The Development of Agent-demoting passives in Malayic*

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The di-passive in Malay/Indonesian and other Malayic languages is clearly a European-type agent demotion passive; the agent, nevertheless, unexpectedly exhibits grammatical properties which are cross-linguistically typical of arguments and unusual for adjuncts. We explain the unusual properties of di-passive agents by arguing for the analysis of the di-passive construction as deriving historically from a Philippine-type voice construction in which the non-subject agent remains an argument. Based on evidence from modern and classical varieties of Malayic, we propose a pathway of historical changes whereby a Philippine-type non-active construction developed into a European-type agent demoting passive.

1. Introduction

In this paper we examine the grammatical characteristics of *di*-passives both in Standard Indonesian and in several colloquial Malayic varieties spoken in central Sumatra. We shall argue that the characteristics of *di*-passives are typologically surprising in passive constructions, but the unusual features of this construction are explained if they are viewed as remnants of an earlier 'object voice' construction that, we claim, was the historical source for the *di*-passive. Some background on Austronesian voice may be helpful before we turn to the details of Indonesian and the central Sumatran varieties.

A key typological characteristic of conservative western Austronesian languages like Seediq, Malagasy, and Tagalog is that these languages manifest a distinctive voice system which has come to be known as the 'Philippine type' voice system.² In a Philippine type voice system the choice of voice determines which argument occurs as the surface subject. No voice is morphosyntactically basic. A salient characteristic of this sort of voice system, one which, as we shall see, distinguishes Philippine voice systems from European type passives, is that in 'non-active' voices, demotion of the agent to adjunct does not occur. In LFG terminology, agent arguments are retained as core arguments in transitive constructions with non-agent subjects.

The Tagalog sentences in (1) exemplify the Philippine type voice system. In each sentence a different argument occurs as surface subject. In each case, verbal morphology indicates which argument is subject. In cases where the agent is not the subject it remains an argument of the verb.

¹These varieties of colloquial Malayic, which are spoken in small villages in the so-called 'Malay Heartland', the area around the border between Jambi Province and West Sumatra. It is from this region that many scholars believe Malayic languages initially proliferated (e.g. Sneddon 2003), developing into prominent regional languages, and eventually spreading to the outer reaches of the Indonesian Archipelago, as the official national languages of Malaysia, Indonesia, Singapore, and Brunei Darussalam. The varieties that are the focus of this paper are to be distinguished from the colloquial Malay/Indonesian spoken in major cities of Indonesia like Jakarta, which result from a combination of Batawi Malay, local languages like Javanese and Sundanese, the southern Chinese varieties spoken in Jakarta, and so forth.

²A notable exception of great diachronic interest is Rukai, which does not exhibit the complex voice system found in other Formosan Austronesian languages.

(1) Examples illustrating agent and non-agent voices in Tagalog (from Foley 1998)

- a. b-um-ili ng isda sa tindahan ang lalake VC-buy CORE fish OBL store man The man bought fish in the store.' [agent is subject]
- b. bi-bilh-in ng lalake sa tindahan ang isda IRR-buy-VC CORE man OBL store fish 'The man will buy the fish in the store.' [theme is subject]
- c. bi-bilh-an ng lalake ng isda ang tindahan IRR-buy-VC CORE man CORE fish store 'The man will buy fish in the store.' [location is subject]
- d. *ipam*-bi-bili ng alake ng isda *ang salapi*VC-IRR-buy CORE man CORE fish money
 'The man will buy fish with the money.' [instrument is subject]
- e. *i*-bi-bili ng lalake ng isda *ang bata*VC-IRR-buy CORE man CORE fish child
 'The man will buy fish for the child.' [benefactive is subject]

As was already mentioned above, the Philippine type voice system can be contrasted with voice systems often referred to as 'European type' voice systems. In languages with a European type voice system, the 'unmarked' voice is the active voice. This voice is literally unmarked in that no special morphology is used to indicate the occurrence of the construction. Furthermore, the agent corresponds to the surface subject of the clause. In 'European' voice systems the active is contrasted with a 'marked' passive voice, in which the agent is either omitted or it appears as an adjunct rather than as a core argument of the verb.³

- (2) Active The army destroyed the city.
- (3) Passive
 - a. The city was destroyed.
 - b. The city was destroyed by the army.

Notably, both the agent and the patient are obligatory arguments in 2, but the agent is omitted or occurs in an optional prepositional phrase in 3 while the patient remains as the sole core argument of the verb. In 3 not only is the agent 'demoted' to adjunct, but the patient is 'promoted' from object to subject. In works from the 1980's (e.g. Comrie 1988, Perlmutter & Postal 1984 *inter alia*) the promotion of the object to subject is often treated as the defining characteristic of the passive; however, many more recent works (e.g. Roeper & van Hout 1999, Arka & Manning 1998, Kiparsky 2013, Wunderlich 2012), treat demotion of the agent as primary.

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³Some linguists working in the framework of Lexical Functional Grammar categorize the passive agent as an oblique non-core argument. See Arka (2003) *inter alia*.

Valency-decreasing operations reduce the number of syntactically active arguments; they apply directly on the Θ -structure. [The schema below] shows the passive, which binds the highest argument existentially, so that that it remains unexpressed. (The event argument is irrelevant here and therefore ignored.)

PASS [...
$$\lambda x$$
 VERB(x, ...)] = ... $\exists x$ VERB(x, ...) (Wunderlich 2012:2231)

From this perspective, the promotion of the object to subject in examples like 2 is viewed as secondary, and, in some frameworks, is attributed to the fact that passive verbs share with adjectives the property of failing to case mark their objects (thereby motivating the promotion of the object to surface subject so it will receive case). Thus, the promotion of the patient to subject may be viewed as a strategy to avoid stranding the patient in an uncasemarked position, rather than a core characteristic of the passive construction. Evidence for this approach is presented by Roeper & Van Hout 1999 based on data from nominal passives. In nominal passives the agent is demoted to adjunct but the patient need not be promoted to subject (because the preposition of is present to case-mark the object).

(4) Nominal Passive

The destruction of the city (by the enemy) was intended to terrify the inhabitants.

Compare 4 with its active nominal counterpart in 5 below.

(5) Nominal Active

The enemy's destruction of the city was intended to terrify the inhabitants.

In the nominal passive in 4 the agent (*the enemy*) has been demoted to an adjunct but the patient (*the city*) remains in object position and is not promoted to subject (because *the city* is case-marked by *of*). We adopt this perspective, and, like the authors cited above, we take the demotion of the agent to adjunct/non-core oblique to be firmly established as the critical characteristic of passive constructions.

The voice system of conservative Austronesian languages contrasts sharply with European type voice. As noted by Himmelmann (2005 inter alia), not only are the voice systems in conservative Austronesian languages symmetrical (i.e. no voice is morpho-syntactically basic), but, more critically for our purposes, in these voice systems, while non-active voices involve the selection of a non-agent argument as surface subject, the demotion of the agent to adjunct does not occur, and agent arguments are retained as core (but non-subject) arguments in transitive constructions with non-agent subjects. We shall refer to non-active voices that do not involve demotion of the agent to non-argument status as instances of 'object voice' rather than 'passive'.⁴

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⁴Other names for this construction are 'patient focus', 'objective voice' and, in the case of Indonesian, Passive 2 and passif semu (Dardjowidjojo 1978). To some extent the issue is more than terminological. The choice of voice does not seem to be connected in any way with 'focus' as the term is typically used by linguists, so the term 'focus' seems misleading, and 'passive', which we in fact used in earlier works, is misleading in its own way, so we hope that the term 'object voice' will become standard.

2. Mixed voice systems in Indonesian-type languages

Early work on Indonesian (like Chung 1976) treated examples like 6 and 7 as simply two different passive constructions, and did not distinguish between passive and object voice (except as two variants of the passive). There is, however, an emerging consensus among Austronesianists that Indonesian-type languages exhibit a 'mixed' voice system (Arka & Manning 1998 inter alia). These languages, on the one hand, retain (a reduced version of) a 'Philippine' type object voice construction, while on the other hand, they also appear to exhibit a European type passive, in which the agent argument is 'demoted' to adjunct. This passive construction is marked with the prefix di- in Standard Indonesian, and, on this view, is to be contrasted with object voice.

- (6) Di-Passive (agent demoted to adjunct or omitted)
 - a. buku itu sudah di-baca (Adapted from Arka & Manning 1998:10) book that PFCT PASS-read 'That book has been read.'
 - b. buku itu sudah di-baca oleh Ali book that PFCT PASS-read by ali 'That book has been read by Ali.'
 - c. buku itu sudah di-baca Ali book that PFCT PASS-read ali 'That book has been read by Ali.'
- (7) Object Voice (agent not demoted to adjunct) buku itu sudah aku baca book that PFCT 1SG read 'I have read that book.'

There are a number of reasons to view 6 and 7 as different constructions. In the *di*-passive, as in 6, the agent is optional and occurs after the verb (either as a bare NP or in a prepositional phrase) while in object voice, as in 7, the presence of the agent is obligatory and occurs pre-verbally. The fact that the agent is optional in 6 but obligatory in 7 is in itself strong evidence that the agent is an argument in object voice but not in the *di*-passive. Furthermore, Arka and Manning have shown that the distribution of reflexives provides yet stronger evidence that the agent is a core argument in 7 but not in 6: In the object voice the agent is able to antecede reflexives, including reflexives in surface subject position.

- (8) Object Voice (examples from Arka & Manning 1998) (Their glosses are retained)
 - a. diri saya <u>yang</u> saya serahkan ke polisi self.1 REL 1SG surrender to police 'It is myself that I surrendered to the police.'
 - b. dirimu <u>yang</u> mesti kau serahkan ke polisi self.2 REL must 2 surrender to police 'It is yourself that you must surrender to the police.'

c. dirinya <u>yang</u> mesti dia serahkan ke polisi self.3 REL must 3SG surrender to police 'It is herself/himself that (s)he must surrender to the police.'

In contrast, in *di*-passives the agent cannot be the antecedent for a reflexive in subject position.

- (9) *Di*-reflexives (examples from Arka & Manning 1998) (Their glosses are retained)
 - a. ?*dirinya tidak di-perhatikan Amir self.3 NEG di-care (name) 'Himself was not taken care by Amir.'
 - b. ?*dirinya selalu di-utamakan Amir self.3 always di-prioritize (name) '(S)he always giving priority of himself.'

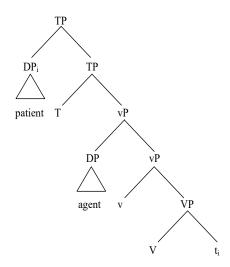
The sentences of 9 are ungrammatical despite the fact that the agent is a bare NP and not a prepositional phrase.

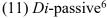
In Arka and Manning it is taken as definitional that a nominal that can antecede a reflexive must be an argument. Members of our research group have argued elsewhere with respect to Toba Batak that similar facts follow naturally from c-command (Cole and Hermon 2008). The same arguments presented there apply to Indonesian as well. We assume that in object voice constructions the agent is generated in a high position outside the VP (as the specifier of vP) and, thus, c-commands the arguments generated within the VP (like the patient, before it moves to subject position). In contrast, in passives we assume a Larsonian structure in which adjuncts are generated as 'lowest complements' inside the VP, hence lower than patients. We further assume that reflexive *dirinya* is possible iff it has a potential c-commanding antecedent at some stage.

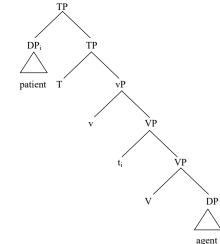
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⁵According to Larson (1988), both arguments and adjuncts are structurally complements. Adjuncts are analyzed as 'lowest complements', i.e. for Larson these adjuncts are lower in the tree than direct and indirect objects.

(10) Object Voice







In object voice, the agent c-commands the patient prior to the movement of the patient to specifier of TP. Thus, it is predicted that the agent will be able to be the antecedent for a reflexive in specifier of TP. In the passive construction, however, the agent is lower than the patient at all stages in the derivation. Thus, it is predicted on the basis of the structures proposed that in passives the agent will not be a possible antecedent for a reflexive in subject (specifier of TP) position. Therefore, given our (relatively standard) assumptions, the reflexive facts reported by Arka and Manning provide very strong evidence that the agent is an argument in the object voice but that it is an adjunct in *di*-passives.⁷

The conclusion that the agent in *di*-passives is an adjunct is further supported by evidence from nominalization. In SI (but not in all colloquial varieties) predicates with a single argument can be nominalized (Sneddon et al. 2010). The basic pattern for nominalization is illustrated in 12 below.

⁶See Mckinnon, Cole and Hermon (2011) for a discussion of the motivation in Malayic for this and similar Larsonian structure.

There is one exception to this generalization with respect to *di*-passives, which will be discussed below.

The predicates *teriak* 'scream' and *membeku* 'freeze' take a single argument, and are able to undergo nominalization.

- (12) Nominalized predicates in Standard Indonesian: (Auxilliary) active.voice.prefix-Verb.Stem-*nya* argument
- (13) a. orang itu teriak person that scream 'That person screamed.'
 - b. teriak-nya orang itu membuat kami takut scream-3 person that ACT.make 1PL afraid 'That person's screaming scared us.'
- (14) a. air itu sudah membeku water that PFCT ACT.frozen 'That water froze.'
 - membeku-nya b. air itu kabar gembira bagi kami that ACT.frozen-3 water news happy for 1_{PL} 'The freezing of the water was good news for us.'

Predicates with more than one argument, like *mencuri* 'to steal' and *membekukan* 'to freeze something', cannot undergo nominalization.

- (15) a. orang ini mencuri uang person this ACT.steal money 'This person stole money.'
 - b. *mencuri-nya uang (oleh orang ini) tidak di-selidik-i polisi ACT.steal-3 money by person this NEG PASS-investigate-APPL police ('The stealing of the money (by this person) was not investigated by the police.')
 - c. *mencuri-nya orang ini tidak di-selidik-i polisi
 ('The stealing by this person was not investigated by the police.')
- (16) a. ali membeku-kan air itu Ali ACT.frozen-APPL water that 'Ali froze the water.'
 - *membeku-kan-nya air itu (oleh ali) tidak kami rekam b. ACT.frozen-APPL-3 water that by Ali 1_{PL} record NEG ('The freezing of the water (by Ali) wasn't recorded by us.')

Nominalization can be used to test whether the *di*-passive agent is an argument or an adjunct. If the agent is an argument in this construction, the *di*-passive predicate will have two core arguments (agent and patient), thus it is predicted that nominalization will not be possible. If the agent is an adjunct, and therefore the predicate has a single argument (patient), nominalization is predicted to

be possible. As Sneddon and colleagues (2010) demonstrates, *di*-passives allow nominalization, thus supporting the conclusion that the agent is an adjunct.

- (17) Nominalization of di-passive is grammatical
 - a. uang itu sudah di-curi (oleh) ali money that PFCT PASS-steal by Ali 'That money was stolen by Ali.'
 - b. sudah di-curi-nya (oleh ali) membuat teman-nya sedih uang itu friend-3 PFCT PASS-steal-3 money that by Ali ACT.make sad 'Ali's having stolen the money made his friend sad.'

In contrast, predicates in the object voice do not undergo nominalization.

- (18) Nominalization of object voice is not permitted
 - a. uang itu sudah ku-curi money that PFCT 1SG-steal 'I have already stolen that money.'
 - sedih b. *sudah ku-curi-nya uang itu membuat teman-ku **PFCT** 1sG-steal-3 money that ACT.make friend-1sG sad 'My having stolen the money made my friend sad.'

These facts follow directly from Arka and Manning's analysis which claims that the object voice is a predicate with two core arguments, where the agent is a core argument, whereas the *di*passive is a predicate with a single argument (patient) with the agent (optionally) appearing as an adjunct.

Thus, the facts regarding nominalization lead to the same conclusions as Arka and Manning's Binding facts. Object voice and *di*-passives differ in that the agent in object voice remains a core argument while in *di*-passives the agent has been demoted to adjunct.

Given the evidence we have presented above, we shall therefore assume in what follows that Arka and Manning's characterization of the diffeences between passive and object voice is correct: In object voice constructions the agent remains an argument and is not demoted to adjunct status while in *di*-passives the agent has been demoted to non-argument status.

3. Some peculiarities of the di- passive in Standard Indonesian

We shall now turn to some apparent counter examples to the generalization argued for in the previous section. As described in the previous section, the *di*- passive is simply a European type passive, so it would be expected to fit the prototype for such constructions. In fact, as we shall show, the construction has a variety of properties that receive no explanation if the *di*-passive is simply a European type passive with the syntactic properties described above, in which the agent is considered to be in a very low position in the VP. We shall first show some properties of *di*-passives in Standard Indonesian that fail to fit the typological profile of a European type passive. We shall then consider some additional characteristics found in traditional Malayic languages of central Sumatra that provide further evidence that the description of the *di*-passive as a European passive is an oversimplification.

3.1 Complementary distribution

In Standard Indonesian the *di*-passive and object voice are in (near) complementary distribution, suggesting the possibility that the two constructions should be viewed as two realizations of a single construction in different contexts, either in contemporary Indonesian or at some earlier historical stage of the language. Speakers almost invariably use object voice with first and second person agents and passive with third person non-pronominal agents.

- (19) Object Voice: First and Second Person Agent (Adapted from Sneddon 1996:249)
 - a. dia kami jemput 3 1PL pick.up 'He was picked up by us.'
 - b. buku ini harus kau-baca book this must 2-read 'You must read this book.'
 - c. *dia heri jemput
 3 Harry pick.up
 'He was picked up by Harry.'
- (20) Passive: Third Person Non-Pronominal Agent (Adapted from Sneddon 1996:247-248)
 - a. dia di-jemput (oleh) heri
 3 PASS-pick.up by Harry
 'He was picked up by Harry.'
 - b. *dia di-jemput (oleh) saya 3 PASS-pick.up by 1SG 'He was picked up by me.'

While some overlap occurs with third person pronominal agents, it is plausible to claim that speakers view the two constructions as contextual variants of a single construction rather than as two independent, contrasting constructions. Furthermore, this pattern can be interpreted as indicating that verbs in these two constructions select for the agent and stand in an agreement relationship with the agent as well, with one verb form (di-) agreeing with third person agents and a second verb form ($\underline{\mathcal{O}}$) agreeing with first and second person agents. Such an analysis (with some additional refinements to handle the overlap between the two constructions) would be unproblematic from a typological perspective with regard to an object voice construction because in the object voice the agent is analyzed as an argument of the verb, and verbs frequently select for and agree with their arguments. It is, however, problematic, with regard to the passive since selection for and agreement with an adjunct is typologically uncommon and is not expected to occur.

⁸This is a slight over simplification. In Standard (or near Standard) Indonesian object voice is possible with third person pronominal agents (as well as first and second person agents) while *di*-passives are grammatical with all third person agents, regardless of whether they are pronominal. Thus, the distribution in Standard Indonesian is a near complementary distribution. We shall argue below that the (near) complementarity has a historical rather than a

synchronic explanation.

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3.2. Adjacency requirements

We will turn next to a second grammatical requirement shared by arguments of verbs and agents of *di*-passives, but not by adjuncts. Verbs in Indonesian require adjacency between the verb and its direct object (shown in boldface).

- (21) dia akan *membeli* **buku itu** bulan ini 3 will ACT.buy book that month this 'He will buy that book this month.'
- (22) *dia akan *membeli* bulan ini **buku itu**3 will ACT.buy month this book that 'He will buy that book this month.'

There is no adjacency requirement for adjuncts. This is true even when the adjunct is itself a noun phrase, as is the case with regard to *bulan ini* in (21)-(22).

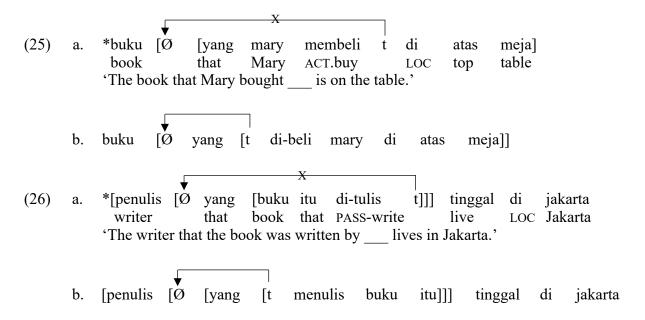
Turning now to *di*-passives, much like the direct object of the active verb in (21)-(22) above, the nominal agent (i.e. agent DP not agent PP) in the *di*-passive must be adjacent to the verb.

- (23) buku itu di-beli **oki** hari ini book that PASS-buy Oki day this 'That book was bought by Oki today.'
- (24) *buku itu di-beli hari ini **oki** book that PASS-buy day this Oki 'That book was bought by Oki today.'

Examples 23-24 show that (noun phrase) agents of *di*-passives are like direct objects of active verbs in requiring adjacency to the verb. In contrast, adjuncts display no adjacency requirement, even when the adjunct consists of a noun phrase like *hari ini* (and, hence, might, presumably, require case marking). This distribution would be easily explained if passive agents were analyzed as (non-subject) arguments rather than as adjuncts.

3.3. Relativization

A related distribution is observed with regard to relativization and similar processes of movement to an A' (non-argument) position. Standard Indonesian (as opposed to many urban colloquial varieties) is well known as an example of a language that allows subject but not object relativization (Keenan & Comrie 1977). In this construction as well, NP agents in *di*-passives pattern with direct objects rather than with adjuncts. In the following examples, the arrow indicates a possible movement path. An X on the arrow indicates that the movement path is not possible.



The possibility of A' extraction is blocked in both the case of direct objects of active verbs and agents of *di*-passives. In contrast, the relativization of nominal adjuncts is grammatical.

Again, in the case of relativization (and similar processes of extraction to a non-argument position), NP passive agents pattern with direct objects rather than with adjuncts.

The argument-like characteristics of agents of *di*-passives are difficult to explain synchronically. While it is hard to find a Minimalist or other principle-based analysis synchronically, the picture, we believe, is quite different from a diachronic perspective. There has been considerable discussion of the etymological origin of the passive prefix *di*- (Wolff 2001, Adelaar 2005, van den Berg 2004 *inter alia*), however, little attention has been paid to the question of how the *di*- construction came to be a European type passive when it is well known that earlier Austronesian exhibited a Philippine type voice system, one that did not include European type passives. Viewed from a diachronic perspective, we shall argue that the grammatical characteristics of the *di*- construction in fact provide indications that this construction, in an earlier stage of the language, was an object voice construction rather than a passive: The *di*- construction displays grammatical peculiarities that are typologically atypical for a passive construction, but which make sense historically if they are remnants of an earlier object voice construction.

4. Di-passives in Sumatran Malayic varieties

We have seen that the distributional restrictions on the agent of the di-passive construction in Standard Indonesian mirror restrictions on the object of the active transitive construction, and that these restrictions do not apply to adjuncts (including noun phrases used as adjuncts). Typologically, these restrictions are unexpected for a European type passive construction, the

critical characteristic of which is the demotion of the agent to adjunct. They would make sense, however, if the agents in *di*-passives were in fact arguments (as is clearly the case in object voice constructions).

We shall now turn to rural Malayic varieties spoken around the border between Jambi Province and West Sumatra. These varieties are important because they represent Malayic varieties that appear to have developed naturally, i.e. they are not the result of linguistic engineering. Furthermore, they are not the result of creolization, language mixture or similar processes (as is the case for some urban varieties). At least as spoken by conservative rural speakers, these rural varieties seem to be largely uninfluenced by Standard Indonesian.

It is widely recognized that the structure of contemporary Standard Indonesian is due to both natural processes of linguistic change and conscious language planning. Sneddon (2006:3), in the introduction to his grammar of Colloquial Jakarta Indonesian, notes that, unlike the colloquial forms of Malay/Indonesian, 'formal Indonesian is to a considerable extent the result of deliberate language planning.' Thus, there may be skepticism on the part of some linguists as to whether the characteristics of Standard Indonesian which we described above are characteristics of natural language development rather than deliberate decisions of language planners. As a result, it is important to show that these same characteristics are displayed by local, unengineered varieties of Malayic as well as by the standard language. As we shall see below, the local traditional Malayic varieties studied by our research group not only display all the attributes just described for Standard Indonesian, but *di*-passive agents in these varieties also show additional properties that would be expected if the agents in *di*-passives were arguments, but not if they are adjuncts.

We will focus our discussion on one traditional Malayic language, the Tanjung Pauh dialect of Kerinci, a traditional Malayic language spoken in the Bukit Barisan of Jambi Province, Sumatra. Kerinci was described originally by Usman (1978), Prentice and Usman (1978), and more recently by Mckinnon (2011) and Mckinnon, Cole and Hermon (2011), among others. Map 1 shows where Tanjung Pauh Kerinci is spoken.



Map 1. Location of Tanjung Pauh Kerinci

Like Standard Indonesian, Kerinci displays an active voice employing a nasal prefix, an object voice and a *di*-passive construction.

(28) Active voice
no nimbeo? sitiy
3 ACT.shoot Siti
'He shot Siti.'

- (29) Object voice sitiy la ka timba? Siti PAST 1SG shoot 'I shot Siti.'
- (30) di- Passive voice sitiy di-timboo? ardiy Siti PASS-shoot Ardi 'Siti was shot by Ardi.'

Di-passive agents in Kerinci varieties show the same distribution of argument-like properties as do passive agents in Standard Indonesian. First, in Kerinci the *di*-passive and the object voice are in complementary distribution (not in near complementary distribution, as in Standard Indonesian).

- (31) a. Object voice only allows non-3rd person agent
 - (i) sitiy la ka timba? Siti PAST 1SG shoot.A 'Siti was shot by me.'
 - (ii) sitiy la mpA? timba? Siti PAST 2SG shoot.A 'Siti was shot by you.'
 - (iii) sitiy la ***no/***ardiy timba? Siti PAST 3/Ardi shoot.A
 - b. *Di*-passive only allows 3rd person agent ayε? la di-nɨŋ **no**/hah/alɨy/*mpʌ/*kao/*kito water.A PAST PASS-drink.O 3/person.A/Ali/*2sG/*1sG/*1PL.INCL 'The water was drunk by him/someone/Ali/*you/*me/*us.'

Second, the *di*-passive verb selects for and agrees with the features of the agent.

Passive verb selects for/agrees with features of the agent (only 3rd person agents permitted) ayε? la di-nin hah/aliy/*mpʌ/*kao/*kito water.A PAST PASS-drink.O person.A/Ali/*2SG/*1SG/*1PL (incl.) 'The water was drunk by someone/Ali/*you/*me/*us.'

The nominal agent must be adjacent to the passive verb.

(33) kakiy nəh di-gigit (*tadiy) hah leg.O 3 PASS-bite.O recently person.A 'His leg was bitten by someone (recently).'

This is similar to the situation in the active, in which the direct object must be adjacent to the active verb.

(34) sitiy nimboo? (*tadiy) ardiy Siti ACT.shoot recently Ardi 'Siti shot (recently) Ardi.'

It is also similar to the object voice, in which the agent must also be immediately adjacent to the verb.

- (35) Agent must be adjacent to verb in object voice
 - a. no la ka timba? 3 PAST 1SG shoot.A 'He was shot by me.'
 - b. *no ka la timba? 3 1SG PAST shoot.A

We can summarize what we have shown so far as follows: The *di*-passive construction in Kerinci displays many of the same attributes as Standard Indonesian (but in some cases the argument-like properties of the agent are more clear cut than in Standard Indonesian). In fact, the argument-like properties of *di*-passive agents are attested to a greater or lesser extent across Malay varieties and registers. These properties should be seen as characteristic of the *di*-passive construction in general, and therefore, highly pertinent to understanding the construction's historical development.

We shall now turn to ways that nominal agents in the *di*-passive construction in Kerinci display argument-like properties that go beyond those found in Standard Indonesian.⁹

4.1. Only nominal agents are possible in *di*-passives

We saw earlier that in Standard Indonesian passive agents can either be noun phrases or prepositional phrases.

sudah (36)buku ini di-baca (oleh) ibu saya this already PASS-baca book mother 1s_G by 'This book has been read by my mother.'

In contrast, in object voice only nominal agents are possible and prepositional phrase agents are not.

- (37) a. buku ini sudah aku baca book this PFCT 1SG read 'This book has been read by me.'
 - b. *buku ini sudah oleh aku baca book this PFCT by 1SG read 'This book has been read by me.'

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⁹We have in fact seen one such case already. In Kerinci object voice and *di*-passive are in full complementary distribution, while in Standard Indonesian they are in near complementary distribution. We shall return to this topic below.

c. *buku ini sudah baca oleh aku book this PFCT read by 1SG 'This book has been read by me.'

Example (37) shows that a PP agent is not possible in object voice, regardless of whether the agent is preverbal (as in 37b) or postverbal (as in 37c).¹⁰

Turning to Kerinci, unlike SI, passive agents can only be nominal.

- (38) NP Agent kakiy nəh di-gigit hah/aliy leg.O 3 PASS-bite.O person/Ali 'His leg was bitten by someone/Ali.'
- (39) Prepositional Phrase Agent
 *kakiy nəh di-gigit wət hah/aliy
 leg.O 3 PASS-bite.O by person.A/Ali
 'His leg was bitten by someone/Ali.'

The restriction of passive agents to NPs rather than PPs more closely resembles the pattern seen in object voice in Standard Indonesian than the pattern seen in the *di*-passive.

4.2. Obligatory agents

It will be remembered that in Standard Indonesian the presence of the agent is optional in *di*passives. In fact, in Standard Indonesian the agent is frequently omitted.

(40) topik ini sudah di-bahas kemarin topic this PFCT PASS-discuss yesterday 'This topic was already discussed yesterday.'

This is to be contrasted with object voice, in which the occurrence of the agent is obligatory.

- (41) a. topik ini sudah **saya** bahas topic this PFCT 1SG discuss 'This topic was already discussed by me.'
 - *topik ini sudah bahas
 Topic this PFCT discuss
 'This topic was already discussed.'

In the Tanjung Pauh variety of Kerinci, however, the presence of the agent is obligatory in *di*passives.

¹⁰A postverbal agent would be ungrammatical in (37a) as well.

- (42) Obligatory agent in Kerinci
 - a. kakiy nəh di-gigit hah/aliy leg.O 3 PASS-bite.O person.A/Ali 'His leg was bitten by someone/Ali.'
 - b. *kakiy nəh di-gigit. leg.O 3 PASS-bite.O 'His leg was bitten.'11

The requirement that an agent must occur resembles the pattern observed in object voice, in which the agent is an argument of the verb, but contrasts with the pattern observed in Indonesian passives, in which the optionality of the agent suggests that the agent is an adjunct rather than an argument.

4.3. Ablaut marking object registration

We will turn next to an aspect of Kerinci morphology that has no counterpart in Standard Indonesian, object registration morphology. In many Kerinci varieties, roots from diverse lexical categories exhibit two (or more) morphological forms distinguished by the phonological shape of their final rime (see among others: Usman 1978, Prentice & Usman 1978, Mckinnon 2011, Mckinnon, Cole and Hermon 2011). As the glosses for the following examples suggest, so-called secondary forms (also referred to as 'oblique' or 'ablaut' forms in the literature and glossed as O forms) exhibit multiple functions, while the primary (basic forms) are glossed as A forms, following the glossing conventions used in previous work on this topic.

(43) Ablaut in Kerinci (Examples based on Mckinnon 2011)

| Primary (A) form | Gloss | Secondary (O) form | Gloss |
|------------------|---------|--------------------|------------------------------------|
| gdi | 'large' | gdaŋ | 'enlarge' or 'largeness of (sth.)' |
| ana? | 'child' | anso? | 'his/her/the child' |
| mandae | 'bathe' | mandiy | 'to bathe (someone)' |

Among other functions, the occurrence of the secondary form of the root functions as morphological registration of the head/complement relationship, marking on the head the presence of objects and other nominal complements. The relationship between the head and complement is similar to that of agreement, but (unlike agreement in e.g. Romance languages) without covariation in person/number-features. (The term 'agreement' rather than 'nominal complement registration' was employed in our earlier work.) What is relevant here is that active verbs with nominal direct objects must occur in the secondary form.

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¹¹It is not completely ungrammatical to omit a third person agent, but the absence of an overt agent is interpreted as having a phonologically third person null personal pronoun ('him', 'her') as agent. This is in fact an instance of a more general process of 'prodrop': the omission of a noun phrase is interpreted as though there were a third person referential pronoun present. In contrast, in SI the absence of an explicit agent in Indonesian is interpreted as an indefinite agent, similarly to English, e.g. *the book has been sold around the world*. See Mckinnon, Cole and Hermon (2011) for details.

(44)Transitive verbs in the secondary form

```
V + NP
       Soebn
                  *nisa?/nisək
                                               kwoo?
kao
                                                             minin
                                                                       lah
                 *ACT.suck.A/ACT.suck.O
                                               cigarette.A
                                                             now
                                                                       just
1s<sub>G</sub>
       FUT
'I am going to smoke a cigarette right now.'
```

In contrast, intransitive verbs and verbs with clausal objects occur in the primary form.

(45) Intransitive verbs and verbs with clausal objects in the primary form

```
V + PP
*no gne/*gij
                  ku
                      mɨŋ
     go.A/*go.O
                  to
                       Kumun
'She's going to Kumun.'
```

V + CPsitiy nuwe?/*nuwe?? po yo

nin heriy nukʌn tim gi ACT.ask.A/*ACT.ask.O what.A yes.A DEG Heri PROG ACT.hit.O Tim 'Siti wonders whether it is true that Heri is hitting Tim.'

With this background, we turn now to the form of the verb in Kerinci passives. In passives, like transitive active constructions, the verb must be in the secondary form.

(46)Active transitive clause a. sina njiw/*nji ?wix tah ACT.chase.O/*ACT.chase.A lion monkey.A that 'The lion chased that monkey.'

b. Passive clause ?wix tah di-kjiw/*dikji siŋa pass-chase.O/*di-chase.A that lion

'That monkey was chased by the lion.'

The fact that passive verbs occur in the secondary form would be predicted if the agent in dipassives, like the direct object in the active, were an argument of the verb, but it is unexpected if the agent is an adjunct.

5. Evidence that passive agent is *not* an argument in Kerinci.

We have observed a number of ways that passive agents in Kerinci exhibit properties typical of arguments rather than adjuncts. These include the grammatical properties observed in SI, but also include additional properties not found in SI. For example, we saw that in SI di-passive agents are adjunct-like in that they are optional constituents and can be realized as either noun phrases or as prepositional phrases; in Kerinci this constituent is obligatory and can only be a noun phrase, not a prepositional phrase. This might appear to suggest that di-passive agents in Kerinci not only resemble arguments, but rather that they are arguments. This, however, is not the case. There is evidence which, in our view, shows definitively that the agent in the Kerinci di-passive must be analyzed as an adjunct synchronically.

Following Arka and Manning (1998), if an agent is able to antecede a reflexive, this provides definitive evidence for its status as a core argument of the verb. As we saw in SI, the agent in the object voice behaves as core argument because it can antecede reflexives in subject position. In contrast the agent in the SI *di*-passive cannot antecede a reflexive surface subject; thus it is not a core argument of the verb. Analogous facts are found in Kerinci: the agent in the object voice can bind a reflexive subject 48, while the agent in the *di*-passive cannot 49. This means that the agent of the *di*-passive agents does not retain core argument status.

- (47) Kerinci object voice: Agent can be the antecedent for reflexive in subject position
 - a. [dihae kah kihiy]i la kai timba? kahi self 1 alone PAST 1 shoot 1 'I shot myself.'
 - b. $[dih \lambda e mp \lambda h kih e y]_i$ la $mp \lambda_i$ timba? $mp \lambda h_i$ self 2SG alone past 2SG shoot 2SG 'You shot yourself.'
- (48) Di-passive voice: agent cannot antecede reflexive in subject position *[dihiy nəh kihiy]_I la di-timbəo? ardiy_i self 3 alone PAST PASS-shoot Ardi 'Himself was shot by Ardi.'

We therefore conclude that despite the fact that Kerinci *di*-passive agents display multiple properties associated with arguments, in contemporary Kerinci these phrases are adjuncts rather than arguments. This leaves open the question of how the argument-like characteristics are to be explained.

6. A diachronic account

To review the general picture, we have shown that in both Standard Indonesian and in Kerinci, object voice agents are arguments by all criteria, but *di*-passive agents display a mixture of argument-like and adjunct-like characteristics. The characteristics of agents in Standard Indonesian and Kerinci are summarized in the following chart.

| (49) | | | | | | | | | |
|---|--------------|---------|----------------------------------|---------|---------------------|---------|--|--|--|
| Name of feature | Object voice | | <i>di</i> -passive bare NP agent | | di-passivePP agents | | | | |
| | SI | Kerinci | SI | Kerinci | SI | Kerinci | | | |
| Is agent obligatory? | Yes | Yes | No | Yes | No | N/A | | | |
| Does agent need to be adjacent to verb? | Yes | Yes | Yes | Yes | No | N/A | | | |
| Can agent be extracted (e.g. via relativization)? | No | No | No | No | No | N/A | | | |
| Can agent bind a reflexive in surface subject position? | Yes | Yes | No | No | No | N/A | | | |

There is strong structural evidence (based on the ability to antecede subject reflexives and based on nominalization) that *di*-passive agents are synchronically adjuncts despite the fact that they display a number of characteristics that would be more natural if they were arguments. Such

a mix of characteristics makes it difficult to develop a consistent synchronic analysis of the *di*-passive, especially in the context of a framework like Minimalism, that eschews the use of language specific and construction specific rules. From a synchronic perspective, the voice systems of both Standard Indonesian and Kerinci include a number of typologically unexpected 'irregularities' that do not follow from general principles and must be memorized. While exceptions of all sorts are problematic for synchronic analysis and may undercut the ability of the analyst to find interesting synchronic generalizations, from a diachronic perspective, exceptions can be valuable tools for detecting traces of earlier stages of the language. In particular, archaic irregularities can be more helpful than contemporary regular forms for reconstructing the stages through which the present-day language developed. We would like to argue that the agent-like properties of both Standard Indonesian and Kerinci constitute archaisms of the sort that provide an entrée into the syntax of earlier stages of Malayic.

If the argument-like properties of the agent in the *di*-passive construction are viewed as archaisms, a promising approach is to claim that at some previous stage of Malayic the *di*-passive agent did not simply display some argument-like properties, but it **was** an argument, presumably with the full range of characteristics seen in present day object voice. Such a scenario would fit our general picture of how Malayic languages developed because we know that the current mixed voice system found in Indonesian type languages is a departure from the earlier Philippine-type voice system still found in the Austronesian languages of the Philippines (and in most of the languages found in Taiwan). Previous research, however, has not shown concrete evidence for an earlier stage in which Indonesian languages (and specifically Malayic) conformed to the Philippine voice system without the admixture of a European type passive voice. Our claim is that the argument-like properties of the *di*-passive in both Standard Indonesian and in Kerinci constitute this sort of concrete evidence. These archaisms, then, are the 'missing link' that connects Indonesian type languages and the earlier Austronesian pattern.

If we are correct in interpreting the argument-like properties in Malayic as indications of an earlier fully symmetrical voice system, it is useful to map out in more detail how, under our account, some of the other characteristics of the *di*-passive might have evolved. At the earliest stage, the *di*-passive was presumably part of an object voice paradigm.

Stage 1

As we envisage the system, at this stage the voice system of Malayic (or perhaps some earlier ancestor language) looked roughly like that of today's Toba Batak. The core voice system consisted of an active indicated by the active prefix and an object voice consisting of a paradigm of verbal prefixes agreeing with the agent. The prefixes presumably corresponded to today's, *ku*-'1', *kau*-'2' and *di*-'3' and were in effect agreement markers indicating the person of a postverbal nominal agent. The nominal agent was obligatory in the third person (with the usual caveats for contexts in which the agent stood in an anaphoric relationship with an overt nominal found earlier in the discourse). First and second person nominal agents were optional and typically did not occur overtly, but were understood on the basis of the first and second person prefixes.

 $^{^{12}}$ As a matter of convenience we refer to the prefix in question as di- and so forth, but in fact we take no position on whether for example the morpheme at that time was di-, ni- or yet another form, with the same caveat with respect to the first and second person prefixes. There are a variety of proposals in the literature regarding the etymology of the modern-day prefix di- (for an brief overview of these proposals see Adelaar 2005). We do not take any position on this issue, since we see the etymology of the prefix di- as an issue which is orthogonal to our claim that the di-passive originated from an object voice construction containing a 3^{rd} person agent.

(50)
$$\begin{bmatrix} ku - \\ kau - \\ di - \end{bmatrix}$$
 Verbal-Stem Agent-Nominal

In the object voice, the agent occurred immediately after the verb, and displayed similar characteristics to contemporary object voice agents without displaying any split between the properties of first/second person and third person agents.

Stage 2

The second stage is roughly like Stage 1 except that clarificatory phrases providing additional information regarding the agent were possible. These had the following form.

(51) *di*-Verbal-Stem-*nya* oleh [or other preposition] NP

In examples following the form of (51), the prepositional phrase stood in an appositional relationship with the pronominal nominal agent -nya. ¹³ The structure proposed in (51) is still found in some Sumatran Malayic varieties. Examples from Tapus and Rantau Panjang are provided (though we would not wish to claim that overall these varieties remain in Stage 2.):

- (52) Tapus: *Di*-passive with PP agent
 - a. ayam du di-masa? de? uma? chicken DEM.DIST PASS-cook by mother 'The chicken was cooked by mother.'
 - b. Tapus: *Di*-Verbal-Stem-nya [preposition NP] ayam du di-masa?-ã de? uma? chicken DEM.DIST PASS-cook-PRON by mother 'The chicken was cooked by mother (and not someone else).'
- (53) Rantau Panjang: *Di*-passive with PP agent (extra pronoun preferred/required)
 - a. Agent Pronoun Absent

*?ayam tu la di-pangan wi? indo? chicken that PAST PASS-burn by mother *That chicken was grilled by mother.'

b. Agent Pronoun Present

ayam tu la di-pangon wi? indo? chicken that PAST PASS-burn-PRON by mother 'That chicken was grilled by mother.'

(The cognate to -nya '3' in Indonesian is incorporated into the verb form is 53b but not in 53a.)

The structure seen in (52) and (53) typically occurs when the agent is third person in these languages. We assume that this is the case because no clarification would be needed in the case of

 13 The analogous morpheme in many varieties is realized as -e rather than -nya. Our interest is in the syntactic structure rather than in reconstructing the morpheme in question.

first or second person agents. Thus a split occurs between the first and second person agent construction, in which no post verbal nominal agent and no clarificatory phrase is usually found, and the third person agent construction, in which a post verbal agent is obligatory and an additional clarificatory description of the agent is possible though not required.

Examples similar to (52) and (53) are found not only in contemporary Sumatran dialects but also in Classical Malay. For example, the following examples were found by searching the Malay Concordance Project database (http://mcp.anu.edu.au), a corpus of Malay texts currently containing 165 texts and 5.8 million words.

- (54) Classical Malay: Verb-*nya* PP (original glossing retained)
 - maka peti besi itu pun di-pegang-nya oléh boga a. anta then box iron that pun PASS-hold-3 by Anta Boga 'So the iron box was held by Anta Boga.' (Hikayat Bayan Budiman: Text 1371, Manus. 1852)
 - b. maka cemeti itu pun di-beri-kan-nya oleh fatimah zahra kepada bilal then whip that PUN PASS-give-APPL-3 by Fatimah Zahra to Bilal 'Then the whip was given by Fatima Zahra to Bilal.'
 (Hikayat Muhammad Hanafiah: Text 1380s, Manus.1580s)
 - c. maka segala itu kata di-dengar-nya oleh dewi siti sundari PASS-hear-3 then each that word Dewi Siti Sundari by 'So all that was said was heard by Dewi Siti Sundari.' (Hikayat Pandawa Lima: Text 1350-1400 (estimated))

According to our analysis, at Stage 2 the construction is still an object voice construction. The pronoun -nya (or its counterpart) is an obligatory argument constituting the agent, and the prepositional phrase is simply appositional to -nya.

Stage 3

In the third stage speakers reanalyze the prepositional phrase as the agent rather than as appositional. The pronoun -nya (or its analog) is interpreted as a linker (i.e. as an element that is not meaningful in this consruction) rather than as the agent.

(55) *di*-Verbal-Stem linker PP Agent

In structure 56 the agent is in a prepositional phrase rather than a noun phrase. On the assumption that the default interpretation for prepositional phrases modifying the VP is adjunct rather than argument, the prepositional phrase agent in (55) is interpreted as an adjunct, and thus, the construction exhibits the key characteristic of a passive construction.

This construction co-exists with a second construction in which -nya does not occur (i.e. -nya is optional).

(56) *di*-Verbal-Stem NP

Stage 3+

We would suggest that subsequent to the reinterpretation of 56 as a passive construction, by analogy all *di*-Verb-Stem constructions were reinterpreted as passives; that is the NP agent in 57 was reanalyzed as being an adjunct. Thus, in contemporary Sumatran varieties, as in Standard Indonesian, sentences with the form of 57 manifest key grammatical properties of a passive voice construction rather than those of an object voice construction.

Stage 4

In this stage the use of *nya*- as a linker was dropped in some varieties (like SI). Some traditional Sumatran Malayic languages (like Tapus and Rantau Panjang) did not undergo this change, and continued to maintain the use of a cognate of –*nya* with PPs. With the exception of dropping -*nya* as a linker, the construction otherwise remained essentially the same, resulting in the contemporary Standard Indonesian passive voice.

7. Further predictions of the analysis

Our historical proposal accounts for several peculiar and previously unexplained properties of the *di*-passive construction. These include the argument-like properties of di-passive agents, the existence of two agent 'constructions' (i.e. PP and NP agents), the existence of a pronominal 'linker' (non-meaningful use of -nya) in some traditional Malay varieties (e.g. Tapus and Rantau Panjang) and the fact that *di*-passive and object voice constructions are in near complementary distribution in the standard language and in full complementary distribution in Kerinci.

We would now like to discuss two additional predictions that follow from our analysis. The first prediction is that, in some Malayic varieties, Stage 3+ might not have occurred. In particular, the analogical process, whereby non-PP agents were reanalyzed as adjuncts, may not have applied uniformly to all NP agents in *di*- passives. In such cases what in Standard Indonesian are instances of NP agent passives might have remained object voice constructions. In such a variety, it would be expected that at least some NP passive agents would be arguments, and therefore would be able to serve as antecedents for reflexive subjects. This prediction turns out to be correct for pronominal agents with -*nya* in Standard Indonesian, as was shown by Arka and Manning.

- (57) a. dirinya tidak di-perhatikan-nya (Their glosses are retained) self.3 NEG di-care-3 '(S)he didn't take care of himself/herself.'
 - b. dirinya selal di-utamakan-nya self.3 always di-prioritise-3 (S)he always giving priority of himself.'

Similar facts are true for Sumatran Malayic languages like Kerinci as well.

(58) di-passive (Kerinci) with pronominal agent [dihiy nəh kihiy]_I la di-timbəo? ŋəh_i self 3 alon past PASS-shoot.O 3 'He shot himself.'

These examples show that there exists a subset of di-passives that remain instances of object voice. This state of affairs is not unexpected if di-passives derive from an earlier object voice construction, but it is unexplained on other accounts.

Our account makes a second prediction with regard to the types of agents which are possible in object voice. Recall that one claim of our account is that at Stage 1 the person marked agent forms that precede the verb in object voice (the analogs of ku-, kau- and di- in contemporary Standard Indonesian) were historically prefixes or clitics, rather than free pronouns. In modern-day Malay varieties, we find considerable variation regarding which forms may appear as agent in the object voice. In conservative Kerinci varieties, as we have seen, only 1^{st} and 2^{nd} person pronouns are permitted as agents in object voice. Non-pronominal forms, as well as 3^{rd} person pronouns are not permitted in this position.

- (59) (repeating examples in 31)
 - (i) sitiy la ka timba? Siti PAST 1SG shoot.A 'Siti was shot by me.'
 - (ii) sitiy la mpAh timba? Siti PAST 2SG shoot.A 'Siti was shot by you.'
 - (iii) sitiy la *po/*ardiy timba? Siti PAST 3/Ardi shoot.A

However, unlike the construction we posit at Stage I, Kerinci does allow full (non-clitic) pronouns to occur as agents in object voice.

(60) Full pronominal agent in object voice ((a)kao is the non-clitic form of ka(h)) sitiy la (a)kao timba?
Siti PAST 1SG shoot.A
'Siti was shot by me.'

Many other varieties exhibit fewer restrictions regarding which forms can occur as agent in object voice. For example, in contemporary Indonesian, unlike European languages, first and second person nominals are not restricted to a closed, pronominal word class. Rather, in context, proper names can be used freely to refer to the speaker and addressee (examples adapted from Sneddon 1996), as seen in the following active sentences.

- (61) Proper Name Used as Second Person in active voice (Sneddon 1996:162) pak hasan mau makan sekarang?

 Mr. Hasan want eat now
 'Do you want to eat now?' (addressed to Mr. Hasan)
- (62) Proper Name used a First Person in intransitive clause (Sneddon 1996:163) dinah mau ikut
 Dinah wants come along
 'I want to come along.' (said by a girl named Dinah)

Both proper names and free pronouns are grammatical in Standard Indonesian object voice.

- (63) Object voice
 - a. buku itu sudah tini kembali-kan
 book that already Tini return-APPL
 'I already returned that book.'(said by Tini, ungrammatical if neither speaker nor addressee is Tini)
 - b. buku itu sudah **saya** kembali-kan book that already 1SG return-APPL 'I already returned that book.' (free pronoun *saya* rather than clitic *ku*-)
 - c. buku itu sudah **ku**-kembali-kan book that already 1SG-Return-APPL 'I already returned that book.' (clitic pronoun *ku*-)

These facts suggest that in contemporary, Standard Indonesian, the correct synchronic analysis is one in which *Tini*, *saya*, and *ku*- occupy a **syntactic** position to the left of the verb phrase, for example, the position of specifier of vP in some contemporary models. In other words, Standard Indonesian and (to a lesser extent) conservative Sumatran varieties like Kerinci exhibit an object voice construction in which restrictions on agents have been 'relaxed' from the earlier state of affairs, as illustrated below.

(64)
$$\begin{bmatrix} ku - \\ kau - \\ di - \end{bmatrix}$$
 Verbal-Stem Agent-Nominal

From our historical account it follows that varieties which exhibit less restrictions on the properties of object voice agents developed from an earlier, more conservative variety in which agents were clitic or affix agreement markers. Thus, we predict that varieties which allow full pronominal forms will also permit clitic pronominals. We also predict that varieties which allow full NP agents in object voice, will also permit full pronouns. As far as we know, both of these predictions are borne out: It appears to be the case that there are conservative village varieties which restrict the preverbal form to the clitic, but there are no varieties (as far as we know) in which only the full form of the pronoun is used and the clitic form is excluded. Likewise, we are not aware of any varieties in which NP agents are permitted but which do not allow full pronouns.

8. Conclusions

We would like to review what we view to be the advantages of our analysis of the origin of the *di*-passive in Malayic. First of all, our account explains why there should be a split between, on the one hand, first and second person agents, that remained arguments in modern varieties of Malayic, and third person agents that have become adjuncts. Our analysis claims that the passive developed for third person agents because only the third person was easily compatible with a clarificatory *by*-phrase, which later was reinterpreted as a passive agent, transforming the structure from an object voice construction to a passive. No similar clarificatory phrase occurs easily with first and second person agents, so no change took place for first and second person agents.

Secondly, the analysis explains why agents in the passive construction have a variety of properties typical of arguments rather than adjuncts. These are properties retained from an earlier stage in the development of the construction; in effect, archaisms.

Third, the conclusions drawn in this paper on the basis of the internal reconstruction of Malayic and the comparison of Malayic varieties are broadly compatible with comparative analyses of Western Malayo-Polynesian languages carried out by Kikusawa (2012). We shall not review the arguments presented by Kikusawa, but that work makes proposals similar to those found here to explain the relationship between passive and ergative marking in a variety of Austronesian languages. If Kikusawa's proposals are correct, it would add plausibility to the specific claims made here.

To conclude, the sequence of changes proposed here illustrates what we consider to be a plausible path toward the acquisition of a passive by a previously symmetrical voice system. To the best of our knowledge, no alternative explanations have been proposed for the seemingly chaotic list of properties associated with the passive and object voice constructions in Malayic languages. While it is possible that future alternatives to our analysis will be proposed, the current analysis at the least demarcates the grammatical characteristics of Malayic that demand explanation and proposes a series of changes that constitute a plausible historical account for the characteristics. We would like to emphasize that the study of local Sumatran Malayic varieties played a key role in our analysis. It is important to understand that there are in fact hundreds of such languages that have not been described at all. Our expectation is that if our analysis is correct, the future study of these varieties will fill in still unattested steps between object voice and passive. For instance, our analysis predicts that we might find a dialect in which nominal agents in the *di*construction have all the properties of arguments, while PP agents will be adjuncts.

Another important issue is what light Malayic can shed on other Austronesian languages spoken in Indonesia. Passive constructions with characteristics like those we have described in Malayic are found outside of Malayic (e.g. Balinese, Batak, etc.). This raises many new questions that are beyond the scope of this paper. Assuming the correctness of our analysis for Malayic, did the changes discussed here take place in Malayic or in some earlier common ancestor of the set of languages displaying Indonesian type voice systems? What is the role of language contact and grammatical borrowing in the spread of this construction? More generally, what are the consequences of these proposals for the genetic grouping of Indonesian type languages? We hope that an investigation of these questions in non-Malayic Indonesian-type languages will assist us in finding the answers to these questions.

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