## What is Indonesian NCA? Let's find out.

The goal of this paper is to describe the phenomenon of Indonesian null complement anaphora (NCA), situate it within existing descriptions and analyses of NCA in other languages, and show that it is problematic for recent theorizing regarding the relationship of ellipsis to phasehood. NCA is a type of ellipsis under which the clausal complement of an embedding predicate surfaces as phonologically null, yet yields a definite interpretation, which is determined by the context (1). Since Hankamer & Sag 1976, NCA has been viewed as an outlier of sorts among ellipsis phenomena. Hankamer & Sag show that English NCA is a 'deep' anaphor, or a null proform lacking internal structure at all points in the derivation. This distinguishes NCA from other ellipsis phenomena, such as verb phrase ellipsis (VPE), which are 'surface' anaphors, meaning that the ellipsis site has internal structure at some stage in the derivation. Subsequent research on NCA in other languages, such as Spanish and Italian (Depiante 2000) and Japanese (e.g. Saito 2007), has generally supported the characterization of NCA crosslinguistically as a deep sentential proform with no internal syntactic structure. Research on Portuguese NCA, in contrast, depicts it (until now, uniquely) to be a surface anaphor (Cyrino 2004; Cyrino & Matos 2006).

Indonesian displays NCA, with many of the same defining characteristics as NCA in previously-described languages. As in these other languages, Indonesian NCA can be interpreted as either a property or a proposition (2); it does not, however, permit a nominal interpretation (3). Additionally, it allows both strict and sloppy identity readings (4), and the Backwards Anaphora Constraint holds (5). Indonesian NCA does not, however, behave as a deep anaphor: it has several properties that indicate the presence of internal structure. It permits extraction from the ellipsis site, as in (6), where the inverse scope reading is available, suggesting QR has extracted a quantifier from the null complement. It also appears to permit coreference with a 'missing' antecedent (7), suggesting that this antecedent is present within the null complement. Indonesian NCA thus seems to be a surface anaphor. Cyrino 2004 hypothesizes that Portuguese NCA was originally a deep anaphor, and was reanalyzed as a surface anaphor via extension of the interpretive process used to resolve null DP objects. If this hypothesis is on the right track, that Indonesian NCA is a surface anaphor is unexpected, as Indonesian lacks null DP objects.

If Indonesian NCA is a surface anaphor, and its derivation does involve ellipsis, regardless of whether this obtains via PF Deletion (e.g. Merchant 2001), LF Copying (e.g. Chung, Ladusaw, and McCloskey 1995), or a mechanism that blocks vocabulary insertion (e.g. Aelbrecht 2010), it appears to offer a counterexample to aspects of recent theorizing linking ellipsis to phasehood. Boškovi 2014 argues that only full phases, and the complements of phase heads, can be targeted by ellipsis. He further argues the two types differ where A'-extraction is concerned, as predicted by the Phase Impenetrability Condition: A'-extraction is possible only from ellipsis sites that are complements of phase heads. English VPE, for example, which involves ellipsis of a complement of a phase head (namely, v), allows A'-extraction, while British English *do*-ellipsis, which involves ellipsis of a full phase, does not (8). Indonesian NCA, which appears to involve ellipsis of the CP complement of an embedding predicate – that is, of a full phase – does, contrary to expectations, permit A'-extraction.

(1) Sue was attempting to kiss the gorilla, and Harry didn't approve <> (H&S 1976: 411)
(2) Siti menyuruh Ali untuk mencuci piring, tapi dia lupa <>.
Siti order Ali for wash dish but 3SG forget
<ul> <li>'Siti told Ali to wash the dishes, but he forgot'</li> <li>✓ property interpretation: 'to wash the dishes.'</li> </ul>
<ul> <li>✓ proposition interpretation: 'that she told him to wash the dishes.'</li> <li>(3) a. Majikan=nya tidak tahu ke mana dia pindah.</li> </ul>
(3) a. Majikan=nya tidak tahu ke mana dia pindah. employer=3SG NEG know to where 3SG move
Teman-teman=nya juga tidak tahu <>.
friend-REDUP=3SG also NEG know
'Her employer didn't know where she'd moved to. Her friends didn't know either.'
b. *Siti belum tahu jawaban yang betul, tapi Ali sudah tahu <>.
Siti not.yet know answer REL true but Ali PERF know
(*'Siti doesn't know the correct answer yet, but Ali already knows.')
(4) Ali ingat menelpon ibu=nya, tapi Siti lupa <>.
Ali remember call mother=3SG but Siti forgot
'Ali remembered to call his mother, but Siti forgot.'
$\checkmark$ strict interpretation: Siti forgot to call Ali's mother
$\checkmark$ sloppy interpretation: Siti forgot to call Siti's mother
(5) a. Walaupun saya tidak mau <>, saya tetap membayarkan=nya.
although 1SG NEG want 1SG still ACT-pay-APP=3SG
'Although I don't want, I still pay for him.'
b. * Saya tidak mau, walaupun saya tetap membayarkannya.
1SG NEG want although 1SG still ACT-pay-APP=3SG ('Ldon't want although Lstill pay for him ')
('I don't want, although I still pay for him.') (6) Setiap mahasiswa lupa membaca dua buku dan setiap dosen juga lupa <>.
every student forget read two book and every professor also forget
'Every student forgot to read two books, and every professor also forgot.'
✓ surface scope: every student/professor forgot to read some two books
$\checkmark$ inverse scope: there are two books that every student/professor forgot to read
(7) a. Saya tidak pernah diperbolehkan naik becak, tapi Siti diperbolehkan <>,
1SG NEG ever PASS-allow ride pedicab but Siti PASS-allow
dan dia bilang itu hijau.
and 3SG say that green
'I've never been allowed to ride in a pedicab, but Siti has been allowed, and she said it
was green.'
b. * Saya tidak pernah naik becak, dan itu hijau.
1SG NEG ever ride pedicab, and that green
'I've never ridden a pedicab, and it was green.'
<ul><li>(8) a. Although I don't know who Thomas will visit, I do know who Aga will.</li><li>b. *Although I don't know who Thomas will visit, I do know who Aga will do.</li></ul>
b. *Attribugh I don't know who Thomas will visit, I do know who Aga will do. (Boškovi 2014: 48)
(DOSKOVI 2014. 40)