatches will be discussed in turn: templatic suffix ordering, long-distance effects of the Transitive suffix, and the appearance of meaningless formatives under special morphophonological conditions. Unlike the examples of deponency to be discussed in §5, most of the mismatches here involve what might be termed phonology-morphology mismatches, where the phonological exponence of a morpheme is more complicated than its segmental form simply being concatenated onto the verb root.

Even though these mismatches do not involve the syntactic properties of verb stems, we will see in §5 that the existence of mismatches like these will prove useful in establishing unequivocal cases of deponency. Specifically, such mismatches will allow us to make use of criteria for categorizing potentially deponent forms as "Causative" or "Passive", etc., which go beyond simply showing that their segmental phonology resembles that of true Causatives, Passives, etc. In some cases, the candidate deponent forms will also participate in morphophonological alternations, of the sort described in this section, which are otherwise only associated with their non-deponent counterparts—giving us strong evidence that both sets of forms truly belong to the same morphological class.

4.1. TEMPLATIC MORPHEME ORDERING. One of the more well-studied areas of mismatch in the Bantu verb stem is apparent templatic ordering of the verbal suffixes of interest to us here (Hyman 2003c, Good 2005). Specifically, a primary determining factor of allowable suffix combinations is a relative order template which can be schematized as a series of linear precedence statements indicating how any set of suffixes should be ordered with respect to each other when multiple suffixes appear in the same verb stem. Such a schema is given in 9.

(9) CAUS (*-ic-) > APPL (*-id-) > RECP (*-an-) > TRANS (*-ị-) > PASS (*-u-)

While the template in 9 can be violated in some cases in some languages, overall, it characterizes the possible orderings of the suffixes more accurately than another principle suggested as relevant to their order—semantic scope (Baker 1988, Alsina 1999). One important effect accounted for by the template, worth highlighting here, is that suffix orders consistent with it may be ambiguous for the scope of the semantics associated with the suffixes. This is exemplified by the Chichewa data in 10 (for further discussion see Hyman (2003c)).

(10)

STEM	GLOSS	TRANSLATION
-mang-its-	'tie-CAUS'	[X cause Y to tie]
-mang-ir-	'tie-APPL'	[Y tie for Z]
-mang-its-ir-	'tie-CAUS-APPL'	[X cause [Y to tie with Z]] *or* [X [cause Y tie] with Z]
**-mang-ir-its-*	'tie-APPL-CAUS'	—

As seen in 10, consistent with the template in 9, Causative-Applicative order is permitted in Chichewa but Applicative-Causative order is not. However, this restriction does not appear

to be connected to the syntax or semantics of causativization and applicativization since, as indicated, the form *-mang-its-ir-* is ambiguous for scope of applicativization with respect to causativization.

Depending on one's theoretical persuasion, a relative order template like the one given in 9 might be considered to trigger the presence of deponency in a given language. For instance, if one were to assume that morphological ordering should, in general, reflect semantic scope, along the lines of Baker's (1988) Mirror Principle, a reading like "[X cause [Y to tie with Z]]" for the verb *-mang-its-ir-*, as seen in 10, would represent a morphology-syntax mismatch since a morpheme closer to the verb root (the Causative) apparently has scope over a morpheme further from the verb root (the Applicative). Such templatic ordering effects are, however, clearly not ideal sources for examples of deponency since the classification of the relevant forms as deponent relies on a theoretical approach to morphosyntax which is not universally accepted.

Putting aside the issue as to whether or not order/scope mismatches conditioned by the template in 9 should qualify as instances of deponency, we will see in section 5 that some parts of the template will still have an important role to play in some less theory-dependent cases of deponency. Specifically, the typical positioning of the Transitive and Passive near the end of the verb stem will help us to strengthen the arguments for a morphology/syntax mismatch in certain forms by giving us stronger criteria for treating them as marked with the Transitive or Passive than their simply having the "right" segmental phonology.

4.2. LONG-DISTANCE EFFECTS OF THE TRANSITIVE SUFFIX. A fairly striking set of morphophonological patterns found in some Bantu languages involves apparent "long-distance" effects of the Transitive suffix. To understand the nature of these effects, it is helpful to begin with data from an etymologically "well-behaved" language. Such data can be seen in 11 where examples from Mongo of verb stems marked with only the Transitive and of verb stems marked with both the Applicative and the Transitive are given. The examples are drawn from Hulstaert (1965), as collected by Hyman (2003b:60). As seen in 11, the productive order of the Applicative (A) and Transitive (T) in Mongo is AT, consistent with the template schematized in 9, just discussed above in §4.1.

(11)

ROOT	TRANS	APPL-TRANS	ROOT GLOSS
*-kɔ**t**-*	*-kɔ**ts**-ị-*	*-kɔ**t**-ɛj-ị-*	'cut'
*-kú**t**-*	*-kú**ts**-ị-*	*-kú**t**-ej-ị-*	'cool'
*-ká**l**-*	*-ká**j**-ị-*	*-ká**l**-ej-ị-*	'dry'
*-kɛ**l**-*	*-kɛ**j**-ị-*	*-kɛ**l**-ej-ị-*	'flow'
*-kɛ**nd**-*	*-kɛ**nj**-ị-*	*-kɛ**nd**-ej-ị-*	'go'
*-kí**nd**-*	*-kí**nj**-ị-*	*-kí**nd**-ej-ị-*	'eat one's fill'

The Mongo data in 11 show a similar pattern to the Ciyao data given in 6 where the Transitive triggers palatalization on the consonant immediately preceding it, whether this is a root-final consonant or the consonant of an Applicative suffix. Mongo is referred to as etymologically "well-behaved" here because the palatalized root-final consonants in the forms marked only with the Transitive revert to ending with their "underlying" consonants when the Applicative intervenes between the root and the Transitive—as expected if palatalization is conceived of as a purely local phenomenon.

A language like Mongo can be contrasted with a language like Bemba, which is etymologically poorly-behaved (examples from Hyman (2003b:61), see also Hyman (1994)). As seen in 12, when a Transitive does not immediately follow the root in Bemba due to the presence of

an intervening Applicative, the root-final consonant remains palatalized. (In non-causativized contexts, the Applicative in Bemba has form *-il-/-el-* (Hyman 2003b:62).) The data in 12 are divided between labial-final stems, which "palatalize" to a final *f*, and alveolar and velar stems, which palatalize to a final *š*. (The use of *š*, as opposed to *sh*, in examples like that in 12 follows the original source.)

(12)

ROOT	TRANS	APPL-TRANS	ROOT GLOSS
*-lee**p**-*	*-lee**f**-y-*	*-lee**f**-eš-y-*	'be long'
*-lu**b**-*	*-lu**f**-y-*	*-lu**f**-iš-y-*	'be lost'
*-fii**t**-*	*-fii**š**-y-*	*-fii**š**-iš-y-*	'be dark'
*-ci**nd**-*	*-cin**š**-y-*	*-cin**š**-iš-y-*	'cry'
*-li**l**-*	*-li**š**-y-*	*-li**š**-iš-y-*	'cry'
*-buu**k**-*	*-buu**š**-y-*	*-buu**š**-iš-y-*	'get up (intr.)'
*-lú**ng**-*	*-lún**š**-y-*	*-lún**š**-iš-y-*	'hunt'

Data like that in 12 show that, in some cases, the exponence of the Transitive can include idiosyncratic, morphologically-conditioned phonological effects. We will see comparable effects in the discussion of deponent forms §5.1, where they will prove useful in establishing that candidate deponent forms really do belong to the same morphological class as their non-deponent counterparts.

4.3. MEANINGLESS FORMATIVES. A final interesting kind of morphological complication found in the exponence of verbal suffixes in Bantu worth mentioning here is the appearance of meaningless morphological formatives whose existence is apparently phonologically conditioned.

This phenomenon is reported for Nyakyusa. In order to understand the relevant data, it is first helpful to look at verb stems like those in 13, which are discussed by Hyman (2003b:74) and were originally reported by Schumann (1899) and Meinhof (1932). Forms are adapted from Meinhof (1932:147–149); daggers indicate forms I have constructed on the basis of the description. The Nyakyusa forms in 13 are comparable to the Bemba forms just discussed in 12 where interesting morphophonological effects are found when some suffix (here the Applicative) intervenes between the stem and the Transitive suffix.

(13)

ROOT	TRANS	APPL	APPL-TRANS	ROOT GLOSS
-sok-	*-sos-y-*	*-sok-el-*	*-sok-es-y-*	'go out'
-lek-	†*-les-y-*	*-lek-el-*	*-lek-es-y-*	'let go'
-syut-	*-syus-y-*	†*-syut-el-*	†*-syuk-es-y-*	'swing'
-kind-	*-kis-y-*	†*-kind-il-*	*-kik-is-y-*	'pass'
-jong-	*-jos-y-*	†*-jong-el-*	*-jok-es-y-*	'run away'
-ag-	*-as-y-*	†*-ag-il-*	*-ak-is-y-*	'come to an end'
-tup-	*-tuf-y-*	†*-tup-il-*	*-tuk-**if**-y-*	'become stout'
-pub-	*-puf-y-*	†*-pub-il-*	*-puk-**if**-y-*	'get used to'

As can be seen in 13, Nyakyusa, like Mongo (see 11), depalatalizes a root-final consonant in a causativized verb when the root is not immediately followed by the Transitive due to the presence of an intervening Applicative. However, unlike Mongo, it always depalatalizes to the same consonant, *k*.[9] In addition, Nyakyusa shows an interesting pattern where the "palatalization" of

[9] This sort of phenomena is attested elsewhere, for example in Ciyao where the replacive consonant is *c* (Ngunga 2000:240–242) (see also Hyman (2003b:73)).

the Applicative triggered by the Transitive is sensitive to the underlying form of the root-final consonant. Roots underlyingly ending in alveolar or velar stops marked with the Transitive show an Applicative with form *-is-* (a form consistent with the broader pattern where alveolars palatalize to *s*). Roots underlyingly ending in a labial, however, appear with Applicative form *-if-*, showing the same consonant the root would have surfaced with if it were followed immediately by the Transitive. Superficially, at least, it is as if the final consonant of the root is being transferred to the end of the stem (see Hyman (2003b:75) for a historical analysis of these facts).

An additional complication, of particular interest in the present context, is found in verbs ending in nasal consonants, which do not palatalize when followed by the Transitive suffix. The Nyakyusa forms in 14, adapted from Hyman (2003b:76), give relevant examples. (As in 13, daggers indicate forms I have constructed on the basis of the description.)

(14)

ROOT	TRANS	APPL	APPL-TRANS	ROOT GLOSS
-lim-	*-lim-y-*	†*-lim-il-*	*-lim-**ik**-is-y-*	'cultivate'
-lum-	*-lum-y-*	†*-lum-il-*	*-lum-**ik**-is-y-*	'bite'

The data in 14 indicate that there is a general morphophonological constraint in Nyakyusa specifying that all forms marked with the Applicative and Transitive should contain a sequence like *-kis-* or *-kif-*. When this constraint cannot be fulfilled "naturally" because the root-final consonant never palatalizes and, therefore, can never depalatalize to a *k*, a meaningless *-ik-* formative is inserted. Meaningless formatives like Nyakyusa *-ik-* represent an interesting kind of phonology-morphology mismatch wherein an element which looks like a morpheme, but does not appear to have any morphological function, must appear solely in order to satisfy a phonological shape requirement.

While the instances of deponency to be discussed in §5 will not be associated with morphophonological alternations as complex as this, the Nyakyusa facts underscore the general point that the morphophonology of the Bantu verb stem sometimes seems to have "a mind of its own", taking on properties not predictable from more general principles of a language's morphology or morphosyntax. Given this, it should not be surprising that, under the right conditions, the morphophonological behavior of a verb stem can fall out of line with its morphosyntactic interpretation, resulting in, as we will see, a kind of deponency.

4.4. SUMMARY. We have seen in this section that being, for example, a "causative", "applicative", or "passive" verb form in Bantu is not always as simple as being a verb form with a Causative, Applicative, Transitive, or Passive suffix. Such verb forms can also be associated with special morphological and morphophonological restrictions including (i) templatic stipulations on the relative order of the suffixes and (ii) participation in idiosyncratic morphologically-conditioned phonological processes. While the data seen in this section did not include instances of deponency, they point to an important pattern wherein a verb form like a Transitive or Applicative can sometimes be identified both by its segmental content and by its morphophonological behavior. The goal of the next section will be to analyze cases wherein verb forms which both segmentally and morphophonologically appear to belong to a particular class (e.g., Transitives) do not appear to belong to that class syntactically—that is, where we seem to have instances of deponency in the Bantu verb stem.

5. POSSIBLE CASES OF DEPONENCY IN BANTU. In this section, I will discuss instances of deponency which have been uncovered in Bantu verb stems involving pseudo-causatives

and pseudo-passives. I will also discuss the possibility that certain pseudo-applicatives may be examples of deponency. Each of these classes of "pseudo-" verbs are discussed in turn.

5.1. PSEUDO-CAUSATIVES. All of the cases of pseudo-causatives I have encountered in Bantu languages to this point involve, either synchronically or diachronically, the Transitive, not the Causative, suffix. The Kinande data in 15, repeated from 3, provide a good example of a pseudo-causative where the Transitive still has a clear segmental reflex. A similar pattern is found in Ciyao (Ngunga 2000:234) (and certainly elsewhere—but a systematic survey of pseudo-causatives in Bantu has not been undertaken here).[10]

(15)

STEM	GLOSS	TRANSLATION
-tsap-	'wet'	"get wet"
-tsap-ɟ-	'wet-CAUS'	"make wet"
-tsap-an-ɟ-	'wet-RECP-CAUS'	"wet each other"
**-song-*	—	no meaning
-song-ɟ-	'SONG-CAUS'	"gather (trans.)"
-song-an-ɟ-	'SONG-RECP-CAUS'	"gather each other"

As discussed in §1, verb forms like *-song-ɟ-* not unequivocal instances of deponency—one could instead suggest that there is simply a morphological gap for the bare stem *-song-* in Kinande, something which would not be particularly striking given the general tendency of the Bantu verbal suffixes to lexicalize, as discussed in section 3. The challenge is to find cases comparable to Kinande *-song-ɟ-* involving verb stems which would be quite difficult to reasonably classify as being syntactically or semantically "causativized"—i.e., cases where the Transitive cannot be easily said to be making any contribution to the verb stem's syntax or semantics. I am, in fact, aware of several such cases. For example, Kinyamwezi causativized verbs are described as follows:

> Semantically and syntactically most [c]ausative verbs are regular. The [Transitive or Causative] extension adds an agent to the argument structure, the subject of the underived verb becomes the object of the [c]ausative verb. However, there are quite a number of formally [c]ausative verbs for which no corresponding underived verb is in use, and in some cases the typical causative argument structure has been obscured (Maganga and Schadeberg 1992:155).

The examples in 16 (adapted from (Maganga and Schadeberg 1992:155)) give instances of such pseudo-causatives in Kinyamwezi. They are treated as formal causatives by Maganga and Schadeberg because they all have a final palatal articulation that is consistent with their being suffixed with a Transitive. As can be seen, while some of these verbs (e.g., *-goóŋóóɲ-* 'knock') would be amenable to a morphological gap analysis, others (e.g., *-kúmy-* 'be surprised') are apparently intransitive and, therefore, not amenable to one. Such verbs seem to represent instances of deponency. Kinyamwezi, however, does not offer the strongest possible evidence for deponent pseudo-causatives since, unlike the cases discussed immediately below, the basis for the classification of a given verb stem as being marked with the Transitive involves only segmental phonology and does not also include special morphophonological alternations of the

[10] Ciyao is further described as showing a pattern of depalatalization of a stem-final consonant, like what was seen for Nyakyusa in §4.3, involving a single replacive consonant, *c*. This process affects the final consonant of pseudo-causatives in addition to real Causatives (Ngunga 2000:242), indicating that both are in the same morphological class.

sort discussed in §4. Given that the relevant segmental form is simply a final palatal articulation, one could reasonably argue that, at least in some cases, the formal resemblance between apparent pseudo-causatives and verbs marked with the Transitive is simply accidental.

(16)

STEM	GLOSS
-amby-	'help'
-andy-	'begin'
-βoonj-	'taste'
-daahy-	'bid farewell'
-dṓj-	'be able'
-goóŋóójɲ-	'knock'
-kúmy-	'be surprised'
-kuúmy-	'touch'
-weej-	'can'

Kinyamwezi also makes use of a reflex of the the Causative, with form *-iish-*, to mark causativization. However, this suffix does not appear to be implicated in any deponency-like phenomena in the language. As mentioned above, I am not, in fact, aware of any cases of deponent pseudo-causatives in Bantu involving a reflex of the Causative suffix.

A similar pattern to what is seen in Kinyamwezi can be found in Chimwiini (Abasheikh 1978). In the case of this language, the relevant verb stems again show final consonants that make them appear to be formally marked with the Transitive. In addition, as we will see, they show a special morphological selection pattern otherwise only associated with truly causativized stems, giving us strong evidence that they belong to the same morphological class as such stems. Examples of Chimwiini pseudo-causatives are given in the first half of the table in 17 (Abasheikh 1978:66).

(17)

STEM	GLOSS
-pas-	'borrow'
-anz-	'begin'
-ṭosh-	'suffice'
-fa:ñ-	'do'
-pis-	'cause to pass'
-las-	'cause to divorce'
-la:ñ-	'cause to quarrel'

The verbs in the first half of the table in 17 are all explicitly described as being "non-causative" (Abasheikh 1978:66). However, as just mentioned, they end in consonants typically associated with causativized forms marked with the Transitive. (Recall that, as seen in table 2, Proto-Bantu is not generally reconstructed with fricatives. Root-final fricatives in verbs are, therefore, often associated, historically at least, with causativization marked with the Transitive.) They also select for a special allomorph of the Applicative normally only associated with causativized verbs (including verbs causativized with a reflex of the Causative, which has the form *-ish-/-esh-* in Chimwiini (Abasheikh 1978:55–57)).[11] Abasheikh (1978:66) describes the use of this special Applicative form as follows:

[11] Historically, the form *-ish-/-esh-* almost certainly reflects a palatalization of *-ic- triggered by the frequent presence of a following Transitive, along the lines of what was described in §2.2. Therefore, a verb marked with the Causative could be understood to also be marked with the Transitive, at least from an etymological perspective.

> [T]he [Applicative] suffix basically has the shape *-iɬ-* (∼*-eɬ-*). However a special allomorph *-iɬiz-* (∼*-eɬez-*) appears after the verb stem ending in *s*, *z*, *sh*, and *ñ*...This allomorph is consequently the one that is used in causative [applicative] verbs, since the causative verb stem always ends in a consonant that belongs to the above mentioned group of consonants.

The verbs described by Abasheikh as non-causativized in the first half of the table in 17 are good candidates for deponent stems, resembling clearly causativized forms both in terms of their segmental phonology and their morphological selection. As with the earlier cases, however, they can not all be considered unequivocal instances of deponency since the apparent transitivity of some of the verbs makes them amenable to being treated as syntactically or semantically causativized, with a morphological gap accounting for the lack of a non-causativized root. The verb *-ṭosh-* 'suffice' is the best potential case of a deponent stem in 17, since its translation implies it is intransitive, making it a poor candidate for being analyzed as causativized in any way.

I have encountered one other language, Ganda, with apparent pseudo-causative deponent stems, and, in this case, the evidence for this is especially strong. This language has verb stems which resemble truly causativized stems both in terms of their form and their morphophonological patterning but which (i) have been explicitly described as intransitive—in the other cases here intransitivity has been inferred from glosses—and (ii) have, in some cases, clearly been transferred into the same morphological class as causativized verb stems as the result of a historical innovation. As with the other cases discussed, the relevant verbal suffix is the Transitive, not the Causative. The data are somewhat complex and can only be easily understood given some background on more general issues of Ganda morphophonology. The data and basic analysis of the Ganda facts given here are drawn from Hyman (2003b:81–85).

The first set of facts which is important for understanding deponency in Ganda involves the phonological effects of (i) palatalization triggered by the Transitive and (ii) the suffix's subsequent "absorption" into roots ending in certain consonants, giving it no overt segmental reflex. This process is schematized in 18, following Hyman (2003b:82). The sequences in the top half of 18 represent the final consonant of a verb root, followed by the Transitive suffix, followed in turn by the inflectional Final Vowel *-a*. The bottom half of the table schematizes how roots ending in Proto-Bantu *c and *j which were not marked with the Transitive are realized in Ganda.

(18)

PROTO-BANTU		STAGE I		STAGE II		STAGE III
*t-ɟ-a	>	*s-ɟ-a	>	*s-y-aa	>	s-aa
*k-ɟ-a	>	*s-ɟ-a	>	*s-y-aa	>	s-aa
*d-ɟ-a	>	*z-ɟ-a	>	*z-y-aa	>	z-aa
*g-ɟ-a	>	*z-ɟ-a	>	*z-y-aa	>	z-aa
*c-a	>			*š-a	>	s-a
*j-a	>			*ž-a	>	y-a (j-a after nasal)

As indicated in 18, the regular reflex of Proto-Bantu *c in Ganda is *s*, but Ganda *s* may also derive from the regular reflex of *kɟ for *tɟ (Guthrie 1971:44). Given that the reconstructed form of the Transitive is *-ɟ-, there should be at least two sources of root-final *s* in Ganda verbs, one of which is associated with causativization and the other which is not. Furthermore, in principle, it should be possible to synchronically distinguish between root-final *s* in Ganda which is a reflex of Proto-Bantu *c and root-final *s* which is a reflex of Proto-Bantu *k-ɟ- or *t-ɟ-. This is because there are three phonological processes found in the language which are sensitive to the (historical) presence of the Transitive.

One such process involves compensatory lengthening of a Final Vowel following the Transitive *-ị-*, both when the suffix surfaces as a glide and when it is absorbed. Utterance-final long vowels will be realized as short before a pause in Ganda (Hyman 2003b:83). Therefore, determining whether or not a verb ends in an underlyingly long Final Vowel requires that it be "protected" from appearing utterance finally. This can be done by placing a clitic after the verb. Representative data are given in 19 (Hyman 2003b:83).[12]

(19)

VERB	TRANSLATION
*ku-láb-**à**=kí*	'to see what?'
*kw-áák-**à**=kô*	'to blaze a bit'
*ku-láb-y-**àà**=kí*	'to make see what?'
*ku-láb-y-**àà**=kô*	'to make see a bit'
*kw-áás-**àà**=kí*	'to make blaze what?'
*kw-áás-**àà**=kô*	'to make blaze a bit'

The first pair of verbs in 19 is not marked—overtly or abstractly—with the Transitive. Each can be seen to end in an underlying short vowel since the Final Vowel of the verb surfaces as *à* even when it is protected by a postverbal clitic. The second pair of verbs shows the effects of the Transitive, when surfacing as the glide *-y-*, on the Final Vowel of the verb, which is lengthened in this context. Lengthening can also be observed in the last pair of verbs. While these verbs do not contain an overt segmental reflex of the Transitive, their form indicates that, at least historically, they were subject to palatalization triggered by the Transitive being suffixed to the non-causativized root *-ák-* 'blaze', seen in the first pair of verbs in 19. Thus, these verbs can be understood to contain an absorbed Transitive, which is what causes their Final Vowel to be subject to the observed lengthening.

A second phonological process sensitive to the presence of the Transitive in Ganda involves applicativization. Specifically, the language behaves like some of the languages discussed earlier, for example Ciyao (see the data in 6), where the form of the Applicative is different in causativized as opposed to non-causativized environments. Relevant data are given in 20 where the italicized stems represent underlying and/or historical verb forms and the bracketed stems represent surface forms not appearing utterance finally (Hyman 2003b:82–83). Of interest here is the alternation between the *-ir-* and *-iz-* forms of the Applicative.

(20)

VERB STEM		APPLICATIVE		STEM GLOSS
-láb-	[láb-a]	*-láb-ir-*	[láb-**ir**-a]	'see'
-láb-ị-	[láb-y-aa]	*-láb-ir-ị*	[láb-**iz**-aa]	'make see'
-ák-	[ák-a]	*-ák-ir-*	[ák-**ir**-a]	'blaze'
-ás-ị-	[ás-aa]	*-ás-ir-ị-*	[ás-**iz**-aa]	'make blaze'

As can be seen in 20, an Applicative suffix appearing on a verb stem which contains a Transitive surfaces as *-iz-* instead of *-ir-*, due to the same basic process of palatalization of the Proto-Bantu form *-id- seen above in 6. Also relevant here are the facts discussed in §4.1 involving templatic suffix ordering, which help make clear the reason why the Transitive follows the Applicative in the forms in the second column of 20.

In addition to these two processes, Hyman (2003b:82–84) discusses a third phenomenon sensitive to the presence of the Transitive, involving the Perfective marker *-ịd-e, which shows a similar alternation to the Applicative in causativized versus non-causativized contexts.

[12] The long vowels seen in the verb root *-ák-* 'blaze' and the related causativized stem *-ás-* 'blaze.TRANS' in 19 is the result of compensatory lengthening triggered by the gliding of the *u* in the infinitival prefix *ku-*.

As discussed above, etymologically, there are at least two classes of *s*-final verb roots in Ganda, those which developed from *c-final roots and those which developed from *kį or *tį sequences where the *į* was the exponent of the Transitive. Those developing from *c-final roots, of course, should behave as though they have not "absorbed" a reflex of the Transitive. That is, they should not show long Final Vowels or take the special *-iz-* form of the Applicative, unlike, for example, the causativized verb *-ás-* 'make blaze' seen in 19 and 20. However, it turns out that, synchronically, there is only one class of *s*-final roots in Ganda. All roots with this shape behave as though they have absorbed a Transitive suffix.[13] Relevant examples of reconstructed *c-final roots and their Ganda reflexes, adapted from Hyman (2003b:84), are given in 21. As can be seen, the morphophonological behavior of these roots indicates that they have been analogically shifted into the class of roots with an absorbed Transitive, even though historically they would not been marked with this suffix.

(21)

PROTO-BANTU		GANDA	*what* ENCLITIC	APPLICATIVE
*-dác- 'shoot (arrow)'	>	*-lás-*	*ku-lás-àà=kí*	*lás-iz-aa*
*-píc-, *-bíc- 'hide'	>	*-bis-*	*ku-bis-aa=kí*	*bis-iz-aa*

Hyman (2003b:84) describes the Ganda situation quite explicitly as follows:

> As seen, all three criteria establish that PB *-CVc- roots, pronounced -CVs- in Ganda, have been reanalyzed as -CVs-į-, that is, as pseudo-causatives. This is true even of the few [-]CVs- verbs which are intransitive, and hence not likely to be morphological causatives at all, e.g., *kuus-a* 'be hypocritical', *myáas*[-]*a* 'flash' (of lightning).

Ganda, thus, gives us three reasons for claiming its lexicon includes pseudo-causative deponent forms: (i) the criteria for membership in the class of Transitive verbs goes beyond segmental features and includes participation in morphophonological alternations otherwise only associated with verbs that are truly causativized, (ii) there are explicitly-indicated examples of intransitive pseudo-causatives which cannot be straightforwardly analyzed as cases where there is simply a morphological gap for the more "basic" root to which causativization would apply, and (iii) there is clear evidence that verbs which were historically not causativized have been moved into the same morphophonological class as verbs marked with the Transitive.[14] The conjunction of the latter two points allows us to say that Ganda exhibits deponency on two distinct levels: in terms of its synchronic grammar and in terms of diachronic change.

Overall, then, it would appear to be the case that at least some Bantu pseudo-causatives are examples of deponent stems, with Ganda showing the clearest evidence for this. Finding unequivocal cases of deponency was far from trivial however since (i) it was not straightforward to establish strong criteria for classifying a given stem as formally causativized given that the most salient exponent of causativization is often simply a final palatal articulation and (ii) even when there were such criteria, it was not always easy to establish a morphology-syntax mismatch since the syntax and semantics of causativization are such that one could argue that any transitive verb is a "causative".

[13] For discussion of why Ganda underwent this apparent analogical process, but languages showing similar patterns did not, see Hyman (2003b:84–87).

[14] Hyman (2003b) gives no example of a historically intransitive verb analogically moved into the Transitive-marked class. I have no reason to believe this is or is not an accidental omission. The translation of the form *ku-bis-aa=kí* given by Hyman (2003b:84) is "to hide what?", implying it is transitive.

5.2. PSEUDO-PASSIVES. Pseudo-passive verbs in some Bantu languages also offer some reasonable candidates for deponent stems. On a purely segmental level, possible pseudo-passives are quite easy to find by looking through dictionaries for stems with "extraneous" final *w*'s, analyzable as deriving from the Proto-Bantu Passive *-u-, which are not accompanied by related stems without final *w*. Of course, such stems, on their own, are weak candidates for deponency since such final *w*'s could represent accidentally homophonies with the Passive and, even when they do not, the existence of *w*-final stems without bare counterparts could evince a morphological gap instead of deponency.

Analogous to pseudo-causatives, if pseudo-passive stems in a given language meet the following three criteria, it will be possible to make a fairly strong case for deponency: (i) membership in the Passive morphological class should go beyond mere presence of a segment which is apparently a reflex of **-u-*, (ii) there should be verb stems which are not amenable to being analyzed synchronically as passivized and lacking an associated plain stem due to the presence of a morphological gap, and (iii) there should be evidence that non-passivized Proto-Bantu forms ending in sequences accidentally homophonous with the Passive morpheme were analogically moved into the Passive class.[15]

I am aware of one language with pseudo-passives which seem to meet all three criteria, Kinyamwezi. As a systematic survey of pseudo-passives in Bantu has not been undertaken here, there are almost certainly others.[16] Maganga and Schadeberg (1992:149) describe the basic situation in Kinyamwezi as follows:

> There are a few verbal bases ending in *w* without being passives, at least in a synchronic perspective. In as far as passives can be derived from such verbs this is done by substituting *-iw-* for *-w-*.

The forms in 22, adapted from Maganga and Schadeberg (1992:149–151), are examples of such pseudo-passives in Kinyamwezi. A "—" in the table indicates that the possibilities for passivization of the verb were not given. The association of Proto-Bantu roots with Kinyamwezi stems is my own, with the reconstructions drawn from Guthrie (1970:146,176). As indicated in the gloss column, Maganga and Schadeberg associate some of these verbs with corresponding bare stems but treat them as pseudo-passives because the Passive stems have undergone semantic shifts.

(22)

STEM	PASSIVE	GLOSS	PROTO-BANTU
-gay-iw-	none	'lack' (cf. *-gay-* 'die')	
-chil-w-	none	'hate'	
-íg-w-	*-igíw-* (?)	'hear'	*-jɟgu-
-tóg-w-	*-togíw-*	'like'	
-i-kʊ́ʊ́mb-w-	—	'REFL-wish'	
-lemeel-w-	—	'fail' (cf. *-lemeel-* 'be too difficult')	*-dèm- (plus APPL?)
-zilí-w-	—	'be in need'	

The lack of a corresponding passivized form for the first two verbs in 22 makes them good candidates for an analysis where they are, in fact, passivized but there is a morphological gap for the bare stem. However, the fact that the second two verbs can be passivized makes such an

[15] I do not mean to suggest that these are the only kind of criteria we could use to argue for deponency in Bantu. Rather, these are the best criteria I am aware of at present.

[16] Larry Hyman (personal communication), for example, has found a comparable phenomenon in Bemba to what is described here for Kinyamwezi.

analysis more difficult for them. This would imply they could be doubly passivized, which is problematic on syntactic grounds. (Of course, such an analysis would be easier for the verb *-íg-w-* 'hear' than for the verb *-tóg-w-* 'like' since its Passive form is indicated as being marginal.) For the two verbs explicitly indicated as having undergone semantic drift, it is not clear how the existence of the bare stems with considerably different meanings impacts their classification as deponent. Making such a determination would, of course, require a theory as to when the meaning of two historically related elements diverges significantly enough to consider them morphologically distinct. I leave this matter unresolved here, though it is obviously of potential interest for general models of deponency.

One of the roots in 22, *-íg-w-* 'hear', is reconstructed in Proto-Bantu as having a final "super-high" back vowel *ɥ not associated with the Proto-Bantu Passive *-u-. This root, therefore, appears to be a good candidate for deponency on a diachronic level since it was not originally a Passive form but entered the Passive class as a result of morphophonological analogy triggered by its surfacing with a final *w*—a stem-final consonant otherwise closely associated with true Passives in Kinyamwezi.

As indicated above, the evidence that forms like those in 22 should be classified as Passives goes beyond their simply having a segmental form that appears to contain a Passive suffix. Such verbs also participate in special morphophonological alternations involving the Pre-Final element *-ag-* and the Perfective marker *-il-e* (both of which play a role in TMA-marking) (Maganga and Schadeberg 1992:150–1). Maganga and Schadeberg (1992:150) describe the situation for *-ag-* as follows:

> If a conjugated verb contains the [P]re-Final element *-ag-*, the Passive I extension *-w-* occupies the position after *-ag-* and before the Final [Vowel]. This is also true for petrified or pseudo-passives as in [*kʊ-togw-á*] 'to like'.

The forms in 23, adapted from Maganga and Schadeberg (1992:150), illustrate this pattern. The first verb exemplifies a true Passive and the second two verbs are pseudo-passives. The relevant feature of these forms is that the segmental exponent of the Passive, *w*, appears after the Pre-Final element *-ag-* instead of immediately after the root. This shift of the Passive *-w-* to a position near the end of the stem is related to the fact that the suffix has the final position in the relative-order template discussed in §4.1.

(23)

VERB	MEANING	STEM
yaatʊmágwa	"it was sent"	*-tʊ́m-w-* (cf. *-tʊ́m-* 'send')
waanitogágwa	"she has liked me"	*-tóg-w-*
waániigágwa	"she has heard me"	*-íg-w-*

As indicated in the above quotations, Maganga and Schadeberg distinguish between two Passive suffixes in Kinyamwezi, one with form *-w-* and the other with form *-iw-*.[17] One of the pseudo-passive forms they give *-gayiw-* 'lack' makes use of this longer suffix. Though they do not explicitly give an example of it containing the Pre-Final element *-ag-*, their description implies it should behave like the Passive of the verb *-hay-* 'say', which has the form *-hay-iw-*. The stem form of this verb with the Pre-Final is *-hay-iw-ag-w-*, containing two exponents of passivization, the long Passive morpheme *-iw-* before *-ag-* and the short Passive after *-ag-* (Maganga and Schadeberg 1992:150).

[17] While the *w* in the long form of the Kinyamwezi Passive is almost certainly derived from the Proto-Bantu Passive *-u-, the source of the *i* is not clear.

The Perfective marker *-il-e* shows a comparable pattern with respect to Passive marking as that found for the Pre-Final element *-ag-*.[18] The verb *waatóg**ílwé***, for example, 'she has liked' is based on the pseudo-passive stem *-tóg-w-* 'like'—as with verbs marked with *-ag-*, the *w* marking passivization in verbs marked with *-il-e* "jumps" towards the end of the stem. The general pattern for the Perfective, however, is distinct from the pattern for the Pre-Final in that both the short and long forms of the Passive—i.e., both the *-w-* form and the *-iw-* form—"disappear" root finally, resulting in only one exponent of passivization for all regular Passive Perfective stems, a *-w-* immediately following the *-il-* of the Perfective (Maganga and Schadeberg 1992:150).

However, the one pseudo-passive verb given as taking the *-iw-* Passive, *-gay-iw-* 'lack' is exceptional in this regard. The suffix *-iw-* "remains in its place and in addition we find the Passive-Perfective Final [*-il-w-e*]" (Maganga and Schadeberg 1992:150). This is illustrated in 24. (The Augment prefix marking the noun in 24 plays a role in its interpretation as definite.)

(24) *naágáy**iwíl**wé* ɪ*-héla*
1SG.PST.lack.PFV AUG-money
"I lacked the money." (Maganga and Schadeberg 1992:150; glossing my own)

Clearly, the overall picture is quite complex, but, nevertheless, there is good evidence that being a Passive verb in Kinyamwezi involves more than just containing a stem-final *w*. It also means taking part in a special set of morphophonological alternations. Since pseudo-passives generally participate in the same set of idiosyncratic morphophonological alternations as truly passivized verbs, they meet the first criterion for deponency given above.

While it is not clear that all the pseudo-passives listed in 22 are deponent forms, since some do not clearly meet either the second or the third criteria, at least two are very good candidates for being categorized as deponent stems: *-íg-w-* 'hear' and *-tóg-w-* 'like'. Both can be associated with separate Passive forms, strongly indicating they themselves are not understood to be syntactic passives, and one of them *-íg-w-* 'hear', meets the additional criterion that its membership in the Passive class is apparently a historical innovation. Thus, it seems reasonable to say that Kinyamwezi is a language with pseudo-passive deponent verb stems.

An interesting issue raised by the Kinyamwezi data, for which, unfortunately, I have no data, is whether or not there are some *w*-final verb forms which do not participate in the morphophonological alternations described above. If they did exist, it would make the case that forms like *-íg-w-*'hear' and *-tóg-w-* 'like' are deponent stronger since it would imply that their designation as morphological Passives is not simply determined by their having a specific phonological shape but, rather, results from their being assigned to an abstract, unpredictable morphological class otherwise only associated with true Passives—a class which would correlate, but not be precisely the same as, the class of stems having a final *w*.[19]

5.3. PSEUDO-APPLICATIVES? While one can quite easily find cases where suffixes other than the Transitive or Passive are found on verb stems which are not accompanied, synchronically at least, by corresponding bare roots, it is rather more difficult to devise convincing arguments that such stems are exhibiting deponency. The Applicative provides a good example of the sorts of complications that arise when trying to do this. Lexicalized Applicatives are quite frequent in Bantu and can be found through even cursory inspections of dictionaries. It is not

[18] As with the Pre-Final *-ag-*, the shift in the position of the Passive in Perfective stems is connected to the existence of the verbal suffix template discussed in §4.1.

[19] The existence of Ganda *s*-final verbs not subject to the morphophonological processes described in §5.1 would be similarly useful. However, as indicated in the discussion in that section, Hyman (2003b) reports that all *s*-final verbs in Ganda, in fact, behave as if they were marked with the Transitive.

surprising, therefore, that one also often encounters cases where stems containing lexicalized Applicatives are not associated with a bare root.

Drawing again on Kinyamwezi, consider, for example, the forms in 25, adapted from Maganga and Schadeberg (1992:158) (presence/absence of bare stem determined based on examination of word list included in Maganga and Schadeberg (1992)). These forms are instances of apparent intransitive pseudo-applicative verb stems.

(25)

APPL. STEM	GLOSS	BARE STEM
-angíl-	'be not enough'	—
-βʊʊ́kɪl-	'rise slowly'	*-βʊʊ́k-* 'rise'
-leembel-	'be quiet'	—
-laálɪl-	'go to sleep hungry'	*-laál-* 'sleep'

If one assumes that the Bantu Applicative suffix should *always* allow a verb to take an "extra" object then, perhaps, the fact that the stems in 25 are intransitive makes them examples of deponency. However, it is not clear that the use of the Applicative is quite that syntactically straightforward—see Marten (2003) for relevant discussion. Without a very clear sense of what the syntax and semantics "should" be for the Applicative, it is impossible to be sure when there is a mismatch between the morphological form and the syntactic function of an applicativized stem. In the case of pseudo-causatives, it was assumed that an intransitive verb is a poor candidate for being syntactically causative. In the case of pseudo-passives, it was assumed that a verb that could independently passivize, using a different marking strategy from its "lexical" marking, was a poor candidate for being syntactically passive. There is no such straightforward criterion for being a "true" syntactic applicative.[20]

An additional complication in looking for examples of deponent pseudo-applicatives is that, for whatever reason, it is harder to find cases where suffixes with the shape -VC-, like the Causative and Applicative, participate in special morphophonological processes like what was seen for the Ganda Transitive in §5.1 or the Kinyamwezi Passive in §5.2. It, therefore, is harder to establish for these suffixes that apparent cases of "pseudo-" stems are not, instead, simply forms which accidentally resemble roots followed by the relevant verbal suffix.

None of this is to say that there are no instances of suffixes other than the Transitive or the Passive playing a central role in deponency phenomena in some Bantu languages. Rather, it is simply harder to find solid cases of these on methodological grounds.

6. CONCLUSION. We have seen here that there appear to be good candidates for deponency in Bantu involving pseudo-causatives and pseudo-passives. The Proto-Bantu Transitive *-į- and Passive *-u- were the morphemes involved in the clearest cases. Deponency does not seem to be an isolated morphological phenomenon in Bantu languages but, rather, is one part of a general "syndrome" where stem+suffix combinations can be associated with phonological processes that effectively partition them into different morphophonological classes. In most cases, such classes will show a complete correspondence with associated morphosyntactic classes. However, under certain conditions, the morphophonological and morphosyntactic classes can become disjoint, resulting in deponent forms.

Since the phenomena discussed here were drawn from derivational, not inflectional, morphology, the analysis of deponency did not invoke paradigmatic mismatches, of the sort found

[20] This basic problem is again encountered when trying to find possible cases of deponency involving another verbal suffix, not discussed here, the *-ik- Stative, which is also frequently found lexicalized on verb stems not accompanied by corresponding bare stems.

in classic cases of deponency, like those found in Latin. It did, however, make extensive use of the notion of morphophonological class and would, thus, appear to be broadly in line with Kiparsky's (2005) suggestion that the devices of lexical phonology and morphology are adequate for the analysis of deponency. Given that some analyses of deponent forms in inflectional morphology have made crucial reference to paradigmatic relations (see, for example, Sadler and Spencer (2001), Stump (2001:171–176, this volume), Corbett (this volume) and Spencer (this volume)), this raises the question as to whether or not deponency in derivational morphology may have distinct properties from inflectional deponency.[21] Finding an answer to this question will require collecting more cases of deponency involving morphological phenomena not easily characterized with respect to paradigms—assuming they can be found.

A final point worth making about the Bantu data seen here is how it illustrates a possible historical pathway to deponency, distinct from the classic cases: morphophonological analogy. Specifically, accidental phonological resemblances between a given form and forms belonging to a well-defined morphosyntactic class may result in that form taking on special morphophonological properties normally only associated with that class. (See Bermúdez-Otero (this volume) for a similar pattern in Spanish.)

Glossing abbreviations

CAUS	Causative	FV	Final Vowel
APPL	Applicative	REFL	Reflexive
TRANS	Transitive	PST	Past
RECP	Reciprocal	1...12	noun class
PASS	Passive	1/3SG	first/third person singular
PFV	Perfective	AUG	Augment

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[21] It is noteworthy in this regard that, while Bantu verbal suffixes are typically treated as derivational, one of the cases of deponency discussed here, pseudo-passives, involves a similar (the same?) morphosyntactic category as Latin deponency.

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