The many ways of transitivization in Totoli

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Abstract: This paper investigates the basic valency orientation and different ways of transitivization in Totoli, a western Austronesian symmetrical-voice language of Indonesia. Totoli can be considered a transitivizing language that makes use of four major valency-increasing strategies: causativization proper, transitive-intransitive alternation within the stative paradigm, alternation between the stative and the dynamic paradigms, and the use of applicative morphology. Taking a closer look at the unique relationship between the symmetrical-voice and applicative systems in Totoli we claim that the language occupies an intermediary position between Philippine-type and non-Philippine-type symmetrical-voice languages, and that the development of applicatives as a system independent from voice may have arisen with the emergence of transitivity as a distinction relevant in the grammar of western Austronesian languages of the non-Philippine-type.

Keywords: symmetrical voice, basic valency orientation, transitivization, applicativization, (non-)Philippine type

1 Introduction

This paper investigates the basic valence orientation and different ways of transitivization in Totoli, a western Austronesian symmetrical-voice language.[1] In western

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Austronesian symmetrical-voice languages, voice alternations do not decrease transitivity, i.e. unlike the active-passive alternation, a symmetrical-voice alternation does not involve the suppression or demotion of a core argument to oblique status. Rather, it can be described as a means to rearrange the linking of arguments and select different arguments as syntactic pivots. In some symmetrical-voice languages of Indonesia,[2] formatives which are historically associated with the Austronesian voice system are used as applicatives. That is, they signal the promotion of a peripheral participant to core status.

Totoli is interestingly different from many other Indonesian symmetrical-voice languages in two ways: first, it exploits the same formatives for both voice and applicative functions and thus exhibits a rather puzzling polysemy in the voice-changing and valency-increasing paradigms. Second, the extent to which Totoli makes use of different transitivization operations seem to be exceptionally high.

In the first part of the paper, we will be concerned with the different valence increasing strategies in Totoli. These include 'proper' causativization – i.e. the addition of an AGENT by means of a designated causative prefix, and 'proper' applicativization – i.e. the application of a GOAL by means of an applicative suffix. Due to the symmetrical nature of the voice system, and unlike in asymmetrical languages, neither causativization nor applicativization in Totoli install the applied argument to a predetermined syntactic function (i.e. new agent to subject for causatives and new undergoer to object for applicatives, as would be the case in asymmetrical languages). Rather, they install the new argument in core function, which, depending on the voice, can either be the subject or a non-subject direct core argument (Zúñiga and Kittilä 2019: 14 call this process 'nucleativization'). Furthermore, Totoli exhibits the applicative-causative syncretism found in many western Austronesian languages (cf. Hemmings 2013 for references and discussion). That is, depending on the basic valency of the verb, the same set of affixes is used to either promote different undergoer participants to core arguments or to add a (new) AGENT/CAUSER. With transitive bases, the suffix *-an* applies a BENEFACTIVE or an INSTRUMENT. With intransitive bases, a new AGENT/CAUSER is added to the verb's argument structure. Making use of Nichols, Peterson and Barnes' (2004) method to determine the BASIC VALENCE ORIENTATION of

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Riesberg (2014) provides the most detailed discussion available to date. A comparison between western Austronesian symmetrical voice systems and similar phenomena in languages of the Americas is found in Zúñiga and Kittilä (2019: 120–150).

2 The symmetrical-voice languages of Indonesia are found west of Lombok and in the northern half of Sulawesi.

a language, we show that Totoli is a strongly transitivizing language, and we will see that transitivization is an important aspect of Totoli grammar.

In the second part of the paper, we will place the Totoli system into the wider western Austronesian context and demonstrate that Totoli is exceptional in the way it employs the same set of formatives for different voice-changing and valency-increasing alternations. Based on the Totoli system, we also provide some comments on a possible historical development of western Austronesian voice and applicative marking systems.

In Section 2, we will provide some grammatical background information on Totoli. In particular, we will describe the voice system, the applicative paradigm, and the distinction between dynamic and stative predications. In Section 3 we turn to the issue of transitivity and basic valence orientation. In addition to the above-mentioned strategies of 'proper' causativization (Section 3.1), and transitivization with applicative morphology (Section 3.4), we will discuss causativization within the stative paradigm (Section 3.2), and causativization by conjugation class change (Section 3.3). Section 4 introduces the Philippine-type voice system and the non-Philippine-type voice/applicative system and argues that the Totoli system is somewhere in between the two.

2 Grammatical background – voice and applicative marking in Totoli

Totoli is a Western Malayo-Polynesian language spoken by up to 5000 speakers in the northern part of Central Sulawesi (see Himmelmann 2001, 2010 for further details on the social and linguistic setting). Most examples used in this paper are from the DoBeS Totoli corpus (Leto et al. 2005–2010) and can be cross-checked there. A few examples are from the corpus by Bracks et al. (2017–2020), which will be available online in the near future. Examples from spontaneous discourse are referenced for name of the session and line number. Elicited examples are not further indexed. To further highlight the difference between natural and elicited data, we represent the two data types differently: Elicited examples all adhere to capitalization conventions and include punctuation, while examples from natural spontaneous speech do not.

2.1 Voice in Totoli

Totoli is a western Austronesian language of the non-Philippine type (see Section 4 for further details). It has two basic transitive constructions, the actor voice and

the undergoer voice. If the NP in subject function[3] is an actor, the verb will be marked by actor-voice morphology. If the subject is an undergoer, undergoer-voice morphology will be used. The undergoer voice comes in two different paradigms, here simply called UNDERGOER VOICE 1 (UV1) and UNDERGOER VOICE 2 (UV2). The choice between paradigm 1 and 2 is lexically determined. That is, some verbal bases mark undergoer voice with UV1 and others with UV2 without there being a functional difference between the two undergoer voices. Note that this differs crucially from Philippine-type languages like Tagalog (cf. Section 4, example (18)), where the different undergoer voices are functionally distinct, each voice selecting a participant with a different semantic role as a subject. Both the actor voice and the undergoer voice in Totoli are fully transitive, that is, in both voices the non-subject argument has core argument status. There is also a locative voice, in which the subject is a stative locative argument (i.e. a place where something happens). Unlike in Tagalog (cf. example (18d)), however, the locative voice in Totoli is less basic than the actor and the undergoer voices, as it is syntactically more restricted (cf. Himmelmann and Riesberg 2013: 412). The following examples illustrate actor- and undergoer-voice uses of the verb *taip* 'peel' (a verb which takes paradigm 1 for undergoer-voice marking), and a locative-voice form of the verb *kaan* 'eat'.

(1) a. *I   Rinto   manaip   taipang.*
       i   Rinto **moN-**taip taipang
       HON   PN   **AV-**peel   taipang
       'Rinto is peeling a mango'

    b. *Taipang   kodoong   taip   i   Rinto.*
       taipang   ko-doong taip   i   Rinto
       mango   POT-want   peel.**UV1** HON PN
       'The mango will be peeled by Rinto.'
       'The house is where they eat.'

    c. *Bale   ia   pangaani   ssia.*
       bale   ia   **poN-**kaan-**i** sisia
       house   PRX   **SF-**eat-**LV**   3PL
       'The house is where they eat.'

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3 The position of the subject NP is flexible. It can occur either before or after the verb + non-subject complex. In the examples used in this paper the subject occurs consistently in sentence-initial position (in the actor voice SVO order is more frequent, in the undergoer voice OVS order is preferred (cf. Riesberg, Malcher and Himmelmann 2019: 537)). Note that we use the term 'subject' here as equivalent to what is termed 'privileged syntactic argument' (PSA) in Van Valin (2005) and elsewhere. A PSA is defined as the syntactic element that controls coding properties such as agreement and that is the pivotal element in complex constructions such as relativization, NP deletion, control, etc.

All examples shown above are in non-realis mood, which is not indicated in the glosses. Table 1 summarizes the full set of voice affixation, including the respective realis forms.[4] Riesberg (2014) provides an in-depth discussion of symmetrical-voice alternations, including more data from Totoli.

Table 1: Totoli voice formatives (dynamic paradigm).

	NON-REALIS	**REALIS**
ACTOR VOICE	*mo-/moN-/mog-*	*no-/noN-/nog-*
UNDERGOER VOICE 1	Ø	*ni-*
UNDERGOER VOICE 2	*-i*	*ni- + -an*
LOCATIVE VOICE	*po-/poN-/pog- + -i*	*ni- + po-/poN-/pog- + -an*

As can be seen in Table 1, UV1 is unmarked in non-realis mood, the form simply consisting of the bare stem. In realis mood, UV1 is only marked by the undergoer-voice realis prefix *ni-*, which occurs in all realis forms except actor voice. The choice of the different prefixes in the actor and locative voices is partially phonologically, partially lexically conditioned.

2.2 Applicativization in Totoli

There are two applicative paradigms in Totoli (shown in Table 2 below) which increase the valency of a predicate by one place. One of these, marked by *-an* in non-realis mood, introduces an argument whose semantic role depends on the valency of the stem. If the stem is monovalent, it adds a (new) causer argument, if it is bivalent, the added argument can either be a BENEFICIARY/ RECIPIENT or an INSTRUMENT. We call this APPLICATIVE 1, even though it partly has a causative function. The other one, which uses the suffix *-i* in non-realis mood, typically adds a GOAL argument. We call this APPLICATIVE 2.

Both applicative markers occur in all voices and in both realis and non-realis mood. Table 2 summarizes the rather intricate system of applicative formatives in Totoli. As can be seen, there is significant syncretism between plain voice forms (cf. Table 1) and applicative (voice) marking. The suffixes *-an* and *-i* are part of

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4 Realis mood denotes past events or situations that already exist and are still ongoing. Non-realis mood is used in reference to situations that do not (yet) obtain at the time of speaking, inter alia. Its distribution is in fact considerably wider than realis mood. It is both morphologically and distributionally the unmarked member of the pair.

the applicative paradigm, but they also occur in 'plain', non-applicative voice forms (uv2). Likewise, bare (i.e. non-suffixed) verb forms can be found in both functions, non-applicative realis undergoer voice (uv1) and APPLICATIVE 1 realis undergoer voice. For a detailed argument supporting the analysis summarized in the two tables, see Himmelmann and Riesberg (2013). As illustrated in Table 2, it is especially in realis undergoer voice forms that applicative marking is less transparent and partially homophonous with non-applicative undergoer voice marking.

Table 2: Totoli applicative formatives (dynamic paradigm).

	NON-REALIS	**REALIS**
APPLICATIVE 1 AV	*mo-*/*moN-*/*mog-* + *-an*	*no-*/*noN-*/*nog-* + *-an*
APPLICATIVE 1 UV (SUBJ = THEME)	*-an*	*ni-* + *-Ø*
APPLICATIVE 1 UV (SUBJ= BEN/INSTR)	*po-*/*poN-*/*pog-* + *-an*	*ni-* + *po-*/*poN-*/*pog-* + *-Ø*
APPLICATIVE 2 AV	*mo-*/*moN-*/*mog-* + *-i*	*no-*/*noN-*/*nog-* + *-i*
APPLICATIVE 2 UV	*-i*	*ni-* + *-an*

Example (2) illustrates the basic, i.e. non-applicative form of the monovalent verb *sake* 'ascend'. Example (3) shows the use of APPLICATIVE 1 (with non-realis applicative suffix *-an*), where the promoted argument (*tau ana* 'those people') is an external CAUSER, which becomes the subject in the actor voice (example a), and a (not overtly expressed, but unambiguously implied) non-subject core argument in the undergoer voice (example b). The GOAL argument *kapa'* 'ship' remains oblique, marked by the locative preposition *dei* or its proclitic form *i=*. In (4) we see the use of APPLICATIVE 2 (with non-realis applicative suffix *-i*) occurring with the same verb, and it is the GOAL argument, i.e. the ship, that is promoted to become a non-subject core argument in the actor voice, and the subject in the undergoer voice. In these examples, the THEME is marked as oblique.

(2) *sumake pesawat heli*
     -um-sake pesawat heli
     -AUTO.MOT-ascend airplane helicopter
     'the helicopter ascended' [lelegesan_a.020]

(3) a. *Tau ana meseo manakean balaan dei kapa'.*[5]
         tau ana mo-seo **moN-**sake-**an** balaan dei kapa'
         person MED ST-busy **AV-**ascend-**APPL1** goods LOC ship
         'Those people are busy loading goods on the ship.'

b. *Balaan   isake   ikapa'.*
   balaan   **ni**-sake   i=kapa'
   goods   **RLS.UV-**ascend:**APPL1**   LOC=ship
   'The goods were loaded onto the ship.'

(4) a. *Douamo   no ondo sisia* manakei   *kapa'* (*takin balaan*).
       doua=mo   no ondo sisia **moN**-sake-**i**   kapa' (takin balaan)
       two=CPL   LK day 3PL   **AV**-ascend-**APPL2** ship   with   goods
       'For two days already they are loading the ship (with goods).'
   b. *Kapa'   ana   lalau   sakei   sisia* (*takin   balaan*).
       kapa'   ana   lalau   sake-**i**   sisia (takin   balaan)
       ship   MED   presently ascend-**APPL2.UV** 3PL   with   goods
       'They are loading the ship (with goods).'

The two examples in (5) illustrate how the use of APPLICATIVE 1 with a bivalent base can either add a BENEFICIARY argument (5a), or an INSTRUMENT (5b).

(5) a. *Aku   notookamo   nipanaipna   taipang.*
       aku   no-tooka=mo   **ni**-**poN**-taip=na   taipang
       1SG   ST.RLS-finished=CPL   **RLS.UV-SF**-peel.**APPL1**=3SG.GEN mango
       'He peeled a mango for me.'
   b. *Kode gopas nanasi   nipadaamkuko*
       kode gopas nanasi   **ni**-**po**-daam=ku=ko
       only yarn   pineapple **RLS.UV-SF**-sew.**APPL1**=1SG.GEN=AND
       ulos   ana.
       ulos   ana
       sarong   MED
       'I only use the yarn from the pineapple leaf to sew that sarong.'

2.3 Stative predicates in Totoli

The paradigms illustrated in Table 1 and Table 2 above pertain to dynamic events. But besides the obligatory mood-distinction that holds for all verbs, Totoli also morphologically distinguishes between dynamic and non-dynamic eventualities.

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5 The base form for 'ship' is kapal, but word-final laterals after vowels are regularly replaced by vowel lengthening in Totoli (i.e. kapal is [kapa:]). Elided laterals are indicated by an apostrophe <'> in the practical orthography used here. See Himmelmann (1991) and Bracks (forthc.) for more on Totoli phonology.

The latter denote non-dynamic state of affairs, including bodily states, qualities, and emotional and cognitive states. Like dynamic predicates, stative predicates participate in the actor- vs. undergoer-voice alternation. Note, however, that in the stative paradigm, there is only one (transitive) undergoer voice form, but there is an additional set of formatives (*mo-* in the non-realis, *no-* in the realis) that is designated for intransitive uses, and which also takes an undergoer subject (cf. Table 3).

Table 3: Totoli voice formatives (stative paradigm).

	Non-Realis	**Realis**
Stative AV	*mo- + ko-*	*no- + ko-*
Stative intr	*mo-*	*no-*
Stative UV	*ko- + -i*	*ni- + ko- + -an*

In this paper, we will mainly be concerned with intransitive stative predicates. But in Section 3.2 we will also see that the alternation between intransitive and transitive stative forms shown in Table 3 involves a sense of causativization. The examples in (6) illustrate some common uses of intransitive stative predicates in Totoli.

(6) a. *mo-linggo deuk dei saa*
          ST-afraid   dog   LOC snake
          'the dog is afraid of the snake' [maptask_1 0560]

  b. *ai   anu   mpido   ssaakan*
        ai   anu   mo-pido   sasaakan
        and   REL   ST-good   all
        'and all of them are good' [monkey_turtle 069]

  c. *ana waktuu mo-lotok sasik*
        if   time   ST-calm   sea
        'in times when the sea was calm' [tau_bentee 014]

Here the stative predicates take non-agentive subjects. It is this construction type that frequently constitutes the morphologically basic member in a causative – non-causative pair, as we will further discuss in Section 3.

3 Basic valence orientation in Totoli

Nichols, Peterson and Barnes (2004) argue that languages can be classified according to their BASIC VALENCE ORIENTATION, which is determined by how they treat intransitive-transitive verb pairs such as 'learn' and 'teach' or 'die' and 'kill'. They propose four types: TRANSITIVIZING, DE-TRANSITIVIZING, NEUTRAL, and INDETERMINATE. See Table 4 for the respective morphological patterns and their descriptions.

Table 4: Types of basic valence orientation (adapted from Nichols, Peterson and Barnes 2004: 159).

TYPE	CORRESPONDENCE	DESCRIPTION
transitivizing	augmented	induced verb is derived
detransitivizing	reduced	plain verb is derived
neutral	double derivation	both verbs are derived
	auxiliary change	different auxiliaries
	ablaut	consonant/vowel change with same morphology
indeterminate	suppletion	different verb roots
	ambitransitive	same verb, same morphology
	conjugation class change	different conjugation class, otherwise underived

In their study, Nichols, Peterson and Barnes (2004) investigate 18 verb pairs in 80 languages, each pair consisting of a plain (i.e. intransitive and semantically non-causative) and an induced (i.e. transitive and semantically causative) member. The list of verb pairs is shown in Table 5.

Table 5: Plain-induced verb pairs studied in Nichols, Peterson and Barnes (2004: 186).

PLAIN	INDUCED	PLAIN	INDUCED
1. laugh	make laugh	10. (come to) boil	(bring to) boil
2. die	kill	11. burn, catch fire	burn, set fire
3. sit	seat	12. break	break
4. eat	feed	13. open	open
5. learn, know	teach	14. dry	dry
6. see	show	15. be/become straight	straighten
7. be/become angry	make angry	16. hang	hang (up)
8. fear, be afraid	frighten, scare	17. turn over	turn over
9. hide, go into hiding	hide, put into hiding	18. fall	drop, let fall

In Totoli, 14 of these 18 pairs are transitivizing, i.e. the induced member of the pair is morphologically derived – either by applicativization and by causativization – from its plain counterpart. Table 6 shows the 18 verb pairs and the evidence for their basic valence orientation in Totoli.

Table 6: Plain and induced verb pairs in Totoli.

PLAIN	INDUCED	MORPHOLOGICAL MARKING	CORRESPONDENCE
1. *kekek* 'laugh'	*po-kekek* 'make laugh'	causative	augmented
2. *mate* 'die'	*pate* 'kill'	---	suppletion
3. sugo 'sit'	po-sugo-an 'seat'	causative + applicative	augmented
4. *kaan* 'eat'	*po-kaan* 'feed'	causative	augmented
5. *koto* 'learn, know'	*po-koto-i* 'teach'	causative + applicative	augmented
6. *ita* 'see'	*po-ita* 'show'	causative	augmented
7. *ngasa* 'be/become angry'	*moko-ngasa* 'make angry'	transitive stative	augmented
8. *linggo* 'fear, be afraid'	*moko-linggo* 'frighten, scare'	transitive stative	augmented
9. *buni* 'hide, go into hiding'	*buni-an* 'hide, put into hiding'	applicative	augmented
10. *lolok* '(come to) boil'	*lolok-an* '(bring to) boil'	applicative	augmented
11. *mo-tutung* 'burn, catch fire'	*moN-tutung* 'burn, set fire'	stative vs. dynamic paradigm	conjugation-class change
12. *kolog* 'break'	*kudut* 'break'	---	suppletion
13. mo-*buka* 'open'	*moN-buka* 'open'	stative vs. dynamic paradigm	conjugation-class change
14. *tuu* 'dry'	*moko-tuu, po-tuu* 'dry'	transitive stative, causative	augmented
15. *nonto'* 'be/become straight'	*nonto'-an* 'straighten'	applicative	augmented
16. *toeng* 'hang'	*toeng-an* 'hang (up)'	applicative	augmented

Table 6 (continued)

Plain	Induced	morphological marking	Correspondence
17. *balli*	*balli-an*	applicative	augmented
'turn over'	'turn over'		
18. *dabu*	*moko-dabu, dabu-i*	transitive stative,	augmented
'fall'	'drop, let fall'	applicative	

As can be seen in Table 6, two of the pairs (numbers 11 and 13) exhibit conjugation-class change, with the plain member occurring in the stative and the induced member in the dynamic paradigm. Pairs 2[6] and 12 involve suppletion. These two strategies can be considered instances of indeterminate valency alternation. For pair number 17, no induced form is attested in our corpus. Note that there is no detransitivization process in Totoli. We will discuss the first three strategies in the following subsections.

3.1 Transitivization by causativization – the causative prefix po-

Totoli has a designated causative marker *po-* that adds a new CAUSER argument to the argument structure of a verb. Causativized forms can occur in both actor and undergoer voice. In the dynamic paradigm, the causative marker follows the voice prefix (if present). Consider the following two example pairs that illustrate the causative alternation for the dynamic verbs *kaan* 'eat' (in the actor voice, (7)) and *ita* 'see' (in the undergoer voice, (8)).

(7) a. *sia   geiga   kode   mangaanmo   kukis*
         isia   geiga   kode   mog-kaan=mo   kukis
         3SG   NEG   only   AV-eat=CPL   cake
         'she doesn't only eat cake' [conv_cl 671]

   b. *aa   mpakaan   bou   ana*
        aa   mo-**po**-kaan   bou   ana
        INTJ   AV-**CAU**-eat   turtle   MED
        'ah, he feeds that turtle' [Mansur's_work 0865]

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6 Note that in pair number 2, the Totoli induced form *pate* 'kill' is historically most likely a causative formation /po-ate/ of the plain form *ate* 'die'. Synchronically, however, these are clearly two different roots.

(8) a. *niitaanna*   *sellengget*   *tadinmoko*
      ni-ita-an=na   se-RDP1-lengget   tadin=mo=ko
      RLS.UV-see-APPL1=3SG   one-RDP1-basket   lost=CPL=AND
      'he saw (that) one basket was already missing' [pearstory_2 310]

    b. *bali kau nippoitanamo*
      bali   kau   ni-po-**po**-ita=na=mo
      SO   2SG   RLS.UV-SF-**CAU**-see.UV1=3SG.GEN=CPL
      'so he already showed it to you' [Abdullah's_dream 002]

The causative prefix *po-* can also occur with semantically stative predicates, again, both in the actor voice, here illustrated with the verb *linggo* '(be) afraid' in (9a), and in the undergoer voice, as exemplified with *itom* '(be) black' in (9b).

(9) a. *Aku mo-**po**-linggo*   *tau*   *moane ia.*
      1SG   AV-**CAU**-be.afraid   person   man   PRX
      'I scared this man.'

    b. *Mangana*   *ana*   *nipoitom*   *ai*   *buling.*
      mangana   ana   ni-**po**-itom   ai   buling
      child   MED   RLS.UV-**CAU**-black.UV1   with   charcoal
      'The child was made (i.e. painted) black with charcoal.'

Note that there is no additional stative marking on the predicates in either of the two examples in (9). It is conceivable that in these two instances, the focus is on the (causative) event that is initiated and conducted by the newly added, volitionally acting causer. Compare this to the examples in (10), where in addition to voice morphology and the causative prefix, we find the stative marker *ko-*.

(10) a. *Aku mo-**po**-**ko**-linggo*   *tau*   *moane ia.*
      1SG   AV-**CAU**-**ST**-be.afraid   person   man   PRX
      'I made this man (really) scared.'

    b. *Dinding*   *ia*   *nipokoitamku.*
      dinding   ia   ni-**po**-**ko**-itam=ku
      wall   PRX   RLS.UV-**CAU**-**ST**-black.UV1=1SG.GEN
      'I painted this wall (really) black.'

Compared to the examples in (9), it seems to be the case that in (10) the result state is more important than the activity. This is in line with the judgement expressed by some speakers that the latter examples include an increased intensity, as also indicated in the translations (i.e. '*really* scared' and '*really* black'). Yet, the differ-

ences between 'plain' causativized statives and causativized statives with stative marking are subtle and require more research.

3.2 Valency alternation within the stative paradigm – intransitive vs. transitive statives

As illustrated in Table 3, the Totoli stative paradigm includes one set of intransitive formatives, and two sets of transitive ones – one for the actor voice and one for the undergoer voice. The availability of regular transitive forms for all stative predicates might seem typologically unusual, and indeed these forms never convey a purely stative meaning in Totoli.[7] Rather, they always involve the entailment of causation, and like in the causative alternation discussed in the previous section, transitive stative forms add a causer argument to the semantically more basic intransitive counterpart. In the following two example pairs, example (a) illustrates the intransitive, non-causative form of the pair. Example (b) shows the transitive, causative version (in (11b) in the actor voice, in (12b) in the undergoer voice). As also seen in these examples, transitive forms of stative predicates preferably involve inanimate causers.

(11) a. *tapi* **mo**-*ongot*   *tian*   *sisia*
       but   **ST**-painful   stomach   3PL
       'but their stomach is aching' [maptask_1 1138]
    b. *i*   *dulian*   **mo-ko**-*ongot*   *tian*
       HON   durian   **AV-ST**-painful   stomach
       'durian causes stomach ache' [lelegesan_a 057]

(12) a. *tau-i*   *asin*   *saddek injan*   **mo**-*lutu*
       put-APPL2   salt   a.little   after   **ST**-cook
       'put in a bit of salt after it is done (cooked)' [making_ambaa_siote 0797–0799]

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7 The actor voice formations for stative predicates are not fully productive, but the undergoer voice formations appear to be so.

b. *ikolutu*   *tuak* *nolumolok* *nabali*
 i-ko-lutu   tuak no-um-lolok no-bali
 RLS.UV-ST-cook.**UV1** palm.wine AV.RLS-AUTO.MOT-boil ST.RLS-become
 manisan
 manisan
 Manisan
 'the palm wine is being cooked, it boils and turns into Manisan (a kind of drink)' [explanation-making-red-sugar_IS.572] (Bracks et al. 2017–2020)

Note that the verb *lutu* in (12) basically means 'ripe, done' and is typically used for fruit and vegetables that are ready to eat. The verb *lolok*, which occurs in (12b), translates as 'boil', but unlike English *boil*, *lolok* actually denotes a process and cannot be used transitively without further derivation.

3.3 Valency alternation by conjugation class change – stative vs. dynamic

Some verbal bases may occur both with stative and dynamic formatives without requiring any further derivation. As seen in example (13a), the stative form is intransitive and typically denotes a result state, while the dynamic forms are transitive and allow for both actor and undergoer voice, as seen in (13b) and (13c).

(13) a. *mottung* *tooka* *itu* *laengna*   *itu*
    mo-tutung tooka itu laeng=na   itu
    ST-burn already DIST leaf=3SG.GEN DIST
    'its leafs are already burnt' [making_ambaa_siote.1027]
  b. *ha* *rayat* *montung* *danna* *iatur*   *baik*
    ha rayat **moN**-tutung danna i-atur   baik
    INTJ people **AV**-burn then RLS.UV-organize.UV1 good
    'the people burned (it) down, and then organized (it) properly'
     [bajugan 169f]
  c. *kututungmo*   *kau* *tiana*
    ku-tutung=mo   kau tingana
    1SG.ACT-burn.**UV1**=CPL 2SG QUOT
    'I will burn you, she says' [story-monkey-turtle_RSM.050] (Bracks et al. 2017–2020)

For reasons discussed in the following section, to date it is not clear how productive this pattern really is. We suspect that this class is fairly small. Another verbal

base that patterns in the same way is, for example, the verb *botak* 'split', which denotes the result state (e.g. a coconut being split open) with stative morphology (*mbotak*), but with dynamic voice morphology can denote a transitive event (e.g. s/he split a coconut) without additional marking (*momotak* in AV, *botak* in UV).

3.4 Transitivization by applicativization

Section 2.2 has introduced the Totoli applicative paradigms, and illustrated use of applicativization with the dynamic monovalent base *sake* 'ascend'. In examples (3) and (4) above, we have seen how the one set of applicative formatives (APPLICATIVE 1) adds a causer argument to the monovalent bases and a benefactive or an instrument to bivalent bases, while the other set of applicative markers (APPLICATIVE 2) promotes goals or locatives to direct core arguments. Example (14) illustrates the same process with the verb *seok* 'enter'.

(14) a. *Isia   mosumeok   dei   lalom   bale.*
       isia   mo-um-seok   dei   lalom   bale
       3SG   AV-AUTO.MOT-enter   LOC   inside   house
       'She enters into the house'

    b. *Deinako   carana   meneokan   bau   ana?*
       deinako   cara=na   moN-seok-**an**   bau   ana
       how   manner=3SG.GEN   AV-enter-**APPL1**   fish   MED
       'How did you put in the fish?'

    c. *Isia   neneokiko   bale.*
       isia   noN-seok-**i**=ko   bale
       3SG   AV.RLS-enter-**APPL2**=AND   house
       'She entered the house.'

The verb *seok* 'enter', like *sake* 'ascend' in Section 2.2, can be considered to be UNERGATIVE, i.e. an intransitive base that takes an agentive theme in S function, which usually is volitionally acting, as in (14a), or at least has some control over the activity denoted by the verb (like the helicopter in (2)). With unergative bases, APPLICATIVE 1 adds a new, external causer (see (14b)). The former S argument becomes the no longer agentive theme of the derived transitive predicate. In (14c) the goal argument is promoted to core-argument status. But applicative suffixes also occur on monovalent stative bases, which we can call UNACCUSATIVE, because they take a non-agentive argument as their subject. In this case as well, an external causer is added, but there is no change in the semantic role of the former S argument.

(15) a. *kuitai*   *maaling*   *konising*
      ku-ita-i   **mo**-aling   konising
      1SG.ACT-see-UV2 **ST**-disappear fingernail
      'I see that the fingernails are gone' [siote_2 151f]

    b. *magalingan*   *strees* *itu*   *ee*
      mog-aling-**an**   stress itu   ee
      AV-disappear-**APPL1** stress DIST EMPH
      '(fishing) makes the stress go away' [fishing_2 430]

This kind of multifunctionality of applicative and causative morphology is typical for cognate morphological markers throughout Indonesian symmetrical-voice languages (Himmelmann 2005; Hemmings 2013). The extent to which this transitivization strategy is found varies across the languages of the area. It seems to be particularly productive in Totoli. That is, many verbs that seem to express transitive events at first sight, turn out to be intransitive verbs transitivized by applicativization. The overlap between the plain voice paradigm and the applicative paradigm (compare again Table 1 and Table 2) often poses an analytical challenge. We explicate this challenge in the following with the two verbs *tutung* 'burn' and *pio*' 'twist'.

    The dataset in (16) shows these two verbs marked by the (undergoer voice) realis prefix *ni-* only: *nitutung* in (16a), and *nipio*' in (16b).

(16) a. *lemba* *itu*   *i-teleb=na*   *injan*
      valley DIST RLS.UV-clear.UV1=3SG.GEN after
      tooka=mo *i-teleb*   **ni-tutung**=*mo*
      finish=CPL RLS.UV-Clear.UV1 **RLS.UV-burn.UV1**-CPL
      'he cleared the valley (of the bushes), after clearing (it), (he) burned it'
      [podok_langgat 076ff]

    b. *Lima=ku*   **ni-pio'**   *i*   *inang=ku.*
      hand=1SG.GEN **RLS.UV-twist.APPL1** HON mother=1SG.GEN
      'My mother twisted my hand.'

We have already seen in example (13) that *tutung* 'burn' is a transitive base that can be used in transitive contexts without any applicative marking (cf. (13b) and (13c)). The base *pio*' 'twist', on the other hand – though in undergoer voice and realis mood formally identically marked as *tutung* – is monovalent, and the form *nipio*', unlike *nitutung*, is an APPLICATIVE UNDERGOER VOICE 1 form and not a plain undergoer voice 1 form. This difference, obviously, cannot be spotted when only looking at the two examples above. Rather, for each verb, we need to know either the respective actor voice form, or the non-realis undergoer voice form. Only these slots in the paradigm are unambiguously marked as either plain voice

or applicative voice forms. For *tutung* 'burn', example (13) shows that the transitive actor voice form is *mon-tutung*, and the respective non-realis undergoer voice form is *tutung*. Example (17a) shows that the base *pio'*, like *tutung*, can be used as an intransitive stative verb. But examples (17b) and (17c) reveal that *pio'* needs to be applicativized in order to be used transitively; the (realis) actor voice form is thus *non-pio'-an* and the non-realis undergoer voice form is *pio'-an*.

(17) a. *Dopi*   *ana*   *noppiomo.*
       dopi   ana   **no-RDP1-pio'**=mo
       cardboard   MED   **ST-RDP1-twist**=CPL
       'The cardboard twisted.'

     b. *I*   *Tuti*   *nomiolan*   *lima*   *i*   *Iskander.*
       i   Tuti   **noN-pio'-an**   lima   i   Iskander
       HON   PN   **AV.RLS-twist-APPL1**   hand   HON   PN
       'Tuti twisted Iskander's hand.'

     c. *Usatku*   *molinggo*   *piolan*   *singgayanna.*
       usat=ku   mo-linggo   **pio'-an**   singgayan=na
       sibling=1SG.GEN   ST-afraid   **twist-APPL1.UV**   friend=3SG.GEN
       'My sibling is afraid to be twisted (pinched) by his friend.'

Table 7 summarizes the differences in the transitive use of the two verbal bases discussed here. It shows the partial overlap (marked in grey) of plain and applied voice forms for verbs that take the UNDERGOER VOICE 1. Remember that the overlap is even more severe in the paradigm of UNDERGOER VOICE 2, where plain undergoer voice and applicative marking is identical in both non-realis and realis mood (cf. Table 1 and Table 2).

     When we look at the actual distribution of voice marked verbal forms in Totoli, we can see that the undergoer voice – i.e. the voice in which the syncretism between plain and applicative form occurs – is by far the more frequent one; Totoli displays a ratio of 73% undergoer voice and 28% actor voice (cf. Riesberg et al., in print). Of all the undergoer voice forms in our Totoli corpus of spontaneous speech, more than half (i.e. 53%) are ambiguous.[8]

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8 These numbers pertain to an annotated subset of our documentation corpus. This sub-corpus amounts to 02h 50 minutes of spoken texts recorded during various field trips to the Tolitoli Regency, Sulawesi, between 2006 and 2018, with the exception of one recording which dates from 1989. It consists of 27 texts involving a total of 53 different speakers, 26 female and 27 male, mainly adults (with the exception of one text), and all of whom live in bilingual Totoli/Indonesian-speaking households (as is the case for virtually all of the Totoli-speaking population). The texts amount to 16.272 words and consist of 6.745 intonation units, as defined in Himmelmann et al. (2018).

Table 7: Transitive uses of the bases tutung 'burn' and pio' 'twist'.

	NON-REALIS	REALIS
ACTOR VOICE	*moN-tutung* **AV**-burn	*noN-tutung* **AV.RLS**-burn
	moN-pio'-an **AV**-twist-**APPL1**	*noN-pio'-an* **AV.RLS**-twist-**APPL1**
UNDERGOER VOICE	*tutung* burn.**UV1**	*ni-tutung* RLS.UV-burn.**UV1**
	pio'-an twist-**APPL1.UV**	*ni-pio'* RLS.UV-twist.**APPL1**

4 Totoli in the context of western Austronesian symmetrical-voice languages

Western Austronesian symmetrical-voice languages can be roughly divided into two major types: Philippine-type and non-Philippine-type languages. The latter include a somewhat heterogeneous set of languages sometimes referred to as 'Indonesian-type' languages. In using 'non-Philippine type' to refer to these languages, we emphasize the fact that their main commonality pertains to the fact that they do not show all the defining features of Philippine-type languages (see Himmelmann 2005: 112–114). Among the defining features of Philippine-type languages is the presence of phrase-marking clitics and a rich voice system, i.e. more than two transitive constructions, including those which allow semantically peripheral arguments to be selected as subjects (further illustrated below). Importantly, Philippine-type languages lack applicative marking altogether.

Non-Philippine-type western Austronesian symmetrical-voice languages, on the other hand, have a much more reduced voice system, usually only exhibiting one actor and one undergoer voice (sometimes in addition also a proper, agent-demoting passive). Furthermore, and unlike Philippine-type languages, they often display a set of applicative markers that increase the valency and introduce new core arguments to the verb's argument structure. These applicative markers typically differ formally from the voice marking morphology in the same language.

The purpose of this section is to show that Totoli, which belongs to the non-Philippine-type languages, occupies an intermediary position between

typical Philippine-type and typical non-Philippine-type languages and may thus provide a glimpse into the historical development of western Austronesian voice and applicative marking systems. For reasons given below, however, all remarks regarding historical developments must remain fairly speculative for the time being. The following examples illustrate the basic four voice alternations in the Philippine-type language Tagalog:

(18)   TAGALOG
   a.   *Bumabasa*   *ng*   *diyaryo*   *ang*   *titser.*
         <um>RDP-basa   ng   diyaryo   ang   titser
         <AV>RDP-read   GEN   newspaper   NOM   teacher
         'The teacher is reading a newspaper.' (Schachter and Otanes 1972: 69)
   b.   *Kinain*   *ng*   *pusa*   *ang*   *daga.*
         <in>kain-ø   ng   pusa   ang   daga
         <RLS>eat-PV   GEN   cat   NOM   rat
         'The cat ate the rat.' (Kaufman 2017: 603)
   c.   *iniabot*   *ng*   *manggagamot*   *sa*   *sundalo*   *ang*   *itlog*
         <in>i-abot   ng   manggagamot   sa   sundalo   ang   itlog
         <RLS>CV-reach   GEN   doctor   DAT   soldier   NOM   egg
         'The physician handed the egg to the soldier.' (Himmelmann 2008: 265)
   d.   *Kinainan*   *ng*   *pusa*   *ng*   *daga*   *ang*   *pinggan.*
         <in>kain-an   ng   pusa   ng   daga   ang   pinggan
         <RLS>eat-LV   GEN   cat   GEN   rat   NOM   plate
         'The cat ate the rat on/from the plate.' (Kaufman 2017: 603)

The Tagalog sentences above illustrate the actor voice (18a) and three undergoer voices – patient voice (18b), conveyance (displaced theme/instrumental) voice (18c), and locative voice (18d). The important points for the current investigation are as follows: All four voices basically have the same structure. Verbs are initial and are followed by one or more non-subject arguments, marked by the phrase-marking particles *ng* or *sa*. The term referring to the subject – i.e. the actor, the patient, the theme, and the locative respectively – occurs in final position and is introduced by the phrase marker *ang*. All constructions are equally transitive. The voice marker on the verb marks only the semantic role of the subject argument, the other roles can be deduced by implicature. All voices make use of an overt marker in at least one of the two moods, as seen in Table 8. All undergoer voices have in common that the realis mood is marked by *<in>* or its phonologically conditioned allomorph *ni-*.

Table 8: Voice paradigm in Tagalog.

	NON-REALIS	**REALIS**
ACTOR VOICE	*<um>/mag-/maN-*	*<um>/nag-/naN-*
PATIENT VOICE	*-in*	*<in>/ni-*
LOCATIVE VOICE	*-an*	*<in>/ni- + -an*
CONVEYANCE VOICE	*i-*	*i- + <in>*

Comparing Table 8 with the Totoli voice marking formatives shown in Table 3, repeated here for convenience as Table 9, it is clear that, with one exception, the Totoli formatives constitute a proper subset of the Tagalog ones.

Table 9: Totoli voice formatives (dynamic paradigm).

	NON-REALIS	**REALIS**
ACTOR VOICE	*mo-/mog-/moN-*	*no-/nog-/noN-*
UNDERGOER VOICE 1	Ø	*ni-*
UNDERGOER VOICE 2	*-i*	*ni- + -an*
LOCATIVE VOICE	*po-/poN-/pog- + -i*	*ni- + po-/poN-/pog- + -an*

The one exception is the UV2 suffix *-i* in non-realis mood. However, the lack of a suffix of this shape is a somewhat idiosyncratic property of Tagalog. Most other closely related Meso-Philippine languages such as Cebuano, Bikol, Waray-Waray, etc. include such a suffix in their voice paradigms, usually in the so-called sub-junctive mood, which has been lost in Tagalog. Table 10 illustrates this with Cebuano data.

Table 10: Cebuano voice-mood paradigm for dynamic verbs (cf. Wolff 1972: xvi, 2001:123; quoted from Himmelmann 2005:168).

	NON-REALIS	**REALIS**	**SUBJUNCTIVE**
ACTOR VOICE	*mu-*	*mi-/ni-*	*mu-*
PATIENT VOICE	*-un*	*gi-*	*-a*
LOCATIVE VOICE	*-an*	*gi- + -an*	*-i*
CONVEYANCE VOICE	*i-*	*gi-*	*i-*

The most conspicuous difference between the Philippine and the Totoli para-digms is the lack of a conveyance voice, which is marked by a prefix while the other undergoer voices are marked by suffixes. There is also no voice formative

in the Totoli paradigm that specifically signals patient voice, corresponding to Tagalog -*in* and Cebuano -*un*.

Before further discussing similarities and differences between Philippine-type languages and Totoli, it will be useful to take a brief look at a more typical non-Philippine-type symmetrical-voice language, using Madurese as our example. In Madurese, there is a simple actor voice vs. undergoer voice distinction, both marked by prefixes, as seen in example (19).

(19) Madurese

    a. *Ale'*   *noro'*   *Ebu.*
        yngr.sibling AV.follow mother
        'Little Brother followed Mother.'

    b. *Ebu*   *e-toro'*   *Ale'.*
        mother UV-follow yngr.sibling
        'Little Brother followed Mother. /Mother was followed by Little Brother.'
        (Davies 2010: 249)

There are no multiple undergoer voices in Madurese which would alternate in accordance with the semantic role of the undergoer subject as in the case of Tagalog shown above. But Madurese also allows for superficially very similar constructions to the ones illustrating the Tagalog locative and conveyance voices. The crucial difference pertains to the fact that these constructions are clearly applicative constructions in that they usually alternate with a non-applicative construction. Furthermore, all applicatives come in both actor and undergoer voice.

(20) Madurese

    a. *Ennyor rowa gaggar ka motor-ra Ahmad.*
        coconut that fall to car-DEF PN
        'That coconut fell on Ahmad's car.'

    b. *Motor-ra Ahmad e-gaggar-i ennyor rowa.*
        car-DEF PN UV-fall-APPL coconut that
        'That coconut fell on Ahmad's car.'

    c. *Ennyor rowa ngaggar-i motor-ra Ahmad.*
        coconut that AV.fall-APPL car-DEF PN
        'That coconut fell on Ahmad's car.' (Davies 2010: 295)

(21) Madurese

    a. *Ale'*   *nambu' burus bi'*   *bato.*
        yngr.sibling AV.hit dog with rock
        'Little Brother hit the dog with rocks.'

b. *Ale'   nambu'-agi   bato dha' burus.*
   yngr.sibling AV.hit-APPL   rock   to   dog
   'Little brother hit the dog with rocks.'

c. *Bato e-tambu'-agi (dha') burus bi' ale'.*
   rock UV-hit-APPL   to   dog   by   yngr.sibling
   'Little Brother hit the dog with rocks.' (Davies 2010: 309)

Here the applicative suffixes *-e* (and its allomorph *-i*) and *-agi* can be used with verbs marked for actor voice or undergoer voice. Example (20a) differs from (20b) and (20c) in that, in the latter (featuring the applicative suffix *-e/i*), the locative expression is a direct argument, whereas in (20a) it is an oblique, introduced by the preposition *ka*. Similarly, in (21a), an instrument is treated as an oblique. In (21b) and (21c), which are marked with the applicative suffix *-agi*, the erstwhile oblique instrument is promoted to core argument status. In the actor voice (21b), it is assigned direct object status, in the undergoer voice (21c), it is selected as subject.

There is of course an interaction between the systems in that the subject function is determined by the voice. In the actor voice the applied argument is the object and in the undergoer voice it is assigned the subject function. Nevertheless, the systems can be clearly distinguished formally and functionally. The Madurese voice and applicative paradigms are shown in Table 11.

Table 11: Madurese voice and applicative formatives (Davies 2010).

ACTOR VOICE	*N- (ng-/m-/n-/ny-)* /a-
UNDERGOER VOICE	*e-*
APPLICATIVE (LOCATIVE/GOAL)	*-e/-i*
APPLICATIVE (BENEFACTIVE/INSTRUMENTAL)	*-agi*

Comparing the Madurese system with the Totoli and the Philippine-type systems, there are major differences. In Madurese, voice marking is exclusively done by prefixes, applicative marking by suffixes. In Totoli, voice marking is mixed, as it is in the Philippine-type languages. But Totoli applicatives are exclusively suffixes, as in Madurese. Madurese, like many other non-Philippine-type symmetrical-voice systems in Indonesia (but unlike Totoli), does not distinguish realis from non-realis forms. Totoli and Madurese are similar in that functionally there is a simple actor voice – undergoer voice alternation, though Totoli still has two formally distinct undergoer voices. And, of course, both languages

have applicative marking, which is completely absent in the Philippine-type languages.[9]

Furthermore, voice marking and applicative formatives in Totoli and Madurese constitute subsets of the forms attested in the Philippine languages, with the exception of the Madurese applicative suffix -*agi*. The latter is an innovation, as argued by Adelaar (2011). The Madurese undergoer voice prefix *e-* is cognate with the widely attested (realis) undergoer voice prefix *i-*, which is a reduced form of the prefix *ni-* attested in Totoli and some Philippine languages. Madurese N in actor voice, which assimilates to and sometimes replaces the base-initial consonant, is cognate with the N in the widely attested actor voice prefix *maN-*.

The above comparisons should make it clear that Totoli is exceptional in formally intertwining two otherwise formally and functionally different systems: voice and applicative marking. Philippine-type languages only mark voice. Most non-Philippine-type languages mark voice and applicatives, but by two clearly distinct set of formatives (prefixes and suffixes). In Totoli, however, the same formatives may sometimes mark an applicative, and sometimes a voice.

The above comparisons also make it clear that in all three languages – Totoli, Tagalog and Madurese – we are basically dealing with the same formatives, except for Madurese -*agi*. It is thus tempting to speculate about which kind of changes may have lead from one system to the other.

Before doing so however, a caveat is in order. Following the pioneering work of Wolff (1973), it has been widely assumed that Proto-Austronesian clause structure and verb morphology looked very much like they do in current Meso-Philippine languages (see Ross 2009 for some recent modifications). That is, all of the formatives illustrated for Tagalog in Table 8 and Cebuano in Table 10 have been reconstructed to the proto-level, also with essentially the same meanings and functions. It is very likely that this picture is considerably oversimplified. To date there is no comprehensive account for the attested historical developments for a single one of these formatives, let alone the many changes found in each individual system. As further detailed in Himmelmann (2020: 1045–6, 1057–8), it is not uncommon that even something so basic as the directionality of a given change is unclear. In the case at hand, for example, it is not established beyond all doubt that Totoli represents the innovation and Tagalog/Cebuano the inherited system.

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9 There are, however, approaches to Philippine-type voice systems which claim that locative and conveyance voices are to be analyzed as applicatives. See Chen and McDonnell (2019: 180–184) for references and counterarguments.

The following remarks are largely framed within the widely shared hypothesis that the general direction of historical developments affecting Austronesian voice and applicative affixes is from close to Philippine-type to non-Philippine-type. However, it should be kept in mind that the reverse direction has also been proposed and that it is, in fact, not straightforward to decide between competing views at our current stage of knowledge.

If it is assumed that the ambiguous Totoli voice/applicative suffixes *-i* and *-an* were originally patient and/or locative voice suffixes in a Philippine-type system of voice alternations (compare again the Tagalog examples in (18)), then the main question pertaining to the transition from the Philippine-type system to the Totoli system is how the new applicative uses came about. Note that, strictly speaking, the introduction of a new argument into the case frame of a verb is not an innovation. Tagalog locative voice, for example, also allows for assigning subject status to the place where something happens (compare 'The cat ate the rat on/ from the plate' in (18d) above). Consequently, the major change in the transition to Totoli consists in the fact that the suffixes *-i* and *-an,* which continue to be used as regular undergoer voice suffixes, may co-occur with the actor voice prefixes, thus making for a proper applicative where the 'applied' argument functions as a non-subject core argument. See the examples (3a) and (4a), repeated here in (22).

(22) a. *Tau   ana   meseo   manakean   balaan dei   kapa'.*
         tau   ana   mo-seo **moN-**sake-**an**   balaan dei   kapa'
         person   MED   ST-busy **AV-**ascend-**APPL1** goods LOC ship
         'Those people are busy loading goods on the ship.'

     b. *Douamo   no ondo sisia manakei   kapa' (takin balaan).*
         doua=mo   no ondo sisia **moN-**sake-**i**   kapa' (takin balaan)
         two=CPL   LK day   3PL   **AV-**ascend-**APPL2** ship   with   goods
         'For two days already they are loading the ship (with goods).'

Another apparent innovation in Totoli, not discussed in the preceding sections, is the occurrence of verbal forms with pronominal prefixes such as *ku-ita-i* 'I see it/ them' exemplified in (15a) above. Such forms do not occur in Philippine-type languages. They may have provided a major stepping stone for forms with an actor voice prefix and the former undergoer voice suffixes *-i* and *-an* such as *manakei* and *manakean* in (22) above. The development of the forms with pronominal prefixes themselves, however, is complex and cannot be further expounded here (Wolff 1996 and Himmelmann 1996, 2020 provide further details and discussion).

In the current context, the role played by transitivity and the basic valency profile in the development of the Totoli system is of particular interest. Transitivity distinctions do not play a major role in the grammar of Philippine-type

voice alternations and there are reasons to assume that the lexical bases of verbal items are essentially intransitive (see Kaufman 2009 on the so-called nominal-ist hypothesis for Tagalog and other Philippine languages). In Totoli, on the other hand, there are clear differences in the transitivity of the different verbal formations. Furthermore, while a large number of verbal bases, also ones which denote semantically transitive eventualities, are intransitive (see Section 3.4 above), there are also some bases which are clearly transitive. Consequently, it would appear that the innovation of proper applicative forms is correlated with a beginning change in the basic valency profile of the language: from a stage where essentially all base forms are (syntactically) intransitive to one where tran-sitivity distinctions become not only more relevant in the verbal grammar of the language overall, but also manifest themselves on the level of lexical base forms.

Further developments then would lead to a stage where transitive and intran-sitive verbal bases are clearly distinguished on the lexical level, as is the case in Madurese and other Indonesian symmetrical-voice languages. The emergence of a new valency profile in these languages would further correlate with a change in function of the former undergoer voice suffixes *-i* and *-an* (for the latter, such a change is in fact rarely attested). These fully lose their function as markers of dif-ferent types of undergoer voices and only occur in their applicative function. To emphasize the point made above once again: while this scenario may have some plausibility, it is highly speculative and very sketchy. There are very many details that need to be worked out in much more detail. Among many other points, we would need proper basic valency profiles for all the languages mentioned here (including Tagalog and Madurese) as well as for a few additional representatives of the two basic types, i.e. Philippine vs. non-Philippine type.

5 Summary

In this paper, we investigated the basic valency orientation and different ways of transitivization in Totoli. Following the approach in Nichols, Peterson and Barnes (2004) to determine basic valency orientation, Totoli can be considered a transi-tivizing language. Comparing verb pairs whose meaning differs in the presence or absence of an entailment of external causation ('induction' in the terms of Nichols, Peterson and Barnes (2004)), the 'plain' (i.e. 'non-induced') member can be con-sidered as non-derived or basic in the majority of cases. Alternations in which both 'plain' and 'induced' meanings are coded in a way that may be considered equally basic (or derived) are also attested but detransitivization proper seems to be absent in the language. Leaving aside suppletion, four valency-increasing

strategies were identified in Totoli: causativization proper, transitive-intransitive alternation within the stative paradigm, alternation between the stative and the dynamic paradigms, and the use of applicative morphology. Applicative marking in Totoli is sensitive to the argument structure of the verbal base, resulting in causative-applicative syncretism. With transitive bases, applicative morphology signals the promotion of a participant to core-argument status, while with intransitive bases the entailment of external causation is added.

The unique relationship between the symmetrical-voice and applicative systems in Totoli is of particular interest, as the language seems to occupy an intermediary position between Philippine-type and non-Philippine-type symmetrical-voice languages. The situation is as follows: Philippine-type languages have a rich symmetrical-voice system but lack applicatives. Typical non-Philippine-type languages have applicative markers, which are – with the exception of some innovations – cognate with voice formatives in Philippine-type languages. But in non-Philippine-type languages the voice and applicative systems are clearly distinct. Voice and applicative morphology in Totoli, in contrast, exhibits substantial formal overlap. This suggests that the development of applicatives as a system independent from symmetrical-voice alternations may have arisen with the emergence of transitivity and valency as distinctions relevant in the grammar of western Austronesian languages of the non-Philippine-type.

Abbreviations

1	first person
2	second person
3	third person
ACT	undergoer voice agent
AND	andative
APPL	applicative
APPL1	applicative1
APPL2	applicative2
AV	actor voice
AUTO.MOT	autonomous motion
CAU	causative
CPL	completive
CV	conveyance voice
DAT	dative
DEF	definite
DIST	distal
EMPH	emphatic
GEN	genitive

HON	honorific
INTJ	interjection
LK	linker
LOC	locative
LV	locative voice
MED	medial
NEG	negation
NOM	nominative
NP	noun phrase
ONE	one
PL	plural
PN	proper or personal name
POT	potentive
PRX	proximal
PV	patient voice
QUOT	quotative
RDP	reduplication
RDP1	reduplication1
REL	relative
RLS	realis
SG	singular
SF	stem formant
ST	stative
UV	undergoer voice
UV1	undergoer voice 1
UV2	undergoer voice 2

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