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The ~~apparent~~ lack of a complementizer-trace effect in Indonesian *supaya* complements

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1. Introduction

Complementizer-trace (C-*t*) effects

(1) Complementizer-trace (C-*t*) effects
A preverbal subject cannot be extracted from an embedded clause headed by an overt complementizer.

(2) a. **Who* did you think [that ___ met Budi yesterday]?
b. *Who* did you think [Ø ___ met Budi yesterday]?

C-*t* effects are considered part of UG and have been reported in a number of unrelated languages (Pesetsky 2017).

The issue

Supaya clauses in Standard Indonesian can contain a subject gap, thus suggesting the absence of a C-*t* effect.

(3) a. *Siapa*-kah yang kamu usulkan [supaya ___ ketemu Budi besok]?[1]
who-Q REL 2SG suggest so.that meet Budi tomorrow
b. *Siapa*-kah yang kamu usulkan [Ø ___ ketemu Budi besok]?
who-Q REL 2SG suggest meet Budi tomorrow
'To whom did you suggest meeting Budi tomorrow?'

The claims

- The gap is indeed a trace.
- Indonesian *supaya* complement clauses present a counterexample to the universality of C-*t* effects.

Organization

§2. Complement vs. adjunct *supaya* clauses
§3. Analysis of *supaya* complement clauses: Successive cyclic interclausal movement
§4. Alternative accounts: Intraclausal/no movement + coreference, raising
§5. Conclusion

[1] This type of sentence has an inverted pseudo-cleft structure with a headless relative clause. However, we treat it as if the interrogative rather than a null operator moved.

(i) [$_{\text{Predicate}}$ WH-kah] [$_{\text{Subject}}$ Op yang *t* …]

2. Different kinds of *supaya* clauses: Complement vs. adjunct

Not all *supaya* clauses are adjuncts. Complement and adjunct *supaya* clauses are distinct.

Fronting

(4) Complement: No

a. Saya meng-usulkan [supaya mesin itu di-perbaiki oleh tukang].
1SG ACT-suggest so.that machine that PASS-fix by mechanic
'I proposed that the machine be fixed by a mechanic'

b. *[Supaya mesin itu diperbaiki oleh tukang], saya mengusulkan.
so.that machine that PASS-fix by mechanic 1SG ACT-suggest

(5) Adjunct: Yes

a. Tono meng-[k]erjakan PR-nya [supaya dia bisa lulus].
Tono ACT-do homework-3 so.that 3SG can pass.
'Tono did his homework so that he can pass'

b. [Supaya dia bisa lulus], Tono meng-[k]erjakan PR-nya.
so.that 3SG can pass Tono AV-do homework-3
'So that he can pass, Tono did his homework'

Extraction

(6) Ini adalah *persidangan yang di-usulkan [supaya __ di-bubarkan]*.
this COP trial REL PASS-suggest so.that PASS-dissolve

(i) Complement: Yes (despite C-*t*) → reasonable interpretation
'This is *the trial whose dissolution was suggested*.'

(ii) Adjunct: No (adjunct island) → anticipated semantic oddity blocked
#'This is *the trial that was suggested, so that it be dissolved*.'

3. The proposal

Assumption: CT splitting

(7) CT splitting (Martinović 2015; Erlewine 2016)
C and T start as one head. They split when a feature cannot be checked or when no position is available for the CT's goal to move into.

a. No split → no clear A/A'-distinction
$[_{CTP}\ CT_{[uTop,\ uD]}\ [_{VoiceP}\ DP_{[Top,\ D]}\ \ldots\ ]]$

b. Split → clear A/A'-distinction
$[_{CTP}\ CT_{[uTop,\ uD]}\ [_{VoiceP}\ DP_{[D]}\ PP_{[Top]}\ \ldots\ ]]$
↓
$[_{CP}\ C_{[uTop]}\ [_{TP}\ T_{[uD]}\ [_{VoiceP}\ DP_{[D]}\ PP_{[Top]}\ \ldots\ ]]]$

The claim: Successive cyclic movement

(8) a. The embedded subject successive-cyclically moves.
b. A-movement (raising): Driven by an EPP (D) feature.
c. A'-movement: Also driven by an information structural feature such as [Top(ic)] and [Foc(us)].

(9) [$_{CTP}$ Mesin itu$_{[Top, D]}$ [$_{VoiceP}$ *t* di-usulkan [$_{CTP}$ *t* supaya [$_{VoiceP}$ *t* di-perbaiki oleh tukang]]]].
machine that PASS-suggest so.that PASS-fix by mechanic
'The machine was suggested to be repaired by a mechanic.'

(10) [$_{CTP}$ Siapa$_{[Foc, D]}$ -kah yang [$_{VoiceP}$ *t* kamu usulkan [$_{CTP}$ *t* supaya [$_{VoiceP}$ *t* ketemu Budi besok]]]]?
who-Q REL 2SG suggest so.that meet Budi tomorrow
'To whom did you suggest meeting Budi tomorrow?'

Support 1: Null expletive

- The preverbal position can be null for passive verbs taking a clausal complement.[2]
- The embedded subject is licensed in the embedded clause.
- The sentence is not about the embedded subject.

(11) [$_{CTP}$ ___ Telah di-usulkan [$_{CTP}$ supaya *mesin* *itu*$_{[D]}$ di-perbaiki oleh tukang]].
PFV PASS-suggest so.that machine that PASS-fix by mechanic
'It was suggested that the machine be repaired by a mechanic.'

Support 2: No *meN-* on the matrix verb

The ungrammaticality of *meN-* indicates DP movement happening across it (Saddy 1991; Soh 1998; Cole and Hermon 1998).

(12) A-movement (bare passive)
a. Buku itu sudah Ali baca *t*.
book that already Ali read
'Ali has already read the book./The book has already been read by Ali.'
b. *Buku itu sudah Ali **mem-**baca *t*.
book that already Ali ACT-read

[2] Unlike in English, clausal subject is generally unacceptable in Indonesian.

(i) *[Supaya mesin itu di-perbaiki] di-usulkan oleh mereka.
so.that machine that PASS-fix PASS-suggest by 3PL
'[That the machine needed fixing] was suggested by them.'

(13) A-movement (crossed control reading; Nomoto's (2011) analysis)

a. Tono coba *t* di-ciumi ibu.
Tono try PASS-kiss mother
'Mother tried to kiss Tono.'

b. *Tono **men-**coba *t* di-ciumi ibu.[3]
Tono ACT-try PASS-kiss mother
Intended reading: 'Mother tried to kiss Tono.'

(14) A'-movement (adapted from Saddy 1991: 186)

a. Siapa yang *t* **men-**cintai Sally?
who REL ACT-love Sally
'Who loves Sally?'

b. *Siapa yang Sally **men-**cintai *t* ?
who REL Sally ACT-love

c. Siapa yang Sally cintai *t* ?
who REL Sally love
'Who Sally loves?'

(15) a. Mesin itu telah ***di-****usulkan* [supaya di-perbaiki oleh tukang.
machine that PFV PASS-suggest so.that PASS-fix by mechanic

b. Mesin itu telah mereka *usulkan* [supaya di-perbaiki oleh tukang].
machine that PFV 3PL suggest so.that PASS-fix by mechanic

c. *Mesin itu telah mereka ***meng-****usulkan* [supaya di-perbaiki oleh tukang].
machine that PFV 3PL ACT-suggest so.that PASS-fix by mechanic
'{It was/They} suggested that the machine be repaired by a mechanic.'

4. Alternative accounts

Alternative 1: Matrix A-movement (passivization) + coreference

(16) a. Obligatory control[4]
$[_{TP}$ Mesin itu$_i$ di-usulkan t_i $[_{CP}$ supaya PRO$_i$ di-perbaiki oleh tukang]].
machine that PASS-suggest so.that PASS-fix by mechanic

b. Prolepsis
$[_{TP}$ Mesin itu$_i$ di-usulkan t_i $[_{CP}$ supaya pro/ia$_i$ di-perbaiki oleh tukang]].
machine that PASS-suggest so.that it PASS-fix by mechanic

[3] This sentence as well as (13a) are acceptable in the normal control reading ('Tono wants to be kissed by Mother.').

[4] We extend Fortin's (2006) analysis of adjunct clauses to complement clauses. Fortin claims that CP adjuncts with and without an overt subject involve different kinds of TPs.

- T with Case-assigning ability → overt subject
- T with no Case-assigning ability → PRO + obligatory control

Empirical problem

The verb *usulkan* does not select the passive "subject" DP.[5]

(17) *Mereka meng-usulkan [$_{DP}$ mesin itu] [$_{CP}$ supaya PRO/pro/ia di-perbaiki oleh tukang].
3PL ACT-suggest machine that so.that it PASS-fix by mechanic

Alternative 2: Base-generated topic + obligatory control (= our analysis in the abstract)

(18) [$_{TopP}$ Mesin itu$_i$ di-usulkan [$_{CP}$ supaya [$_{TP}$ PRO$_i$ di-perbaiki oleh tukang]]].
machine that PASS-suggest so.that PASS-fix by mechanic

Theoretical problem

In obligatory control, the controller must be in an A-position.[6]

Alternative 3: Base-generated topic + prolepsis

(19) [$_{TopP}$ Mesin itu$_i$ di-usulkan [$_{CP}$ supaya [$_{TP}$ pro/ia$_i$ di-perbaiki oleh tukang]]].
machine that PASS-suggest so.that it PASS-fix by mechanic

Empirical problem

The antecedent of *pro/ia* is restricted to the DP in the matrix clause.

(20) Talking about **Tono$_i$**, who is always complaining about **his machine$_j$**'s bad conditions.
a. *[$_{TopP}$ [Mesin-**nya$_i$**]$_j$ di-usulkan [$_{CP}$ supaya [$_{TP}$ **pro/ia$_i$** ketemu tukang]]].
machine-3 PASS-suggest so.that it meet mechanic
For: 'As for his machine, it was suggested that he meet a mechanic.'
b. #[$_{TopP}$ **[Mesin-nya$_i$]$_j$** di-usulkan [$_{CP}$ supaya [$_{TP}$ **pro/ia$_j$** ketemu tukang]]].
machine-3 PASS-suggest so.that it meet mechanic
'It was suggested that his machine meet a mechanic.'

Alternative 4: Raising

(21) [$_{TP}$ Mesin itu$_i$ di-usulkan [$_{CP}$ supaya t_i di-perbaiki oleh tukang]].
machine that PASS-suggest so.that PASS-fix by mechanic

[5] The verb usulkan is able to take a DP complement, but the DP must denote eventualities.

(i) Mereka meng-usulkan [$_{DP}$ pembaikan mesin itu].
3PL ACT-suggest fixing machine that
'They suggested repairing the machine.'

[6] This problem will disappear under the CT-splitting hypothesis, where no clear A/A'-distinction exists in Indonesian. If one also adopts a movement analysis of obligatory control (Hornstein 1999), this alternative will be nothing but our proposed analysis.

(22) a. *They say [$_{DP}$ the machine] [$_{CP}$ that PRO/it was repaired by a mechanic].
b. The machine is said to have been repaired by a mechanic.
cf. *The machine is said that *t* was repaired by a mechanic. (*that*-trace effect)

Theoretical problem

- The presence of *supaya* indicates that the embedded clause is not a TP but CP.
- The putative movement would incur a locality violation (e.g. Chomsky's (2001) Phase Impenetrability Condition).

(23) a. (21)
___ diusulkan [$_{\mathbf{CP}}$ supaya [$_{TP}$ *mesin itu* diperbaiki oleh tukang]].
↑_____X_____|
b. (22b)
___ is said [$_{\mathbf{TP}}$ *the machine* to have been repaired by a mechanic].
↑_____|

5. Conclusion

An interclausal successive-cyclic movement analysis appears most plausible for Indonesian *supaya* complement clauses.

(9) [$_{CTP}$ Mesin itu$_{[Top, D]}$ [$_{VoiceP}$ *t* di-usulkan [$_{CTP}$ *t* **supaya** [$_{VoiceP}$ ***t*** di-perbaiki oleh tukang]]]].
machine that PASS-suggest so.that PASS-fix by mechanic
'The machine was suggested to be repaired by a mechanic.'

(10) [$_{CTP}$ Siapa$_{[Foc, D]}$ -kah yang [$_{VoiceP}$ *t* kamu usulkan [$_{CTP}$ *t* **supaya** [$_{VoiceP}$ ***t*** ketemu Budi besok]]]]?
who-Q REL 2SG suggest so.that meet Budi tomorrow
'To whom did you suggest meeting Budi tomorrow?'

- The proposed structure involves a C-*t* configuration.
- Our analysis provides a counterexample to the hypothesis that C-*t* effects are part of UG.
- To the extent our analysis is successful, it lends support to the view that Austronesian languages lack a clear A/A'-distinction (Aldridge 2017).

Future work

1. Find other verbs taking *supaya* complement clauses.
2. Explain why Indonesian lacks C-*t* effects.
   Conjecture
   C-*t* effects only concern languages with a clear A/A'-distinction? Only in a split CT structure, does t occur in the same phase/spell-out domain as C.

(24) a. Split CT structure
$[_{CP}$ **WH** C $[_{TP}$ ***t*** T $[_{VoiceP}$ *t* …
↑_____|↑_____|
(i) * (ii) ok

b. Non-split CT structure
$[_{CTP}$ WH CT $[_{VoiceP}$ *t* …
↑_____|
(ii) ok

3. Think more carefully about Indonesian clause structure under the CT-splitting framework.

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