

Degrees of affectedness and verbal prefixation in Abui (Papuan)

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Abstract

This paper deals with the encoding of affectedness in Abui, a Papuan language of Indonesia. Abui is a head-marking language of the rare type where the verbs are marked for their undergoer arguments (S_o , O) formally split into several subtypes. This marking has been previously analyzed as a type of semantic alignment sensitive among others to affectedness. Affectedness is understood here as a scalar property delimiting the predicate (following Tenny 1987 and Beavers 2011). The paper explores the structure of the affectedness scale for Abui, comparing the functions and meaning of three types of person prefix paradigms. We show that verbs with similar meaning, encoding the same type of change (in Beavers' terms) can differ in their entailments. We also show that there may be additional dimensions in which affectedness can be measured, such as affected agents, and that the interpretation of the degree on the affectedness scale interacts with instigator's (source of force) status on the referential hierarchy. While human agents in some cases allow lower degrees of affectedness, the inanimate forces select the maximal degree reading. We conclude, that despite a considerable amount of fluidity of marking (Fedden et al. 2013, 2014), the shifts in degree of affectedness can be predicted as lowering of the degree stipulated for the predicate.

1 Introduction

Abui is a Papuan language of the Alor-Pantar Archipelago of Eastern Indonesia (Alor branch of the Timor-Alor-Pantar family, Holton et al. 2012) spoken by over 17,000 people. Abui has a relatively simple phonemic inventory, with phonemic vowel length, lexical and grammatical tone. The tone system is presently not fully understood and the tones are not marked here. The language is head-marking, verb-final, and moderately agglutinative. Negation particles occur post-verbally and verb serialisation and clause chaining are extensive. The grammatical relations have been described as semantic alignment detected in both free pronouns and person prefixes (Kratohvíl 2007, 2011, 2014). Fedden et al. (2013, 2014) show that Abui verbs are highly fluid in argument selection and indexing, compared to related languages. The system is complex, and we do not presently fully understand the features predicting the distribution of person marking prefixes. The system interacts with the Abui aspectual system, expressed through a variety of morphosyntactic operations such as stem modification, suffixation and verb serialisation.

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Abui verbs agree in person and number with their undergoer arguments (O, S_o). Person prefixes are listed in Table 1. Number is distinguished in the first and second person only. Distributive forms have both distributive and reciprocal reading. The third person is split between the *d-* series prefixes (indexing the A argument), and the *h-* series (non-A argument). Five prefix paradigms distinguish five basic types of undergoer arguments. For more details about their use, see Kratochvíl (2011, 2014). The glosses are not to be taken to literally indicate the semantic role of the argument.

Table 1: Abui person prefixes

PERSON	I	II	III	IV	V
1SG	<i>na-</i>	<i>no-</i>	<i>ne-</i>	<i>noo-</i>	<i>nee-</i>
2SG	<i>a-</i>	<i>o-</i>	<i>e-</i>	<i>oo-</i>	<i>ee-</i>
3UND	<i>ha-</i>	<i>ho-</i>	<i>he-</i>	<i>hoo-</i>	<i>hee-</i>
3AGT	<i>da-</i>	<i>do-</i>	<i>de-</i>	<i>doo-</i>	<i>dee-</i>
DISTR	<i>ta-</i>	<i>to-</i>	<i>te-</i>	<i>too-</i>	<i>tee-</i>
1PL.EXCL	<i>ni-</i>	<i>nu-</i>	<i>ni-</i>	<i>nuu-</i>	<i>nii-</i>
1PL.INCL	<i>pi-</i>	<i>pu-/po-</i>	<i>ni-</i>	<i>puu-/poo-</i>	<i>pii-</i>
2PL	<i>ri-</i>	<i>ru-/ro-</i>	<i>ri-</i>	<i>ruu-/roo-</i>	<i>rii-</i>
GLOSS	PAT	REC	LOC	GOAL	BEN

Although a number of predicates are rigid in their argument selection, most verbs are quite fluid. To illustrate the fluidity, the paradigm of the verb *wik* ~ *wit* ‘carry in hands/arms’ is given in (1-6). Each person prefix series indicates a different degree/degrees of affectedness (Kratochvíl 2014: 558-559). The prefixes *ha-* (3UND.PAT) and *he-* (3UND.LOC) index the carried theme in (1, 2, 4). The prefix *do-* (3AGT.REC) indexes the carrier, who is affected by his own action (3), *hee-* (3UND.BEN) the benefactor (4), *hoo-* (3UND.GOAL) someone who is given something to carry (5). Note also that the theme does not have to be indexed, although it is definite, when the sentence does not contain an agent argument (6).

- (1) Bui kaai ha-wik
 PN [dog]_{PAT} 3UND.PAT-carry.in.arms.IPFV
 ‘Bui is carrying her dog in her arms.’
- (2) Bui bataa tuku mii de-wiil hee-r ba
 PN wood piece take.PFV 3AGT.AL-child 3UND.BEN-reach SIM
 ha-wik
 3UND.PAT-carry.in.arms.IPFV
 ‘Bui made a doll from a piece of wood and carries it around.’

- (3) akuun nuku, dikang di de-naamang
morning one again 3AGT 3AGT.AL-cloth
do-witi, pun namei he-yaari
3AGT.REC-carry.in.arms.PFV field prepare.field 3UND.LOC-go.PFV-PFV
‘one morning, he again took his clothing and went to work in the field.’
- (4) a-taáng do mi he-wik,
2SG.INAL-hand PROX use 3UND.LOC-carry.in.arms.IPFV
hee-wik-e!
3UND.BEN-carry.in.arms.IPFV-PROG
‘carry it in your hands, carry (it) for him!’
- (5) na ara mii hoo-wik
1SG.AGT firewood take.PFV 3UND.GOAL-carry.in.arms.IPFV
‘I give him firewood to carry.’
- (6) sura foka do baai wik-e?
book big PROX also carry.IPFV-PROG
‘should this big book be carried too?’

The basic meaning of the root is not a good predictor of its inflectional behavior, as shown in (7-12). The root *rumai* can be interpreted as a state (7) or as an inchoative (8-9). Further, some of the combinations may be used in an idiomatic way (10-12), where the basic meaning is extended based on a metaphor (here STRONG >RELY ON, PUT FAITH IN, DERIVE STRENGTH FROM):

- (7) di rumai natet hare eel baai rumai
3AGT be.strong stand.up.PFV so 2SG.TOP also be.strong
‘He is firm, so you too be strong!’ [E14BD.A63]
- (8) ni-maama wee lik ha-rumai
1PL.EXCL.AL-father ASSOC platform 3UND.PAT-strengthen
‘my father and his friends are strengthening the platform.’ [E14BD.A64]
- (9) no-rumai
1SG.REC-be.strong
‘I feel strong (and I took the decision to feel so).’ [E14BD.A65]
- (10) he-tanga nu a he-rumai naha!
3UND.AL-word SPC 2SG.AGT 3UND.LOC-strengthen not
Do not put your trust in his words!’ [E14BD.A66]
- (11) moku kaik loku di needo noo-rumai
kid orphan PL 3AGT 1SG.FOC 1SG.GOAL-rely
‘The orphaned children rely on me, have support in me.’ [E14BD.A67]

- (12) na ama wala hee-rumai naha
 1SG.AGT person just 3UND.BEN-have.strength not
 ‘I don’t expect any support from anyone.’ [E14BD.A68]

2 Affectedness

Affectedness has been invoked by typologists to define prototypical undergoers and it is understood as the property of simply undergoing change (literature dealing with alignment, case, transitivity). In formal semantic work affectedness is understood as a scalar property delimiting the predicate, starting from Tenny (1987).

The most influential among the typological approaches is Tsunoda (1981), who identified typical verb class boundaries through what he termed ‘verb effectiveness hierarchy’ (p. 395), shown in (13):

- (13) effective action > perception > pursuit > knowledge > feeling > relation

If the transitive frame (construction) can be used for classes on the right of that hierarchy, it can be used also for classes on the left of them. Tsunoda’s proposal has been modified by Christian Lehman, who highlighted the two-dimensional nature of affectedness and its internal scale: total ~ partial ~ minimal (1991:221). Importantly, the internal scale is not consistent across verb classes (affected object are created, and therefore show no grades of existence). The most recent elaboration of the hierarchy comes from the ValPal Project (Hartmann et al., 2013), which has revised the hierarchy (Malchukov & Comrie, 2015).

The semantic approaches have discussed affectedness in relation to pre-posed NPs, middles and subsume it under aspect (for example Tenny (1987)):

Affectedness may be defined as the property of a verb, such that it describes a situation or happening that can be delimited by the direct argument of the verb. Affectedness verbs describe events, which are ‘measured out’ and delimited by their direct arguments. Affectedness defined in this way as an aspectual property more adequately characterizes the verbs that allow middles and noun phrase passives than the definition of affectedness based on the notion of ‘undergoing change’.
 (Tenny 1987:75)

In Tenny’s framework, there are five verb classes for which the notion affectedness is relevant. These are (i) *verbs of creation, consumption and path-motion*, (ii) *verbs of physical change*, (iii) *verbs of abstract change*, (iv) *achievement verbs*, and (v) *verbs of locomotion* (1987:105).

Beavers (2011) reorganised Tenny’s framework in a two-dimensional space for the encoding of affectedness. One dimension represents the types of change, and the other the degree of change. With respect to the types of change, Beavers identifies the following six types of change, restricting the discussion to transitive verbs:

- (a) *x* changes in some observable property (clean/paint/delouse/fix/break *x*)
- (b) *x* transforms into something else (turn/carve/change/transform *x* into *y*)
- (c) *x* moves and stays at some location (move/push/angle/roll *x* into *y*)
- (d) *x* is physically impinged (hit/kick/punch/rub/slap/wipe/scrub/sweep *x*)
- (e) *x* goes out of existence (delete/eat/consume/reduce/devour *x*)
- (f) *x* comes into existence (build/design/construct/create *x*)

Beavers measures the degree of affectedness along a scale in his Affectedness Hierarchy, shown in (14) and proposes a number of semantic tests characterising each degree. Predicates listed in (a-c, e, f) combine with patients and entail a resulting state. Predicates in (d) are non-patient force-recipients which do not always entail a resulting state.

(14) Affectedness Hierarchy (Beavers 2011:359)

TEST	quantized	non-quantized	potential	unspecified
telic	+	-	-	-
change entailed	+	+	-	-
result XP	+	+	+/-	-
<i>happened to x</i>	+	+	+	-
dynamic	+	+	+	+/-
result variation	low	low/high	high	n.a.

Importantly, Beavers excludes intransitive predicates from his discussion of affectedness, while in Tenny’s framework includes preposed NPs (middles and DP-passives).

3 Affectedness in Abui

Affectedness is relevant for several of the person prefix paradigms listed in Table 1.¹ We will restrict our discussion to transitive verbs that combine with three paradigms. Section 3.1 will discuss verbs that combine exclusively with the PAT prefix paradigm. Section 3.2 examines the meaning of the PAT~ LOC alternation. Section 3.3 discusses another type of affectedness, not covered in Beavers’ framework, but very common in Abui, where the scale of affectedness is applied to the agent who is in some way also experiencing or affected by the action.

¹The data discussed in this paper is drawn mostly from a purpose built database of Abui inflectional paradigms (v. 2015). The database contains attested combinations of over 300 verbal roots and person prefixes. The database contains the most frequent verbs from the corpus and also the 80 verbs covered by the VALPAL database. In this paper we selected verbs that are compatible with the person prefix that marks affected undergoers (PAT) and whether the verb allows the LOC-prefix alternation.

Beavers (2011:359) lists the variation of the result XP as a diagnostic feature of the *non-quantized* degree, which seems to match the Abui data. Some variation of the results are shown for the verb *ha-wel* ‘wash him’ in (19-20).

- (19) Na ha-wel-i, haba sanra naha.
 1SG.AGT 3UND.PAT-wash-PFV but become.clean.IPFV not
 ‘I washed him, but he is not clean.’ [E15BD.25]
- (20) Na ha-wel-i, haba he-isi de-i
 1SG.AGT 3UND.PAT-wash-PFV but 3UND.AL-body 3AGT.LOC-have
 dakuni.
 be.dirty
 ‘I washed him but he is still dirty.’ [E15BD.22]

Similarly to the other verbs of the same class, some minimal degree of affectedness is entailed, as shown by the implausible entailments in (21-22).

- (21) Na ha-wel-i, #haba nala da-lakda
 1SG.AGT 3UND.PAT-wash-PFV but something 3AGT.PAT-happen.IPFV
 naha.
 not
 ‘I washed him, #but nothing happened.’ [E15BD.23]
- (22) Na ha-wel-i, #haba yokda naha.
 1SG.AGT 3UND.PAT-wash-PFV but become.wet.IPFV not
 ‘I washed him, #but he didn’t get wet.’ [E15BD.24]

The second type of change identified by Beavers (2011:339) is TRANSFORM INTO SOMETHING ELSE. Our 300-verb sample does not contain any verbs marked with the PAT prefix belonging to this type. The third type - MOVE AND STAY AT SOME LOCATION - is common and some examples are listed in (23).

- (23) MOVE AND STAY AT SOME LOCATION (PAT-type)
- | | | |
|------------------|-----------------------|---------------------|
| <i>ha-fik</i> | 3UND.PAT-pull | ‘pull it, pull him’ |
| <i>ha-suonra</i> | 3UND.PAT-push.IPFV | ‘push it’ |
| <i>ha-kuoila</i> | 3UND.PAT-topple.IPFV | ‘topple it’ |
| <i>ha-kai</i> | 3UND.PAT-drop.IPFV | ‘drop it, trip him’ |
| <i>ha-ai</i> | 3UND.PAT-add.IPFV | ‘add it’ |
| <i>ha-reng</i> | 3UND.PAT-turn.to.IPFV | ‘turn to it’ |
| <i>ha-bi</i> | 3UND.PAT-lean.PFV | ‘lean against it’ |

Beavers considers this type of change to be compatible with the non-quantized degree of affectedness (2011:245). However, in Abui, no change is necessarily entailed with human agents and the forms may also describe failed attempts, if forced by the context, as shown in (24-26).

- (24) Na ha-fik-i haba burook naha.
 1SG.AGT 3UND.PAT-pull-PFV but move not
 ‘I pulled it but it didn’t move.’ [E15BD.34]
- (25) Na ha-fik-i haba sik naha.
 1SG.AGT 3UND.PAT-pull-PFV but snap not
 ‘I pulled it but it didn’t snap.’ [E15BD.35]
- (26) Na ha-fik-i haba dara de-yal mia.
 1SG.AGT 3UND.PAT-pull-PFV but still 3AGT.AL-place be.in
 ‘I pulled it but it is in its place (it’s too heavy).’ [E15BD.36]

It seems that the PAT-subclass of MOVE AND STAY AT SOME LOCATION verbs in Abui alternates between taking patients with non-specific result (*non-quantized degree*) and non-patient force recipients (*potential degree*).

The fourth type of change BE PHYSICALLY IMPINGED is encoded by the following verbs in Abui:

- (27) BE PHYSICALLY IMPINGED (PAT-type)

<i>ha-balak</i>	3UND.PAT-punch	‘punch him’
<i>ha-paakda</i>	3UND.PAT-slap.IPFV	‘slap him’
<i>h-uol</i>	3UND.PAT-hit.IPFV	‘hit/strike him’
<i>ha-taak</i>	3UND.PAT-shoot.IPFV	‘shoot him’
<i>ha-laanga</i>	3UND.PAT-grope.IPFV	‘grope him’

These verbs are similar to the previous type in allowing the failed readings with human agents, shown in (28). This is consistent with Beavers’ classification (2011:345) in which this class of verbs combines with non-patient force-recipients only compatible with certain types of result XPs.

- (28) Di n-uol mai ne-l=ha-yei
 3AGT 1SG.PAT-strike.IPFV and.then 1SG.LOC-GIVE=3UND.PAT-hit.IPFV
 naha.
 not
 ‘He struck at me, but didn’t hit me.’ [E15BD.45]

The fifth type of change is GO OUT OF EXISTENCE (Beavers 2011:339). Examples of Abui PAT-marked belonging to this type are given in (29).

- (29) GO OUT OF EXISTENCE (PAT-type)

<i>ha-al</i>	3UND.PAT-burn.IPFV	‘burn it’
<i>ha-fuul</i>	3UND.PAT-swallow.IPFV	‘swallow it’
<i>ha-pok</i>	3UND.PAT-cover.IPFV	‘cover it’
<i>ha-yol</i>	3UND.PAT-bury.IPFV	‘bury it’

The verbs in (29) are incompatible with the constructions of the type *x but nothing happened* and entail therefore a minimal change, as shown in (30-31). These verbs are classified as taking patient arguments and entailing a change, matching Beaver's (2011:345) *non-quantized* degree.

- (30) Na ha-ar-i, haba dara on-a.
 1 SG.AGT 3UND.PAT-burn.PFV-PFV but still make.PFV-CONT
 'I burned it, but there was still some left.' [E15BD.50]
- (31) Na ha-ar-i, #haba ara diyei naha.
 1 SG.AGT 3UND.PAT-burn.PFV-PFV but fire burn not
 'I burned it, #but the fire didn't burn it.' [E15BD.49]

The last type of change is COME INTO EXISTENCE. Our sample contained a single PAT-marked verb of this type:

- (32) COME INTO EXISTENCE (PAT-type)
 ha-yaal 3UND.PAT-give.birth.IPFV 'give birth to him'

The verb *yaal* 'give birth' combines with a patient, but is not necessarily telic, as shown in (33), describing a failed birth where some complications prevented the baby from being born.

- (33) Di moku ha-yaar-i, haba moku sei
 3.AGT child 3UND.PAT-give.birth.PFV-PFV but child come.down.IPFV
 naha.
 not
 'She gave birth to the child, but the child was not delivered.' [E15BD.80]

Besides the above types, Abui PAT-marked verbs also include psych-verbs, and intransitives such as 'hurt', or 'fall'. It should also be noted that the above change type classes include other verbs, which do not require the PAT prefix. The discussion of those is beyond the scope of this paper.

3.2 Abui PAT~LOC alternation

Verbs belonging to OBSERVABLE CHANGE (PAT~LOC) class shown in (16) and repeated below as (34) use prefix alternation to distinguish different degrees on the affectedness scale.

- (34) OBSERVABLE CHANGE (PAT-LOC-type)
- | | | | | |
|--------------------|-------------------|---|--------------------|-----------------|
| <i>he-komangdi</i> | 'make it blunter' | ~ | <i>ha-komangdi</i> | 'make it blunt' |
| <i>he-lilri</i> | 'warm it up' | ~ | <i>ha-lilri</i> | 'boil it' |
| <i>he-siki</i> | 'split it' | ~ | <i>ha-siki</i> | 'separate it' |
| <i>he-kol</i> | 'tie it' | ~ | <i>ha-kol</i> | 'tie it up' |
| <i>he-kuya</i> | 'peel it' | ~ | <i>ha-kuya</i> | 'expose it' |

The LOC prefix entails a minimal change, of a lower degree than indicated by the PAT prefix, which usually takes the maximum degree. In terms of Beavers' typology, we consider this alternation as an overt marking of the patient as either involved in a *telic* event, where the final point is known, or in an *atelic* event where a change progresses in the specified direction, but the final point is not specified.

In (35), the LOC prefix attached to the verb *kol* 'bind' implies that there is still some thatching grass left that could be bound, although the binding has stopped (the verb is perfective). The PAT prefix allows the same entailment only if we imagine another agent undoing the binding, such as children or animals scattering the grass after it has been bound, as in (36). Note also, that in the second sense, the verb *kol* has a distinct perfective stem *kor*, while in the first sense, the stem does not have a perfective counterpart (Kratochvíl, 2015).

- (35) Na ameng he-kol-i haba dara
 1SG.AGT coarse.grass 3UND.LOC-bind-PFV but still
 kata-kata-di ba iti.
 be.scattered-GET.PFV PROG
 'I tied the thatching grass, but some is still scattered around.' [E15BD57]

- (36) Na ameng ha-kor-i haba dara
 1SG.AGT coarse.grass 3UND.PAT-bind.up.PFV-PFV but still
 kata-kata-di ba iti.
 be.scattered-GET.PFV PROG
 'I tied up the thatching grass, but there is (again) some scattered around (by chickens, or children).' [E15BD58]

The verb *-komangdia* is derived from the state *komang* 'blunt' with the inchoative suffix *-di*. The verb therefore contains the description of the final result. When combined with the LOC prefix, this action does not indicate the maximum degree on the affectedness scale, but a minimal degree of change towards the state denoted by the root (37). When the same root combines with the PAT prefix, the result matches the description in the root (38).

- (37) Di kawen he-komangdii, haba de-i
 3AGT machete 3UND.LOC-make.blunter.PFV but 3AGT.LOC-have
 bula.
 be.sharp
 'He made the knife blunter, but it's still sharp.' [E15BD51]

- (38) Di kawen ha-komangdii, #haba de-i
 3AGT machete 3UND.PAT-make.blunter.PFV but 3AGT.LOC-have
 bula.
 be.sharp
 'He made the knife blunt, #but it's still sharp.' [E15BD52]

As mentioned above, the second type of change (TRANSFORM INTO SOMETHING ELSE) proposed by Beavers (2011:339) is not found in our sample. The third type (MOVE AND STAY AT SOME LOCATION) also contains verbs compatible with the PAT~LOC alternation, as shown in (39).

(39) MOVE AND STAY AT SOME LOCATION (PAT-LOC-type)

<i>he-taang</i>	‘pass it along’	~	<i>ha-taang</i>	‘give it away’
<i>he-fil</i>	‘pull on it’	~	<i>ha-fil</i>	‘pull it’
<i>he-bel</i>	‘pluck it’	~	<i>ha-bel</i>	‘pull it out’
<i>he-baang</i>	‘put on shoulder’	~	<i>ha-baang</i>	‘put on (its lid)’
<i>he-kil</i>	‘put it out’	~	<i>ha-kil</i>	‘turn it upside down’

The MOVE AND STAY AT SOME LOCATION verbs marked with the PAT prefix take patient arguments and entail change. On the other hand, verbs marked with the LOC prefix are ambiguous and allow for readings compatible with a non-patient, force-recipient for whom a change is not necessarily entailed (Beavers 2011:345). This is illustrated with the LOC-marked verb denoting a failed attempt with *fil* ‘pull’ (40), a reading which is not compatible with the PAT-marked form (41).

(40) Ata di bataa he-fil-i, haba burook naha.
 PN 3AGT wood 3UND.LOC-pull.on-PFV but move not
 ‘Ata pulled on the log, but it didn’t move.’ [E15BD59]

(41) Ata di bataa ha-fil-i, #haba burook naha.
 PN 3AGT wood 3UND.PAT-pull.on-PFV but move not
 ‘Ata pulled the log, #but it didn’t move.’ [E15BD60]

BE PHYSICALLY IMPINGED type is well represented in our sample, with examples listed in (42).

(42) BE PHYSICALLY IMPINGED (PAT-LOC-type)

<i>he-dik</i>	‘stab at it’	~	<i>ha-dik</i>	‘pierce it’
<i>he-rel</i>	‘plant it in’	~	<i>ha-ril</i>	‘ram it in’
<i>he-taakda</i>	‘skewer it’	~	<i>ha-taakda</i>	‘stab to death’
<i>he-keila</i>	‘block it’	~	<i>ha-keila</i>	‘plug it’
<i>he-afui</i>	‘scoop it’	~	<i>ha-afuui</i>	‘scoop it up’
<i>he-ahii</i>	‘select it, pick it’	~	<i>ha-ahii</i>	‘remove it’
<i>he-fuuidi</i>	‘made it flatter’	~	<i>ha-fuuidi</i>	‘flatten it’

The function of the PAT~LOC alternation is the same as with the OBSERVABLE CHANGE verbs. The PAT marked verb describes a telic event reaching the result described by the the predicate. The LOC marked verb describes an atelic event entailing a minimal change. In both cases, the verb combines with a patient argument, as illustrated in (43-44). Note that we use the gloss ‘stab’ in both cases, although, it would be equally accurate to gloss the PAT-marked form as ‘pierce’.

(43) Na baleei foori he-dik-i, haba dara tukoladi
 1SG.AGT banana stem 3UND.LOC-stab-PFV but still have.hole.PFV
 naha.
 not
 ‘I stabbed the banana stem, but didn’t perforate it.’ [E15BD63]

(44) Na baleei foori ha-dik-i, #haba dara tukoladi
 1SG.AGT banana stem 3UND.PAT-stab-PFV but still have.hole.PFV
 naha.
 not
 ‘I stabbed through the banana stem, #but didn’t perforate it.’ [E15BD64]

The last type of change is encoded by the GO OUT OF EXISTENCE verbs, exemplified in (45). The verbs belonging to this class pattern in the same way as the verbs of OBSERVABLE CHANGE: PAT-marked forms are telic, LOC-marked do entail a change, but are atelic.

(45) GO OUT OF EXISTENCE (PAT-LOC-type)

<i>he-lak</i>	‘demolish it’	~	<i>ha-lak</i>	‘destroy it’
<i>he-akung</i>	‘shade it’	~	<i>h-akung</i>	‘extinguish it’

There are no examples of the PAT~LOC alternation with COME INTO EXISTENCE verbs in our sample. The PAT~LOC alternation is also found with some psych-verbs and with state-causatives pairs. The state verb is marked with LOC; the causative verb takes the PAT prefix. This type is quite common, with many examples in our database. Some examples are listed in (46).

(46) STATE~CAUSATIVE alternation (PAT-LOC-type)

<i>he-rumai</i>	‘it is strong’	~	<i>ha-rumai</i>	‘strengthen it’
<i>he-poku</i>	‘it hatched’	~	<i>ha-poku</i>	‘crack it’
<i>he-lika</i>	‘it is stuck’	~	<i>ha-lika</i>	‘stick it in’
<i>he-mong</i>	‘it is dead’	~	<i>ha-mong</i>	‘extinguish it’
<i>he-liikda</i>	‘it leans sideways’	~	<i>ha-liikda</i>	‘bend it’

We are listing these verbs, because they are not treated in Beavers (2011) account, but in our view show that the affectedness space is multidimensional. Perhaps the PAT~LOC alternation could be in this case thought of as a detransitivising process, where the absence of an external force is marked in this way.

Another type of PAT~LOC alternation involves an intransitive process verb (LOC) and a transitive causative verb (PAT). Some examples are listed in (47). We included the LOC-marked punctual verbs, such as ‘explode’ and ‘break off’.

(47) PROCESS~CAUSATIVE alternation (PAT-LOC-type)

<i>he-lai</i>	‘it diffuses’	~	<i>ha-lai</i>	‘squeeze it out’
<i>he-buida</i>	‘it’s getting short’	~	<i>ha-buida</i>	‘shorten it’
<i>he-takda</i>	‘it’s getting empty’	~	<i>ha-takda</i>	‘empty it’
<i>he-fokda</i>	‘it’s getting big’	~	<i>ha-fokda</i>	‘enlarge it’
<i>he-peekdi</i>	‘it came near’	~	<i>ha-peekdi</i>	‘put it near’
<i>he-melri</i>	‘it got flavor’	~	<i>ha-melri</i>	‘season it’
<i>he-fuunri</i>	‘it piled up’	~	<i>ha-fuunri</i>	‘pile it up’
<i>he-fuuisi</i>	‘it exploded’	~	<i>ha-fuuisi</i>	‘blow it up’
<i>he-tukdi</i>	‘it broke off’	~	<i>ha-tukdi</i>	‘break it off’

3.3 Abui transitive REC-verbs

The REC alternation is used when the involvement of the agent in the situation is at the centre of attention rather than the resulting state of the undergoer. The agent, which is always human, is usually acting in an involuntary or uncontrolled fashion, driven by some internal need which cannot be controlled. However, paraphrases with ‘want’ or ‘must’ are not quite precise, showing that this alternation is not a type of modality. Multiple results XPs are possible suggesting that a minimal change is always entailed for the undergoer argument (49-50).

- (48) Ata ama he-baleei do-takaafi, haba mingwaha wala
 PN person 3UND.AL-banana 3AGT.REC-steal.PFV but some only
 mii.
 take.PFV
 ‘Ata stole (for himself) bananas of those people, but he took just a few.’
 [E15BD69]
- (49) Ata ama he-baleei do-takaafi taaqdi.
 PN person 3UND.AL-banana 3AGT.REC-steal.PFV exhaust.PFV
 ‘Ata stole (for himself) all the bananas of those people.’ [E15BD76]
- (50) Ata ama he-baleei do-takaafi, #haba nuku baai
 PN person 3UND.AL-banana 3AGT.REC-steal.PFV but one also
 mii naha.
 take.PFV not
 ‘Ata stole (for himself) bananas of those people, #but he didn’t take any.’
 [E15BD68]

Example (51) shows that the agent remains the acting force but that his control is reduced in a way detectable for the speaker. The agent can perform the event, and still be dissatisfied with the result (51).

- (51) Ata ama he-baleei do-takaafi, haba
 PN person 3UND.AL-banana 3AGT.REC-steal.PFV but
 ho-ming kaanri naha.
 3UND.REC-satisfied.PFV not

‘Ata stole for himself enough bananas of those people, but he is not satisfied.’ [E15BD.70]

The control over the event is cannot be transferred to another agent, as shown with the quasi-causative construction in (52). Note also, that the presence or absence of an agentive pronouns is encodes the presence or absence of control with the agent (Kratochvíl 2014:561-563).

- (52) A panen-te di ko ama he-baleei
 2SG.AGT make.PFV-PRIOR 3.AGT IRR person 3UND.AL-banana
 do-takaafi
 3AGT.REC-steal.PFV

‘Do something that he would steal bananas of those people.’ [E15BD.77]

This type of affectedness is not included in Beavers’ framework, but the REC alternation is very common in Abui. In our database, more than 75% of the verbs are compatible with the REC prefix. The REC paradigm is also used to mark experiencers of some psych-verbs in Abui, and so the REC-marked agent can be thought of as similar to an experiencer, or in Beavers’ terms as a non-force recipient (2011:358). As we said above, we do not consider this alternation a type of modality.

We conclude that the REC alternation is neither a simple detransitivising process, but rather a construction indicating a temporary absence of control, which is regained through performing the action. In future research, we will explore, whether the ‘change’ on the agent’s side can be expressed with a result XP and whether the scale can be named more precisely to answer the question whether this type of change could be considered an additional degree of affectedness (agent-oriented).

The REC-alternation shares some similarities with the Slavic dispositional reflexives which emphasise a different aspect of the agent, usually casting it not only as instigating but also as experiencing the action in a particular way, positive or negative (Fried 2007:743-744).

3.4 Agents, forces, and degrees of affectedness

The degree of affectedness can vary for PAT-marked verbs depending on whether the cause of the event is a human agent or an inanimate cause. As shown in section 3.1, various degrees of affectedness are compatible with human agents. However, as shown in (53-55), inanimate force is compatible with the maximum degree of change and does not allow for failed readings.

- (53) Na ha-kaai haba ha-yei naha.
 1SG.AGT 3UND.PAT-make.fall.PFV but 3UND.PAT-fall.IPFV not
 ‘I tripped him but he didn’t fall.’ [E15BD.37]

syntax. In other words, Abui verbs show an interesting pattern of lexical stipulation of the verbal root, as discussed by Fedden et al. (2013, 2014). Although the interpretation of the predicate is co-determined by the argument agreement selection, verbs with the same marking lexicalised a different maximal degree of affectedness in terms of Beavers' (2011) hierarchy. For the PAT~ textsloc alternation the shifting is always one degree lower for the LOC-marked form, which suggests that systematic encoding of the maximum degree of affectedness for each verb (class) in the lexicon may be sufficient to determine the meaning of this alternation.

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