# On the Movement Theory of Control: Voices from Standard Indonesian

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## 1. Two Contemporary Theories of Control

The proper analysis of the raising vs. control constructions, illustrated in (1a, b), has been one of the most important issues of continued theoretical investigations for some last forty years within the framework of generative grammar.

- (1) a. Akira seemed to understand minimalist syntax. (raising)
  - b. Akira tried to understand minimalist syntax. (control)

In (1a), the matrix subject *Akira* is related only to the infinitival complement in which it receives the experiencer role from the embedded verb. It has been commonly assumed that this construction involves A-movement of the logical subject to the matrix subject position. In (1b), however, the matrix subject is linked to both the matrix and the embedded verbs. This semantic property thus motivates the most widespread analysis of control (Chomsky 1981; see also Bošković 1995 and Martin 1996 for the minimalist null case approach to PRO) whereby the complement clause contains the null formative PRO to be obligatorily controlled by the matrix subject, as shown in (2).

## (2) Akira tried [PRO to understand minimalist syntax]]

The postulation of the PRO in the subject of the controlled complement was motivated by the  $\theta$ -Criterion at D-Structure, which effectively bans movement into  $\theta$ -positions. However, with the advent of the Minimalist Program (Chomsky 1995), which dispenses with all superfluous levels of representation including D-structure, this movement option has come out as a new analytic possibility for control. Following this minimalist logic, Hornstein (1999) has proposed the Movement Theory of Control (MTC), according to which a single DP argument receives a  $\theta$ -role as the argument of the embedded verb in the complement and later moves into a matrix position to pick up another  $\theta$ -role, as shown in (3):

# (3) Akira<sub>i</sub> tried [ $t_i$ to understand minimalist syntax]]

Under the MTC, obligatory control is a subspecies of A-movement on a par with raising. The grammatical operations underlying the two constructions are the same, with the only difference being whether the landing site of the movement is a θ-position or not. The MTC has generated a huge controversy in recent generative inquiries; some have presented evidence in favor of the MTC; others have strenuously argued against it. It is not my intention to review all major works in this area (Culicover and Jackendoff 2001, 2003; Boeckx and Hornstein 2003, 2004, 2006; Bobaljik and Landau 2009; Boeckx, Hornstein and Nunes 2010; Landau 2003; see Davies and Dubinsky (2004, 2007) for recent detailed overviews of the controversy. The purpose of this squib is to present evidence against the MTC from Standard Indonesian. This language provides an excellent testing ground for the MTC because it possesses a unique morphosyntactic feature – the movement-sensitive

distribution of the active voice morphology – that mirrors the presence vs. absence of the movement of an NP across control verbs.

This squib is structured as follows. In the following section, I review Cole and Hermon's (1998) Generalization, widely acknowledged in the Malay/Indonesian literature, that the movement of an NP across a verb with the active voice prefix *meN*-results in the obligatory deletion of the prefix. In section 3, I provide examples of the obligatory control construction from Standard Indonesian in which the active voice morpheme is not elided but rather must remain prefixed with matrix control verbs. I show that this distributional pattern of the active voice morphology provides strong syntactic evidence against the MTC.

#### 2. The Distribution of the Active Voice Prefix *meN*- in Standard Indonesian

Cole and Hermon (1998) establish the generalization in (4) for a dialect of Malay used by educated speakers in Singapore and note that it also holds for Indonesian (see also Saddy 1991 for a preliminary observation of this sort). <sup>1</sup>

(4) Cole & Hermon's Generalization: The obligatory omission of *meng*- with verbs that would otherwise permit *meng*- indicates the movement of an NP argument over the *meng*- + verb. (Cole and Hermon 1998: 233)

I illustrate (4) with A'-movement, A-movement, and the movement of an NP vs. non-NP in turn in Standard Indonesian. Firstly, examples (5a, b) show that *wh*-movement causes *meN*- deletion from the verb within their extraction path.

- (5)a. Siapa<sub>i</sub> yang Bill (\***mem**)-beritahu ibu-nya [ $_{CP}$  yang  $t_i$  \*(**men**)-cintai Fatimah]? who that Bill AV-tell mother-his that AV-love Fatimah 'Who does Bill tell his mother that loves Fatimah?'
  - b. Apa<sub>i</sub> yang Ali (\***mem**)-beri t<sub>i</sub> kepada Fatimah?

    what that Ali AV-give to Fatimah?

    'What did Ali give to Fatimah?'

(Standard Indonesian; based on Cole and Hermon (1998: 231, 232), their (25a, 27a))

In (3a), the movement of *siapa* 'who' crosses the matrix verb but not the embedded verb. The AV prefix must be deleted from the matrix verb whereas it must not be deleted from the embedded verb. A similar characterization holds for the examples in (3b) and (4a, b).

Secondly, *meN*<sup>-</sup> deletion is also caused by A-movement, as shown in (6).

(5) Ali<sub>i</sub> saya (\***men**)-cubit  $t_i$ .

Ali I AV-pinch

'I pinched Ali. /Ali was pinched by me.'

(Standard Indonesian; Cole and Hermon (1998: 232), their (28a, b))

One might analyze (6) as topicalizaton, which is an example of A'-movement in languages like English. However, Chung (1976) presents evidence from Equi NP/Control that the preposing of the NP in (5) involves A-movement. Consider examples (6a-d).<sup>2</sup>

- (6)a. Dia datang untuk ber-cakap-cakap dengan Ali.

  he come for Intr-talk-Red with Ali

  'He came to talk with Ali.'
  - b. ?\*Saya mem-bawa surat itu untuk teman saya (dapat) (mem)-baca.

    I AV-bring letter the for friend my can AV-read

    'I brought the letter for my friends to (be able to) read.'
  - c. Saya mem-bawa surat itu untuk (dapat) di-baca oleh teman saya.

    I AV-bring letter the for can Pass-read by friend my

    'I brought the letter to (be able to) be read by my friends.'
  - d. Saya mem-bawa surat itu untuk (dapat) kau baca.

    I AV-bring letter the for can you read

    'I brought the letter to (be able to) be read by you.'

(Standard Indonesian; Chung (1976: 46, 47))

The contrast between (6a) and (6b) shows that the embedded subject in [Spec, TP] can become PRO while the embedded object cannot. (6c) is a canonical di– passive construction. This type of passive takes the order of Neg + Aux + di– verb + (oleh) NP. (6c) shows that the derived subject of this construction can become PRO. (6d) is our crucial case. This example illustrates a zero passive construction. This type of passive takes the order of Neg + Aux + pronominal subject + (stem) verb in Standard Indonesian. The fact that the derived subject in this construction patterns with the subject of the di– passive in its ability to become PRO suggests that zero passives instantiate A-movement. Thus, (5) provides evidence that A-movement causes meN– deletion.

Finally, what matters for *meN*— deletion is the movement of an NP across *meN*—verbs. This observation is illustrated by examples (7a-c).

- (7)a. Kenapa<sub>i</sub> Mary \*(**mem**)-beli buku itu  $t_i$ ? why Mary AV-buy book that 'Why did Mary buy that book?'
  - b. [PP] Di mana]<sub>i</sub> John \*(**mem**)-beri Mary buku itu  $t_i$ ?

    at where John AV-give Mary book that

    'Where did John give Mary that book?'
  - c. [PP Kepada siapa]<sub>i</sub> Mary \*(mem)-beri buku itu  $t_i$ ?

    to who Mary AV-give book that

'To whom did Mary give that book?'

(Standard Indonesian; modeled on Cole and Hermon (1998: 231, 232), their (26a-c))

In these examples, the movement of the non-nominal *wh*-phrases does not trigger *meN*-deletion. The AV prefix is obligatory in this environment.

Recent work as in Aldridge 2008 and Cole et al 2008 has attempted to develop a theoretical understanding of what is behind the active voice deletion in (varieties of) Indonesian but precise mechanisms of the deletion are immaterial for our purposes, insofar as the generalization in (4) holds for Standard Indonesian.

# 3. Evidence against the MTC in Control in Standard Indonesian

Now, the MTC makes an explicit prediction in obligatory control constructions in Standard Indonesian. Recall that under this theory, a single DP element is base-generated in a thematic position of the embedded predicate and later undergoes A-movement into another thematic position of the higher predicate. Since this movement of a DP crosses the embedded verb, the MTC predicts that the active voice marker must be eliminated from the verb. The following example shows that the prediction is not borne out. In this example, the active voice prefix *meN*- must remain obligatorily prefixed to the control verb *coba* 'try'.

(8) Esti (\*men)coba memasak makanan Jepang.
Esti AV.try cook food Japan

'Esti tried to cook Japanese food.'

This result, of course, is consistent with the non-movement PRO-based analysis of obligatory control. Thus, Standard Indonesian presents crucial morphosyntactic evidence that the MTC is not adequate for control constructions in this language.

#### References

Aldridge, Edith. 2008. Phase-based account of extraction in Indonesian. *Lingua* 118: 1440-1469.

- Bobaljik, Jonathan and Idan Landau. 2009. Icelandic control is not A-movement: The case from case. *Linguistic Inquiry* 40: 113-154.
- Boeckx, Cedric and Norbert Hornstein. 2003. Reply to "Control is not movement." Linguistic Inquiry 34: 269-280.
- Boeckx, Cedric and Norbert Hornstein. 2004. Movement under control. *Linguistic Inquiry* 35: 431-452.
- Boeckx, Cedric and Norbert Hornstein. 2006. Control in Icelandic and theories of control. *Linguistic Inquiry* 37: 591-606.
- Boeckx, Cedric, Norbert Hornstein and Jairo Nunes. 2010. Icelandic control really is Amovement: Reply to Bobaljik and Landau. *Linguistic Inquiry* 41: 111-130.
- Bošković, Željko. 1995. Principles of economy in nonfinite complementation. Doctoral dissertation. University of Connecticut, Storrs.
- Chomsky, Noam. 1981. Lectures on government and binding. Dordrecht: Foris.
- Cole, Peter and Gabriella Hermon. 1998. Voices in Malay/Indonesian. *Lingua* 118: 1500-1553.
- Culicover, Peter and Ray Jackendoff. 2001.Control is not movement. *Linguistic Inquiry* 32: 492-512.
- Culicover, Peter and Ray Jackendoff. 2003. The semantic basis of control in English.

  Language 79: 517-556.
- Davies, William and Stanley Dubinsky. 2004. *The grammar of raising and control*. London: Blackwell.
- Davies, William and Stanley Dubinsky. 2007. *New horizons in the analysis of control and raising*. Dordrecht: Springer.
- Hornstein, Norbert. 1999. Movement and control. Linguistic Inquiry 30: 69-96.

Landau, Idan. 2003. Movement out of control. Linguistic Inquiry 34: 471-498.

Martin, Roger. 1996. A minimalist theory of PRO and control. Doctoral dissertation.

University of Connecticut, Storrs.

Saddy, Douglas. 1991. WH-scope mechanisms in Bahasa Indonesia. In *MIT working* papers in linguistics 15: More papers on wh-movement, 183-218. MITWPL, Department of Linguistics and Philosophy, MIT, Cambridge, Mass.

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## **Notes**

- (i) a. meN—  $\rightarrow$  meng/menge (if the stem starts with a, e, g, h, i, o, u)
  - b.  $meN- \rightarrow mem$  (if the stem starts with b, f, p, v)
  - c.  $meN- \rightarrow men$  (if the stem starts with c, d, j, t, z)
  - d.  $meN- \rightarrow men/meny$  (if the stem starts with s)
  - e.  $meN- \rightarrow meny$  (if the stem starts with k, l, m, n, v, w, y)

<sup>&</sup>lt;sup>1</sup> The AV prefix *meN*<sup>-</sup> takes one of the phonologically conditioned allomorphs in (ia-e).

<sup>&</sup>lt;sup>2</sup> The examples here from Chung (1976) are converted to the current spelling of Indonesian.