Kena Passives in Indonesian: A Malaysian Perspective

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1. Introduction

Kena sentences in Malay

In our talk at ISMIL14, we studied kena constructions in Colloquial Malay and established the relation between kena passives (1a) and sentences with kena expressing obligation/non-volition (‘have to’) (1b), as a passive-active pair.

(1) a. Penyeluk saku itu kena tangkap (oleh) polis. (passive) pickpocket that KENA arrest by police ‘The pickpocket got arrested by the police.’
   b. Polis kena tangkap penyeluk saku itu. (active) police KENA arrest pickpocket that ‘The police have to arrest the pickpocket.’

We argued that

1. Kena is not a passive voice marker but a ‘funny predicate’, which gives rise to ‘funny control’ phenomenon (Gil 2002).
2. Malay employs a voice alternation that involves no overt voice morphology (‘covert voice alternation’) in kena sentences.

A dialectal difference between Malay and Indonesian

Indonesian lacks the ‘have to’ use of kena.

We would like to thank Iwan Setiya Budi, Santi, Rita and Vivi Tika Sari for providing judgements for Indonesian sentences. The research reported here was supported in part by the JSPS Grant-in-Aid for Young Scientists (B) (#23720199).

(2) Ali kena tipu wanita itu.
   Ali KENA cheat women that
   (i) M✓/✓ ‘Ali got cheated by the woman.’
   (ii) M✓/✘ ‘Ali had to cheat the woman.’

We suggested that this difference arises because kena belongs to the ‘funny predicate’ class in Malay, but not in Indonesian.

However, we left it unanswered what Indonesian kena really is, besides a transitive verb meaning ‘to hit, touch’ or ‘to incur, get’ as in (3).

(3) a. Tangan ku kena pisau tapi gak berdarah.1
   hand my touch knife but not bleed
   ‘My hand touched a knife but didn’t bleed.’
   b. “Warung-warung makan kecil bisa kena pajak,” .... 2
   stalls eat small can incur tax
   ‘Small food stalls can get taxed,’ ....

This paper proposes a principled account for this dialectal difference.

Specific question

Why do kena sentence in Indonesian lack the ‘have to’ use available in Malay?

Claims

1. In both Malay and Indonesian, kena is not a voice marker but a modal verb with a meaning like ‘forced by the circumstances’. Thus, in principle, kena is able to occur in both active and passive sentences in both dialects.
2. Kena in Malay is a ‘funny predicate’ whereas kena in Indonesian is a control verb that takes an affected external argument.
   a. Active kena sentences are ruled out in Indonesian because the PRO of an active embedded clause is not affected.
   b. Active kena sentences are available in Malay because it involves raising of a DP rather than PRO.

1 http://www.koprol.com/places/45879 (accessed 07/06/2011)
Implications
Our study has implications for the way the movement theory of control should be implemented. Specifically, it suggests that (i) the Theta Criterion should be abandoned, (ii) movement to a $\theta$-position should be allowed and (iii) PRO is necessary.

Organisation of the paper
Section 1: Introduction
Section 2: briefly reviews our talk on kena passives in Malay at ISMIL14
Section 3: proposes an analysis of why kena sentences in Indonesian lacks the “have to” use
Section 4: discusses one of the predictions of our analysis, i.e. Indonesian has covert voice alternation; examines ter- sentences
Section 5: Conclusion and implications

2. Kena passives in Malay (Kartini and Nomoto 2010; Nomoto and Kartini, under review)

Active and passive kena sentences
Kena passives have corresponding active sentences, namely sentences with kena meaning ‘have to’ as in (4a).

(4)  a. Ali kena tipu wanita itu. (active)
   Ali KENA cheat women that
   ‘Ali had to cheat the woman.’

   b. Wanita itu kena tipu oleh Ali. (passive)
   woman that KENA cheat by Ali
   ‘The woman got cheated by Ali.’

(4a) and (4b) both contain the same kena morpheme with a modal meaning like ‘regardless of the subject/speaker’s own will’, ‘pressed by external circumstances’ or ‘destined to’.

In the active, the circumstances force the subject to do something, hence he ‘has to’ to it.

In the passive, the circumstances force the subject to undergo some action, usually (but not necessarily) putting him into an adverse situation.

Kena as a ‘funny predicate’

Kena is not a passive voice marker (contra Bao and Wee 1999) or an auxiliary verb (contra Nik Safiah et al. 1993: 493), but a funny predicate, which gives rise to the funny control phenomenon as illustrated by (5).

The external argument of funny predicates (e.g. mahu ‘to want’, cuba ‘to try’) is associated with either the internal or the external argument of the passive clause they embed (Nomoto 2008, to appear).

(5)  Ali mahu/cuba di-bunuh (oleh) perompak itu.
   Ali want/try PASS-kill by robber that
   (i) ‘Ali wanted/attempted to be killed by the robber.’ (normal control reading)
   (ii) ‘The robber wanted/attempted to kill Ali.’ (crossed reading)

(6)  a. Normal control reading (5i)
   Ali               robber
   ‘wanter/tryer’   ‘catchee’   ‘catcher’

b. Crossed reading (5ii)
   Ali               robber
   ‘wanter/tryer’   ‘catchee’   ‘catcher’

Funny predicates are restricted to a certain class of predicates (Nomoto 2008, to appear).

- Semantically, their meanings have to do with modality which express (i) psychological attitudes (e.g. mahu ‘to want’, cuba ‘to try’) or (ii) external circumstances that affect the realisation of a situation (e.g. layak ‘qualified’).

- Morphologically, funny predicates are either affixless or contain the prefixes ber- or ter-.

Kena meets both of these characterisations.

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3 The terms ‘normal control reading’ and ‘crossed reading’ are used by Polinsky and Potsdom (2008).
The syntax of funny control sentences

Funny predicates take a reduced clause (vP) as their complements (Nomoto 2008, to appear). Thus, the structure of funny control sentences is as shown in (7).

(7) The structure of funny control sentences

\[
TP \\
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<table>
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<tbody>
<tr>
<td>DP</td>
<td>T</td>
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<tr>
<td></td>
<td>vP</td>
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<td></td>
<td>VP</td>
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<td></td>
<td>V</td>
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<tr>
<td></td>
<td>vP</td>
</tr>
<tr>
<td></td>
<td>TP</td>
</tr>
<tr>
<td>funny predicate</td>
<td>vP</td>
</tr>
</tbody>
</table>

Funny control constructions involve DP movement. This is supported by the fact that the ambiguity between a normal control reading and a crossed reading disappears when the funny predicate is prefixed by meN-, which is known to block DP movement (Saddy 1991; Soh 1998; Cole and Hermon 1998).

(8) Ali men-cuba di-bunuh (oleh) perompak itu. cf. (5)

Ali MEN-try PASS-kill by robber that
(i) ‘Ali tried to be killed by the robber.’ (normal control reading)
(ii) *‘The robber tried to kill Ali.’ (crossed reading)

The structure of (8) is (9b) rather than (9a).

(9) a. Ali men-cuba [vP t\_ dibunuh (oleh) perompak itu].

b. Ali men-cuba [CP [TP PRO\_ dibunuh (oleh) perompak itu]].

Kena ≠ voice marker

Kena is not a passive voice marker because it may co-occur with the morphological active marker meN- and the morphological passive marker di-.5

(10) a. Polis kena [vP men-[t]angkap penyeluk saku itu].

police KENA ACT-arrest pickpocket that
‘The police have to arrest the pickpocket.’

b. Penyeluk saku itu kena [vP di-tangkap oleh polis].

pickpocket that KENA PASS-arrest by police
‘The pickpocket got arrested by the police.’

Kena also occurs in bare active and bare passive sentences.

(11) a. Aku kena [vP Ø ACT tembak monyet- monyet liar itu].

I KENA shoot monkeys wild that
‘I had to shoot the wild monkeys’.

b. Monyet-monyet liar itu kena [vP aku Ø PASS tembak].

monkeys wild that KENA I shoot
‘The wild monkeys got shot by me. I had to shoot the wild monkeys’.

Covert voice alternation

Since kena is not a passive marker, there is no overt voice marker in kena sentences.6 In other words, the voice alternation involved in kena active and passive sentences is covert.

(12) Covert voice alternation in kena sentences

a. Active

DP_{ext} kena [vP Ø_{ACT} [vP V DP_{int} ]]

b. Passive

DP_{int} kena [vP Ø_{PASS2} [vP V] (oleh) DP_{ext} ]

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4 Nomoto (2010, under review) and Soh (2010) suggest that meN- may not be an active voice marker. Whether or not meN- is an active voice marker is not crucial to our claim because kena also occurs in bare active sentences in Malay.

5 Some speakers do not accept kena sentences with the morphological passive marker di-.

6 when kena is not followed by morphological voice markers.
(13) a. Ali kena [v\_P Ø tipu wanita itu]. (active) 
   ‘Ali had to cheat the woman.’

   woman that KENA cheat by Ali 
   ‘Ali got cheated by the woman.’

Ø ACT in (13a) is the null voice marker in the bare active. 

Given the word order and the optionality of oleh ‘by’ (phrase), ØPASS2 in (13b) is not the null voice marker in the bare passive but a phonologically null allomorph of di- in the morphological passive.

Remaining issue 

In addition to participating in the adversative passive construction, kena is also used to express obligation/non-volition (‘have to’) in Malay, but not in Indonesian:

(14) Ali kena tipu wanita itu. 
   Ali KENA cheat women that 
   (i) \[M\check{\alpha}\check{\beta}\] ‘Ali got cheated by the woman.’ 
   (ii) M\check{\alpha}\check{\beta} ‘Ali had to cheat the woman.’

(15) a. DP\_i[α] … PROC\_i[α] (same feature value) 
   b. *DP\_i[α] … PROC\_i[−α] (different feature values) 
   c. *DP\_i[α] … PROC\_i (PRO lacks the relevant feature) 
   d. *DP\_i … PROC\_i[α] (controller lacks the relevant feature)

(16) a. They\_Y[PL] tried [PROC\_i[PL] to gather at the Union Square]. 
   b. *She\_i[−PL] tried [PROC\_i[PL] to gather at the Union Square]. 
   c. *I wanted the sky\_i[0] [PROC\_i to rain]. cf. I wanted it\_i [PROC\_i to rain]. 
   d. *I wanted PROC\_i [the sky\_i[0] to rain]. 
   (= a backward control equivalent of (c))

The semantic feature relevant to kena sentences is thought to be related to affectedness. The subject of kena passives is usually adversely affected (Koh 1990; Bao and Wee 1999; Chung 2005).

Beavers (2011) distinguishes four levels of affectedness based on how specific a predicate specifies the change undergone by the theme.

(17) The Affectedness Hierarchy (Beavers 2011)

<table>
<thead>
<tr>
<th>A. Quantized change</th>
<th>B. Non-quantized change</th>
<th>C. Potential for change</th>
<th>D. Unspecified for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>accomplishments/achievements</td>
<td>degree achievements/cutting</td>
<td>surface contact/impact</td>
<td>other activities/states</td>
</tr>
<tr>
<td>(break, shatter)</td>
<td>(widen, cool, cut)</td>
<td>(wipe, hit)</td>
<td>(see, smell)</td>
</tr>
</tbody>
</table>

Q: Why do kena sentences in Indonesian lack the ‘have to’ use?

3. Kena passives in Indonesian

3.1 Proposal

Kena in Indonesian is not a funny predicate but a control verb that takes an affected ([+AFF]) external argument.

Assumption: In a control structure, the controller and the controllee must be semantically coherent.
We posit that in each clause the [+AFF] index is given to a DP that has ‘potential for change’ or undergoes actual change, i.e. A–C in (17).

(18) a. Wanita itu men-[t]ipu Ali; woman that ACT-cheat Ali
   ‘The woman cheated Ali.’
b. Ali [t+AFF]; di-tipu oleh wanita itu. Ali PASS-cheat by woman that
   ‘Ali got cheated by the woman.’

Why *kena* sentences in Indonesian lacks the ‘have to’ use
*Kena* can embed a passive clause. Both PRO and its controller have [+AFF]. cf. (15)

(19) Passive

*Ali [t+AFF]; kena [CP [TP PRO [t+AFF] ØPASS2 tipu oleh wanita itu]].

*Ali KENA cheat by woman that
   ‘Ali got cheated by the woman.’

However, *kena* cannot embed an active clause. While the controller has [+AFF], PRO lacks it. cf. (15)

(20) Active

*Ali [t+AFF]; kena [CP [TP PRO ØACT tipu wanita itu [t+AFF]]].

*Ali KENA cheat woman that

This explains why *kena* sentences in Indonesian *kena* do not have the ‘have to’ use.

3.2 Predictions of our analysis

(21) The structure of *kena* passives in Indonesian cf. Malay (7)

This structure makes the following three predictions:

- **Prediction 1**: The morphological passive marker *di-* can occur in *kena* passives because ØPASS2 is the covert variant of *di-* (section 2).
- **Prediction 2**: Because ØPASS2 is available in *kena* passives, it should be also available in other constructions, giving rise to covert voice alternation.
- **Prediction 3**: Overt C/T elements may occur in *kena* passives.
3.3 Prediction 1: kena di-

It is very easy to find examples in which *kena* and *di-* co-occur.

(22) a. “Aduh sakit, bibir ku *kena di-*pukul sama polisi,” kata Uci.7 ouch hurt lip my KENA PASS-hit by police say Uci “Ouch! My lips got hit by the police,” said Uci.
b. Dia *kena di-*tipu oleh se-orang yang mengaku mewakili he KENA PASS-cheat by one-CLF that admit represent Tumenggung.8 Tumenggung ‘He got cheated by a man who admitted to represent Tumenggung.’

This fact cannot be accounted for by the alternative analysis in which *kena* is analysed as a passive voice marker as in (23). Under such an analysis, *kena* and *di-* will compete for the same structural position, i.e. v.


3.4 Prediction 3: Overt C/T elements

We found examples in which *untuk* ‘for/to’ occurs in *kena* passives. However, our consultants judged them odd. The sentences improve if *untuk* is removed.

(24) a. Siapa-kah yang paling mudah/ berpotensi *kena untuk* who-Q that most easy have.potential KENA to/for di-brainwash?9,10 PASS-brainwash ‘Who are the people who are the easiest or have the highest potential to get brainwashed?’

Indonesian has a null C/T element that alternates with *untuk*.

(25) Saya men-coba *untuk/Ø* merokok Dji Sam Soe. I ACT-try to smoke Dji Sam Soe ‘I tried to smoke Dji Sam Soe cigarette.’ (Sneddon 1996: 295)

Sneddon (1996: 295) notes that *untuk* rarely occurs following some main verbs, such as mencoba ‘try’. *Kena* is thought to be one of such main verbs, though its co-occurrence with *untuk* is much rarer than mencoba.

4. Prediction 2: Covert voice alternation

4.1 Covert voice alternation

*Kena* sentences in Malay exhibit covert voice alternation (section 2).

(26) a. Ali *kena [vP Ø[ACT] [VP tipu wanita itu]].* (active) Ali KENA cheat woman that ‘Ali had to cheat the woman.’

10 The same author also uses the expression without *untuk*, i.e. *berpotensi di-brainwash*, in the same article.

Covert voice alternation is also involved in accidental *ter*-sentences in Malay.

(27) a. Polis ter-[\[VP ØACT [VP tangkap lelaki itu]]. (active)
   ‘The police arrested the man by mistake.’
   
   b. Lelaki itu ter-[\[VP ØPASS [VP tangkap] (oleh) polis]]. (passive)
   ‘The man was mistakenly arrested by the police.’

4.2 Is there covert voice alternation in *ter*-sentences in Indonesian?

4.2.1 Three functions of *ter*- 

The prefix *ter-* has multiple functions (Sneddon 1996; Alwi et al. 1998). They can be classified into the following three categories:

1. **Accidental** (‘non-volitional’ (Arka and Manning 1998); ‘unintentional or nonvolitional completion’ (Mintz 2002); ‘unvoluntary action’ (Polinsky and Postdam 2008); ‘unintentional actions’ (Goddard 2003))
2. **Result state** (‘stative’ (Sneddon 1996); ‘completed state’ (Mintz 2002); ‘adjectival passive’ (Soh 1994))
3. **Abilitative** (‘ability/possibility’ (Arka and Manning 1998)).

(28) Accidental

Latif ter-tidur di kelas.
Latif TER-sleep at class
‘Latif fell asleep in class.’

(29) Result state

Patung dewa itu ter-buat dari emas.
statue god that TER-make from gold
‘The statue of the god was made from gold.’

(30) Abilitative

Mobil semahal itu tidak ter-beli oleh saya.
car as.expensive.as that not TER-buy by me
‘I can’t afford a car as expensive as that.’

4.2.2 Previous remarks on *ter*-sentences in Indonesian

Sneddon (1996) 
Arguments are aligned as in passive sentences in all types of *ter*-sentences in Indonesian.

Transitive accidental verbs are passive. (p. 114)
All abilitative constructions are transitive and passive. (p. 116)
All stative *ter*-verbs correspond to basic passive verbs …. (p. 113)

Sneddon admits one exception:

The verb *teringat* ‘remember, recall (suddenly)’ is exceptional in a number of ways. … It allows an active clause structure, … (p. 116)

(31) a. Saya ter-ingat akan keluarga saya.
    I TER-remember about family my
    ‘I suddenly thought of my family.’

b. Keluarga itu ter-ingat oleh saya.
    family that TER-remember by me
    ‘I suddenly thought of my family.’

(Sneddon 1996: 116)

(31a) is intransitive, unlike active *ter*-sentences like (27) in Malay, which are transitive.

Alwi et al. (1998) 

The prefix *ter*- is compared to the morphological passive prefix *di*-.

Verbs prefixed by *ter*- are generally closely related to verbs prefixed by *di*.

12 Examples

<table>
<thead>
<tr>
<th>Verbs prefixed by <em>ter</em>-</th>
<th>Verbs prefixed by <em>di</em>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>membawa</td>
<td>dibawa</td>
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<tr>
<td>mengungkapkan</td>
<td>diungkapkan</td>
</tr>
<tr>
<td>memenuhi</td>
<td>dipenuhi</td>
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</tbody>
</table>

(pp. 130–131)

12 The original passage in Indonesian: Verba yang berprefiks *ter*- pada umumnya erat berkaitan dengan verba yang berprefiks *di*.-
If an active sentence is changed into a passive one and that passive sentence contains a meaning that the action described by the verb is accidental in nature, then the prefix to be used for the verb is not \textit{di-} but \textit{ter-}.\(^{13}\) (p. 348)

It is safe to say that they regard \textit{ter-} as a passive voice marker. All examples given by them follow the passive argument alignment pattern.

If all \textit{ter-} sentences in Indonesian are “passive” (i.e. do not exhibit voice alternation), \textit{ter-} is best analysed as an intransitive marker/intransitiviser with modal/aspectual semantics similar to the suffix -\textit{e} in Japanese.\(^3\)

\begin{align}
\text{Transitive} & \quad \text{Intransitive}^{14} \\
\text{mi-ru ‘to look at’} & \quad \text{mi-e-ru ‘(can) be seen’} \\
\text{tur-u ‘to fish’} & \quad \text{tur-e-ru ‘(can) be fished’} \\
\text{war-u ‘to break’} & \quad \text{war-e-ru ‘(can) be broken’}
\end{align}

Then, there is no reason to posit \(\mathcal{O}_{\text{PASS}}2\) in \textit{ter-} sentences in Indonesian unlike Malay. This means that \textit{kena} passives are the only place where \(\mathcal{O}_{\text{PASS}}2\) occurs, which makes our analysis somewhat stipulative.

However, Mintz (2002) provides examples of active \textit{ter-} sentences that are transitive:

\begin{enumerate}
\item a. Sofiah ter-pijak kaki saya ketika kami naik bis.
\item b. Anak Hamid ter-telan benda-benda yang kotor.
\end{enumerate}

\begin{enumerate}
\item a. Sofiah \textit{TER-step} foot \textit{my} while \textit{we} \textit{get.on bus} ‘Sofiah stepped on my foot while we were getting on the bus.’
\item b. Child Hamid \textit{TER-swallow} things that dirty ‘Hamid’s child swallowed some things that were dirty.’
\end{enumerate}

(Mintz 2002: 199)

Transitive examples are only given for the accidental use. The examples for the result state and abilitative uses are all intransitive (“passive”).

If Sneddon’s (1996) description is correct, sentences like (33) should be ungrammatical; they must be intransitivised (“passivised”) as follows:

\begin{enumerate}
\item a. Kaki saya ter-pijak oleh Sofiah ketika kami naik bis. foot my \textit{TER-step} by Sofiah while \textit{we} \textit{get.on bus} ‘My foot was stepped on by Sofiah while we were getting on the bus.’
\item b. Benda-benda yang kotor ter-telan oleh anak Hamid. things that dirty \textit{TER-swallow} by child Hamid ‘Some things that are dirty were swallowed by Hamid’s child.’
\end{enumerate}

Alwi et al. (1998) do not say whether or not sentences like (33) are grammatical.

A positive answer to this questions means that \textit{ter-} sentences in Indonesian also shows covert voice alternation, which in turn confirms the presence of \(\mathcal{O}_{\text{PASS}}2\) employed in our analysis of \textit{kena} passives.

\begin{tabular}{|c|}
\hline
\textbf{Q: Are transitive active \textit{ter-} sentences grammatical in Indonesian?} \\
\hline
\end{tabular}

\(^{13}\) The original passage in Indonesian: Jika kalimat aktif diubah menjadi kalimat pasif dan dalam kalimat pasif itu terkandung pula pengertian bahwa perbuatan yang dinyatakan oleh verba itu mengandung unsur yang tak sengaja, maka bentuk prefiks yang dipakai untuk verba bukan \textit{dir-}, melainkan \textit{ter-}.

\(^{14}\) Note that the transitivity alternation in Japanese is in fact much more complex. The pattern shown here is only one of the many attested patterns. See Jacobsen (1992) for details.
4.2.3  Transitive active ter- sentences in actual use

We searched the Internet for examples of transitive active clauses with ter- and found many instances of them, some of which are given below (and Appendix A):15,16

(35) Kemungkinan gajah juga memasuki perladangan mereka dan ter-makan racun yang di-tebar masyarakat tadi, kata Fadli. 17

TER-eat poison that PASS-spread society past say Fadli

‘Maybe the elephant also entered their field and accidentally ate the poison spread over by the people there, said Fadli.’

We used the following two criteria in discerning transitive ter- clauses from intransitive ones: (i) a passive sentence formed based on the sentence is grammatical; (ii) the same sentence without ter- (or with meN- instead of ter-) is well-formed. For examples, gajah [...] termakan racun [...] ‘The elephant ate the poison by accident’ in (35) is considered as a transitive active clause because the following sentences are well-formed: (i) Racun termakan oleh gajah ‘The poison was accidentally eaten by the elephant’; (ii) Gajah makan racun ‘The elephant ate the poison’.

A clause with no overt DP before the ter- verb is tricky because it could be analysed in two ways, i.e. either as a transitive active clause that lacks an overt subject (due to coordination, relativisation, etc.) or an intransitive (“passive”) clause in which the sole argument of the verb occurs postverbally. Only in the latter case can one insert an oleh ‘by’ agentive phrase after the ter- verb. Consider (i) below:

(i) Pasalnya beberapa hari Agnes tidak ter-lihat, dan tiba-tiba ter-cium the.reason several day Agnes not TER-look and suddenly TER-smell bau menyengat dari kamar gadis tersebut.

oder acrid from room girl mentioned

‘The reason was because Agnes had not been seen for several days and suddenly an acrid odor could be smelled from the girl’s room.’


As indicated in the translation in English, the italicised clause is intransitive. The agent of tercium ‘to smell, sniff out’ is not Agnes in the same sentence but warga sekitar ‘nearby residents’ in the previous sentence. Thus one can insert oleh warga sekitar ‘by nearby residents’ after tercium.

(36) ...., rupanya penyebab-nya adalah “si pemuda telah ter-minum susu apparently cause-its is youth PERF TER-drink milk kadaluarsa”18 expired

‘...., apparently the reason was because “the young man drank expired milk without knowing it”’

(37) Di Amerika, separuh dari kasus anak ter-telan koin harus at America, half from case child TER-swallow coin must di-tangani di ruang UGD, kata James S. Reily, M.D., ....19

PASS-handle at emergency.room say James S. Reily, M.D.

‘In the U.S., half of the cases where children have accidentally swallowed a coin have to be handled at emergency rooms, said James S. Reily, M.D., ....’

(38) Kemarin gw sempat ter-nonton salah satu episode nya yesterday I still.be.able.to TER-watch one.of episode POSS oprah tentang umr.20

Oprah about regional.minimum.wage

‘Yesterday I could watch one of the Oprah episodes about the regional minimum wage (though I didn’t plan to).’

(39) Jika saat makan, baju kesayangan anda ter-ciprat kuah soto if time eat shirt favourite your TER-splash soup soto berbahan dasar kunyit atau ter-kena air saat minum, with.material base turmeric or TER-hit drink time drink segera bersihkan pakaian dari noda tersebut.... 21 immediately clean clothes from stain mentioned

‘If your favourite shirt gets splattered with soto soup using turmeric as a basic ingredient when you are eating or if it gets drink on it when you are drinking, immediately clean the stain off your clothes.’

15 We used the following two criteria in discerning transitive ter- clauses from intransitive ones: (i) a passive sentence formed based on the sentence is grammatical; (ii) the same sentence without ter- (or with meN- instead of ter-) is well-formed. For examples, gajah [...] termakan racun [...] ‘The elephant ate the poison by accident’ in (35) is considered as a transitive active clause because the following sentences are well-formed: (i) Racun termakan oleh gajah ‘The poison was accidentally eaten by the elephant’; (ii) Gajah makan racun ‘The elephant ate the poison’.
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(i) Pasalnya beberapa hari Agnes tidak ter-lihat, dan tiba-tiba ter-cium the.reason several day Agnes not TER-look and suddenly TER-smell bau menyengat dari kamar gadis tersebut.

oder acrid from room girl mentioned

‘The reason was because Agnes had not been seen for several days and suddenly an acrid odor could be smelled from the girl’s room.’


We asked four speakers of Indonesian whether/how the sentences above and their variants with a passivised ter- clause sounded natural.  

(40) **Results**

a. Active: ‘DP1 ter-V DP2’

<table>
<thead>
<tr>
<th>sentence [verb]</th>
<th>Speaker 1</th>
<th>Speaker 2</th>
<th>Speaker 3</th>
<th>Speaker 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(35) [termakan]</td>
<td>OK</td>
<td>?</td>
<td>?</td>
<td><strong>?</strong></td>
</tr>
<tr>
<td>(36) [terminum]</td>
<td>OK</td>
<td>*?</td>
<td>?</td>
<td><strong>?</strong></td>
</tr>
<tr>
<td>(37) [tertelan]</td>
<td>OK</td>
<td>?</td>
<td>*?</td>
<td><strong>?</strong></td>
</tr>
<tr>
<td>(38) [ternonton]</td>
<td>OK</td>
<td>OK</td>
<td>*?</td>
<td>OK</td>
</tr>
<tr>
<td>(39) [terciprat]</td>
<td>OK</td>
<td>?</td>
<td>OK</td>
<td>?</td>
</tr>
<tr>
<td>(39) [terkena]</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>?</td>
</tr>
</tbody>
</table>

b. Passive: (a) ‘DP2 ter-V oleh DP1’, (b) ‘ter-V oleh DP1 DP2’

<table>
<thead>
<tr>
<th>sentence [verb]</th>
<th>Speaker 1</th>
<th>Speaker 2</th>
<th>Speaker 3</th>
<th>Speaker 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(35) [termakan]</td>
<td></td>
<td>– *</td>
<td>– OK</td>
<td>– OK</td>
</tr>
<tr>
<td>(36) [terminum]</td>
<td>*?</td>
<td>OK</td>
<td>*?</td>
<td>OK</td>
</tr>
<tr>
<td>(37) [tertelan]</td>
<td>*?</td>
<td>OK</td>
<td>*?</td>
<td>OK</td>
</tr>
<tr>
<td>(38) [ternonton]</td>
<td>– * –</td>
<td>– OK –</td>
<td>– OK –</td>
<td>– OK –</td>
</tr>
<tr>
<td>(39) [terciprat]</td>
<td>– – –</td>
<td>– – –</td>
<td>– – –</td>
<td>– – –</td>
</tr>
<tr>
<td>(39) [terkena]</td>
<td>*? *? *?</td>
<td>OK OK OK</td>
<td>*? *? OK</td>
<td>*? OK ?</td>
</tr>
</tbody>
</table>


c. Symbols

OK: correct and suitable (“betul dan cocok”)

?: correct but less suitable (“betul tetapi kurang cocok”)

*?: comprehensible but strange (“bisa dipahami tetapi ganjil”)

*: incorrect (“salah”)

- Speaker 1 preferred the active pattern to the passive pattern. The other speakers preferred the passive pattern, but they also accepted the active pattern for some examples.
- Covert voice alternation is observed for Speakers 2–4 (indicated by shading).

Thus, Indonesian also has transitive active ter- sentences (i.e. ter- sentences with \( \text{O}_{\text{ACT}} \)) and covert voice alternation (i.e. alternation between sentences with \( \text{O}_{\text{ACT}} \) and \( \text{O}_{\text{PASS}} \)). Therefore, Prediction 2 is borne out.

While \( \text{O}_{\text{ACT}} \) in ter- sentences is widely available in Malay, it is strictly constrained in Indonesian (except for Speaker 1), paralleling the situation of kena sentences.

5. **Conclusion and implications**

5.1 **Summary**

- *Kena in kena passives is not a passive marker but a modal verb in both Malay and Indonesian. Specifically, it is a funny predicate in Malay and a control verb in Indonesian.*
- *Kena can embed a passive clause but not an active one because the PRO in the embedded clause and its controller are semantically coherent only in the former. This is why kena sentences in Indonesian lack the ‘have to’ use.*

(41) **Malay**

a. Ali kena [\( \text{VP}_{\text{tipu wanita itu}} \)] (active)

Ali KENA cheat woman that ‘Ali had to cheat the woman.’

b. Wanita itu kena [\( \text{VP}_{\text{tipu oleh Ali}} \)] (passive)

woman that KENA cheat by Ali ‘Ali got cheated by the woman.’

(42) **Indonesian**

a. *Ali \( \text{I}_{\text{AFF}} \) kena [\( \text{VP}_{\text{tipu wanita itu}} \)] (active)

Ali KENA cheat woman that ‘Ali got cheated by the woman.’

b. Ali \( \text{I}_{\text{AFF}} \) kena [\( \text{VP}_{\text{tipu oleh wanita itu}} \)] (passive)

Ali KENA cheat by woman that ‘Ali got cheated by the woman.’

---

22 The questionnaire used for this purpose is given in Appendix B.
23 The places of origin of the speakers are as follows: Lampung (Speaker 1), Medan (Speaker 2), Semarang (Speaker 3), Jakarta (Speaker 4).
24 Some speakers had not heard the word form ternonton. The word was substituted by tertonton or terlihat for these speakers.
Our study has shown that a comparative study between Malay and Indonesian can engender questions that will never be asked if one looks at only of them, and that it can offer new insights to the analysis of both languages.

5.2 Implications for the theory of raising and control

5.2.1 A review of the traditional view of raising and control

Raising and control constructions refer to two similar but distinct constructions with infinitival embedded clauses as in (43).

Traditionally, the two constructions are assumed to have different structures as shown in (44): raising involves DP movement of the embedded subject to the matrix subject position whereas control involves two co-referential DPs, i.e. an overt subject and a PRO.

(43) a. Ali seemed to understand the syntax class. (raising)
    b. Ali tried to understand the syntax class. (control)

(44) a. Alii seemed \[\text{TP} t i\] to understand the syntax class]. (raising)
    b. Ali tried \[\text{CP PRO} t\] to understand the syntax class]. (control)

The structural difference as shown in (44) is posited to capture a crucial difference between raising and control predicates (45) in a manner that complies with the Theta Criterion (46).

(45) Raising verbs do not take a thematic subject while control verbs do.
    (= Raising verbs do not assign an external \(\theta\)-role while control verbs do.)

(46) The Theta Criterion
    Each argument bears one and only one \(\theta\)-role, and each \(\theta\)-role is assigned to one and only one argument.

Several differences reported between raising and control sentences follow from (45).

Difference 1: Pleonastic subjects
Raising allows pleonastic subjects (e.g. \textit{it}, \textit{there}) whereas control does not.

(47) Raising
    a. Ali seemed to understand the syntax class.
    b. It seemed that Ali understood the syntax class.

(48) Control
    a. Ali tried to understand the syntax class.
    b. *It tried that Ali understood the syntax class.

Difference 2: Selectional restrictions
Only control verbs, but not raising verbs, impose selectional restrictions on the subject.

(49) Raising
    a. The rock seems to be granite. (Davies and Dubinsky 2004: 6)
    b. The doctor tried to examine Siti.

(50) Control
    a. The old manuscript see \textit{med} to have been read by Ali.
    b. The old manuscript seemed to have been read by Ali.

Difference 3: Embedded passives
In raising, sentences with a passive complement and the same sentence with an active complement are truth-conditionally equivalent whereas in control, they are not.

(51) Raising: (a) = (b)
    a. Ali seemed to have read the old manuscript.
    b. The old manuscript seemed to have been read by Ali.

(52) Control: (a) \neq (b)
    a. The doctor tried to examine Siti.
    b. Siti tried to be examined by the doctor.


**Difference 4: Idiom chunks**

In raising, idiomatic expressions are ambiguous between an idiomatic reading and a literal reading, whereas in control, the idiomatic meaning is lost.

(52) Raising

The cat seemed to be out of the bag.
(i) *the cat* = a feline (literal reading)
(ii) *the cat* = a secret (idiomatic reading)

(53) Control

The cat tried to be out of the bag.
(i) *the cat* = a feline (literal reading)
(ii) *the cat* = a secret (idiomatic reading)

5.2.2 PRO and the Movement Theory of Control (MTC)

It is nowadays common to treat not only raising but also (obligatory) control as involving DP movement (= movement theory of control; MTC) (Hornstein 1999; Davies and Dubinsky 2008; Boeckx et al. 2010; Hornstein and Polinsky 2010).

MTC analyses assume the copy theory of movement (Chomsky 1993), where movement creates copies of an element and only one of them is pronounced.

There are at least three versions of the MTC.

(54) PRO-free theory (e.g. Hornstein 1999)

\[ \text{Ali} \ [\text{PAST}] \ [\\_\_ \text{Ali} \ \text{v} \ \text{try} \ [\text{Ali} \ \text{to} \ [\_\_ \text{Ali} \ \text{understand} \ \text{the} \ \text{syntax} \ \text{class}]]] \]

a. Theta Criterion: no
b. Movement to a θ-position: yes
c. PRO: no (PRO is simply a residue of A-movement.)

(55) PRO theory (e.g. Chomsky and Lasnik 1993)

\[ \text{Ali} \ [\text{PAST}] \ [\_\_ \text{Ali} \ \text{v} \ \text{try} \ [\_\_ \text{PRO} \ \text{understand} \ \text{the} \ \text{syntax} \ \text{class}]]] \]

a. Theta Criterion: yes
b. Movement to a θ-position: no
c. PRO: yes

(56) Doubling theory (e.g. Rodorigues 2008)

\[ \text{Ali} \ [\text{PAST}] \ [\_\_ \text{Ali} \ \text{v} \ \text{try} \ [\_\_ \text{Ali-DP} \ \text{understand} \ \text{the} \ \text{syntax} \ \text{class}]]] \]

a. Theta Criterion: yes
b. Movement to a θ-position: yes
c. PRO: yes (?)

Our analysis of *kena* sentences in Malay and Indonesian suggests that PRO is necessary. It thus supports the PRO theory (55) and the doubling theory (56).

- **Reason 1**: PRO is involved in *kena* passives in Indonesian.
- **Reason 2**: The presence/absence of PRO accounts for the difference between *cuba* ‘to try’ and *mencuba* ‘to meN-try’.

(57) Ali *cuba* di-bunuh (oleh) perompak itu.

Ali try PASS-kill by robber that
(i) ‘Ali tried to be killed by the robber.’ (normal control reading)
(ii) ‘The robber tried to kill Ali.’ (crossed reading)

(58) Ali *cuba* [\_\_ \text{Ali} \ [\_\_ \text{perompak} \ \text{itu} \ [\_\_ \text{dibunuh} \ \text{Ali}]]].

(59) Ali *men-cuba* di-bunuh (oleh) perompak itu.

Ali ME N-try PASS-kill by robber that
(i) ‘Ali tried to be killed by the robber.’ (normal control reading)
(ii) ‘The robber tried to kill Ali.’ (crossed reading)

(60) Ali *men-cuba* [\_\_ \text{PRO} \ [\_\_ \text{perompak} \ \text{itu} \ [\_\_ \text{dibunuh} \ \text{PRO}]]] [\_\_ \text{PRO}].

(locality violation)

---

26 See Nomoto (2008, to appear) for several possible analyses of the post-verbal linearisation of the agent phrase.
However, our analysis adopts Nomoto’s (2008, to appear) analysis of the funny control construction, which does not assume the Theta Criterion (cf. (ii) in (58a)) and allows movement to a θ-position (cf. movement of Ali to the matrix Spec, vP in (58a)).

In sum, the Theta Criterion should be abandoned and movement to a θ-position should be allowed. However, this does not mean that PRO is unnecessary.

(61) The version of MTC compatible with our analysis
   a. Theta Criterion: no
   b. Movement to a θ-position: yes
   c. PRO: yes

With the presence of PRO, control does not fully reduce to A-movement to a θ-position. Malay/Indonesian has (at least) three types of constructions/predicates. The funny control construction constitutes the third type, which can be described as ‘raising to a θ-position’ or ‘control with movement/raising’.

(62)

<table>
<thead>
<tr>
<th>construction</th>
<th>A-movement</th>
<th>external θ-role</th>
<th>e.g.</th>
</tr>
</thead>
<tbody>
<tr>
<td>raising (traditional)</td>
<td>yes</td>
<td>no</td>
<td>kelihatan ‘to appear’</td>
</tr>
<tr>
<td>funny control</td>
<td>yes</td>
<td>yes</td>
<td>mahu/mau ‘to want’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cuba/coba ‘to try’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>kena (Malay)</td>
</tr>
<tr>
<td>control (traditional)</td>
<td>no</td>
<td>yes</td>
<td>berharap ‘to hope’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mencuba/mencoba ‘to try’,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>kena (Indonesian)</td>
</tr>
</tbody>
</table>

5.2.3 The development of various uses of kena

As the funny control construction shares features with both traditional raising and control as shown in (62), our analysis suggests a natural course of development of the various attested uses of kena:

(63) The development of various uses of kena

<table>
<thead>
<tr>
<th></th>
<th>STAGE</th>
<th>SYNTAX</th>
<th>SEMANTICS</th>
<th>CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>physical contact</td>
<td>kena DP &lt;Goal, Theme&gt;</td>
<td>ordinary transitive</td>
<td>↓ semantic change (domain shift)</td>
</tr>
<tr>
<td></td>
<td>‘to hit, touch’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>abstract contact ‘to get; to incur’</td>
<td>kena DP &lt;Goal/Experiencer, Theme/Event&gt;</td>
<td>ordinary transitive</td>
<td>↓ syntactic change (clausal complement)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>(adversative) passive ‘get V-ed’</td>
<td>kena CP &lt;Experiencer, Event&gt;</td>
<td>traditional control</td>
<td>↓ syntactic change (movement)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>(adversative) passive ‘get V-ed’ &amp; debitive ‘have to V’</td>
<td>kena vP &lt;Experiencer, Event&gt;</td>
<td>funny control</td>
<td></td>
</tr>
</tbody>
</table>

The change from (c) to (d) is facilitated by the availability of covert voice alternation. Hence, it took place in Malay, but not in Indonesian.

5.3 Remaining issues

5.3.1 [+AFF]

We used the index [+AFF] to account for why kena in Indonesian cannot embed an active clause. However, its theoretical status is not very clear.

Many researchers have pointed out the relevance of ‘affectedness’ to thematic roles.

Dowty (1991) makes use of the notion to define the Agent and Patient Proto-Roles.

Is [+AFF] a θ-feature? If so, does [+AFF] trigger movement?

Jackendoff (1990: ch. 7) proposes a function related to affectedness, i.e. AFF. The Actor and Patient/Beneficiary roles are respectively defined as the first and the second argument of this function. AFF comes in three flavours: AFF+ (positively affect), AFF− (negatively affect) and AFF0 (non-opposition).

We treated [+AFF] like a privative feature. Is this justified? Should we distinguish different types of affectedness as Jackendoff does?
Bosse et al. (to appear) posit a special functional head concerning the relation between an event and the experiencer affected by that event.

→ How is the [+AFF] index assigned? Is it assigned by particular verbs? Is its assignment determined structurally?

5.3.2 Active ter- sentences in Indonesian

In section 4.2.3, we confirmed that transitive active ter- sentences are actually used and accepted by the speakers. However, at the same time, we also found variations among speakers and sentences with regard to their acceptability.

→ What factors govern these variations? Are they related to speakers’ dialects, particular constructions (e.g. relative clauses, word order) or meaning (e.g. verbs of digestion, hitting, etc.)

Appendices

Appendix A. Transitive active ter- sentences in Indonesian from the Internet

1. bu, mandi tiap hari pake antiseptik apa tidak menyebabkan kulit bayi jadi kering? dan bayi yang terminum air antiseptik tidak pernah diare?
   (http://www.ayahbunda.co.id/diskusi/Lihat/230/10)
2. Karena dimata saya mereka terminum ANGGUR.
   (http://achmadmohyimadura.staff.umm.ac.id/2011/01/28/saya-dengar-mandinya-basah-tapi-nescafe/)
   (http://sumekeS.co.id/index2.php?option=com_content&do_pdf=1&id=5894)
5. Dengan mug ini para pecinta teh dan kopi tidak perlu takut terminum amapsnya.
   (http://smallidea.wordpress.com/2010/08/16/cangkir-mug-kreatif-2/)
7. Penyebab kematian satu keluarga menurut polisi diduga karena terminum air menerah salah satu merek yang diduga mengandung zat berbahaya.

Appendix B. Questionnaire

Kuesioner 1 [Bahasa Indonesia]

Tolong pilih satu frase yang paling cocok untuk mengisi tempat kosong dalam kalimat di bawah. Kemudian jawab tentang setiap pilihan dengan frase yang paling cocok.

2. Tak cuma itu, ban mobilnya pun kempes terkena paku.
3. Pasalnya, dia terkena sabetan pedang di tangan dan punggungnya.
   (http://news.okezone.com/topic/read/1874/14)
C susu kadaluarsa telah terminum oleh si pemuda

   A anak tertelan koin
   B tertelan oleh anak koin
   C koin tertelan oleh anak

   A gw sempat ternonton
   B sempat gw ternonton
   C sempat ternonton oleh gw

5. Boleh jadi sehabis memakai sepatu kesempitan, _____, atau______.
   A kaki terantuk batu, siku tertumbuk pintu
   B kaki terantuk pada batu, siku tertumbuk pada pintu
   C batu terantuk oleh kaki, pintu tertumbuk oleh siku

6. Pada tanggal 1 Juli 2006, ______. Luka pada paha kanan dan luka tersebut menggelembung.
   A saya tersiram air panas
   B saya tersiram oleh air panas
   C air panas tersiram oleh saya

7. Jika saat makan, (1)_______ atau (2)_______ saat minum, segera bersihkan pakaian dari noda tersebut karena biasanya noda yang masih baru cenderung mudah dibersihkan.
   (1)_______
   A baju kesayangan anda terciprat kuah soto berbahan dasar kunyit
   B baju kesayangan anda terciprat oleh kuah soto berbahan dasar kunyit
   C kuah soto berbahan dasar kunyit terciprat di paha anda
   D kuah soto berbahan dasar kunyit terciprat ke baju kesayangan anda
   (2)_______
   A baju kesayangan anda itu terkena air teh

B terkena oleh baju kesayangan anda itu air teh
C air teh terkena oleh baju kesayangan anda itu

Appendix C. Raising and control in Malay/Indonesian

**Difference 1: Pleonastic subjects**
Neither Malay nor Indonesian has pleonastic subjects.27

1. Raising
   a. Kucing itu kelihatan menjadi gemuk.28
   The cat appears to be getting fat.
   b. Kelihatan bahawa kucing itu menjadi gemuk.
   appear that cat that become fat
   ‘It appears that the cat is getting fat.’

2. Control
   a. Aminah berharap menang Idola Malaysia.
   Aminah hopes to win the Malaysian Idol.
   ‘Aminah hopes to win the Malaysian Idol.’
   b. *Berharap bahawa/supaya Aminah menang Idola Malaysia.
   hope that/so.that Aminah win Idol Malaysia

**Difference 2: Selectional restrictions**

3. a. Raising
   Batu itu kelihatan menjadi zamrud.
   stone that appear become emerald
   ‘The stone appears to become emerald.’

---

27 We do not consider hari in weather sentences like Hari akan hujan *‘It’s going to rain’* as a pleonastic subject because the relevant position can be filled by clearly meaningful words such as cuaca *‘weather’* as in Cuaca akan hujan *‘As for the weather, it’s going to rain’*. cf. It/*The weather is going to rain.

28 Kelihatan in Malay is not the exact equivalent of appear in English. Unlike appear to/that ..., kelihatan cannot be used for entities/situations that one cannot see with his/her eyes.
b. Control

#Batu itu berharap menjadi zamrud
stone that hope become emerald
‘#The stone hopes to become emerald.’

Difference 3: Embedded passives

(4) Raising: (a) = (b)
a. Aminah kelihatan membaca manuskrip lama itu. Aminah appear ACT-read manuscript old that
   ‘Aminah appears to have read the old manuscript.’
b. Manuskrip lama itu kelihatan di-baca oleh Aminah, manuscript old that appear PASS-read by Aminah
   ‘The old manuscript appears to have been read by Aminah.’

(5) Control: (a) ≠ (b)
a. Kami berharap (untuk) men-[t]ewaskan mereka kali ini. we hope to ACT-beat them time this
   ‘We hope to beat them this time.’
b. Mereka berharap (untuk) di-tewaskan oleh kami kali ini. they hope to PASS-beat by us time this
   ‘They hope to be beaten by us this time.’

Difference 4: Idiom chunks

(6) Raising
Kelip-kelip kelihatan terbang malam.
firefly appear fly night
(i) *kelip-kelip = a firefly (literal reading)
   ‘A firefly appears to fly at night.’
(ii) *kelip-kelip = a secret (idiomatic reading)
   ‘The secret appears to be obvious to anyone.’

References


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29 The contrast is not observed with idioms whose subject is sentient in the idiomatic interpretation, e.g. Padi semakin berisi semakin tunduk ‘Full ears of corn hang lowest.’


Nomoto, Hiroki, and Kartini Abd. Wahab. under review. *Kena* passives in Malay, funny control and covert voice alternation.
