

Relative Clauses in Indonesian Discourse: Face to Face and Cyberspace Interaction

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1. Introduction¹

According to prescriptive grammar, relative clauses in Standard Indonesian are restricted to the most constrained position on the Keenan-Comrie accessibility hierarchy (Keenan & Comrie 1977, 1979): only subjects may be relativized. Formal written Indonesian adheres closely to the standard in this respect. In this paper, we address the question of whether the standard constraint also applies to less formal genres. In other words, are the syntactic constraints on relative clauses part of the “real” Indonesian language, or merely an artifact of the prescriptive tradition? To this end, we compared two kinds of informal data — natural conversation and Internet newsgroup postings in Indonesian — with results from previous research on relative clauses in formal written Indonesian (Ewing 1991, Cumming 1995). We discovered that relative clauses in Indonesian conversation are overwhelmingly intransitive. Those transitive relative clauses that occur are primarily restricted to clefts, and are loose in their syntactic organization. The newsgroup data has many informal and interactional linguistic features; however, relative clauses in these data are more similar to formal written Indonesian in their form and function. This suggests that the constraint on the role of the head of a relative clause is not merely a prescriptive artifact, although the demands of real-time interaction may restrict its use in face to face conversation.

2. Traditional approaches to relativization

Work on relative clauses in Indonesian has focused mainly on the interaction of word order and verb morphology with relativization (MacDonald & Dardjowidjojo 1967, Wolff 1980, Moeliono 1988). In this section we define the term “trigger” and show how trigger choice is constrained in Standard Indonesian relative clauses. The examples we give here are taken from a novel (*Senja di Jakarta* by Mochtar Lubis), illustrating that the constraint holds in the kind of planned formal language in which prescriptive rules might be expected to be applied.

2.1 Trigger choice

The term “trigger” refers to the privileged NP of the clause — the syntactic role which has traditionally been called the subject. The trigger acts as the pivot in clause combining constructions, including relativization. The trigger may have any one of the three semantico-syntactic macro-roles: S, A, and P (Comrie 1989), where S is the single argument of an intransitive clause, A is the most agent-like argument of a transitive clause, and P is the most patient-like argument of a transitive clause. The privileged NP triggers the morphology of the verb, hence the name trigger. The following examples illustrate trigger choice and verb morphology in independent clauses.

In intransitive clauses, with S triggers, the verb may be unprefixes, or may be prefixed with *me-*, *ter-*, or *ber-*.

- (1) Beberapa mobil di belakangnya **berhenti** pula²
 several car at behind:3SG MID:stop also
 ‘Several cars behind him also stopped’ (SDJ)
- (2) Saimun **terperanjat** bukan kepalang.
 Saimun INVOL:startle not trifle
 ‘Saimun was extremely startled’ (SDJ)

In transitive clauses, if the trigger is the A argument, the verb usually takes the prefix *me-* (with a few high-frequency lexical exceptions):

- (3) Suryono **mengeluarkan** uang lima rupiah dari sakunya
 Suryono AT:take:out money five rupiah from pocket:3SG
 'Suryono took five rupiah out of his pocket' (SDJ)

If the trigger is P, the verb may take the prefix *di-*:

- (4) Hampir pula dia **ditabrak** sebuah mobil yang buka kap
 almost also 3SG PT-hit one:CL car REL open top
 'He was almost hit by an open convertible' (SDJ)

When the agent of a P-trigger clause is a speech participant (first or second person), the prefix *di-* does not occur and the agent directly precedes the verb.

- (5) Apa hendak **saudara** **buat**, jika kembali di kampung?
 what want 2SG do when return at village
 'What do you want to do when you get back to the village?' (SDJ)

2.2 Relativization

A standard Indonesian relative clause follows its head noun and is introduced by the linker *yang*. Relative clauses may be formed on the macro-roles A, S, and P, and the head is omitted in the relative clause itself.³ There is a syntactic constraint which applies to the relative clause as well: the shared NP (the head) must be the trigger of the relative clause. Since intransitive (S) relatives have only one relativizable argument, this trigger constraint has no morphological or syntactic consequences for them. In the case of A and P relatives, however, the morphology of the verb reflects the role of the head. The following examples of relative clauses formed on A and P arguments in standard written Indonesian illustrate this trigger constraint.

A Relative

- (6) Pukulan akan dilepaskan terhadap mereka
 blow will PT:loose against them

<yang selama ini **menginjak** rakyat
 REL as:long this AT:step:on people

dan **mengisap** kaum kecil.>
 and AT:suck group small

'Blows would be loosed against those who all this time had been treading down the people and exploiting the common man.' (SDJ)

P Relative

- (7) Dilihatnya orang <yang **dilanggarnya** itu> telah berdiri.
 PT:see:3SG person REL PT:hit:3SG that already MID:stand
 'He saw the person whom he had hit standing up already.' (SDJ)

If this trigger constraint only occurs in formal written genres it might be inferred that it is an artifact of prescriptive grammar, applied only when language is produced under carefully monitored circumstances such as formal writing. On the other hand, if these constraints are followed in informal, spontaneous circumstances, it could be inferred that these constraints are a part of the "real" grammar.

3. Conversation

The conversational data used in this study were transcripts of two twenty-minute segments of conversations recorded in Indonesia. The first was an informal meeting in a newspaper office in Jakarta, and the second was a group of graduate students in Malang, chatting at home. The transcripts were segmented by intonation units (IUs). An intonation unit is a segment of speech under a single intonation contour, whose boundaries are indicated by a combination of pitch reset, pause, initial anacrusis, and terminal lengthening (Chafe 1994, Du Bois et al. 1992). Relative clauses were identified by the presence of the relative particle *yang*. The conversational data consist of 1360 IUs and included 74 relative clauses.

3.1 Relative clauses in conversation

Relative clauses in the conversational data were categorized according to the grammatical role of the shared NP within the relative clause. In Figure 1 this data is compared with relative clause data from standard literary Indonesian (a database of a database of 655 clauses from *Senja di Jakarta* by Mochtar Lubis. Relative clauses in novels are discussed in more detail in Cumming 1995.)

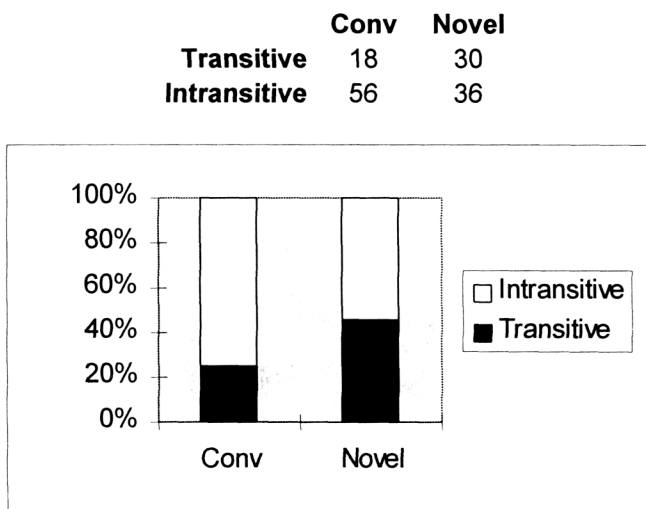


Figure 1: Relative clause transitivity in two genres

Transitive relative clauses, those in which the shared NP has the macro-role A or P in the relative clause, are much less frequent than intransitive clauses in the conversational data, where they make up just under one fourth of the total number of relative clauses. This is in contrast to the written data where transitive relative clauses account for almost one half of the total number of relative clauses.

The high frequency of intransitive relative clauses in conversation is actually not surprising when we consider that a primary function of relative clauses is to characterize referents. This function is more appropriately carried out with intransitive predicates, describing states and characteristics with

greater duration over time, rather than transitive predicates which are more likely to describe transitory events (Fox & Thompson 1990).

3.2 Syntactic looseness

Transitive relative clauses have a low frequency in our conversational data. In addition, the transitive relatives that do occur are interesting because of their syntactic looseness. By “looseness” we mean that the morpho-syntax of the clauses does not explicitly indicate trigger status or other grammatical relationships, and thus it is not clear that the standard prescriptive trigger constraint on relative clause formation actually holds. In example (8) the lack of verb morphology and unusual word order both contribute to the loose nature of the relative clause.

- (8) *Yayu,*
Yayu

semua <*yang akan atur*>.⁴

all REL will arrange

‘Yayu’s the one who will arrange everything’. (O)

The relative clause here is headless, part of a “cleft” construction (as defined in section 3.3 below). Here both arguments of the verb *atur* ‘arrange’ are external, occurring to the left of the relative clause marker *yang*. It is not clear which is the shared NP and it is thus not possible to determine whether the trigger constraint holds in the relative clause. Verb morphology also does not disambiguate this. If the A argument, *Yayu*, were the trigger, the expected verb morphology would be the prefix *meng-*. If the P, *semua* ‘everything’, were the trigger of the relative clause, the expected verb morphology would be the prefix *di-*. But the verb in the relative clause is unaffixed and thus there is no indication of which argument is the trigger.

In (9) the shared argument of the relative clause is clearly not a trigger.

- (9) Itu <yang tadi sudah katakan bahwa mohon pengertian>.
 that REL earlier already say that request understanding
 'That's what (I) already said that (I) requested (your) understanding (about)'
 (O)

This is also a headless cleft construction. The headless relative refers to the things about which the speaker had asked his interlocutors' understanding. It is in fact an oblique argument of the nominalization *pengertian* 'understanding', which itself is part of a complement clause serving as the P argument of *katakan* 'say', the main verb of the relative clause. We see here that the speaker is making use of richer grammatical resources than are usually sanctioned by the standard grammar, in which an embedded oblique is not an argument considered accessible to relativization. Additionally, as in (8) above, in (9) the main verb of the relative clause has neither prefix nor procliticized agent.

(10) is also an example of an unaffixed verb in the relative clause. Here the identity of the referent of the shared NP is ambiguous, and thus its status as trigger in relation to the verb is also indeterminate.

- (10) .. Nggak ada lagi <yang simpan di laci masing-masing>.
 .. not be again REL store at drawer each:one
 'There won't be (anyone) storing (things) in their drawers any more',
 or 'There won't be (things) stored in their respective drawers anymore.' (O)

In (10) the verb in the relative clause is unaffixed and the shared NP is not explicitly expressed in the matrix sentence. The general context of the utterance suggests that the first interpretation given above, which takes the shared argument to have the macro-role A, is the more likely; however, the second interpretation, with P as the shared argument, is not inconsistent with either the context or form of the relative clause. Again, the verb lacks any affixation and so does not give any indications as to the role of the trigger.

This data illustrate that inconsistencies between prescriptive grammar and what speakers actually produce in conversation are most evident in transitive relative clauses. The form that is most common among the transitive relative clauses

in our conversational data is for neither of the core arguments to be expressed within the relative clause, and for the verb in the relative clause to be bare, with neither a prefix nor a proclitic agent. Indeed, in morphosyntactic terms, the semantically transitive relative clauses in our conversational data are almost indistinguishable from the intransitive relative clauses. The production of transitive relative clauses with their arguments and verb morphology in order according to standard Indonesian grammar does not appear to be something that the speakers in our corpus attend to. This loose quality of transitive relative clauses does not however appear to cause any problems for production or comprehension. They are produced fluently and there is no evidence that hearers find them difficult to understand.

3.3 Clefts

It was mentioned above that one of the main functions of relative clauses is to characterize NPs, for which intransitive relative clauses are particularly well suited. Is there some other function which might account for the few transitive relative clauses that do occur in the data? As it happens, a number of the conversational relative clauses occur in cleft constructions. Cleft constructions consist of a lexical NP or pronoun and a relative clause in an equational structure.

- (11) ... Jadi,
... so,

itu <yang sisa garisbawahi lagi>.
that REL left underline again

'So, that's what still needs underlining again' (O)

In a cleft construction, the relative clause usually contains presupposed information, while the lexical NP or pronoun indicates the entity about which that presupposition holds. In (11) it is taken as presupposed that something needs to be underlined, and what that is is indicated with the pronoun *itu* 'that'.

Clefts are also common in question-word questions in Indonesian, as in example (16). Here again the relative contains the presupposition behind the question, while the other element in the equational is the question word.

- (12) Siapa <yang buat ini>.
 who REL make this
 'Who took this (photograph)?' (H)

We categorized transitive and non-transitive relative clauses in the conversational data according to whether they occurred in cleft constructions or not. As the results in figure 2 indicate, the majority of transitive relative clauses (over 70%) occur in cleft constructions, while only about 20% of the non-transitive relative clauses are used in cleft constructions.

	Cleft	Non-Cleft
Transitive	13	5
Intransitive	12	44

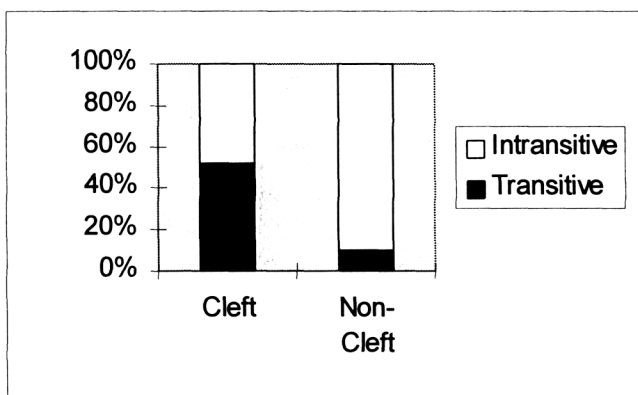


Figure 2: Cleft and transitivity

When transitive relative clauses are used in cleft constructions, their loose syntactic structure can also impact the structure of these cleft constructions. Recall that in example (8), repeated here as (13), there were two shared NPs external to the relative clause.

- (13) Yuyu,
Yayu

semua yang akan atur.
all REL will arrange

'Yayu's the one who will arrange everything'. (O)

Thus the matrix clause, which is normally a two-part equational in a cleft construction, actually consists of three nominals whose relationships, while clear on semantic and pragmatic evidence, are not clearly indicated by means available in standard Indonesian grammar.

It was suggested above that a primary function of relative clauses is to characterize referents and that this characterization function is best fulfilled by intransitive clauses. Cleft constructions, on the other hand, do not have a characterizing function, but rather an interactional one, indicating the speaker's stance toward the informational status of the content of the clause. Thus, clefts would be expected to be used with the full range of clause types occurring in discourse, including transitive constructions.

3.4 The trigger constraint in conversation

We have shown in this section that transitive relative clauses are rare in conversation, and that when they do occur they are syntactically loose. These two facts have the consequence that the conversational data that we examined does not provide evidence for the application of the standard syntactic constraint on trigger choice. This could be considered evidence for the claim that this trigger constraint is merely an element of prescriptive grammar that is not attended to by speakers in unmonitored contexts.

Alternatively, however, this data is open to another interpretation: that the trigger constraint is in fact part of the "real" grammar of Indonesian, but that something about real-time face-to-face interaction precludes the use of transitive relative clauses that comply with this constraint. In the next section we examine further evidence from language use in cyberspace.

4. Newsgroup posts

The database we used for newsgroup posts consisted of 58 relative clauses from 20 posts on the Internet newsgroups "alt.culture.indonesia" and "soc.culture.indonesia". The language found in these posts ranges from very informal to very formal. A wide range of informal features is found in the following example:

(14) Ngak juga tuh. :)

not also PRT SMILEY

Di lab biasanya ada rekaman video monitor
at lab usually be recording video monitor

yang bisa dicocokin ama ftp log,
REL can PT:match:CAUS with FTP log

jadi kalo ketangkap elu gak bisa alasan
so if PT:catch 2SG not can excuse

ada hacker yang pake account elu.
be hacker REL use account 2SG

'No it isn't. :) In a lab there's usually a video record which can be matched to the FTP log, so if you're caught you can't use the excuse that there's a hacker using your account.' (Net)

Informal features illustrated in this example include the use of nonstandard lexicon, such as variant forms of the negative morpheme (*gak*, *ngak*) and pronouns (*elu*); nonstandard affixation, such as the "patient-trigger" prefix *ke-* and the "causative-applicative" suffix *-in*; and spellings reflecting nonstandard phonology, such as *pake* for *pakai*, *kalo* for *kalau*, *tangkap* for *tangkap*, and *ama* for *sama*.

Some aspects of this medium seem to reflect not merely non-standard language use, but more specifically aspects of language normally confined to face-to-face interaction, such as the use of "discourse particles" like *tuh* and the use of "smileys" or "emoticons", like the symbol :) — which, when viewed sideways, resembles a smiling face, and is used in electronic communication to approximate the use of body language and intonation to express speaker attitude towards

what is said. Sometimes writers go even further: the writer of the following example, for instance, used the particle *eh* to repair an inappropriate word choice, rather than merely deleting the repaired item as one might expect in written communication produced at a terminal:

- (15) Paling gak yang ini lebih aman, dan susah untuk di- trace
 most not REL this more safe and difficult to PT trace
 siapa yang logged eh ftp-ed kesana... =)
 who REL logged REPAIR FTPed to:there SMILEY
 'At least this is safer, and it's hard to trace who logged, I mean FTPed there
 =)' (Net)

Other messages, conversely, exhibit the use of explicitly formal language; compare for instance the following, which contains the standard suffix *-kan* (where a more informal style would use *-in*), and the formal deictic expression *tersebut* for anaphoric reference:

- (16) Di bawah ini saya kutipkan kembali
 at under this 1SG excerpt again
 article yang saya follow-up tersebut.
 article REL 1SG follow-up aforementioned
 'Below I excerpt again the above-mentioned article which I'm following up on'
 (Net)

Because the net messages in our database varied between formal and informal style, as the above examples show — and in fact, register shifting was often apparent even within a message — overall they fall somewhere in between exclusively formal and exclusively informal genres. However, informal language was definitely characteristic of the majority of our sample. For instance, with respect to transitive verb prefixation — a good index of register — newsgroups show almost as low a rate as conversation, while the standard Indonesian of novels uses prefixes at a much higher rate. Figure 3 illustrates this distribution.

	Conv	Net	Novel
Prefix	103	86	207
No prefix	83	55	37

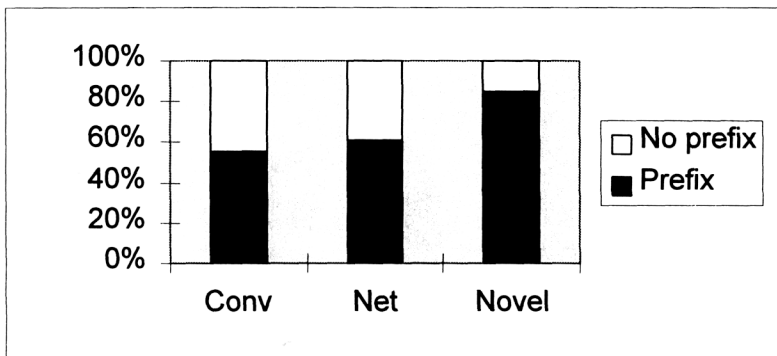


Figure 3: Prefixes by genre in transitive relatives

4.1 Relative clauses in newsgroups

Although informal newsgroup posts are morphologically conversation-like, as shown by the above measures, there is one respect in which they resemble standard written Indonesian: the high incidence of transitive relative clauses. Indonesian conversation is marked by a very strong tendency for relative clauses to be intransitive, but fully half the relative clauses in newsgroups were transitive, virtually the same proportion as for formal Indonesian. This is illustrated in Figure 4, which adds the newsgroup data to the data in Figure 1.

	Conv	Net	Novel
Transitive	18	25	30
Intransitive	55	28	36

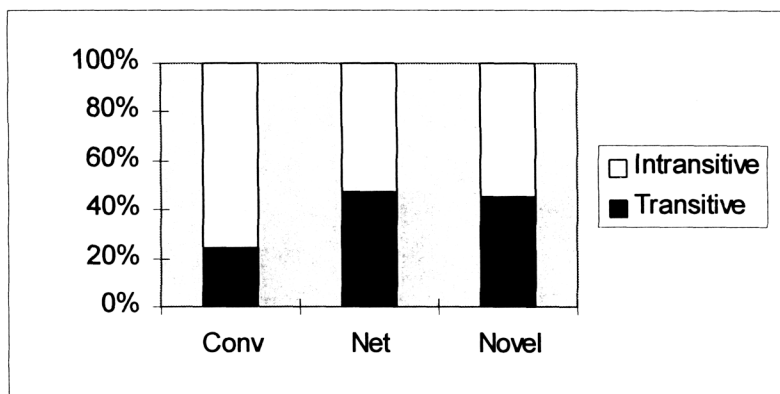


Figure 4: Relative clause transitivity in three genres

The frequency difference between the transitivity of relatives in newsgroups and conversation is even more striking when you consider that clefts (which, as we showed above in section 3.3, accounted for the large majority of transitive relative clauses in conversation) are much less important in newsgroup posts: there are only four instances of cleft constructions in our newsgroup database. The paucity of clefts in newsgroups is presumably due to the non-interactional characteristics of the genre. In addition to their higher frequency, transitive relative clauses from the net data differ from those of the conversational data in that they do not display the same degree of syntactic looseness; in general, their form is consistent with the rules of the standard grammar.

Why, then, do people who post to newsgroups use transitive relative clauses? Most of the transitive relatives that occurred in our data did in fact have basically the same “characterizing” functions as intransitives. This is because transitive clauses overlap with intransitives in their discourse functions: they too can sometimes refer to time-stable situations. The transitive relatives in our data for the most part bear

this out: while they were transitive in the sense of having two arguments, most were habitual or stative rather than active or perfective.

As Fox & Thompson (1990) note, characterization is generally most relevant at the point where the referent is introduced, and thus we see many characterizing relatives in our data in a presentative construction involving the "existential" predicate *ada*.

AT transitive relatives tended to refer to generic activities, as in (17) and (18):

- (17) Kalo nggak salah, ada ftp-site <yang nge-log semua activities luh
if not wrong exist FTP:site REL AT:log all activity 2SG

selama login termasuk file-file apa yang sudah luh ambil>
while logged:in including file:REDUP what REL PFV 2SG take

'If I'm not mistaken, there are FTP sites that log all your activities while you're logged in, including whatever files you downloaded' (Net)

- (18) Misalnya ada BBS <yang khusus menyimpan recipe
for:instance exist BBS REL specially AT:store recipe

untuk bikin bom atau alat-alat destruction lainnya>
for make bomb or instrument:REDUP destruction other

'For instance, there are BBSs which specifically store recipes for making bombs or other instruments of destruction' (Net)

PT characterizing relatives are typically agentless, with the relative being used to characterize a referent in terms of the outcome of an event, as in (19). Although such verbs have PT morphology, they are intransitive in the sense of having a single argument, and (like the AT relatives in (17) and (18)) they can be seen as time-stable, since they refer to a resultant state.

- (19) Tapi dulu kayaknya nggak ada BBS <yang ketangkap>,
but formerly apparently NEG exist BBS REL PT:catch
'But formerly it seems there weren't any BBSs that got caught' (Net)

Thus, the range of uses of relative clauses is similar between transitives and intransitives in newsgroup posts.

4.2 The trigger constraint in newsgroups

The newsgroup posts exhibit many characteristics of conversational Indonesian and, while they occasionally include a few formal segments, they are generally of an informal, unplanned nature. This suggests that, as is the case for conversation, the prescriptive tradition has little effect on this genre. Interestingly, transitive relative clauses are not only frequent in this data, but are also consistent with the syntactic trigger constraint. This suggests that this constraint is in fact not just a prescriptive rule. This suggests further that the scarcity of transitive relative clauses in conversation, and the syntactic looseness of those that do occur, may be due to processing constraints on relative clause production in real time interaction, rather than simply to informality. Exactly what these constraints are and how they affect relative clause production in conversation warrants further research.

5. Conclusion

Relative clauses in Standard Indonesian are highly constrained in their syntax, and formal written Indonesian adheres closely to the standard in this respect. By examining data from face-to-face interaction and Internet newsgroups and comparing these with written Standard Indonesian, we discovered that relative clauses in Indonesian conversation are overwhelmingly intransitive. Those transitive relative clauses that occur are primarily in clefts and are syntactically loose. As for the newsgroup data, although it has many informal and interactional features, it is similar to formal written Indonesian in that it makes extensive use of transitive relative clauses, and they are generally consistent with the syntactic role constraint of Standard Indonesian. This suggests that this constraint is not merely a prescriptive artifact but in fact part of the living grammar of Indonesian.

NOTES

- 1 The authors are grateful to Yoshi Ono, to Sandy Thompson, and to the members of the UCSB Austronesian Circle for their comments.
- 2 The following abbreviations are used in the examples:

Data source: H: Home conversation; O: Office conversation; Net: Internet newsgroups; SDJ *Senja di Jakarta*, by Mochtar Lubis (novel)

Glosses:

1SG, 2SG, 3SG	Pronouns
AT	Agent Trigger
PT	Patient Trigger
INVOL	Involuntary
MID	Middle
ADV	Adverbial
DEF	Definite
REL	Relative linker

- 3 Possessor relativization occurs in Indonesian, but in this case the head is cross-referenced by a clitic pronoun in the relative clause. Possessor relative clauses are thus structurally distinct from relative clauses formed on the macro roles A, S and P and will not be discussed here.
- 4 Transcription conventions for spoken data are adapted from Du Bois et al. (1992). The most important features for our purposes are the use of punctuation to indicate intonation patterns (period = final, comma = non-final), and the use of dots to indicate pauses (here, two dots = very short pause or timing break, three dots = longer pause).

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