Names as complex indices: On apparent Condition C violations in Thai
Khanin Chaiphet (Stony Brook University) and Peter Jenks (UC Berkeley)

Thai is known to mysteriously violate Condition C (Lasnik 1987):

(1) Nít phûut wāa Nít sâbâay.
    Nit say COMP Nit comfortable
    ‘Nit said that she’s comfortable.’

This paper argues that such apparent Condition C violations arise in Thai due to the exceptional semantics of Thai names: they are not constants but instead are complex indices, analogous to indexicals. This account highlights the success of Reinhart’s Coreference Rule as a crosslinguistically robust account of Condition C. Furthermore, the Thai facts illustrate that proper names and kinship terms exhibit crosslinguistic variation in their semantics.

**Two generalizations** refine our understanding of cases like (1), both due to Hoonchamlong 1991, who offers a novel binding condition to Thai to account for these facts.

**Generalization 1:** Not all R-expressions can be bound in Thai; only Pronominal R-Expressions (PREs), which include names, kinship terms, and titles such as aacaan ‘teacher.HON.’ Thus, a complex demonstrative cannot be bound as it is a regular R-expression (cf. Larson 2006):

(2) *Nít phûut wāa [khon nañ]₁/₂ sâbâay.
    Nit say COMP person that₁ comfortable
    ‘Nit said that that person’s comfortable.’

PREs are neither epithets nor Imposters (Collins and Postal 2012): neither of which can be bound as in (1). Instead, PREs are predicates which consistently identify a single individual in context.

**Generalization 2:** PREs can only be bound by an identical PRE, not a pronoun or R-expressions:

(3) *[khon nán]₁/ khǎw₁ phûut wāa Nít₁ sâbâay.
    person that₁ 3P₁ say COMP John comy
    ‘That person/She said that Nit₁’s comfortable.’

Hoonchamlong dubs this constraint the Binder Identity Generalization (BIG).

Existing accounts of Thai Condition C violations fail to account for both generalizations. First, Lee 2003 proposes that the bound PRE in (1) is a phonological copy in a bound variable structure. This accounts for the BIG, but it does not account for the exceptional behavior of PREs, as it predicts any element that can bind variables can be copied to the bindee. But quantifiers can’t act as bound variables (4), nor can regular R-expressions (not shown):

(4) ???[Thúk khon]₁ phûut wāa [thúk khon]₁ mây sâbâay.
    every CLF say COMP every CLF NEG comfortable
    ‘Everyone said that they aren’t comfortable’ (intended)

On the other hand, Larson (2006) focuses on the exceptionality of PREs, arguing that they are syntactic pronouns, or ϕPs. This accounts for PRE’s exceptional behavior vs. regular R-expressions, but it cannot account for the BIG, because it predicts PREs should behave like pronouns. But unlike pronouns, PREs cannot be bound by quantifiers:

(5) [phîi thúk khon]₁ phûut wāa phîi₁/₂sabaaj.
    old.sib every CLF think COMP old.sib comfortable
    Only: ‘[Every older sibling]₁ thinks that I/you/she₂ is comfortable.’

(5) only allows a referential interpretation of the bound PRE, not a bound one, although phîi is a PRE and can bind itself when bare. Furthermore, if the bound PRE is replaced with a regular 3P pronoun like khǎw in (2), (3), and (5), bound variable interpretations are fine.
There are parallels between Thai PREs and indexicals (e.g. ‘me’ and ‘you’, Kaplan 1977) in that they are interpreted as contextually restricted variables. Thus, we analyze (1) as parallel to, e.g., *I think that I am comfortable* in English. We offer three arguments for this connection.

1. In Thai, PREs can refer to the speaker or addressee in argument position as the context allows. For example, (1) could be used by someone named Nit to talk about themselves, or by someone else addressing Nit, in contexts of casual familiarity. All PREs share this property. Otherwise only first and second person pronouns can be used in these contexts.

2. Neither indexicals (6) nor PREs (5) can receive bound variable interpretations (BVIs) when bound by quantifiers (Sudo 2012:140):

(6) #Exactly one person\(_1\) did my\(_1\) homework(, namely me).

3. However, PREs and indexicals can get BVIs under focus (7) and ellipsis (not shown):

(7) a. Only I think that I am smart. (Strict or sloppy)

b. Miikhɛ Nít thîikhítwâ Nítchàlàat. EXT just Nit REL think COMP Nit smart

‘Only Nit thinks that she’s smart.’ (Strict or sloppy)

Bound ‘I’ in (7-a) and Nít in (7-b) can be bound or free when assessing focus values, either \(\{x \text{ think that } x \text{ is smart: } x \in D_1\}\) (sloppy) or \(\{x \text{ think that I/Nit am smart: } x \in D_1\}\) (strict).

**Analysis:** To account for these parallels, I adopt the proposal of Sudo (2012, §10.1), that pronominal indices are ordered triples, members of \(N \times \text{TYPE} \times \{\langle 1, e, 2 \rangle, \langle 2, 3 \rangle\}\), where \(N\) is a variable, TYPE is a semantic type, and \(\{\langle 1, e, 2 \rangle, \langle 2, 3 \rangle\}\) are person features. So ‘you’ is \(\langle i, e, 2 \rangle\), written \(i[\langle 2 \rangle]\) for short. Assignment functions are subject to admissibility conditions which ensure \(i[\langle 2 \rangle]=\text{addressee}(c)\). Call the role of person features the contextual restriction on the index. In Thai, predicates described by PREs, e.g. names and kinship terms, are contextual restrictions on indices:

(8) a. \([\text{Nit}_i]^g = g(i[\text{Nit}]) = \text{the individual called ‘Nit’ in } c.\)

b. \([\text{phi}_i]^g = g(i[\text{old.sib}]) = \text{the older sibling of the speaker in } c.\)

Like ‘speaker’ and ‘addressee’, PREs are well-suited as contextual restrictions as they either identify individuals in particular contexts, or contain concealed indexicals, as in (8-b).

I further assume with Sudo that when an expression moves, enabling binding via predicate abstraction, the variable introduce in predicate extraction must include the entire complex index to bind its trace. As a result, moved indexicals (or PREs) can only bind indexicals (or PREs) with the same contextual restriction, as these expressions will have the same complex index:

(9) Nít \(i_1[\text{Nit}_i]\) [ \(t_1[\text{Nit}_i]\) said that Nít\(_1[\text{Nit}_i]\) is comfortable ]

If quantifiers only abstract over simple indices, they cannot bind complex indices, explaining (5).

The BIG can now be attributed to the Coreference Rule (CR, Grodzinsky and Reinhart 1993), which attributes Condition C to a ban on coreference when an LF involving binding is semantically equivalent. Consider the following LF for (3), where the moved subject binds a simple variable:

(10) that person \(i_1\) [ \(t_1\) said that Nít\(_1[\text{Nit}_i]\) is comfortable ]

Even though the index itself may be the same, the subject is unable to bind the complex index corresponding to Nít; only coreference is possible. Furthermore, if Nít was replaced with a pronoun, interpretable as a simple variable, binding is possible. As a result, Reinhart’s CR bans coreference in (3), but not in (1)/(9). So if CR is our account of Condition C, Thai is no longer recalcitrant.