Variation and change in Abui : the impact of Alor Malay on an indigenous language of Indonesia

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Chapter 5

Variation and change in reflexive possessive marking

5.1 Introduction

This chapter investigates variation and change in reflexive possessive marking among the four age-groups discussed in §3.4.[1] Abui has a reflexivity distinction in its possessive system: it differentiates morphologically between 'He$_j$ hugs his$_j$ child' and 'He$_j$ hugs his$_k$ child'. Alor Malay lacks this possessive reflexive distinction, such that the sentence, 'He$_j$ hugs his$_{j/k}$ child', is ambiguous purely from a morphological perspective. Language contact studies suggest that the reflexivity distinction poses problems to L2 speakers whose L1 lacks such a distinction. For instance, Tingsell et al. (2011), Fabricius-Hansen et al. (2017), and Helland (2017) show that German and French (languages that lack a reflexivity distinction) learners of Norwegian and Swedish (languages with the reflexivity distinction) fail to master the reflexivity distinction, and tend to simplify the system by overgeneralizing one form on the model of their L1.

Given that Alor Malay lacks this reflexivity distinction in the marking of possession, we expect to find some simplification in the Abui possessive

[1]This chapter is based on Saad, G., Klamer, M., & Moro, F. (2019). Identifying agents of change: Simplification of possessive marking in Abui-Alor Malay bilinguals. *Glossa: A Journal of General Linguistics*, 4(1), 1–29. doi:10.5334/gjgl.846

marking system. In particular, based on the observations above, we expect to find simplification in the groups that are least dominant in Abui and most dominant in Alor Malay. Since it was not possible to operationalize dominance as such, age and gender were taken as proxies for dominance (see §2.4.2).

In order to test whether this simplification is indeed connected to age, we conducted a cross-sectional study using the apparent time construct (Labov, 1963; Bailey et al., 1991), which is based on the assumption that synchronic differences between age-groups reflect diachronic language change. Following this line of argumentation, we take one synchronic sample which consists of four different age-groups of Abui-Alor Malay bilinguals: (pre)adolescents (aged 9-16), young adults (aged 17-25), adults (aged 26-34), and elders (over 40). Indeed, the least Abui-dominant group, (pre)adolescents is the group that shows the highest incidence of simplification.

In addition to age, gender has also been shown to be a crucial variable in explaining linguistic variation (Labov, 1990; Dubois & Horvath, 1999; Eckert & McConnell-Ginet, 1999). In Takalelang, young females have been observed to have more territorially bounded networks, and they socialize more with the older generations. Young males are typically afforded more time to roam around and play (see §2.4.2.2). The present study shows that the language of (pre)adolescent females is more conservative than that of their male counterparts, whose language shows a higher degree of simplification.

By combining production data and comprehension data, we tested their active and passive knowledge of the reflexive prefixes. We did so to test the predictions of a prominent hypothesis often proposed to explain the vulnerability of inflectional morphology in bilinguals, the Missing Surface Inflection Hypothesis (MSIH, Prévost and White, 2000b). This hypothesis is usually applied to bilinguals such as L2 learners (Prévost & White, 2000b) and heritage speakers (Montrul, 2011) but is also shown to hold true for Abui-Alor Malay bilinguals.

The MSIH states that L2 learners generally have underlying knowledge of a given inflectional category or feature. However, in online production, they have trouble mapping the abstract feature to the morphological form (Lardiere, 1998a, 1998b, 2000; Prévost & White, 2000a, 2000b). This means that L2 speakers still possess the knowledge; however, they may resort to a default form during oral production. Since it is not possible to test the re-

flexive possessive in a different grammatical environment (because it only manifests itself in one), a useful way of testing the MSIH is by comparing production and comprehension data. If the MSIH holds, then it follows that, despite speakers performing badly in production, good performance in comprehension should be indicative that they retain knowledge of these inflectional categories.

The results show that both (pre)adolescents and young adults have significant difficulty producing the reflexive possessive distinction, while, in comprehension, only (pre)adolescents have difficulty. The findings of this study show that (pre)adolescents are the leaders of linguistic change with respect to the reflexive possessive. Overall, the speakers perform better in comprehension than in production. This indicates that, in general, they still retain linguistic knowledge of the reflexivity distinction but have difficulties accessing or applying this knowledge during oral production. Using the apparent time construct, we suggest that the speech patterns of younger speakers will persist and become fully-fledged changes in the grammar of Abui over the next decades.

This chapter is organized as follows: Section 5.2 describes the expression of third person possession in both Abui and Alor Malay. Section 5.3 describes the present study. Section 5.4 discusses and synthesizes the findings, while §5.5 presents the conclusions of the chapter and offers suggestions for further research.

5.2 Possession marking in Abui and Alor Malay

5.2.1 Abui

As discussed in §4.3.1, a simple transitive clause in Abui has an A argument and a P argument, and either one of these can be possessed or not. Example (1) has an unpossessed A argument, *neeng nuku* 'a man', and an unpossessed P argument, *kalieta neeng nuku* 'an elderly man'.[2] A possessed A argument NP is illustrated in (2); in this clause 'Daniel's friend' is the A argument, and the P argument of the verb *fik* 'pull' is expressed by the verbal prefix *na-* '1SG.PAT'. In (3), 'Daniel' is the A argument, and the P argument of *fik* 'pull' is

[2] An unpossessed, bare noun is interpreted as indefinite, while the numeral *nuku* 'one' can be used to overtly express indefiniteness.

the possessed NP *ne-feela* 'my friend', which is also expressed by the verbal prefix *ha-*. In (2), the possessive prefix *he-* '3.AL(IENABLE)' indexes the third person features of 'Daniel'; in (3), the possessive prefix *ne-* '1SG.AL(IENABLE)' indexes a first person possessor (not 'Daniel').

(1) [*Neeng nuku di*]$_A$ [*kalieta neeng nuku*]$_P$ *ha-fik.*
man one 3.AGT elder man one 3.PAT-pull
'A man pulls an elderly man.' [SS.32M.45]

(2) [*Daniel he-feela*]$_A$ *na-fik-e.*
Daniel 3.AL-friend 1SG.PAT-pull-IPFV
'Daniel's friend is pulling me.' [FN.26M]

(3) [*Daniel*]$_A$ [*ne-feela*]$_P$ *ha-fik-e.*
Daniel 1SG.AL-friend 3.PAT-pull-IPFV
'Daniel is pulling my friend.' [FN.26M]

As indicated by the glosses, possessor marking in Abui is different for alienable and inalienable nouns.[3] Alienable and inalienable nouns are formally distinguished by having an optional vs. obligatory possessive prefix: *faling* 'axe' in (4) may occur with or without a possessor prefix, while the body part *-min* 'nose' in (5) must take an obligatory possessive prefix (see also Kratochvíl, 2007, p. 13). Within the prefix itself, the alienability distinction is encoded by the theme vowel. Prefixes with the vowel /e/ are alienable, as illustrated in (4); prefixes with the vowel /a/ signals that the possessed noun is inalienable, as illustrated in (5). Note that a third person possessor noun such as 'Daniel' in (4) and (5) precedes the possessed NP and forms a phrase with it.[4]

(4) *Daniel he-faling*
D. 3.AL-axe
'Daniel's axe' [FN.26M]

[3] For more information on possession, see §4.4.1.

[4] The alienability distinction in Abui nouns is largely semantically based: the majority of nouns expressing body parts are inalienable. However, most kinship nouns (e.g. *wiil* 'child', *maama* 'father') and some body parts (e.g. *toku* 'leg') fall into the class of alienable nouns, so the noun class distinction is also partially arbitrary.

(5) *Daniel ha-min*
D. 3.INAL-nose
'Daniel's nose' [FN.26M]

Besides the alienability distinction, the present chapter revolves around yet another distinction encoded in third person possessive prefixes: the distinction between "reflexive" and "non-reflexive" possessive prefixes. A "reflexive" possessive prefix encodes a referential relation between the A argument and the possessor of the P argument in the clause. This is illustrated in (6a), where the reflexive possessive prefix *de-* '3.ALIEN.REFL' on the P argument *de-wiil* 'his child' is coreferential with the A argument Daniel. Using the prefix *de-* thus expresses unambiguously that Daniel is cradling his own child. In contrast, the non-reflexive possessive prefix *he-* on the P argument in (6b) is not bound by the A argument.[5] In this case, the child is possessed by someone outside of the clausal context; it is not Daniel's child. The two prefixes differ only in their initial consonant. Reflexive prefixes may be alienable or inalienable, compare (6a) and (7a); as can the non-reflexive prefixes, compare (6b) and (7b).[6][7] In what follows, we use the notion "reflexive *dV-*" as a cover term for both alienable and inalienable reflexive prefixes, and the notion "non-reflexive *hV-*" or "default *hV-*" as cover terms for both alienable and inalienable non-reflexive prefixes.

[5]The sequence *Daniel he-wiil ha-buk-e* in (6b) allows two different readings, depending on intonation. The reading indicated by the subscripts in (6b) is attained by rising pitch on the final syllable of *Daniel*, indicating that this noun constitutes a separate (A argument) NP; while falling pitch on the final syllable of *hewiil* would mark it as the P argument NP of the clause 'Daniel$_j$ cradles his$_k$ child'. An alternative reading is invoked with rising pitch on the final syllable of *hewiil*, thus marking [*Daniel he-wiil*] as the A argument NP of the clause (which does not have an P argument NP): [*Daniel$_j$ he$_j$-wiil*]$_A$ *ha-buk-e* '[Daniel's child]$_k$ cradles him'. In this chapter, we focus on clauses with a simple A argument NP and a possessed P argument NP such as the one in (6b) but possessor prefixes occur in more contexts, see the overview in (8)-(9) below.

[6]Example (7b) is unambiguous and the distal demonstrative and applicative *nu-ng* does play a role in the possessor reference.

[7]Agentive pronouns like *di* in (7b) cannot occur as possessors inside of NPs. Hence, (7b) does not allow the alternative readings relating to different phrase boundaries that was discussed for (6b) in Footnote 5, where the possessor is a (proper) noun.

(6) a. *Daniel*$_{j}$ ***de***-$_{j}$*wiil* *ha-buk-e.*
D. 3.REFL.INAL-child 3.PAT-cradle-IPFV
'Daniel cradles his (own) child.' [FN.26M]

b. *Daniel*$_{j}$ ***he***-$_{k}$*wiil* *ha-buk-e.*
D. 3.NREFL.INAL-child 3.PAT-cradle-IPFV
'Daniel cradles his (someone else's) child.' [FN.26M]

(7) a. *Di*$_{j}$ ***da***-$_{j}$*tang* *ha-fik-e.*
3.AGT 3.REFL.AL-hand 3.PAT-pull-IPFV
'He is pulling his (own) hand.' [FN.26M]

b. *Di*$_{j}$ ***ha***-$_{k}$*tang* *nu-ng* *ha-fik-e.*
3.AGT 3.NREFL.AL-hand DIST-APPL 3.PAT-pull-IPFV
'He is pulling his (someone else's) hand.' [SS.27F.61]

In this chapter, we consider the non-reflexive *hV-* prefix as the "default" or "unmarked" third person possessor prefix. The first motivation for doing so is that this prefix is found in a wider range of grammatical contexts than the reflexive prefix. It can refer to a possessor in an NP (as in (4) and (5)) - irrespective of whether that NP is the A argument or the P argument of a clause. In addition, it can also refer to a possessor outside of the clausal context, as in (6b) and (7b). In contrast, the reflexive *dV-* is restricted to only one context: it only occurs on P argument NPs, where it always refers to the A argument of a clause, as in (6a) and (7a). It cannot occur in an A argument NP and never refers to an NP-internal possessor (that is, *Daniel de-wiil* cannot be an A argument and cannot mean 'Daniel's child'), and neither can it refer to a possessor outside of the clause (that is, *de-wiil* cannot mean 'someone else's child'). In (8)-(9) we summarize the various grammatical contexts where reflexive *dV-* and non-reflexive *hV-* are found: only one grammatical context for the reflexive possessor (8), against four contexts for the non-reflexive, (9a-d).

(8) Reflexive possessor on P argument, without possessor N in NP: see example (6a)

(9) a. Non-reflexive possessor on P argument, without possessor N in NP: see example (6b)

b. Non-reflexive possessor on P argument, with possessor N in NP

[*Daniel*$_j$ *he*$_j$-*wiil*]$_P$ *ha-buk-e.*
D. 3.NREFL.AL-child 3.PAT-cradle-IPFV

'(Someone) cradles Daniel's child.'/ 'Daniel's child is being cradled.'

c. Non-reflexive possessor on A argument, without possessor N in NP

[*He*$_j$-*wiil*]$_A$ *ha*$_{j/k}$-*buk-e.*
3.NREFL.AL-child 3.PAT-cradle-IPFV

'His child cradles him.'

d. Non-reflexive possessor on A argument, with possessor N in NP

[*Daniel*$_j$ *he*$_j$-*wiil*]$_A$ *ha-buk-e.*
D. 3.NREFL.AL-child 3.PAT-cradle-IPFV

'Daniel's child cradles him.'

The second reason to analyze the non-reflexive *hV-* as the default possessive prefix is that it is much more frequent than the reflexive *dV-*. This is shown in Table 5.1, which reports token frequencies of all third person prefixes in my conversational corpus of around 5 hours from speakers aged between 1-85 years (see §3.6). As shown, the non-reflexive occurs 267 times, while the reflexive only occurs 30 times.

Table 5.1: Tokens of "non-reflexive *hV-*" and "reflexive *dV-*"

	Non-reflexive *hV-*	**Reflexive *dV-***
Alienable	*he*: 206	*de*: 27
Inalienable	*ha*: 61	*da*: 3
Total	267	30

5.2.2 Alor Malay

In contrast to Abui which distinguishes both reflexivity and alienability, Alor Malay has only one construction to encode third person possessive relations. Possession is marked using the possessor *punya* which may follow either a full NP as in (10) or a pronoun, as in (11a). Possessors are expressed analytically as full NPs or pronouns preceding the possessed; there are no possessive affixes involved.

(10) *anak dong punya mau*
child PL POSS want
'children's desires' [EG.57M.1]

Like many other eastern varieties of Malay, possessive constructions all derive from a clausal construction with the verb *punya* 'to possess' (Adelaar & Prentice, 1996). The possessive *punya* may be reduced to *pung* or *pu*, as in (11a) and (11b). The third person construction *dia pung*/*pu* can be further abbreviated to *dep*, as in (11c).

(11) a. *dia punya teman*
3.SG POSS friend
'his friend' [SS.28F.AM.70]

b. *dia pu teman*
3.SG POSS friend
'his friend' [SS.11M.AM.3]

c. *dep teman*
3.POSS friend
'his friend' [SS.15F.AM.16]

Unlike Abui, Malay does not specifically encode the "reflexive" referential relation between a clausal A argument and the possessor of the P argument. This is illustrated in (12), which allows for either a reflexive or a non-reflexive possessive reading.

(12) *Daniel koko dep anak.*
Daniel cradle 3SG.POSS child
'Daniel cradles his (own) child.'; 'Daniel cradles his (someone else's) child.' [FN.40F.AM]

In the context of the present discussion, it is relevant to note that Alor Malay reflects a [possessor-possessed] order that is also attested in Abui, as well as in the other Papuan languages of the region. This order is opposite to the [possessed-possessor] order of Standard Indonesian (e.g. *anak saya* 'child 1SG; my child').

5.2.3 Summary: Differences between Abui and Alor Malay possessive constructions

Abui possessive structures are more complex than those in Malay. They involve affixes encoding alienability distinctions on the possessed as well as prefixes coding the relatively subtle 'reflexive' referential (binding) relation between a clausal A argument and the possessor of the P argument in the clause. This relation disambiguates between third person possessors with referents within the clause and those with referents outside the clause. In contrast, Malay has no possessor affixes and no restrictions on binding relations between the A argument of a clause and the possessor of its P argument.

5.3 Present study

5.3.1 Introduction

Given the typological differences in possessive marking strategies in Abui and Malay, this study aims to test whether there is variation in the expression of the reflexivity distinction in third person possessive marking among the four bilingual age-groups. From a linguistic point of view, the reflexivity distinction represents a suitable domain to investigate language contact effects among Abui-Malay bilinguals for two reasons: (i) it has been shown to be an area sensitive to contact, and (ii) the dominant language Malay lacks such a distinction.[8]

[8]When surveying the data, there did not appear to be any striking variation in the marking of alienability, despite the fact that this could have emerged as an area sensitive to contact – Alor Malay does not encode the distinction, whereas Abui does. Encodings of alienability distinctions are often observed to be highly stable across time and insensitive to contact (Nichols, 1992), and the lack of variation in this domain of Abui is no exception. This is probably due to the fact that all nouns in Abui belong to either the lexical class of alienables or the class of inalienables; and these class memberships are partly semantically

First, while many areas of grammar are potentially prone to contact, the reflexivity distinction in possessive marking is particularly sensitive because it involves binding relations between the possessor of the P argument and either the A argument of the clause (local binding) or a referent outside the clause (non-local binding). The Abui possessive system requires speakers to apply morpho-syntactic rules of possessive prefixation on the P argument of a clause, while at the same time determining whether the possessor of the P argument has the same referent as the A argument of the clause, or a referent that is outside of the clausal domain (for example, introduced earlier in discourse, recoverable by applying knowledge of the world or by considering the non-linguistic context in which the clause was uttered). This task requires considerable computation effort.

Second, because Alor Malay lacks the reflexive distinction in its possessive marking, it is underspecified compared to Abui. The one Malay third person possessive construction *dia punya* '3SG POSS' allows for both local and non-local referential interpretations, while in the Abui system, there are two forms, one of which is dedicated to encode locally bound antecedents, the other for other non-local antecedents. Following Sorace and Serratrice (2009, p. 199), the underspecification in Malay is expected to "give rise to ambiguity and optionality in the L2 [Abui] because it allows a wider range of possible mappings". Kim and Montrul (2004) and Kim, Montrul, and Yoon (2009) show that when languages with two different binding systems come into contact, the binding relations of the dominant language are transferred to the weak language. Thus we expect that the underspecified nature of binding in Malay will transfer to Abui in the Malay dominant bilingual groups.

Given these considerations, we investigate the reflexivity distinction in possessive marking among Abui-Malay bilinguals. More specifically, we address the following questions: (i) Is there variation in third person possessive constructions across the four age-groups of Abui bilinguals? (ii) If there are any significant differences in their use of possessive constructions, how are age and gender linked to the variation? (iii) What do differences in production and comprehension tell us about speakers' knowledge of the reflexivity

determined and partly arbitrary (see Footnote 4). Variation that is related to lexicalized semantic classes of nouns refers to a different language module than variation in possessor marking that is related to syntactic binding relations. The latter area is known to be sensitive to contact (Sorace & Filiaci, 2006; Sorace & Serratrice, 2009); see also §8.4.

distinction?

Having had less exposure to Abui than the two other groups, (pre)adolescents and young adults are expected to have difficulty with the reflexivity distinction. As far as speaker gender is concerned, we expect young females to perform better than their male peers as they often spend more time at home and have less contact with people outside the community (see §2.4.2.2). (Pre)adolescents and young adults are expected to simplify the system by generalizing one of the two forms. Possessives expressed with a marked form are more likely to be replaced by a form that is less marked (Tingsell et al., 2011). The Abui default non-reflexive *hV-* prefix is far more frequent and has wider distributional patterns than the reflexive *dV-* prefix, which is less frequently used in Abui, and also cross-linguistically rarer. The latter may thus be considered the more marked possessive prefix (Holm, 2000). We expect that younger speakers generalize the default prefix *hV-* to contexts that in the language of the elders are reserved for the *dV-* prefix only.

Production data only does not provide information on whether the variation reflects incomplete knowledge of the reflexive possessive distinction or whether it is only a surface problem during oral production. It might be that the young Abui-Alor Malay bilinguals struggle to produce the reflexive form in the correct context but still retain enough knowledge to recognize it in comprehension. The disparity between production and comprehension has been known for quite some time, with most studies showing that features which are problematic for speakers in L2 production may not necessarily be so in comprehension (Jarvis & Pavlenko, 2008). This is especially relevant when considering the socialization process of Abui speakers: speakers develop passive knowledge in childhood and adolescence and begin speaking actively in early adulthood. Passive knowledge can be tested using judgment data from comprehension tasks (Sorace & Filiaci, 2006; Meakins & O'Shannessy, 2010; Onar Valk, 2015; Stadthagen-González, López, Couto, & Párraga, 2017). Following the predictions of the Missing Surface Inflection Hypothesis (Prévost & White, 2000b), we expect that speakers will exhibit passive knowledge of the reflexivity distinction, performing better in comprehension than in production.

In order to answer the research questions and test our predictions, we conducted two studies: one on oral production elicited by means of the Surrey Stimuli video-clips depicting various types of events (§5.3.2); and an-

other on comprehension elicited by means of a forced-choice task (§5.3.3). In the general discussion in §5.4, the results of both experiments are elaborated upon in more detail and discussed in light of another.[9]

5.3.2 Study 1: Production data

The aim of the production data study is to compare the use of third person possessive prefixes across the four Abui age-groups. The methodology of this study is discussed in §5.3.2.1, while the results are presented in §5.3.2.2.

5.3.2.1 Methodology

Data was obtained from a total of 66 participants, divided into four groups according to age. Information about the participants is laid out in Table 5.2. The age-groups are discussed in detail in §3.4.

Table 5.2: Participant table for Surrey Stimuli production task

Group	Age range (years)	M	F	Total	Mean age
(Pre)adolescents	9-16	9	10	19	13.47
Young adults	17-25	10	9	19	21.42
Adults	26-34	10	9	19	30.29
Elders	40-75	4	5	9	50.44
Total	9-75	33	33	66	25.51

The production task involved the use of 40 elicitation videos from the Surrey Stimuli, discussed in detail in §3.5.2.1 and listed in Table 3.11. For the present study, all the P argument NPs in all the utterances were tagged as either unpossessed or possessed. The unpossessed NPs were excluded from this study.[10] The possessed P argument NPs were subsequently coded as

[9] More in-depth information on how the data was coded and analyzed can be found in §3.8.

[10] Some might argue that using a (zero-marked) unpossessed P argument NP is the result of an avoidance strategy used by speakers who do not want to make a choice between the reflexive and non-reflexive possessive prefixes. Evidence for this particular avoidance strategy would be, for example, the observation that the group of (pre)adolescents use more

matches or mismatches according to whether the possessive prefix matched or not the type of environment. For instance, if the participant used the reflexive prefix *dV-* in a reflexive environment, or the non-reflexive prefix *hV-* in a non-reflexive environment, these were coded as "reflexive match" and "non-reflexive match", respectively (Table 5.3, coding categories (a) and (c)). In contrast, the possessed NPs were coded as "reflexive mismatch" or "non-reflexive mismatch" if the participant used the default non-reflexive prefix in a reflexive environment and vice versa (Table 5.3, coding categories (b) and (d)).

Table 5.3: Categories used to code the possessed NPs in the oral production data

Coding categories	**Prefix**	**Environment**	
(a) reflexive match:	reflexive	reflexive	✓
(b) reflexive mismatch:	non-reflexive	reflexive	×
(c) non-reflexive match:	non-reflexive	non-reflexive	✓
(d) non-reflexive mismatch:	reflexive	non-reflexive	×

It is important to underline that the elicitation task with the 40 Surrey clips was not hypothesis-driven, but rather served to collect a corpus in which variable grammatical patterns could be identified. As a result, it was not a completely controlled production task, and did not have a predetermined amount of reflexive or non-reflexive targets in the responses that were elicited: these were coded as such per utterance and per speaker after the recording had been done. The (non-)reflexive environments were

unpossessed NPs than the elders in descriptions of the same video-clip. Inspection of my corpus does not provide such evidence. But even if it did, there are good reasons to exclude the unpossessed NPs from this study, because their use is determined by many other factors besides possibly being used as an avoidance strategy. For example, the choice of P argument noun determines to a large extent whether or not it will be possessed: a rock is intrinsically unpossessed, a child is intrinsically possessed; so an unpossessed P argument NP with the noun rock is expected, but an unpossessed P argument NP with the noun child is not. In general, variation in using unpossessed and possessed NPs has dimensions that are quite different from those of variation in using a reflexive or a non-reflexive possessive prefix, so we will not compare these here.

determined on the basis of linguistic and extra-linguistic information, and corroborated by feedback from older speakers.

Using video elicitation stimuli, both the referents and their real world context is known and kept constant, so that it is possible to reliably interpret the target of the possessed P argument NPs used in the utterances. For example, the responses to clip C11 in Table 3.11 (man sitting against a wall of a house eating a banana) would for some speakers be 'A man is eating a banana', while others would respond with a possessed P argument, 'A man is eating his banana'. In this particular instance, the utterance would be considered to have a reflexive environment based on the context of the depicted event. The clip shows a context with only a man and a banana present, which favours the interpretation that the banana is possessed by the man who is present in the clip, not by someone else who is not visible in the clip. The same reasoning was applied to clips depicting prototypical non-reflexive environments. For example, clip P19 (banana falls on stomach of man lying down) was described by most speakers as 'A banana falls on his stomach'. Is 'his stomach' used in a reflexive or a non-reflexive context? Since 'banana' is the A argument of the clause it can never be coreferential with the possessor of 'stomach', so this utterance was coded as a non-reflexive target. In all cases, feedback from older speakers who were asked to comment on the felicitousness of utterances supported the (extra-)linguistic interpretations.

At the same time, many clips allow more than one possible interpretation. For example, clip C01 (man pulls other man), one speaker responded 'a man is pulling his friend', in which case 'his friend' would be coded as a reflexive target; whereas another speaker responded 'a man is pulling another man's hand', in which case the utterance was tagged as a non-reflexive target, because the A argument of the clause 'a man' is not the possessor of the other man's hand. In other words, different speakers may have different targets responding to the same clip. For this reason, we determined the target for every utterance of every speaker, as opposed to only one possible target per clip.

5.3.2.2 Results

This section presents the results regarding the use of reflexive and the non-reflexive prefixes in the Surrey Stimuli production of the four age-groups. In

addition, gender is also tested to see if it plays a role in the selection of the appropriate prefix.

The results of reflexive prefix mismatches are presented first. An example of a reflexive match and mismatch is provided in (13a-b). The utterances in (13a-b) are produced in response to clip (a man holding a girl). In their responses, speakers refer to the girl as *wiil* 'child' (in the sense of 'offspring').[11] The target form is the reflexive prefix *de-*: the scene depicted in the video-clip gives no reason to suggest that the child held by the man is another person's child. To describe the clip, the elder speaker uses the reflexive form *de-* (13a), whereas the (pre)adolescent speaker uses the non-reflexive *he-* (13b).

(13) a. 40-year-old female (Elder)

Neeng kalieta nuku oro ***de****-wiil*
man old one DIST.LOCA 3.REFL.INAL-child
ha-buk-e.
3.PAT-cradle-IPFV

'A man cradles his (own) child (there).' [SS.40F.24]

b. 9-year-old female ((Pre)adolescent)

Neeng nuku ***he****-wiil ha-buk-e.*
man one 3.AL-child 3.PAT-cradle-IPFV

? 'A man cradles his (someone else's) child.'
Intended: 'A man cradles his (own) child.' [SS.9F.21]

Table (5.4) displays the proportion of reflexive mismatches such as the one in (13b) averaged over the speakers. The higher the percentage, the more frequently participants used the non-reflexive prefix *hV-* instead of the reflexive prefix *dV-*.

[11] The term *moqu* is used for 'child' in the sense of young person.

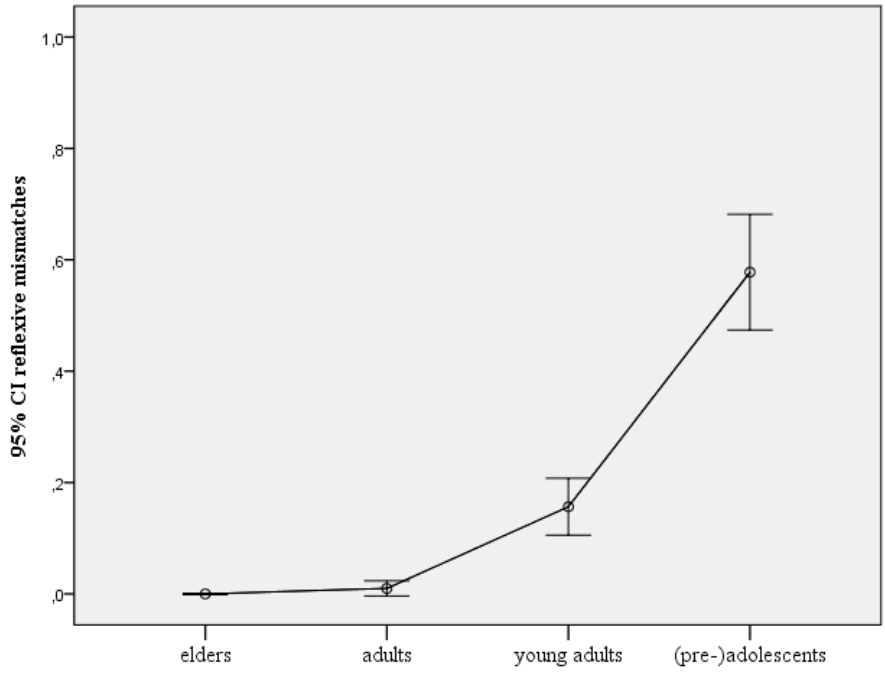
Table 5.4: Production data: Proportion of mismatches for reflexive prefix *dV-*

Group	**Speakers**	**Proportion**	**SD**
(Pre)adolescents	19	52/90 (58%)	.49
Young adults	19	31/198 (16%)	.36
Adults	19	2/202 (1%)	.09
Elders	9	0/66	.0

A non-parametric Kruskal-Wallis test[12] shows a statistically significant difference between the proportion of mismatches in the four groups ($H(3) = 168.978$, $p < .001$). A post-hoc pairwise comparison shows that (pre)adolescents produce mismatches significantly more often than the other three groups (p's < .001), using the unexpected prefix in 58% of the cases. They are followed by the young adults, who produce significantly fewer mismatches than the (pre)adolescents, but significantly more than adults and elders. No statistical difference was found between adults and elders ($p = .996$). The graph in Figure 5.1 visualises the results, highlighting a striking increase in reflexive mismatches in the younger age-groups.

[12]We used the non-parametric Kruskal-Wallis test instead of an ANOVA because the data was not normally distributed (Field, 2013). A linear mixed-effects model was also attempted; however, the results were not interpretable due to complete separation, as can be seen in Table 5.4, where the group of elders has a proportion of 0/66.

Figure 5.1: Mean and 95% (C)onfidence (I)interval of reflexive mismatches across the four age-groups



Furthermore, we examined the relationship between gender and reflexive mismatches using a chi-square test. We investigated such a relationship in the (pre)adolescent and young adult groups, as these are the two groups that significantly differ from the control group of elders. These results are summarized in Table 5.5.

Table 5.5: Production data: Proportions of reflexive matches and mismatches between males and females in the (pre)adolescent and young adult groups

Group	Gender	Reflexive match	Reflexive mismatch	Total
(Pre)adolescents	male	13 (28.9%)	32 (71.1%)	45
	female	25 (55.6%)	20 (44.4%)	45
Young adults	male	87 (82.9%)	18 (17.1%)	105
	female	80 (86.0%)	13 (14%)	93

The relationship between mismatches and gender was significant in the (pre)adolescent group, X^2 (1, N = 90) = 6.55, p <.01. Among the females in this age-group the proportion of mismatches is about 44%, as opposed to 71% among their male peers. For the young adult group no relationship was found between gender and reflexive mismatches, X^2 (1, N = 198) = .37, p = .34.

To test for directionality, we also tested speakers' non-reflexive mismatches. This includes the use of a reflexive prefix in a non-reflexive environment. Table 5.6 displays the proportion of non-reflexive mismatches. This type of mismatch is virtually absent in the dataset. A non-parametric Kruskal-Wallis test showed no significant differences between the age-groups (H(3) = 3.753, p = .289).[13]

Table 5.6: Production data: Proportion of mismatches for non-reflexive prefix *hV-*

Group	Speakers	Proportion	SD
(Pre)adolescents	19	1/39 (3%)	.16
Young adults	19	3/104 (3%)	.16
Adults	19	0/91	.0
Elders	9	0/41	.0

[13]Nonetheless, it is worth noticing that the only four tokens of non-reflexive mismatches are attested in the younger groups.

In sum, speakers are far more likely to overgeneralize the non-reflexive *hV-* prefix to reflexive environments rather than using the reflexive *dV-* prefix for non-reflexive environments. (Pre)adolescent and young adult speakers are simplifying the system by extending the use of the non-reflexive prefix *hV-* to reflexive contexts. Within the (pre)adolescent group, gender has an effect such that males overgeneralize the *hV-* prefix more frequently than their female peers.

5.3.3 Study 2: Comprehension data

In this second study, comprehension data from the four Abui age-groups is examined. The methodology of the study is described in §5.3.3.1, and the results are presented in §5.3.3.2.

5.3.3.1 Methodology

Comprehension data was obtained from a total of 60 participants during a two-month field trip in 2017. Most of the participants who took part in the production task also participated in the comprehension task. In total, 9 out of 66 participants from the production task were not available for the comprehension task.[14] To compensate, three new speakers were added for the comprehension task. Information about the participants is laid out in Table 5.7.

Table 5.7: Participants list in forced-choice comprehension study

Group	Age-range (years)	M	F	Total	Mean age
(Pre)adolescents	9-16	9	9	18	13.78
Young adults	17-25	9	5	14	22.28
Adults	26-34	9	8	17	29.52
Elders	40-75	5	6	11	52.72

Comprehension data was collected by means of a forced-choice task (elaborated upon in detail in §3.5.2.2). Participants were presented with a video-clip and a pair of sentences spoken by a native speaker. From each

[14] These speakers had moved to other villages, both in and outside of Alor.

pair, participants were asked to choose the sentence that they found more acceptable in relation to the video-clip. Illustrations of two video-clips with their two respective sentences are in (2a)-(2b). In both of these examples, option (a) represents the target.

(14) Target: Reflexive possessive. Clip C01 'man$_j$ pulling his$_j$ friend'

a. Match

[*Neeng nuku*]$_j$ ***de***-$_j$*feela* *ha-fik-e.*
man one 3.REFL.AL-friend 3.PAT-pull-IPFV
'A man$_j$ is pulling his$_j$ friend.'

b. Mismatch

[*Neeng nuku*]$_j$ ***he***-$_k$*feela* *ha-fik-e.*
man one 3.NREFL.AL-friend 3.PAT-pull-IPFV
'A man$_j$ is pulling his$_k$ friend.'

(15) Target: Non-reflexive possessive. Clip C08 'she$_j$ is afraid of his$_k$ snake'

a. Match

[*Neeng nuku*]$_k$ *mon* *hoo-puna,* *dikaang* *di* [*moqu*
man one snake 3.GOAL-hold then 3.AGT child
fila]$_j$ *hoo-ha-tang* *haba* *di*
small 3.GOAL-3.PAT-hand.over but 3.AGT
he-$_k$*mon* *h-ieng* *mielang.*
3.NREFL.AL-snake 3.PAT-see.IPFV be.afraid

'A man$_k$ is holding a snake. Then, he gives to a child$_j$ but she is afraid of his$_k$ snake.'

b. Mismatch

[*Neeng nuku*]$_k$ *mon* *hoo-puna,* *dikaang* *di* [*moqu*
man one snake 3.GOAL-hold then 3.AGT child
fila]$_j$ *hoo-ha-tang* *haba* *di* ***de***-$_j$*mon*
small 3.GOAL-3.PAT-hand.over but 3.AGT 3.REFL.AL-snake
h-ieng *mielang.*
3.PAT-see.IPFV be.afraid

'A man$_k$ is holding a snake. Then, he gives it to a child but she is afraid of her$_j$ snake.'

The task contained 30 video-clips and 30 pairs of sentences describing what was happening in the clips. Of these 30 video-clips, six targeted a possessive relation (three a reflexive one and three a non-reflexive one). The other video-clips tested other features and functioned as distractors for the purpose of this study. The three reflexive possessive target video-clips were taken from the Surrey Stimuli (see §5.3.2.1). For the non-reflexive target sentences, two of the clips were taken from the Surrey Stimuli while one was recorded specifically for the forced-choice task, as the Surrey Stimuli did not provide enough contexts to elicit such a response. The new clip showed the researcher smoking a cigarette, and then another Abui speaker snatching it from his hand and smoking it (see §3.5.2.2 for more details; see also Appendix V for a full list of stimuli).

5.3.3.2 Results

Table 5.8 reports the proportion of reflexive mismatches, namely the choice of non-reflexive sentence in response to a video-clip depicting a reflexive relation (e.g. P15 man$_k$ cradling his$_k$ child). The two older groups, adults and elders, always chose the sentence where the P argument is marked with the reflexive *dV-* prefix, so that their proportion of mismatch is zero. The young adults performed similarly to the older groups, with only 2/42 (5%) mismatches. The (pre)adolescent group shows a higher proportion of mismatches, namely 15/54 (28%), indicating that they sometimes selected the sentence where the P argument is marked with the non-reflexive *hV-* prefix, even though the video-clip showed a reflexive possessive relation.

Table 5.8: Comprehension data: Proportion of mismatches for reflexive prefix *dV-*

Group	**Speakers**	**Proportion**	**SD**
(Pre)adolescents	18	15/54 (28%)	.45
Young adults	14	2/42 (5%)	.21
Adults	17	0/51 0	.0
Elders	10	0/30 0	.0

The Kruskal-Wallis test shows a significant difference in the proportion

of reflexive mismatches across the four groups ($H(3) = 29.853$, $p < .001$). A post-hoc pairwise comparison shows that the proportion of mismatches produced by (pre)adolescents is significantly higher than those produced by the three older groups (p's < .001). Conversely, there is no statistical significant difference among the groups of young adults, adults, and elders. The (pre)adolescents choose the expected sentence with the reflexive *dV-* prefix in 72% of the cases; in the remaining 28% they select the sentence with the non-reflexive *hV-* prefix. This mismatch occurs in 7/18 speakers of which six are male and one is female.

To examine the relation between mismatches and gender in the (pre)adolescent group, a chi-square test shows a significant relation between mismatches and gender, X^2 (1, N = 54) = 6.59, p <.05. As in production, female (pre)adolescent speakers are more likely to select the correct reflexive sentence, while the proportion of mismatches is higher for their male peers. These results are summarized in Table 5.9. The three mismatches found in the female group are all made by the same speaker.

Table 5.9: Comprehension data: Proportion of reflexive matches and mismatches between male and female in the (pre)adolescent group

Group	**Gender**	**Reflexive match**	**Reflexive mismatch**	**Total**
(Pre)adolescents	male	16 (57.1%)	12 (42.9%)	28
	female	23 (88.5%)	3 (11.5%)	26

Table 5.10 reports the proportion of non-reflexive mismatches: choosing a reflexive sentence in response to a video-clip depicting a non-reflexive relation (e.g. C08 man$_k$ carrying snake; girl$_j$ fears his$_k$ snake). The three older groups make virtually no error, as they almost always choose the sentence where the P argument is marked with the non-reflexive *hV-* prefix. The (pre)adolescents sometimes select the sentence where the P argument is marked with the reflexive *dV-* prefix, even though the video-clip showed a non-reflexive possessive relation.

Table 5.10: Comprehension data: Proportion of mismatches for non-reflexive prefix *hV-*

Group	Speakers	Proportion	SD
(Pre)adolescents	18	15/54 (28%)	.45
Young adults	14	3/42 (7%)	.21
Adults	17	1/51 (2%)	.0
Elders	11	0/30	.0

The Kruskal-Wallis test shows a significant difference in the proportion of non-reflexive mismatches across the four groups ($H(3) = 24.500$, $p < .001$). A post-hoc pairwise comparison shows that the proportion of mismatches produced by the (pre)adolescents was significantly higher than those produced by the three older groups (p's < .005). Conversely, the three older groups do not demonstrate any statistically significant difference. This result is unexpected, given what has been observed so far. (Pre)adolescents are found to overgeneralize the non-reflexive *hV-* prefix to reflexive contexts both in production and in comprehension. We expected them, therefore, to perform at ceiling when they were asked to respond to video-clips depicting non-reflexive relations. However, 14 out 18 participants, at least in one case, fail to attain the target, selecting the sentence with the reflexive *dV-* prefix. This behavior is found across participants, with no difference between male and female, X^2 (1, N = 54) = .22, p =.433). The fact that, unlike in the other tasks, mismatches are found in almost all the speakers regardless of gender may indicate that these are instances of hypercorrection rather than systematic errors.

5.4 Discussion

We investigated how Abui-Alor Malay bilingual speakers use possessive constructions, addressing three major questions: (i) Is there variation in third person possessive constructions across the four age-groups of Abui-Alor Malay bilinguals? (ii) If there are any significant differences in their use of possessive constructions, how are age and gender linked to the variation? (iii) What do differences in production and comprehension tell us

about speakers' knowledge of the reflexivity distinction?

As predicted, (pre)adolescents (age 9-16 years) showed the most variation of the four groups in overgeneralizing the non-reflexive possessive prefix to reflexive contexts. This confirms that speakers consider the non-reflexive *hV-* prefix as the default to mark possession on nouns, while the reflexive *dV-* prefix is seen as the marked form. The simplification mechanism attested is overgeneralization of the semantically least specified form, interpreted here as the default form. Young adults (17-25 years) also differed significantly from adults (26-34 years) and elders (40-75 years), although they showed less variation than the younger group of pre-adolescents. This distribution suggests that (pre)adolescents and to some extent young adults are losing the reflexivity distinction, while for adults and elders, the reflexivity distinction is still obligatory.

Gender was found to be linked to the variation in the group of (pre)adolescents, where females were more conservative while males accounted for most of the variation. The gender differences are argued to relate to the differences in social networks of Abui (pre)adolescent females and males. Abui girls have territorially bounded social networks (Milroy & Milroy, 1985), spending more time with other female relatives (mother, grandmother, aunts) attending to domestic chores such as fetching pig food and firewood, cooking, and cleaning. In a lot of these activities, despite often being directly addressed in Alor Malay, they obtain passive knowledge of Abui because they are surrounded by Abui speaking adults. In addition, sometimes they are addressed directly in Abui as many older women do not always feel comfortable speaking Alor Malay. Boys, on the other hand, spend a considerable amount of time away from their hamlet, playing with other boys. Typically, they speak Alor Malay with their peers, as Alor Malay has very high prestige among adolescents. This strongly suggests that young girls must have more exposure to Abui relative to boys.

The finding that social networks are different among younger generations and thus yield gender differences has also been reported in the Cajun English speech community (Dubois & Horvath, 1999). However, the observation that (pre)adolescent males are the agents of linguistic change stands in contrast to studies reporting that role for females instead. This was found to be the case for urban communities (Labov, 1990; Campbell, 2013) but also for indigenous minority communities such as the K'iche' of Guatemala (Romero 2008) and the Garifura of Belize (Ravindranath, 2008) (cited

in Stanford and Preston (2009a, p. 10). It seems that people of either gender can be the agents of change, depending on the specific social practices and roles that females and males carry out in a given community, and the type of social networks they have (Eckert & McConnell-Ginet, 1999). In language change, the factor of gender appears to be highly culture-specific (Labov, 1989; Sankoff, 1994; Dubois & Horvath, 1999). Before turning to the next point of discussion, it is important to note that there were no gender effects for any of the other groups. This means that gender only played a role in explaining differences among (pre)adolescents. The fact that male young adults do not show siginficant differences could suggest that the young adult life-stage might indeed increase a male's exposure to Abui (see §2.4.2.1).

Age and gender of speakers are thus relevant variables in explaining the observed variation, and they are also crucial characteristics of the type of bilingualism studied here. In fact, exposure to and use of Abui vary, and increase as an individual's age increases: as many parents put it, "We need to raise our children in Alor Malay so that they do well at school. When they grow up, they will learn Abui from their peers, simply by living in the community". This implies that the acquisition of Abui in Takalelang involves a prolonged period of passive knowledge up until adolescence when speakers gradually begin developing active knowledge.

To test the implications this type of bilingualism might have on outcomes of contact, we compared speakers' (i) (pre-)school exposure to Abui, and (ii) current exposure to Abui. Since (pre)adolescents were raised mostly in Alor Malay and still speak predominantly Alor Malay with their peers, they have low (pre-)school exposure and also low current exposure to Abui (see Table 3.4). As such, they may be characterized as active-passive bilinguals (Kulick & Terrill, 2019): they have passive knowledge of Abui, can speak it if called upon, yet rarely ever do. As Alor Malay-dominant speakers, the (pre)adolescents appear to be losing the reflexivity distinction in their speech.

Young adults share with (pre)adolescents a similar low level of (pre)school exposure to Abui, yet have higher current exposure. They presumably also had passive knowledge growing up, as they claim they spoke mostly Alor Malay during childhood, but now speak Abui more as their prominence in the community rises and they have more direct contact with elders. This low quantity of Abui input in their (pre)school years explains why some young adult speakers have problems with the reflexivity distinc-

tion, while their current increased quantity of Abui input may explain why they have fewer problems than (pre)adolescents.

In addition, while the *quantity* of input that the (pre)adolescents and young adults received in (pre)school years may have been roughly similar, as depicted in Table 3.4 and Table 3.5, the *quality* of the input they received is likely to have been different. The reason for this lies in the adjacent age-groups: (Pre)adolescents receive some input from young adults, who already show some variation. It has been observed that variation in children and teenagers is likely to be enhanced by variable input received from older peers, as opposed to input received from the parental generation (McConvell, 2008), while children are also known to increase the frequency of an innovative form (Labov, 1989; Sankoff, 1994). Young adults, on other hand, receive input from adults and elders, who as the results show, retain active and passive knowledge of the possessive prefixes.

Considering the type of bilingualism found among the four age-groups with varying amounts of passive and active knowledge of Abui, we tested differences in their production and comprehension. We predicted that (pre)adolescent and young adults would perform better in the comprehension task than in the production task, because we still expect them to retain knowledge of the reflexivity distinction, despite the fact that it poses problems in production. Passive comprehension of language requires less processing effort than active production (Onar Valk, 2015). In addition, a number of studies show that while speakers appear to have trouble producing inflectional forms on the surface, they actually retain knowledge of the underlying rule (Prévost & White, 2000a, 2000b).

This prediction was borne out: (Pre)adolescents selected the target sentence significantly more often in the comprehension task than in the production task. This fits in neatly with self-reports from members of the community, suggesting that children and adolescents can understand the language but struggle to speak it. A similar but less significant difference between comprehension and production was observed in the young adults, while adults and elders performed at ceiling in both comprehension and production. Within the (pre)adolescent group, we found that there were significant differences between males and females, with males attaining the reflexive target much less frequently – in line with the production data, for reasons discussed above.

That (pre)adolescents and young adults performed better in compre-

hension than in production tells us that both groups have knowledge of the grammatical distinction of reflexivity, but that this knowledge is not always applied during oral production. This provides evidence in support of the Missing Surface Inflection Hypothesis (Prévost & White, 2000a), which states that L2 learners may have underlying knowledge of a given inflection category or feature, but fail to instantiate it during oral production (Lardiere, 1998a, 1998b, 2000; Prévost & White, 2000a). This will lead speakers to resort to a default form, which is indeed what we observe in the present study, where speakers resort to the more general, non-reflexive possessor prefix. Ideally, evidence for the MSIH arises by examining multiple grammatical environments in which a given feature manifests itself (e.g. by examining how gender in Dutch manifests itself in articles, demonstratives, pronouns, adjectives, etc.). However, since it is not possible to test the Abui reflexive possessive in a different grammatical environment (because it only manifests itself in one), we tested whether speakers retain knowledge of the feature by comparing production and comprehension data.

One unexpected result in our study was that, in the forced-choice task targeting the non-reflexive prefix *hV-*, (pre)adolescents performed worse in comprehension than they did in production. We propose that this might be due to a task effect for a number of reasons. First, Abui bilingual speakers perform poorly in comprehension tasks because it is possible that their mode of Abui acquisition is oral, and they do not receive any kind of formal instruction in Abui. Therefore, they might have little metalinguistic awareness of their language and little experience in being tested in Abui. This observation is in line with the results of a study conducted by Montrul (2011) on L2 and heritage speakers. According to Montrul (2011, p. 2011), there is a direct relationship between mode of acquisition and type of task, such that heritage language speakers are better at oral tasks that minimize metalinguistic knowledge, while L2 speakers are better at tasks that are more explicit and metalinguistic. Although Abui bilinguals are different from the prototypical heritage speakers in Montrul's study, they may share with them the unfamiliarity with certain type of tasks. Secondly, another possible task-effect is the length of the sentences in the forced-choice task. The sentences developed for these stimuli involved a higher processing load than for the reflexive target set: two out of the three trials used a combination of two sentences in order to elicit a non-reflexive meaning, while all three trials of the reflexive target consisted of only one sentence. The reason for this is that in

the non-reflexive targets the possessor referred to by the prefix is outside the clause, so an additional clause introducing the possessor was necessary in two of the trials. In the reflexive targets, the possessor is simply the A argument of the clause, so adding an extra clause was not necessary. Finally, considering that we observed gender differences in the reflexive target in both production and comprehension, the fact that there were no gender differences in the comprehension part of the non-reflexive target may be another indicator that the results in this part of the comprehension task are more likely due to task effects. Taken together, these results lay the platform for further research, and we suggest that a follow-up forced-choice study would need to control for sentence length.

The methods and findings of this study are a direct answer to the call by Ross (2013) that, in order to develop models of contact-induced change which allow us to reconstruct the processes that brought about these outcomes, we need to collect more studies examining a linguistic variable across age-groups. These studies should focus on the social setting and the relevant variables that might account for the variation. Two findings from the current chapter directly contribute to Ross's approach.

First, as Ross suggests, in studying language contact and change, it is imperative to focus not only on the language of children or adults, but to pay particular attention to the language of (pre)adolescents as they are the most likely agents of change. Our study shows that the (pre)adolescents of the Takalelang community indeed show the most variation when compared to adult Abui L1 speakers.

Second, our study offers somewhat diverging evidence from the two types of contact-induced processes of change presented in Ross (2013): bilingually-induced change and shift-induced change. While on the one hand, the Abui setting is more characteristic of relatively stable bilingualism, the outcome of the contact, simplification, is more similar to what happens after a shift (Ross, 2013, p. 30). We suggest that the explanation lies in the type of bilingualism found in the Abui community. It is well known that different types of bilingualism have different outcomes of contact (O'Shannessy & Meakins, 2012) and that outcomes from one type may not necessarily be applied to others (Ameel et al., 2009; Ross, 2013). For example, simultaneous bilingual child learners have been shown to converge on monolingual-like targets (Döpke, 2000) while later sequential bilinguals do not (MacWhinney, 1987; Cook, Iarossi, Stellakis, & Tokumaru,

2003; O'Shannessy & Meakins, 2012). However, many Abui speakers are a hybrid between sequential and simultaneous bilinguals: they acquire receptive competence in the language during childhood, but become active speakers post-adolescence. This type of bilinguals is highly underrepresented in the bilingualism and variationist literature, but we expect it to be much more widespread in Indonesia and Melanesia (Nevins, 1998; Bowden, 2002; Schokkin, 2017).

Before concluding the chapter, one question that was not empirically addressed but was often alluded to is whether the variation observed in the (pre)adolescent group will lead to a fully-fledged change (following the apparent-time construct) or whether this group will learn the reflexivity distinction as it grows older (age-grading). At this point, without a real-time study, it is impossible to ascertain whether age-grading will nullify the observed variation in the young speakers, or whether they will continue to show it when they become adults. A recent review by Sankoff (2006) suggests that age-grading is actually much less widely attested than previously thought, and that changes detected in younger groups typically do carry through as speakers grow older. In addition, Kerswill (1996, p. 198) points out that during the period of adolescence (age 16 at the latest), speakers "no longer have the ability to acquire lexically complex rules [or] new oppositions". This would suggest that the reflexive *dV-* prefix and thus the reflexivity distinction may become lost in the Abui community of Takalelang over the next decades.

5.5 Summary and conclusion

This case study of variation combined methods from descriptive linguistics, bilingualism research, and variationist sociolinguistics to investigate the causes and distribution of contact-induced variation in possession marking in an underdescribed type of bilingual speech community in eastern Indonesia. It was shown how inflectional morphology is simplified due to limited language input and cross-linguistic influence. Age and gender are crucial variables in explaining the variation among the Abui-Alor Malay bilingual groups. Younger bilinguals overgeneralize the default, non-reflexive possessive prefix *hV-* to reflexive contexts significantly more than older Abui speakers. In particular, (pre)adolescent males could be the main

drivers of the change, should this change grammaticalize. Our results lend support to the Missing Surface Inflectional Hypothesis, with comprehension data revealing that speakers still retain much knowledge of the reflexivity distinction but fail to produce the forms in production. By comparing the use of possessive markers among four groups of Abui-Alor Malay bilinguals, this study shows that one of the outcomes of contact during this 50-60 year time frame of bilingualism is simplification, which is argued to be strengthened, yet not exclusively caused, by the fact that Alor Malay lacks the distinction.

While showing that simplification is underway, this study has also laid the platform for future studies. Firstly, a follow-up panel study in at least eight years' time would enable us to answer the question of whether the currently observed variation will persist and lead to fully-fledged language change. Secondly, a follow-up to this study could also involve the investigation of the alienability distinction which, alongside the reflexivity distinction, is also encoded in third person possessive prefixes. Comparing alienability and reflexivity, two features which Alor Malay lacks, can offer valuable insights with regards to the vulnerability of possessive inflection referring to semantic noun classes vis-a-vis syntactic binding relations (see also §8.4).