Movement across meN- and unaccusatives in Malay

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1. Introduction

Problem:
The verbal prefix meN- in Malay blocks DP movement across it in transitive sentences (Saddy 1991; Soh 1998; Cole and Hermon 1998).

However, no such blocking effect is found in intransitive sentences that contain verb roots that are usually considered unaccusative.

This is unexpected given that Malay syntax is sensitive to the unergative/unaccusative distinction (Nomoto, forthcoming-a), in accordance with the Unaccusative Hypothesis (Perlmutter 1978).

Proposal:
No blocking effect is observed in intransitive sentences with meN- because all intransitive meN- sentences are unergative.

Implications:
(i) The semantic associations of unergative/unaccusative structures: The association between an unergative structure with an internally caused event and an unaccusative structure with an externally caused event as proposed in Levin and Rappaport Hovav (1995) needs to be loosened.

(ii) Lexical versus structural approaches to the unergative/unaccusative distinction: Our analysis supports specifying the unergative/unaccusative distinction through syntactic structure.

(iii) The function and meaning of meN-: Our analysis provides a new data point for evaluating competing analyses of meN-.

2. Background

2.1 The verbal prefix meN-

There is no consensus as to the grammatical function or the semantic contribution of meN-.

meN- has been claimed to be an active voice marker (Sneddon 1996; Voskuil 2000; Son and Cole 2004; Nomoto and Shoho 2007), a transitive marker (Chung 1976; Cole and Hermon 1998), an agentive (trigger) marker (Wouk 1989; Cumming 1991; Gil 2002; Englebretson 2003), an objective Case marker (Guilfoyle, Hung and Travis 1992) or recipient (Voskuil 1993), an object clitic/antipassive marker (Fortin, in press), an agreement marker (Willett 1993), among others.

More recently, we showed that meN- has aspectual effects, and that it shares with a progressive marker a restricted distribution in stative sentences (Soh and Nomoto, forthcoming).

Despite this, there is general agreement about its syntactic effect, namely it blocks DP movement across it.

2.2 The ban on DP movement across meN-

A-bar movement of a DP may not cross the prefix meN- in Malay (Saddy 1991; Soh 1998; Cole and Hermon 1998).


b. [CP Apa, [TP Ali beli t₁]]


b. *[CP Apa, [TP Ali mem-belì t₁]]

1 See Hasal (2005) for cases where this restriction does not appear to hold.
3. Problem

MeN- does not appear to block DP movement in sentences containing verb roots that are usually considered unaccusative.

This is unexpected given that Malay syntax is sensitive to the unergative/unaccusative distinction (Nomoto, forthcoming-a), in accordance with the Unaccusative Hypothesis (Perlmutter 1978).

3.1 The unergative/unaccusative distinction in Malay

On the use of the terms ‘unergative/unaccusative verbs/roots’ in this section

Unaccusative verbs/roots: verbs/roots that appear in an unaccusative structure.

As we will argue later in section 4, an unergative structure may contain an unergative or an unaccusative root.

While we make use of these terminologies, we are not committed to the idea that the unergative/unaccusative distinction is specified on the verb.

3.1.1 The positioning of the argument

The sole argument of a class of unaccusative verbs can appear in a pre-verbal or a post-verbal position, while the sole argument of an unergative verb can appear only in a pre-verbal position (Nomoto, forthcoming-a).

(7) Unaccusative verbs

a. Se-orang lelaki tinggi _datang_ dari jauh.
   1-CLF man tall _come_ from far
   ‘A tall man came from a distance.’

b. Dari jauh _datang se-orang lelaki tinggi._
   from far _come_ 1-CLF man tall
   ‘From a distance came a tall man.’

(8) Unergative verbs

a. Se-orang lelaki tinggi _pergi_ ke pasar.
   1-CLF man tall _go_ to market
   ‘A tall man went to a market.’

b. *Ke pasar _pergi se-orang lelaki tinggi._
   to market _go_ 1-CLF man tall

The word order with the argument of an unaccusative verb in a post-verbal position is observed much more frequently in adverbial clauses, especially conditionals (Nomoto, forthcoming-a).

(9) a. Bagaimana kita hendak mengambil tindakan
   how we will take action
   jika sesuatu berlaku di luar pengetahuan kita?
   if something happen at outside knowledge our
   ‘How are we going to react if anything happens without our knowing it?’

   (Utusan Malaysia, 29/01/2002)
b. ... jika berlaku sesuatu kecemasan
if happen something emergency
mereka akan menghubungi saya atau Dr. Tan dengan segera.
they will contact me or Dr. Tan with quick
‘... if any emergency happens, they will contact me or Dr. Tan immediately.’

(Utusan Malaysia, 11/11/2002)

The contrast between unergative and unaccusative verbs in the possible
positions of their sole argument is in accordance with the Unaccusative
Hypothesis (Perlmutter 1978), which specifies that an unergative verb has an
external argument, while an unaccusative verb has an internal argument.\(^3\)

(10) a. Unergative

\[
\text{TP} \quad [\_P \quad \text{DP} \quad [\_P \text{V} \_P]]
\]

b. Unaccusative

\[
\text{TP} \quad [\_P \quad [\_P \text{V} \_P\_P \quad \text{DP} \_P]]
\]

Assuming that the post-verbal position is an object position, the argument of an
unaccusative verb may appear there as that is its projected position. The
argument of an unergative verb may not as there is no point in the derivation
where its argument occupies an object position.

**3.1.2 Causativization with the suffix -kan**

The suffix -kan has multiple functions and meanings (see, e.g. Asmah 1993;
Cole and Son 2004; Kroeger 2007; Son and Cole 2008)\(^4\). Causativization is

<table>
<thead>
<tr>
<th>a. Unergative roots + -kan</th>
</tr>
</thead>
<tbody>
<tr>
<td>pergi ‘to go’  *pergi-kan/*mem-(p)ergi-kan(^5)  *‘to cause x to go’</td>
</tr>
<tr>
<td>nyanyi ‘to sing’  nyanyi-kan/me-nyanyi-kan  *‘to cause x to sing’</td>
</tr>
<tr>
<td>fikir ‘to think’  fikir-kan/mem-(f)ikir-kan  *‘to cause x to think’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Unaccusative roots + -kan</th>
</tr>
</thead>
<tbody>
<tr>
<td>datang ‘to come’  datang-kan/men-datang-kan  ‘to cause x to come’</td>
</tr>
<tr>
<td>jatuh ‘to fall’  jatuh-kan/me-jatuh-kan  ‘to cause x to fall’</td>
</tr>
<tr>
<td>wujud ‘to exist’  wujud-kan/me-wujud-kan  ‘to cause x to exist’</td>
</tr>
<tr>
<td>ber-laku ‘to happen’  per-laku-kan/mem-per-laku-kan  ‘to cause x to happen’</td>
</tr>
</tbody>
</table>

This is expected if causative -kan introduces an external argument and can only
combine with a root that is not associated with an external argument.

**3.2 No blocking effect**

Given the Unaccusative Hypothesis and the blocking effect of meN-, we expect
not to find unaccusative meN- sentences with its sole argument in a pre-verbal
position.

\(^3\) Unlike Chomsky (1995), we assume following Marantz (1997) and Chomsky (2001)
that the verbal structure of an unaccusative is also headed by a v, though of a
different type than that heading the verbal structure of a transitive and an unergative
sentence. The v of an unaccusative lacks an external argument.

\(^4\) -kan is associated with the introduction of a causer argument and the promotion of a
benefactive or an instrumental argument PP to a direct object DP. Although there
are substantial differences between Malay and Indonesian with respect to the
functions of the suffix -kan, the causative use is common to both.

\(^5\) Wolff (1980:210) lists mem-(p)ergi-kan as meaning 'to send out' (= to cause x to
go). Vamarasi (1999:33) states that it does not exist in Indonesian and regards it as
an accidental gap. Two Indonesian speakers we consulted confirmed Vamarasi’s
observation. The relevant form appears to be non-existent in Malay too.
(10b’) Unaccusatives

\[
\begin{array}{ccc}
TP & DP_i & [vP [vP V t_i]] \\
\end{array}
\]

(6) Blocking by \textit{meN-}

\[
\begin{array}{cccc}
DP_i & \textit{meN-V} & t_i \\
\end{array}
\]

Contrary to our expectation, such sentences exist.

\textit{Turun} ‘fall’ is an unaccusative verb. Its argument may appear in a pre-verbal or a post-verbal position.

    ‘If the oil price doesn’t fall, we’ll go bankrupt.’

        
    b. Kalau \textit{turun} \textit{harga minyak}, kita akan bankrup.
    ‘If the oil price does fall, we’ll go bankrupt.’

\textit{Turun} ‘fall’ may also be causativized with the suffix -\textit{kan}.

(13) Kerajaan \textit{telah} \textit{men-(t)urun-kan} harga minyak.
    ‘The government has lowered the price of oil.’

However, it may also occur with the prefix \textit{meN-}, with its argument in a pre-verbal subject position.

(14) a. Harga elektrik \textit{turun}.
    ‘The electricity price fell.’

        
    b. Harga elektrik \textit{men-(t)urun}.
    ‘The electricity price is falling.’

(14b) is unexpected because the movement of the internal argument crossing \textit{meN-} does not give rise to ungrammaticality.

(15) a. \textit{TP Harga elektrik}, \textit{turun} \textit{t_i} \\

        
    b. \textit{TP Harga elektrik}, \textit{men-(t)urun} \textit{t_i} \\

??

4. Proposal

No blocking effect is observed in intransitive sentences with \textit{meN-} because all intransitive \textit{meN-} sentences are unergative.

4.1 The positioning of the argument

\textit{MeN-} sentences with an unaccusative root pattern like unergatives and unlike unaccusatives in the positioning of its sole argument.

\underline{Unergative roots}

The argument of an unergative root may only appear in a pre-verbal position, regardless of the presence of \textit{meN-}.

(16) Unergative root

a. Kalau \textit{anak \_nyanyi} dalam kereta api, ibu bapa-nya harus \textit{menegur-nya}.
    ‘If a child sings in the train, his/her parents should reprimand him/her.’

        
    b. *Kalau \textit{\_nyanyi anak} dalam kereta api, ibu bapa-nya harus \textit{menegur-nya}.
    ‘If a sing child in train, his/her parents should reprimand him/her.’

\underline{\textit{meN-} sentences with \textit{anak nyanyi}}
(17) Unergative root with meN-
   a. Kalau anak me-nyanyi dalam kereta api,
      if child meN-sing in train
      ibu bapa-nya harus menegur-nya.
      parents-3SG should reprimand-3SG
      ‘If a child sings in the train, his/her parents should reprimand
      him/her.’
   b. *Kalau me-nyanyi anak dalam kereta api,
      if MEN-sing child in train
      ibu bapa-nya harus menegur-nya.
      parents-3SG should reprimand-3SG
‘If a child sings in the train, his/her parents should reprimand
him/her.’

(18) Unaccusative root
    The argument of an unaccusative root differs in its possible positions depending
on the presence of meN-.
    Without the prefix meN-, it may appear in a pre-verbal or a post-verbal position.

(19) Unaccusative root with meN-
    a. Kalau harga minyak tidak men-(t)urun, kita akan bankrup.
       if price oil not fall we will bankrupt
       ‘If the oil price doesn’t fall, we’ll go bankrupt.’
    b. *Kalau tidak turun harga minyak, kita akan bankrup.
       if not fall price oil we will bankrupt
       ‘If the oil price doesn’t fall, we’ll go bankrupt.’

However, with the prefix meN-, it may only appear in a pre-verbal position, pattering like an unergative root with or without meN-.

4.2 Causativization with -kan

If [meN-+ unaccusative root] is associated with an unergative structure, we
expect that the suffix -kan cannot attach to it with a causative interpretation.

(20) *Causative
    meN- Root -kan
If a causative [meN-+ unaccusative root + -kan] form is available, it must have
the structure in (21) rather than the structure in (20) above.

(21) Causative
    meN- Root -kan
This expectation is borne out.

While forms like men-(t)urun-kan ‘to lower’ exist as causatives, it is a result of
the merging of meN- to turun-kan as in (21), rather than the merging of -kan to
men-(t)urun as in (20).

Evidence for this analysis comes from the fact that the existence of a meN-X-
kan causative entails that of a X-kan form, but not a meN-X form.

6 Son and Cole (2008) also argue for the structure in (21), though their argument is
based on constructions involving -kan other than causatives (i.e. benefactives, goal-
PP constructions and inherent ditransitives). They claim that -kan introduces an
internal argument and is an overt instantiation of the head of Result phrase (RP).
Assuming that meN- occupies the Voice head (which they take to be equivalent to v),
they postulate RP below VoiceP and VP as follows:

(i) [VoiceP External Argument meN- [VP V [RP -kan XP]]].
(22)  
\[
\begin{align*}
\text{meny-(s)ampai-kan} & \quad \text{meng-(s)ampai} \\
\text{‘to convey’} & \quad \text{‘to convey’} \\
\text{men-(t)idur-kan} & \quad \text{tidur-kan} \\
\text{‘to put to sleep’} & \quad \text{‘to put to sleep’} \\
\text{mem-ber-henti-kan} & \quad \text{ber-henti-kan} \\
\text{‘to dismiss’} & \quad \text{‘to dismiss’} \\
\end{align*}
\]

We do not find \textit{meN-X-kan} verbs that do not have an \textit{X-kan} form.

That \textit{-kan} is more closely related to the verbal root than \textit{meN-} has been argued for on the basis of phonological evidence from a related language, Indonesian. Cohn and McCarthy (1998) treat \textit{X-kan} as a prosodic unit (\textit{= Prosodic Word} or \textit{PrWd}) to the exclusion of \textit{meN-} to account for stress patterns and syllabification in Indonesian.

(23)  
\[
\begin{align*}
\text{a. } & \quad [X]_{\text{PrWd}} \\
\text{b. } & \quad [X-kan]_{\text{PrWd}} \\
\text{c. } & \quad \text{meN-}[X-kan]_{\text{PrWd}} \\
\end{align*}
\]

To the extent that stress and syllabification in Malay are the same as Indonesian in the relevant respects, the independently proposed structure corroborates our analysis.

7 Some authors (e.g. Vamarasi 1999; Kroeger 2007) conclude that a prefixed form like \textit{ber-henti} ‘to resign; to stop (intransitive)’ is unaccusative based on the fact that its base (\textit{henti} in this case) can be causativized with \textit{-kan} as in \textit{meng-henti-kan} ‘to stop (transitive)’. Other verbs that are concluded to be unaccusative based on the same reasoning include \textit{meng-hilang} ‘to disappear’, \textit{men-jadi} ‘to become’, \textit{meng-alir} ‘to flow’, \textit{meny-(s)eburang} ‘to cross’ and \textit{men-(t)angis} ‘to cry’. Such an analysis is problematic as it ignores the difference between bare forms and prefixed forms. The causative diagnostic also indicates that bare forms are unaccusative, and does not suggest that the prefixed forms are necessarily unaccusative as well.

5. Implications

5.1 The semantic associations of unergative/unaccusative structures

Levin and Rappaport Hovav (1995) propose that verbs have structured lexical semantic representations from which syntactic structures are projected.

They relate the unergative structure with a verb that describes an eventuality that is conceptualized as ‘internally caused’, and the unaccusative structure with a verb that describes an eventuality that is conceptualized as ‘externally caused’.

Under this view, \textit{turun} ‘fall’ is a variable behaviour verb (like \textit{roll} verbs in English (Levin and Rappaport Hovav 1995:209)) in that it may have an unergative use as well as an unaccusative use.

With an animate volitional/agentive argument, the eventuality may be conceptualized as internally caused, and hence unergative. With an inanimate argument, the eventuality is conceptualized as externally caused, and hence unaccusative.

(24)  
\[
\begin{align*}
\text{a. } & \quad \text{Dia turun dari bas.} \quad \text{(internal causation; unergative syntax)} \\
& \quad \text{he alight from bus } \quad \text{‘He alighted from the bus.’} \\
\text{b. } & \quad \text{Harga minyak turun.} \quad \text{(external causation; unaccusative syntax)} \\
& \quad \text{price oil fall } \quad \text{‘The oil price fell.’} \\
\end{align*}
\]

However, the situations described by (25a) and (25b) are both conceptualized

8 Vamarasi (1999:29) contends that prefixless verbs are all unaccusative. However, this claim is too strong because it does not allow for the existence of prefixless unergative verbs, which we believe exist (e.g. \textit{pergi} ‘to go’ (8)). Also, the same prefixless verb can be both unaccusative and unergative (variable behaviour verbs) (e.g. \textit{turun} ‘to fall; to alight’ (24)).

9 See Soh (1994: 14) for an early suggestion of this possibility.
as externally caused. Yet, (25a) without the prefix meN- involves an unaccusative structure, while (25b) with the prefix meN- involves an unergative structure.


b. Harga elektrik men-(t)urun. (external causation; unergative syntax) ‘The electricity price is falling.’

This means that the connection between the type of the eventuality described (whether internally or externally caused) and argument realization in Levin and Rappaport Hovav (1995) needs to be loosened.

5.2 Lexical versus structural approaches to the unergative/unaccusative distinction

Two approaches to argument realization (unergative/unaccusative distinction):

(i) Lexical:
Verbs have structured lexical semantic representations from which syntactic structures are projected (Levin and Rappaport Hovav 1995; Rappaport Hovav and Levin 1998, 2002).

Levin and Rappaport Hovav (1995) on unergative/unaccusative distinction:
- Verbs are specified as being unergative or unaccusative, and an unergative verb describes an internally caused event while an unaccusative verb describes an externally caused event.
- Arguments are projected in accordance with the verb’s categorization as unergative or unaccusative.
- Different nuances of verb meaning are due to different lexical verbs.
  e.g. An intransitive verb describing an externally caused event is unaccusative, while one describing an internally caused event is unergative.

(ii) Structural:
The meaning of a verb in a given use is determined compositionally from the meaning of the verb root and the syntactic environment in which the verb appears (Ritter and Rosen 1998; Marantz 1997; Borer 2005; Pylkkänen 2008; Ramchand 2008).

Borer (2005) on unergative/unaccusative distinction:
- Verbs are not specified as being unergative or unaccusative.
- Arguments are projected freely.
- Different nuances of verb meaning are associated with the different structure in which the verb appears.

Because a single root with the same relevant meaning may have an unaccusative or unergative use depending on the surrounding structural elements in the functional domain (i.e., the presence of meN-), the analysis supports specifying the unergative/unaccusative distinction through syntactic structure (e.g., Borer 2005), rather than lexical encoding (Perlmutter 1978; Perlmuter and Postal 1984; Levin and Rappaport Hovav 1995; Rappaport Hovav and Levin 1998, 2002).

5.3 The analysis of the function and meaning of meN-

This new observation about the occurrence of meN- being associated with the existence of an external argument (which need not be an agent; cf. Dowty 1991; Ramchand 2008) enables us to re-evaluate the various analyses of meN- and to separate out analyses that are compatible with this new fact, from ones that are not.

(26) How various analyses of meN- fare with the new observation

This helps narrow down existing competing analyses of meN-.

6. Future work

Why is it that meN- has the particular effect that it does? Is it a syntactic effect due to meN- being a v that requires an argument in its Spec or does meN- contribute a certain meaning that is relevant to the argument realization of the verb?
Aspects of meN- (Soh and Nomoto, forthcoming)

The difference between (27a) and (27b) is an aspectual difference.

(27)  
a. Harga elektrik turun. (external causation; unaccusative syntax)
   ‘The electricity price fell.’

b. Harga elektrik meN-(t)urun. (external causation; MEN-fall unergative syntax)
   ‘The electricity price is falling.’

In (27a) without the prefix meN-, the decline of the electricity price is understood to be abrupt, and the decline is conceived in its entirety.

In (27b) with the prefix meN-, the decline of the electricity is understood to be gradual and involve multiple substages. This aspectual effect is typical of the progressive.

While this aspectual effect of meN- is clear in a subclass of verbs that turun ‘fall’ belongs, namely those that describe degree achievements, the aspectual effect of meN- is subtle with other verbs.

Q: How is this aspectual effect of meN- related to the finding in the present study about intransitive meN- sentences being unergative?

While previous studies on the unergative/unaccusative distinction have explored the relation between situation aspect and argument realization (e.g., Dowty 1991), to the extent that meN- can be viewed as a progressive viewpoint marker, the present study raises the question about what role, if any, viewpoint aspect may play in argument realization.

References


