Vietnamese Anaphora: Binding Principles and the Lack Thereof[1]

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Abstract

Vietnamese poses a challenge for both classic and competition-based accounts of the Binding Theory. While, at first glance, Vietnamese seems not to be subject to any of the classic Binding Principles, we discuss each of the conditions and argue that Vietnamese still fits within the realm of cross-linguistic patterns. We also present novel data that illustrate *context-dependent* competition based accounts fare better in capturing coreferent readings of personal pronouns.

1 Introduction

The Binding Theory is often seen as a universal set of principles that regulate possible patterns of coreference in natural language. However, cross-linguistic patterns cannot all be accounted for under the assumption of *universal* constraints. In this paper, we investigate the degree to which the Binding Theory guides the interpretation of referring expressions in Vietnamese, a language which allows for apparent violations of *all* three Binding Principles. The crux of the paper focuses on the possible interpretations of *mình* and *nó*, as illustrated below.

(1) *Luna$_1$ nói là   Ginny$_2$ trách   mình$_{1/2}$*
    Luna say that Ginny criticize SELF
    'Luna said Ginny criticizes her(self).'

(2) *Luna$_1$ nói là   Ginny$_2$ trách   nó$_{1/2}$*
    Luna say that Ginny criticize 3SG
    'Luna said Ginny criticizes her(self).'

In (1), the reflexive form *mình* can refer back to either the local subject *Ginny* or the long-distance subject *Luna*. Meanwhile, the non-reflexive pronoun, *nó*, in (2) exhibits

the same pattern when it appears in the same syntactic environment. This perplexing observation presents an interesting puzzle for syntactic and semantic theories of Binding. Not only is the complementary distribution of reflexives and non-reflexives not met in Vietnamese, but, at first glance, both *mình* and *nó* seem to be impervious to Principles A and B, in their classic form.

In this paper, we discuss data that supports as well as contradicts classic or current accounts of the Binding Theory, and we sketch out an analysis of the distributional and interpretative properties of the referent forms in the language. The organization is as follows. In the next section, we briefly introduce the necessary background regarding the language and classic Binding Theory accounts (Chomsky, 1981, 1986). In the third section, we discuss data which illustrates the lack of the classic binding principles in Vietnamese, with a particular emphasis on Principles A and C. In section 4, we then focus on Principle B, discuss competition-based accounts of the Binding Theory (Reinhart, 1983; Rooryck & Vanden Wyngaerd, 2011; Roelofsen, 2010) and how the Vietnamese data fares against them. We argue that, in Vietnamese, the bound and coreferent readings for the personal pronoun *nó*, although grammatically possible, are a matter of context-dependent preference. Under a view where competition between forms and interpretations is at play in deriving Condition B effects, another puzzle in Vietnamese is represented by the reflexive marker *tự*, which greatly increases the preference for bound and coreferent readings of *nó*. Section 5 discusses *tự* from the perspective of VP emphatic reflexive markers (Ahn, 2010). Finally, section 6 concludes the paper.

2   Setting the Stage

2.1   Language Background

Vietnamese is part of the Austroasiatic language family and is spoken by roughly 96 million native speakers in Vietnam. The data discussed in this paper is representative of the Southern dialect, as our informants live in the area of Saigon. The data reported in this paper was collected by means of direct elicitation from four primary consultants, both in person and online.

The table in (3) offers an overview of the Vietnamese pronominal system, zooming in on singular pronouns for the sake of simplicity. The morphological form of personal pronouns is sensitive to person, number, honorificity and gender (the latter for honorific pronouns). Meanwhile, the reflexive pronoun is morphologically underspecified: *mình* does not vary across the paradigm.

(3) *Singular Pronouns in Vietnamese*

	PERSONAL	REFLEXIVE
1SG	*tôi*	*mình*
2SG	*bạn*	*mình*
3SG.M.HON	*ổng*	*mình*
3SG.F.HON	*bả*	*mình*
3SG.HHON	***nó***	***mình***

In Vietnamese, gendered pronouns are not only honorifc, but their distribution is more restricted than that of *nó*, their subhonorific counterpart. Consequently, the data discussed in the present paper focuses on the contrast between the subhonorific personal pronoun *nó* and the reflexive *mình* (both bolded in (3)), neither of which is specified for gender.

2.2 Classic Binding Theory

Traditionally, the three Binding Conditions (Chomsky, 1981, 1986) are taken to be innate, independent and universal *principles*. Despite a large body of work over the years, including more recent findings regarding Khanty (Volkova & Reuland, 2014), Jambi (Cole et al., 2017), and Chamorro (Wagers et al., 2017)), which provide evidence against their universality, the notion of *Binding Principles* is still canon. The most well-known versions of the BT conditions are given below.

(4) a. *Condition A*
          An anaphor must be locally bound (in its binding domain).
                    Chomsky (1986); Büring (2005); Charnavel & Sportiche (2016), a.o.

     b. *Condition B*
          A pronoun must be free in its binding/coargument domain.
                                        Chomsky (1986); Büring (2005), a.o.

     c. *Condition C*
          An R-expression must be free.   Chomsky (1986)

Although what qualifies as a *binding domain* has been subject to significant changes in the literature on Binding Theory in its classic form, the formulation of the conditions proper has been more or less consistent. With the emergence of competition-based accounts of the constraints on pronominal binding and coreference (see Section 4 for an overview), the arguments in favor of the principles in (4) have varied in strength from condition to condition: Condition A still sees strong support (see Charnavel & Sportiche (2016), for instance), while Condition C has seen a considerable amount of

counterevidence (starting with Lasnik (1989)). Nevertheless, the sentences in (5) illustrate how the classic Binding conditions hold in English.

(5) a. *Luna$_1$ said that Ginny$_2$ criticizes herself*$_{*1/2}$.   CONDITION A COMPLIANT
     b. *Luna$_1$ said that Ginny$_2$ criticizes her*$_{1/*2}$.   CONDITION B COMPLIANT
     c. **Luna$_1$ said that Ginny$_2$ criticizes Ginny$_2$.*   CONDITION C COMPLIANT

In (5a), the reflexive *herself* can only refer to the local subject, and not to the long-distance subject, *Luna*. In other words, *herself* has to be bound by a c-commanding antecedent within the same sentence (*Ginny*), thus obeying Condition A. On the other hand, the personal pronoun *her* in (5b) cannot be bound by a clausemate c-commanding antecedent: non-local *Luna* is an available antecedent for *her*, but clause-mate *Ginny* is not. The utterance in (5b) illustrates that *her* obeys Condition B. Similarly, (5c) shows that, in English, referential expressions (like *Ginny*) cannot be 'bound': a non-pronominal DP cannot be repeated in order to target the same referent. Although English provides evidence for the classic versions of the Binding Conditions, not all languages do. Compare the sentences in (5) to their Vietnamese counterparts below.

(6) a. *Luna$_1$ nói là Ginny$_2$ trách   **mình**$_{1/2}$*
        Luna say that Ginny criticize SELF
        'Luna said that Ginny criticizes her / herself.'

     b. *Luna$_1$ nói là Ginny$_2$ trách   **nó**$_{1/2}$*
        Luna say that Ginny criticize 3SG
        'Luna said that Ginny criticizes her / herself.'

     c. *Luna$_1$ nói là Ginny$_2$ trách   Ginny$_2$*
        Luna say that Ginny criticize Ginny
        'Luna said that Ginny criticizes Ginny.'

Even though *mình* is the invariant reflexive pronoun in Vietnamese, (6a) illustrates that *mình*, unlike English *herself*, can corefer with either *Luna* or *Ginny*. In a similar fashion, the personal pronoun *nó* in (6b) can refer to either of the two antecedents, thus violating Condition B in its form in (4b). Finally, the sentence in (6c) shows that repeated names do not lead to ungrammaticality in Vietnamese. The contrast between (5) and (6) naturally leads to the following question: are conditions A, B and C grammaticized in English, but not in Vietnamese?

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3 The Lack Thereof

3.1 Principles A and B need not apply

In order to determine whether Conditions A an B are grammaticized in English and Vietnamese, we presented our English and Vietnamese consultants with sentences such as (7a) and (7b), and then asked a question of the type in (8) below, to check the strength of each condition.

(7)   a.   *Luna says that Ginny often criticizes herself / her.*   ENGLISH

       b.   *Luna nói là   Ginny hay   trách   mình / nó.*   VIETNAMESE
           Luna says that Ginny often criticizes SELF / 3SG
           'Luna says that Ginny often criticizes her.'

(8)   *Who does Ginny often criticize?*

       a.   Luna (LONG DISTANCE)   b.   Ginny (LOCAL)

While our English consultants make a very strong distinction between *herself* and *her*, the difference between *mình* and *nó* is not as clear cut. To a question like the one in (8), all of our 4 English informants chose the long distance referent, *Luna*, for *her*, and the local referent, *Ginny*, for *herself*. On the other hand, our 4 Vietnamese consultants said that choosing the long-distance referent feels more natural in sentences like (7b), irrespective of whether the pronominal is *mình* or *nó*, and that they prefer *Luna* as an antecedent; however, both interpretations are possible.[2] We take these empirical facts as evidence that the classic versions of Conditions A and B are grammaticized in English, and that they are more of a *preferential* soft constraint in Vietnamese.

3.2 A note on C

Another question of interest is whether Condition C is grammaticized in one language, but not in the other. Based on acceptability ratings of sentences such as the ones in (9) coming from 4 speakers of each language, while the English (9a) is rated at around 2.5/7[3], our Vietnamese consultants rate (9b) at around 5.5/7[4]. The three point differ-

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[2]This difference between English and Vietnamese was corroborated by the data from an online forced-choice task pilot experiment ran on the two languages, via IbexFarm (Drummond, 2013). There is a slightly stronger preference for the long-distant referent when *nó* is used, but an overall dispreference for the local antecedent.

[3]Two ratings of 2/7 and two ratings of 3/7.

[4]Two ratings of 5/7 and two ratings of 6/7.

ence on the Likert scale is informative with respect to how *hard* of a constraint Condition C is in each language.[5] Data like the one in (9) motivates our claim that Condition C might be grammaticized in English, but that it is most definitely not a hard constraint in Vietnamese.

(9) a. *Hermione knew that Hermione was smart.* ENGLISH: 2.5

  b. *Hermione biết là Hermione thông minh.* VIETNAMESE: 5.5
  Hermione knew that Hermione smart
  'Hermione knew that she was smart.'

At first glance, it seems that Vietnamese does not obey *any* of the classic BT Conditions. However, the observation that the *Binding Principles* face considerable challenges in the face of cross-linguistic data should not be that surprising. Certainty regarding the *classic* version of the BT conditions has wavered singificantly over the years. For instance, not only does Lasnik (1989) briefly discuss that languages like Thai and Vietnamese might not be subject to Condition C, but he also notes, as many do later on as well (Schlenker (2005); Patel-Grosz (2015), a.o.), that English also exhibits Condition C violations. One such case is represented by anaphoric epithets.

(10) a. *Peter convinced John$_1$ that **the idiot**$_1$ is smart.*
  b. *Peter convinced the director$_1$ that **the director**$_1$ is smart.*

As illustrated above, epithets like *the idiot*, and even more traditional R-expressions like *the director*, can and do refer to previously introduced antecedents. This data is in direct conflict with Condition C, according to which R-expressions like *the director* should necessarily introduce a new discourse referent within the same sentence. For this and other reasons, more recent versions of the classic Binding Theory accounts, such as Büring (2005), do not explicitly include a Condition C among the Binding Conditions. Despite the difference in acceptability ratings in (9), Vietnamese is not an outlier with respect to Condition C *per-se*: Condition C seems to generally be inconsistently applied. Another possible take on the difference in ratings for the English and Vietnamese alternatives of (9) stems from Gordon et al. (1993), who look at *repeated name penalties*. In this sense, Vietnamese might exhibit a lower repeated name penalty than English.

3.3 Condition A in Vietnamese

Of the three classic BT conditions, the one that truly stands the test of time is *Condition A*. The notion of *exempt anaphora* or *long-distance anaphora* has been a primitive for those

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[5]Once again, this 3-point difference is corroborated by data coming from an online acceptability rating pilot experiment ran on English and Vietnamese, via IbexFarm (Drummond, 2013).

working on reflexives ever since Huang & Tang (1991). Crucially, in (11) below, the *self*-pronoun *ziji* has a non-local interpretation in (11): it may refer to the long-distance subject, *Zhangsan*.

(11) *Zhangsan₁ renwei Lisi hai-le   ziji₁.*   MANDARIN
      Zhangsan think Lisi hurt-ASP SELF
      'Zhangsan thought that Lisi hurt him'   (Huang & Tang, 1991)

An important observation is that exempt anaphora seem to be logophoric (Huang & Liu, 2001; Charnavel & Sportiche, 2016), i.e. perspective-dependent. The take on these exempt anaphora is that they are, in fact, subject to Condition A (Charnavel & Sportiche, 2016). While reflexive pronouns like *himself* are subject to classic Condition A, with the clause being the binding domain, logophors are argued to also be subject to Condition A, with a *larger* discourse-dependent binding domain. In essence, they are bound via a logophoric operator within the sentence; the main difference is that this logophoric operator need not be coindexed with the local subject, but with any perspective holder in the local context (including the speaker).

We assume that Vietnamese *mình* is an exempt anaphor, similarly to Mandarin *ziji* or Icelandic *sig*. For data and argumentation in support of this assumption, see Bui (in preparation). Some of the facts discussed in Bui (in preparation) include the observation that *mình* has an animacy constraint (it can only refer to animate antecedents), that *mình* can refer to the speaker (under certain conditions regarding honorificity) and that it is subject-oriented. The subject-orientation of *mình* is apparent when comparing the *mình* and *nó* alternatives in (12) below.

(12) a. *Ginny₁ nói với   Luna₂ về   mình₁/∗₂/speaker.*
         Ginny talk with Luna about SELF
         'Ginny talked with Luna about herself / me.'

      b. *Ginny₁ nói với   Luna₂ về   nó₁/₂/∗speaker.*
         Ginny talk with Luna about 3SG
         'Ginny talked with Luna about her / herself.'

As shown in (12a), *mình* can refer either to the speaker or the subject, *Ginny*, but not the prepositional object antedecent, *Luna*. On the other hand, *nó*, illustrated in (12b), cannot refer to the speaker, but may take either the local subject or the PP object as antecedents. The subject-orientation of *mình* is also evinced in sentences where other topics are introduced in non-subject position, this and more cases discussed in Bui (in preparation). Consequently, we argue that *mình* tracks the perspective center introduced by subjects, and that it is a long-distance anaphor that obeys a Charnavel & Sportiche (2016) version of Condition A.

So far we have suggested that Vietnamese is not an outlier with respect to the BT conditions, since it does obey Condition A (if *mình* is logophoric) and Condition C violations are common cross-linguistically. However, the personal pronoun *nó* is not subject to classic Condition B or Condition A: it can be bound by local subjects, and refer to non-local antecedents as well as to previously introduced discourse referents. At this point, we turn to competition-based accounts of Condition B and see how they fare with respect to the Vietnamese data.

4   Condition B in Vietnamese: the view from competition

Although the traditional view assumes that Conditions A and B are universal, independent principles, there is a large body of work in the Binding literature which generates Condition B effects based on competition between the available pronominal forms within a language. In this section, we sketch out the competition-based reasoning and compare it to the Vietnamese data.

4.1   Competition-based BT

The general reasoning behind competition-based accounts of the Binding Theory is based on two main assumptions: i) Condition A holds of reflexive pronouns, and ii) reflexive and non-reflexive pronouns compete. In this sense, Condition B effects are obtained for non-reflexive pronouns by virtue of their competition with necessarily bound reflexive pronouns. This view stems from the intuition put forth in Reinhart (1983) (and later on Reinhart (2006)) that the post-syntactic competition between possible LFs for the same sentence is responsible for generating Condition B effects for non-reflexive pronouns. Reinhart (1983) inspired competition-based accounts at a semantic level (Schlenker, 2005), at a syntactic level (Safir (2004), Rooryck & Vanden Wyngaerd (2011), Safir (2014), a.o.) as well as at a pragmatic level Roelofsen (2010), with the latter being more along the lines of Reinhart (1983)'s original proposal. In order to provide a brief overview of how competition-based models work, we lay out the main assumptions of syntactic-based Rooryck & Vanden Wyngaerd (2011) and pragmatic-based Roelofsen (2010) below.

4.1.1   Competing Pronominal Forms

Based on Kratzer (2009), Rooryck & Vanden Wyngaerd (2011) assume that there is a morpho-syntactic split between referential and reflexive pronouns. While referential pronouns are assumed to enter the derivation with valued ϕ-features, reflexive

pronouns are argued to be *minimal pronouns* which get their ϕ-features valued via an AGREE relation with their antecedent. In this sense, Binding is an effect of Agreement and Condition B is an artifact of feature-valuation on reflexives: inherently featured pronouns are never bound, since they do not require an AGREE relation.

Rooryck & Vanden Wyngaerd (2011), as well as all other competition-based syntactic accounts, make a key cross-linguistic prediction, spelled out in (13) below. The assumptions that all dedicated reflexive pronouns are *minimal pronouns* and that only these minimal pronouns can (and have to) be bound lead to the following inference: if a language *has* reflexive pronouns, then non-reflexive pronouns cannot be bound, or, non-reflexive pronouns are *free*.

(13)   *A Key Prediction*
       The presence of Condition B effects depends on whether a language has a **dedicated reflexive** form. The absence of Condition B effects correlates with the absence of specialized reflexive anaphors.

In fact, this prediction has been argued to be met for various languages, including, more recently, Jambi (Cole et al., 2017) and Chamorro (Wagers et al., 2017): the lack of a specialized reflexive form leads to an absence of Condition B effects.

4.1.2   Competing Interpretations

A core contribution of Reinhart (1983) and Grodzinsky & Reinhart (1993) concerns the distinction between binding and corefrence. The claim is that while Condition B targets proper variable-binding, there is a separate rule regarding intrasentential coreference, which targets discourse phenomena, as opposed to syntactic binding. Their version of this rule is given in (14) below.

(14)   *Rule I: Intrasentential Coreference*
       NP A cannot corefer with NP B if replacing A with C, C a variable A-bound by B, yields an *indistinguishable interpretation*.

                                            (Reinhart, 1983; Grodzinsky & Reinhart, 1993)

In essence, what drives the ungrammaticality of *Ginny₁ criticized her₁* in (5b) is competition with *Ginny₁ criticized herself₁* in (5a). Furthermore, Rule I favors the use of a bound variable over a pronoun which could express the same meaning. The assumption is that when a speaker aims to produce a sentence that conveys *Ginny talked about Ginny*, they take into account various alternatives of the same sentence: in this case, the personal pronoun alternative in (5b) and the reflexive alternative in (5a). Rule I states that

her cannot corefer with *Ginny* in (5b) if its *herself* alternative in (5a), which is a bound reflexive, would yield the desired interpretation. Consequently, disjoint reference is the only possible interpretation for *her* in this sentence.

This post-syntactic computation of alternatives is expanded on by Roelofsen (2010), who provides a pragmatic take on disjoint reference. In this account, Rule I is rehashed as the *Coreference Rule* in (15). An important difference between *Rule I* and Roelofsen (2010)'s version is that the latter directly targets alternatives which would have the same interpretation *in a given context*.

(15) *Coreference Rule*
A speaker will never use a logical form LF <u>in a context C</u> if the LF is semantically indistinguishable from one of its *binding alternatives*.[6]

<div align="right">(Roelofsen, 2010, p.119)</div>

The context-dependent application of the rule in (15) can account for known exceptions to Condition B, such as (16), where both the *himself* and *him* alternatives are allowed in different scenarios.

(16)   a. *(Only) Lockhart$_1$ voted for himself$_1$.*   b. *(Only) Lockhart$_1$ voted for him$_1$.*

In a scenario like the one in (17), where the question under discussion has to do with professors who voted for themselves, the two alternatives yield indistinguishable interpretations. Assuming that both *him* and *himself* could express that *Lockhart voted for Lockhart*, either via coreference for the former, or variable binding for the latter, the *Coreference Rule* would favor (17a) over (17b). Consequently, (17b) can only be used to express disjoint reference in this context.

(17)   CONTEXT: The Hogwarts professors were electing a new headmaster and were discussing which of the professors voted for themselves.

     a. *(Only) Lockhart$_1$ voted for himself$_1$.*   b. # *(Only) Lockhart$_1$ voted for him$_1$.*

On the other hand, in a scenario like the one in (18), where the question under discussion has to do with professors who voted for *Lockhart*, the two alternatives yield distinguishable interpretations. While *him* can be used in (18) to express a reading where *Lockhart voted for Lockhart*, via coreference, the bound-variable alternative with *himself*

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[6]Roelofsen (2010) also provides a formal description of *binding alternatives*, which we do not include for the sake of brevity. Its effect is to explicitly determine that, in each context, a sentence in which a pronoun and an antecedent corefer will have alternatives which employ variable binding of a (possibly reflexive) pronoun instead.

only has an interpretation where there was a self-vote. Since (18a) is not felicitous in this scenario, (18b) survives.

(18) CONTEXT: The Hogwarts professors were electing a new headmaster and were discussing which of the professors voted for Lockhart.

    a. # *(Only) Lockhart$_1$ voted for himself$_1$.*   b. *(Only) Lockhart$_1$ voted for him$_1$.*

This contextual enrichment of the rule on *coreference* may aid in elucidating the Vietnamese data. The following subsection discusses Vietnamese from the perspective of syntactic and pragmatic competition-based accounts of Condition B in the vein of those laid out above.

4.2 Competition in Vietnamese

Going back to Rooryck & Vanden Wyngaerd (2011)'s account, the key prediction in (13) was that languages with a specialized reflexive anaphor exhibit Condition B effects. When it comes to Vietnamese, the question is whether logophors like *mình* should fall under the umbrella term of *dedicated reflexives*. If *mình* is a minimal pronoun which gets its features via AGREE (with the logophoric operator), then Condition B effects are predicted in Vietnamese. On the other hand, if long-distance anaphora are not *specialized reflexives*, in the Rooryck & Vanden Wyngaerd (2011) sense, then this predicts an absence of Condition B effects. However, assuming that long-distance anaphora *are not* dedicated reflexive forms would lead to the expectation that not only is Vietnamese supposed to lack Condition B effects, but so would any language that only expresses reflexivity by means of logophoric pronouns. As far as we know, this is not the case.

Assuming that *mình* is a a Condition A compliant logophor, along the lines of Charnavel & Sportiche (2016) for Icelandic *sig*, as well as a *dedicated reflexive*, then, according to Rooryck & Vanden Wyngaerd (2011), Condition B effects are predicted in Vietnamese. If Condition B does apply in Vietnamese, then the availability of a reading where *nó* refers to its clausemate subject in (19) is surprising. The fact that *mình* is a bound variable does not rule out coreferent readings of *nó*: in (19), the personal pronoun can be interpreted as referring either to *Snape* or to *Lockhart*.

(19) *Snape$_1$ nói là   Lockhart$_2$ bầu cho **nó**$_{1/2}$*
     Snape say that Lockhart vote for 3SG
     'Snape said that Lockhart voted for him / himself.'

However, it is surprising for (19) to have a reading where *Lockhart votes for Lockhart* only if Condition B is assumed to rule out both binding *and* coreference. As mentioned

above, accounts like Reinhart (1983) and Roelofsen (2010) make a clear distinction between variable-bound pronouns and coreferent pronouns. Crucially, under this view, it is *Rule I* or the *Coreference Rule* that would be at play in (19), and not Condition B. With respect to the *Coreference Rule* in (15), the expectation is that the acceptability of either of the two readings in (19) above is context-dependent. And so it is, as shown below.

(20) CONTEXT: The Hogwarts professors were electing a new headmaster and were discussing which of the professors voted for themselves.

    a. *Chỉ có   Lockhart$_1$ bầu cho mình$_1$.*
       only exist Lockhart vote for SELF
       'Only Lockhart$_1$ voted for himself$_1$.'

    b. #*Chỉ có   Lockhart$_1$ bầu cho nó$_1$*
       only exist Lockhart vote for 3SG
       'Only Lockhart$_1$ voted for him$_1$.'

The Vietnamese equivalent of (17), in (20) above, observes the same felicity pattern: the *mình* sentence is available in a context where the question under discussion has to do with *self-votes*, while the *nó* sentence is not. Similarly, the reverse is true in the scenario repeated from (18): like in English, the alternative with the reflexive is not compatible with a scenario where *Lockhart-votes* matter, but the personal pronoun alternative is felicitous in this context.

(21) CONTEXT: The Hogwarts professors were electing a new headmaster and were discussing which of the professors voted for Lockhart.

    a. #*Chỉ có   Lockhart$_1$ bầu cho mình$_1$.*
       only exist Lockhart vote for SELF
       'Only Lockhart voted for himself.'

    b. *Chỉ có   Lockhart$_1$ bầu cho nó$_1$*
       only exist Lockhart vote for 3SG
       'Only Lockhart$_1$ voted for him$_1$.'

We take the data above as evidence for the fact that a *context-dependent* coreference rule, like that of Roelofsen (2010), does apply in Vietnamese. Furthermore, if Roelofsen (2010) is correct, and the unavailability of the third person pronoun in the context in (20) is determined by the competition with binding alternatives, then this also implies that *nó* is *not* a bound variable in these sentences: were *nó* actually bound, then (20b) would not be ruled out. However, the fact that the coreferent interpretation is possible for sentences like (19), which is not the case for the English alternative, suggests that

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Rule I, in its original form in Reinhart (1983) and Grodzinsky & Reinhart (1993) does *not* apply in Vietnamese. Coreference is only contextually constrained.

Above, we have examined evidence in favor of the existence of a Roelofsen (2010)-type context-dependent *Coreference Rule* in Vietnamese, but against a more general Reinhart (1983) *Rule I*-like restriction on coreference in general. The question at this point is whether *nó* can get bound-variable interpretations. For this reason, we discuss (22) below.

(22)   *Mọi đứa con gái₁ nói về nó₍?1/2₎.*
      every HHON ANIM girl talk about 3SG
      'Every girl talks about her.'

According to our four Vietnamese informants, although a bound variable reading of (22) is *possible*, there is a strong preference for the pronoun *nó* to have a disjoint reference reading. Despite the dispreference for bound-variable interpretations, it seems that bound *nó* is not *ungrammatical*, and that the plausibility of a bound-variable reading of *nó* increases in a restricted context: it is much more likely for *nó* to be interpreted as a bound pronoun in a context where the sentence only applies to the girls in some contextually salient room. Although this context-dependent plausibility for a bound LF is more than intriguing, we leave the discussion of this topic for future work.

Currently, Bui (in preparation) is gathering experimental evidence which, among other things, compares preference for bound-variable readings of *nó* in sentences with quantificational DP antecedents and preference for coreferent readings in sentences with referential subjects. Her experimental data will help separate and compare Rule I and Condition B effects, as well as adjudicate whether we are right in assuming that a generalized Rule I is *not* at play in Vietnamese. With respect to a Condition B that only targets *binding*, the data in the aforementioned experiment in Bui (in preparation) can offer a lay of the land with respect to the dispreference for bound-variable readings of *nó* in 'out of the blue' contexts. While we do argue that *preference* is a big factor in the availability of these readings, we realize the fine line between *strong preference* and grammaticized constraints. Nevertheless, we believe that the effect that context restriction has on both coreference and binding (as illustrated in this section), strongly suggests that it is *not* the case that Condition B (or Rule I) is a hard constraint in Vietnamese.

In the final section we focus on the particle *tự* as another piece of the puzzle when it comes to the availability of bound readings for the third person pronoun *nó* in Vietnamese. According to our four consultants, the preference for the bound-variable reading increases of a sentence like (22) increases if *tự* is present, as in the example below.

(23)   *Mọi* *đứa*   *con*   *gái*$_1$ ***tự*** *nói* *về*   *nó*$_{1/2}$.
      every HHON ANIM girl REFL talk about 3SG
      'Every girl talks about herself.'

Since Vietnamese can make use of the minimally different alternative in (23) to express that *every girl talked about herself*, the competition between the two sentences might explain why (22) resists bound-variable readings. In what follows we compare *tự* to emphatic VP reflexive markers.

5   An emphatic wrinkle

Besides full-fledged pronouns like *mình* and *nó*, emphatic markers, such as *chính* and *tự*, can also give rise to reflexive interpretations. These markers modify either DPs or VPs, and can be generally captured as DP emphatic reflexives and VP emphatic reflexives, along the lines of Ahn (2010).[7] With respect to VP emphatic reflexives, forms like *herself* can be used as adjuncts to contribute a "without help" interpretation (Ahn, 2010), as illustrated below.

(24)   *Luna did it **herself**.*
     = Luna did it without any help.

However, in Vietnamese, the preverbal marker *tự* also greatly increases the likelihood of reflexive readings for sentences with either *mình* and *nó*. This leads to two possible interpretations for a sentence like (25): *Luna* loves herself or *Luna* loves someone else, of her own accord.

(25)   *Luna*$_1$ ***tự*** *yêu* *nó*$_{1/2}$.
     Luna REFL love 3SG
     'Luna loves herself. / Luna loves someone else on her own.'

As illustrated in (26), *tự*-sentences with quantified DP antecedents are also compatible with two different readings. These interpretations are sketched out below.

(26)   *Mọi* *đứa*   *con*   *gái*$_1$ ***tự*** *nói* *về*   *nó*$_{1/2}$.
     every HHON ANIM girl REFL talk about 3SG
     'Every girl talks about herself.'

    a. CONTEXT: # *Dumbledore encouraged the girls to be outspoken and talk about themselves. They didn't want to.*

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[7]For the sake of brevity, we focus on *tự* below, but the Vietnamese data suggest that *chính* fits the DP emphatic reflexive pattern discussed in Ahn (2010).

b. CONTEXT: ✓ *All of the girls wanted to talk about themselves and they did. Nobody made them do it.*

c. CONTEXT: ✓ *All of the girls wanted to talk about Snape and they did. Nobody made them do it.*

Comparing (26a) to (26b), it seems that *tự* requires that there be an identity relationship between the Agent and the person who *wanted* for the event to happen. Although the presence of *tự* signals preference for the bound variable reading in (26b), it is nonetheless the case that an additional reading is available, where *nó* has a disjoint reference interpretation, as in (26c), where the girls deliberately talked about *Snape*. The data in (26) illustrates that the 'without help' interpretation is necessarily encoded in Vietnamese *tự*. However, its role as a facilitator of bound variable interpretations remains puzzling. The fact that *tự* merely improves the likelihood of a reflexive reading, and does not strictly enforce it, is more difficult to account for. The fact that VP emphatic reflexive markers encode an *on their own* description of the event has been discussed in Ahn (2010).

Like other VP emphatic reflexive markers, *tự* is sensitive to the syntax-semantics of the predicate. In particular, *tự* seems to require that there be a *vP* which introduces the agentive external argument (Kratzer, 1994). Since the distribution of *tự* is restricted to sentences with *vP*, it is ungrammatical when preceding copular or passive constructions, as shown below in (27) and (28), respectively.

(27) **Hermione **tự** hạnh phúc.*
Hermione REFL happy
'Hermione is happy on her own.'

(28) **Luna **tự** bị đánh.*
Luna REFL PASS hit
'Luna was hit on her own.'

Ahn (2010) argues that the distribution of VP emphatic reflexives cannot be generalized merely through the requirement that there be an Agent thematic role. Ahn (2010) proposes that it is *volition*, rather than agentivity, that VP emphatic reflexives are sensitive to: VP emphatic reflexives are not felicitous alongside non-volitional external arguments, as shown below.

(29) a. <u>Non-volitional</u>: *#Guess which medicine cured me itself.*
b. <u>Volitional</u>: *Guess which nurse cured me herself.*

Consequently, in Ahn (2010)'s analysis, the verb to which the VP emphatic marker attaches must license volitional agents, and not just agentive subjects. Arguably, this view also extends to *tự*. The Vietnamese VP emphatic reflexive marker can go with volitional agents, but not with non-volitional causative ones, such as (30): the scaring event could not have been intentional. However, this is not always the case. The marker

tự may also occur in sentences where the subject is an inanimate non-volitional agent. The syntactic difference between (30) and (31) is unclear.

(30) **Tiếng sấm **tự** làm tôi sợ.*
sound thunder REFL make me scared
'The thunder scares me itself.'

(31) *Trái banh **tự** lăn.*
CL ball REFL roll
'The ball rolls on its own.'

Moreover, Ahn (2010) notes that it is ungrammatical for VP emphatic reflexive markers to co-occur with unaccusative verbs, since they lack a volitional agent. However, *tự* can surface in the presence of unaccusative verbs, such as *arrive*, as shown in (32) below.

(32) *Hermione **tự** đến.*
Hermion REFL arrive
'Hermione arrived on her own.'

The data above reflect only some of a range of exceptions to Ahn (2010)'s proposal. Ahn (2010) argues that the properties of DP and VP emphatic reflexive markers are in complementary distribution. For instance, a contrastive reading is associated with the DP emphatic reflexives, but not the VP ones. However, *tự* in Vietnamese can also get a contrastive reading in certain contexts:

(33) *Luna **tự** tổ chức bữa tiệc.*
Luna REFL organize CL party
'Luna herself (and not anyone else) organizes the party.'

It seems that the distribution of *tự* both fits and contradicts the pattern for VP emphatic reflexives in Ahn (2010). It is unclear not only what the status of *tự* is in Vietnamese, but also how to capture this increased preference for reflexive readings of pronominal VP complements. Further research is needed to pinpoint an analysis for *tự*; understanding the semantic contribution of *tự* would aid in capturing the Vietnamese binding phneomena and their context-dependent interpretations.

6 Conclusion

A close examination of an understudied language like Vietnamese challenges well-established cross-linguistic generalizations. We provide data which illustrates that, on

the surface, Vietnamese displays violations to all three Binding Principles in their classic form. However, we argue that Vietnamese is not an outlier with respect to the Binding Theory. We show that the apparent absence of Principle A effects is in fact due to *mình* being a *Condition A compliant* logophor, along the lines of Charnavel & Sportiche (2016). We further argue that Principle B is not a strict grammaticalized constraint, but rather a soft context-dependent restriction in Vietnamese. We discuss evidence against the classic formulation of *Rule I* (Reinhart, 1983), but in favor of an extension of this account, namely the *Coreference Rule* (Roelofsen, 2010). We argue that context-dependent competition between the logophor *mình* and the personal pronoun *nó* is at play in deriving their distribution and interpretation, and, finally, introduce the puzzle of the VP emphatic reflexive marker *tự* and its effect of increasing the likelihood of a reflexive interpretation. This paper lays the foundation for the further exploration of Binding phenomena in Vietnamese. Work on this topic enhances our cross-linguistic understanding of the nature and source of constraints which underlie referential relationships in natural language.

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