On the Movement Theory of Control: Voices from Standard Indonesian

1. Two Contemporary Theories of Obligatory Control in Generative Grammar

The proper analysis of the raising and control constructions, illustrated in (1a) and (1b) respectively, 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 semantically 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 for Case reasons. In (1b), however, the same matrix subject *Akira* 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 infinitival complement contains the null formative PRO to be obligatorily controlled by the matrix subject, as shown in (2).

(2) Akira_i tried [PRO_i to understand minimalist syntax]]

(3)

The postulation of the PRO in the subject position of the controlled complement has been motivated by the θ-Criterion at D-Structure, which effectively bans movement into θ-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 obligatory control. Following this minimalist logic, Hornstein (1999) has proposed the Movement Theory of Control (MTC), according to which a single DP argument receives a θ-role as the argument of the embedded verb in the infinitival complement and later moves into a matrix position to pick up another θ-role, as shown in (3).

(3) Akira$_i$ 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 a large body of recent works in this area (Culicover and Jackendoff 2001, 2003, Boeckx and Hornstein 2003, 2004, 2006, Boeckx, Hornstein and Nunes 2010, Bobaljik and Landau 2009, Landau 2003 and references cited therein); see Davies and Dubinsky (2004, 2007) for two most recent overviews. Instead, the purpose of this paper 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 paper 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 from the verb. 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).[1]

(4) Cole & Hermon's (1998) 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 the generalization in (4) with A′-movement, A-movement, and the movement of an NP vs. non-NP in turn in Standard Indonesian; see Cole and Hermon for the full paradigm of examples to illustrate this generalization from Malay. Firstly, examples (5a, b) show that *wh-* movement causes *meN-*deletion from the verb located only within its extraction path.[2]

(5)a. Siapa$_i$ 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$_i$ yang Ali (***mem**)-beri t_i 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 (5a), the movement of *siapa* 'who' crosses the matrix verb *beritahu* 'tell' but not the embedded verb *cintai* 'love'. The active voice prefix *meN-* must be deleted from the matrix verb whereas it must *not* be deleted from the embedded verb. A similar characterization holds for the example in (5b).

Secondly, *meN*−deletion is also caused by A-movement, as shown in (6).

(6) Ali$_i$ 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 an instance of topicalizaton, which involves A′-movement in languages like English and Italian. However, Chung (1976) presents evidence from Equi NP/Control that the preposing of the NP in (6) involves A-movement. Consider examples (7a-d).[3]

(7)a. Dia atang 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 PV-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 (7a) and (7b) shows that the embedded subject in [Spec, TP] can become PRO while the embedded object cannot. (7c) is known as the canonical *di*-passive construction in the Indonesian literature. This type of passive takes the order of Neg + Aux + *di*- verb + (*oleh*) NP. (7c) shows that the derived subject of this construction can become PRO. (7d) is our crucial case. This example illustrates the zero passive/passive type-two 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 derived subject of the *di*-passive in its ability to become PRO suggests that zero passives instantiate A-movement

(movement into [Spec, TP]). Accordingly, the example in (6) 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 (8a-c).

(8)a. Kenapa$_i$ Mary *(**mem**)-beli buku itu t_i?
why Mary AV-buy book that
'Why did Mary buy that book?'

b. [$_{PP}$ Di mana]$_i$ 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]$_i$ 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 (*kenapa* 'why', *di mana* 'where' and *kepada siapa* 'to whom') does not trigger *meN−*deletion. The AV prefix is obligatory in this environment.

Recent work (see Aldridge 2008 and Cole, Hermon and Yanti 2008 and references cited therein) has developed a theoretical understanding of what is behind the active voice "deletion" in (varieties of) Indonesian but precise theoretical mechanisms of the phenomenon in question are

immaterial for our present purposes, insofar as the generalization in (4) holds for Standard Indonesian.

3. Evidence against the MTC in Control in Standard Indonesian

An example of what seems like an obligatory control constructions in Standard Indonesian is shown in (9).

(9) Esti$_i$ sudah men-coba [e_i bicara dengan teman-nya].
Esti already AV-try talk with friend-her
'Esti has tried to talk with her friend.'

As in English, this type of construction in Indonesian can be defined as a relation of referential dependency between an overt argument in the matrix clause (*Esti* in (9)) and an unexpressed argument in the embedded clause (*e* in (9)); the embedded subject is obligatorily coreferential with the subject of the matrix clause, as indicated by the shared index in the example.

In English, on which the standard/GB theory of control was developed, it is the finiteness vs. non-finiteness distinction that was deemed as a defining characteristic of control constructions. A question arises, then, whether Standard Indonesian has obligatory control, because this language, as well as other closely related languages such as Balinese, Javanese and Sudanese (Davies 2005), have been considered to lack any apparent manifestation of the distinction in question. Verbs in all these languages most typically occur in an uninflected/bare form and temporal and aspectual distinctions are either recovered for the most part from linguistic contexts or signaled by temporal adverbs such as *kemarin* 'yesterday' or *sudah*

'already'. However, the distribution of the futuristic auxiliary *akan* 'will' provides solid evidence that Indonesian does possess an abstract finite vs. non-finite distinction like English. Arka (2004: 4) observes that the controlled complement of the subject control verb *ingin* 'want' cannot contain this auxiliary, as shown in (10a, b). Compare this example with (10c), a full-fledged finite embedded non-control example, in which the auxiliary can occur felicitously.

(10) a. Para ibu$_i$ juga ingin [e_i mengubah penampilan-nya] (non-finite)
PL mother also want change appearance-3SG
'Mothers also want to change their appearance.'

b. * Para ibu juga ingin [e_i **akan** memgubah penampilan-nya] (non-finite)
PL mother also want will change appearance-3SG
'Mothers also want to change their appearance.'

c. Tapi saya belum tahu apakah saya akan mampu menggungguli Irene. (finite)
But I not.yet know whether I will able defeat Irene
'But I am not sure yet whether I will be able to defeat Irene.'

(Arka 2004: 4, with a minor modification)

The contrast between (10b) and (10a, c) thus shows that Indonesian does possess the finite vs. non-finite distinction that has been held responsible for the emergence of control since GB Theory. [4]

Constructions like (9) also exhibit the signature properties of the obligatory control construction in other languages like English (Hornstein 1999), providing further evidence that Standard Indonesian possesses this construction. Firstly, the unexpressed argument in the embedded clause requires a c-commanding antecedent. This point is illustrated by (11a, b).

(11) a. [Ibu Esti]$_i$ sudah men-coba [e_i bicara dengan teman-nya].
mother Esti already AV-try talk with friend-her
'Esti's mother$_i$ has tried e_i to talk with her friend.'

b. * [Ibu Esti$_i$] sudah men-coba [e_i bicara dengan teman-nya].
mother Esti already AV-try talk with friend-her
'*Esti's$_i$ mother has tried e_i to talk with her friend.'

Secondly, obligatory control constructions in Standard Indonesian do not allow a split antecedent. For instance, in the example of object control in (12a), the unexpressed subject of the embedded clause must be interpreted as Nita, not Nita *and* Eddy together (or some persons in the domains of discourse). This is in sharp contrast with the finite clause counterpart in (12b), in which the pronoun *mereka* 'they' can take a split antecedent (i.e. it can refer back to Nita and Eddy together).

(12) a. Eddy mem-bujuk Nita untuk pulang.
Eddy AV-persuade Nita to go home
'Eddy$_i$ persuaded Nita$_j$ $e_{*i/j/*i+j}$ to go home.'

b. Eddy berkata pada Nita bahwa mereka harus pulang.
Eddy said to Nita that they should go home
'Eddy$_i$ said to Nita$_j$ that they$_{i+j}$ should go home.'

Now, the MTC reviewed in section 1 makes an explicit prediction for the distribution of the active voice prefix *meN-* under 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 matrix predicate. Since this movement of a DP crosses the matrix control verb, the MTC predicts that the active voice marker must be eliminated from the verb. The following example shows, however, that the prediction is not borne out.

(13) Esti ***(men)**-coba memasak makanan Jepang.
Esti AV.try cook food Japan
'Esti tried to cook Japanese food.'

In this example, the active voice prefix *meN-* must remain obligatorily prefixed to the control verb *coba* 'try'. This result, of course, is consistent with the standard/PRO-based analysis of obligatory control, according to which the embedded subject is base-generated as PRO and is obligatorily construed as referring to the matrix subject via some non-transformational construal (e.g., Chomsky 1981) or lexical-semantic processes (e.g., Culicover and Jackendoff 2001, 2003) without resorting to syntactic movement. Therefore, Standard Indonesian presents unique morphosyntatcic evidence that the MTC is not the adequate analysis of the obligatory control construction in this language.

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Notes

[1] The prefix *meN−* takes one of the phonologically conditioned allomorphs, as shown in (ia-e).

(i) a. *meN−* → *meng/menge* (if the stem starts with a, e, g, h, i, o, u)

b. *meN−* → *mem* (if the stem starts with b, f, p, v)

c. *meN−* → *men* (if the stem starts with c, d, j, t, z)

d. *meN−* → *men/meny* (if the stem starts with s)

e. *meN−* → *meny* (if the stem starts with k, l, m, n, v, w, y)

[2] The following abbreviations are used in examples in this paper: AV, active voice; INTR, intransitive; PL, plural; PV, passive voice; RED, reduplication; SG, singular; 3, third person.

[3] The examples here from Chung (1976) are converted to the current spelling of Indonesian.

[4] There are two reasons that the finite vs. non-finite distinction may not be as important in understanding control phenomena as has previously been thought for two reasons. First, Landau (2000, 2004) proposes that this distinction is not a primary determinant of control because Bulgarian, Greek and several other Balkan languages permit control into finite clauses (see also Terzi 1992 and Watanabe 1993). Second, Culicover and Jackendoff (2001, 2003) argue that control phenomena have a semantic basis rather than a syntactic one. Given these two claims, the finiteness criteria may not be criterial in understanding control in natural language in general. I will not discuss this matter further, however, because it does not affect the main point of this paper.