Transitivity, modality, and voice in Waray

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Abstract
This paper provides a fresh look at the verb morphology of Waray, the major language of Samar, Leyte, and Biliran islands. The main contribution of this study is to identify a relatively small set of inflectional affixes, one and only one of which is required in order to allow a word form to function as a verbal predicate. We show that transitivity and modality are the two major dimensions of this paradigm. Inflectional affixes are distinct from a larger set of morphological processes which we identify as stem-forming. These processes are not grammatically required and are not paradigmatic. Zero to four stem-forming processes may contribute to a word form functioning as a verbal predicate. We contend that the "voice system" of Waray is the result of the interaction between the dimension of transitivity in the inflectional paradigm and applicative processes in the stem-forming group, as follows:

Intransitive inflection =	"Actor Voice"
Transitive inflection, no applicative =	"Patient/Undergoer Voice"
Transitive inflection plus applicative 1 (*-an, -i*) =	"Locative/Recipient Voice"
Transitive inflection plus applicative 2 (*i-*) =	"Conveyance/Benefactive Voice"

We believe that this way of looking at clause structure in a Philippine language is more consistent with what is known about the typological characteristics of languages in general than the traditional voice or focus approaches. While Philippine languages are indeed unique and special in many ways, there is no need to posit a typologically rare or unique "Philippine type" voice system. We believe this approach will demystify the clause structure of Philippine languages for linguists who work outside of Philippinist traditions.

1. Introduction

Waray is the mother tongue and language of wider communication for most inhabitants of Samar, Eastern Leyte, and parts of Biliran islands in the Eastern Visayas region of the Philippines.[1] With over three million speakers, it is the sixth most widely spoken language in the country. This paper is part of a larger project to document the grammar of Waray for purposes of Mother-Tongue Based Multilingual Education (MTB-MLE) under the auspices of Leyte Normal University and the Commission on Higher Education (CHED). It is based on a large corpus of spoken and written data (3NS Corpora project), as well as extensive input from teachers, students, and intellectual leaders throughout the Waray speaking region. Unless otherwise specified, examples appearing in this paper are from the variety of Waray spoken in Northern Leyte.[2]

Ever since Blake (1906) and Bloomfield (1917), linguists have puzzled over the best way to understand verb morphology in Philippine languages. Recent approaches have treated verbal categories as mostly a matter of "voice", with modal and temporal notions being expressed by distinct sets of affixes, including prefixes, suffixes, infixes, multifixes, and reduplication. The "voice systems" of Philippine languages are understood to be quite distinct and more complex than those of Indo-European "active-(middle)-passive" systems.

In this paper, we present a fresh approach that views the voice system of Waray as the result of the interaction between grammatical transitivity in the inflectional paradigm, and applicative categories in stem-forming (loosely "derivational") morphology. This perspective builds on previous approaches (notably Wolff 1972 and DeGuzman 1978), yet, we believe, provides a simpler, more coherent way of understanding verb morphology than has previously been articulated. While it still may be convenient to refer to a "voice system", we hope to show that this system is not so unusual in comparison to what is known about voice and valence in the general typological tradition. While Philippine languages are indeed unique and special in many ways, there is no need to posit a typologically rare or unique "Philippine type" voice system. We believe that this approach will demystify the clause structure of Philippine languages for linguists who work outside of the Philippinist tradition, as well as educators in the Philippines who are tasked with teaching local language grammars.

This paper is organized as follows: Section 2 gives a brief background to the notion of "voice" as it has been applied to Philippine languages. Section 3 defines and exemplifies applicative constructions, and shows that the verbal affixes *-an*, *-i*, and *i-* in Waray can be insightfully analyzed as applicatives. Section 4 is the heart of the paper, laying out our arguments that transitivity and

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[2] Although Tacloban City is the capital of the Waray speaking region, there is no specific variety of Waray that can be considered the "Tacloban variety." Rather, because of urbanization, the language as used in Tacloban tends to mix features of all regional varieties. For this reason, the baseline for this study is the much more uniform variety of Waray spoken in Barugo, a medium sized municipality on the northern coast of Leyte Island. Variations from this standard are noted when they affect the presentation in this paper.

modality are intersecting dimensions in the inflectional paradigm. Section 5 provides our conclusions and summary.

2.   The notion of voice in Philippine languages

Blake (1906) set the stage for the view of Tagalog verbs as expressing four distinct "voices." Blake used the term "expression of case by the verb" to describe the ways in which verb morphology varies to express different semantic roles of the "subject" argument. The Tagalog system, according to Blake, represents a more fully developed version of the expression of case by the verb than the two-way active/passive voice systems common in Indo-European and Semitic languages. In other words, "voice", for Blake, was a limited variety of case expression in the verb. More recent approaches (e.g., Wolff & Wolff 1967, Payne 1994, Foley 2008, Himmelman 2008) have reversed Blake's characterization, extending the definition of voice to include Philippine-type systems, rather than extending the definition of case in the verb to include voice. In the present paper, we will use the term voice in the more recent sense to refer to any system of verb (phrase) morphosyntax that specifies the alignment between grammatical relations and semantic roles in a clause.

Examples (1) - (4) illustrate the four-voice system that is common among Greater Central Philippine languages (Blust 1991). These Waray examples are cited out of context, but all are perfectly grammatical, and contain verb forms that commonly occur in everyday conversation. We present these basic examples with glosses consistent with the approach taken throughout this paper. Explanation for this approach will be given in the sections that follow:[3]

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[3] Data in this paper are presented in an interlinear format. The top line is the official Waray orthography, as described in Nolasco, Oyzon & Ramos (2012; 2017 revision currently under consideration by the Department of Education). A second line provides morphological analyses when helpful for the point illustrated by the example. A third line gives the morpheme-by-morpheme glosses. Finally, the last line gives a free English translation.

In the current official orthography, syllable prominence (either word stress, vowel length, or both) is not indicated when it is predictable. When it is unpredictable given the context, an acute accent indicates syllable prominence. Briefly, if the final syllable is prominent, no accent is needed. If there is a "heavy" syllable (CVC, or CV:) anywhere in the word other than the last syllable, the prominence predictably moves to the left, and so is not indicated. All other prominent syllables in indigenous Waray words are indicated with an acute accent. In Spanish and English loan words, stress is not indicated at all. Syllable prominence alone may distinguish lexical items. In addition, many grammatical categories are expressed or accompanied by changes in syllable prominence patterns. The glottal stop is indicated in one of four ways. 1) Sequences of vowel graphemes always involve an intervening glottal stop, e.g., *tiil* [tiˈʔil], 'foot'. 2) Following a consonant, the glottal stop is indicated with a hyphen, e.g., *mag-áanak* [magˈʔaʔanak] 'will give birth'. 3) At the end of a word in a prominent syllable, it is indicated with a circumflex over the final vowel, e.g., *kitâ* [kiˈtaʔ] 'to see'. 4) At the end of a word in a non-prominent syllable, it is indicated with a grave accent over the final vowel, e.g., *sikò* [ˈsikoʔ] 'elbow'. In such cases the penultimate syllable is predictably prominent. Unfortunately, most published material in Waray does not employ diacritics at all.

In this paper, morphological analyses are expressed in the following ways. Prefixes are followed by a hyphen, e.g., *g-*, *pa-*; suffixes are preceded by a hyphen, e.g., *-an*, *-i*: Infixes are surrounded by hyphens when cited in the text, e.g., *-in-*, *-um-*, but are surrounded by angled brackets when occurring in morphological analyses of cited data, e.g., <*in*>, <*um*>. Finally, inflectable stems are indicated with a preceding hyphen, e.g.,   *-pípinamulod*, whereas fully inflected verb forms are indicated with no hyphen, e.g., *nagpípinamulod*. Sometimes a given form may be understood in isolation as an inflectable stem or as a fully inflected verb form. In such cases, the typography employed corresponds to the intent in the particular context, e.g., *-*sinúsuntok* is ungrammatical as an inflectable stem, whereas *sinúsuntok* (without the hyphen) is a grammatical fully inflected verb form.

Abbreviations employed in Waray examples are the following:

1EXCL   'First person plural exclusive'

(1)   **Pum**alit   **hi**   **Nánay** hin isdâ ha   merkado.   ACTOR VOICE
      <um>palit
      INTR.CTRL-buy   ABS.P Mom   OBL fish LOC   market
      'Mom bought fish in the market.'

(2)   **Pin**alit   ni   Nánay **an isdâ** ha   merkado.   PATIENT VOICE
      <in>palit
      TR.CTRL-buy   ERG.P Mom   ABS fish   LOC   market
      'Mom bought the fish in the market.'

(3)   **Pin**alit**an**   ni   Nánay hin   isdâ **hi**   **Tátay**.   LOCATIVE/RECIPIENT
      <in>palit-an   VOICE
      TR.CTRL-buy-APPL1   ERG.P Mom   OBL   fish ABS.P Dad
      'Mom bought fish for Dad.' (or 'Mom bought Dad fish.')

1SG	'First person singular'
2SG	'Second person, singular'
3SG	'Third person, singular'
3PL	'Third person, plural'
ABS	'Absolutive case'
APPL1	'Applicative 1' (Locative or recipient applicative, -*an*)
APPL2	'Applicative 2' (Benefactive or transferred item applicative, -*i*)
CAUS	'Causative'
CTRL	'Controlled mood'
NOW	'Completive particle'
DEL	'Deliberate mood'
DEMO1	'Demonstrative pronoun/adjective, near speaker and hearer.
ERG	'Ergative case'
EXIST	'Existential particle'
GEN	'Genitive case'
HSY	'Hearsay particle'
IM	'Decided/imminent mood'
IMP	'Imperative'
INCOMP	'Imperfective'
INF	'Infinitive'
INTR	'Intransitive'
IR	'Irrealis'
LK	'Linker'
NEG	'Negative'
OBL	'Oblique'
P	'Personal name'
PL	'Plural'
R	'Realis mood'
RED1	'Partial (#CV-) reduplication'
SG	'Singular'
HAP	'Happenstantial mood'
TR	'Transitive'
VBLZR	'Verbalizer'

(4)   **Ipin**alit   ni   Nánay hin isdâ **an kwarta**.   CONVEYANCE VOICE[4]
       i-<in>palit
       APPL2-TR.CTRL-buy   ERG.P Mom   OBL fish ABS money
       'Mom bought fish with the money.'

The essential insight of Blake (1906) and subsequent work, including the most commonly cited references, such as Schachter & Otanes (1972) on Tagalog and Wolff (1972) on Cebuano, is that the various verb affixes (in bold) specify the semantic role of the noun phrase the speaker chooses to highlight (also bolded). This highlighted noun phrase is variously termed the "subject", "topic", "focus", "trigger," or "absolutive".[5] In example (1) the infix *-um-* specifies that this highlighted NP is the AGENT, or ACTOR. In (2) the infix *-in-* specifies that the highlighted NP is the PATIENT, or UNDERGOER. In (3) the combination of *-in-* plus the suffix *-an* is a multifix that specifies that a LOCATIVE, or RECIPIENT NP is highlighted. Finally, in (4) the combination of *-in-* plus the prefix *i-* is also a kind of multifix that specifies that the highlighted NP is transferred away from the actor ("conveyance voice").

The examples above are all in realis moods. The voice system is also evident in irrealis moods, as in the following:

(5)   **Má**palit   **hi   Nánay** hin isdâ ha merkado. ACTOR VOICE
       ma-á-palit
       INTR.IR-INCOMP-buy ABS.P Mom   OBL fish   LOC market
       'Mom will buy fish in the market.'

(6)   Pápalit**on**   ni   Nánay **an isdâ** ha merkado.   PATIENT VOICE
       RED1-palit-on
       INCOMP-buy-TR.IR ERG.P Mom   ABS fish LOC market
       'Mom will buy the fish in the market.'

(7)   Pápalit**an**   ni   Nánay hin isdâ **hi   Tátay**. LOCATIVE/RECIPIENT
       RED1-palit-an-0   VOICE
       INCOMP-buy-APPL1-IR ERG.P Mom   OBL fish   ABS.P Dad
       'Mom will buy fish for Dad.' (or 'Mom buys Dad fish.')

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[4] The term "conveyance voice" is based on the fact that this form is "typically used in the case of verbs which refer to an action of conveying, or doing something in a direction away from the agent" (Wolff 1973: 79). In descriptions of particular Philippine languages, affixes corresponding to this *i-* are described in a number of ways.

[5] In this paper we claim that ergative and absolutive are the core grammatical relations in Waray clauses. We are aware, of course, of alternative views, including the "symmetrical voice" analysis proposed by Foley (2008) and much subsequent work. We find the arguments for the symmetrical voice hypothesis to be faulty in certain respects and inconclusive in others. Nevertheless, the main point of the present paper is not to refute the symmetrical voice hypothesis or resolve the long and continuing controversy over Philippine basic clause structure. Rather we hope to show that the voice system can be understood as a result of the interaction between transitivity in the inflectional morphology and applicative processes in stem-forming morphology, regardless of how one chooses to understand basic clause structure.

(8)   **I**pápalit   ni   Nánay hin isdâ **an kwarta**. CONVEYANCE VOICE
        i-RED1-palit-0
        APPL2-INCOMP-buy-IR ERG.P Mom   OBL fish   ABS money
        'Mom will buy fish with the money.'

Note that in these examples the components *i-* and *-an* occur in both realis and irrealis moods, whereas *-um-* in the realis (example (1)) is replaced by *ma-* in the irrealis (5). Also, *-in-* in the realis (examples (2), (3) and (4)) is replaced by either *-on* (6), or zero (7), (8) in the irrealis.[6] We will argue in Section 4 that *-um-*, *ma-*, *-in-*, *-on* and a meaningful zero express inflectional categories that combine the dimensions of grammatical transitivity (transitive or intransitive) and modality (realis or irrealis). The forms *i-* and *-an* are reasonably described as applicative morphemes. As such they belong to a larger set of STEM-FORMING (or loosely "derivational") affixes that express a wide range of dimensions including valence (applicative, causative, reciprocal), aspect (incompletive, iterative), actional type (pluraction, sociative, distributive), and other notions.

3. Applicatives in Philippine and other Western Austronesian languages

Prototypical applicatives are similar to morphological causatives in that both are "valence increasing" verbal categories; that is, they both add an argument to the core argument structure of a clause (see, e.g., Dixon & Aikhenvald 2000, Peterson 2007, Polinsky 2013b). The difference between causatives and applicatives is that causatives add a controlling or permitting argument, whereas applicatives add a controlled or affected argument. It so happens that the first example of an applicative construction cited in Polinsky (2013b) is from a Western Austronesian language, Tukang Besi, spoken in Sulawesi, Indonesia (Donohue 1999: 256):

(9)   Tukang Besi (glosses as given in Polinsky, 2013b):
        a. Basic construction, two-place predicate
            no-ala   te kau
            3.REALIS-fetch the wood
            'S/he fetched the wood.'

        b. Applicative construction, three-place predicate
            no-ala-**ako**   te ina-su   te kau
            3.REALIS-fetch-APPL the mother-my the wood
            'S/he fetched the wood (as a favor) for my mother.'

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[6] Examples (6)-(8) include first syllable stem reduplication (RED1), 'incompletive', because these examples sound more natural out of context with the reduplication. Indeed, incompletive aspect often *accompanies* irrealis moods, but there is independent evidence that this reduplication primarily *expresses* incompletive aspect, and not irrealis modality in Waray. First, CV reduplication also occurs in realis modalities, in which case it unequivocally expresses ongoing situations. Second, this reduplication is not absolutely required in expressions of future time, and is largely absent in conversational Waray. Third, CV reduplication is also absent in several other irrealis moods, such as epistemic and deontic moods, and in dependent situations (see examples (35) and (38) below). Finally, incompletive aspect and irrealis co-expression makes semantic sense since irrealis situations and incomplete situations are less transitive, in the sense of Hopper & Thompson (1980), than completive aspect and realis modality.

In example (9)b, the applicative verb suffix *-ako* licenses an additional argument in the construction, and specifies that the semantic role of that argument is a BENEFICIARY, the mother.

In addition to increasing valence, applicative morphemes often simply indicate that the controlled or affected argument is something other than what the underived verb root would normally specify, without increasing the number of core arguments. Indonesian is another Western Austronesian language that illustrates this type of applicative construction. Indonesian has two recognized applicatives, one marked by a suffix *-i*, illustrated in (10)b, and the other by a suffix -*kan*, (11)b:

(10) a. Basic construction, Theme=Obj, Goal=Oblique
          Dia melempar batu   ke saya
          3SG AV.throw   stone to 1SG
          'S/he threw stones at me'

      b. Applicative construction with *-i*. Theme=Oblique, Recipient=Object
          Dia melempar-**i**   saya dengan batu
          3SG AV.throw-APPL 1SG with   stone
          'S/he pelted me with stones' (Arka, et al. 2009:88)

(11) a. Basic construction. Patient=Object, Instrument=Oblique
          Dia memukul anjing dengan tongkat.
          3   AV.hit   dog   with   stick
          'He hit the dog with a stick.'

      b. Applicative construction. Patient=Oblique, Instrument=Object
          Dia memukul-**kan** tongkat pada anjing.
          3   AV.hit-APPL   stick   at   dog
          'He used the stick to beat the dog.' (Sneddon 1996:78)

In Indonesian, applicative constructions specify that the semantic role of the "object" of the verb is something other than PATIENT, usually a LOCATION, BENEFICIARY, INSTRUMENT, or RECIPIENT.

In a survey of 183 languages, Polinsky (2013b) finds 83 languages for which sources have documented applicative constructions, including Tagalog as described by Schachter and Otanes (1972). Though Schachter and Otanes do not use the term "applicative," their discussion of "Locative Focus", "Benefactive Focus", and "Referential Focus" verb forms was clear enough for Polinsky to consider them to be applicative constructions (Schacter & Otanes 1972: 310-313, 314-321, 329). Examples (13) and (15) below are from Schachter and Otanes with glosses reflecting the applicative analysis. Examples (12) and (14) are corresponding non-applicative examples. In example (12) the absolutive argument is the actor, *ako*:

(12) Pípirma   ako   ng mga dokumento.
      RED1-pirma
      IR-sign   1SG.ABS OBL PL   document
      'I will sign some documents.'

In example (13) there are two core arguments—the actor now expressed in the ergative case, *ko*, and a beneficiary expressed in the absolutive:

(13)   "BENEFACTIVE FOCUS" (Schachter & Otanes 1972: 310—glosses added):
           Ipipirma   ko   ang Tátay. (*sic*.)[7]
           i-RED1-pirma
           APPL2-IR-sign 1SG.ERG ABS Dad
           'I'll sign (as proxy) for Dad.'

In example (14), the letter is the absolutive. If the recipient, *alkalde*, is expressed, it must appear in a locative case:

(14)   Sinulat   ko   na   ang liham sa   alkalde.
           <in>sulat
           TR.R-sulat 1SG.ERG NOW   ABS letter LOC mayor
           'I already wrote the letter to the mayor.'

In the corresponding "directional focus" (DF) construction, the *-an* suffix indicates that the absolutive argument, the *alkalde*, is the recipient of the letter:

(15)   "DIRECTIONAL FOCUS" (Schachter & Otanes 1972: 328—glosses added):
           Sinulatan   ko   ng liham ang alkalde.
           <in>-sulat-an
           TR.R-write-APPL1 1SG.ERG OBL letter ABS mayor
           'I wrote the mayor a letter.'

Cena (2014) also treats the *i-* prefix in Tagalog as an "applicative voice" marker, and provides several single-word examples, such as the following (analysis and glosses represent those given by Cena):

(16)   n-a-i-pa-bili
        ASP.[+BEG]-MODE.ACCOM-ASP.[+FIN]-VCE.APPL-MODE.CAUSE-bili
        'was able to have caused (x) to buy (y)' (Cena 2014: 204)

Mithun (2002), in an important paper on the syntactic and discourse functions of applicative constructions in several languages, includes applicative constructions in Kapampangan, a Philippine language spoken just north of the Tagalog speaking region of Luzon Island. The initial examples provided by Mithun are the following:

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[7] The word *Tátay*, like the word *dad* in English, can be used as a personal name or as a common noun. The common noun that corresponds to the kinship term "father" is *ama*. The pre-nominal absolutive case marker *ang* in this example indicates that *Tátay* is being used as a common noun. If it were a personal name, the form would be *si*: *Ipagpipirma ko si Tátay*. However, Schacter and Otanes capitalize this word, as though it should be a personal name. We have left the lexical choice and capitalization as in the original, even though this is a bit incongruous according to the prescriptive rules of Tagalog spelling.

Kapampangan applicatives: Bernadette Mangaser, speaker p.c. (cited in Mithun 2002, with original glosses and translations):

(17)a. <u>Buklat</u> ne.   Transitive, non applicative
      Buklat=na=ya
      <u>open</u>=3.ERGATIVE=3.ABSOLUTIVE
      'He (ERGATIVE) will <u>open </u>it (ABSOLUTIVE).'

    b. **Buklatan ne.**   Transitive, benefactive applicative
      Buklat-an=na=ye.
      <u>open</u>-APPLICATIVE=3.ERGATIVE=3.ABSOLUTIVE
      'He (ERGATIVE) will <u>open </u>(it) <u>for </u>him (ABSOLUTIVE).'

Peterson (2007), in a fairly comprehensive study of applicative constructions in the world's languages, also treats the *-an* suffix and *i-* prefix in Tagalog as markers of applicative constructions (pp. 160-62). Peterson's study highlights the range of uses of applicative morphology, including uses as markers of locative and other types of nominalizations in various languages. Another common feature of applicative morphemes is that they are often lexicalized with certain roots, particularly those for which an affected participant is something other than a prototypical PATIENT, usually something that is only superficially, slightly, or invisibly affected. In Waray, the verbs *hugasan* 'to wash dishes', *tilawan* 'to taste', and *tutdoan* 'to teach' along with many others, belong to this class of verbs.

Regarding the distribution of applicative constructions in the world's languages, Polinski (2013b) states:

> Applicatives are common in three geographical areas: Africa (mostly in Bantu), the western Pacific region (Austronesian), and North and Meso-America (Salish, Mayan, Uto-Aztecan). The main generalization seems to be that applicatives are commonly found in those languages that have little or no case-marking of noun phrases in a clause and that have sufficiently rich verbal morphology to mark applicative formation on the predicate.

Philippine languages exhibit all geographic/genetic and typological characteristics that Polinski finds common for languages with applicative constructions: they are Western Austronesian, they have rich verb morphology, and they have relatively few distinct "cases" in noun phrases.

Ross (2006) provides arguments from Formosan languages that proto-Austronesian *-an* and *Si-* (reflexes *-an* and *i-* in Tagalog and in Waray) may be analyzed as applicatives. Kaufman (2009:188ff) argues against Ross' account on four grounds, as follows:

> First, we do not expect that an applicative affix (i.e., PAn *-an, *Si-*) would replace a transitive voice affix (i.e., *-en*), but this clearly appears to have been the situation from the beginning in Austronesian. Second, the two putative applicatives cannot create new objects, but are rather restricted to creating new subjects. As noted by Ross (this volume, fn.4) and argued for by Aldridge (2004), it may be possible that applicatives in ergative languages behave differently in promoting applicative objects directly to subject/absolutive.

Nonetheless, it is odd for there to be a ban on applicatives co-occurring with the actor voice/antipassive, as this is seen to occur in other robustly ergative languages. Third, the two putative applicatives cannot co-occur with each other, a common possibility afforded to applicatives cross-linguistically. Finally, it is not clear that reflexes of *-an* and *Si-* can be considered any more valency-increasing than reflexes of *-en*.

Each of these arguments is challenged by the view that "actor voice" affixes indicate grammatical intransitivity, and the "undergoer voice" affixes indicate grammatical transitivity (see section 4.1 below). First, if *-en* expresses basic active, transitive voice, it is not at all surprising that an applicative affix might replace it. Applicatives always result in grammatically transitive stems. There is no need for two markers of grammatical transitivity in the same modality in the same clause. In our analysis, *-on* in Waray (reflex of pAn *-en*) indicates that the absolutive argument has the semantic role, usually patient, which is expected for the particular verb, whereas the applicative *-an* indicates that the absolutive has a different semantic role. The fact that they don't co-occur is a natural consequence of this view. Second, the argument that *-an* and *Si-* create new subjects rests on the premise that subject and object are the basic grammatical relations. If one takes the view that the arguments created by *-an* and *Si-* are absolutives, this objection evaporates. Also, because applicative constructions are transitive it is entirely reasonable that the applicatives should not occur with the intransitive ("actor voice/antipassive") affixes. Kaufman mentions "other robustly ergative languages" that do allow such co-occurrence, but cites no references. Even if such languages exist, Philippine languages may just be different in this respect. Third, Kaufman mentions cross-linguistic evidence that multiple applicatives may occur in the same clause, without citing any references. While there are languages that allow two applicative categories in the same clause, this phenomenon is relatively rare (see, e.g., the study of multiple applicatives in Samkoe 1994, and Polinsky 2013b). Finally, the applicative analysis does not entail that reflexes of *-an* and *Si-* are "more valence increasing" than reflexes of *-en*. They are all indicators of grammatical transitivity. They contrast in that they express different semantic roles of the absolutive argument.

While it has been widely recognized that the common Philippine verbal affixes *-an*, and *i-*, are reasonably treated as applicative morphemes, it is still common within Philippine linguistic studies to consider these formatives to be parts of "multifixes," "ambifixes," or "circumfixes", forming combinations with other verbal affixation. For example, Wolff and Wolff (1967, chapter 19, p. 37) describe Waray verbs with the form *gin-* as 'direct passive', *gin- . . . -an* as 'local passive,' and *igin-* as 'ablative passive.' In our approach, *gin-* is a combination of the inflectional infix *-in-* plus a stem-forming prefix *g-*, while *-an*, and *i-* are distinct stem-forming applicative affixes. For an analogy from English, Wolff and Wolff 's approach would be similar to asserting that the English forms *tied*, *retied*, and *untied* represent three distinct morphological categories, *-ed* 'past', *re- . . . -ed*, 'repetitive past', and *un- . . . -ed*, 'negative past.' In fairness to Wolff and Wolff and others who take the multifix approach, Philippine applicative processes are much more frequent, regular, and productive than English verbal derivational morphology like *un-* and *re-*. Furthermore, certain combinations of inflectional and stem-forming affixes commonly occur together (e.g., applicatives must be transitive). For these reasons, the multifix approach is more reasonable when applied to a Philippine language than it would be for English. This is one reason we avoid the term "derivational" for the stem-forming affixes—the prototype evoked by the term "derivational" does not fit the stem-forming categories very well. Nevertheless, we contend that the verbal morphology

of Waray, including commonly occurring affix combinations, like *gin-*, *igin-*, and *gin- . . . -an*, are more reasonably understood as parts of a coherent system resulting from the interaction between two quite distinct sets of forms, whatever terminology one chooses to describe them.

4. Inflectional vs. Stem-forming affixation

Our approach depends on a clear distinction between two classes of affixes which we describe as INFLECTIONAL and STEM-FORMING affixes. The essential difference between these two classes is that inflectional affixes are strictly paradigmatic—one and only one inflectional affix is required to allow a word to function as a verbal predicate in a main independent clause. Stem-forming affixes, on the other hand, are non-paradigmatic—they may combine with one another to form complex meaningful stems that are then available for inflection. It is worth noting that our identification of a small set of inflectional affixes distinct from derivational affixes is consistent with observations by Wolff (1972) on Cebuano (a close relative of Waray) and others. Wolff (1972: xv) states (emphasis in the original):

> Verb forms are subject to the addition of a small list of affixes which we call INFLECTIONAL AFFIXES. The inflectional affixes specify three tenses: PAST, FUTURE, and SUBJUNCTIVE; four cases or voices: ACTIVE, DIRECT PASSIVE, LOCAL PASSIVE, and INSTRUMENTAL PASSIVE; and two modes: POTENTIAL and NONPOTENTIAL.

The major difference between our approach and Wolff's lies in which affixes belong to each set. For Wolff, *i-* is a component of inflectional morphology, and *-an* is both inflectional and derivational. There is an inflectional *-an₁* which combines with several other formatives (*gi-*, *na-*, *ma-*, *ka-*, and *paga-*) to form multifixal "local passive" forms. There is also a derivational *-an₂* which is defined as a "suffix forming verb bases . . . and means [do] something at a certain place habitually" (Wolff 1972: 39). Our view, based on Waray, is that both *i-* and *-an* (as well as the subjunctive *-i*) are stem-forming—specifically applicative—affixes. The differences between Wolff's *-an₁* and *-an₂* have to do with the verb roots and inflectional affixes they occur with. We suggest that our approach provides a more internally consistent analysis of Waray verb morphology, one which will be more transparent to linguists who work in other language families.

Table 1 displays the entire paradigm of Waray inflectional affixation for verbal predicates, according to our current analysis. In order to function as a verbal predicate, a stem must take one, and only one of these affixes. Note that many of the affixes in this table have additional functions in referential expressions (often combined with stress shifts), as infinitives, action nominalizations, participant nominalizations, etc. In this paper we are only concerned with their usages in the inflectional paradigm of verbal predicates. Table 1 contains references to examples further below that illustrate each of these usages. See Oyzon & Payne (in preparation) for a more inclusive account of Waray morphosyntax.

Table 1*:*

The inflectional paradigm of Waray verbs

Modality ↓ Transitivity →		Transitive	Intransitive
Realis	Controlled	-in- (20), (30)	-ín-/-um- (21)a, (32) [8]
	Happenstantial/Neutral[9]	na- (26)b, (33)	na- (34), (36)
Irrealis	Imminent/Decided	-on/-0[10] (6), (7), (8), (27)	tí- (18), (44)
	Controlled		ma- (43)
	Happenstantial/Neutral	ma- (42)	
	Subjunctive/Imperative	-a (52)	-0 (47), (49)

According to our analysis of Waray, transitivity and modality are the major dimensions in the inflectional paradigm. As discussed below, temporal effects (tense and aspect) that arise from these dimensions are largely collateral to transitivity and modality. Other Philippine languages, e.g., Cebuano, seem to incorporate aspect (time texture, Comrie 1976) more directly into a similar paradigm. There clearly are other dimensions, and other specific categories represented in other Philippine languages. In the following sections we will describe how transitivity and modality are expressed in the inflectional paradigm specific to Waray.

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[8] In most varieties of modern spoken Waray, the *-um-* infix is the only member in this category. In Eastern Samar, sometimes *-ín-* (long vowel) is used. Historically, both *-in-* (short *i*) and *-um-* appeared together, {kinumáon}. This form shortened to *kinmaon* (which is also still heard in some areas). This form further shortened to *-ín-*, with the extra length on the vowel compensating for the truncated {m}. Such compensatory lengthening occurs in other contexts as well, as discussed in Oyzon and Payne (*in prep.*).
Wolff (1970), speaking of Cebuano, described the *-um-* verbal infix as expressing "general time." "Controlled" mood in Waray can be understood as general time in the sense that the event is expressed as usually, normally, or effortlessly happening. However, this mood contrasts with realis neutral and happenstantial moods, rather than an aspectual dimension. All realis moods may occur in perfective, imperfective, present, or past contexts depending on other contextual or constructional features, such as the second-position aspectual enclitics *pa* 'continuing' and *na* 'completed.' Therefore, we conclude that modality is the major dimension, and any temporal nuances are collateral. Though Cebuano and Waray are closely related, it does appear that aspect is more prominent in the inflectional paradigm of Cebuano than of Waray.
[9] The "happenstantial" meaning of the *na-* and *ma-* prefixes is "neutralized" when they combine with incompletive *á-* or deliberate *g-* stem-forming prefixes. Also, when used with transitive, volitional stems, the "happenstantial" categories are commonly interpreted as abilitative, e.g., *Nakúha ko an tinapay* 'I was able to get the bread.' We consider this to be a logical consequence of happenstantial semantics applied to volitional concepts: An action may be volitional, but the ability to perform the same action is non-volitional. For this reason, abilities have more in common with states that with activities.
[10] The alternation between *-on* and a meaningful zero at this point in the paradigm is perhaps the most debatable part of our hypothesis. Briefly, both our approach and the multifix approach must posit such an alternation. We believe that our approach (inflection plus stem-forming categories) provides a more principled motivation for this alternation, though others will surely disagree.

4.1.   Transitivity

In this section we give evidence for our assertion that a major dimension in Waray verbal inflectional morphology is grammatical transitivity, rather than voice *per se*. We are suggesting that voice, as it is usually considered in Philippine linguistic studies, is an epiphenomenon that results from the combination of transitivity in the inflectional paradigm and applicative categories in stem-forming morphology.

Transitivity is a concept that may be thought of in terms of semantics or grammar (Comrie 1989). Semantically, transitivity can be defined as the degree to which an activity "carries over" or "transfers" from a specific controlling starting point to a concrete, visibly affected endpoint (Hopper & Thompson 1980: 251ff). As with many continuous semantic dimensions (e.g., relative time, reality, causal responsibility, direction, location, and many others), individual languages tend to divide the transitivity scale into discrete categories for purposes of grammatical expression. Examples of morphosyntactic discretization of transitivity can be found in the Inuit languages (Reed, *et al*. 1977, Payne 1979), Cariban languages (Payne & Payne 2013), and in a typologically broad spectrum of languages documented in Nichols, Peterson, and Barnes (2004).

Most definitions of grammatical transitivity highlight the difference between clauses that do not have an "object" argument (intransitive clauses) and those that do (transitive clauses). As pointed out in La Polla *et. al.* (2011) among others, this definition has been unduly influenced by the structural characteristics of Indo-European languages, in which "subject" and "object" are robust and well-defined grammatical relations. We would like to challenge this assumption by suggesting that, while Philippine languages are certainly unique and special in many ways, the particularly contentious controversy concerning their basic clause structure stems not from any peculiarity of the languages themselves, but from conscious or unconscious presuppositions that linguists hold regarding the notion of transitivity. Therefore, we would like to propose a different "take" on the notion of grammatical transitivity, one based on what we see as the essential relational categories of Waray, rather than those of other languages. We define a grammatically intransitive construction as one that contains an absolutive argument, but lacks a *separate*, expressed or clearly understood starting point (usually an actor). The absolutive may itself be the starting point, but there is no starting point apart from the absolutive. A grammatically transitive clause is one in which there is a starting point which is distinct from the absolutive argument. Crucially, it is the presence of a distinct grammatical *starting point* (usually expressed in the genitive/ergative case) that defines transitive clauses, rather than the presence of a distinct grammatical *endpoint* (object). We contend that the transitivity dimension of verbal inflectional morphology in Waray reflects precisely this syntactic notion of transitivity.

The first argument for this assertion is that certain roots, when functioning as verbal predicates, only occur with one set of inflectional affixes, i.e., they only occur in the "actor voice". These are all roots which semantically evoke scenes that involve only one participant—they do not involve a "transfer" of activity to a specific endpoint, from a separate starting point, and so may be considered "semantically intransitive". These include roots such as *tawà* 'to laugh/smile', *lakat* 'to walk/go on foot', *lukso* 'to jump', and a long list of others.

(18)   **Tum**awà hiya.   'S/he laughed.'
              3SG.ABS
        Natawà hiya.   'S/he happened to laugh.'
        Mátawà hiya.   'S/he will be laughing.'
        Titawà hiya.   'S/he is about to laugh.'

Transitive (patient voice) forms are simply ungrammatical for these underived roots:

(19)   *Tinawà hiya.   Patient voice, realis = 'S/he was laughed'[11]
        *Tátawáon hiya.   Patient voice, irrealis = 'S/he will be laughed'??

  Those who suggest that the *-um-*, *na-*, *ma-*, and *tí-* affixes mark "actor voice" will argue that of course these underived roots only occur in actor voice, because there is only an actor. There is no separate participant in the basic semantic frame evoked by the verb, therefore actor voice is the only possibility. The counter-argument is that a scene with only one participant is the prototype of semantic intransitivity. And a clause with only one argument is the prototype of grammatical intransitivity. Why invoke an entirely new conceptualization of clause structure when a well-established and widely understood equivalent is readily available? These are inherently intransitive verb roots, and they are inflected to *reflect* their intransitivity.

  In order to be used as a predicate in a grammatically transitive argument structure frame, these roots must take transitivizing stem-forming morphology, either the causative *pa-* (20)a or an applicative (20)b:

(20)   a.   **Pina**tawà   níya   an   ímo   anak.
              <in>pa-tawà
              TR.R-CAUS-laugh 3SG.ERG ABS 2SG.GEN child
              'S/he made your child laugh.'

        b.   **Ti**naw-**an**   níya   an   ímo   anak.
              <in>-tawà-an
              TR.R-laugh-APPL1 3SG.ERG ABS 2SG.GEN child
              'S/he laughed at your child.'

  In (20)a, the stem is *-patawà* 'cause to laugh'. This stem now evokes a scene that does involve action "carrying over" from a controller, the causer, to an affected participant, someone who laughs. Therefore, it is semantically transitive. This semantic transitivity is reflected grammatically in the verb by the infix *-in-*. Similarly, in (20)b, the stem is *-taw-an* 'laugh at someone'. This stem also evokes a scene that involves an actor and a distinct endpoint or undergoer, and so also must take transitive inflection. Both *pa-* and *-an* increase the semantic valence of the stem, but in different ways. The affix combinations *-in-* . . . *-an* and *pina-* are not unified multifixes, but rather combinations involving one stem-forming affix that *changes* the valence of the stem, and an inflectional affix (*-in-*) that *reflects* the valence of the construction. Of course, these particular combinations are very common since stems that involve valence increasing derivations must be semantically transitive, and thus normally take their inflections from the transitive set.

  The second argument for grammatical transitivity as being a major dimension of the inflectional paradigm is that stems that allow both intransitive and transitive inflections fall into two categories, which are well known in the general typological literature. These are PATIENT-PRESERVING and AGENT-PRESERVING LABILE VERBS (Letuchiy 2009, and references cited therein,

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[11] The form *tínawà hiya*, with long vowel in the first syllable of the verb, is an acceptable form in E. Samar. In that variety, *-ín-* is an intransitive infix that contrasts with *-in-* (short *i*) as the transitive version (see Table 1). Unfortunately, in most published material in Waray, this important distinction is not reflected.

including Dixon, 1988, on an Austronesian language). The examples in (21) are of a root that can be considered a **PATIENT PRESERVING** labile root following Dixon (1994). For these roots the intransitive form evokes a scene in which the actor is also the most affected participant. In the transitive form, a distinct actor is included as a causal agent:

(21) a. **Bum**alhin   **an karabaw** ha íba   nga úma.   INTRANS. Undergoer(+Actor)
          <um>balhin   =ABS
          INTR.R-move ABS carabao   LOC other LK   field
          'The carabao moved (itself) to another field.'

      b. **Bin**alhin   ko   **an karabaw** ha íba   nga úma. TRANS. Undergoer=ABS,
          <in>balhin   Actor=ERG
          TR.R-move 1SG.ERG ABS carabao   LOC other LK   field
          'I moved the carabao to another field.'

Example (21)a is inflected with the intransitive form, *-um-*. In the corresponding transitive construction, (21)b, an external controller acts directly on the carabao, causing it to move. In both of these constructions the participant expressed in the absolutive role is the most affected (undergoer or patient) participant.

The examples in (22) illustrate a second type of labile verb termed **AGENT PRESERVING** labile roots, also following Dixon (1994). In this type, the actor of the intransitive construction remains the actor in the corresponding transitive construction. In Waray, this involves a change in case from absolutive to ergative:

(22) a. **Kum**áon   na   hiya.   INTRANSITIVE. Actor=ABS.
          <um>kaon
          INTR.R.CTRL-eat COMPL 3SG.ABS
          'S/he already ate.'

      b. **Kin**áon   níya   an tinápay. TRANSITIVE: Actor=ERG
          <in>káon   Undergoer=ABS
          TR.R.CTRL-eat   3SG.ERG ABS bread
          'S/he ate the bread.'

Roots such as *káon* 'to eat' may be considered "semantically transitive" in that they evoke scenes which inherently involve two participants. In the case of (22)a, it is understood that the actor ate something, even though the eaten thing is not overtly mentioned. Constructions based on such roots may include reference to the undergoer in an oblique role introduced by one of the noun markers *han* 'definite' or *hin* 'indefinite,' as in example (23).

(23) Kumáon   hiya   hin tinápay.   DETRANSITIVE: Actor=ABS
      <um>káon   Undergoer=OBL
      INTR.R.CTRL-eat 2SG.ABS OBL bread
      'S/he ate bread.'

We describe these kinds of constructions as DETRANSITIVE because they present a semantically transitive event as not as effective, or the affected participant not as specific, definite, or individuated, as in the corresponding grammatically transitive construction.[12] The undergoer in such constructions may also be freely omitted, as in (22)a. For almost every component of semantic transitivity mentioned in Hopper and Thompson's (1980), examples such as (23) are less transitive than their corresponding "undergoer voice" constructions. The fact that they are inflected with the same set of inflectional affixes as clearly semantically intransitive constructions is a strong piece of evidence that they are grammatically intransitive.

Finally, we argue for the grammatical intransitivity of examples such as (23) on the basis of the grammatical status of the undergoer argument. If example (23) were grammatically transitive, the undergoer, *hin tinápay*, should be a direct argument of the verb, specifically a direct object. Therefore this argument should have properties of other direct objects. However, there are several "tests" that show that this participant is not a direct argument at all, but rather a kind of oblique. Here we present, briefly, only one of these tests. In unquestionably transitive constructions, either the ergative or the absolutive argument may appear before the verb:

(24)   a. Ákon ginkaon   an   tinapay. TRANSITIVE, ERGATIVE FRONTED
                      g-in-káon
        1SG.ERG DEL-TR.R-eat ABS bread
        'I (am the one who) ate the bread.'

    b. An tinápay, ginkaon ko.   TRANSITIVE, ABSOLUTIVE FRONTED
       'THE BREAD I ate.'

In detransitive constructions, the absolutive may be fronted (25), but fronted undergoers are very odd (25):

(25)   a.   Hiya   kumáon hin tinápay.   DETRANSITIVE: ABS=ACTOR
                         <um>káon
        2SG.ABS INTR.R-eat OBL bread
        'S/HE (is the one who) ate bread.'

    b. ??Hin tinapay, kumáon hiya. (Poetic or "Yoda speech" only)

Some oblique participants may also be fronted in similar "topic-comment" constructions, in particular those that describe a locational or temporal setting for the following clause. Much could be said about these alternative constituent order constructions, including the possibility of analyzing them as clefts based on nominalizations. However, most of that discussion lies outside the scope of this paper. Suffice to say that "demoted" undergoers in detransitive ("actor voice") constructions in Waray may not freely be fronted in this type of construction. This fact

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[12] Foley (2008:34) argues that constructions similar to (22) in Tagalog are just as transitive as examples such as (21b), and asserts that direct arguments may not be fronted. This is incorrect for Tagalog, and for Waray. Absolutives in both languages are actually the most likely elements to be fronted; ergatives may also be fronted when pronominal (see examples in (24)). We will not pursue this debate in detail here, but rather simply give one more piece of evidence that the detransitive construction is grammatically intransitive.

differentiates them from direct arguments, and therefore constitutes independent evidence for an approach that treats such "actor voice" constructions as grammatically intransitive.

Constructions such as (23) may be considered a kind of ANTIPASSIVE (Silverstein 1972) insofar as they depict a semantically transitive situation with the controller in a central grammatical role (absolutive). However, we avoid the term antipassive for this construction in Waray for two reasons. First, a prototypical antipassive construction is one in which a specific valence reducing morpheme occurs in the verb (phrase), in addition to any inflectional information (Polinsky 2013a). In Waray there is no specific marker of "antipassivization". The verb is simply inflected as intransitive, as are all single argument verbal predicates.[13] Second, the term "antipassive" implies the mirror image of a "passive" construction. Passive constructions in a language like English are glaringly marked with an auxiliary and past-participle verb form, and thus might reasonably be considered to be derived from a more "basic" transitive construction. They also have a very powerful agent demotion and patient promotion function, and are relatively uncommon in most registers of discourse. Verbs in detransitive constructions in Waray, on the other hand, are only subtly marked by the presence of intransitive inflection. Pragmatically, they communicate a reduction in the completeness or effectiveness of the action, and/or the diffuseness or indefiniteness of the affected participant. This is a job that is accomplished not by voice alternations but by other means, including a robust system of articles in English and other Indo-European languages. For this reason, Waray detransitive constructions are more useful and more common in ordinary conversation than are passive constructions in languages like English. They also "seem transitive" to linguists who are native speakers of English because the English translations tend to be transitive: "She ate bread", "They found a boat," "We never eat pork," etc. For these reasons, we consider "detransitive" to be a more insightful term than "antipassive" for this construction type in Waray.

The following are some additional examples of grammatically transitive and intransitive clauses from the corpus, with the main verbs highlighted, and the core arguments underlined:

(26)   Transitive Realis clauses:
   a.   **Ginbiling**   <u>ni   Tátay Pído</u> <u>an balay nga   may numero 5</u>.
        g-in-biling
        DEL-TR.R-seach.for ERG.P Father Pido ABS house COMP EXIST number 5
        'Tátay Pido searched for the house marked number 5.' (Ramos & Gaspay 2015)

   b.   **Natad-an**   <u>ni   Sabel</u> <u>an munyika han íya   manghod</u>
        na-tarâ-an
        R.HAP-find-APPL1   ERG.P Sabel ABS doll   GEN 3SG.GEN younger.sister

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[13] Polinsky (2013a) does mention the existence of antipassive constructions that do not have dedicated antipassive markers: "Languages also make use of antipassive markers that are syncretic with other categories: detransitivizers and aspect/modality markers." Polinky's rather brief study lists Kapampangan (a Philippine language spoken in central Luzon) as having antipassives, but Tagalog as not having antipassives. We are certain that this discrepancy reflects the different perspectives in the literature consulted by Polinsky (though no specific examples or references on antipassives in these languages are provided).

nga hi   Ana ha   kamiyápian han Alimasag.[14]
<small>COMP ABS.P</small> Ana <small>OBL</small> mangrove <small>GEN</small> Alimasag
'Sabel happened to come across her little sister Ana's doll in the mangroves of Alimasag.' (Salvacion *et al*. 2015)

(27)   Transitive, irrealis clause:
Kúkuháon   _námon_   _ini'n_   _ímo_   usa nga anak nga laláki . . . "
<small>RED</small>1-kuhâ-on   ini-nga
<small>INCOMP</small>-take-<small>TR.IR</small> 1<small>EXCL.ERG</small> this.<small>ABS-LK</small> 2<small>SG.GEN</small> one <small>LK</small>   child <small>LK</small>   male
'We will take this one of your sons . . .' (Alunan 2016:7)

(28)   Intransitive, realis clause:
Nangángaturog   na   ngáni <u>an ámon   Lola</u> . . .'
na-<small>RED</small>1-N-katúrog
<small>R.HAP-INCOMP-DIST</small>-sleep <small>NOW</small>   but   <small>ABS</small> 1<small>EXCL.GEN</small> grandmother
'But whenever our grandmother would fall asleep . . . .' (Alunan, 2016:26)

(29)   Intransitive, irrealis clause:
Mábayâ   na   <u>hira</u> híni   nga tent . . .
ma-á-bayâ
<small>INTR.IR-INCOMP</small>-leave <small>NOW</small> 3<small>PL.ABS</small> this.<small>OBL</small> <small>LK</small>   tent
'They now will leave this tent . . . " (Ramos & Gaspay 2015:2)

4.2.   Modality

In this section we provide our arguments that **MODALITY** is the second major dimension of verbal inflectional morphology in Waray. Other linguists have analyzed inflection in other Philippine languages as involving tense, aspect, or both, in addition to voice. While relative time (tense) and time texture (aspect) are certainly expressed in Waray, we claim that these temporal notions are "collateral" to the modal contrasts described below. This is because the modal notions (realis, irrealis, control, happenstance, etc.) vary independently of relative time and aspect. Specifically, aspect (imperfective, incompletive, and completive) is overtly expressed in either stem-forming morphology (*á-* 'incomplete', <small>RED</small>1 'imperfective') or second-position enclitics (*na* 'completive', *pa* 'continuing').

Modality in Waray refers to the speaker's evaluation of whether an event actually happened, may have happened, will happen, or might happen. In addition, modality expresses the degree of responsibility and intentionality ascribed to the controlling argument(s). The specific categories within the modality dimension are called **MOODS**. The terms we are using to gloss the moods are tentative, but reflect our current understanding of their general meanings, based on input from many native speakers. The emphasis in this section will be on modality as it is expressed in the inflectional paradigm (see Table 1). Some of the stem-forming affixes may also express what may be considered modal notions. In particular, there is a stem-forming prefix *g-* that expresses deliberate mood. This affix interacts significantly with the controlled, neutral, and happenstantial inflectional categories, and so warrants separate discussion, which we provide in section 4.2.3.

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[14] This example contains two absolutive arguments because there are two clauses. The phrase *nga hi Ana* is a relative clause modifying the noun *manghod*. A more literal translation of the absolutive argument of the main clause would be "the doll of her younger sister who is Ana".

The major distinction in the inflectional modal dimension is between REALIS and IRREALIS situations (see Table 1). Realis situations are presented as actually happening. They are not hypothetical, future, or possible situations, but real facts (from the speaker's perspective). Irrealis situations may be predicted, possible, or contemplated. They may be imperatives or situations that are contingent upon other situations. In the following sections we discuss and exemplify the various realis and irrealis moods.

4.2.1. Realis Moods

Within realis modality, we recognize two categories which we name CONTROLLED and HAPPENSTANTIAL/NEUTRAL moods (see Table 1). Controlled mood normally depicts situations as being under the control of the actor. However, the emphasis in the controlled mood is the *effect* of the situation on the absolutive argument (whether the absolutive happens to be the actor or not). Often, events in controlled mood are presented as situations the controller always, naturally, effortlessly, or inevitably does, as in examples (30) to (32):

(30)   Transitive, controlled mood:
Komo   an misyon ko   pamusil,   **pinusil**   ko.
                                    pag-N-pusil   <in>pusil
because ABS mission 1SG.GEN INF-DIST-shoot TR.R.CTRL-shoot 1SG.ERG
'Because my mission was to go shooting, I shot (it).' (The speaker was there to go shooting, so the act of shooting was inevitable.)

In ex. (31), *-in-* is used because grief is the natural, expected human response to death:

(31)   **Ikinasubô**   ko   an íya   kamatay.
i-<in>ka-subô
BEN-TR.R.CTRL-VBLZR-grief   1SG.ERG ABS 3SG.GEN death
'I grieved her/his death.'

(32)   Intransitive, controlled mood:
Umabot   an   bagyo.
<um>-abot
INTR.R.CTRL-arrive ABS storm
'The storm arrived.' (The storm was known to be on its way, so its arrival was inevitable, neither happenstantial nor deliberate. Oyzon, Claro & Ramos 2015, p. 8).

Situations or events expressed in happenstantial mood are not instigated or controlled by anyone—they "just happen". As with controlled moods, the profiled semantic feature is the *effect* of the event or situation on the participant expressed in the absolutive role. For semantically transitive or intransitive situations that are inherently non-volitional, such as *kitâ* 'to see' *túnaw* 'to dissolve/melt', *matay* 'to die', etc. the happenstantial realis forms are the default, basic forms, and hence can usually be understood as past tense, perfective aspect.

(33)   Happenstantial, transitive:
       Kay   **nakitâ**   níya   nga   náuro   ito'n   uding, . . .'
              na-kitâ   na-á-uro   ito-an
       because R.HAP-see   3SG.ERG COMP R.NEU-INCOMP-defecate that-ABS cat
       'Because (s/he) saw that the cat was defecating, . . .'

Seeing something is a happenstantial experience, not a controlled act. This root may occur in controlled moods, but the English translation would more appropriately be *find*, *look at* or *watch*, depending on other contextual factors.

Regarding example (34), drinking is a controlled activity, but getting drunk is a happenstantial effect experienced by the drinker.

(34)   Happenstantial, intransitive:
       Nahubog   hi   Inay   Bebeng.   'Inay Bebeng got drunk.'
       na-hubog
       R.HAP-drunk   ABS.P Inay Bebeng

Compare example (35) to (31) above. Happenstantial mood in (35) highlights the fact that the experiencer, *ako*, is affected by grief as a natural momentary state. Whereas in (31) the experiencer, *ko*, is expressed as an actor who *does* something—he/she acts in a natural, controlled way to express a possibly more intense, more enduring sense of grief.

(35)   **Nasubô**   ako   ha   íya   kamatay.
       na-subô
       R.HAP-grieve 1SG.ABS LOC 3SG.GEN death
       'I was in grief from his/her death.'

Examples (36) through (38) illustrate further usages of the happenstantial, realis mood.

(36)   **Namatay** an   báboy.   'The pig died.'
       na-matay
       R.HAP-die   ABS pig

(37)   **Natúnaw** an   ice.   'The ice melted.'
       na-túnaw
       R.HAP-melt   ABS ice

The happenstantial meaning of this category is neutralized when combined with the stem-forming incompletive aspect *á-* (38), or the deliberate mood *g-* (39):

(38)   **Násirang**   an   adlaw.   'The sun is rising.'
       na-á-sirang
       R.NEU-INCOMP-rise ABS sun

(39) **Nagkagawas**   ha íra   tent (hira) . . .
na-g-ka-gawas
R.NEU-DEL-VRBLZR-outside LOC 3PL.GEN tent 3PL.ABS
'(They) stepped out of their tent . . . ' (Ramos & Gaspay 2015, p. 1)

4.2.2. Irrealis Modality

Within irrealis modality, there are four major divisions. We name these IMMINENT/DECIDED, CONTROLLED, HAPPENSTANTIAL/NEUTRAL, and SUBJUNCTIVE/IMPERATIVE moods. The neutral and imminent/decided irrealis moods are only distinct in a grammatically intransitive frame. In the transitive, these categories are merged into one suffix, *-on* (with a zero-form allomorph in applicative stems). One might want to consider all these moods as variations on "future tense", but they express more information than future time, so it makes more sense to call them moods than tenses. The neutral irrealis mood is the most common intransitive, irrealis mood and is used for happenstantial and controlled events. The imminent mood is less common and involves an assertion that the actor has decided to perform the action and is about to do so. The speaker is not necessarily predicting that it *will* happen, but only saying that the actor plans to carry out the activity, probably in the very near future.

(40) Transitive, irrealis, controlled:
Ayaw hin aringása dinhi, kay   bángin kita   **labáyon**.
                                              labay-on
don't OBL noisy   here   because maybe 1INC.ABS throw-TR.IR.CTRL
'Don't be noisy here, because (people) will throw (things) at us.'

(41) Intransitive, irrealis, controlled:
Maglálaba   ako   niyan.   'I will do the laundry later.'
ma-g-RED1-laba
INTR.IR-DEL-INCOMP-launder 1SG.ABS later

(42) **Mábayâ**   na <u>hira</u> híni   nga tent . . .
ma-á-bayâ
INTR.IR-INCOMP-leave NOW 3PL.ABS this.OBL LK   tent
'They now will leave this tent . . . " (Ramos & Gaspay 2015:2)

(43) Intransitive, irrealis. happenstantial:
Bángin **mamatay**   an báboy. 'Maybe the pig will die.'
        ma-matay
maybe INTR.IR.HAP-die ABS pig

(44) Intransitive, irrealis imminent:
Tíkaturog   na an báta.   'The child is about to go to sleep.'
tí-katurog
INTR.IR.IM-sleep NOW ABS child

For applicative stems (those formed with either *i-* or *-an*), the stem itself stands as the irrealis form.[15] Neither of these two Stem-forming affixes occur with any of the specifically irrealis inflectional forms. Normally, these will be understood as imperatives (ex. (45)), though this is not always the case (ex. (46)).

(45)   **Ikuhà**   ako   han unod hin bugsok.
        i-kuhà-0
        BEN-fetch-TR.I 1SG.ABS OBL meat GEN deer
        '(Please) get me some deer meat.'

(46)   **Taw-án**   ko   gud   la   hi   Mam.
        tawâ-an-0
        laugh-APPL-TR.I 1SG.ERG indeed just ABS.PNAME maam
        'I'll just smile at Ma'am.'

The default modality for a stem functioning as a predicate is irrealis. In the absence of any specifically realis marking, a verbal predicate will be understood as irrealis in modality. Bare stems can be used to express a "historical present" in narrative discourse, though their primary function is as intransitive imperatives, as in examples (47) through (49):

(47)   **Langoy**, **langoy** ngadi.   'Swim, swim towards here.'

(48)   **Káon** na   la,   anak, **káon**, bisan guti . . .
        eat   NOW   just   child eat   even   little.bit
        'Just eat, my child, eat even just a little, . . .'

(49)   **Dalágan,** kay   may alok ha mga kákawaynan!
        run   because EXIST witch LOC PL   bamboo.grove
        'Run, because there is a witch in the bamboo groves!'

When an imperative construction is grammatically transitive, there are three possibilities. First, if the non-imperative, irrealis, transitive form ends in *-on*, the suffix *-a* appears. If the non-imperative, irrealis, transitive form ends in *-an*, the stem-forming applicative suffix *-i* appears. Finally, if the non-imperative, irrealis form begins with *i-*, the *i-* remains in the imperative. For example:

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[15] Some linguists who study Tagalog and other Philippine languages think of *i-*, *-on* (*-in* in Tagalog), and *-an* as all being irrealis markers. However, for Waray we prefer an approach that treats *i-* and *-an* as Stem-forming affixes and *-on* as a transitive, irrealis inflectional affix. The evidence for this analysis is that both *i-* and *-an* may occur in realis moods: *Iginlutò ko an isdâ* 'I cooked the fish for someone' and *Ginhugasan ko an mga pinggan* 'I washed the dishes.' Therefore, irrealis cannot be a part of their meanings. The suffix *-on*, on the other hand, never occurs in the realis modality. Therefore, we conclude that *-on* is part of the inflectional paradigm, specifically indicating transitive, irrealis modality. *i-* and *-an*, on the other hand, are Stem-forming affixes (having to do with valence, rather than modality). For this reason, they may occur together with the realis inflectional affixes. When they occur on stems with no other overt inflectional affixes, as in examples (51) through (53), the clause will always be understood as irrealis in modality, because the bare form of a stem is irrealis. Another way of saying this is that for applicative stems, the irrealis marker is zero (as is independently verified in imperatives), but for other transitive stems, the irrealis marker is *-on*.

(50)   Irrealis, transitive form: Transitive, imperative:

kaúnon	'will eat (it)'	Kaóna íni!	'Eat this!'
kuháon	'will take (it)'	Kuháa íni!	'Take this!'
kuháan	'will take (some)'	Kuhái íni!	'Take (some of) this!'
hugásan	'will wash (dishes)'	Hugási íni!	'Wash this!'
(ha)tágan	'will give to'	(Ha)tági ako híto![16]	'Give that to me!'
ipalit	'will buy for'	Ipalit ako híto!	'Buy that for me!'

(51)   Transitive imperative, applicative:
        Katurógi   na   ito, duro   na   ito nga   ímo   kakapoy.
        katúrog-i
        sleep-IMP.APPL NOW   this too.much NOW   this NOW   2SG.GEN tiredness
        'Get some sleep; your tiredness is too much.'

(52)   **Pakatúroga**   an báta kay   nagpúpurdyos.
        pa-katurog-a   na-g-RED1-purdyos
        CAUS-sleep-TR.IMP ABS child because INTR.R-DEL-INCOMP-grumpy
        'Let the child go to sleep because s/he is getting grumpy.'

(53)   **Luksuhí**   an íya   tiyan.   'Jump over his/her belly.'
        lukso-i
        jump-IMPER.APPL ABS 3SG.GEN belly

Examples (53) and (54) are both natural utterances that illustrate the difference between the suffixes *-a* and *-i* on transitive imperatives. In (52), the belly is only part of the patient that is jumped over, whereas in (54), the bamboo in its entirety is implied:

(54)   Transitive imperative, non-applicative (complete effect):
        Uday, **luksuha**   it'   kawáyan bángin ka   masugápot.
             lukso-a   ma-sugapot
        Uday jump-TR.IMP this.ABS bamboo maybe 2SG.ABS INTR.IR.HAP-stumble
        'Uday, jump over the bamboo; you might stumble.'

The following example illustrates three direct imperative forms in one sentence. The first, *tukdaw* is a bare stem intransitive imperative, *kugusa* is a transitive imperative for which the non-imperative form would be *kugúson (mo) an báta* 'you will carry the child.' Finally, *kapti* is a transitive imperative for which the non-imperative form would be *kaptan (mo) hiya ha ímo mga kamot* 'You will hold him/her in your hands:

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[16] In everyday speech, initial *ha* of this verb is usually dropped. When *ha* is not initial, as in *ihatag*, it is not dropped. There is no difference in meaning with or without the *ha* syllable.

(55) **Tukdaw**, **kugúsa**   an báta ngan **kapti**   hiya ha ímo   mga   kamot.
                kugus-a   kapot-i
      stand.up carry-TR.IMP ABS child and hold-TR.IMP.APPL 3SG.ABS LOC 2SG.GEN PL   hand
      'Stand up, carry the child and hold him/her in your hands.'

The imperative forms also have a SUBJUNCTIVE function, i.e., when an irrealis situation depends on some immediately previous element in the construction. The most common environment for this usage is following the negative particle *waray*:

(56) Waray ito   **pahigoti** . . .
                         pa-higot-i
      NEG   DEMO1.ABS   CAUSE-tie-SUBJ.APPL
      'This (parrot) was not tied . . .'

4.2.3. The special case of *g-*

Since this section is about modality, we must mention the stem-forming prefix *g-*, which in our current analysis functions to express DELIBERATE MOOD, following Cena (2014: 199) on Tagalog. Most other approaches consider *g-* to be a component of other morphemes, usually *nag-* and *mag-*. Cebuano has an inflectional prefix *gi-*, and Iloko and other Cordilleran languages have an *ag-* that are undoubtedly cognate to Waray *g-* (see Wolff 1972:xvi, Cena 2014). Cena (2014), however, is unique in proposing that *ag-* in Tagalog expresses deliberate mood. In any case, if it is reasonable to consider Waray *g-* to be a distinct, productive morpheme, it is the only verbal morpheme we are aware of that does not include a vocalic component. The result is unpronounceable stem forms such as *-gkaon*, *-gsakay*, *-ghatag,* etc. Nevertheless, in our view, it is still reasonable to treat this morpheme in Waray as consisting only of a /g/ phoneme. Second, we analyze *g-* as having a modal function. As such it intersects significantly with the inflectional paradigm. However, we must consider *g-* in Waray to be a member of the stem-forming class, as detailed below.

Meaning of *g-*: Deliberate events are normally those that actors go out of their way to perform. They are probably not something the actor normally does, but are special, conscious acts. The actor, usually a person, acts intentionally (on purpose) and controls the event. The actor is distinct from the affected participant:

(57) Transitive deliberate mood:
      Ginbalyoan   hin *happy birthday to you* an   kanta.
      g-in-balyo-an
      DEL-TR.R-change-APPL1 OBL   ABS song
      'They (deliberately) changed the song to *Happy Birthday to you*.'

(58) **Gintaw-an**   ko   gud   la hi   Mam.
      g-in-tawà-an
      DEL-TR.R-laugh-APPL1 1SG.ERG indeed just ABS.P Ma'am
      'I just laughed at Ma'am.' (deliberately, so she would see me)

When combined with happenstantial mood prefixes, *g-* neutralizes the happenstantial component:

(59)   Intransitive, deliberate mood:
        Nagkagawas   ha íra   tent (hira) . . .
        na-g-ka-gawas
        INTR.R-DEL-VRBLZR-outside LOC 3PL.GEN tent 3PL.ABS
        '(They) stepped out of their tent . . . ' (Ramos & Gaspay 2015, p. 1)

    Recall that in example (31) above, controlled mood (*-in-*) is used because grief is the natural, expected, inevitable response to someone's death. The contrasting deliberate mood form is grammatically possible but sounds odd:

(60)   **?Iginkasubô**   ko   an íya   kamatay
        i-g-<in>-ka-subô
        APPL2-TR.R.CTRL-VBLZR-grief 1SG.ERG ABS 3SG.GEN death
        'I (deliberately) grieved her/his death.'

    This would imply that the actor was not naturally inclined to grieve this person's death, but had to go out of her/his way and/or make a special effort to do so.
    Example (61) provides a telling contrast between deliberate and plain controlled moods. In the following narrative sequence, the speaker describes her treatment of a sick relative. The first two verbs are in deliberate mood, while the last is in plain controlled mood.

(61)   **Ginpakaturog**   ko   íto hiya   dida ha balay,
        g-in-pa-katurog
        DEL-TR.R.CTRL-CAUS-sleep 1SG.ERG this 3SG.ABS there OBL house

        ginhinaplosan   ko   ngan **pinaínom**   ko   hin mapaso.
        g-<in>-<in>-haplos-an   <in>-pa-inom
        DEL-TR.R.CTRL-ITER-rub-APPL 1SG.ERG and TR.R.CTRL-CAUS-drink 1SG.ERG OBL hot

        'I made him sleep there in the house, I rubbed (him, with iterative movements), and had (him) drink something hot.'

    The first two events are presented as entirely under the control of the speaker. In the last event, however, responsibility is shared between the speaker and the sick person. The speaker does not physically put the hot liquid in the patient's mouth, but rather offers it to him. The patient remains responsible for the drinking. Since the actor's responsibility is reduced, being shared by the causee, plain controlled mood is appropriate.
    Wolff and Wolff (1967, ch. 19, p. 37) describe *gin-* and *-in-* as synonymous, and as "stylistic variants". Our research with several native speakers from different parts of the Waray speaking region confirms that there is in fact a clear difference in agent intentionality, as described above. The difference in meaning between *-in-* and *gin-* for grammatically transitive constructions is analogous to the difference between *-um-* and *nag-* for intransitives (see Table 1 above). The infixal forms are used when the speaker judges that the actor simultaneously controls and is affected by the event, or when the actor's responsibility is reduced in some way. The event may also be inevitable, natural, or common. The forms with *g-*, on the other hand, describe fully intentional,

deliberate events, completely under the control of the actor, and the actor is distinct from the most affected participant(s).

Formal properties of g-: The primary evidence that *g-* is a morpheme in its own right, which enters into the commonly occurring combinations *nag-* and *mag-*, is that it may be separated from the *na-* and *ma-* components by the stem-forming prefix *ka-*.[17] Consider the following examples:

(62) a. Nakalutò   hin pinakbet an báta para kan Nánay.
         na-ka-lutò
         R.HAP-ABL-cook OBL pinakbet ABS child for DAT Mom
         'The child is able to cook pinakbet for Mom.'

      b. Nakaglutò   hin pinakbet an báta para kan Nánay.
         na-ka-g-lutò
         R.NEU-ABL-DEL-cook OBL pinakbet ABS child for DAT Mom
         'The child managed to cook pinakbet for Mom.' (The child was able, and counter to expectations, actually did cook pinakbet).

Example (62)a describes a realis happenstantial situation. The child does not control her ability to cook fish, and so happenstantial mood is appropriate. In (62)b, the situation is expressed as something the child is able to do, and actually did do. This meaning is approximated by the English construction *managed to*. This example shows that *g-* is added to the root, *lutò* 'cook', to form an intermediate stem *-glutò.* The stem-forming abilitative prefix *ka-* is then added to yield -*kaglutò*. Finally, the realis prefix *na-*, with its happenstantial meaning neutralized by *g-*, is added yielding *nakaglutò*.

Our definition of inflectional morphology is that part of the verb morphology that "completes" a predicative verb form; however, stem forms with *g-* are not complete unless they receive subsequent inflection (*-in-*, *na-* or *ma-*). Recall that one and only one inflectional affix may occur on any given verb stem. Finally, it is clear from examples such as (62)b that *g-* may be followed in derivational sequence by at least one other stem-forming affix, *ka-*. For these reasons, we must consider this *g-* to be a stem-forming process.

5. Conclusion

In this paper we have provided a fresh look at the verb morphology of Waray, the major language of the Eastern Visayas region. The main contribution of this study is to identify a relatively small set of verbal affixes, one and only one of which is required in order to allow a word form to function as a verbal predicate in discourse. We have identified this set of affixes as inflectional

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[17] What we are calling the abilitative prefix *ka-* only occurs in an intransitive frame. This makes functional sense in that the ability to do something is a property of the actor and does not entail that anything happens to an affected participant. However, because grammatical intransitivity seems to be "built in" to the meaning of *ka-*, it, like *g-*, is on the margin between inflectional and stem-forming morphology—structurally both belong to the stem-forming class, but functionally they express categories more akin to the dimensions of inflectional morphology: transitivity in the case of *ka-* and modality in the case of *g-*. It is also worth noting that the form *ka-* is also a distinct stem-forming morpheme that functions as a verbalizer. See, e.g., example (50b): *adto* is a demonstrative 'there, away from speaker and hearer; -*kadto* 'go there'.

affixes, and have shown that transitivity and modality are the two major dimensions of the inflectional paradigm. Inflectional affixes are distinct from a comparatively larger set of affixes which we identify as stem-forming (or loosely "derivational") affixes. These affixes are not grammatically required and are not paradigmatic. Any number from zero to four stem-forming affixes may appear in a word form functioning as a verbal predicate. In this paper we have concentrated on the inflectional affixes, but have mentioned at least six of the more common stem-forming processes: *pa-* 'causative', *i-*, *-an* and *-i* 'applicative', *á-* 'incompletive', CV- reduplication (RED1) 'imperfective', *ká-* 'abilitative,' and *g-* 'deliberate mood'. Oyzon and Payne (in prep.) document and describe the usages of eight additional productive stem-forming processes. It is our contention that the "voice system" of Waray (and probably many other Philippine languages as well) is the result of the interaction between the dimension of transitivity in the inflectional paradigm and applicative processes in the stem-forming group. These relationships are summarized in (63):

(63)   Intransitive inflection =   "Actor Voice"
        Transitive inflection, no applicative =   "Patient/Undergoer Voice"
        Transitive inflection plus applicative 1 (*-an, -i*) = "Locative/Recipient Voice"
        Transitive inflection plus applicative 2 (*i-*) =   "Conveyance/Benefactive Voice"

While we are quite confident in this general outline of the system of verb morphology in Waray, there remain several questions as to the precise usages of the various categories that we have identified and described in this paper. It is our hope that future research, by ourselves and others, will continue to refine and perfect the description of this rich and very efficient communicative system, and possibly extend this way of looking at verb morphology to other Philippine type languages.

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